SMA Solar Technology AG

Annual Report 2021

SMA Solar Technology AG at a glance

SMA group		2021	2020	2019	2018	2017
Sales	€ million	983.7	1,026.6	915.1	760.9	891.0
Export ratio	%	74.9	79.6	76.1	80.6	81.8
Inverter output sold	MW	13,584	14,416	11,409	8,449	8,538
Capital expenditure [1]	€ million	56.4	57.1	54.4	40.3	33.2
Depreciation	€ million	41.7	43.6	46.0	82.6	53.2
EBITDA	€ million	8.7	71.5	34.2	–69.1	97.3
EBITDA margin	%	0.9	7.0	3.7	–9.1	10.9
Net income	€ million	–23.0	28.1	–8.6	–175.5	30.1
Earnings per share [2]	€	–0.66	0.81	–0.25	–5.06	0.87
Employees [3]		3,510	3,264	3,124	3,353	3,213
in Germany		2,474	2,262	2,186	2,212	2,077
abroad		1,036	1,002	938	1,141	1,136

SMA group		2021/12/31	2020/12/31	2019/12/31	2018/12/31	2017/12/31
Total assets	€ million	1,052.5	1,051.2	1,107.3	989.3	1,216.2
Equity	€ million	410.4	439.1	416.9	424.5	611.5
Equity ratio	%	39.0	41.8	37.6	42.9	50.3
Net working capital [4]	€ million	257.5	210.6	159.5	177.4	167.9
Net working capital ratio [5]	%	26.2	20.5	17.4	23.3	18.8
Net cash [6]	€ million	221.7	226.0	303.0	305.3	449.7

1 Investments including additions of rights of use in accordance with IFRS 16 as of 2019
2 Converted to 34,700,000 shares
3 Reporting date; including trainees and learners; excluding temporary employees
4 Inventories and trade receivables minus trade payables and liabilities from advanced payments received for orders
5 Relating to the last twelve months (LTM)
6 Total cash minus interest-bearing financial liabilities to banks

ENERGY

THAT
CHANGES

As a leading global specialist in system technology, the SMA group is setting the standards for the decentralized and renewable energy supply of tomorrow.

More than 3,500 SMA employees in 20 countries have devoted themselves to this task.

Our innovative solutions for the sustainable generation, storage and use of energy enable people and companies around the world to meet their energy needs with greater independence.

In collaboration with our partners and customers, we are helping the world transition to a digital, decentralized and renewable energy supply. Our energy inspires the world's most important customer. Our future.

DR.-ING. JÜRGEN REINERT

Chief Executive Officer SMA Solar Technology AG

FOREWORD BY THE BOARD OF DIRECTORS

Dear Shareholders,

After coping very well with the first year of the global coronavirus pandemic and achieving the targeted growth despite the considerable challenges, the SMA group started the 2021 fiscal year with the prospect of further growth. In the first few months of the year, the global economy began to recover from its deep recession, several vaccines against the coronavirus were approved and the decarbonization of the economy – and with it an increased expansion of renewable energies – came increasingly into the focus in politics, business and society. However, in the months that followed it became apparent that the global vaccination campaign was not progressing as quickly as planned. New coronavirus variants and related measures led to interruptions in supply chains. At the same time, as the economy started to pick up again, the demand for raw materials and electronic components also increased, which soon exceeded production capacity. Along with many other industries, the solar industry, and thus also the SMA group, felt the effects of this.

THE SHORTAGE OF ELECTRONIC COMPONENTS HIT US HARD

While we initially managed to avoid major restrictions due to the pandemic and the shortage of components, the situation worsened significantly in the second half of the year. Suppliers canceled firmly committed delivery quantities at short notice. As a result, we were unable to fully meet the high demand for our products and solutions in some areas. The Business Solutions segment was particularly affected. In the first few months of the year, uncertainties surrounding the coronavirus pandemic had a negative impact on willingness to invest in this area. When demand rose again in the fourth quarter, component shortages restricted our delivery capacity. Against this background, we were unable to achieve the growth targets we set at the beginning of the year. With 13.6 gigawatts of inverter output sold, the SMA group generated sales of €983.7 million in 2021. The operating earnings (EBITDA) of €8.7 million were also burdened by a one-time item resulting from the termination of a long-term contract for operation and maintenance services (O&M) for PV power plants. Unfortunately, the shortage of electronic components will continue and also pose challenges for us in the coming year. Accordingly, the Managing Board’s outlook for 2022 is also cautious. For the coming fiscal year, we expect sales between €900 million to €1,050 million and an operating result (EBITDA) of €10 million to €60 million.

WE ARE AIMING FOR PROFITABLE GROWTH IN THE MEDIUM TERM

Our medium- and long-term prospects remain positive. The increasingly important megatrends of decentralization, decarbonization and digitalization of energy supply provide excellent opportunities for the SMA group. Experts unanimously agree that demand in the future fields of storage technology, e-mobility, energy management, digital energy services and green hydrogen production will grow exponentially in the coming years and decades. The SMA group positioned itself in these areas at an early stage. We also achieved considerable successes in this area in the past fiscal year, such as concluding contracts to supply the largest and most innovative storage power plants in Australia and Europe. One of the key factors here was that our technology makes it possible to integrate a high proportion of fluctuating renewable energy sources into the utility grids. This feature will become increasingly important due to the rising use of renewable energies in global supply structures. In 2021, numerous projects using SMA system technology were realized in the new business field of green hydrogen generation in the U.S., Europe, Asia and Australia.

WE ARE DEVELOPING THE SMA GROUP INTO A SUSTAINABLE ENERGY TRANSITION COMPANY

We will continue along this path with our Strategy 2025, which we developed in 2020, and further develop the SMA group into an innovative and sustainable “energy transition company” that offers suitable solutions with high customer benefits for all essential areas of future energy supply. Our strategic objectives focus on forging closer links with our customers, on sustainably increasing our profitability through the further development of our core business and the targeted development of new business areas, on the focused use of our capacity for innovation in order to stand out from our competitors and secure the future viability of the SMA group, and on the targeted expansion of our partner network with the aim of developing solutions that offer our customers high added value.

At the heart of our strategy is the objective of holistic sustainability in all areas of the company with the aspiration of taking a leading role in shaping a better future. By taking sustainability aspects into account in all business processes, we aim to achieve success by way of responsible and respectful treatment of people, the environment and resources with increasing use of renewable energies in all parts of the value chain. To strategically integrate sustainable thinking and action into the company and ensure that we achieve our sustainability objectives, we established a Sustainability Committee in 2021, consisting of members of the Managing Board and top-level managers. However, it is just as important that all SMA employees integrate the idea of sustainability into their daily work. I am convinced that this is already largely the case, because sustainability has always had a high priority in our corporate culture. On behalf of the Managing Board, I would like to express my sincere thanks to all SMA employees for this and for their extraordinary commitment in the past year under difficult conditions caused by the coronavirus pandemic.

Dr.-Ing. Jürgen Reinert
Chief Executive Officer
SMA Solar Technology AG

CONTENTS

ULRICH HADDING

Board Member for Finance, Human Resources and Legal

Ulrich Hadding (b. 1968) held different positions at the SCHOTT Group in Germany and abroad for ten years, most recently as Head of Legal & Compliance for SCHOTT Solar AG. He moved to SMA in 2009, initially establishing an internationally oriented Legal department and then the Compliance function. He played a major role in nearly all of SMA's recent M&A activities and successively took on further management functions, e. g., for Tax, Insurance, Controlling and Financial Project Management. Since the end of 2015, he has been Head of Finance and Legal and member of SMA's Executive Management Committee. Since January 1, 2017, Ulrich Hadding has been a member of the Managing Board with responsibility for Finance, Human Resources and Legal. He also serves as labor director of SMA and is responsible for capital market communication.

THE MANAGING BOARD TEAM

DR.-ING. JÜRGEN REINERT

Chief Executive Officer

After he studied electrical engineering in South Africa, Dr.-Ing. Jürgen Reinert (b. 1968) received his doctorate at the Institute for Power Electronics and Electrical Drives (ISEA) at RWTH Aachen, Germany, and began his career as senior engineer there. From 1999 to 2011, he worked for Emotron AB in Sweden, where in his last position, as General Manager, he was responsible for Technology and Operations. From 2011 to 2014, as Executive Vice President, Technology, he was responsible for the division Power Plant Solutions at SMA. Under his leadership, SMA was successful in expanding its worldwide project business and developing turnkey system solutions for large-scale PV power plants. Since April 2014, Dr. Reinert has been a member of the Managing Board. He was appointed Chief Executive Officer in October 2018. Dr. Reinert is responsible for Strategy, Sales and Service, Operations and Technology. He is a member of the Supervisory Board at Danfoss A/S.

SUPERVISORY BOARD REPORT

Dear Shareholders,

The ongoing coronavirus pandemic and the shortage of parts from suppliers, as well as particular difficulties in relation to the O&M business, were the main challenges facing the SMA group in the 2021 fiscal year. However, prospects for renewable energy sources becoming continuously more positive and the progressing development of the SMA group into a systems and solutions provider as part of its Strategy 2025 are good signs that we are on the way to sustainable profitability.

In the reporting year, collaboration with the Supervisory Board and between the Supervisory Board and Managing Board was characterized by openness, intensity and constructiveness. The Supervisory Board assisted the Managing Board in an advisory capacity and continuously monitored the Managing Board with regard to the management of the company in accordance with the law, Articles of Incorporation and Rules of Procedure. For its part, the Managing Board involved the Supervisory Board and its committees early on in all decisions of fundamental importance to the SMA group. The Supervisory Board was also kept informed both in writing and speech of all strategy issues relevant to the company, the market and competitive situation, and business developments. The Managing Board also regularly updated the Supervisory Board on the SMA group's sales, earnings and general situation. Furthermore, the Managing Board presented detailed information on proposed business policies and other important questions concerning corporate planning, in particular financial, investment, production and personnel planning, as well as significant business transactions to the Supervisory Board. Deviations in how events actually transpired in comparison to planned projects or objectives were provided, including reasons for the variances. In addition, the Supervisory Board was informed about the group's profitability, above all the return on equity, risk and opportunity management, risk status and compliance.

The Supervisory Board closely scrutinized and discussed business transactions requiring the approval of the Supervisory Board as well as instances where business performance deviated from corporate planning. Even beyond the regular Supervisory Board and Audit Committee meetings, the Chairman of the Supervisory Board and his deputy as well as the Audit Committee Chairwoman were in frequent contact with the Managing Board and discussed subjects concerning strategy, planning, business development, position of risk, risk management and compliance, as well as significant business transactions and upcoming decisions. The Supervisory Board members took general and specialized training necessary for their tasks on their own accord, and in doing so, they received appropriate support from the company. No Supervisory Board or Managing Board members reported any conflicts of interest to the Supervisory Board.

Focus of Supervisory Board consultations

The Supervisory Board examined all material events and discussed them with the Managing Board at five meetings and adopted necessary resolutions in accordance with the law, Articles of Incorporation and Rules of Procedure. Kim Fausing participated in three meetings. Yvonne Siebert participated in four meetings. The other Supervisory Board members participated in all five meetings.

In preparation for the meetings, the Supervisory Board received written reports from the Managing Board on a regular basis and on time. At each regular meeting, the subject matter of the deliberations were current business developments, the evolution of markets of particular importance to the SMA group and corporate planning. Members of the Managing Board participated in all regular Supervisory Board and Audit Committee meetings, but were not present for discussions of matters relating to the Supervisory Board or Managing Board itself.

At its meeting on February 4, 2021, the Supervisory Board dealt with the Corporate Governance Report included in the 2020 Annual Report, and the Supervisory Board Report for 2020. The Supervisory Board also discussed the contents of the Non-Financial Statement presented by the Managing Board. Deliberations and decisions also addressed the changes to the remuneration system for the Managing Board as well as to the company's articles of incorporation. Finally, the Supervisory Board evaluated the objective achievements of the Managing Board members in 2020 and approved the objectives for defining variable remuneration for the Managing Board in the 2021 fiscal year.

At its meeting convened to adopt the accounts on March 24, 2021, the Supervisory Board acknowledged the 2020 Annual Financial Statements, approved the 2020 Consolidated Financial Statements after in-depth consultation and also passed the proposal to the Annual General Meeting on profit appropriation for 2020. In addition, it reviewed the proposal for selection of the Financial Statements and the Consolidated Financial Statements auditor for 2021. In addition, the meeting dealt with the approval of the Supervisory Board to hold a virtual Annual General Meeting and to set the maximum remuneration for the Managing Board to be disclosed in accordance with Section 87a of the German Stock Corporation Act (AktG).

At its meeting on May 31, 2021, the Supervisory Board discussed the development of new SMA group products. Additionally, the discussions and resolutions covered the company's personnel-related plans as well as strategies and efforts to improve sustainability.

The company's Strategy 2025 and the plans for its implementation were at the top of the agenda for the meeting on September 30, 2021. In addition, the Supervisory Board familiarized itself with the company's product innovations and product roadmap and discussed the results achieved in the partnership with Danfoss A/S. Furthermore, the Supervisory Board was informed about the economic developments of SMA Solar Technology AG's subsidiaries.

At its meeting on December 8, 2021, the Supervisory Board dealt in depth with the budget for the 2022 fiscal year submitted by the Managing Board. Furthermore, it discussed the Managing Board's report on the orientation of the SMA group's sales and service as well as the reasons for potential provisions cited by the Managing Board. The Managing Board and the Supervisory Board also adopted a new Declaration of Conformity pursuant to Section 161 (1) sentence 1 of the German Stock Corporation Act (AktG) to comply with the recommendations of the German Corporate Governance Code.

Focus of committee meetings

To improve the efficiency of the work carried out by the Supervisory Board, the Supervisory Board maintains four permanent committees: the Presidial Committee, Audit Committee, Nomination Committee and Mediation Committee. You will find the names of the persons appointed to these committees on our website at www.SMA.de/en/investor-relations as well as in the Corporate Governance Statement 2021.

The committees prepare the topics and resolutions to be reviewed by the entire Supervisory Board, and, within the framework of the competencies assigned to them, they resolve those matters they have been assigned instead of the Supervisory Board. The content of the committee meetings is reported on by the committee chairperson at the subsequent plenary session of the Supervisory Board. All members of the Supervisory Board receive the content and resolutions of the committees in writing.

The **Presidial Committee** met three times in 2021. The committee's work focused in particular on dealing with matters relating to the Managing Board and preparing Supervisory Board resolutions on the new remuneration system and the objectives for the Managing Board, as well as preparing for the efficiency check on the Supervisory Board. The members participated in all meetings of the committee.

The **Audit Committee** met nine times in 2021. The meetings focused on discussing the company's business performance and cost efficiency, the Quarterly Statements and Half-Yearly Financial Report. In addition, the committee familiarized itself with the main points and overall findings of the auditor for the 2020 Annual Financial Statements and upon review confirmed the auditor's independence. The Audit Committee also dealt with tax issues. Another key area of the committee's work was reviewing the internal risk management systems (Internal Control System, Internal Audit and Compliance), with the committee members gathering comprehensive information about these systems' methods and effectiveness. Furthermore, the committee handled the Half-Yearly Financial Report prepared by the Internal Audit department and the Compliance Report, neither of which showed any significant irregularities in SMA business processes. Other topics of the committee meetings were the contents of the Non-Financial Statement of the company pursuant to Section 289c of the German Commercial Code (HGB) and the extended Auditors' Report. The Audit Committee also reviewed the recommendation made for the entire board to consider regarding profit appropriation, selecting the auditor for 2021 and granting the audit mandate. Finally, deliberations and discussions addressed the implementation of new statutory requirements concerning risk management, accounting and financial audits. Oliver Dietzel and Johannes Häde attended eight meetings, while the remaining members of the committee attended all meetings.

The **Nomination Committee** and **Mediation Committee** did not convene in 2021.

Corporate Governance

In 2021, the Supervisory Board also dealt with the contents of the German Corporate Governance Code that had been newly adopted in December 2019. For the reporting year, the Supervisory Board and the Managing Board issued a Declaration of Compliance pursuant to Section 161 of the German Stock Corporation Act (AktG) in compliance with the recommendations of the German Corporate Governance Code. The joint report issued by the Supervisory Board and the Managing Board on compliance with the rules of the German Corporate Governance Code pursuant to clause 22 of the German Corporate Governance Code (Corporate Governance Report) has been made permanently available on our website at www.SMA.de/en/investor-relations and is also mentioned on pages 87 et seq. of the Annual Report. This is also where you will find statements on conflicts of interest and how they are handled.

Annual Financial Statements and Consolidated Financial Statements

The Annual Financial Statements prepared by the Managing Board as of December 31, 2021, the Combined Management Report for the 2021 fiscal year of SMA AG, the Consolidated Financial Statements as of December 31, 2021, and the Combined Management Report for the 2021 fiscal year of the SMA group were audited by the accounting firm Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Hanover, Germany. The Supervisory Board granted the audit assignment in accordance with the resolution adopted by the General Meeting on June 1, 2021. The Supervisory Board also monitored the independence of the auditor.

The Consolidated Financial Statements of the company were prepared in line with Section 315a of the German Commercial Code (HGB) on the basis of the International Financial Reporting Standards (IFRS) as applicable in the EU. The auditor granted an unqualified audit opinion for the Annual Financial Statements and the Combined Management Report of SMA AG as well as for the Consolidated Financial Statements and the Combined Management Report of the SMA group.

The reporting documents, including the Non-Financial Statement of the company, and the Managing Board's proposal on the appropriation of profits, as well as the audit reports were made available to the Supervisory Board in good time. These were first discussed by the Audit Committee at its meetings on February 7, 2022, March 23, 2022, and March 30, 2022, with the auditors and then by the Supervisory Board at its meetings on March 24, 2022, and March 30, 2022, in the presence of the auditor's representatives. The auditor's representatives reported on the audit findings and provided detailed explanations of the net assets, financial position and results of operations of the company and the group. The questions posed by the Supervisory Board were answered and the reporting documents were reviewed in detail with the auditor's representatives and discussed and examined by the Supervisory Board. The Supervisory Board raised no objections after concluding its examination. Thereafter, the findings of the audit were approved. Accordingly, the Supervisory Board approved the Financial Statements prepared by the Managing Board and the related Combined Management Report for the 2021 fiscal year at its meeting convened to adopt the accounts on March 30, 2022. Hence, the company's Annual Financial Statements have been approved as set out in Section 172 of the German Stock Corporation Act (AktG).

Finally, at its meeting held on March 30, 2022, the Supervisory Board approved the Managing Board's proposal on the appropriation of the balance sheet profit. In this respect, the Supervisory Board discussed the company's liquidity position, the financing of planned investments and estimated business development. In doing so, the Supervisory Board came to the conclusion that the proposal was in the interests of the company and the shareholders.

Changes to the Managing Board and Supervisory Board

There were no personnel changes to the Managing Board or Supervisory Board in the reporting year.

In 2021, the SMA group succeeded through clever strategic planning and by systematically taking the necessary action in making further progress on its way toward becoming a solutions provider. We must continue to pursue this path consistently over the next few years to be a part of the promising future of renewable energies.

The Supervisory Board would like to thank the Managing Board and all employees for their dedicated work and their strong commitment to lead the SMA group to a successful future, despite the stresses caused by the coronavirus pandemic.

Niestetal, March 30, 2022

The Supervisory Board

Uwe Kleinkauf
Chairman

ROLAND BENT

Shareholder Representative

MARTIN BREUL

Employee Representative

OLIVER DIETZEL

Employee Representative

KIM FAUSING

Shareholder Representative
(Deputy Chairman)

JOHANNES HÄDE

Employee Representative

ALEXA HERGENRÖTHER

Shareholder Representative

UWE KLEINKAUF

Shareholder Representative
(Chairman)

ILONKA NUSSBAUMER

Shareholder Representative

YVONNE SIEBERT

Employee Representative

ROMY SIEGERT

Employee Representative

JAN-HENRIK SUPADY

Shareholder Representative

DR. MATTHIAS VICTOR

Employee Representative

COMBINED MANAGEMENT REPORT [1]

[1] The present Combined Management Report has been drawn up for both the SMA group and SMA AG. It was prepared in accordance with Sections 289, 289a, 315 and 315a of the German Commercial Code (HGB) and German Accounting Standards (GAS) numbers 17 and 20.

BASIC INFORMATION ABOUT THE GROUP

Business activity and organization

SMA Solar Technology AG and its subsidiaries (SMA group) develop, produce and sell systems and solutions for the efficient and sustainable generation, storage and use of energy. These include PV and battery inverters, monitoring systems for PV systems, charging solutions for electric vehicles as well as intelligent energy management systems and digital services for future energy supply. Extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) as well as medium-voltage technology and power supplies for hydrogen production round off the product range. With its products and services, the SMA group actively contributes to combating the global climate crisis.

Organizational structure

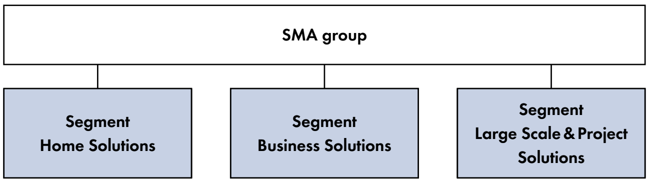
LEGAL STRUCTURE OF THE GROUP

As the parent company of the SMA group, SMA Solar Technology AG, headquartered in Niestetal near Kassel, Germany, takes over all of the functions required for its operative business. The parent company holds, either directly or indirectly, 100% of the shares of all the operating companies that belong to the SMA group. The Consolidated Management Report includes information regarding the parent company and all 29 group companies (2020: 28), including seven domestic companies and 22 companies based abroad. In addition, SMA Solar Technology AG holds a 42% interest in elexon GmbH. The joint venture in the field of charging infrastructure facilities was established in 2019 and is recognized as an associate in the Consolidated Financial Statements according to the equity method.

ORGANIZATIONAL AND REPORTING STRUCTURE

The SMA group operates under a functional matrix organization. In this organization, the Home Solutions, Business Solutions and Large Scale & Project Solutions business units manage development, operational service and sales as well as production and procurement/logistics. Until July 31, 2021, the Home Solutions and Business Solutions segments were combined in a single business unit.

REPORTING STRUCTURE



MANAGEMENT AND CONTROL

In accordance with the German Stock Corporation Act, the executive bodies consist of the Annual General Meeting, the Managing Board and the Supervisory Board. The Managing Board manages the company. The Supervisory Board appoints, supervises and advises the Managing Board. The Annual General Meeting elects shareholder representatives to the Supervisory Board and grants or refuses discharge to the Managing Board and the Supervisory Board.

COMPOSITION OF THE MANAGING BOARD

Since October 15, 2018, the Managing Board of SMA Solar Technology AG has comprised the following members: Dr.-Ing. Jürgen Reinert (Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology) and Ulrich Hadding (Board Member for Finance, Human Resources and Legal).

COMPOSITION OF THE SUPERVISORY BOARD

The Supervisory Board of SMA Solar Technology AG, which represents shareholders and employees in equal measure, consists of Roland Bent, Kim Fausing (Deputy Chairman), Alexa Hergenröther, Uwe Kleinkauf (Chairman), Ilonka Nußbaumer and Jan-Henrik Supady as shareholder representatives. The employees are represented on the Supervisory Board by Martin Breul, Oliver Dietzel, Johannes Häde, Yvonne Siebert, Romy Siegert and Dr. Matthias Victor.

Products and services [1]

As a specialist in system technology, the SMA group develops and globally sells systems and solutions consisting of hardware, software and services that allow energy to be efficiently generated and intelligently monitored, managed and used. The portfolio of the SMA group contains a wide range of PV inverters, holistic system solutions for PV systems of all power classes, battery storage solutions, intelligent energy management systems, charging solutions for private and commercial electric vehicles, digital energy services for private and business customers, and complete solutions for PV diesel hybrid applications. In addition, the SMA group offers extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) and power supplies for hydrogen production. The inverters of the SMA group already come integrated with all the functions required to generate maximum yields, without any additional cost to customers. These functions include effective shade management with SMA ShadeFix and inverter monitoring with SMA Smart Connected.

In the **Home Solutions segment**, the SMA group caters to global markets for private PV systems with and without storage systems and connections to a smart home solution. Our SMA Energy System Home provides an end-to-end, single-source system package featuring all the hardware, software and service components required for an independent and cost-effective household electricity supply. It comprises single- and three-phase string inverters in the Sunny Boy and Sunny Tripower product families in the lower output range of up to 12 kW, integrated services, energy management solutions, storage systems with the Sunny Island, Sunny Boy Storage and Sunny Tripower Storage product families as well as charging solutions for electric vehicles. They form a holistic smart home solution. Communication products and accessories, services, such as extended warranties, spare parts and modernization of PV systems (Repowering) to enhance performance as well as digital energy services complete the offering. With this portfolio of products and services, the SMA group provides solutions for private PV systems in all major photovoltaic markets worldwide.

In the **Business Solutions segment**, the focus is on global markets for smaller and medium-sized PV systems with and without energy management, battery storage and electric vehicle charging solutions. SMA Energy System Business, featuring ideally matched hardware, software, tools and services, gives small and medium-sized commercial enterprises and the housing sector the option of producing, storing and selling solar power themselves, organizing their companies' energy flows in a transparent and cost-efficient way as well as charging and managing electric vehicle fleets efficiently and sustainably. The solutions comprise the three-phase string inverters of the Sunny Tripower product family with outputs of more than 12 kW and up to 110 kW, storage solutions for the commercial sector in the Sunny Tripower Storage and Sunny Island product families as well as holistic energy management solutions for smaller and medium-sized PV systems. Solutions for charging management and billing of electric vehicle fleets on the basis of the ennexOS platform, which are implemented by the Business Solutions business unit together with the subsidiary company coneva, complete the offering. In addition, the SMA group offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services in this segment.

The **Large Scale & Project Solutions** segment focuses on international PV power plant markets with complete solutions that perform optimal grid service and monitoring functions on the basis of central inverters and system controllers. The outputs of the string inverters in the Sunny Highpower product family and the central inverters in the Sunny Central product family in this segment range from 100 kW to the megawatts. Another focus is on storage solutions for large-scale PV and storage power plants with the Sunny Central Storage product family and on solutions for optimized hydrogen production. The portfolio is supplemented by services, for example, for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business). In addition, the SMA group implements PV diesel hybrid and large-scale storage projects worldwide in this segment.

Important sales markets and competitive situation [2]

With its extensive portfolio of systems and solutions, the SMA group is well positioned to benefit from the growth of global solar and battery-storage markets and from the increasing demand for holistic solutions for electric vehicle charging and energy management. Its own presence with experienced specialists in 20 countries on six continents enables the SMA group to serve all markets worldwide. Our main customer groups include companies from the sectors of investment, project development, EPC (engineering, procurement and construction), system integration, energy supply, operation and maintenance services, the housing sector, wholesale and installation companies as well as small and medium-sized commercial enterprises.

Our production site for inverters in Niestetal (Germany) has an overall annual capacity of 21 GW. The competence center for coils (electromagnetic components) is based in Modlniczka, near Krakow (Poland). With its international positioning and product and service portfolio for all types of applications and different regional requirements, the SMA group can react quickly to shifts in demand on international markets anytime.

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

[2] The estimated values in the following section are not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

SMA estimates that approximately 153 GW to 161 GW of new PV power was installed worldwide in 2021. This is again a significant increase compared to last year's level (2020: approximately 140 GW; figures exclude inverter retrofitting and battery inverter technology). SMA estimates that global PV inverter technology sales, including inverter retrofitting and battery inverter technology, increased to around €6.9 billion to €7.6 billion in the reporting period (2020: €6.8 billion).

According to SMA estimates, the share of the photovoltaic markets in Europe, the Middle East and Africa (EMEA) in global sales increased to more than 30% in 2021 (2020: 28%). American photovoltaic markets also increased by around 25% (2020: approximately 22%). The Chinese market accounted for approximately 20% of global sales in 2021 (2020: approx. 19%) due to further strong growth. The Asia-Pacific photovoltaic markets (excluding China) accounted for around 25% of sales and thus less than in the previous year (2020: approximately 31%).

MATERIAL SHORTAGES RESULTING FROM THE CORONAVIRUS PANDEMIC IMPAIR BUSINESS PERFORMANCE

The effects of the coronavirus pandemic posed significant challenges for the SMA group in 2021. In the second half of the year, the supply situation for electronic components unexpectedly worsened considerably again. As a result, it was not possible any more to fully cater the very strong demand, particularly in the areas of storage systems, electric vehicle charging solutions and energy management for private households. In 2021, the SMA group sold inverters with accumulated power of 13,584 MW (2020: 14,416 MW), and its sales amounted to €983.7 million (2020: €1,026.6 million).

In the reporting year, the SMA group pressed ahead with its strategic development into an innovative and sustainable "energy transition company" with suitable solutions for all key areas. In addition to the expansion of digital offers in the Home Solutions and Business Solutions segments, the conclusion of contracts to supply innovative large-scale storage power plants in Australia and Europe also contributed to this. The capacity for seamless grid integration and provision of grid services is taking on crucial importance as a result of the fast-growing share of fluctuating renewable energy sources in utility grids worldwide. The SMA group's technologies meet the highest international standards here. In addition, the SMA group successfully pursued its positioning in the new business field of green hydrogen production in the reporting year. Projects with SMA system technology for the processing of direct current for electrolysis went into operation in the U.S., Europe, Asia and Australia.

Strategy

Energy supply structures are undergoing fundamental change all over the world. The growing awareness in politics, science, economy and society that the increasingly threatening climate crisis can only be effectively combated through a rapid and comprehensive decarbonization of the global economy and people's way of life as well as the striving for an energy supply that is independent from imports of fossil energy sources is accelerating this development. According to experts, the global energy supply will be decentralized, highly renewable, fully digital and interconnected in the medium and long term. As the most cost-effective energy source and one that can be generated near to where it is consumed, photovoltaics are of considerable importance. According to scientists at the Potsdam Institute for Climate Impact Research, green electricity could cover three-quarters of energy use in the long term. Prices for solar power, which have fallen by 85% in recent years, plus further expected cost reductions could have the potential to fundamentally revolutionize energy systems. With its portfolio of products, systems and solutions for all PV segments and applications, its level of system expertise and its global presence, the SMA group makes a significant contribution to the rapid and sustainable transformation of the world's energy supply structures and exploits the opportunities arising from the megatrends of decentralization, decarbonization and digitalization.

The framework for this is provided by the SMA Strategy 2025 developed in the 2020 fiscal year. Its goal is to develop the SMA group into an innovative and sustainable "energy transition company" that offers appropriate solutions for all essential areas of future energy supply. We are leveraging our systems expertise to develop holistic, future-proof solutions of significant customer benefit in close collaboration with our strong partners and to tap into new business areas.

Representatives from all regions and corporate functions were involved in the strategy development in a broad-based, participatory process and contributed their special knowledge and expertise. In addition, all employees were given the opportunity to play a part in developing the corporate mission statement with the core elements of purpose, mission and vision within the strategy process. Employees were also asked to have their say on the final formulation of the corporate purpose in a survey.

Purpose, vision and mission [1]

The purpose developed in this way reflects the strong entrenchment of sustainability within the company, which also represents a key element of the SMA Strategy 2025. It is: "Our energy inspires the world's most important customer. Our future." We think long-term, strive for an environmentally friendly and resource-saving way of doing business, and have a livable planet for future generations in mind.

The same is true of our vision, which sets out the SMA group's vision for the future and the standard we are setting ourselves: "We pioneer access to clean energy." With our experience, our innovative strength and our knowledge of system technology, we make renewable energies accessible to people all over the world in an easy, straightforward and sustainable way.

Our mission statement describes how we intend to achieve this objective and meet the ambitions and needs of our customers and other stakeholders: "We leverage 40 years of expertise and passion in renewables to drive the world's energy transition with our partners." In our daily interactions, we embody our company values of trust, performance and team spirit, and allow our actions – within and outside the company at all levels – to be influenced by our brand values: We are **sustainable** and respect people and the planet, we are **passionate** in all that we do, we are **connected** and work together to achieve our objectives, we are **visionary** and dare to innovate, and we are a **reliable** partner.

Strategic corporate objectives

The strategic corporate objectives form the core of the SMA Strategy 2025. They ensure the future corporate success of the SMA group. During the strategy process, they were derived from the most important trends in the industry and developed in collaboration with all relevant areas of the company. Annual ambition levels were defined for each objective up to 2025, the achievement of which will be ensured through clearly defined and measurable interim objectives.

In addition, strategic areas of action were developed in the reporting year that will strengthen the competitiveness of the SMA group in the long term and will be pressed ahead by corresponding business initiatives. They address key trends and growth segments with high future potential. These include PV and storage solutions, energy market integration, e-mobility and future business fields. They bundle the business initiatives that are essential for achieving the strategic objectives and are implemented with a clear segment focus. The extent to which our objectives have been achieved and the progress within the areas of action are made transparent in quarterly strategy reviews. Management derives appropriate courses of action from the results.

OBJECTIVE 1: CLOSER TO THE CUSTOMER

We inspire our customers with a high level of user-friendliness and solution-oriented cooperation.

Customer focus is purposefully the first objective of our strategy, because it means consistently aligning our actions with the needs of our customers. In the objective category of customer needs, we have set ourselves the goal of aligning our portfolio of systems and solutions even more precisely to the current and future requirements of the various customer segments. We want to continue to optimize the sales process for all stakeholders by using existing customer channels more efficiently and developing alternative channels. Customer focus is to be stringently discernible in all our decisions, processes and organizational structures. We are attaching major importance to our knowledge about our customers, their needs and major market requirements and are continuously expanding our knowledge, skills and capabilities across all relevant areas within the SMA group.

In 2021, we developed an organizational structure with which we are aligning our sales and service units to achieve this strategic objective. Targeting segment-specific customer groups will enable us to act even faster and with greater focus. Implementation of the new structure is scheduled for completion at the end of the first half of 2022.

OBJECTIVE 2: STABILITY THROUGH PROFITABILITY

We are sustainably increasing our profitability through the further development of our core business and the targeted development of new business areas.

Being profitable over the long term is the basis for entrepreneurial freedom, strategic investments and economic security. Therefore, increasing sales and profit are among the key objective categories here. We want to achieve an EBITDA margin of at least 10% by no later than 2025. Under the quality and cost discipline objective category, we have set ourselves the target of continuously reducing quality costs and cost of sales. We intend to strengthen the company's net cash by generating a consistently positive free cash flow and optimizing working capital. The overarching objective is to continuously increase company value. Finally, by 2025, employees are to be given greater levels of participation in the company as shareholders through a stock participation program.

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

Against the backdrop of the further challenge posed by the coronavirus pandemic in the reporting year, we were not able to achieve all the objectives set in this area. However, important initiatives were launched or further advanced that contribute to the objective categories. These include the expansion of our market model to further optimize our planning processes, the QCore quality program and measures to optimize net working capital.

OBJECTIVE 3: HOLISTIC SUSTAINABILITY

We live sustainability in all areas of the company and take over a leading role in shaping a better future.

The objective of holistic sustainability in all areas of the company is at the center of our strategy. This underscores the high priority that sustainable thinking and action have within the SMA group. In the objective category of environmental and climate protection, we have set ourselves the target of supplying the SMA group with fully climate-neutral electricity and heat by 2025 and implementing the principle of the circular economy across the entire value chain. In the objective category of positive social impact, we strive to be an exemplary employer, to bring diversity to life and to contribute to positive social development across the entire value chain through consistent occupational health and safety management, fair pay and benefits, diversity and equal opportunity in practice as well as comprehensive training. For us, good corporate governance means continually improving our processes and structures to ensure transparency, good management and compliance with (recognized) standards. In our decisions, we respect and take into account the principles of holistic sustainability. We want to secure sustained business success and thus the future of the SMA group with long-term, innovative business models.

In the reporting year, we sharpened our strategic objective corridor by conducting a materiality analysis and defined focal points for action based on the aspects identified as material for the SMA group. Further information on development and progress within the strategic objective of holistic sustainability can be found in the chapter "Consolidated Non-Financial Statement" starting on page 25.

OBJECTIVE 4: SHAPING THE FUTURE WITH INNOVATIONS

We use our technological expertise, experience and innovative strength to position SMA for the future in existing and new business fields.

We use our high capacity for innovation to stand out from competitors and to secure the future viability of the SMA group with new digital approaches. Under the customer success objective category, we will prioritize our innovation activities and investments in customer added value. We are enhancing our capacity for innovation by systematically using our innovativeness to generate new ideas and implement them successfully. We will continue right up to 2025 to develop our expertise in addressing complex issues. We will align complex processes holistically across all departments within the organization. Digitalization also plays a decisive role in this context. Accordingly, it is our aim to establish an end-to-end digital system landscape that can also flexibly map new business models.

In the reporting year, digitalization within the company was pressed ahead in particular within the framework of the "Digital Core" program already established in 2020. Experts from all areas of the company are working closely together to develop the core processes and IT applications of the SMA group in order to map the high complexity and dynamics of the market environment within the company, simplify processes, introduce system-based innovations, ensure end-to-end use of the core systems and create the conditions for seamless cross-functional collaboration within the SMA group. The aim is to align SMA's system and solution offering even more effectively with customer requirements and to develop existing and new channels for the respective customer groups.

OBJECTIVE 5: POWERFUL PARTNERSHIPS

We develop a powerful partner network and take advantage of the opportunities it creates.

Together with strong partners, we develop comprehensive solutions with high customer value and a broad range of applications. To be successful in this area, our management processes are geared to the targeted integration of partners with whom we are shaping the energy supply of the future. Under the new business opportunities objective category, our ambition is to develop a new range of impressive customer solutions with external partners by 2025 and thus expand our scope of action. Another aim of our collaboration with strong partners is to continue developing our capabilities over the long term and generate synergy effects. Effective integration of our partners allows us to improve our efficiency, productivity and competitiveness and thereby increase our internal and external impact. By establishing a strategic partner management process, we can also optimize our integration capacity. Achieving these objectives is vital for the further transformation of the SMA group into a systems and solutions provider because powerful partnerships are key here.

Company-wide partner management supports the further development of the SMA group as a system and solution provider. For years, we have been working successfully with strong partners in various areas in order to develop systems and solutions with high added value for our customers. In the reporting year, we began to further structure and centralize our partner management. One important element was the successful establishment of a Partner Management Board to increase the efficiency and effectiveness of partner management across divisions and to coordinate and control it.

Enterprise management

Leading indicators

To be able to react to market changes in a timely manner, it is exceedingly important for the SMA group to recognize opportunities and risks early on. To achieve this, we will have ongoing discussions about what are commonly referred to as operative leading indicators at both the Managing Board and business unit level with the business unit heads, vice presidents and the general managers of SMA subsidiaries. Indicators relevant to the SMA group include changes in PV system incentive programs and their effect on regional market potential, growth and competitiveness of the SMA group in regional markets, customer acceptance of new products as well as market-related information stemming from discussions with customers, suppliers and associations. The myriad of influencing factors and the complex way they interact make it difficult to produce a detailed forecast that holds up long term.

As part of annual and medium-term planning, the Managing Board specifically discusses opportunities and risks with regard to markets and sales volumes with the sales and business unit heads and records the final assumptions for planning. In the reporting period, the Managing Board and business unit management were informed on a monthly basis about the financial development of the entire SMA group and the individual business units. They were continuously compared with planning assumptions. In the event of deviations or unforeseen events, short-term countermeasures could therefore be taken on the basis of intra-year forecasts.

Financial management parameters

In 2021, the SMA group used the following key financial management parameters for its operative business as explained below. Compared with the previous year, there were no changes in the calculation of key figures or in the management system.

SALES

Sales include all the sales generated over the reporting period. Because the market for inverters was shaped partly by plummeting prices, we measure inverter output sold along with sales. We calculate sales at both the group and segment level.

OPERATING PROFIT (EBIT)/OPERATIVE EARNINGS MARGIN

In addition to sales and the cost of sales, the operating profit includes functional costs and other operating expenses and income. We use this key figure to measure the profitability of the individual segments and the group. To determine the operative earnings margin, we calculate operating profit in relation to total sales. We measure the operating profit and operative earnings margin at both the group and segment level.

EARNINGS BEFORE DEPRECIATION AND AMORTIZATION (EBITDA)/EBITDA MARGIN

We calculate operating earnings before interest, income taxes, depreciation and amortization (EBITDA) based on operating earnings (EBIT), plus depreciation and amortization of fixed and intangible assets. To determine the EBITDA margin we calculate the operating earnings before interest, income taxes, depreciation and amortization in relation to total sales. We use these key figures to measure profitability at the group level, excluding imputed depreciation of investments made.

NET WORKING CAPITAL/NET WORKING CAPITAL RATIO

In addition to inventories, net working capital comprises trade receivables, trade payables, prepayments received from customers and prepayments made to suppliers. We measure our customers' and suppliers' accounts receivables as well as product manufacturing inventories regularly in relation to sales over the last 12 months. We measure and manage net working capital at the corporate group level.

CAPITAL EXPENDITURE

Capital expenditure is another key driver of liquidity planning. To manage capital expenditure, we formulate budgets as part of our annual planning, which the Managing Board approves over the course of the fiscal year. This applies particularly to large-scale capital expenditure projects, which are additionally evaluated with a profitability calculation. We manage capital expenditure at the corporate group level.

NET CASH

With net cash, we review our own financing possibilities for the ongoing business like net working capital and capital expenditure. It includes liquid funds and securities contained within working capital and cash on hand pledged as collateral less interest-bearing financial liabilities. We manage net cash at the corporate group level.

Intragroup reporting and management

INTRAGROUP REPORTING

The monthly reporting includes, among other information, detailed status reports on orders placed and order volumes, the amount of inverter output sold, sales figures, results of operation, cash flow statements, research and development activities, investments and net working capital. The aim is to compare changes in decisive items on the income statement and balance sheet both with the budget and figures of the previous month and to take any corrective measures necessary. Reporting is mapped using SAC (SAP Analytics Cloud), and an electronic management information system (SAP Business Warehouse) serves as the "home" for the information.

INTRAGROUP MANAGEMENT SYSTEM

In the reporting period, the basic elements of the intragroup management system were the regular Managing Board meeting and monthly discussions on results with the business unit heads. Strategy implementation was also discussed during quarterly business reviews with the business units as was an assessment on the progress of objectives. In addition, the intragroup management system encompasses the regular Risks and Opportunities Report and the report prepared by the Internal Audit department.

Research and development

The SMA group uses its systems expertise to develop holistic solutions comprising hardware, software and (digital) services for different applications in the fields of photovoltaics, battery-storage systems and electric vehicle charging as well as for comprehensive energy management across all segments and sectors (power generators, household appliances, storage systems, heating, ventilation and air conditioning, e-mobility). To offer our customers technically mature and economic system solutions in all market segments and regions, we selectively collaborate with strong partners. With our continuous research and our market- and customer-focused development, we can further reduce the consumer cost of PV electricity, optimize the use of energy and decrease the complexity in the new, decentralized and digital energy world.

Forward-looking development approach

With the growing importance of photovoltaics for the global power generation and the increasing integration of PV systems into complete systems, system technology demands on system integration, connectivity and the provision of grid services for a reliable energy supply are taking center stage. In this context, the SMA group's development focus is on highly integrated and digitalized solutions that cover as many functions as possible (all-in-one solution). Future focus areas of our research and development activities also include energy storage systems, e-mobility, energy market integration and power-to-gas.

In product development, we are pursuing a platform strategy aimed at quickly being able to react to market changes and systematically reducing product costs. By standardizing the architecture of the core components and integrating key system functions, we are increasing the proportion of identical components across the entire portfolio while also reducing the number of components in the system in order to offer our customers highly efficient solutions. Customization in line with different markets and customer needs is implemented partly through the connection area and software as well as through different power classes based on the platform. [1]

SMA Solar Technology AG was granted 1,709 patents and utility models worldwide by the end of the reporting period. In addition, more than 500 other patent applications were still pending as of December 31, 2021. Furthermore, SMA Technology AG holds the rights to 1,431 trademarks.

In addition to the (further) development of solutions for the efficient generation, storage and use of solar energy, for electric vehicle charging and charging management and for intelligent energy management across various sectors, the focus of development in the reporting period was on optimizing hydrogen production. The SMA group was already involved in the implementation of related projects on several continents.

Research and development expenses of the SMA group

in € million	2021	2020	2019	2018	2017
Research and development expenses	77.7	71.2	63.1	67.8	83.0
of which capitalized development projects	27.4	15.2	10.9	18.8	18.4
Depreciation on capitalized development projects (scheduled)	8.8	9.1	9.0	21.4	18.2
Research and development ratio in % in relation to sales	7.9	6.9	6.9	8.9	9.3

Holistic solutions for the energy supply of the future [2]

RESIDENTIAL SYSTEMS: HYBRID INVERTERS AND ADDITIONAL APP FUNCTIONS

In the Home Solutions segment, the focus in the reporting period was on the integration of storage and the functional expansion of energy apps for installers and system operators.

The SMA group is closing a gap in its portfolio with the market launch of the Sunny Tripower Smart Energy planned for the first quarter of 2022. The three-phase hybrid inverter with integrated backup function is available with four power classes for use in private homes. As a solar and battery inverter in one, it manages the energy flows between the PV generator, the connected battery and the household's public electricity supply together with the Sunny Home Manager 2.0. The Sunny Tripower Smart Energy thus reduces the power drawn from the utility grid and, thanks to the backup function, continues supplying important domestic appliances in the event of a power outage. Integrated services and software solutions ensure user convenience and safety. This includes the digital SMA Smart Connected service solution for swift service in the event of a fault.

SMA Smart Connected was expanded in the reporting period to improve the service process for all parties involved. SMA Smart Connected monitors the PV system around the clock, analyzes anomalies, reports these directly to the SMA service organization, if necessary, and informs the system operator and/or the installer about system data, faults and measures. Spare parts or replacement devices are sent automatically or reserved for the installer in the online shop. The high degree of automation shortens and simplifies the service process and minimizes the PV system's downtime.

The SMA apps for solar power professionals and system operators were also supplemented with additional functions. The SMA 360° app for solar power professionals now allows installers to connect system simulation, planning, commissioning and monitoring as well as automatic notifications when servicing is required. The SMA Energy app for end users was expanded by a module for managing the charging of electric vehicles.

In addition, the SMA group moved into the business field of energy market integration in Germany with the launch of the SMA JOIN electricity tariff. As the next step, it plans to introduce the JOIN Charge Card for charging of electric vehicles with renewable electricity.

[1] This paragraph is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

[2] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

COMMERCIAL APPLICATIONS: OPTIMIZED PLANNING AND EXPANSION OF INVERTER OFFERING

In the Business Solutions segment, the SMA group expanded the Sunny Design software for the planning of PV systems by shade analysis taking into account shadow progression and by the possibility of integrating up to six different sub-projects into the planning of one PV system, such as on multiple roofs, in the reporting period. Additional functional expansions are planned for the coming months, particularly with regard to planning complex electric vehicle charging solutions in the commercial sector.

In the U.S. market, we introduced a product update of the Sunny Tripower CORE1 inverter with even better diagnosis, monitoring and reporting functions for PV system designers and operators. In addition, the SMA group is currently working on new models in the product families Sunny Tripower (the next generation of three-phase solar inverters for small to medium-sized commercial applications), Sunny Island and Sunny Tripower Storage (battery inverters for the integration of storage into both on-grid and off-grid power supply systems). The new inverters will complement the range of the SMA Energy System Business.

In the past fiscal year, coneva expanded the product range in the field of intelligent charging solutions for electric vehicles. For example, coneva delivered a dynamic load management solution for optimized automatic charging of electric vehicles for around 640 charging points, among others to the parcel service provider DHL and its international locations in the reporting period. In addition to automatic control of the charging power, the internal administration and billing of the charging points (CPO services) is ensured. The coneva charging solutions will also be integrated into the expanded SMA Energy System Business in the future so as to offer commercial enterprises a complete solution for climate-neutral charging and the management and billing of electric vehicle fleets.

PV POWER PLANTS: GRID INTEGRATION FOR RENEWABLE ENERGY

In the Large Scale & Project Solutions segment, development in the reporting period focused on customer-specific complete solutions for PV, storage and power-to-gas applications.

SMA's medium-voltage power stations combine PV or battery inverters with matched medium-voltage technology in one container. With power of up to 6,000 kVA and new, grid-forming functions, they also meet future requirements for integrated energy and maintaining grid stability. They thus make a considerable contribution to integrating ever greater amounts of locally generated power from renewable sources into the grids.

We also expanded our service offering for PV power plants in the reporting period. This includes free remote service from experts for quick fault analysis and rectification and the provision of software updates via remote transmission according to the highest security standards and system availability. The SMA Virtual Support app enables the maintenance of central inverters on-site with expert support via remote service for both corrective and preventive maintenance including the replacement of components.

In the field of storage solutions, we concluded a contract in August to supply the world's largest grid-forming storage power plant in Torrens Island, Australia. SMA will supply 109 medium-voltage power stations (MVPS-SCS4200) to the project. With SMA's turnkey solution, the storage power plant can form a utility grid independently. This considerably shortens response times and ensures high grid stability in a utility grid with a large proportion of feed-in from fluctuating renewable energy sources. The project is globally significant for the transition from a central to a decentralized and renewable electricity supply.

In addition, the SMA group pressed ahead with its positioning in the new business field of green hydrogen production in the reporting period. Projects with SMA system technology for the processing of direct current for electrolysis went into operation in the U.S., Europe, Asia and Australia.

COMBINED NON-FINANCIAL STATEMENT

Basic information on the non-financial statement

In this combined non-financial statement, we report on the developments and progress in our areas of action for sustainability in the 2021 fiscal year in accordance with the statutory requirements under section 289c-e and section 315c of the German Commercial Code (HGB). This reporting is in line with the "core" reporting option of the Global Reporting Initiative (GRI) standards. At the same time, the non-financial statement also represents the UN Global Compact annual Communication on Progress. Information on the SMA group's business model, on products and services as well as on important sales markets can be found in the section „Basic information about the group" on page 16 et seq. Material risks and opportunities from the SMA group's business activities, from products and services as well as risks and opportunities in connection with climate change that could have a significant impact on the company are described in the Risks and Opportunities Report starting on page 65.

REPORTING BOUNDARIES

Unless stated otherwise, all disclosures in the "Governance and ethical business" and "Product stewardship" areas of action relate to the entire SMA group including the parent company SMA Solar Technology AG. The companies included therefore correspond to the list of fully consolidated group companies published on page 100. This also applies to the "Employees" area of action, with the exception of the "Occupational health & safety" aspect. Unless stated otherwise, all disclosures in the "Environment & energy" area of action and in the "Occupational health & safety" aspect include the parent company of the SMA group as well as major subsidiaries. The information relates to the reporting period from January 1, 2021 to December 31, 2021. It is reported annually. The last non-financial statement was published on March 25, 2021.

COLLECTION OF KEY FIGURES

The key figures in all areas of action were gathered and verified by the responsible departments to ensure that the information was complete and correct. The data in the "Environment and energy" area of action and in the "Occupational health & safety" aspect were largely compiled using the software WeSustain. The key figures on energy at the headquarters in Niestetal/Kassel, Germany, were managed using the software InterWatt. The key financial and personnel figures were largely recorded using global SAP systems. The risk assessment of suppliers was performed using RiskMethods. When determining the sustainability performance of our suppliers, we work with EcoVadis. Key figures relating to the "Integrity and compliance" aspect are managed using datasheets.

EXTERNAL AUDIT

Deloitte GmbH Wirtschaftsprüfungsgesellschaft performed an audit of the combined non-financial statement in accordance with ISAE 3000 rev with limited assurance. The "Independent auditor's limited assurance report" can be found starting on page 143.

UN SUSTAINABLE DEVELOPMENT GOALS

The UN Sustainable Development Goals (SDGs) in the areas of environment, economy and social welfare are at the heart of the 2030 Agenda for Sustainable Development adopted by all member states of the United Nations at the UN Sustainable Development Summit 2015. It is a joint roadmap for a future characterized by peace and prosperity for people and the planet. All participants in society are called upon to help achieve these goals. The Managing Board of SMA Solar Technology AG is committed to this responsibility. In the reporting year, the contribution of SMA's business activities to the SDGs was evaluated down to the level of the SDG sub-goals. Within the main aspects, the SMA group's activities contribute to 9 of the 17 SDGs. Its business activities have the greatest influence on SDG 7 "Affordable and clean energy."

UN GLOBAL COMPACT

In the opinion of SMA's Managing Board, producing technologies for the decarbonization of the energy supply is not enough for a holistic understanding of sustainability. It is equally important for these solutions to be produced in accordance with high environmental, social and governance standards. Against this backdrop, the Managing Board is committed to the ten principles of the UN Global Compact. SMA Solar Technology AG joined this United Nations initiative in 2011. The UN Global Compact sets out ten principles relating to human rights, labor standards, environmental protection and the fight against corruption, which are based on the central conventions of the United Nations.

The GRI content index, starting on page 50, provides a detailed overview of where in the SMA Annual Report the relevant information regarding the GRI and the UN Global Compact can be found. An overview of sustainability key figures can be found on page 48 et seq. We publish further information about sustainability at the SMA group on our website at www.SMA.de/Sustainability.

Sustainability management

For the SMA group, sustainable business means making a significant contribution to the company's long-term success by way of responsible and respectful treatment of people, the environment and resources with increasing use of decentralized renewable energies along the entire value chain.

STRATEGIC OBJECTIVE OF HOLISTIC SUSTAINABILITY

Sustainability had already been integrated into the SMA Strategy 2020 as an important basis and played a central role in the further development for the SMA Strategy 2025. The SMA Managing Board is thereby taking account not only of the importance of sustainability within the SMA group, but also of the significantly increasing interest and demands of major stakeholder groups. The "holistic sustainability" objective within the Strategy 2025 sets out the aspiration of integrating sustainability in all areas of the company and taking on a leading role in creating a better future with the SMA group. Sustainability should be taken into account in all business processes, as every area of the company can contribute to creating a better future. Further information on the SMA Strategy 2025 can be found in the Strategy chapter starting on page 18.

MANAGEMENT AND CONTROL

To strategically integrate and advance sustainable thinking and action into the company, the SMA Managing Board established a Sustainability Committee in the reporting year, consisting of members of the Managing Board and top-level managers. The Sustainability Committee also ensures that the SMA group's sustainability objectives are achieved. The committee prepares sustainability topics for the Group Management Committee, which is also made up of members of the Managing Board and top-level managers and which makes the main decisions with regard to the SMA group's sustainability program.

The SMA group's sustainability management is based in the Global Quality department. The management systems for quality, the environment, energy and occupational safety and health are also coordinated in this area. In this way, the SMA group makes optimal use of synergies with sustainability management. The Executive Vice President for Technology & Digitalization, who is responsible for the Global Quality department, is a member of the Sustainability Committee and of the Group Management Committee.

Since 2021, sustainability management has been coordinated globally within the SMA group. A Global Sustainability Meeting at which all major subsidiaries of the SMA group are represented has been initiated for this purpose. The goal is to coordinate sustainability initiatives, standards and key figures on a regular basis.

To have our sustainability performance reviewed externally and disclose it to our customers, we again took part in the evaluation by EcoVadis in the reporting year. As in the previous year, we were awarded the silver medal in 2021. In addition, the SMA group is one of the most sustainable companies in Germany according to an independent evaluation by the magazine "Stern" with Statista from December 2020, and was among the finalists in the German Sustainability Award for companies in the reporting year.

MATERIALITY ANALYSIS

Our sustainability management comprises four areas of action: environment & energy, product stewardship, employees and governance & ethical business.

The SMA group identifies the materiality of the sustainability aspects within these four areas of action by means of a materiality analysis that was updated in 2021. The materiality analysis maps the outside-in and inside-out perspectives of sustainability aspects. The outside-in perspective provides an understanding of how sustainability aspects were assessed by major stakeholders. For example, the aspirations of politicians and legislators are included, as are customer perspectives. The inside-out perspective presents the influence that the SMA group can have on the aspects assessed. To this end, we have performed a detailed evaluation of the UN Sustainable Development Goals and their influence on the SMA group's value chain.

In updating the materiality analysis, the structure of the areas of action, the aspects as well as the disclosures and key figures on the SMA group's sustainability program to be reported in accordance with the GRI were adjusted. We ensure that our ambitious

SMA group materiality matrix

objectives are consistent with the results of the materiality analysis and the SMA Strategy 2025 and measure their achievement using KPIs. We have discontinued the previously used combined key figure for the company and the product in order to increase transparency. In addition, we have clarified the terms used and more clearly delineated and specified the aspects. With "Integrity & compliance", "Fair pay & benefits", and "Product development & innovation", new material aspects have also been identified.

By contrast, the "Sustainable profitability" aspect was no longer included under the topic of sustainability in the SMA Strategy 2025, but instead came under the strategic objective "Stability through profitability." The "Social commitment" and "Training" aspects were no longer identified as material in the latest materiality analysis. However, we will continue to be involved in initiatives and partnerships at different levels. We cover the topics of feedback culture and customer satisfaction in the "Stakeholder management" section.

The previous material aspects "Circular economy," "Preventive environmental protection," and "International principles and values" are no longer treated as sustainability aspects within sustainability management, but instead as important principles for several aspects. Within these aspects, these principles are still a high priority for the SMA group.

We have examined the material aspects and SDGs to which we contribute along the entire SMA value chain and presented the points in the value chain where they are relevant.

Delineation of material aspects and SDGs along the value chain

Area of action	Key issues	Research and development	Procurement	Production	Delivery logistics	Product use	Product end of life	SDG sub-goal
Environment & energy	Renewable energies	x	x	x	x	x		7.1, 7.2
	Responsible use of materials	x	x	x	x			8.4, 12.2
	Waste & recycling		x	x	x			12.4, 12.5
	Climate protection	x	x	x	x	x	x	7.3, 12.2, 13.2
Employees	Occupational health & safety		x	x	x			8.8
	Diversity & equal opportunities		x	x	x			4.3, 5.1, 5.5, 8.5, 10.2, 10.3
	Fair pay & benefits		x	x	x			8.5, 10.1
Governance & ethical business	Sustainable supply chains	x	x	x				5.2, 8.7, 12.7, 16.2
	Integrity & compliance	x	x	x	x	x		16.5
Product stewardship	Product development & innovation	x	x			x	x	7.b, 9.5
	Sustainable product life cycle			x		x	x	12.4, 12.5

In 2022, we will update the SMA sustainability mission statement based on the knowledge gained from the materiality analysis.

STAKEHOLDER MANAGEMENT

We define stakeholders as individuals or organizations that could influence our decisions and activities or that could be influenced by decisions and activities of the SMA group. We place high value on ongoing, transparent dialogue with important stakeholder groups. We report important events within the company in ad hoc messages, press releases, on our website and social media channels. We regard dialogue with our stakeholders as an important catalyst for the further development of our sustainability management.

One important tool for this is our annual stakeholder analysis, which gives us an insight into important stakeholder groups and their expectations. We analyze the data and prioritize the expectations. If prioritized expectations are not met by the SMA group, then appropriate measures are defined. The most important stakeholder groups for us are employees, customers, investors and analysts, politicians and legislators as well as media and non-government organizations (NGOs).

Employees

Open and trustful interaction with each other as well as the highest possible transparency and involvement of employees in corporate decisions are highly important to us. That is why we not only provide our employees with regular and comprehensive information about developments and changes in the company, but also develop important topics and content in a participatory way.

Dialogue with employees once again largely took place virtually in the reporting year due to the coronavirus pandemic. Members of the Group Management Committee informed the employees of the company's current situation and major events in video messages in 2021. In addition, two virtual works meetings were held, with employees able to address questions to the Managing Board and the Works Council online both in advance and directly. New employees were also welcomed using the digital format New@SMA in the reporting year and had the opportunity to meet the Managing Board.

We use our annual employee appraisals for all employees to coordinate their tasks and the associated qualification requirements, to measure performance and to provide feedback on collaboration in an exchange between manager and employee.

Global employee surveys are generally held every two years and help us identify important topics for employees. The last survey was held in 2020. The analysis showed that the employees were particularly motivated by the development of the corporate strategy, which was being refined at the same time. One integral part of the survey is the topic area of "Commitment", which addressed topics relating to the work situation, management and team spirit in the 2020 survey. The evaluation results in a transparent commitment KPI across all areas of the SMA group and thus allows for targeted improvements. Measures are derived by the business divisions in collaboration with the HR department.

In addition, executives and project managers can conduct short "pulse check" surveys in collaboration with the HR department, which can be used to measure the mood in change processes, for example.

Customers

The dialogue with our customers takes place in particular at customer events, as part of the SMA partner program, at SMA Solar Academy seminars and regular international trade fairs. Despite the significant restrictions imposed due to the coronavirus pandemic, we continued this dialogue and close collaboration with our customers in 2021. To this end, we used various analog and virtual formats and communication channels. In addition to livestreams with interactive product presentations and panel discussions for a global audience, these included 711 seminars and webinars held by the SMA Solar Academy with a total of more than 20,000 participants worldwide.

Our customers have a constantly growing interest in transparency and particularly in sustainability issues. In order to process customer inquiries faster, we started developing a glossary in 2021 and assigned topic areas to SMA experts. The glossary is to be continuously expanded and regularly updated to ensure that up-to-date information is available to our customers at all times.

Investors and analysts

We also aim to ensure transparency, up-to-date information and credibility in our capital market communication. Due to the coronavirus pandemic, both our Capital Markets Day and the SMA Annual General Meeting were held virtually in 2021. In addition, the Chief Financial Officer took part in virtual roadshows and conferences and held regular phone calls with analysts. We addressed the capital market's growing need for information on companies' ESG performance by taking part in the Carbon Disclosure Project (CDP) for the first time in the reporting year. This year we also actively participated again in ESG ratings by international rating agencies.

Politicians and legislators

As a globally operating company, we are subject to a wide variety of political changes and decisions that affect our business activities. To safeguard the future of the SMA group, it is important to us to communicate our company's interests in open dialogue with governments, industry associations and organizations. We also respond to our business partners' suggestions and interests with the same openness. Our principles on political dialogue and representation of interests form the basis for a set of responsible, reliable and honest practices aimed at reconciling commercial and social interests. In the reporting year, we made a financial donation of €10,000 to the Social Democratic Party of Germany (Sozialdemokratische Partei Deutschlands).

In addition, we are organized in industry associations where we represent our interests. The main national and international advocacy groups include SolarPower Europe, the Solar Energy Industries Association, the German Solar Industry Association (Bundesverband Solarwirtschaft), the German Renewable Energy Federation (Bundesverband Erneuerbare Energie), the German Electro and Digital Industry Association (Zentralverband Elektroindustrie) and the Association for Electrical, Electronic and Information Technologies (Verband der Elektrotechnik, Elektronik und Informationstechnik).

At a local level, we are also involved in the Kassel Climate Protection Council. This committee, which includes representatives from business, science, civil society, culture, education, youth organizations, religion and social welfare advises the city council on climate protection issues. It reflects a broad range of opinions of different stakeholder groups. Taking account of the Climate Protection Council's recommendations, the city of Kassel has set itself the goal of reaching climate neutrality by 2030 and implementing a 100% decentralized supply of renewable energy.

The table below shows a summary of the main stakeholder groups for the SMA group, their type of involvement and important topics and concerns expressed.

SMA stakeholder dialogue

Stakeholder	**Type of involvement**	**Issues raised and expectations of SMA**
Employees	Regular company-wide and division-specific "pulse check" surveys, works meetings held by the Works Council, intranet communication with comment functions, collaboration tools, leadership events, communication with "climate representatives," newsletters, monthly division and department meetings, committees, working groups	Working conditions, working hours and location arrangements, mobile working, training, career opportunities, fair, transparent and performance-based remuneration, sustainable corporate strategy, safe jobs, business success, equal opportunities
Politicians / legislators	Organization of events, joint initiatives, proactive contact, participation in consultations, personal meetings, presentation of positions via industry associations, involvement in local initiatives (Kassel Climate Protection Council / Smart City Kassel)	Securing jobs, location image and positive reputation, specialist support in the field of renewable energies and sustainability strategies, evaluation of solar-specific issues, economic performance, willingness to invest, preparation of positions
Press / NGOs	Press releases, press conferences, ad hoc messages, social media channels, website, interviews, surveys, background discussions, responding to inquiries	Transparent communication, sense of responsibility in dealing with sustainability issues, compliance with global standards (e.g., UN Global Compact), business success, securing jobs, working conditions, location image and positive reputation, renewable energies, technological development and innovation
Customers / major customers / distributors / installers / project partners	Personal and virtual meetings and events, trade fair presentations, personal customer service advisors, newsletters, e-mails and phone calls, joint business development, marketing, hotline and digital platforms in service, service partners, SMA Solar Academy for installers	Quality, reliability, value for money of systems and solutions, contract compliance and delivery reliability, compliance, fairness, sustainability performance of products, product certification, training for installers, innovative applications, lifetime, customer service, holistic collaboration
Investors / analysts / rating agencies	Financial and sustainability reporting, Annual General Meeting, roadshows and bilateral meetings with investors, continuous contact with analysts, annual Capital Markets Day, website, participation in several ESG ratings and the Carbon Disclosure Project (CDP)	Transparent and extensive communication on the company's development, economic profitability, sustainability performance / ESG
Suppliers	Bilateral dialogue via commodity managers, purchasing partnerships, annual or quarterly discussions, Supplier Day, supplier training, participation in supplier evaluations, supplier development with regard to quality, supplier audits	Reliable partnership, compliance with legal regulations, fair competition and ethical conduct, clear guidelines for quality, occupational safety requirements and environmental standards, reliable capacity and procurement planning

SOCIAL COMMITMENT

In addition to climate protection, democratic values such as openness, respect and tolerance are extremely important to us. For this reason, the SMA group has joined with other companies, institutions, societies and industry associations in the “Open to diversity – Closed to exclusion” initiative in Kassel and northern Hesse to promote diversity in all dimensions and stand up against the exclusion of people in society and the working world. As part of our commitment, we donated €1,500 to the initiative in the reporting year.

The traditional Christmas donation by SMA employees is used to support projects and initiatives that help disadvantaged children and young people via the fund-raising organization A.M.S. e.V. Employee donations are usually collected every year at the Christmas party, but as this took place digitally again in 2021 due to the coronavirus pandemic, and in view of the generous donations in the previous year, the possibility of donating overtime and vacation days in addition to money was provided again. In total, donations amounting to more than €54,000 were collected from the employees. This amount was supplemented by the Managing Board with a corporate contribution of €10,000.

In the following sections, we report on the developments and progress and the key aspects in our four areas of action.

Area of action: Environment & energy

7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION

Our technologies facilitate a climate-friendly energy supply all around the world. Furthermore, by handling resources responsibly and using renewable energies within the SMA group, we aim to minimize the environmental impact of our business activities and to help establish the conditions for a livable future for all people.

We endeavor to continuously reduce the use of resources in terms of raw materials, energy and waste along the entire value chain and increase the use of renewable energies, environmentally friendly materials and sustainable forms of mobility. To this end, we reviewed our sustainability objectives in 2021 and added further ambitious objectives. The aspect of climate protection and the topic area of the circular economy are at the heart of the “Environment & energy” area of action.

Under the circular economy, we include all topics that contribute to closing material cycles and reducing material flows. In addition to the “Product stewardship” area of action, this includes the aspects of responsible use of materials as well as waste and recycling. We want to incorporate the principles of the circular economy in our thinking and our business processes. Our approach is based on the belief that every area of the company can influence the topic of the circular economy.

The SMA group’s production sites have environmental management systems in line with DIN EN ISO 14001. In addition, the environmental management system used for our inverter production at our headquarters in Germany is certified in accordance with DIN EN ISO 14001. The monitoring audit was conducted successfully in 2021. Our environmental management system supports us with our approach of minimizing the environmental impact at every stage of the value chain and acting in accordance with the current environmental legislation. The precautionary approach in line with Global Compact Principle 7 is thus an integral part and a driving force for our environmental management.

The energy management system at our headquarters in Germany is certified in accordance with DIN EN ISO 50001. SMA’s energy concept is based on three levels from which we work to improve energy-related performance: avoiding energy consumption, using energy more efficiently and increasing the share of renewable energies used. The SMA group has already undertaken a number of flagship projects such as the SMA Solar Academy building in Niestetal, Germany, which functions independently from the utility grid; the data center completed in 2013, which, at that time, was one of the most resource-efficient centers of its kind; and two extremely energy-efficient production buildings operated with renewable electricity. These projects are a testament to the high priority the SMA group places on its sustainable energy management. The data center won the German Data Center Award for energy and resource efficiency, while the production buildings won the international Energy Efficiency Award and the Timber Construction Award for Hesse.

To keep up to date with all environmental legislation, the Legal Provisions taskforce was established at the headquarters in Germany. No violations of environmental laws and regulations were identified in the reporting year.

Material risks and opportunities from the SMA group’s business activities, from products and services as well as risks and opportunities in connection with climate change that could have a significant impact on the company are described in the Risks and Opportunities Report starting on page 65 and in the Forecast Report starting on page 81. Key figures on environment & energy that go beyond the disclosures in this section can be found in the overview of sustainability key figures on page 49.

RENEWABLE ENERGIES

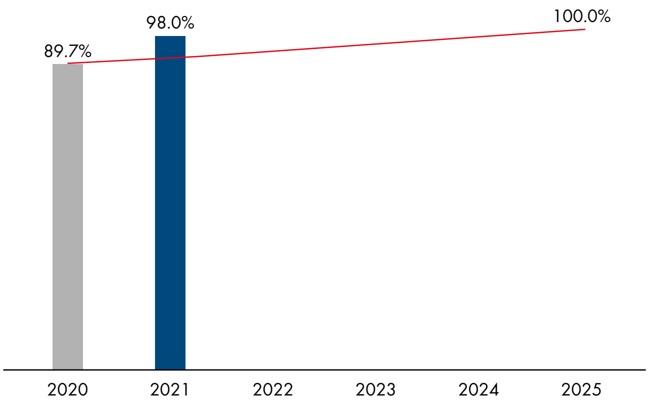
→ Our objective: 100% electricity from renewable energies

The transformation of global energy supply structures to generation based on decentralized renewable energies is an important factor in the fight against the global climate crisis. With around 3,500 employees in 20 countries, the SMA group develops, produces and sells technologies that are fundamental to this transformation. Our systems and solutions facilitate decentralized and efficient energy generation and use based on renewable energies. As such, the SMA group's sustainable business activities directly contribute to SDG 7 "Affordable and clean energy".

Renewable energies also play an important role in our own energy supply. Since 2020, our headquarters in Germany has been supplied entirely with decentralized renewable power from the immediate surroundings. In 2021, our in-house PV systems produced a quantity of electricity corresponding to 36% (2020: 39%) of our total electricity consumption at the headquarters in Germany. We used around 33% of the electricity generated ourselves. The rest was fed into the utility grid.

All other SMA locations worldwide are also to be gradually changed over to renewable electricity. The target that we have set ourselves as part of the SMA Strategy 2025 is to use 100% electricity from renewable energy sources by 2025. With a ratio of 98.0% achieved in 2021 (2020: 89.7%), we already came very close to our target. This is particularly attributable to the transition to renewable electricity at the production site in Poland.

Achievement of objective: 100% electricity from renewable energies



Energy efficiency

In the course of merging our inverter production activities at one of our production facilities, we started to optimize energy use at our Solar Factory 3 at the headquarters in Germany in 2020. This is based on a full analysis of the current situation that we successfully completed in 2021. At the same time, we already switched the hall lighting in Solar Factory 3 over to efficient LED lighting. In Solar Factory 1, which is now used differently, we will also gradually switch to efficient LED lighting by 2023. We are also working on the continuous improvement of our energy-related performance in the development and testing infrastructure. New AC sources were procured in 2021, enabling us to test our inverters more efficiently. A modern energy management software makes it possible for us to monitor all types of consumption on an ongoing basis. The focus in 2021 was on further development of our key figures at process level.

Despite the implementation of energy-saving measures, the SMA group's energy consumption increased slightly in 2021. In 2021, the specific energy consumption per kW of inverter output produced amounted to 2.64 kWh/kW at the headquarters in Germany (2020: 2.27 kWh/kW) and 3.35 kWh/kW globally (2020: 2.83 kWh/kW). This was particularly due to the increased base load in relation to production-linked consumption as well as increased gas consumption as a result of hygiene problems in the water supply at the Niestetal/Kassel location, which required a higher storage temperature. This latter factor was also one of the reasons why the SMA group's total energy consumption rose slightly to 34.37 GWh in 2021 (2020: 33.35 GWh). Of this total, 21.59 GWh was obtained from renewable sources (2020: 21.65 GWh). In 2022, we will implement a project at the headquarters to switch to decentralized heat generation with further energy-saving potential.

CLIMATE PROTECTION

The Managing Board of SMA Solar Technology AG considers the global climate crisis to be the greatest challenge facing mankind. The Managing Board is convinced that the climate protection goals set out in the closing statement of the 2016 UN Climate Summit in Paris must be achieved to preserve the planet for future generations. States, public and private institutions and companies must all work together to limit global warming to 1.5 °C. For this reason, the Managing Board has geared the SMA group toward contributing to the achievement of this target both with its systems and solutions and in its operating activities.

We report our key figures on CO_2e in accordance with the GHG Protocol Corporate Standard. To further increase transparency on SMA's climate footprint for our stakeholders, we joined the Carbon Disclosure Project (www.cdp.net) in 2021. In the first evaluation by the CDP, we already achieved a ranking of B–. The CDP also helps us recognize opportunities in line with best practices and systematically integrate climate protection into our business processes.

EU taxonomy

The European Green Deal aims to achieve economic growth in harmony with the well-being and health of society, protection of the environment and biodiversity, and climate protection. This can be achieved only by reorganizing the financial system for sustainability.

With the Sustainable Finance package, the European Commission has adopted extensive measures to guide finance flows toward sustainable activities. By creating transparency and introducing disclosure requirements, it aims to make it easier for investors to finance sustainable business activities and technologies. This is intended to close gaps in financing on the European Union's path to achieving its target of climate neutrality by 2050. The basis for this is the EU Taxonomy Regulation.

The EU taxonomy provides a tool that specifies criteria for determining which economic activities are sustainable and contribute to the goals of the Green Deal. For the 2021 reporting year, companies initially report on economic activities that make a significant contribution to the goals of climate change mitigation and climate change adaptation. Delegated legal acts have already been adopted for these two goals and include technical screening criteria for specifying when an economic activity is to be considered environmentally sustainable.

However, the requirement to disclose fulfillment of the technical screening criteria does not yet apply to the 2021 reporting year. Instead, economic activities that are "taxonomy-eligible" are reported in the year of first-time application. These are economic activities that are described in the EU Taxonomy Regulation and in the associated delegated legal acts, without having to meet the technical screening criteria defined for these. Our disclosures therefore relate to taxonomy-eligible and non-taxonomy-eligible economic activities broken down by their share of total sales, investment expenditure and operating costs.

The SMA group's economic activities make a significant contribution to climate change mitigation in the area of enabling economic activities as defined in Article 10 (1) (i) in conjunction with Article 16 of the EU Taxonomy Regulation. Enabling economic activities do not contribute significantly to climate change mitigation with their own performance, but rather play a key role in the decarbonization of the economy, as they make it possible to improve the climate footprint and environmental performance of other activities. In accordance with Annex I of the delegated regulation to establish the technical screening criteria for the environmental goals of climate protection and climate change adaptation, we have identified two economic activities to which the SMA group's technologies and services are assigned. These are firstly "Manufacture of renewable energy technologies" to which we assign our products, and secondly "Installation, maintenance and repair of renewable energy technologies" to which we assign our services. As a result, 100% of the SMA group's business activities are taxonomy-eligible.

To determine the disclosures, we first performed an analysis of consolidated sales and differentiated them by product group. We then allocated the sales generated with the respective product groups to the taxonomy-eligible economic activities. Based on the differentiation by product group, a direct allocation of sales to the identified activities could be performed. As a result, two economic activities were identified to which the SMA group's products and services could be allocated. First, these are the production of technologies for renewable energy and second, the installation, maintenance and repair of technologies for renewable energies in accordance with Annex I of the Delegated Regulation C(2021) 2800 in the final version dated June 4, 2021 (climate change mitigation and climate change adaptation). For both taxonomy-eligible capital expenditure and taxonomy-eligible operating expenditure, direct allocation to the activities of the Delegated Regulation was not possible. We assume, however, that the operating expenditure and capital expenditure are mostly taxonomy-eligible. As all sales are taxonomy-eligible and operating expenditure and capital expenditure serve to generate sales, the percentage ratio of sales from activities 1 and 2 was therefore used as the basis for the breakdown of capital expenditure and operating expenditure.

SMA disclosures on EU taxonomy

SMA group 2021	in €'000	in %
Sales [1]	**1,012,576**	
thereof taxonomy-eligible in absolute terms	1,012,576	100.0%
thereof from activity 1 [2]	900,160	88.9%
thereof from activity 2 [2]	112,416	11.1%
Operating costs	**72,000**	
thereof taxonomy-eligible in absolute terms	72,000	100.0%
thereof from activity 1 [2]	64,006	88.9%
thereof from activity 2 [2]	7,993	11.1%
Investment expenditure	**56,376**	
thereof taxonomy-eligible in absolute terms	56,376	100.0%
thereof from activity 1 [2]	50,117	88.9%
thereof from activity 2 [2]	6,259	11.1%

1 Sales before sales deductions
2 Activity 1: Manufacture of renewable energy technologies
Activity 2: Installation, maintenance and repair of renewable energy technologies

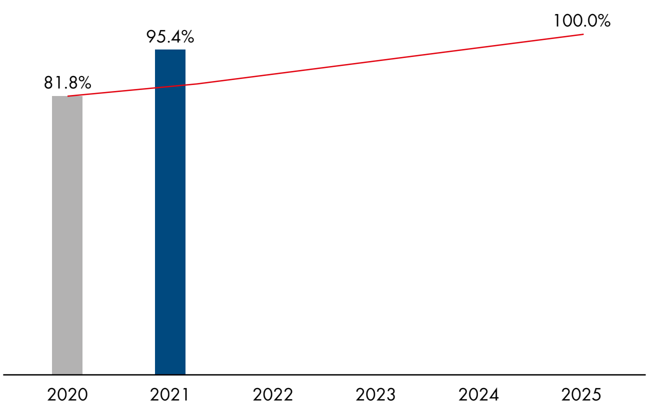
Decarbonization

→ Our objective: 100% climate neutrality

The target that we originally set ourselves for 2025 of reducing specific CO_2e emissions in kg per kW of inverter output produced at the headquarters in Niestetal/Kassel, Germany, by 50% to 0.084 kg/kW compared to the 2018 base year had already been achieved in 2020. Measures to reduce losses in the refrigerant circuit and compensation for our procurement of district heating made a significant contribution to achieving this target. In the reporting year, specific CO_2e emissions at the headquarters in Niestetal/Kassel, Germany, of 0.020 kg/kW were on par with the previous year (2020: 0.021 kg/kW; the previous year's figure was adjusted due to the switch to emissions factors from the Ecoinvent database). Globally, the SMA group's direct greenhouse gas emissions (Scope 1) amounted to 575 tons of CO_2e (2020: 512 tons of CO_2e). The SMA group's indirect greenhouse gas emissions (Scope 2) decreased significantly to 359 tons of CO_2e in 2021 (2020: 1,705 tons of CO_2e). The intensity of greenhouse gas emissions also decreased considerably to 0.66 tons of CO_2e/sales in € million (2020: 1.91 tons of CO_2e/sales in € million). This significant decrease particularly resulted from the switch to renewable electricity at the Polish production site.

As the next step, we have set ourselves the goal of supplying the SMA group with 100% climate-neutral electricity and heating by 2025 as part of the corporate strategic objective of "holistic sustainability." We had already achieved this target in production at the headquarters in Niestetal/Kassel, Germany, back in 2020. Globally, we have already achieved a climate neutrality ratio of 95.4% in 2021 (2020: 81.8%).

Achievement of objective: 100% climate neutrality



In the medium term, we also plan to increase the quality of climate neutrality and consider compensation measures only when no other solution is available. In the long term, we want to expand this to our value chain, thereby further reducing our CO_2e footprint. In this context, we will develop a climate roadmap by the end of 2022 that also takes account of the Scope 3 emissions generated outside the organization.

The contribution that we make to climate protection with our products can also be measured in monetary terms. With an underlying average term of 20 years and an average value in relation to the amount of electricity generated, the total inverter output sold by the SMA group since 2001 of around 113 GW helped avoid greenhouse gas emissions of almost 76 million tons of CO_2e in the reporting year. This corresponds to avoided environmental damage of more than €15 billion (2020: more than €13 billion; calculation: 113 GW output sold x 1,512 kWh electricity generation per year per kW x 0.475 kg CO_2/kWh x €201 per ton of CO_2; previous year's figure has been adjusted due to specification of the calculation method).

Sustainable mobility

Our commitment to more sustainable mobility relates to both our employees und our in-house vehicle fleet. Our corporate mobility management, which has won multiple awards, aims to raise awareness of environmentally friendly forms of transportation among SMA employees in the interests of climate protection. To increase the proportion of cyclists among our employees, we introduced the option of bicycle leasing in 2016. In 2021, 362 employees made use of this possibility (2020: 334 employees). We also significantly expanded the charging infrastructure for electric vehicles at the headquarters in Niestetal/Kassel, Germany, in 2021. We now provide our employees and visitors with a total of 72 electric vehicle charging stations at three locations with an entirely renewable electricity supply (2020: 27 charging stations).

Our fleet organization had already been recognized by nonprofit environmental and consumer protection association Deutsche Umwelthilfe as a good example of climate protection. By progressively switching to alternative drive systems, we further reduced our vehicle fleet's CO_2 emissions to 90 g/km in 2021 (2020: 101 g/km). We increased the proportion of electric vehicles in our fleet to 44% in the reporting year (2020: 37%). We are currently working on updating and developing our fleet organization with the focus being on sustainability and climate protection.

RESPONSIBLE USE OF MATERIALS

For the SMA group, responsible use of materials in our products means continuously increasing material efficiency, substituting materials with more environmentally friendly alternatives and complying with the material requirements for our products at all times. Improving our products' sustainability performance with these and other measures is something that we take into account in the product development process already. We describe this, and the way that we handle our products at the end of their useful life, in more detail in the "Product stewardship" area of action. By contrast, the aspect of responsible use of materials maps the start of the product life cycle. For all these aspects, we follow the circular economy approach and endeavor to close material cycles and steadily reduce the impact of our products on the environment.

To promote the circular economy and conserve natural resources, it is very important to avoid the use of primary raw materials by treating waste products and returning them to the production process as secondary raw materials. In view of the growing shortage of raw materials, this is also a tool for ensuring supply reliability. We are therefore working on steadily increasing the share of secondary raw materials in our products.

Material efficiency

By reducing the materials used in our products, we save resources and thus protect the environment. In addition, resource efficiency gives rise to economic benefits for the SMA group. The target that we had originally set ourselves for 2025 of reducing the weight of our products by 30% per kW of inverter output produced compared to the 2019 base year had already been achieved in 2020. In the reporting year, we moved even further below the target of a maximum of 1.49 kg/kW. The average weight of our products came to 1.43 kg/kW in 2021 (2020: 1.47 kg/kW).

In the previous year, the weight of our string inverters had averaged 2.23 kg/kW output, in 2021, it was 2.27 kg/kW. We increased the power density of our central inverters such that the weight across all products is now just 1.01 kg/kW output (2020: 1.05 kg/kW). The high power density also reduces the number of inverters required within a PV power plant.

Avoiding production rejects

→ Our objective: 25% reduction of the ratio of material input to product output

There is further potential to increase material efficiency by way of reducing production rejects. Rejects are produced when components and component groups cannot be used in the production process due to damage or faults. By improving production processes and ensuring the quality of components in procurement, the use of materials and quality costs can be reduced.

For our objective of reducing the ratio of material input to product output in our production at the headquarters in Germany by 25% by 2025, we drew up the requirements for the design of key figures and reports in the reporting year. In this context, we changed the base year for this objective from 2018 to 2020. Due to extensive changes in the key figure structures and reporting formats from 2020 onward, we can thereby ensure that the key figures are reliable and can be tracked consistently. The establishment of the key figure structures will be completed in 2022 and comprises evaluations of all production areas. In the next reporting period, we will therefore report retroactively on progress in achieving the target up to the 2020 base year.

Critical materials

Materials that are harmful to people and the environment are often required for the production of (performance) electronic components. We have undertaken to reduce the share of substances of very high concern (SVHCs) under the Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH Regulation) and the possible exceptions under the Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS Directive) in our products. We are thus going beyond the legal regulations. We have acquired a materials compliance platform in the reporting year. This software will allow us keep track of materials information in more detail and thus manage it better in the future.

In our standard for dealing with critical and hazardous materials and substances from conflict regions, we require our suppliers to comply not only with applicable laws such as REACH and the Stockholm Convention on Persistent Organic Pollutants, but also with additional requirements such as Section 1502 of the Dodd-Frank Act. We can thus assure our customers that we do not use any conflict minerals.

WASTE & RECYCLING

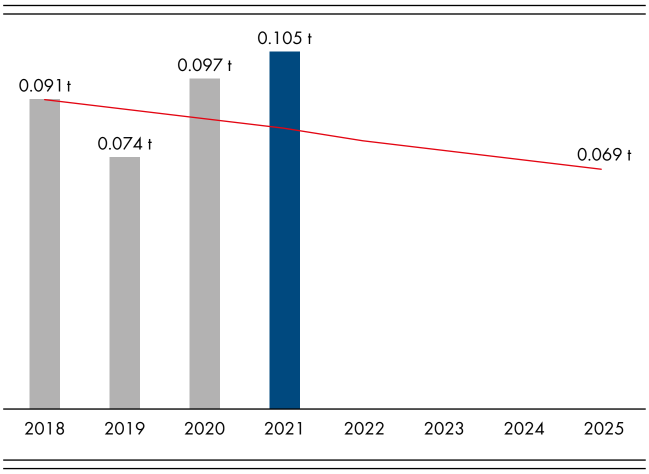
→ Our objective: 25% reduction in waste per metric ton of product produced

In dealing with waste, we use the measures of the waste hierarchy as a guideline. Accordingly, the top priority is to avoid waste. If this is not possible, then measures for reuse are examined. The next step is recycling measures, energy recovery and only then disposal.

In 2021, we expanded the recording of key waste figures to the entire SMA group. Globally, the key figures show a recycling rate of 92% (2020: 89%) in relation to the total waste volume of 2,413 tons (2020: 2,583 tons). The global share of hazardous waste materials came to 12.46% in 2021 (2020: 10.65%).

The volume of waste generated plays a particularly important role in the operating divisions. We have therefore set ourselves the objective of reducing this waste volume by 25% to 0.069 tons of waste per ton of product produced by 2025 compared to the 2018 base year. This objective covers waste in the operating divisions at the headquarters in Niestetal/Kassel, Germany. It does not include construction waste or extraordinary waste. In the reporting year, we recorded a specific waste volume of 0.105 tons of waste per ton of product produced (2020: 0.097 tons of waste per ton of product).

Achievement of objective: 25% reduction in waste per metric ton of product produced



Measures to reduce waste are developed on the basis of detailed analyses of the categories of waste generated. These showed that the increase in our specific key figure in the past two years was proportionately due to an increased volume of packaging. One measure to reduce the packaging volume is the development of an internal packaging guideline to avoid creating packaging waste in the first place in accordance with the waste hierarchy.

Area of action: Product stewardship

For us, product stewardship means taking responsibility for the impact of our products throughout the product life cycle, from their development to the end of their lifetime. Our aim is to meet our customers’ highest quality requirements and provide them with products with a long lifetime. With our high capacity for innovation, we therefore develop high-quality products that meet the changing demands of an increasingly digitalized world and the requirements for the circular economy.

Our production sites are certified in accordance with DIN EN ISO 9001, thus guaranteeing compliance with internationally recognized quality standards. The high standards that we set for the quality and safety of our products and systems is supported by our accredited in-house test center. The expansion of our test center in 2021 enables us to test even larger devices for electromagnetic compatibility using state-of-the-art techniques and to ensure that our future solutions for PV power plants also satisfy the requirements and regulations on the international markets.

To examine the impact of our products on customer health, safety and the environment, we conduct risk assessments and extreme tests for fault simulation during the product development process, such as the creation of a flammable gas mixture that is caused to explode in the device. If necessary, we use the results to derive measures for achieving the desired condition of our products. The products of the SMA group meet all the safety standards required by each of our markets (e.g., UL, JET, VDE, etc.). There were no violations in the reporting year in connection with the effects of our products on our customers' safety and health.

SUSTAINABLE PRODUCT LIFE CYCLE

It is important to us to know what effects our products have on the environment so that we can derive measures on this basis and improve product sustainability. Life cycle assessments for representative product categories help us identify the factors that influence the sustainable product life cycle. By means of life cycle assessments conducted internally, we have established that factors such as the use of renewable energy by our suppliers, reduced use of materials and increased energy efficiency of our products are important approaches for improving product sustainability. In the "Environment & energy" area of action, we report on important initiatives in this area. To create more transparency on product sustainability also for our customers, we will update our life cycle assessments and have them certified externally. We will include representative products from different product groups here.

Product lifetime

→ Our objective: 1.0% field failure rate

Continuous reduction of wearing parts and efficient maintenance routines make a positive contribution to our products' lifetime. We qualify components that are critical to the product's lifetime separately before their use. In addition, we conduct extensive functional and endurance tests during the development phase and validate our products with field tests before series production begins. We once again significantly increased the already long lifetime of our products with the Sunny HighPower Peak3. Provided it is installed and operated correctly, we can give proof of a lifetime of 25 years on the basis of extensive age simulations.

One important key figure for the quality of our products is their field failure rate. This key quality figure refers to the number of failures in the field after the products are approved. For each SMA product, ambitious and specific product lifetime and field failure rate targets are defined and assessed each year. Field behavior is evaluated continuously. Identified deviations are prioritized in terms of their impact from the customer's perspective and are remedied as part of a problem-solving process. Based on the failure rates and the installation figures for the products, we derive an overall failure rate target for overarching product groups and for the SMA group. In order to adhere to our commitment to quality, we have set ourselves the ambitious target of reducing the field failure rate of our products to 1.0% by 2025. We derived this target in the 2018 base year by reference to the current and forecast products and the product mix in the field. In the reporting year, the field failure rate averaged around 1.7% (2020: 1.5%) with a positive trend at the end of the year. This was due to system faults that occurred at the beginning of the reporting year and were remedied with effective measures in the course of the year. Our extensive quality program QCore helps improve the field failure rate and permanently reduce quality costs.

Reparability and reuse

To further minimize the environmental impact of our inverters, we aim to return the greatest possible proportion of materials to the material cycle as secondary raw materials once the inverters reach the end of their useful lives. We thereby become less dependent on raw material extraction, which involves working and environmental conditions that are difficult to control, and simultaneously improve our supply security.

In our Global Repair Program, we have consistently developed this approach in order to recycle used equipment and components as comprehensively as possible and return equipment parts that are no longer usable to the material cycle. If the source of the fault is known, devices that require servicing are repaired by replacing defective components at the customer site. Only if this is not possible, the devices will be sent to our Global Repair Center in Niestetal, Germany, and replaced with reconditioned devices. Defective devices are repaired wherever possible and transferred to the replacement device pool. As part of the "Refurbished Inverter" subproject, we have also developed a process that allows us to offer refurbished products for which no use has been found in service for sale as used goods.

We have also analyzed the reusability of components and derived measures in the Global Repair Program. Components and assemblies that we can reuse are removed from decommissioned devices and reused for repair purposes. After defining the system and process requirements, a pilot project was implemented for this purpose. Based on the results, we are examining whether and how this can be transferred to other products.

To also ensure reparability, increase reuse of components and extend the lifetime of products outside Germany, we are examining feasibility with service partners in the U.S. as part of a pilot project. After the project is completed, we will expand the analysis to other global locations.

PRODUCT DEVELOPMENT & INNOVATION

The SMA group continuously uses its capacity for innovation to enhance existing products, systems and complete solutions, and develop new ones in the areas of decentralized power generation with renewable energy, energy storage, intelligent energy management and e-mobility. To offer our customers technically mature and economic system solutions in all market segments and regions, we selectively collaborate with strong partners. With our innovation activities and investments, we actively shape technological, social and economic trends for an energy supply based on renewable energy sources. Our innovation activities and investments focus on creating added value for customers and directly relate to current megatrends. These include decentralization, decarbonization and digitalization as well as future mobility. We use the SMA strategy architecture, which was developed partly on the basis of expert interviews, as a structuring element here. Product development in the SMA group takes place in line with a specified product development process. This covers the definition of product requirements through to the series production stage and ensures process and product quality.

To take account of the effects of our products on the environment already during the development stage, we have added sustainability aspects to the product development process. Our guidelines for sustainable product design laid down key design criteria that ensure that our products become more sustainable from one generation to the next. To better understand the factors influencing the design criteria, we started working with a renowned research institute in the reporting year. In this cooperation, we aim to develop a concept for product- and component-specific evaluation of product sustainability. Based on the results, we will further develop our design criteria.

Phase-out management for our products is based on a defined phase-out process (POP). One task here is to manage the use of materials in a way that avoids rejects and ensures further use of materials in subsequent generations. This task is made more difficult particularly when there is a broad product portfolio and subsequent generations differ from previous products. For this reason, too, we follow a platform strategy in product development. By standardizing the architecture of the core components and integrating key system functions, we are increasing the proportion of identical components across the entire portfolio while also reducing the number of components in the system. This sustainable design ensures that defective components can be replaced easily and products can be used for longer. The focus here is on highly integrated and digitalized solutions that cover as many functions as possible (all-in-one solutions) and thus meet the demands for sustainability, material efficiency and ease of use. Further information on our development approach can be found in the "Research and Development" section starting on page 22.

Research and development expenses increased to €77.7 million in the reporting year (2020: €71.2 million). This was particularly due to the increased capitalization of development costs. The SMA group offers solutions in the field of renewable energy and efficient energy use, meaning that its entire product portfolio can be allocated to low-CO_2 technologies. For this reason, we attribute all expenses for our product development and R&D to the development of low-CO_2 technologies.

Area of action: Employees

The high level of commitment and willingness of our employees to always learn are essential factors in the success of the SMA group. In the competition for talent, it is extremely important to us to be perceived as an attractive employer. That is why we are continuously developing our corporate and leadership culture, which is characterized by fairness and respect, putting our values of trust, performance and team spirit into practice in our day-to-day work and creating scope for responsible, entrepreneurial action and opportunities for shaping international collaboration. We have mapped this in our Global Leadership Fundamentals developed over the past few years. These are aimed at creating an environment in which our employees can fully develop their individual talents and potential and apply these for the benefit of our customers. The focus here is on a high level of self-organization in cross-functional and international teams, entrepreneurial thinking and action, a strong customer focus, valuing diversity and life-long learning. We have transferred the leadership criteria to our instruments and tools and see them as the basis for our leaderships activities.

During the coronavirus pandemic in 2021, the high flexibility and extraordinary willingness to learn on the part of SMA employees made a key contribution to ensuring that business operations were seamlessly maintained and that our close collaboration with customers and suppliers was successfully continued using new work methods, tools and communication channels.

DEVELOPMENT OF THE NUMBER OF EMPLOYEES

As of December 31, 2021, the SMA group had 3,353 employees worldwide (December 31, 2020: 3,126 employees).[1] Employee figures increased in Germany to 2,364 (December 31, 2020: 2,171) and to 989 abroad (December 31, 2020: 955). This growth is attributable to the staffing of positions in strategically important future fields and the hiring of temporary employees in the first half of the year. Employee turnover amounted to 4.4% in the reporting year (2020 4.0%), corresponding to 144 employees (2020: 122). We define employee turnover as departures by employees (resignations) as a percentage of the average headcount.

In addition, the SMA group uses temporary employees to absorb order fluctuations. Temporary employees are mostly deployed in the areas of production and logistics. As of the reporting date, the number of temporary employees decreased by 162 to 226 worldwide (December 31, 2020: 388).

Employees

Reporting date	**2021/ 12/31**	**2020/ 12/31**	**2019/ 12/31**	**2018/ 12/31**	**2017/ 12/31**
Employees (excl. trainees, learners and temporary employees)	3,353	3,126	2,998	3,231	3,057
Learners	94	80	67	50	62
Trainees	63	58	59	72	94
Temporary employees	226	388	442	290	701
Total employees (incl. trainees, learners and temporary employees)	3,736	3,652	3,566	3,643	3,914

Full-time equivalents

Reporting date	**2021/ 12/31**	**2020/ 12/31**	**2019/ 12/31**	**2018/ 12/31**	**2017/ 12/31**
Full-time equivalents (excl. trainees, learners and temporary employees)	3,177	3,065	2,937	3,169	2,997
of which domestic	2,198	2,089	2,017	2,045	1,879
of which abroad	979	976	920	1,124	1,118

The figures for 2017 to 2019 have been adjusted slightly due to a change in the calculation method.

[1] Starting 2021, we report trainees, learners and temporary employees in a separate category. Learners include student workers, temporary helpers, interns and graduands. For this reason, the previous year's figures have been adjusted.

Vocational training as a key element in securing and fostering the next generation is a high priority at the SMA group. We currently offer training at the Kassel/Niestetal location in five different training occupations in the industrial/technical and commercial sectors. As of December 31, 2021, 63 young people were in vocational training at the SMA group (December 31, 2020: 58 people). Following vocational training, there is the possibility for further employment. The trainees benefit from the international nature of the organization and, apart from the opportunity to complete language training courses, they have the chance to complete an internship on project work at an international location for a defined period of time. In addition, we are committed to supporting the next generation of MINT (mathematics, information technology, natural sciences and technology) specialists. This includes organizing the annual Girls Camp and the "Jugend forscht" (Youth Researches) regional competition in northern Hesse, Germany. In addition, 94 learners (2020: 80 learners) gained practical experience and some initial insights into potential career areas at the SMA group in 2021.

Additional key figures on employees, in particular on the gender balance at management level, can be found in the overview of sustainability key figures on page 49.

OCCUPATIONAL HEALTH & SAFETY

The safety and health of our employees is a high priority for us. We see Occupational health & safety as part of securing the company's future. The processes for occupational safety and health at our headquarters in Niestetal/Kassel, Germany, have been certified in accordance with DIN EN ISO 45001 since 2018. As such, 2,585 employees, trainees, learners and temporary employees have been covered by a certified management system for occupational safety and health as per December 31, 2021. This corresponds to 69% of all employees, trainees, learners and temporary employees in the SMA group. Various subject-specific and department-specific meetings take place regularly to ensure that the topic of occupational safety and health management is firmly established at the headquarters in Niestetal/Kassel, Germany. These include the quarterly meetings held by the occupational safety committee, chaired by the responsible Managing Board member and with the participation of the safety experts, the Works Council, the safety officers and the occupational health physicians. With the establishment of the Global Sustainability Meeting in the reporting year, we have positioned ourselves globally in the field of occupational safety and health management and will formulate minimum requirements that apply worldwide.

The SMA group assesses new activities, work processes, workplaces and hazardous substances in terms of potential risks and hazards before they are implemented or used for the first time. In doing so, we follow the STOP procedure. The substitution check (S) ensures that it is necessary to perform the activity or to use the hazardous material. If this is the case, technical measures (T) to reduce the risks are defined. If such measures are not possible or not sufficient, organizational measures (O) are taken. In the final step or in addition to the other measures, personal protective measures/equipment (P) have to be used.

The obligation to perform hazard assessments is transferred to the executives in writing. While performing a hazard assessment, they may bring in the occupational safety specialists, the hazardous substances officer and the fire protection engineer for support. A defined process, subject-specific templates and support from the Occupational Safety and Health department ensure consistently high quality and monitoring of hazard assessments. The Occupational Safety and Health department also regularly checks that the hazard assessments are up-to-date and plausible and reports the results as part of the management assessment.

In general safety instructions, we inform all employees in Germany and at the production site in Poland about the importance of occupational safety and health, obligations of employers and employees, safety organization, behavior in case of an emergency, and provide general information on safe and healthy behavior. In addition, there are workplace-related instructions in the departments. Extensive information on occupational safety and health management, the current development of accident rates and templates, processes, organizational charts and contact details of the responsible contact persons are also available on the intranet.

The deployment of external companies on the SMA company premises in Niestetal/Kassel, Germany, and at the production site in Poland is specified via processes and a corresponding guideline. The guideline contains standardized requirements for the protection of people, property and the environment, and describes interfaces, tasks and responsibilities between the external company and the SMA group. All external companies are provided with the guideline before starting work. They confirm that they acknowledge and comply with the requirements. Contractual partners with service, framework or work contracts confirm receipt and compliance for the duration of the contractual relationship when they sign the contract.

Occupational safety

→ Our objective: Lost time incident rate of <1.5

The focus of occupational safety and health management at the SMA group is on avoiding work-related accidents and illnesses. As an employer, we have an obligation to eliminate reported risks and hazards. However, despite all of the measures mentioned, work-related accidents cannot always be avoided. Our objective is to keep the lost time incident rate (LTIR; accidents with at least 1 lost day x 200,000 in relation to hours worked) permanently below 1.5 at our production site in Niestetal/Kassel, Germany until 2025. In the reporting year, the LTIR at our production site in Niestetal/Kassel, Germany, came to 1.11 (2020: 1.37). We thus achieved the best rate since we first started recording the LTIR. This reflects the effectiveness of the continuous improvement of our processes. Furthermore, it cannot be ruled out that the reduced employee turnover and the measures due to the coronavirus pandemic in 2020 and 2021 may also have contributed to the comparatively low LTIR. Globally, the LTIR came to 0.83 in the reporting year (2020: 0.94). The global LTIR was lower than the rate for Germany, as all major locations have been included in the reporting since 2021 and most of these are office workplaces where work-related accidents naturally occur more rarely. As in the previous year, there were no serious work-related accidents or deaths. The key figure includes work-related accidents involving SMA employees, trainees, learners and temporary employees.

Work-related accidents are documented and investigated worldwide. The procedure after a work-related accident has been set out in a process for our headquarters in Germany. Investigations into accidents are performed in a differentiated manner. Possible causes and countermeasures for more minor accidents in production are discussed directly on-site at the daily meetings before the start of the shift. For more serious accidents, a detailed accident investigation report is prepared in line with standardized requirements and measures are defined.

Due to our business field involving the operation of electrical test laboratories and other laboratories, there is a particular risk in connection with electric current at the SMA headquarters in Germany. This includes arcing, fire hazard and electrocution with serious or lethal consequences. We have taken extensive measures to minimize the risks in these areas. These include compliance with mandatory specifications for setting up and operating test laboratories. In addition, test laboratories may be entered only by electrically qualified persons who receive regular training and instructions. Access is managed using electronic access control. As a result of the measures taken and the systematic implementation of applicable regulations, we have not recorded any accidents with serious injuries to date.

Despite all the precautions, emergencies involving risks to people, property or the environment cannot be ruled out in principle at the company. SMA Emergency Management regulates how to handle emergencies in the form of a binding guideline throughout the group. For many types of emergency, such as fires or work-related accidents, there are also emergency plans specifying in a compact form what needs to be done and who needs to be informed when such incidents occur.

The goal of the Business Continuity Framework (BCF), which was newly regulated in 2021, is to make it easier for the departments to identify potential major disruptions and to manage these effectively and efficiently in case they occur. We define major disruptions as disruptions that cannot be managed using Emergency Management's structure- and process-oriented organization and that may entail significant monetary or reputational damage. In connection with the new regulation of the BCF, the relevant departments identified potential operational risks so as to be able to respond to these faster if they occur. This gives the departments a framework for ensuring the proper functioning of the SMA group's business operations until normal operations have been fully restored. The BCF stipulates the use of a taskforce that is specifically assembled depending on the type of major disruption and is commissioned by the Managing Board.

Health

→ Our objective: 70% age-stable workplaces

SMA's health management policy is aimed at avoiding chronic unfavorable stress and thus minimizing the risk of illness and maintaining employees' ability to work and be employed in the long term. As employees age, comprehensive health promotion and ergonomics are becoming increasingly important. Our health measures are quality-assured and are developed and implemented to meet the requirements of particular target groups and genders. One area of focus is ergonomic age-stable workplace design in production and logistics.

In the reporting year, the production ergonomics integrated into the product development process were successfully applied to key new projects. The overarching ergonomics review by the Ergonomics working group also led to reduced strain in production and in central logistics. In cooperation with external social insurance agencies and physiotherapists, we implemented physio coaching on the production lines at the Niestetal/Kassel headquarters in 2021 to also include employees' behavioral ergonomics into the ergonomics concept.

The creation of age-stable workplaces plays an important role in SMA's health management. With age-stable workplaces, we create working conditions that allow all generations to perform to their full potential without suffering chronic unfavorable stress or long-term or delayed effects. In the reporting year, we were not yet able to achieve our target of increasing the proportion of age-stable workplaces in the operating areas at the headquarters in Niestetal/Kassel, Germany, to 70% by 2021. This was due to the intense work involved in setting up and running the SMA Corona Taskforce, which is taking up a lot of the health management team's time and effort. So far, 64% of workplaces have been evaluated. The proportion of age-stable workplaces is currently 56%. We have thus increased this proportion by 23 percentage points compared to the 2018 base year (33%). We are maintaining our target, but have postponed the target achievement year to 2025 due to the continuing pandemic situation. The sickness rate, including long-term sickness, in Germany amounted to 5.3% in 2021 (2020: 5.2%).

Two external occupational health physicians support us with occupational safety and health management and with ergonomic workplace design. Their tasks include taking part in company inspections, participating in hazard assessments, particularly in the case of hazardous substances, and attending meetings of the Occupational Safety Committee. In addition, they carry out the mandatory and optional examinations as determined in the hazard assessment, as well as in-house medical consultations. The occupational health physicians are assigned to the Occupational Safety and Health department. This department coordinates appointments for examinations, which take place on the company premises so that they are close by for the employees. Information on the occupational health physicians, their tasks and contact options is provided to SMA employees in the annual safety training and on the intranet. The occupational medical services are available to all SMA employees.

In February 2020 already, the SMA Corona Taskforce was founded with employees from all relevant functions. It assesses the current situation and decides on and coordinates appropriate measures in close consultation with the Managing Board. The taskforce regularly provides information to all employees in a newsletter and makes additional information available on the intranet. In addition to management, Health Management is also responsible for generating knowledge for the taskforce's interdisciplinary team and for continuous dialogue with external experts. It also operates a telephone hotline for employees, case management and support with the introduction of new measures to protect against infection. One particular focus in the reporting year was the offer of coronavirus vaccinations administered by the occupational health physician. At a vaccination site set up specially for this purpose, around 1,000 employees took advantage of this offer.

Thanks to the measures implemented at an early stage, some of which were prescribed by new occupational health and safety standards and the German Infectious Diseases Protection Act, internal infection chains were avoided and business operations were maintained in full and without interruption again in 2021.

FAIR PAY & BENEFITS

The attractive overall package that the SMA group offers its employees includes market- and performance-based pay and extensive benefits. SMA Solar Technology AG and its subsidiaries are not subject to any collective bargaining agreements. Our goal is to use individual company regulations to create attractive employment conditions that are geared toward the needs of both the employees and the company. In Germany, this is done on the basis of employer/works council agreements, for example, which are always concluded in cooperative collaboration with the employee representatives.

In key operational change processes that affect the employees directly or indirectly, the employee representatives are involved in the context of co-determination and beyond. Changes are always announced to and discussed with the employees in good time before they are implemented.

Fair pay

It is important to us to acknowledge our employees' commitment and performance through appropriate remuneration in line with the market. The job level model that was introduced in Germany in 2016 and has since been rolled out at all SMA group locations, along with the associated remuneration system, help create transparency and enable comparison of pay across all areas of the company. It is based on the requirements of each position and the individual performance. The remuneration system is organized and set up in a way that gives equal importance to the different career paths, such as professionals, project managers and management. In addition to the basic remuneration, the system is also supplemented with variable target-based remuneration components.

Under the remuneration system applied worldwide, employees' individual remuneration is determined within defined salary ranges according to the same criteria. The remuneration ranges are regularly reviewed globally every two to three years and are adjusted if necessary. Remuneration is based on the middle of the market. The review is based on recognized benchmarks from specialist consultants. Ever since the establishment of temporary work at the headquarters in Germany, temporary employees at the SMA group have received the same hourly wage as SMA group employees performing similar duties.

For us, it goes without saying that there are no systematic differences in remuneration for comparable roles, particularly between female and male employees. In the reporting year, we analyzed possible structural salary differences between men and women (gender pay gap) in Germany. The results show possible indications of structural discrimination against female employees with regard to the headquarters in Niestetal/Kassel, Germany. The SMA group has therefore set itself the task of ensuring role-specific equal treatment on salaries as part of the job level model. This includes a detailed analysis of the level of pay of employees within the business areas and of employees within the same job level. Based on the results, we will derive measures to help close the pay gap.

Benefits

In addition to fixed and performance-related remuneration components, our remuneration system also includes various additional monetary and non-monetary benefits. When it comes to company benefits, we do not in principle differentiate between full-time and part-time employees or between SMA group employees with fixed-term and with permanent contracts. However, specific conditions and requirements may mean that certain groups of employees are excluded for factual reasons or that special financial benefits are reduced depending on working hours. Because they are not directly employed by the SMA group, temporary employees can only profit from company benefits that do not require a direct employment relationship.

The benefits offered may well intentionally differ worldwide and be based on the needs of the individual national companies and on local norms. By contrast, employee participation in the company's financial success is globally handled on the basis of uniform principles. They participate once a certain key earnings figure is reached, which is determined anew each year. Temporary employees are also given a share in the financial success of the fiscal year.

In Germany, the benefits are regulated in employer/works council agreements. They include additional benefits such as vacation pay, Christmas bonus, special leave, lifelong working-time accounts, public transport subsidies, sick pay allowance, company pensions, death benefits and anniversary bonuses. We offer medical care components and company pension models globally based on the market standards and statutory requirements. Through framework agreements with insurance companies, employees at the German location also receive discounted offers for occupational disability cover and supplementary medical insurance.

Various other company benefits are offered to encourage and support a good balance between family and career, including family services, fast and unbureaucratic emergency childcare and childcare during school vacations. There is a daycare center very close to the headquarters in Niestetal/Kassel, Germany, that allows for individual childcare. The additional child sick days that SMA Solar Technology AG allows above and beyond the statutory minimum and the option to take family caregiver leave for a relative requiring care also contribute to a better family/career balance.

In a global benefits analysis, we recorded our employees' satisfaction with the respective national company benefits from 2018 to 2020. Based on the analysis, we were able to identify short-term needs for action and modified benefits accordingly. In addition, long-term cornerstones for a global benefits strategy were derived from the results. The benefits strategy is a tool for categorizing and prioritizing actual and potential company benefits. It is based on the employees' individual needs and life phases and embedded in the SMA group's corporate and brand values. At the heart of the strategy are the needs of each individual employee. Based on this starting point, the benefits portfolio can be broken down into financial benefits, offers for promoting physical and mental health, support for a balanced lifestyle and possibilities of individual development paths. Existing benefits are adapted to the strategy and potential new benefits are evaluated and selected in line with the strategy. In this way, we want to ensure that employee needs permanently determine the focus of the company benefits.

We do not currently offer participation in the company's capital (share ownership). However, we started to consider concepts for a global share ownership program in the 2021 fiscal year in the context of strategic measures.

DIVERSITY & EQUAL OPPORTUNITIES

→ Our objective: 26% women in the workforce as a whole

The SMA group is committed to diversity & equal opportunities. We see the diversity of our employees as an asset to our company. In joining the "Diversity Charter" in 2011, we undertook to create a work environment in which all employees have the same opportunities for development, regardless of gender, nationality, religion or ideology, disability, age or sexual orientation.

Given the company's strong technology orientation, the proportion of male employees is comparatively high. On December 31, 2021, 75.3% of employees were male (December 31, 2020: 75.2%) and 24.7% female (December 31, 2020: 24.8%). In 2021, we developed a diversity strategy focusing on the topic of gender diversity. Among other things, this strategy aims to increase the proportion of female employees with the SMA group as a whole to 26% by 2025. Furthermore, we have set ourselves a target of 30% by 2030. In addition, we want to increase the proportion of women in professional and management roles to 16% each by 2025 and to 20% each by 2030.

To achieve these long-term targets, we are implementing a variety of measures such as gradually advertising all vacancies as both full-time and part-time positions and measures for flexible work and for balancing family and career. We also offered a Female Leadership Program in 2021 to provide women in the organization with a platform for learning from one another and exchanging information and opinions in a network. We are planning further measures in 2022, including unconscious bias training. Overall, the planned measures are aimed at bringing about changes at an individual, structural and cultural level.

We intend to integrate different cultures and strengthen collaboration between employees of different nationalities. The SMA group employs people of 62 different nationalities in 20 countries. In addition to promoting international collaboration, the possibility of deployment to our international locations and intercultural training, in 2017, we started implementing a concept to integrate refugees into our vocational training program. In March 2021, the concept marked a special success when a trainee at the SMA group won first place in the nationwide "Diversity in Training" competition (Vielfalt in der Ausbildung) with his outstanding performance and his social commitment. Another SMA trainee was among the top ten participants in the competition. At the same time, SMA Solar Technology AG was recognized as an exemplary training company for refugees and people with a migrant background.

TRAINING

The SMA group operates in a dynamic environment that places high demands on our employees. Radical developments, such as rapid digitalization of the energy supply and Work 4.0, require new skills and competencies. For us, proactive personnel development therefore means enabling our employees to engage in lifelong, self-directed learning as well as in individual development and qualification for current and future challenges.

In addition to external training, employees of the SMA group benefit from a diverse internal training program comprising a variety of topics. Here we focus on distributed responsibilities. For example, the departments have their own training budgets in order to meet their individual training requirements with specific internal and external training offers. Quality assurance of the training offers is performed, for example, by analyzing anonymous feedback forms on our digital training platform.

In 2021, we continued our talent management, which aims to give employees with distinct potential long-term development opportunities at the company. For the first time, employees could nominate themselves and were then selected by an international, cross-functional jury. In this way, a diverse group of eight talented employees was identified without defining specifications. As part of the 18-month program, they are developing individual development plans independently and under their own direction. Together with group-oriented measures, the program is intended to prepare the participants to take on positions with much more complex tasks and increased responsibilities.

The Senior Leadership Development Program, designed to promote a culture of leadership and cross-divisional global collaboration, is aimed at middle-management executives from all departments. The program includes various aspects of leadership topics, which are communicated through individual coaching and working on global projects and serve to promote entrepreneurial thinking and action with a focus on strategic management. We work to ensure that the composition of these programs is at least representative of the proportion of women in the company as a whole.

NEW WORK

With the topic of "new work," we are particularly supporting initiatives of committed employees, continuously developing working environments that promote agile working practices in changing project teams, and establishing self-organized teams to align the organization in a role-based and self-organized manner. Agility is an attitude that is intrinsically linked with the modern working world, as previous problem-solving mechanisms no longer work due to increasing complexity and requirements. The SMA group actively supports this with a central department that assists with agile transformation as a whole and in individual areas and departments. By means of internal networking, coaching, training and support with organizational development projects, these experts enable the organization to deal with growing complexity.

To enable such changes to take place successfully in the interests of the SMA group's future viability, the employer and the employee representatives have concluded a general agreement determining a shared understanding and an open approach to "new work." In this context, temporary employer/works council agreements are being drawn up, for example, to increase the speed at which the company adapts and to allow adjustments to be made repeatedly where necessary in line with the developing requirements.

The extremely quick and flexible switch to mobile and virtual collaboration, with which we successfully met the particular challenges posed by the coronavirus pandemic, has shown that the SMA group is already operating at a very high level. To also take advantage of the potential for collaboration from any location after the pandemic, global guidelines for mobile working have been developed. On this basis, a corresponding employer/works council agreement has also been concluded for the headquarters in Niestetal/Kassel, Germany. In this way, we create attractive conditions for our employees to work independently and flexibly in a way that meets their needs, while motivating them to take responsibility for their own individual learning and knowledge sharing.

Area of Action: Governance & ethical business

In January 2012, the Managing Board enacted the SMA business principles. These represent the Code of Conduct of the SMA group. They set out our values and clear standards of conduct for all employees. The SMA business principles not only underscore the group's desire to fully implement and comply with all legal and regulatory requirements. We also undertake to act ethically, sustainably and with integrity at all times, to assume our corporate responsibility and to treat others with respect. The SMA business principles are publicly available on our corporate website at www.sma-solar.com. We intend to update our business principles over the next fiscal year and ensure that they address all requirements and international standards to which the SMA group is currently committed. In updating our business principles, we will also take adequate account of our stakeholders' expectations.

By signing the UN Global Compact in 2011, we made a declaration of our commitment to responsible corporate governance. At the core of the UN initiative are ten principles in the areas of human rights, labor standards, environmental protection and anti-corruption. As a global company, the SMA group ensures that respect for human rights, including freedom of association and the core labor standards of the International Labour Organization (ILO), is guaranteed at all locations anytime.

INTEGRITY & COMPLIANCE

The aspect of integrity & compliance – that means, adhering to important principles and values as well as legal requirements and internal guidelines – is a crucial part of the way that the SMA group does business. Our compliance management focuses on a value-based approach and promoting a culture of compliance. This is based on the conviction that a compliance culture established throughout the group offers the best protection against legal violations and reputational risks. A high level of acceptance of the rules among employees and an understanding of the goals and values behind these rules are very important for effective compliance management.

All employees of the SMA group are obligated, in the context of their work for the company, to act ethically in accordance with the directives, laws and regulations of their country. All corporate compliance guidelines are compiled in a single source, the SMA Compliance Manual, and are available in several languages. At regular intervals, the Compliance function reports to the Managing Board and Supervisory Board with information on the latest developments, suspicious cases, measures and processes within compliance management. The SMA Compliance Board, in which the entire Managing Board is represented alongside other management functions, usually meets once a quarter. This enables the top management to evaluate the effectiveness of the compliance management system, including the management approach for preventing corruption, and to initiate adjustments if necessary.

In compliance training courses, we promote awareness of the importance of compliance among the employees and pass on the required knowledge. This is done both with web-based training formats for basic training and with on-site events for examining issues in depth. The frequency and scope of training depends on the participants' risk situation in their specific roles. After completing their initial compliance training, new employees actively commit to the principles and rules communicated.

In the case of suspected compliance violations, employees can use the "speak-up line." This whistleblower system is operated by an external provider. It can be used both by employees of the SMA group and by all external stakeholders. At the whistleblowers' request, their identity is kept anonymous. The SMA group assures all employees freedom from sanctions for reports made in good faith. Details of this, together with a complete description of the process for reporting misconduct, can be found on the corporate website at www.sma-solar.com. In addition, the SMA compliance helpline is available for questions relating to compliance and anti-corruption. Concerns or information regarding possible misconduct can also be passed on here.

The SMA group does not operate in an industry where corruption is particularly rife. Nonetheless, business activities in countries with a high level of corruption and collaboration with external intermediaries in particular mean that corruption risks are present and must be countered with preventive measures. The SMA group does not tolerate corruption internally or at its business partners, and is actively committed to Transparency International's Business Principles for Countering Bribery. To put this aspiration into practice, we have implemented an extensive corruption prevention program throughout the group.

Measures to prevent corruption form part of compliance management. Corruption describes the abuse of entrusted power for private gain. Corruption has serious negative consequences for many parts of society and poses a risk to fair competition. Corrupt actions could also lead to considerable legal risks, significantly damage the SMA group's reputation and unduly influence business agreement at the expense of the SMA group or its business partners. Corrupt actions may be committed both by employees of the SMA group and by SMA business partners. Regular compliance risk analyses focusing on corruption risks provide the foundation for the risk-based conception and further development of all anti-corruption activities in the SMA group.

In SMA's business principles, it is clarified that employees must never abuse their professional position to gain personal benefits and must never offer anyone an undue personal benefit. Additional anti-corruption guidelines include clear rules of conduct for all employees. The aim is to avoid even the appearance of questionable conduct. For this reason, higher-value gifts, invitations and other personal favors as well as favors granted to public officials must be approved by the Compliance function. Payments to expedite official processes unlawfully are explicitly forbidden within the SMA group.

Business partners that may influence third parties while performing their service for the SMA group must go through the business partner due diligence process. The risk-based approach ensures a careful selection of business partners who operate for the SMA group. Business partners are commissioned only if they share the SMA group's standards of ethically and legally impeccable conduct. The business partners additionally assure us of this by signing the SMA Code of Conduct for Business Partners. This sets out the legal and ethical standards that business partners such as suppliers and service providers must fully comply with when conducting business with the SMA group and making decisions that affect the SMA group.

If necessary, the management approach for preventing corruption is reviewed at the Compliance Board meetings. In 2021, the Compliance function examined the corruption risk for all companies of the SMA group with active business operations by way of a risk query supplementing the compliance risk analysis. No significant corruption risks were identified in this context. Following the company-wide employee training initiative in 2019 and 2020, a total of 129 employees or 3.8% of the workforce were given anti-corruption training in the reporting year (2020: 1,726 employees or 55.2% of the total workforce). As in the previous year, no confirmed cases of corruption were recorded in the reporting year.

SUSTAINABLE SUPPLY CHAINS

→ Our objective: 55% overall assessment for suppliers' sustainability performance

The SMA group sells its systems and solutions worldwide in countries with different requirements and regulations. The company's supplier base is also widely distributed in geographical terms. This gives rise to challenges for different supply chains. More than 470 direct suppliers from 24 countries are part of these supply chains. In 2021, the SMA group purchased goods totaling more than €500 million from these suppliers in Europe, North and South America and the Asia-Pacific region. The restrictions in connection with the global coronavirus crisis posed particular challenges for individual parts of the global supply chains.

Since 2009, the SMA group has recognized the code of conduct of the German Association for Supply Chain Management, Procurement and Logistics (BME e. V.) and used this as the basis for its own guidelines for suppliers (SMA Supplier Code). In 2020, this Code was revised with the participation of relevant stakeholders and newly implemented under the name "SMA Code of Conduct for Business Partners." Our goal here is to enshrine general principles with regard to fairness, integrity and corporate responsibility in business relationships and the supply chain. The "SMA Code of Conduct for Business Partners" formulates our standards and gives expression to what we expect of suppliers and other business partners with regard to social, ecological and ethical aspects. It is particularly important to us to protect human rights in our supply chain, and meeting this requirement is essential for fulfilling the third principle of the UN Global Compact. The key points of the guidelines are thus a ban on child labor, forced labor, abuse and discrimination of employees, fighting against corruption, fair working conditions, occupational health and safety, environmental protection, and quality and product safety. The Code of Conduct is publicly available on the corporate website at www.sma-solar.com. It is binding for all suppliers as part of the general terms and conditions. Our suppliers also undertake to pass on this requirement in the supply chain, for example by not purchasing any goods or services where production or performance involves human trafficking, forced labor or child labor.

The aspect of sustainable supply chains is becoming increasingly important. This was also clearly reflected in our materiality analysis as updated in 2021. The increasing requirements are particularly due to changing regulatory requirements worldwide. These aim to hold companies more accountable for the effects of their actions in the supply chain. In Germany, these requirements have been established particularly in the Supply Chain Due Diligence Act (Supply Chain Act), which will apply to us from 2024 onward. With our activities in the field of supply chains and supplier assessments regarding sustainability performance, we already meet some of these requirements. Based on our "Sustainable Supply Chains Directive," we will also implement new requirements in our processes and at our suppliers from 2022 onward.

To review risks in the supply chain on a continuous basis, we use a risk software in Procurement to monitor all direct suppliers. Direct suppliers are all suppliers that supply components for our production. Using the risk tool, we monitor not only quality and reliability risks, but also risks in the field of sustainability such as corruption risks, environmental risks, risks relating to human rights violations, risks relating to sustainable purchasing and regulatory risks. In 2021, there were no incidents of human rights or work practices violations at our suppliers. No environmental incidents were identified either.

In 2017, we also started to assess the sustainability performance of our direct A and B suppliers. We are thus initially focusing on the suppliers that account for the largest shares in terms of the value of goods. The assessment was performed using the sustainability software of an external partner. Our target is to achieve an average sustainability performance of 55% in the possible overall assessment across all suppliers assessed by 2025. The sustainability performance covers the topics of the environment, labor and human rights, ethics and sustainable procurement. The suppliers for which an assessment has already been performed show a largely positive picture and a steady improvement in their sustainability performance. In the reporting year, the sustainability performance of the suppliers assessed thus rose to 54.1% (2020: 49.6%). The number of suppliers assessed with regard to sustainability aspects rose by 12% in 2021. As such, we have now covered 46.4% of all A and B suppliers [1] in our sustainability performance assessment. This corresponds to a 57.5% share of our goods volume.

Since 2020, there have also been increased concerns due to indications of human rights violations against the ethnic group of Uighurs in the Xinjiang region in China. The SMA group shares these concerns and has consequently conducted a supplier analysis. As a result, we can confirm that there are no business relationships with suppliers based in this region. In addition, we have implemented a process element in our global supplier selection to ensure that no products from the region are purchased in the future either.

[1] Our A-suppliers account for 80 percent and our B-suppliers for 15 percent of our total purchasing volume.

SUSTAINABILITY KEY FIGURES OF THE SMA GROUP[1]

TARGET-RELATED KEY FIGURES

Aspect	Target	Unit	2020	2021	Target value	Target year
Environment & energy						
Renewable energies	Electricity from renewable energies	%	89.7	98.0	100	2025
Climate protection	Climate neutrality[1]	%	81.8	95.4	100	2025
Climate protection	CO_2e emissions in kg/kW of inverter output produced[1]	kg/kW	0.021	0.020	0.084	2025
Responsible use of materials	Product weight in kg/kW of inverter output	kg/kW	1.47	1.43	1.49	2025
Waste & recycling	Waste per metric ton of product produced	t/t product	0.097	0.105	0.069	2025
Product stewardship						
Sustainable product life cycle	Field failure rate	%	1.5	1.7	1.0	2025
Employees						
Diversity & equal opportunities	Proportion of women in the workforce as a whole	%	24.8	24.7	26	2025
Occupational health & safety	Lost time incident rate[2]	LTIR	1.37	1.11	< 1.5	2025
Occupational health & safety	Age-stable workplaces	%	56.4	56.4	70	2025
Governance & Compliance						
Sustainable supply chains	Overall assessment for suppliers' sustainability performance	%	49.6	54.1	55	2025

1 Market-based approach, after offsets. The specific previous year's figure was adjusted due to the switch to emissions factors from the Ecoinvent database.
2 LTIR of the production site in Niestetal/Kassel, Germany.

AREA OF ACTION: GOVERNANCE & ETHICAL BUSINESS

		2021	2020
Companies assessed for risks of corruption[1]	Number	21	0
Companies assessed for risks of corruption	%	100	0
Anti-corruption training	Employees	129	1,726
Anti-corruption training	%	3.8	55.2
Confirmed cases of corruption		0	0

1 Companies of the SMA group with active business operations

1 Regarding the scope of the sustainability key figures for the various action areas and aspects, see "Scope of reporting" section on p. 25.

AREA OF ACTION: ENVIRONMENT & ENERGY[1]

		2021	2020
General key figures			
Sales	€ million	983.7	1,026.6
Inverter output produced	MW	10,258	11,784
Total weight of inverters produced	t	14,632	17,306
Energy[1]			
Power consumption	GWh	20.46	22.22
of which self-produced solar power	GWh	2.41	2.83
District heating	GWh	3.78	3.21
Natural gas	GWh	4.66	3.04
Diesel fuel	GWh	2.67	2.84
Gasoline	GWh	2.78	2.00
Other fuels	GWh	0.01	0.05
Total energy consumption	GWh	**34.37**	**33.35**
Solar power sold	GWh	4.56	5.10
Energy intensity (production sites)	kWh/kW	2.92	2.52
Energy intensity SMA group	kWh/kW	3.35	2.83
Climate protection[1] (greenhouse gas emissions in CO_2e)			
Scope 1	t	574.88	512.41
Scope 2[2]	t	359.16	1,704.65
Total greenhouse gas emissions	t	934.04	2,217.06
Compensation	t	286.71	255.65
Greenhouse gas emissions after compensation	t	**647.33**	**1,961.41**
Specific greenhouse gas emissions	t/sales in € million	0.66	1.91
Waste & recycling[1]			
Hazardous waste	t	300.54	275.00
of which recycled	t	278.14	261.24
of which not recycled	t	22.40	13.76
Non-hazardous waste	t	2,112.20	2,308.03
of which recycled	t	1,951.43	2,046.99
of which not recycled	t	160.77	261.04
Total waste	**t**	**2,412.74**	**2,583.03**

1 The previous year's figures have been adjusted as a result of the switch to a global key figure system, while greenhouse gas emissions have also been adjusted due to updates to emissions factors.
2 CO_2e emissions according to market-based approach. Scope 2 emissions in accordance with the location-based approach amounted to 11,349.15 metric tons of CO_2e (2020: 12,188.46 metric tons of CO_2e).

AREA OF ACTION: PRODUCT RESPONSIBILITY

		2021	2020
Research and development expenses	€ million	77.7	71.2
Research and development ratio in relation to sales	%	7.9	6.9

AREA OF ACTION: EMPLOYEES

		2021	2020
Employees SMA group (excl. temporary employees)		**3,353**	**3,126**
female		827	775
male		2,526	2,351
Employees EMEA		2,931	2,726
Employees Americas		275	252
Employees APAC		147	148
Full-time equivalents		3,089	2,892
female		646	612
male		2,443	2,280
Part-time equivalents		264	234
female		181	163
male		83	71
Employees with permanent contracts		3,090	2,900
female		745	695
male		2,345	2,205
Employees with fixed-term contracts		263	226
female		82	80
male		181	146
Trainees		63	58
Learners[1]		94	80
Temporary employees		226	388
Senior employee categories			
SMA group executives			
female	%	17.0	16.8
male	%	83.0	83.2
General Managers/Vice Presidents			
female	%	6.7	2.2
male	%	93.3	97.8
Directors			
female	%	16.0	18.1
male	%	84.0	81.9
Managing Board and Supervisory Board			
Managing Board			
female	%	0	0
male	%	100	100
Supervisory Board			
female	%	33.3	33.3
male	%	66.7	66.7
Occupational health & safety			
Work-related accidents resulting in at least one day of absence		23	26
Serious work-related accidents		0	0
Fatal work-related accidents		0	0
Lost time incident rate[2]	LTIR	0.83	0.94

1 Student workers, unskilled employees, temporary helpers, interns and graduands
2 Accidents leading to at least one day of absence x 200,000 based on hours worked

GRI INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		UN Global Compact	Page
GRI 102: General Disclosures 2016			
102-1	Name of the organization		160
102-2	Activities, brands, products, and services	9	17
102-3	Location of headquarters		16
102-4	Location of operations		100
102-5	Ownership and legal form		16, 89, 100
102-6	Markets served	9	17 et seq.
102-7	Scale of the organization		17, 39, 49, 96, 100
102-8	Information on employees and other workers		25, 39, 49
102-9	Supply chain		46
102-10	Significant changes to the organization and its supply chain		16, 46, 100
102-11	Precautionary Principle or approach	7	31, 65 et seq.
102-12	External initiatives		25, 30, 43, 45 et seq., 88
102-13	Membership of associations		29 et seq.
102-14	Statement from senior decision-maker		6
102-15	Key impacts, risks, and opportunities		28 et seq., 65 et seq.
102-16	Values, principles, standards, and norms of behavior	1, 3, 6	45 et seq., 88
102-17	Mechanisms for advice and concerns about ethics		46
102-18	Governance structure		16, 26, 89 et seq.
102-19	Delegating authority		26
102-20	Executive-level responsibility for economic, environmental, and social topics		26
102-26	Role of highest governance body in setting purpose, values, and strategy		26
102-28	Evaluating the highest governance body's performance		145 et seq.
102-29	Identifying and managing economic, environmental, and social impacts		26 et seq..
102-30	Effectiveness of risk management processes		65 et seq.
102-31	Review of economic, environmental, and social topics		26
102-32	Highest governance body's role in sustainability reporting		10, 143
102-35	Remuneration policies		145 et seq.
102-36	Process for determining remuneration		145 et seq.

GRI Standard		UN Global Compact	Page
102-37	Stakeholder's involvement in remuneration		145 et seq.
102-40	List of stakeholder groups		30
102-41	Collective bargaining agreements		42
102-42	Identifying and selecting stakeholders		28
102-43	Approach to stakeholder engagement		30
102-44	Key topics and concerns raised		30
102-45	Entities included in the consolidated financial statements		25, 100
102-46	Defining report content and topic boundaries		26 et seq.
102-47	List of material topics		27
102-48	Restatements of information		25 et seq., 31
102-49	Changes in reporting		25 et seq.
102-50	Reporting period		25
102-51	Date of most recent report		25
102-52	Reporting cycle		25
102-53	Contact point for questions regarding the report		160
102-54	Claims of reporting in accordance with the GRI Standards		25
102-55	GRI content index		50
102-56	External assurance		25, 143 et seq.
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its boundary		26 et seq., 31 et seq., 35 et seq., 40 et seq., 45 et seq.
103-2	The management approach and its components		31 et seq., 35 et seq., 40 et seq., 45 et seq.
103-3	Evaluation of the management approach		31 et seq.
GRI 201: Economic Performance 2016			
201-2	Financial implications and other risks and opportunities due to climate change	7	79 et seq.
GRI 202: Market Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage		42 et seq.
GRI 203: Indirect economic impacts 2016			
203-2	Significant indirect economic impacts	9	34

GRI Standard		UN Global Compact	Page
GRI 205: Anti-corruption 2016			
205–1	Operations assessed for risks related to corruption	10	46, 48
205–2	Communication and training about anti-corruption policies and procedures	10	45, 48
GRI 301: Materials 2016			
301–1	Materials used by weight or volume	7, 8	35, 48
GRI 302: Energy 2016			
302–1	Energy consumption within the organization	7, 8	25, 32, 49
302–3	Energy intensity	7, 8	32, 49
302–4	Reduction of energy consumption	7, 8	25, 32, 49
GRI 305: Emissions 2016			
305–1	Direct (Scope 1) GHG emissions	7, 8	25, 33 et seq., 49
305–2	Energy indirect (Scope 2) GHG emissions	7, 8	25, 33 et seq., 49
305–4	GHG emissions intensity	7, 8	34, 49
305–5	Reduction of GHG emissions	7, 8	34, 49
GRI 306: Waste 2020			
306–1	Waste generation and significant waste-related impacts	7, 8	28, 36, 49
306–2	Management of significant waste-related impacts	7, 8	25, 36
306–3	Waste generated	7, 8	36, 49
306–4	Waste diverted from disposal	7, 8	36, 49
306–5	Waste directed to disposal	7, 8	36, 49
GRI 307: Environmental compliance 2016			
307–1	Non-compliance with environmental laws and regulations		31
GRI 308: Supplier environmental assessment 2016			
308–1	New suppliers that were screened using environmental criteria		47
GRI 401: Employment 2016			
401–1	New employee hires and employee turnover		39
401–2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		43
GRI 403: Occupational health and safety 2018			
403–1	Occupational health and safety management system		40
403–2	Hazard identification, risk assessment, and incident investigation		40 et seq.
403–3	Occupational health services		42
403–4	Worker participation, consultation, and communication on occupational health and safety		40
403–5	Worker training on occupational health and safety		40
403–6	Promotion of worker health		41 et seq.
403–7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		47
403–8	Workers covered by occupational health and safety management system		40
403–9	Work-related injuries		41, 49
GRI 404: Training and education 2016			
404–2	Programs for upgrading employee skills and transition assistance programs		44
404–3	Percentage of employees receiving regular performance and career development reviews		29
GRI 405: Diversity and equal opportunity 2016			
405–1	Diversity of governance bodies and employees	6	43 et seq., 49, 88 et seq.
GRI 407: Freedom of association and collective bargaining 2016			
407–1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		45, 47
GRI 409: Forced or compulsory labor 2016			
409–1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	2, 4, 5	47
GRI 414: Supplier social assessment 2016			
414–1	New suppliers that were screened using social criteria	2, 4, 5	47
414–2	Negative social impacts in the supply chain and actions taken	2, 4, 5	47
GRI 416: Customer health and safety 2016			
416–1	Assessment of the health and safety impacts of product and service categories		37
416–2	Incidents of non-compliance concerning the health and safety impacts of products and services		37

FISCAL YEAR 2021

General economic conditions and economic conditions in the sector

General economic conditions

In the first half of 2021, the global economy started to recover from one of the deepest recessions in history. However, according to the International Monetary Fund (IMF), positive development was impeded by several effects in the second half of the year. Disruptions in global supply chains caused production in the United States and in European economies in particular to falter. Supply bottlenecks combined with sharply rising energy prices, particularly in the U.S. and in many developing and newly industrialized countries, led to an inflation above the expected levels. In addition, due to the spread of the highly infectious Omicron variant, the global number of coronavirus cases has been increasing significantly again since autumn and impeded economic recovery. Overall, global economic output grew by 5.9% in 2021 according to the IMF, after a substantial decline in the previous year (2020: −3.1%). Growth was stronger in developing and newly industrialized countries than in industrialized countries.

According to the IMF experts, economic output in the industrialized countries increased by 5.0% in 2021 after having contracted by 4.5% in the previous year. The eurozone increased its economic power by 5.2% (2020: −6.4%). In the U.S., gross domestic product rose by 5.6% (2020: −3.4%).

As stated by the IMF, the economic output of developing and newly industrialized countries increased by 6.5% in the reporting period (2020: −2.0%). The strongest growth was recorded by India with 9.0% (2020: −7.3%) and China with 8.1% (2020: 2.3%).

Economic conditions in the sector [1]

Photovoltaics is now one of the most cost-effective energy sources in most regions of the world. For example, large-scale solar projects in the Middle East are already generating solar power at less than $0.02 per kWh. This points the way to an environment in which the industry continues to grow even without subsidization. In the wake of the transformation of global energy supply structures, current and future objectives include offering holistic solutions, intelligently interlinking different technologies, providing intermediate storage and management solutions for generated energy, and integrating users into the energy market. This is the basis for ensuring a reliable and cost-effective electricity supply from renewable energies.

GLOBAL PV MARKET CONTINUES TO GROW

Based on newly installed PV power of around 153 GW to 161 GW (2020: approximately 140 GW), according to SMA's estimates, the global photovoltaic market was again clearly above the previous year's level in 2021. (The installation figures do not include retrofitting of existing PV systems with new inverters or battery inverter technology.) SMA estimates that global PV inverter technology sales, including inverter retrofitting and battery inverter technology, increased to approximately €6.9 billion to €7.6 billion in 2021 (2020: €6.8 billion).

In the photovoltaic markets in Europe, the Middle East and Africa (EMEA), SMA estimates that inverter technology sales were slightly higher than in the previous year at around €2.1 billion to €2.3 billion (2020: €1.9 billion). Accordingly, the share of the EMEA region in global sales rose to more than 30% (2020: 28%). SMA estimates that system technology for storage applications and the retrofitting of existing PV systems accounted for a significant portion of sales in the EMEA region at more than 20%. According to SMA estimates, investments in North and South America (Americas) also grew slightly to approximately €1.7 billion to €1.9 billion (2020: €1.5 billion). The region thus accounted for around 25% of global inverter technology sales (2020: 22%). The Chinese PV market recorded a slight increase. SMA estimates that, with an investment volume of approximately €1.5 billion to

1 The estimated values in the following section are not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

€1.6 billion, China accounted for around 20% of global sales in the reporting period (2020: €1.3 billion; 19%). According to SMA estimates, the Asia-Pacific photovoltaic markets (excluding China) were down year on year with sales of around €1.6 billion to €1.8 billion, accounting for around 25% of the global market (2020: €2.1 billion; 31%). The decline is attributable to a significant market slump in Vietnam.

EMEA: GERMANY IS MOST IMPORTANT MARKET AGAIN

In the EMEA (Europe, Middle East and Africa) region, SMA estimates that newly installed PV power was clearly above previous year's level with approximately 35 GW to 37 GW in 2021 (2020: 28 GW). Germany grew slightly in 2021 and, as in the previous year, was the most significant market in Europe with 5.3 GW of newly registered PV power (2020: 4.9 GW). Despite the continuing uncertainties due to the coronavirus pandemic, almost all other European countries also recorded an increase in newly installed PV power in the reporting year.

AMERICAS: U.S. MARKET RISES SHARPLY

The U.S. market was again dominated by large-scale solar projects in 2021. SMA estimates that new PV installations rose to a total of approximately 23 GW to 24 GW in the reporting year (2020: 19 GW). The U.S. market thus recorded growth of approximately 20%. Newly installed PV power in the North and South American (Americas) region came to an estimated total of approximately 32 GW to 34 GW in the reporting period (2020: 27 GW).

APAC: STRONG GROWTH IN INDIA

According to SMA estimates, new PV installations in the Asia-Pacific region (APAC), excluding China, were on a par with the previous year with about 33 GW to 35 GW. In China, new installations grew by approximately 15% to approximately 53 GW to 55 GW (2020: 48 GW). Among the PV markets in the APAC region (excluding China), India recorded particularly strong growth with new PV installations rising to more than 10 GW (2020: 3.8 GW). This was attributable to a high rate of installations of bigger PV rooftop systems and of ground-based PV systems. In Vietnam, by contrast, new PV installations declined drastically to below 800 MW (2020: 11 GW) due to changes to subsidy conditions.

Results of operations

Sales and earnings

EFFECTS OF CORONAVIRUS PANDEMIC LEAD TO SLIGHT DECLINE IN SALES

In the reporting period, the SMA group sold PV inverters with accumulated power of 13,584 MW, putting output sold 6% lower than in the previous year (2020: 14,416 MW). The SMA group's sales decreased by 4.2% to €983.7 million (2020: €1,026.6 million). The slight decline in the 2021 fiscal year was attributable to the significant challenges in connection with the global coronavirus pandemic and the increasingly tight supply situation for electronic components due to a significant increase in global demand as part of the economic recovery and ongoing digitalization. This particularly affected the Business Solutions segment. By contrast, sales in the Home Solutions and Large Scale & Project Solutions segments remained at the previous year's level despite the challenges.

The SMA group is well positioned internationally and generates sales in all relevant regions. In the reporting period, 50.5% of external sales calculated before sales deductions were generated in Europe, the Middle East and Africa (EMEA), 31.4% in the North and South America (Americas) region and 18.1% in the Asia-Pacific (APAC) region (2020: 48.4% EMEA, 30.6% Americas, 21.0% APAC). The main markets for the SMA group in the reporting period were again the U.S., Germany and Australia.

The Large Scale & Project Solutions segment again made the largest contribution to sales in 2021, accounting for 48.1% (2020: 45.8%). The Home Solutions segment generated 27.0% of the SMA group's sales, while the Business Solutions segment contributed 24.9% (2020: 25.7% Home Solutions, 28.5% Business Solutions).

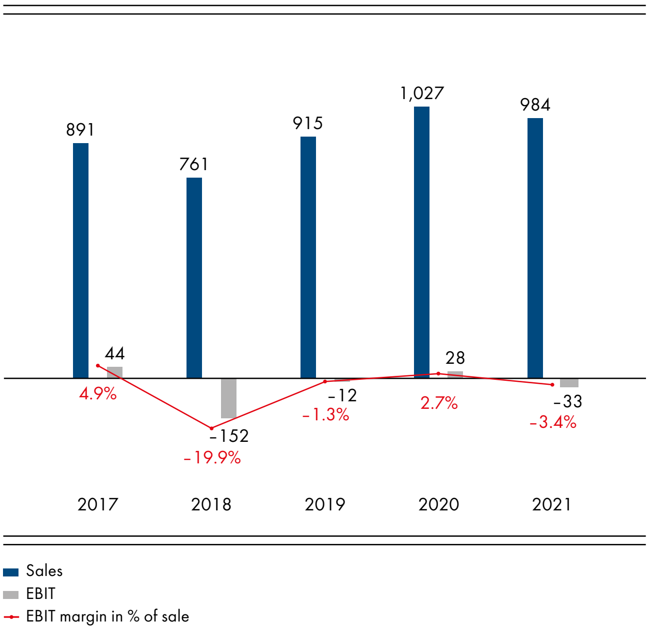
The SMA group increased its order backlog again to €886.6 million [1] as of December 31, 2021 (December 31, 2020: €855.4 million). Of this amount, €408.8 million was attributable to product business. The product-related order backlog was thus 5.8% above the high level reported at the end of the previous year (December 31, 2020: €386.3 million). €477.8 million1 of the order backlog was attributable to service business. The order backlog for services was therefore also above the level at the end of the previous year (December 31, 2020: €469.1 million). Most of it will be implemented over the next five to ten years.

[1] The order backlog contains a high double-digit million euro amount for operation and maintenance services, which will be cancelled in subsequent periods as a result of the targeted contract termination.

In the 2021 fiscal year, earnings before interest, income taxes, depreciation and amortization (EBITDA) declined to €8.7 million (EBITDA margin: 0.9%; 2020: €71.5 million; 7.0%). Earnings before interest and taxes (EBIT) came to −€33.0 million (2020: €27.9 million). Earnings in the 2021 fiscal year were negatively impacted by a one-time item. This resulted from the termination of a long-term contract for operation and maintenance (O&M) services for PV power plants. The contractually assured output of these systems cannot be achieved due to defects that became apparent only after the contract was concluded. A provision for anticipated losses of €36.5 million was recognized for the termination. As a result of the lower system output achieved, the SMA group must also pay contractual penalties that have reduced the sales already received by an amount of €10.9 million. The EBIT margin accordingly fell to −3.4% (2020: 2.7%). The previous year's earnings were influenced by a positive one-time item from a compensation claim with a supplier for quality defects. Net income was −€23.0 million (2020: 28.1 million); earnings per share amounted to −€0.66 (2020: €0.81).

Sales and EBIT

in € million



Sales and earnings per segment

HOME SOLUTIONS SEGMENT SIGNIFICANTLY INCREASES PROFITABILITY

In the Home Solutions segment, the SMA group caters to global markets for small PV systems with and without storage systems and connections to a smart home solution. The SMA Energy System Home is a system package featuring hardware, software and service components required for an independent household electricity supply. It comprises single- and three-phase string inverters with power of up to 12 kW, integrated services, storage systems and charging solutions for electric vehicles. Communication products and accessories, services, such as extended warranties, spare parts and modernization of PV systems (Repowering) to enhance performance as well as digital energy services complete the offering.

External sales in the Home Solutions segment were up slightly by 0.8% year on year at €265.7 million in 2021 (2020: €263.7 million). Its share of the SMA group's total sales was 27.0% (2020: 25.7%). At 81.1% (2020: 75.9%), the EMEA region accounted for the noticeably largest share of gross sales in the Home Solutions segment. 10.9% were attributable to the Americas region (2020: 11.3%) and 8.0% to the APAC region (2020: 12.8%).

EBIT in the Home Solutions segment increased to €37.9 million (2020: €12.8 million) as a result of a higher-margin product portfolio and an optimized cost structure combined with stable market prices. In relation to external sales, the EBIT margin was at a high level of 14.3% (2020: 4.9%).

BUSINESS SOLUTIONS AFFECTED BY SHORTAGE OF COMPONENTS AND RELUCTANCE TO INVEST

In the Business Solutions segment, the focus is on global markets for medium-sized PV systems with and without energy management, battery storage and electric vehicle charging solutions. SMA Energy System Business, featuring matched hardware, software, tools and services, gives small and medium-sized commercial enterprises and the housing sector the option of producing, storing and selling solar power themselves. The application shows the companies' energy flows in a transparent way and thus contributes to cost savings. It comprises three-phase inverters, storage solutions and holistic energy management solutions for smaller and medium-sized PV systems. Solutions for charging management and billing of electric vehicle fleets complete the offering. In addition, the SMA group offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services.

External sales in the Business Solutions segment of €245.4 million were on the decrease in 2021 (2020: €292.6 million). The sales performance of this segment was impacted by restrained investment of commercial enterprises as a result of the coronavirus pandemic and the increasing shortage of materials for electronic components. Its share of the SMA group's total sales was 24.9% in the reporting period (2020: 28.5%). 71.5% of gross sales were attributable to the EMEA region, 16.1% to the Americas region and 12.4% to the APAC region (2020: 57.2% EMEA, 28.7% APAC, 14.1% Americas).

Earnings before interest and taxes (EBIT) amounted to –€18.0 million (2020: –€29.9 million). In relation to external sales, the EBIT margin was −7.3% (2020: −10.2%). Despite the decline in sales, earnings improved year on year. The previous year's earnings had been negatively impacted by increased warranty costs. The order backlog increased by more than 20% compared to the end of the previous year.

STABLE SALES IN LARGE SCALE & PROJECT SOLUTIONS SEGMENT

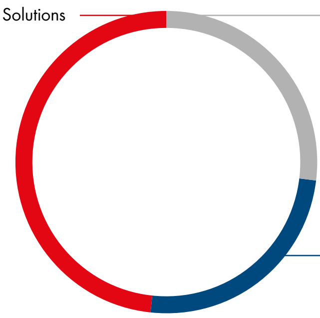
The Large Scale & Project Solutions segment focuses on complete solutions on international PV power plant markets that perform grid service and monitoring functions on the basis of central inverters and system controllers. The outputs of string and central inverters in this segment range from 100 kW to the megawatts. Another focus is on storage solutions for large-scale PV and storage power plants and on solutions for the hydrogen production. The portfolio is supplemented by services, for example, for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business). In addition, the SMA group implements PV diesel hybrid and large-scale storage projects worldwide in this segment.

External sales in the Large Scale & Project Solutions segment were up 0.5% year on year at €472.6 million in the reporting period (2020: €470.3 million). Its share of the SMA group's total sales was 48.1% (2020: 45.8%). The Large Scale & Project Solutions segment thus again accounted for the largest share of the SMA group's total sales. The Americas region accounted for 51.8% (2020: 52.1%) of the segment's gross sales, the APAC region for 27.1% (2020: 20.8%) and the EMEA region for 21.1% (2020: 27.1%).

Earnings before interest and taxes (EBIT) in the Large Scale & Project Solutions segment amounted to −€62.8 million (2020: €48.5 million). Earnings in the 2021 fiscal year were negatively impacted by a one-time item from termination of a long-term contract for operation and maintenance and (O&M) services for PV power plants. For the termination a provision for anticipated losses amounting to €36.5 million was recognized. As a result of the lower system output achieved, the SMA group must also pay contractual penalties that have reduced the sales already received by an amount of €10.9 million. The segment's earnings in the previous year had been influenced by a positive one-time item from a compensation claim with a supplier for quality defects. In relation to external sales, the EBIT margin was −13.3% (2020: 10.3%).

Sales by segments [1]

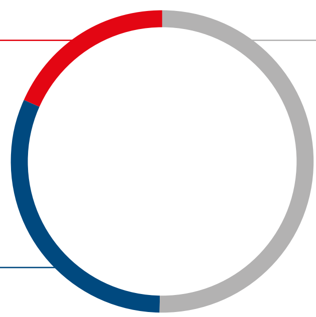
in %



[1] Gross sales before sales deductions (previous year's figures in parentheses)

Sales by regions [1]

in %



[1] Gross sales before sales deductions (previous year's figures in parentheses)

Development of significant income statement items

HIGH SERVICE AND WARRANTY COSTS AND ONE-TIME ITEM NEGATIVELY IMPACT GROSS MARGIN

The cost of sales amounted to €808.2 million in the reporting period (2020: €859.8 million). At 17.8% (2020: 16.2%), the gross margin was up year on year, driven by a positive development in the Home Solutions segment. The gross margin was influenced by the mentioned one-time item in the form of a revenue reduction amounting to €10.9 million.

Personnel expenses included in cost of sales remained almost unchanged year on year at €117.6 million (2020: €118.1 million). Due to the lower sales volume, material expenses fell to €610.2 million (2020: €632.6 million). The SMA group is continuously working on the product portfolio in all segments to tackle price pressure by optimizing the cost of existing products and introducing new and less expensive products.

Depreciation and amortization included in the cost of sales amounted to €35.7 million in 2021 (2020: €38.3 million). This includes scheduled depreciation on capitalized development costs of €8.8 million (2020: €9.1 million). Other costs decreased by 36.9% year on year to €44.7 million (2020: €70.8 million). This was attributable to a large addition to the specific warranty provisions in the previous year.

Selling expenses saw a moderate decrease to €85.4 million in 2021 (2020: €86.3 million). The cost of sales ratio was 8.7% in the reporting period (2020: 8.4%).

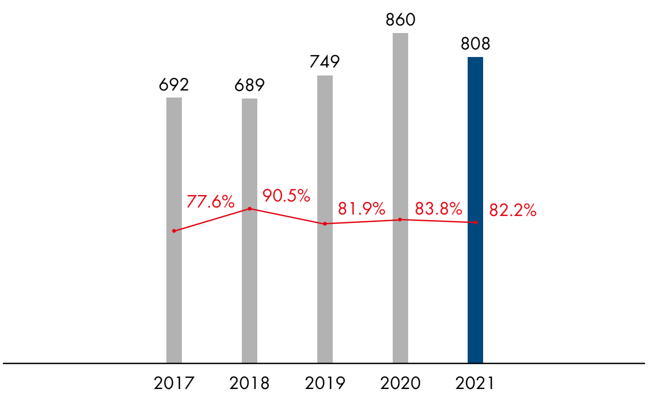
Research and development expenses after deducting capitalized development costs amounted to €50.2 million in the 2021 fiscal year (2020: €56.0 million). This decline was mainly due to increased own work capitalized. The research and development cost ratio amounted to 7.9% in the 2021 fiscal year (2020: 6.9%). Total research and development expenses, including capitalized development projects, amounted to €77.7 million (2020: €71.2 million). Development costs were capitalized in the amount of €27.4 million in the reporting period (2020: €15.2 million).

General administrative expenses were almost unchanged at €50.4 million in 2021 (2020: €50.6 million). The ratio of administrative expenses amounted to 5.1% in the reporting period (2020: 4.9%).

The balance of other operating income and expenses resulted in a negative effect on earnings of −€22.4 million in the reporting period (2020: €54.0 million). The provision for anticipated losses amounting to €36.5 million from the termination of a long-term contract for operation and maintenance (O&M) services for PV power plants described in the sales and earnings development of the Large Scale & Project Solutions segment is included in other operating expenses in the 2021 fiscal year. This is offset by a positive effect amounting to €9.9 million from the success in negotiations regarding an early single payment of the purchase price (earn-out) in connection with the former Chinese subsidiaries. This resulted in a positive effect in a high single-digit million amount as compared to the purchase price claim measured at fair value. Net foreign currency valuation effects, income from renting the group's own buildings and expenses and other income for assets measured at fair value through profit or loss are also included. The previous year had been influenced by a positive one-time item relating to the conclusion of a multi-year settlement with a supplier due to quality defects amounting to €55.0 million. This compensation claim compensates for expenses incurred in recent years.

Cost of sales

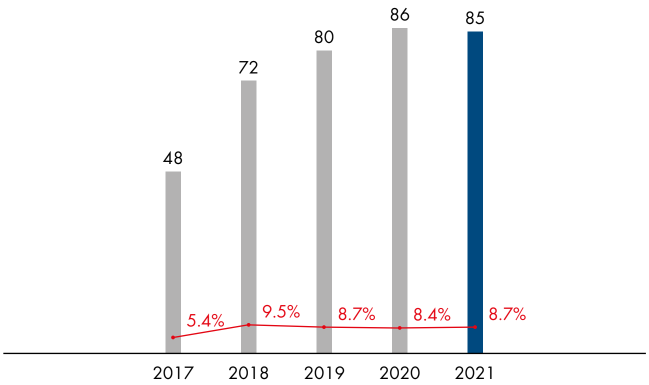
in € million



Ratio in % of sales

Selling expenses

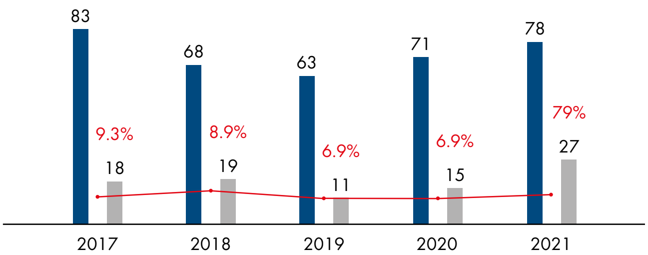
in € million



Ratio in % of sales

Research and development expenses

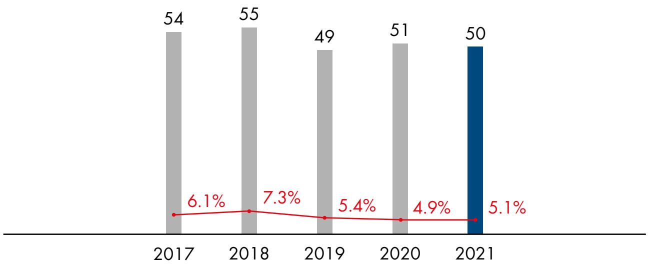
in € million



Research and development expenses
of which capitalized development projects
Ratio in % of sales

Administrative expenses

in € million



Ratio in % of sales

FINANCIAL RESULT AND TAXES

The financial result amounted to –€0.7 million in 2021 (2020: −€0.7 million). Taxes are mainly influenced by the recognition of deferred tax assets for temporary differences and loss carryforwards. Compared with the previous year, these increased by a total of €19.4 million.

Multi-period overview of results of operations

in %	2021	2020	2019	2018	2017
EBIT margin	-3.4	2.7	-1.3	-19.9	4.9
EBITDA margin	0.9	7.0	3.7	-9.1	10.9
EBT margin (return on sales)	-3.4	2.6	-1.2	-21.9	4.9
Return on equity after taxes	-5.4	6.6	-2.1	-33.9	5.0
Return on assets (after taxes)	-2.2	2.6	-0.8	-15.9	2.5

Financial position

Principles and objectives of financial management

Cash holdings are managed and invested centrally by Global Treasury. The decision is based not only on returns but also on the credit rating of the bank partner. In the case of supplier credits granted, counterparty risk is monitored continuously. The decision is primarily based on the customer's payment practices and financial circumstances. To cover potential payment defaults, the SMA group has also taken out commercial credit insurance.

We systematically recognize market risks – above all currency risks – that might jeopardize the operating results and preclude such risks through hedging operations, provided this is economically expedient.

Financing analysis

In 2016, the SMA group agreed upon a long-term financing of €100 million with three domestic banks. Negotiations with lenders to maintain the credit line were successfully concluded in April 2021. At the end of 2021, 28.8% of the credit line were utilized in the form of guarantee credits.

In total, financial liabilities increased by €5.6 million from €41.1 million as of the end of 2020 to €46.7 million as of the end of 2021. This change is due first to the scheduled repayment of financial liabilities to banks of €3.1 million. Second, currency derivatives of €7.0 million were added. IFRS 16 lease liabilities rose by €1.6 million.

Liquidity analysis

SOUND GROSS CASH FLOW

Gross cash flow reflects operating income prior to commitment of funds. It amounted to €84.7 million in the 2021 fiscal year (December 31, 2020: €76.3 million).

In the reporting year, net cash flow from operating activities was €94.3 million (2020: −€31.4 million). It was positively influenced by the operative business adjusted for special effects as well as by further proceeds from a compensation claim with a supplier which affected cash and by an early single payment (earn-out) in connection with the sale of the former Chinese subsidiaries,. In addition, there was a positive effect from the return of cash pledged as collateral. This more than compensated for the increase in net working capital.

Inventories remained at a high level. They increased by 6.9% year on year to €273.0 million (December 31, 2020: €255.5 million). In view of the ongoing shortage of materials, the SMA group is continuing to pursue an intensified stockpiling strategy. Together with the reduction in trade payables and an increase in trade receivables due to the high sales at the end of the year, this led to a significant rise in net working capital by €46.9 million to €257.5 million (December 31, 2020: €210.6 million). The net working capital ratio in relation to sales over the past 12 months thus increased to 26.2% (December 31, 2020: 20.5%) and was therefore above the range of 22% to 24% targeted by the management.

Net cash flow from investing activities amounted to −€81.6 million in the reporting period after −€36.5 million in the previous year. The outflow of funds for investments in fixed assets and intangible assets amounted to €47.5 million in the reporting period (December 31, 2020: €38.8 million). At €27.4 million (December 31, 2020: €15.2 million), capitalized development costs accounted for a large part of these investments. The balance of proceeds and payments for securities and other financial assets amounted to −€33.6 million (December 31, 2020: €0.2 million) and thus made a significant contribution to the change. The return flows of cash pledged as collateral were invested here.

Net cash flow from financing activities amounted to −€20.8 million (2020: −€12.4 million). This included repayments of financial liabilities to banks of €3.1 million, repayments of lease liabilities of €7.3 million and SMA Solar Technology AG's dividend payment of €10.4 million.

As of December 31, 2021, cash and cash equivalents totaling €114.0 million (December 31, 2020: €123.7 million) included cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months. Together with time deposits that have a term to maturity of more than three months, fixed-interest-bearing securities, liquid assets pledged as collateral, and after deducting interest-bearing financial liabilities to banks, this resulted in net cash of €221.7 million (December 31, 2020: €226.0 million).

Multi-period overview of SMA group financial position

in € million	2021	2020	2019	2018	2017
Equity	410.4	439.1	416.9	424.5	611.5
Equity ratio in %	39.0	41.8	37.6	42.9	50.3
Non-current liabilities	289.9	270.5	259.3	244.5	285.2
Current liabilities	352.2	341.6	431.1	320.3	319.5
Share of non-current provisions in total assets in %	9.9	8.0	6.8	6.6	7.5
Financial liabilities	46.7	41.1	34.5	20.4	20.8
Net cash	221.7	226.0	303.0	305.5	449.7
Net working capital	257.5	210.6	159.5	177.4	167.9
Net cash flow from operating activities	94.3	-31.4	-1.2	-54.3	116.8
Net cash flow from investing activities	-81.6	-36.5	83.1	7.4	-81.2
Net cash flow from financing activities	-20.8	-12.4	-10.7	-14.5	-11.5

Investment analysis

In the 2021 fiscal year, investments in fixed assets and intangible assets that affected the statement of cash flows amounted to €47.5 million and were thus clearly above the previous year's figure of €38.8 million. This equates to an investment ratio in relation to sales of 4.8% compared with 3.8% in the previous year. Including additions of rights of use under leases, investments amounted to €56.4 million (2020: €57.1 million).

In total, €17.6 million was invested in fixed assets (2020: €20.2 million) for conversions and new buildings and extensions of buildings and for machinery and equipment. In the fiscal year, a state-of-the-art testing hall for electromagnetic compatibility with an investment volume of more than €5 million was commissioned. The investment ratio for fixed assets was 1.8% in relation to sales in the fiscal year (2020: 2.0%). Depreciation of fixed assets, including depreciation of rights of use under leases, decreased to €29.2 million year on year (2020: €31.1 million). Investment obligations of €5.0 million exist for fixed assets and €7.5 million for intangible assets.

Investments in intangible assets amounted to €29.9 million (2020: €18.5 million). These largely related to capitalized development costs. Amortization of intangible assets amounted to €11.5 million and was thus on a par with the previous year's figure of €11.6 million.

Investments compared to depreciation and net cash flow from operating activities

in € million	2021	2020	2019	2018	2017
Net cash flow from operating activities	94.3	-31.4	-1.2	-54.3	116.8
Capital expenditure [1]	47.5	38.8	27.6	40.3	33.2
Depreciation and amortization	41.7	43.6	46.0	82.6	53.2

[1] See Notes, sections 9 and 10, page 117 et seq.

Net assets

SMA group posts stable equity ratio

Total assets amounted to €1,052.5 million as of December 31, 2021, and slightly increased year on year (December 31, 2020: €1,051.2 million). At €333.2 million, non-current assets were also above the previous year's level (December 31, 2020: €328.5 million).

Net working capital increased to €257.5 million (December 31, 2020: €210.6 million), corresponding to 26.2% of sales over the past 12 months. As of the end of the fiscal year, trade receivables rose by 17.1% compared to December 31, 2020, to €142.7 million (December 31, 2020: €121.9 million). Days sales outstanding came to 49.1 days and were slightly higher than in the previous year (December 31, 2020: 47.6 days). Inventory remained at a high level and increased by 6.9% year on year to €273.0 million (December 31, 2020: €255.5 million). Trade payables decreased by 7.1% to €134.0 million (December 31, 2020: €144.2 million). The share of trade credit in total assets fell to 12.7% (December 31, 2020: 13.7%). Days payable outstanding was lower than in the previous year at 49.7 days (December 31, 2020: 51.3 days).

Most of the provisions set aside by the SMA group are for warranty obligations from our various product families. In addition, provisions for anticipated losses amounting to €36.5 million were recognized in the 2021 fiscal year for the expected expenses from the termination of a long-term contract for operations and maintenance services in North America and for claims for compensation by the customer amounting to €10.9 million.

Mainly as a result of the dividend distribution, the SMA group's equity capital base decreased to €410.4 million (December 31, 2020: €439.1 million). With an equity ratio of 39.0% (December 31, 2020: 41.8%), the SMA group continues to have a solid equity capital base.

Importance of off-balance sheet financing instruments

The SMA group is not involved in off-balance sheet transactions that might have a significant impact on its financial position, net assets or results of operations.

Multi-period overview of net assets

in € million	2021	2020	2019	2018	2017
Goodwill, intangible assets and fixed assets	256.9	251.4	245.4	235.2	283.5
Financial assets and long-term securities (incl. deposits with a total term to maturity of more than three months)	105.9	72.1	72.1	177.5	225.4
Cash and cash equivalents (incl. deposits with a total term to maturity of less than three months)	114.0	123.7	214.8	142.6	234.9

SMA Solar Technology AG (notes based on the German Commercial Code HGB)

In addition to reporting on the SMA group, business development of SMA Solar Technology AG (SMA AG) is outlined below.

SMA AG is the parent company of the SMA group and has its headquarters in Niestetal near Kassel, Germany. Its primary business operations include the development, production and sale of systems and solutions for the efficient and sustainable generation, storage and use of energy. These include PV and battery inverters, monitoring systems for PV systems, charging solutions for electric vehicles as well as intelligent energy management systems and digital services for the future energy supply. Extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) as well as medium-voltage technology and power supplies for hydrogen production round off the product range. In addition to its own operative business, SMA AG functions as a holding company for the SMA group. All key management mechanisms of SMA AG are oriented toward the SMA group.

The SMA AG Annual Financial Statement is prepared according to German Commercial Code (HGB). The Consolidated Financial Statements follow International Financial Reporting Standards (IFRS). This leads to differences between accounting and valuation methods. These mainly relate to intangible assets, inventory measurement, provisions, financial instruments, accrual items, leases and deferred taxes.

Results of operations

SMA Solar Technology AG income statements in accordance with HGB for the period from January 1 to December 31, 2021

in €'000	2021	2020
Sales	**875,159**	**941,999**
Increase or decrease in finished goods and work in progress	8,462	5,612
	883,621	**947,611**
Other own work capitalized	826	1,497
Other operating income	105,540	161,695
Material expenses	609,900	681,341
Personnel expenses	155,896	154,032
Depreciation and amortization of intangible and fixed assets	24,493	25,031
Other operating expenses	196,622	231,900
Financial result	–2,257	60
Taxes on income (income – / expenses +)	–1,635	3,254
Income after taxes	**2,454**	**15,305**
Other taxes	292	238
Annual net income	**2,162**	**15,067**
Accumulated income/losses brought forward	161,308	156,651
Profit available for distribution	**163,470**	**171,718**

SMA AG generated **sales** of €875.2 million in the 2021 fiscal year (2020: €942.0 million). This equates to a decline in sales of 7.1% compared with the previous year. Sold PV inverter output decreased by 7.5% in the same period to 13.6 GW (2020: 14.7 GW). Of this amount, 8.0 GW (2020: 8.5 GW) were attributable to associated companies.

Other operating income amounted to €105.5 million (2020: €161.7 million). This included income from the utilization and reversal of provisions amounting to €51.4 million (2020: €47.2 million), income from foreign currency valuation of €18.2 million (2020: €13.0 million), income from a subsequent adjustment from the sale of shares in a subsidiary amounting to €12.0 million (2020: €0.0 million) and other prior-period income in the amount of €11.0 million. This includes the valuation of securities in the amount of €6.3 million (2020: €0.0 million).

Material expenses fell by €71.4 million year on year to €609.9 million (2020: €681.3 million) and correlate with decreased sales.

Personnel expenses increased by 1.2% to €155.9 million (2020: €154.0 million). The increase is mainly due to the rise in the average number of employees at SMA AG by 152 to 2,211 (excluding temporary employees, trainees and learners).

Depreciation and amortization of intangible and fixed assets slightly declined by €0.5 million to €24.5 million (2020: €25.0 million).

Other operating expenses decreased by 15.2% to €196.6 million (2020: €231.9 million). This was particularly attributable to the recognition of provisions at a lower level than in the previous year at €48.3 million (2020: €67.7 million). It also takes into account operating and administrative expenses of €80.8 million (2020: €83.3 million), sales expenses of €43.3 million (2020: €37.3 million) and expenses relating to foreign currency valuation of €9.8 million (2020: €22.5 million). This item also includes the remeasurement of trade receivables amounting to €1.1 million (2020: €2.6 million) and prior-period expenses of €0.3 million (2020: €2.9 million).

The **financial result** declined by €2.4 million to –€2.3 million (2020: €0.1 million). This change was mainly attributable to depreciation and amortization on shares in affiliated companies.

Taxes on income decreased by €4.9 million to –€1.6 million (2020: €3.3 million). This change was due to the lower earnings in the fiscal year as compared to the previous year and the reversal of a provision for taxes for previous years.

After tax, the company reported an **annual net income** of €2.2 million in 2021 (2020: €15.1 million).

Net assets and financial position

SMA Solar Technology AG balance sheet in accordance with HGB as of December 31, 2021

in €'000	2021	2020
Assets		
A. Non-current assets		
I. Intangible assets	6,797	9,136
II. Property, plant and equipment	155,886	162,024
III. Financial assets	67,842	65,663
	230,525	**236,823**
B. Current assets		
I. Inventories	188,806	156,292
II. Receivables and other assets	218,172	339,048
III. Securities	105,857	65,965
IV. Cash and cash equivalents	58,580	72,299
	571,415	**633,604**
C. Prepaid expenses and deferred charges	**3,434**	**3,029**
	805,374	**873,456**
Liabilities		
A. Equity		
I. Share capital	34,700	34,700
II. Capital reserves	124,200	124,200
III. Retained earnings		
1. Statutory reserve	400	400
2. Retained earnings	3,136	3,136
IV. Profit available for distribution	163,470	171,718
	325,906	**334,154**
B. Special account with reserve characteristics	**4**	**11**
C. Provisions	**187,331**	**203,498**
D. Trade payables	**162,734**	**201,801**
E. Accrued liabilities	**129,399**	**133,992**
	805,374	**873,456**

As of December 31, 2021, **total assets** of SMA AG fell by €68.1 million to €805.4 million (December 31, 2020: €873.5 million).

Non-current assets slightly decreased by €6.3 million to €230.5 million (December 31, 2020: €236.8 million).

As of December 31, 2021, **total inventories** of €188.8 million were above the previous year's level (December 31 2020: €156.3 million). The 20.8% increase year on year was particularly due to the increase in raw materials, consumables and supplies of €11.5 million and in advance payments for inventories of €16.8 million. In view of the ongoing shortage of materials, the SMA group is continuing to pursue an intensified stockpiling strategy.

Trade receivables rose by €3.3 million and totaled €36.9 million on the reporting date (December 31, 2020: €33.6 million).

Other assets fell by €71.5 million to €52.9 million (December 31, 2020: €124.4 million), chiefly due to the repayment of collateral for the bank guarantees issued and a reduction in a compensation claim against a supplier.

Cash and cash equivalents and securities increased by €26.1 million to €164.4 million (December 31, 2020: €138.3 million).

Equity declined, as a result of dividend payment, by €8.2 million to €325.9 million compared with December 31, 2020. The equity ratio increased to 40.5% (December 31, 2020: 38.3%).

The **provisions** of SMA AG largely comprise provisions for warranty obligations for our various product families and personnel provisions. The decline in provisions by €16.2 million to €187.3 million (December 31, 2020: €203.5 million) is largely attributable to the change in warranty provisions.

Trade payables went down by €14.8 million year on year to €98.4 million (December 31, 2020: €113.2 million).

Accrued liabilities of €129.4 million (December 31, 2020: €134.0 million) were recognized for deferred sales for extended warranties sold and for long-term service and maintenance contracts.

SMA AG's **financial position** essentially corresponds to that of the SMA group.

RISKS AND OPPORTUNITIES

The business performance of SMA AG is largely exposed to the same risks and opportunities as the SMA group. SMA AG also partakes in the risks affecting its investments and subsidiaries proportionate to its respective holding. The risks are presented in the Risks and Opportunities Report. The relationships with our investments can also result in negative effects from statutory or contractual provisions for liabilities (particularly financing).

OUTLOOK

As a result of SMA AG's interdependence with its group companies and its importance within the group, please refer to our statements in the Forecast Report for the SMA group, which also outline the expectations for the parent company specifically.

Managing Board statement on the business trends in 2021

With 13,584 MW of inverter output sold (2020: 14,416 MW), the SMA group's sales volume in 2021 was 6% below the previous year's level. Sales decreased by 4.2% to €983.7 million (2020: €1,026.6 million). The SMA group thus reached the sales guidance of €980 million to €1,030 million as adjusted on September 6, 2021. At €8.7 million (EBITDA margin: 0.9%), EBITDA was both below the guidance adjusted on September 6, 2021 (EBITDA: €50 million to €65 million) and below the earnings guidance again adjusted on January 12, 2022 (EBITDA: €20 million to €30 million). Sales and earnings were also significantly lower than the original guidance from February 5, 2021 (sales: €1,075 million to €1,175 million; EBITDA: €75 million to €95 million). The reasons why the development of sales and earnings fell short of the original expectations related to the initially unexpected significant restrictions in connection with the global coronavirus pandemic and the shortage of electronic components, which intensified considerably in the second half of 2021 due to increased demand combined with limited production capacity. Operating earnings were also negatively impacted by a one-time item from the termination of a long-term contract for operation and maintenance (O&M) services for PV power plants.

Sales in the Home Solutions and Large Scale & Project Solutions segments remained around the previous year's level. The Business Solutions segment however suffered as a result of small and medium-sized companies holding off on investments due to the uncertainties associated with the ongoing coronavirus pandemic. The worsening shortage of electronic components in the second half of the year also had a particular impact in this segment. Incoming orders developed positively as of the end of the year, allowing the SMA group to start off the fiscal year 2022 with a high order backlog overall.

At €221.7 million, net cash was slightly lower than at the end of the previous year (December 31, 2020: €226.0 million) and slightly above the guidance adjusted on September 6, 2021. The equity ratio was 39.0% (December 31, 2020: 41.8%). In addition, SMA has a long-term credit line from domestic banks of €100 million. At the end of 2021, 28.8% of this credit line were utilized in the form of guarantee credits.

As of December 31, 2021 net working capital amounted to 26.2% of sales and was thus above the guidance adjusted on September 6, 2021. This was attributable to increased inventories in connection with the shortage of materials, a reduction in trade payables and an increase in trade receivables due to high sales at the end of the year.

STRATEGIC POSITIONING AS "ENERGY TRANSITION COMPANY" ADVANCED [1]

In the reporting year, the SMA group further pressed ahead with its strategic development into an "energy transition company" with suitable solutions for all key areas. It could clearly be seen that the key trends for energy supply had already been identified years ago and suitable solutions had been developed. In the areas of storage technology, charging solutions for electric vehicles, energy management and green hydrogen production, demand by far exceeded the possible delivery volumes in view of the supply bottlenecks for electronic components. We will continuously develop and expand our product range in these areas and in our core business of photovoltaics with a focus on holistic, connected solutions.

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

In this context, we developed strategic areas of action in 2021 as part of the SMA Strategy 2025. These will strengthen the competitiveness of the SMA group in the long term and will be pressed ahead by corresponding business initiatives. They address key trends and growth segments with high future potential. These include PV and storage solutions, energy market integration, e-mobility and future business fields. We have further developed our digital offers in the Home Solutions and Business Solutions segments and signed contracts to supply innovative large-scale storage power plants in Australia and Europe. The capacity for seamless grid integration and provision of grid services is taking on crucial importance as a result of the fast-growing share of fluctuating renewable energy sources in utility grids worldwide. The SMA group's technologies meet the highest international standards here. In addition, we successfully expanded our positioning in the new business field of green hydrogen production in the reporting year. Projects with SMA system technology for the processing of direct current for electrolysis went into operation in the U.S., Europe, Asia and Australia.

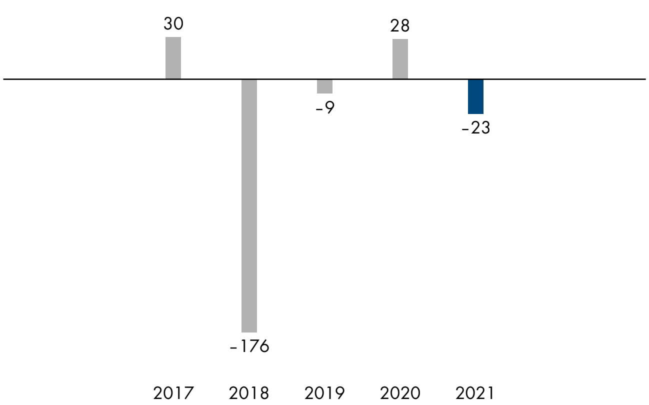
Guidance-actual comparison for 2021

Date of guidance	**2021/02/05, 2021/03/25**	**2021/09/06, 2021/11/10**	**2022/01/12**[1]	**2021 results**
Sales in € million	1,075 to 1,175	980 to 1,030	–	983.7
Inverter output sold in GW	17 to 18	13.5 to 14.5	–	13.6
EBITDA in € million	75 to 95	50 to 65	20 to 30	8.7
Capital expenditure in € million	approx. 60	approx. 55	–	56.4
Net working capital in % of sales	20 to 22	22 to 24	–	26.2
Net cash in € million	>250	200 to 220	–	221.7
EBIT in € million	30 to 50	10 to 25	–	–33.0

1 All parameters marked with "–" here were not part of the published guidance adjustment.

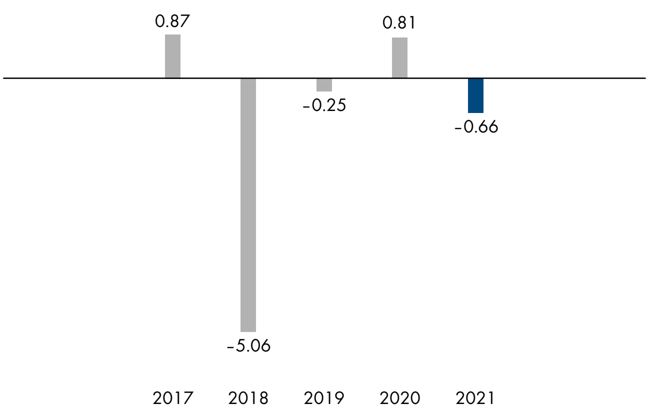
Net income

in € million



Earnings per share

in €



RISKS AND OPPORTUNITIES REPORT

Principles of the risk and opportunity management system

In the context of its business activity worldwide, the SMA group, as a specialist in photovoltaic system technology, is exposed to a range of risks, which can impair the successful implementation of the corporate strategy and the achievement of targets in the business units. By using a group-wide Risk and Opportunity Management System, risks are actively managed and influenced on the basis of the appropriate measures. A risk is defined by the SMA group as an event that ensues from a decision made by management (strategic), an action (operative) or external circumstances and – if the risk occurs – results in a negative deviation from the planned EBIT. To safeguard potential opportunities, opportunities are systematically identified and assessed by means of opportunity management. For the SMA group, an opportunity is the possibility of an event occurring that leads to a positive deviation from the planned EBIT. The Risk and Opportunity Management System is based on the conceptual framework of the Enterprise Risk Management – Integrated Framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which is an internationally accepted standard for establishing and systematically developing a company-wide risk management system. The SMA group uses a uniform software application to systematically record and report risks and opportunities and meet documentation requirements.

Risk and opportunity management

Objectives and strategy

The purpose of the SMA group's risk and opportunity management is to identify risks above a defined threshold as early as possible, present them transparently and comparably and assess and manage them. The SMA group must responsibly accept risks to a controllable and viable extent in the course of business operations in order to be able to exploit business opportunities. The Managing Board bindingly laid out the objectives, strategies and organization of risk management as well as the principles of risk analysis and risk communication in the SMA group's risk manual. It contains all methodical and organizational regulations for dealing with risks and opportunities, requirements and value limits as well as uniform regular and ad hoc reporting processes.

Organization of risk and opportunity management

The Managing Board of SMA Solar Technology AG bears overall responsibility for effective risk and opportunity management and ensures that all identified risks and opportunities are considered comprehensively and uniformly. The Supervisory Board is responsible for monitoring the effectiveness of the group-wide Risk and Opportunity Management System. To perform this task, the Audit Committee provides the Supervisory Board with all relevant information on risk and opportunity management. Process and system responsibility for the uniform group-wide Risk and Opportunity Management System lies with the Corporate Audit, Risk & Information Security department. This department reports directly to the Chief Financial Officer and is responsible for implementation of group-wide risk management standards and methods and for coordination and ongoing development of the risk and opportunity management process. As the highest internal body, the Risk and Opportunity Board ensures that all significant risks and opportunities across all functions and processes are identified, assessed and managed at an early stage. It is also responsible for monitoring the Risk and Opportunity Management System and improving its effectiveness and efficiency. The Risk Control Circle introduced in 2021 has the task of identifying and assessing possible dependencies (correlations) between individual risks and evaluating the suitability and effectiveness of risk control measures. All fully consolidated subsidiaries and business areas of the SMA group are included in the scope of the Risk and Opportunity Management System.

Risk and opportunity management process

Once a quarter, select skilled employees and executives from the first two levels below the Managing Board of SMA Solar Technology AG and select central group functions ("risk owners") assess the risk and opportunity situation of the SMA group in a standardized IT supported "bottom-up process."

The main steps of the risk and opportunity management process are explained hereafter:

RISK AND OPPORTUNITY ANALYSIS

Risk and opportunity analysis entails both the comprehensive identification and assessment of risks and opportunities. Risk owners are obliged to check on a regular basis whether the risks and opportunities within their areas of responsibility are complete and up to date and to identify and assess new risks and opportunities. SMA assesses all risks and opportunities within the SMA group based on a uniform set of assessment principles. For each risk and opportunity, the relevant risk owner assesses its probability of occurrence and its impact (potential amount of damage caused or potential benefit generated in euro). Compared to the 2020 fiscal year, the evaluation of the probability of occurrence was changed from selecting a probability range to recording a specific percentage. In this context, a probability distribution is defined for all individual risks and opportunities. The classification of risks is still based on the following diagram:

Assessment system for risks

Effects in € million	Unlikely (<= 5)	Possible (> 5 to <= 25)	Likely (> 25 to <= 50)	Very likely (> 50)
Very high (> 15)	C	B	A	A
High (> 7.5 to <= 15)	C	B	B	A
Medium (> 2.5 to <= 7.5)	C	C	B	B
Low (> 0.3 to <= 2.5)	C	C	C	C
	Probability of occurrence in %			

The amount of damage is measured based on the potential effect on the planned annual EBIT. Risks need to be mentioned in the quarterly risk assessment reports only if the potential amount of damage resulting from the risk exceeds €300,000.

Opportunities are still classified as follows:

Assessment system for opportunities

Effects in € million	Unlikely (<= 5)	Possible (> 5 to <= 25)	Likely (> 25 to <= 50)	Very likely (> 50)
High (> 2)	C	B	A	A
Low (> 0.5 to <= 2)	C	C	B	A
	Probability of occurrence in %			

Opportunities have to be mentioned in the quarterly risk assessment reports as soon as the potential benefit resulting from the opportunity exceeds €500,000.

Both a gross and a net assessment must be made for every risk within a projection period of one year. The gross assessment represents the largest possible negative effect on the EBIT anticipated before the implemented management measures take effect. The net assessment then considers the risk-reduction measures. Opportunity assessment is based exclusively on a net principle.

To assess materiality, the risks and opportunities are classified as category A, B or C risks and opportunities based on a combination of the assessment of probability of occurrence and the impact over the reporting period on which further internal reporting depends. The individual risks and opportunities for the SMA group are described in the next section "Individual and overall analysis of risks and opportunities."

OVERALL RISK ASSESSMENT

At the start of the 2021 fiscal year, the SMA group introduced an assessment of the overall risk using an IT-supported simulation process in which all risks and opportunities are assessed on an aggregated basis. To determine the overall risk, the key figure “net value at risk” is calculated with a 95% confidence interval [1]. To be able to assess the overall risk periodically and identify risks to the company’s existence at an early stage, the Managing Board of SMA Solar Technology AG has introduced thresholds for risk tolerance and risk-bearing capacity. The net value at risk is considered in relation to the SMA group’s equity and net cash. The overall risk is presented in the regular quarterly reporting and if the defined thresholds are exceeded, additional measures are initiated to manage and reduce the risk.

RISK CONTROL

While taking into account the corporate strategy, the objective of risk management is to actively influence identified and assessed risks. The SMA group’s risk situation must be positively affected in a targeted way using suitable measures. In order to reduce the overall risk, the risk owners have the task of developing and implementing effective measures, among others. Suitable measures include for example forming security reserves or transferring risks to third parties (e.g., through insurance companies). With regard to risk management, these measures and their implementation are subject to regular review and adjustment by the risk owners. In addition, the recently introduced Risk Control Circle reviews the measures for major risks.

RISK AND OPPORTUNITY REPORTING

The development of all risks and opportunities is regularly monitored and reported. Our Risk and Opportunity Management System is designed to ensure that the risk owners can identify risks and changes to them early on as well as report them to the decision-makers in the company. These reports are made directly to Corporate Audit, Risk & Information Security using the standard software application. To maintain high reporting quality, the business units are closely integrated into the regular process and ensure that all significant risks and opportunities for their respective business fields are fully documented and correctly evaluated in the Risk and Opportunity Management System. Once a quarter, significant risks, opportunities and measures along with adjustments to the Risk and Opportunity Management System are presented to the Risk & Opportunity Board. In addition, every six months the Supervisory Board’s Audit Committee is informed of significant risks and opportunities and any newly identified risks that are classified as at least category B. In addition, risk owners are required to report risks to the Managing Board without delay if new risks are classified as A risks or existing risks develop into A risks. The Managing Board decides whether such changes are reported to the Supervisory Board’s Audit Committee on an ad hoc basis or during the regular reporting cycle. To ensure integration with the (group) accounting process, the risk and opportunity management process follows the coordinated schedule and thus provides the SMA functions involved in (group) accounting and financial reporting with the relevant information in full.

Key features of the internal control and risk management system in relation to the (group) accounting process

The SMA group’s Internal Control System includes all the principles, procedures and measures available to ensure business activities maintain the proper course. It is made up of systematically created organizational and technical measures and controls within the company aimed at guaranteeing adherence to laws and regulations, as well as guidelines for preventing damage that might be caused by its employees or third parties. The Managing Board is responsible for implementation and adequacy of the Internal Control System. The Audit Committee of the Supervisory Board monitors the accounting process, the effectiveness of the Internal Control System, the Risk Management System and the Internal Auditing System on the basis of Section 107 (3) of the German Stock Corporation Act (AktG).

The Internal Control System pertaining to the accounting process is part of the overall Internal Control System, which is supported by the company-wide Risk and Opportunity Management System. Process-integrated and process-independent monitoring steps are elements of the internal monitoring system. Automated IT process controls are an integral part of the process-integrated measures. Additional controls are the organizational monitoring methods, such as the four-eyes principle, separation of administration, execution, settlement and approval functions and written work instructions. Furthermore, wherever possible, we protect the IT systems deployed against unauthorized access by using appropriate authorization systems and access restrictions. The Supervisory Board’s Audit Committee and the Internal Audit department are intimately incorporated into the internal monitoring system with process-independent audit activities.

[1] The confidence interval (also known as the confidence range) refers to the range within which the calculated value can be assumed with a certain probability to be located.

On the basis of a risk-oriented audit plan, the Internal Audit department regularly examines the effectiveness of the Internal Control System by means of sampling and thus also checks material parts of the Internal Control System as it pertains to the (group's) accounting process.

Important risks in the (group) accounting process include the possibility that the consolidated local financial statements of the group companies fail to properly reflect the true net assets, financial position and results of operations due to unintentional or deliberate wrongdoing, or that publication of the Quarterly Statements or of the Annual Financial Statements is late. These risks may permanently impair the reputation of the SMA group. The SMA group's Internal Control System as it pertains to (group) accounting is concerned with minimizing the risk of misstatements in the group's bookkeeping as well as in external financial reporting. To ensure systematic early identification of risks throughout the group, the SMA group has a monitoring system to identify risks at an early stage that threaten the existence of the company in accordance with Section 91 (2) of the AktG (Risk and Opportunity Management System). Existence-threatening and other risks are identified early on, managed and monitored, beyond the limits of statutory regulations.

The Internal Control System measures are aimed at securing proper and reliable (group) accounting and ensure business transactions are fully, correctly and promptly recorded in accordance with legal provisions and the articles of association. They also guarantee that the process of stock taking is properly implemented and that assets and liabilities are appropriately recognized, measured and shown in the Annual Financial Statements and Consolidated Financial Statements. Furthermore, the regulations ensure that accounting records provide reliable and comprehensible information. The main tasks of the departments involved in the (group) accounting process are clearly separated and their areas of responsibility are clearly assigned.

The SMA group constantly evaluates laws, financial reporting standards and other agreements and considers their relevance and effect on the (group) accounting process. Applicable requirements are promptly communicated to all group companies. The uniform IT platform, group account plan and standardized processes ensure proper and timely recording of all important business transactions. There are binding rules for the recording of manual business transactions. An accounting manual specifies the group-wide implementation of accounting provisions in accordance with the International Financial Reporting Standards (IFRS). In addition to general accounting principles and methods, the regulations, above all, include requirements concerning the balance sheet, income statement, statement of comprehensive income, Notes, Management Report, statement of cash flows, statement of changes in equity, and segment reporting in compliance with EU legislation. By defining clear requirements, the risk of inconsistent practices when recognizing, measuring and reporting assets and liabilities should be reduced. In addition, a check is carried out centrally on the financial statements submitted by the companies included in the scope of consolidation while referring to the audit reports drafted by the local auditors. Each month upon submission of the reporting packages, those responsible at the subsidiaries also confirm the propriety and completeness of each financial statement by way of an internal declaration of completeness.

Business transactions of SMA Solar Technology AG and all the larger subsidiaries are primarily recorded using ERP systems from SAP AG. These are protected from misuse by appropriate authorization systems and access restrictions. The authorizations granted are reviewed and amended regularly if necessary. The centralized control and monitoring of nearly all IT systems, centralized change management and regular system and data backups minimize not only the risk of data loss, but also the risk of IT system failures related to (group) accounting. Smaller companies either operate local ERP systems or commission external service providers with their own IT systems.

Use of a uniform, group-wide consolidation program ensures that all data is recorded properly, promptly and completely and that internal business transactions within the group are eliminated. This is from where the various components of the Consolidated Financial Statements and important data for the Notes to the Consolidated Financial Statements are derived.

The Internal Control and Risk Management System enables control of risks that might otherwise prevent the Annual Financial Statements and Consolidated Financial Statements from being properly drawn up and is therefore continuously being improved. However, company-wide application of the regulatory and control measures cannot guarantee absolute reliability with regard to the accurate, complete and timely recording of all facts in (group) accounting and in the detection of irregularities.

Individual and overall analysis of risks and opportunities

In this section, the risks classified as significant with disadvantageous impact on business and the associated net assets, financial position and results of operations of the group and the company's reputation, as well as opportunities with a beneficial impact that are assessed as significant are described. The summarized overview of significant risk and opportunity areas shows the risks described below according to the SMA group's assessment after taking appropriate measures (net risks). This assessment relates to all segments. In contrast to the previous year, the risk and opportunity areas are no longer presented qualitatively with the probability of occurrence and the financial effect, but instead based on the net value at risk (in euros) calculated for the respective area with a 95% confidence interval using an IT-supported simulation process. The order in which the risk areas are presented within the seven risk and opportunity categories should not be taken as an order of priority:

Overview of potential financial effects of significant risk and opportunity areas

	Potential financial effects (net) in 2022 [1]		Change
	Negative	Positive	compared to previous year [2]
Strategic risks			
Political and regulatory risks	–		n/a
Competition risks	– –		n/a
Market risks	–		n/a
Portfolio risks	– –		n/a
Operating risks			
Procurement and inventory risks	– – – –		n/a
Product risks	– – –		n/a
Operational risks	– – – –		n/a
Sales risks	– –		n/a
Service risks	– – –		n/a
Environmental risks	–		n/a
Financial risks			
Liquidity risks	–		n/a
Interest rate and currency risks	–		n/a
Default risks	– –		n/a
Compliance risks			
Risks from violations of the law and regulations	– – – –		n/a
Risks from breaching contracts and obligations	– – –		n/a
IT risks			
IT security risks	–		n/a
Product cybersecurity risks	–		n/a
Personnel-related risks			
Personnel recruitment risks	– –		n/a
Personnel retention risks	–		n/a
Opportunities			
Opportunities from business activity		+	n/a
Opportunities from cost savings		+	n/a
Opportunities from improved processes		+	n/a
Overall risk position			
Overall portfolio (risks and opportunities)	– – – –		n/a

1 In relation to a 95% confidence interval for each risk and opportunity area. Addition of the values is not permitted.
2 Due to the change in the assessment method and the presentation of potential effects of the significant risk and opportunity areas, it is not possible to state the change in comparison to the previous year.

Effect categories of the risk and opportunity areas

Risks:	Net Value at $Risk_{95\%}$
–	> -€3 million
– –	> -€10 million to ≤ -€3 million
– – –	> -€25 million to ≤ -€10 million
– – – –	> -€199 million to ≤ -€25 million

Chancen:	Net Value at $Risk_{95\%}$
+	< €5 million
+ +	≥ €5 million to ≤ €49 million

The simulation of the overall risk as of December 31, 2021 and the associated calculation of the net risk score with a 95% confidence interval showed that the threshold for risk-bearing capacity in relation to equity had been exceeded minimally. As a result, measures were immediately taken by the Managing Board with the goal to reduce the overall risk as quickly as possible. The thresholds in relation to net cash were not exceeded.

Strategic risks

POLITICAL AND REGULATORY RISKS

Regulatory changes with regard to government subsidy conditions as well as technical regulations in individual markets may continue to cause high volatility in the photovoltaics sector. There are regional and cyclical volume fluctuations that also affect the SMA group and therefore complicate corporate planning.

The legislation for the implementation of national energy industries and the respective technical consequences at a national and international level are currently undergoing change. Various legislative processes are currently being initiated in connection with the international community's climate protection policy and the need for digitalization and for the establishment of a resilient value chain. Great importance is attached to solar energy in this context. The regional forms of legislation and their effects on the SMA group's profitability are still not specifically foreseeable yet. If new normative regulations are introduced and they are not implemented in the product and service portfolio properly or in a timely manner, this will have a detrimental impact on the SMA group's profitability. Currently, the future effects of the Renewable Energy Sources Act (EEG) 2021 with the amended tendering and self-consumption regulations are also not yet fully foreseeable for the SMA group.

To be able to respond promptly to emerging changes in subsidies and standards in target and existing markets, the SMA group uses a network of industry associations to anticipate these changes at an early stage. This information is included in the regular market analyses. Short-term fluctuations in demand are considered in the rolling forecast process. Thanks to its high level of flexibility in production, the SMA group can usually react quickly to market changes. In addition, the SMA group works to directly contact the certification authorities and electric utility companies to be able to make any necessary modifications to its product and service portfolio in due time. The SMA group is still actively involved in indirect representation of its interests and promotes dialogue between industry associations, politicians and scientists on the state of knowledge with regard to renewable energies. Our employees actively contribute to new technical guidelines through standards associations and other organizations. The SMA group regularly reviews the assumptions and associated risks with regard to strategic projects. This procedure allows us to react quickly to regulatory and market-driven changes in what is required of our products.

For more information on development in individual markets, please see the remarks in the "Future general economic conditions in the photovoltaics sector" section of the Forecast Report.

COMPETITION RISKS

The increasingly attractive market environment for PV systems is intensifying the fierce competition. Individual competitors are attempting to secure market shares through extremely aggressive policies regarding pricing and terms and conditions, with varying degrees of success depending on the region and market. Furthermore, price is crucially important across all segments as a result of growing commoditization of inverters, and technological differentiating features have become increasingly insignificant. This could result in negative effects on the business development and earnings of the SMA group.

In addition, there is the risk that competitors will further improve the quality, functionality or performance of their products and adapt better than the SMA group to the prevailing market requirements in certain markets. In some markets, increased price pressure in individual segments, particularly from Chinese competitors due to overcapacities, may have a negative impact on the future business development of the SMA group. In the future, such competition can lead to additional declines in prices for products and services produced by the SMA group and to a loss in market shares. The decline in prices is to be countered by market-driven and cost-optimized products, moderate price increases in individual product groups and, in particular, innovative solutions. With expenditure for research and development of €77.7 million (including capitalization) in the 2021 fiscal year, the SMA group is well positioned to set important trends with new products, systems and solutions and thus maintain its market shares.

As a result of inverter commoditization, the service portfolio has become a significantly important distinguishing feature for customers. However, there is a risk that the service quality of the SMA group could deteriorate and thus no longer be perceived by market participants as a differentiating feature in comparison to its competitors. To maintain and further increase our customers' satisfaction, the SMA group counters this risk with user-friendly IT systems, optimized warranty conditions and improved service offers geared specifically to our customers' needs.

Cost-out measures and various projects to increase efficiency are delivering continuous results and will be pursued systematically, although the current price increase rates for raw materials and electronic components could weaken their effects.

MARKET RISKS

In most regions of the world, photovoltaics is now among the most cost-effective forms of power generation.

The risk of declining market shares in conjunction with the risk of aggressive competition or changes in market conditions is regularly monitored by the business units based on the forecast process with Sales. These risks are countered with adjustments to the product and solution portfolio that are appropriate to market changes and the consistent positioning of the SMA brand.

Nonetheless, there is a certain dependence on individual regions or markets (e.g., U.S. business). Inverter technology business for large-scale storage systems in Europe is characterized by considerable volatility and pressure on margins. Due to the effects of the ongoing coronavirus pandemic and continued reluctance to invest among some customer groups, the Business Solutions and Large Scale & Project Solutions segments in particular could also continue to develop more weakly in the short term on a regional level. Furthermore, a downward trend was observed in the APAC region across all segments. However, as the Forecast Report shows, the Managing Board sees medium-term prospects as highly positive. In addition, the SMA group is striving to reduce its dependence on individual photovoltaic markets by positioning in all major global markets.

Formation of buying syndicates can increase the dependency of the SMA group on a few wholesalers or specialist wholesalers and other customers generating large sales. This dependency harbors a risk because of these large customers gaining more negotiating power coupled with increased price pressure. By means of its targeted sales strategy, the SMA group is striving to avoid dependency on individual customers. Nevertheless, the share of total sales of the ten largest customers worldwide significantly rose to approximately 37% in the 2021 fiscal year (2020: 32%).

For more information on development in individual markets, please see the remarks in the "Future general economic conditions in the photovoltaics sector" section of the Forecast Report.

PORTFOLIO RISKS

In addition to optimizing existing products and developing future product generations, the SMA group's goal is to develop complete system solutions and digital business models in line with changing customer requirements and make them market-ready within a short time. However, this gives rise to the risk that vital technological trends are identified too late or that market launch is delayed due to development stages that are too long. Products and solutions can be developed quickly and effectively by means of our product development process. The SMA group is consciously seeking collaboration with research facilities to advance strategic development projects. However, we cannot rule out that individual development projects will fail to deliver expected positive economic results or do so in the expected time frame. The ongoing streamlining of product platforms entails the risk of temporary delays in individual power classes or product generations within a segment reaching the series production stage and of competitors being able to fill such gaps in the portfolio quicker than the SMA group.

The SMA group is increasingly involved in strategic alliances to generate economies of scale and to expand and complement its product portfolio.

For additional details, please refer to the information on research and development in the Management Report.

Operating risks

PROCUREMENT AND INVENTORY RISKS

On the procurement side, the company is still exposed to a high dependence on certain suppliers. We work to minimize these risks through market analyses, evaluation of suppliers, flexible supplier agreements, clearly defined quality standards and reducing dependence on individual key suppliers. In its new innovations, the SMA group therefore significantly reduces the number of product platforms, makes greater use of standard components and qualifies alternative suppliers to increase flexibility.

Due to strong global demand and the continuing coronavirus pandemic, including delays in supply chains, delivery capacity for certain electronic components and individual raw materials remains highly limited. For certain components, this trend could continue into 2022. The SMA group is counteracting this situation by implementing a closely monitored, proactive stockpiling strategy, bringing on board more suppliers and stockpiling more critical material groups. For the SMA group, there is thus an increased risk that certain raw and production materials may not be available on time or in sufficient quantities due to a shortage of certain primary materials, dependence on certain suppliers or loss of individual strategic suppliers and that this will lead to delays, particularly in the production and delivery of SMA products. If an unexpected drastic reduction in sales volumes were to occur in the short term, long lead times may result in purchase commitments for raw materials that are surplus to actual requirements.

Since early 2020, the global shortage of materials, long delivery times and limited transportation capacity, largely due to the coronavirus pandemic, as well as the current inflation rates have caused many raw material prices and ancillary procurement costs to rise sharply. This is also attributable to steadily growing demand (particularly from China), which cannot be met in full despite increases in supply. The trend shows that this price level has to be expected until well into 2022. For the SMA group, there is a risk here that increased manufacturing costs may impair products' profitability and that it may not be possible to pass on the higher costs in full to customers via rising selling prices.

Regular inventory analyses are carried out in connection with increasingly shorter innovation cycles and resulting potential inventory write-down requirements. Inventories are continuously monitored and adjusted to the corresponding requirement with active controlling tools and early warning systems. By monitoring changes in important raw material prices, trends should be identified in a timely manner and compensatory mechanisms developed with suppliers before they affect purchase prices and negatively influence the earnings of the SMA group. The ongoing optimization of the purchasing structures is having a positive impact on purchase prices and logistics costs and reducing dependence on individual suppliers. As part of our global purchasing and commodity strategy, these activities are being pursued and further expanded in a sustainable manner. However, the current inflation-driven and pandemic-related price increases for many important materials entail a risk that active management of purchase prices may not be able to generate the desired positive effects on earnings in full.

If any inventory risks due to surplus inventories or obsolescence are identified, these are taken into account in corresponding impairment losses.

For more information on development in individual markets, please see the remarks in the "Overall statement from the Managing Board on expected development of the SMA group" section of the Forecast Report.

PRODUCT RISKS

We are always striving to develop new products, systems and solutions according to customer demands and to optimize existing ones. For this reason, we use new materials and technologies in development to make innovations possible. This can result in SMA group products being defective. Large delivery lots bear the risk of errors or defects affecting a product series or several product batches. Production shortcomings may derive from SMA development errors or production faults or from defects in primary products provided by suppliers. Unidentified incompatibilities can also emerge after products are launched, which require improvement to the customer system on-site after installation to prevent the product from posing a danger to the customer, in the worst-case scenario. A lapse of reliability of our products could bring about a long-term loss of trust and reputation. In addition, any necessary repairs or replacements would have a negative impact on earnings of the SMA group.

If responsibility for the error lies with the supplier, then the supplier must bear the direct costs. If responsibility for the error lies with the SMA group, then product liability insurance covers third-party losses incurred. Newly developed products may be subject to more failures than established products. We are able to minimize this risk through comprehensive testing within the development phases, accompanying quality inspections during production and field testing prior to scheduled serial production. As soon as device failures occur that stand to cause considerable losses, an analysis is performed without delay, and measures are immediately taken to rectify them. There is also the risk that the planned implementation of measures to reduce quality costs will have to be stalled due to an unexpected rise in device failures. This risk is being mitigated by continuously monitoring quality costs.

To continuously increase the quality of our products in addition to general process improvements covering the entire value chain, new developments are backed by specific stress and qualification tests, and tests are carried out on the entire series. In the event of technical faults in the products in the field, the SMA Service organization assesses the nature and scope of the fault and the need for repair or replacement of the devices and implements appropriate measures. If the sources of the fault are identified, the necessary corrective actions are introduced immediately and are taken into account via corresponding provisions for individual warranties in the balance sheet. We make provisions for legal disputes related to product risks if we consider it likely that such claims can be asserted against us.

OPERATIONAL RISKS

Numerous facilities, equipment and systems are required to operate the production and administrative infrastructure, and their smooth operation is exposed to risks due to a number of factors, including natural disasters, accidents, wear and force majeure. The SMA group is well aware of this and employs a preventive maintenance and servicing management strategy to mitigate the risk of infrastructure downtime or other system impairment. In addition, appropriate property and business interruption insurance has been taken out against any potential damage. Appropriate insurance policies are also in place to cover the risk of loss or damage to movable goods and products.

Fulfillment of the various operating performance tasks in the individual function areas is still exposed to a cost and performance risk. Function operations can be impaired by staff shortages, unexpected cost increases or technical malfunctions in a way that function targets may not be met on time, to the fullest extent or only at an increased cost. Extensive cost and performance indicators are regularly assessed and monitored to minimize these risks.

When introducing new operational processes and IT systems or changing existing ones, delays, outdated systems, inadequate master data quality or design flaws may impair efficient business organization and processing. The SMA group counters this by means of systematic project management and a suitable structure and process organization.

As a result of the coronavirus pandemic, there are risks to operations from a possible delay in the supply of raw materials, supplies, intermediate products, materials and in the performance of services required for operations and production on the part of suppliers, which could lead to unforeseeable business interruptions, particularly in the area of production and logistics. For this reason, the SMA group is in constant contact with all important suppliers in order to identify any bottlenecks at an early stage and to be able to implement any necessary measures. Furthermore, there is a risk that larger numbers of employees will need to self-isolate in case of contact with someone infected with COVID-19. If this were to occur in the area of production and logistics, it could have a negative impact on the SMA group's physical manufacturing and service provision. The SMA group's coronavirus task force, established at an early stage in 2020, has since ensured safe working conditions by means of a wide range of preventive measures. This helps minimize coronavirus-related risks such as interruptions to production. The extensive hygiene and social distancing rules as well as organizational and procedural adjustments deserve special mention. Thanks to these measures, the SMA group was also able to keep the number of people infected with the coronavirus very low in 2021 and thus avoid production losses.

SALES RISKS

The SMA group uses a worldwide distribution network to sell its products and is largely dependent on the high reputation of its products. Quality problems or performance weaknesses perceived in the market can have a detrimental effect on the image and thus on sales success. Likewise, misinformation in the media and social networks may damage the reputation of the SMA group's products and lead to a loss of sales. If the SMA group experiences delivery problems or the market readiness of new products or product generations is delayed, there is also the possibility that sales volumes or profit margins are affected.

The SMA group takes particular measures to counteract these challenges, including consistent quality management, pilot projects to develop digital energy services and online sales channels for select markets. The aim here is to gradually establish and expand new business areas.

Due to the persistent effects of the coronavirus pandemic, there are also risks on the sales side, which may result from further, unforeseeable restrictions on public life, travel opportunities for sales employees and service technicians of the SMA group, for example, the general economic conditions in individual target markets and the duration of the respective restrictions. To reduce the negative effects of the coronavirus pandemic on sales success, the SMA group moved sales activities, such as customer meetings, training sessions and product launches, to online format on very short notice.

SERVICE RISKS

Although our products are distinguished by their considerable longevity and reliability, SMA devices sometimes need repairing, reconditioning or replacing. The Service organization of the SMA group and its certified partners are responsible for the global alignment and execution of operational service business across all markets.

In the context of operation and maintenance services for PV power plants (O&M business) in particular, there are risks to the SMA group's profitability. Due to long-term service and maintenance contracts, the SMA group is obligated to carry out various services, ranging from PV system monitoring to end-to-end operational management. These O&M contracts aim to maximize the service life of systems and ensure smooth and efficient operation of PV power plants. In some cases, because of highly extensive and complex contract clauses, there is a risk of legal disputes with customers or service partners with respect to the performance and invoicing of services and a risk of compensation payments due to PV system unavailability.

In the area of repair services for inverters within and outside of warranty obligations, there are risks relating to the availability of spare parts, which have increased further as a result of the coronavirus pandemic. If sufficient quantities of spare parts are not available at the required time in the relevant regions, delayed or incomplete services can harm the reputation of the SMA group or result in claims for compensation from customers.

ENVIRONMENTAL RISKS

In manufacturing its products, the SMA group employs a small number of hazardous substances that might pose a risk to the environment. The comprehensive measures we take in production and in quality management principally ensure that SMA products are manufactured in a way that is environmentally friendly and guarantees compliance with all environmental regulations. Furthermore, the SMA group has safeguarded itself against certain environmental risks in the event of damage, including by means of insurance solutions.

Financial risks

LIQUIDITY RISKS

If there is an unexpected decline in the SMA group's cash holdings in the short term, there is a risk that external market participants, such as commercial credit insurance companies or banks, might downgrade the SMA group's credit rating which might impair its financing options. Furthermore, there is a risk that suppliers could adjust payment terms to the detriment of the SMA group, thereby burdening cash and cash equivalents. In particular, increased demand for products from the Large Scale & Project Solutions segment may continue to place a heavy strain on net cash as a result of naturally long project durations. The increased stockpiling of primary materials required due to procurement risks as well as the termination of a long-term contract on operation and maintenance services for photovoltaic power plants (O&M) may also have a detrimental effect on net cash. The liquidity situation is constantly monitored and actively managed by means of effective financial planning systems.

INTEREST RATE AND CURRENCY RISKS

For the SMA group, currency risks arise in particular from the purchase and sale of products in foreign currencies (transaction risk) and from the measurement and settlement of items denominated in foreign currencies that are recognized in the balance sheet on the balance sheet date (translation risk). The main sources of transaction risks were business transactions in USD in the U.S. and the sales activities of other subsidiaries based outside the eurozone.

The SMA group's Global Treasury function manages currency risks and group financing on a centralized basis. The permissible hedging instruments were laid out by the Managing Board in group-wide guidelines that also regulate the entire process-oriented organization, including hedging strategies, responsibilities and control mechanisms. As an example, currency hedges were concluded to the required extent.

For additional details, please refer to the information under Financial Position in the "Principles and objectives of financial management" section of the Management Report.

DEFAULT RISKS

The volatile and sometimes difficult conditions of the financial markets are conducive to potential payment difficulties for some customers, particularly in newly industrialized countries. Furthermore, the competitive situation and internationalization require extension of payment periods, accompanied by the reduction of collateral (e.g., in the form of bank guarantees). If customers can no longer keep up with their payment obligations, there is a higher default risk for receivables with negative effects on the SMA group's results of operations, financial position and net assets.

As part of its accounts receivable management, the SMA group minimizes the risk of non-payment in accordance with the company's credit guidelines by obtaining references and credit reports beforehand for the purposes of a credit check of customers, allocating appropriate credit limits and continuously monitoring general payment practices. If it is expected that a credit limit is not sufficient for our future business relationship, then we examine whether we should ask the customer to furnish collateral or whether we can accept the residual risk. To cover potential payment defaults, the SMA group has also taken out commercial credit insurance. If non-payment risks materialize, these will be taken into account by means of corresponding impairment losses.

The central Commercial Project Management at the locations in Germany and the U.S. represents another effective measure to avoid or minimize risk to the important project business. All project and service contracts entailing risks are systematically subjected to a legal and commercial risk assessment. Based on this, risky agreements are secured for the SMA group through additional financial securities or contractual adjustments made with both Sales and the customer. Remaining project risks are assessed and approved separately by the heads of the business units and the Managing Board, provided these risks are proportionate to earnings.

Due to the bank guarantee for a loan to an associate issued by SMA Solar Technology AG as part of its business activities, there is a risk that the payment obligation may be transferred to SMA Solar Technology AG if the associate defaults. This risk is countered by closely monitoring the financial performance of the unit concerned.

Compliance risks

RISKS FROM VIOLATIONS OF THE LAW AND REGULATIONS

There is a risk that the SMA group could be involved in unlawful business conduct or that individual employees could violate laws, SMA's business principles or directives. In particular, this includes the risk of corruption and fraud.

The Governance & Compliance department thus issued business principles and directives globally. Basic work sequences and processes were derived from these and implemented worldwide. In the context of their work for the SMA group, all employees are obligated to act ethically and in accordance with the laws and regulations of the legal system of their country. These regulations and obligations are consolidated worldwide by mandatory, extensive training sessions on business principles.

Our goal is to minimize antitrust risks from the outset. To this end, antitrust policy of the Governance & Compliance department sets out clear rules of conduct for all material business situations. In addition, all employees in the areas affected must regularly receive antitrust law training.

With our patents and through constant monitoring of technologies and competitors relevant to the SMA group, we work to protect our technologies and innovations. Because competitors and research institutes also file a large number of patent applications, we cannot rule out that, in spite of regular, extensive and international research, we will not infringe on third-party patent rights or other industrial property rights or that, vice versa, our rights will be violated by third parties. If the former occurs, the SMA group may incur considerable costs related to claims for compensation, in its defense against such claims or in relation to royalty payments to third parties. It is therefore important to us that each product be checked for third-party rights in a timely manner before approval and market launch. Corresponding milestones are included in the guidelines and process descriptions on product development and market launch. The Corporate IP Management department actively protects proprietary technologies and monitors patent applications. We make provisions for disputes related to intellectual property when necessary, if we consider it likely that such claims might be asserted against us.

Due to its global business operations, the SMA group is subject to various tax laws and regulations. Tax changes in Germany and abroad could negatively affect the tax positions of SMA. In addition to legal changes, assessment and interpretation of complex tax regulations, such as those regarding transfer prices, may also affect our net assets, financial position and results of operations. The SMA group therefore collaborates closely with tax consultants in individual countries.

For additional details, please refer to our website www.SMA.de/en/company/group-compliance.

As a result of internationalization and the high international share of sales, there are increased risks for the SMA group from handling the import and export of materials and services as well as finished products. The SMA group must meet the legal requirements for imports from and exports to many countries to stay competitive and meet the needs of its international customers.

Violations of trade restrictions and customs laws are subject to significant penalties and could also damage the reputation of the SMA group. Therefore, the SMA group purposefully monitors its obligations under commercial and customs law using an IT system, which significantly reduces the risk of potential non-compliance.

The EU’s General Data Protection Regulation gives rise to considerable organizational and technical requirements for data protection. The substantial fines for breaches of the data protection law represent a latent risk for the SMA group.

The SMA group counters data protection risks through systematic data protection management. In addition to standardized processes, this includes regular training for those employees who process personal data and monitoring of all projects where PV system operator’s personal data is processed by the company’s data protection officer.

Despite meticulously implementing requirements for processes and systems, violations of data protection law cannot be ruled out completely. The SMA group’s digitalization strategy, in particular, extends the use of personal data, including for the company’s business models. There are also additional risks in the increasingly widespread storage and processing of personal data using cloud solutions. Against the backdrop of the changing business environment and the necessary development of new sales channels, this risk continues to become increasingly significant.

In individual countries where the SMA group operates, there are different, sometimes complex regulations on the minimum wage. If the regulations are not fully adhered to by the SMA group, there is a risk of back payments of wages and fines due to violations of these regulations. The SMA group minimizes this risk by regularly checking and monitoring the relevant legislation and commissioning external consultants for preventive support.

RISKS FROM BREACHING CONTRACTS AND OBLIGATIONS

The SMA group is exposed to risks from legal disputes that may arise from its business activities. Legal disputes with suppliers, customers, employees and distributors can materialize, which can lead to contractual and legal claims for compensation or other such obligations. A sufficient level of provisions is set aside for potential financial damages resulting from legal disputes. The SMA group has also implemented preventive measures, such as taking out a professional indemnity insurance policy to cover liability claims from third parties. However, this does not rule out a situation in which the level of insurance cover is not sufficient for compensation claims that may arise in the future.

Risks can also arise from contractual performance commitments. In the event of an agreement on lump-sum compensation payments, the SMA group may be obliged to pay corresponding amounts in the event of non-performance or poor performance.

There are significant fulfillment and contractual penalty risks for the SMA group remaining from a long-term contract for operation and maintenance (O&M) services for PV power plants for a contractual partner's solar portfolio. For additional details, please refer to the information under "Sales and earnings" and "Sales and earnings per segment" in the "Results of operations" section of the Combined Management Report.

IT risks

IT SECURITY RISKS

As a technology company and publicly traded stock corporation, SMA Solar Technology AG and the SMA group are in the public eye and therefore heavily under threat of industrial espionage and cybercrime. Growing connectivity is placing ever-greater demands on our IT systems, which need to be high-performance, highly available and stable to support global business processes. We reduce the risks of IT breakdowns by continually reviewing and improving IT security and employing advanced hardware and software solutions. We use protective measures at all levels of the company to avert this. To minimize the risk of data losses, the SMA group implements appropriate measures, including regularly building employee awareness, mirrored databases and the use of cloud solutions. All major IT systems are also continuously monitored by a security operations center and regularly patched. Networks are protected, in particular, through the use of up-to-date, highly effective firewalls and e-mail systems through cutting-edge filters to avoid potential loss or manipulation of data by employees or service providers and external attacks besides securing network and server availability.

PRODUCT CYBERSECURITY RISKS

In an increasingly networked world in which the SMA group's products, solutions and services are also being connected, the cybersecurity of our products and the digital services we supply is a top priority. To ensure a high level of cybersecurity for SMA products and services, there are specific guidelines for the product development process, and extensive tests are carried out before and after market launch. Despite these state-of-the-art security measures, a situation cannot be ruled out in which products and services of the SMA group are compromised by a massive targeted hacker attack. The impact of an incident like this on the SMA group's reputation could be significant.

Personnel-related risks

PERSONNEL RECRUITMENT RISKS

Qualified and motivated employees are key to the global evolution of our enterprise and the business success of the SMA group. Due to natural staff turnover and reorganization measures, there is a frequent need to recruit new skilled employees and managers and to fill positions with suitable candidates. Flexible personnel deployment models and temporary employees are used to cover peaks in demand. Despite there being a structured personnel recruitment strategy in place, there is a risk that positions cannot be filled quickly enough or at all by suitable permanent or temporary employees. This can lead to key projects being delayed or to products and services being supplied in reduced capacity. Current legislation on temporary work in Germany and Europe is also limiting flexibility during peak times.

The SMA group is continuously working on its image as an attractive employer, which enables it to bring on board highly qualified employees. It particularly achieves this by setting relevant strategic objectives, implementing contemporary leadership approaches and enhancing its employer branding.

PERSONNEL RETENTION RISKS

To ensure the viability of the SMA group, it is important to retain highly qualified employees, such as skilled employees and managers, at the company for the long term.

However, there is a risk that talented individuals could leave the company and that strategic positions (key positions) may not be able to be filled on short notice, either at all or by someone with the necessary qualifications. To minimize this risk, we are continuously optimizing our offerings, including performance-based remuneration systems and participation in the company's success, flexible working hours and options for continuing education and training as well as for balancing family and career. In addition, the Managing Board continuously monitors personnel structures and, if necessary, adapts them to the sales level expected in the future.

Opportunities

OPPORTUNITIES FROM BUSINESS ACTIVITY

As a result of the new German federal government elected in 2021 and the current trend toward climate-friendly legislative and association initiatives in a national and international context, we anticipate – in addition to the risks specified under "Strategic risks" – positive impetus for our business activities and thus for the SMA group's products, systems and solutions due to the stronger focus on climate protection and the expansion of renewable energies.

The SMA group sees digitalization, system and solution business, storage applications and integration of storage solutions as providing distinct opportunities to strengthen core business. The SMA group is continuously developing digital business models and system solutions, which will be launched continuously. In addition, the SMA group collaborates with globally leading manufacturers of stationary battery-storage systems. However, the market success of storage solutions depends on storage system prices. Declines in prices for electric battery-storage systems in recent years have further improved sales prospects.

In the future fields of power-to-gas (using electrolysis to generate hydrogen as an energy carrier), charging infrastructure for electric vehicles, integrated energy and energy market integration, the SMA group sees further pioneering opportunities for sustainable sales and earnings growth. This potential can be used by the SMA group alone or in collaboration with strategic partners.

Furthermore, there are opportunities for development of additional international markets in both product and service business. The SMA group will continue to use and expand its international presence in order to benefit from foreign markets in particular.

Based on the current market situation and the associated beginnings of market consolidation that has already begun, the SMA group also sees opportunities coming from additional demand stimulus and gains in market share from competitors who have gone out of business.

OPPORTUNITIES FROM COST SAVINGS

The SMA group sees the opportunity to realize potential savings by optimizing the internal production process for certain product groups, for example by streamlining and shortening process lead times.

OPPORTUNITIES FROM IMPROVED PROCESSES

The progressive digitalization of internal business processes and workflows, partly due to the coronavirus pandemic, creates the opportunity to achieve productivity increases in the administrative and sales areas with a positive contribution to earnings.

For more information on the SMA group's opportunities, please see the remarks in the Forecast Report.

Climate-related risk and opportunity management

In the reporting year, the SMA group expanded the existing risk and opportunity management system to include climate-related risk and opportunity management. The process stipulates that all climate-related risks and opportunities are to be recorded and assessed once a year. These climate-related risks and opportunities are assessed qualitatively with regard to their probability of occurrence and impact (potential damage/potential benefit) for the short term (up to 1 year), the medium term (1 to 3 years) and the long term (3 to 5 years). If risks and opportunities also have financial effects in relation to a time horizon of 12 months and exceed the defined thresholds for being recorded in the general risk and opportunity management, then these risks and opportunities are also recorded in the regular risk and opportunity management.

Climate-related risks and opportunities are classified on a uniform basis for all assessment periods as shown in the following diagram:

Assessment system for climate-related risks and opportunities

Effect					
	High	C	C	A	A
	Medium	C	C	B	B
	Low	C	C	C	C
		Very unlikely	Unlikely	Likely	Very likely
		Probability of occurrence			

Individual analysis of climate-related risks and opportunities

In this section, the climate-related risks and opportunities classified as significant are described. All risks and opportunities that are classified as A or B according to the table “Assessment system for climate-related risks and opportunities” are designated as significant.

In the short to long term, there is still a risk of production and delivery delays if natural disasters increasingly occur as a result of climate change and cause complete shutdowns of suppliers’ production sites. This risk can be reduced to a limited extent by means of a multi-supplier strategy in procurement.

In the long term, there is a risk that certain potentially climate-damaging materials that are currently allowed to be used could be banned due to climate change. Such bans could have a detrimental impact on production costs due to higher procurement prices for alternative materials and more complex and expensive production methods. By regularly monitoring the development of laws and standards with regard to material bans, such changes are to be identified at an early stage and alternatives developed.

As a result of climate change, the appeal of the solar and PV industry is growing further. Solar power is becoming increasingly important for climate-friendly power generation. Due to this positive outlook, the competitive situation could intensify in the short to long term, entailing a risk of the emergence of additional competitors that could start operating in some or all of the SMA group’s business fields and participate in this attractive market. The SMA group counters this risk by conducting regular market research and continuously adapting its portfolio of products and services.

Due to the appeal of the market, the increased development of technologies to combat climate change, and the associated higher demand for the raw materials and components required, there is also a risk in the short to medium term of increasing interruptions and delays in supply chains, meaning that certain electronic components, other components and raw materials may not be available in time or in the quantities needed to meet the requirements in production or in service business. This risk is countered by means of adjusted procurement strategies.

Based on its business model and corporate strategy, the SMA group is subject not only to climate-related risks, but also to a number of climate-related opportunities.

Due to climate change, there is an opportunity in the short to long term to tap new markets with innovative products (diversification strategy), such as the sustainable future technology of power-to-gas and the electrification of additional sectors such as heating and mobility, or to develop new, attractive products and solutions for existing markets, such as storage solutions. The good reputation of the SMA brand is crucial to ensure that the SMA group's products and solutions are as well received as possible by the markets.

In addition, the SMA group endeavors to promote the development of sustainable solutions in all areas of the company and to take a leading role in climate protection. There is thus a short- to long-term opportunity to develop and exploit additional business potential by increasing the SMA group's sustainability performance and its positioning as a sustainable company.

In the long term, the Managing Board of SMA Solar Technology AG sees an opportunity that increasing political incentives due to continuing global warming combined with steadily declining photovoltaics costs may increase demand for solar energy even in regions where there are currently no incentives for solar expansion from a cost perspective.

The Managing Board of SMA Solar Technology AG also sees a long-term opportunity to expand its repowering business gradually. This particularly relates to the replacement of inefficient or defective old devices with new devices or the substitution of existing devices with higher-performance product generations.

For more information on the opportunities arising for the SMA group in connection with climate change, please see the remarks in the "Future general economic conditions in the photovoltaics sector" section of the Forecast Report.

Overall statement on the group's risk and opportunity situation

Using our risk and opportunity management system, we continue to rate the overall situation regarding risks to the SMA group's future development as manageable and controllable, partly due to measures initiated immediately to limit the overall risk, even though the threshold for risk-bearing capacity in relation to equity was exceeded minimally. Based on the current assessment, individual risks can also be identified that could significantly impair business development, particularly if they all occurred at once.

On the whole, the overall risk for the SMA group has increased significantly in comparison to the previous year. First, there is still uncertainty surrounding the duration and degree of economic consequences of the coronavirus pandemic and the associated risks. Second, the increase in the overall risk mainly results from changes in risks from the areas of "risks from breaching contracts and obligations" (from the compliance risks category) and "product risks" (from the operational risks category). The war in Ukraine may give rise to further risks, such as additional disruptions in the supply chain. It is currently not possible to make a conclusive assessment. The change in the assessment method did not have any significant impact on the overall risk.

According to the current assessment of the Managing Board, though, there is no indication that the reported risks individually or in their entirety, could endanger the continued existence of the group.

The increasing digitalization of our business areas, the system and solution business, the ongoing internationalization of sales activities and price increases of select product groups are expected to make a significant contribution to raising the sales level and to strengthening profitability.

Our goal is to continue optimizing the risk and opportunity management system to always identify potential risks early on, counteract them effectively and make optimum use of any opportunities that arise.

FORECAST REPORT

Preamble

The Managing Board's forecasts include all factors with a likelihood of impacting business performance that were known at the time this report was prepared. Not only general market indicators, but also industry- and company-specific circumstances are factored into the forecasts. All assessments cover a period of one year from the balance sheet date.

The general economic situation

Global economy enters new year in a weaker position than expected

After the sharp decline due to the coronavirus pandemic in 2020, the global economy posted growth again last year. In the most recent update to the World Economic Outlook from January 2022, the experts at the International Monetary Fund (IMF) calculated a global growth rate of 5.9% for 2021. At the same time, they emphasized that the global economy has been facing growing difficulties since fall. In addition to rapidly increasing infection rates again due to the Omicron variant of the coronavirus, these included widespread inflation triggered by high energy prices and disruptions to global supply chains and a recovery in private consumer spending that is weaker than expected. These effects still exist and are also casting a shadow over the future outlook. In this context, the IMF is forecasting global economic growth of only 4.4% in 2022.

For industrialized countries, the IMF economists anticipate growth of 3.9% in 2022 (2021: 5.0%). For developing and newly industrialized countries, they forecast growth of 4.8% (2021: 6.5%). The IMF experts have significantly scaled back their growth forecast for the U.S. as compared to the fall forecast. They now anticipate a 4.0% increase in economic output in 2022 (2021: 5.6%). This is due to doubts regarding the implementation of the U.S. government's "Build Back Better" plan, an early end to the U.S. Federal Reserve's expansionary monetary policy and continuing supply bottlenecks. The eurozone economy is also suffering from the ongoing disruptions to global supply chains. Here the IMF anticipates a 3.9% increase in economic output in 2022 after growth of 5.2% last year. According to the IMF, the Chinese economy grew by 8.1% in 2021. At 4.8%, the expected growth for 2022 is considerably lower due to negative effects from the Chinese government's zero-COVID policy and tensions in the real estate sector.

In 2023, at 3.8% the IMF expects global economic growth to be lower than in 2022.

In early March 2022, considerable uncertainties emerged with regard to the growth forecasts issued by the IMF experts in January: The escalation of the conflict between Russia and Ukraine and the sanctions imposed on Russia as a result will have a significant impact on the global economy and financial markets, which will also affect other countries.

Future general economic conditions in the photovoltaics sector

Solar energy to become largest source of energy supply [1]

The fight against climate change is now one of the most central issues in the public, politics and economics. The global Fridays for Future movement and, more notably, unusual weather phenomena, such as severe storms, heat waves, droughts and flooding in various regions of the world, not to mention the unprecedented bushfires in South Europe, Australia and the U.S. in the past two years, have helped raise the profile of this issue.

Greater efforts to expand renewable energies are widely regarded as the central pillar in the response to climate change. Politicians are taking account of this with action plans such as the "European Green Deal" to achieve climate neutrality within the EU in 2050 and by appointing top-class teams of experts to tackle climate change, like the U.S. government is doing. These attitudes will expedite expansion of renewable energies over the coming years and decades. The experts at the analysis company Wood Mackenzie describe the solar industry as "highly investable" because it is increasingly able to meet both economic and political targets.

[1] Source: IEA "Net Zero by 2050 – A Roadmap for the global Energy Sector"

The experts at the International Energy Agency (IEA) emphasize the major role of solar energy in combating the climate crisis: In their “Net Zero by 2050 – A Roadmap for the Global Energy Sector” study, they explain that by 2050 the global energy supply will need to be based largely on renewables, with solar energy the single largest source of supply. The experts at the Potsdam Institute for Climate Impact Research (PIK) forecast that green electricity could cover three-quarters of global energy use in the long term, given a consistent climate policy.

In this context, the electrification of other sectors, such as mobility and heat, and the production of green hydrogen will additionally drive electricity demand as further important elements in achieving climate protection targets. In its “Energy Transition Outlook 2021,” the consulting company DNV predicts that electricity’s share of global total energy demand will double from 19% to 38% within the next 30 years. By 2050, solar and wind energy could account for 69% of grid-connected electricity power, according to the experts. Connectivity, storage and demand response would be critical factors in a decarbonized power system.

According to Bloomberg New Energy Finance’s “New Energy Outlook 2021,” the years leading up to 2030 are critical to realizing the goal of global carbon neutrality by 2050. To decarbonize the electricity sector, up to 455 GW of new photovoltaic capacity and up to 245 GWh of battery storage capacity would additionally need to be installed annually on average by 2030. This would correspond to a tripling of the PV capacities installed in 2020 and a 26-fold growth of the storage market. After stagnating at about $300 billion over the past three years, global investment in wind and PV capacity would need to increase to between $763 billion and $1.8 trillion annually from 2021 to 2030, depending on the scenario.

Along with climate change targets, further decreases in its costs are contributing to the anticipated rapid growth of solar and wind energy. According to the PIK, the cost of solar power generation has fallen by 85% over the past ten years alone and further cost reductions can be expected in the future thanks to rapid technological progress. The experts at Bloomberg New Energy Finance classify newly installed wind or PV power plants to be already the most cost-effective form of electricity generation in almost all major markets. These markets cover two-thirds of the world’s population, about 77% of global GDP and 91% of total power generation. Moreover, in a growing number of countries, including China, India and a large part of Europe, it is now more cost-effective to build new renewable energy capacity than to operate existing coal- and gas-fired power plants.

In addition to the ever-decreasing consumer cost of electricity from PV systems and decentralized generation in the vicinity of residential, commercial and industrial consumers, the combination with storage systems makes photovoltaics particularly attractive. DNV’s experts see photovoltaics combined with battery storage systems as a separate power plant category that can supply electricity reliably and on demand, just like conventional power plants. According to their projections, combined PV and storage power plants will account for 12% of grid-connected global electricity generation in 2050.

In the energy system of the future, modern communication technologies with services for cross-sector energy management will further harmonize energy production and demand. In its “World Energy Outlook 2021”, the IEA describes the energy system of the future as “more electrified, efficient, connected and clean.” Its emergence is the result of policy measures and technological innovation, and the momentum is supported by low costs. Clean energy technology is becoming an important new area for investment and employment – and a dynamic field for international collaboration and competition.

The SMA Managing Board is therefore convinced of the market appeal and has thus positioned SMA to ensure it benefits from future developments in the fields of photovoltaics and storage technologies as well as in the markets for e-mobility, digital energy services and green hydrogen production, which experts are predicting will experience exponential growth in the future.

Global new PV installations increase to more than 170 GW

The SMA Managing Board anticipates growth in newly installed PV power worldwide to approximately 171 GW to 183 GW in 2022. The growth is expected to be driven by all regions. The Managing Board estimates that global investments in system technology for traditional photovoltaic applications will increase by around 5%. Investments in system technology for storage applications (excluding investments in batteries) will rise by approximately €100 million to €120 million compared to the previous year. Overall, the SMA Managing Board therefore expects investments in PV system technology (including system technology for storage systems) of around €7.5 billion to €8.4 billion in 2022 (2021: €6.9 billion to €7.6 billion). Whether the expected market development can actually be implemented that way is heavily dependent on the further development of supply bottlenecks of electronic components as well as additional challenges in global supply chains in connection with the coronavirus pandemic.

Considerable increase in demand in the EMEA region

The SMA Managing Board anticipates a significant increase in newly installed PV power to around 40 GW to 43 GW in the Europe, Middle East and Africa (EMEA) region in 2022 (2021: 35 GW to 37 GW). In addition to growth in the countries in the Middle East and Africa, this is also due to the positive development in European markets, such as Germany and Italy, as well as in East European markets. According to SMA estimates, investments in PV and storage system technology will slightly grow to approximately €2.3 billion to €2.6 billion (2021: €2.1 billion to €2.3 billion). Battery-storage systems are gaining importance in European countries, especially in Germany, the UK and Italy. In addition to business involving new systems for consumption of self-generated energy, retrofitting of existing systems with new inverters and storage systems will yield high potential in the medium term. For more and more PV systems, government subsidization will end in the years to come. Self-consumption of solar power is a particularly attractive option for the operators of these systems.

Americas region continues to grow

For the Americas region, the SMA Managing Board anticipates growth in newly installed PV power to approximately 34 GW to 37 GW (2021: 32 GW to 34 GW). Roughly between 24 GW and 26 GW of this amount is attributable to the North American markets. The extension of the Investment Tax Credit (ITC) for PV systems by a further two years, which was adopted by the U.S. Congress in December 2020, and the Climate Change Agenda of the new U.S. government are providing positive impetus here. Inverter technology investments are expected to slightly increase to around €1.8 billion to €2.0 billion in the Americas region (2021: €1.7 billion to €1.9 billion).

Investments in Asia-Pacific region increase again

The most important markets in the APAC region include China, India, Japan and Australia. In Japan and Australia, the installation of PV systems combined with battery-storage systems to supply energy independently of fossil energy carriers offers additional growth potential. The SMA Managing Board estimates that new PV installations in China will increase to 60 GW to 63 GW in 2022 (2021: 53 GW to 55 GW). Investments in inverter technology are expected to rise to approximately €1.6 billion to €1.8 billion (2021: €1.5 billion to €1.6 billion). For the APAC region, excluding China, the SMA Managing Board expects newly installed PV power to grow to around 37 GW to 40 GW in 2022 (2021: 33 GW to 35 GW). This growth is in particular attributable to the positive development in India. The SMA Managing Board expects slightly increasing investments of approximately €1.8 billion to €2.0 billion in inverter technology for the region as a whole (2021: €1.6 billion to €1.8 billion).

Growth markets: energy management, digital energy services and operational management

The trend to decentralize power supplies is progressing. More and more households, cities and companies are becoming less dependent on energy fuel imports and rising energy costs by having their own PV systems. This will lead to a rise in demand for energy storage solutions in the residential, commercial and industrial sectors. In addition, energy will be increasingly distributed via smart grids to manage electricity demand, avoid consumption peaks and take the strain off utility grids. E-mobility is also expected to become an essential pillar of these new energy supply structures. Integration of a prospectively large number of electric vehicles will help increase self-consumption of renewable energies and offset fluctuations in the utility grid. Using artificial intelligence, the behavior of decentralized energy consumers and storage systems can be adapted to the fluctuating production of electricity from renewable energies, thus enabling the overall system to be optimized.

In this context, the SMA Managing Board holds that innovative system technologies that temporarily store solar power and provide energy management to private households and commercial enterprises offer worthwhile business opportunities. Rising prices for conventional domestic and commercial power and many private households and companies wanting to drive forward the energy transition by making their contribution to a sustainable and decentralized energy supply are the basis for new business models. Demand for solutions that increase self-consumption of solar power is likely to continue to rise, particularly in European markets, the U.S., Australia and Japan. In these markets, renewable energies are already taking on a greater share in the electricity supply. In addition, electric utility companies are increasingly using battery-storage systems to avoid expensive grid expansions, stabilize grid frequency and balance fluctuations in the power feed-in from renewable energy sources. The SMA Managing Board expects the still fairly new storage market to grow to approximately €1.1 billion to €1.3 billion in 2022 (excluding investments in batteries). Estimated demand is already included in the specified development projections for the entire inverter technology market.

In addition to storage technology, digital energy services aimed at optimizing household and commercial enterprises' energy costs and their connection to the energy market are becoming increasingly significant. The SMA Managing Board expects this area to represent an addressable market of approximately €1.5 billion in 2022. The market will record strong growth in the medium and long term.

Technical management of commercial PV systems and large-scale PV power plants is another growth segment. This includes a range of services, such as repairs and device replacements as well as visual inspections and maintenance of entire systems. The market in these segments had an accumulated installed capacity of over 780 GW at the end of 2021 and will have an expected of more than 920 GW by the end of 2022. The SMA Managing Board estimates the addressable market share, which is not yet or no longer under contract, at more than 170 GW in 2022, which corresponds to a potential of approximately €1.0 billion. Prices are calculated yearly per MW and vary significantly depending on the regions and services included.

Overall statement from the Managing Board on expected development of the SMA group

Ongoing shortage of components impairs sales and earnings

On March 1, 2022, the Managing Board of SMA Solar Technology AG published its sales and earnings guidance for the 2022 fiscal year for the first time. It predicts sales of between €900 million and €1,050 million (ACTUAL 2021: €983.7 million). The Managing Board estimates that operating earnings before interest, taxes, depreciation and amortization (EBITDA) of the SMA group will amount to between €10 million and €60 million in 2022 (ACTUAL 2021: €8.7 million). The reason for the subdued sales and earnings guidance despite an extremely good level of incoming orders is the ongoing shortage of electronic components, which is affecting the manufacturers of PV inverters as well as many other industries. The global production capacities for electrical components is not sufficient to cover the sharply increased demand, especially from the automotive electronics industry and consumer electronics industry, due to the coronavirus pandemic. This leads to sometimes substantial prolongation of delivery periods culminating in delivery failure. The SMA Managing Board has taken extensive measures to counter the significant challenges related to this. These include setting up a cross-divisional task force at the top management level, working closely with the procurement teams of the semiconductor suppliers as well as exploiting redesign opportunities for series that are particularly affected. However, the Managing Board assumes that the situation will not relax significantly over the course of 2022. The Managing Board currently sees no threat to the guidance from the war in Ukraine. It is currently not possible to make a conclusive assessment.

Depreciation and amortization are expected to come to approximately €40 million in 2022. On this basis, the Managing Board expects an EBIT of between €-30 million to €20 million. In 2022, capital expenditure of approximately €60 million (including capitalized development costs and lease investments) will be approximately on a par with 2021 (ACTUAL 2021: €56.4 million). The SMA group is investing in the future to benefit from the significant potential arising from the megatrends of decentralization, decentralization and digitalization of the energy supply worldwide, and is developing highly integrated and digitalized solutions that precisely meet the resulting requirements. Against this background, investments, especially in new products, land and buildings, technical equipment and machines, as well as the capitalization of research and development expenses are planned for 2022.

For details regarding risks, please refer to the Risks and Opportunities Report on pages 65 et seq.

SMA group guidance for 2022 at a glance

Key figure	Guidance 2022	Actual 2021
Sales in € million	900 to 1,050	983.7
Inverter output sold in GW	12 to 15	13.6
EBITDA in € million	10 to 60	8.7
EBITDA margin in % of sales	1.0 to 5.7	0.9
Capital expenditure in € million	approx. 60	56.4
Net working capital in % of sales	26 to 28	26.2
Net cash in € million	approx. 175	221.7
EBIT in € million	–30 to 20	–33
EBIT margin in % of sales	–3.3 to 1.9	–3.4

The SMA group's sales and earnings depend on global market growth, market share, price dynamics and the supply of electronic components. Our global presence and our comprehensive portfolio of products and solutions for all segments (Home Solutions, Business Solutions and Large Scale & Project Solutions) enable us to respond quickly to changing market conditions, offset fluctuations in demand and take advantage of developments in global photovoltaic and storage markets. Its broad product and solution portfolio in all market segments is a major distinguishing feature for the SMA group. The Managing Board of SMA Solar Technology AG forecasts the following performance for individual SMA segments in the 2022 fiscal year:

Segment guidance for 2022 at a glance

Segment	**Sales**	**EBIT**
Home Solutions	Constant	Down significantly
Business Solutions	Down significantly	Down significantly
Large Scale & Project Solutions	Up significantly	Up significantly

Strategic areas of action strengthen long-term competitiveness

After overcoming the shortage of components, the Managing Board sees excellent growth prospects for the SMA group. Significant impetus will be generated by the anticipated continuing positive development of the global PV market and by growth in major future fields such as storage systems, e-mobility, digital energy services and green hydrogen. With its Strategy 2025, its global presence with experts in 20 countries on six continents and products and solutions, the SMA group is well positioned to benefit from this market growth and consolidate its market position. The ongoing development of the portfolio into a system landscape for decentralized energy supply is progressing steadily.

The goal of the SMA Strategy 2025 is to develop the SMA group into an innovative and sustainable "energy transition company" that offers appropriate solutions for all essential areas of future energy supply. We are leveraging our systems expertise to develop complete, future-proof solutions of significant customer benefit in close collaboration with our strong partners and to tap into new business areas.

In 2021, we successfully started implementing our Strategy 2025. Strategic areas of action were developed that will strengthen the competitiveness of the SMA group in the long term. They will be pressed ahead by corresponding business initiatives and address key trends and growth segments with high future potential. These include PV and storage solutions, energy market integration, e-mobility and future business fields. They bundle the business initiatives that are essential for achieving the strategic objectives and are implemented with a clear segment focus. The extent to which our objectives have been achieved and the progress within the areas of action are made transparent in quarterly strategy reviews. Management derives appropriate courses of action from the results.

SMA group will reap the benefits of megatrends

The expansion of renewable energies and storage systems and the electrification of other sectors, such as mobility, heating and air conditioning will further accelerate the increased fight against climate change and the striving for an energy supply that is largely independent from imports of raw materials. At the same time, there will be a further continuation of the global PV market consolidation, which has already started. This is releasing market shares and is also expected to slow down the decline in prices of PV inverters over the coming years.

The SMA group is well positioned to benefit from these trends in all market segments and regions. With our products and solutions, we actively contribute to combating the global climate crisis. In addition, we have an international sales and service organization and decades of experience and technological expertise in all PV and storage applications as well as key future fields for energy supply. Our total installed inverter output of approximately 113 GW worldwide is a particularly good foundation for data-based business models, as valuable energy data can be compiled by the inverter. Our extensive knowledge of managing complex battery-storage systems and linking solar power systems to other energy sectors, such as heating, ventilation and cooling technology as well as e-mobility, is an excellent basis for developing future growth potential for digital energy solutions. In addition, the SMA group has already positioned itself in the high-margin business field of green hydrogen production, which is expected to see strong growth in the future. We will continuously expand our range of solutions for optimized hydrogen production.

SMA group will take advantage of the potential of digitalization [1]

Thanks to its extensive knowledge and experience in PV system technology, the ability to quickly implement changes, alignment of the subsidiaries toward future business areas and its numerous strategic partnerships, the SMA group is well prepared for the digitalization of the energy industry and will take advantage of the opportunities that it yields. As a specialist in holistic solutions in the energy sector, we will help shape the energy supply of the future, launch a number of innovations and establish further strategic partnerships as part of our centralized and focused partner management. In the process, we will build on our strengths to design additional system solutions for the conversion to a cost-effective, reliable and sustainable energy supply that is based on decentralized renewable energy. We will be helped in this endeavor by SMA's corporate culture and our motivated employees who make a decisive contribution to the company's long-term success and are therefore also given a share in the SMA group's financial success.

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

CORPORATE GOVERNANCE

Corporate Governance Report

In this declaration, SMA Solar Technology AG reports on its corporate governance principles in accordance with Section 289f (1), (2) and 315d of the German Commercial Code (HGB) and on corporate governance in the company in accordance with Section 161 of the German Stock Corporation Act (AktG) and clause 22 of the German Corporate Governance Code (DCGK). The declaration includes the Declaration of Compliance, information on corporate governance practices, which comprises information on where they can be accessed by the public, as well as information on the composition and description of the function of the Managing Board, Supervisory Board and respective committees and material corporate governance structures.

Complying with the principles of good corporate governance is extremely important to SMA Solar Technology AG. The company is guided by the recommendations and suggestions in the German Corporate Governance Code (DCGK). The Managing Board and Supervisory Board dealt with meeting these requirements. The company declared emergent deviations from the German Corporate Governance Code in the Declaration of Compliance of December 8, 2021. This declaration is reproduced below and published on our website at www.IR.SMA.de/contact.

Declaration of compliance with German Corporate Governance Code

In accordance with Section 161 of the German Stock Corporation Act, the Managing Board and Supervisory Board of SMA Solar Technology AG declare:

SMA Solar Technology AG follows all recommendations of the version of the German Corporate Governance Code dated December 16, 2019 ("2020 Code"), as announced by the Federal Ministry of Justice and Consumer Protection in the official section of the Federal Gazette on March 20, 2020, and will continue to pursue them in the future, with the following exceptions:

The remuneration system for the Managing Board approved by the Supervisory Board and at the Annual General Meeting on June 1, 2021, which is to form the basis for all remuneration agreements with members of the Managing Board of SMA Solar Technology AG who are appointed or re-appointed after January 1, 2021 ("2021 remuneration system"), diverges from recommendation G.8 of the 2020 Code in allowing for the opportunity to deviate from target values or reference parameters that have already been approved if this should temporarily be in the interest of the company in exceptional situations. The Supervisory Board considers that such flexibility is necessary to be able to respond appropriately to unforeseen situations, including in accordance with recommendation G.11, sentence 1 of the 2020 Code.

The 2021 remuneration system also envisages an obligation on the part of the Managing Board to invest some of the remuneration component obtained as a result of long-term and short-term variable targets being surpassed in shares in the company, which diverges from recommendation G.10, sentence 1 of the 2020 Code. The Supervisory Board holds that the remuneration arrangements and obligation to invest adequately commit the Managing Board to the long-term and sustainable development of the company and that there is no need for any further obligation in accordance with recommendation G.10, sentence 1 of the 2020 Code.

Contrary to recommendation G.11, sentence 2 of the 2020 Code, the 2021 remuneration system does not stipulate any regulations beyond what is required by law that would give the company the option to retain or reclaim any variable remuneration owed to the Managing Board. The Supervisory Board takes the view that the Managing Board would already have a sufficient stake in any negative developments due to the arrangements for objectives, particularly with regard to variable remuneration, and that any legally reproachable conduct can be adequately sanctioned by means of the possible responses allowed for by law.

Niestetal, December 8, 2021

Corporate governance practices

With the purpose "Our energy inspires the world's most important customer. Our future", the SMA Strategy 2025 comprises a forward-looking vision and mission, the values that all SMA employees align themselves with and clear strategic objectives for the next years. It has been presented to all employees worldwide and forms the strategic framework for action of the SMA group. Further details can be found on page 18.

Furthermore, in 2011, SMA had already made a declaration to the General Secretary of the United Nations to adopt the ten principles of the UN Global Compact as compulsory guidelines for its corporate governance. The principles of the UN Global Compact define standards for upholding human rights, the protection of workers' rights, environmental protection and avoidance of corruption. They can be viewed on the website at www.unglobalcompact.org. In addition, the SMA group is committed to the "Business Principles for Countering Bribery" of Transparency International.

In January 2012, the Managing Board also enacted the SMA business principles. The SMA business principles are the core of the compliance management system and shape SMA's values into clear behavioral standards. The SMA business principles are obligatory for all SMA employees worldwide. They underscore the company's desire to fully implement and comply with all legal and regulatory requirements. The SMA group also undertakes to act ethically, sustainably and with integrity at all times, to assume its corporate responsibility and to treat others with respect. The SMA business principles are publicly available on SMA's corporate website (www.sma.de/unternehmen/group-compliance).

Since 2009, the SMA group has also already recognized the code of conduct of the German Association for Supply Chain Management, Procurement and Logistics (BME e. V.) and used this as the basis for its own guidelines for suppliers (SMA Supplier Code). In 2020, the SMA Supplier Code was revised with the involvement of stakeholders and newly implemented under the name SMA Code of Conduct for Business Partners. This continues to commit the SMA group to fair dealings with suppliers. The guidelines are based on, among other things, the UN Global Compact, the conventions of the International Labour Organization (ILO) and the United Nations' Universal Declaration of Human Rights. The SMA group's objective is to enshrine general principles with regard to fairness, integrity and corporate responsibility in business relationships and the supply chain. For the SMA group, these behavioral guidelines also complement its mission statement and corporate culture, in which fairness, integrity, sustainability and corporate responsibility are deeply rooted. In addition to these guidelines, the SMA code of conduct for business partners prescribes standards for sustainable activity and gives expression to what the SMA group expects of suppliers and business partners with regard to social, ecological and ethical issues. The key points of the guidelines are a ban on child labor, forced labor, abuse and discrimination of employees, fighting against corruption, fair working conditions, occupational health and safety, environmental protection, and quality and product safety. The BME's code of conduct is accessible on its website at www.bme.de/en. The latest version of the SMA code of conduct for business partners is reproduced on the SMA website www.SMA.de/en.

In compliance with the provisions of Section 76 (4) sentence 2 AktG, in 2017, the Managing Board resolved to set a target of 8% for the proportion of female employees in the first management level below the Managing Board and 14.6% for the second level by June 30, 2022. The targets correspond to the current ratio of genders at both management levels as of the date of the resolution. At 0%, the quota for the first management level was below the target figure at the end of the reporting period, owing to departing personnel not being replaced. At 14.5%, the quota for the second management level was in line with the target figure. Furthermore, the Managing Board has set the target figure for the period from July 1, 2022, to June 30, 2027, to 20%. This target applies to all above-mentioned management levels combined.

Transparency

Transparency is a key element of good corporate governance. Our aim is to provide all shareholders, financial analysts, media and interested members of the public at large with timely information about our business situation and significant corporate changes. All important information is also made available on our website at www.SMA.de/en. Reporting on the business situation and the operating results takes place in the Annual Report, in the annual press conference on financial statements and in the Quarterly Statements and Half-Yearly Financial Reports. Furthermore, the public is informed through press releases, via social networks and, if stipulated by law, by means of ad hoc statements. In addition, once a year SMA invites investors, analysts and the press to its Capital Markets Day to inform them about the market and competition, SMA's strategic direction, unique selling propositions and financial developments.

Transparency is particularly important whenever deliberations and company decisions might lead to conflicts of interest for members of the Supervisory Board or Managing Board. Any conflicts of interest that may have arisen are therefore disclosed by those members of the corporate bodies affected when discussion of the subject commences. The member concerned does not participate in the adoption of any necessary resolutions by the Managing Board or the Supervisory Board.

According to a disclosure made by the members of the Managing Board and the Supervisory Board, they held, either directly or indirectly, 6.36% (2020: 6.36%) of all shares issued as of the end of the fiscal year. The Managing Board members held a total stake of 0.03% (2020: 0.03%) in the share capital and the Supervisory Board members held a stake of 6.33% (2020: 6.33%) in the share capital. In addition, Danfoss A/S, in which Supervisory Board member Kim Fausing acts as chief executive officer and Supervisory Board member Ilonka Nußbaumer acts as Senior Vice President, Head of Group HR, holds 20.00% (2020: 20.00%) of the share capital.

Remuneration Report

The Remuneration Report is shown on pages 144 et seq. of the Annual Report and on our website at www.SMA.de/en/investor-relations.

The company’s corporate bodies and their functions

SMA Solar Technology AG is a stock corporation governed by German law. Accordingly, it possesses a dualistic management structure in which one corporate body is devoted to managing the company (the Managing Board) and is supervised by another corporate body (the Supervisory Board). Both bodies are endowed with different powers and work closely with one another in an atmosphere of trust when managing and supervising the company. At the Annual General Meeting, electing the auditor and the shareholder representatives to the Supervisory Board takes place as does determining the appropriation of profits, along with making decisions that impact member rights of shareholders.

Managing Board

The Managing Board is responsible for independently and jointly managing the company. It is obliged to sustainably ensure and increase the company value and is responsible for managing the business. In agreement with the Supervisory Board, it decides on fundamental issues of business policy and corporate strategy as well as on short- and medium-term financial planning. The Managing Board is in charge of preparing the Quarterly Statements, Half-Yearly Financial Reports and Annual Financial Statements for SMA Solar Technology AG and the SMA group, as well as for adherence to all legal and official provisions and internal policies. In compliance with the provisions in Section 111 (5) AktG, the Supervisory Board set a target of 25% for the proportion of women on the Managing Board in the period by June 30, 2022. The Supervisory Board strives to achieve this target by selecting suitable candidates when appointing new members to the Managing Board.

As a collective body, the Managing Board, in principle, strives to adopt resolutions jointly. However, the Rules of Procedure for the Managing Board, adopted by the Supervisory Board, stipulate that individual members of the Managing Board are in charge of specific areas of responsibility. The Managing Board, with the consent of the Supervisory Board, lays out how responsibilities are assigned. The members of the Managing Board notify each other on an ongoing basis about all material events in their area of responsibility and about any matters covering multiple areas of responsibility. Under legal provisions or the Rules of Procedure, in certain transactions, a unanimous resolution of the Managing Board is mandatory. For a predetermined number of transactions, the Supervisory Board has a reservation of consent. The Managing Board has not instituted any committees.

The company’s diversity concept for the Managing Board to be described in accordance with Section 289f HGB comprises, in part, consideration of the various personal and professional competencies required to fulfill the respective tasks on the Managing Board. Other elements include decisions on the proportion of women on the Managing Board and the age limit for the Managing Board described in Section 1 (4b) of the Supervisory Board’s Rules of Procedure. The aim of the concept is to best meet the requirements for the work carried out by a Managing Board through a broad and varied range of knowledge and experience. The current makeup of the Managing Board upholds the prescribed age limit of 65 years and reflects different professions and professional backgrounds as well as personal and professional competencies. Long-term succession planning for the Managing Board takes place partly through regular monitoring by the Supervisory Board to adjust the quantitative and qualitative makeup of the Managing Board as well as the prevailing conditions brought about by the members of the Managing Board, such as a member reaching the age limit. The Managing Board is working to identify potential candidates within the company who would be suitable for taking on a role on the Managing Board given various time frames and, if necessary, after developing appropriate management skills. Detailed information about the individual Managing Board members is provided on page 8 et seq.

On the Managing Board, Dr.-Ing. Jürgen Reinert, as Chief Executive Officer of SMA Solar Technology AG, is responsible for Strategy and Technology, Operations, Sales and Service. Ulrich Hadding is in charge of Finance, Human Resources and Legal, as well as Corporate Governance, including Compliance, Real Estate Management, Investor Relations, Internal Auditing and Public Affairs.

Supervisory Board

The Supervisory Board advises the Managing Board in all matters and supervises its activity. The Managing Board involves and consults with the Supervisory Board on all matters of fundamental significance and whenever particularly important business decisions need to be made. Under the Rules of Procedure applicable to the Managing Board, which were adopted by the Supervisory Board, the Managing Board must obtain prior approval from the Supervisory Board for certain decisions. Such decisions include approval of the annual budget, comprising the investment plan, incorporation, acquisition or sale of companies and acquisition or sale of real estate, whenever stipulated threshold values are exceeded. The Supervisory Board must also consent to the allocations of responsibility on the Managing Board.

The Supervisory Board is made up of 12 members and its composition complies with the provisions of the German Stock Corporation Act and the Codetermination Act. Under these provisions, the employees of German group companies and their shareholders (Annual General Meeting) each elect six representatives to the Supervisory Board. The current members of the Supervisory Board are: Martin Breul, Oliver Dietzel, Johannes Häde, Yvonne Siebert, Romy Siegert and Dr. Matthias Victor as employee representatives, and Roland Bent, Kim Fausing (Deputy Chairman), Uwe Kleinkauf (Chairman), Alexa Hergenröther, Ilonka Nußbaumer and Jan-Henrik Supady as shareholder representatives.

Alexa Hergenröther and Jan-Henrik Supady, as independent members of the Supervisory Board, possess the necessary expertise in the fields of accounting or auditing as stipulated under Section 100 (5) of the AktG. The length of time spent as a member of the Supervisory Board can be found in the members' résumés, accessible on the company's website at www.SMA.de/en/investor-relations.

The Committees of the Supervisory Board are made up as follows:

Presidial Committee	Uwe Kleinkauf (Chairman), Yvonne Siebert (Deputy Chairwoman), Kim Fausing, Dr. Matthias Victor
Audit Committee	Alexa Hergenröther (Chairwoman), Jan-Henrik Supady (Deputy Chairman), Oliver Dietzel, Johannes Häde
Nomination Committee	Uwe Kleinkauf (Chairman), Ilonka Nußbaumer (Deputy Chairwoman), Kim Fausing, Jan-Henrik Supady
Mediation Committee	Romy Siegert (Chairwoman), Kim Fausing (Deputy Chairman), Uwe Kleinkauf, Martin Breul

The committees prepare topics and resolutions for review by the Supervisory Board at its plenary session. They regularly meet with stakeholders such as the Managing Board, the auditor or the heads of Internal Audit or Compliance for this purpose. The committee chairperson reports on the content of the committee meetings at the next plenary session of the Supervisory Board. Any member of the Supervisory Board may attend committee meetings, provided the relevant committee chairperson does not decide otherwise. The meeting minutes and resolutions adopted by committees are made available to all the members of the Supervisory Board.

The Supervisory Board and the committees regularly conduct self-assessments to review the extent to which the committees are effectively handling the tasks allocated to them. The Supervisory Board and the committees assign themselves this efficiency check regularly as separate agenda items, according to which the members examine how tasks have been completed in the past and whether they can identify any improvements for future processes. The analysis focuses partly on the effectiveness of work carried out in the various committees in terms of how preparations are made for decision-making and how information is conveyed within each committee. The Supervisory Board also communicates with the Managing Board for the purpose of improving the efficiency of collaboration between the two bodies. In the reporting year, the Supervisory Board conducted one of these self-assessments for its work.

The Supervisory Board reports annually on the focus of its activities and deliberations in the Supervisory Board Report. You may refer to the Supervisory Board Rules of Procedure on our website at www.SMA.de/en/investor-relations. The Supervisory Board members take general and specialized training necessary for their tasks of their own accord, and in doing so, they receive appropriate support from the company.

In the past, the Supervisory Board already has regularly considered the personal and professional requirements of its members and, with regard to the provisions of recommendation C.1 of the German Corporate Governance Code, has decided on appropriate objectives for its composition and established a competence profile. The competence profile addresses the requirements for members of the Supervisory Board, which are provided in particular by law, the German Corporate Governance Code and the objectives of the Supervisory Board for its composition.

These requirements and the competence profile continue to form the diversity concept of the Supervisory Board within the meaning of Section 289f (6) of the HGB, the objective of which is to ensure that the Supervisory Board has the broadest possible range and variation of knowledge and experience. The Supervisory Board considers that increasing the diversity of the Supervisory Board is already an objective of various provisions of the law and of the German Corporate Governance Code. It incorporated this objective when selecting new members and took it into consideration when creating its competence profile and the objectives for its composition, and will continue to do so in the future while implementing the diversity concept.

The objectives of the Supervisory Board for its composition are as follows:

1. The minimum proportion of women on the Supervisory Board is determined by legal provisions (Section 96 (2) AktG).

2. Maintain the composition of the Supervisory Board members with a background of international experience at least in the previous scope.

3. Special consideration given to candidates with knowledge and experience in the application of financial reporting standards and internal control processes as well as in the field of auditing.

4. Special consideration given to candidates with technical expertise, particularly in the field of renewable energies, preferably in the field of photovoltaics.

5. Special consideration given to candidates with knowledge in the field of digitalization and about the internal structures and functions of the company.

6. At least half of the shareholder representatives are to be independent. At the same time, at least one member is to possess expertise in the field of accounting or auditing.

7. Consideration of the age limit of 75 years at the end of the term of office when selecting new members

These objectives have been implemented as follows:

As regards 1: The Supervisory Board now has four female members, Alexa Hergenröther, Ilonka Nußbaumer, Romy Siegert and Yvonne Siebert. Thus the requirements of Section 96 (2) AktG are met.

As regards 2 to 5 and 7: In the opinion of the Supervisory Board, these objectives have also been achieved.

As regards 6: The company currently considers six shareholder representatives – Roland Bent, Kim Fausing, Alexa Hergenröther, Uwe Kleinkauf, Ilonka Nußbaumer and Jan-Henrik Supady – independent in accordance with the rules of the current German Corporate Governance Code. Of these, Alexa Hergenröther and Jan Henrik Supady, as two independent members, possess expertise in accounting and financial auditing. In addition, Alexa Hergenröther has particular experience in financial reporting standards and internal control processes and is also conversant with matters relating to financial auditing.

From the perspective of the Supervisory Board, the requirements arising from the competence profile and the diversity concept have been fulfilled, also with regard to the minimum proportion of women on the Supervisory Board.

Cooperation between the Managing Board and the Supervisory Board

The Managing Board and the Supervisory Board work closely with one another in an atmosphere of trust for the good of the company, thus meeting both the requirements of effective enterprise control and the need to be able to make decisions quickly. Their common goal is to secure the continued existence of the company and steadily increase its value. The Managing Board keeps the Supervisory Board promptly and comprehensively informed, both in writing and speech, and during regular meetings about the company's position, current business developments and all relevant questions pertaining to strategic planning, risk management, risk status and important compliance matters. The Quarterly Financial Statements and the Half-Yearly Financial Report are discussed with the Managing Board on a regular basis during Audit Committee meetings prior to their publication.

Outside meetings, the Chairman of the Supervisory Board and his deputy are also in contact with the Managing Board to discuss significant business transactions and upcoming decisions and are immediately informed about key developments.

Shareholders and Annual General Meeting

SMA Solar Technology AG shareholders discuss their co-determination and control rights at the Annual General Meeting, which takes place at least once a year. The Annual General Meeting adopts resolutions with binding effect, and each share grants one vote. Every shareholder who registers on time is entitled to participate in the Annual General Meeting. In addition, shareholders may have their voting rights exercised by a credit institution, a shareholder association, the proxies deployed by SMA Solar Technology AG and bound by the shareholder's instructions or by another authorized representative. The invitation to the Annual General Meeting and all reports and information necessary for adopting resolutions, including the Annual Report, are published in accordance with the provisions of the Stock Corporation Act and are available in the run-up to the Annual General Meeting on our website at www.IR.SMA.de/contact.

Information concerning takeovers required by HGB sections 289a and 315a

Number 1: The share capital of SMA Solar Technology AG amounts to €34.7 million. The capital is divided up into 34,700,000 no-par value bearer shares. The rights and obligations associated with the shareholdings fall under the regulations in the German Stock Corporation Act.

Number 2: Each share has the right to one vote. On October 1, 2010, the four founders of SMA Solar Technology AG, Günther Cramer (Dr.-Ing. E.h.), Peter Drews, Werner Kleinkauf (Prof. (em.) Dr.-Ing.) and Reiner Wettlaufer transferred equity stakes to the next generation within their families by way of a gift. The acquiring shareholders had again signed a pooling agreement. During the term of this agreement, the voting rights emanating from the shares transferred were allowed to be exercised only as a block vote. In addition, the shares were allowed to be sold to third parties only with the consent of the other members of the pool or if narrowly defined prerequisites are satisfied. The pooling agreement ended effective January 30, 2020. Beyond this, the Managing Board is not aware of any restrictions affecting voting rights or the transferability of shares.

Number 3: The Mads Clausens Fond. Denmark holds 20.00% of the company's share capital via the Danfoss A/S, Denmark.

Numbers 4 and 5: The shareholders do not have any special rights conferring them any particular powers of control.

Number 6: Appointment and dismissal of the Managing Board takes place pursuant to Sections 84 and 85 of the German Stock Corporation Act (AktG) together with Section 31 of the Codetermination Act (MitBestG). Under Article 5 of the Articles of Incorporation, the Managing Board consists of at least two members and the exact number is laid down by the Supervisory Board. Under Section 179 of the AktG, the Articles of Incorporation may be amended by a resolution adopted by the Annual General Meeting with a majority of three-quarters of the share capital represented at the vote.

Number 7: The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €3.4 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period ending May 23, 2023. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders: (a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, (b) for the purpose of issuing shares to employees of the company and companies affiliated with the company, (c) to exclude fractions and (d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount, and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded does not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on June 1, 2021, the Managing Board, in the period up to May 30, 2026, is entitled on behalf of the company to acquire its own shares up to a value of 10% of the existing capital stock at the time the resolution was adopted by the Annual General Meeting and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange or an offer made to all the shareholders, provided the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the company, or with one of its affiliated companies, or members of bodies in companies that depend on the company. Furthermore, if the Managing Board sells the company's own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions.
In addition, the Managing Board is entitled to cancel any own shares acquired after obtaining the consent of the Supervisory Board.

Number 8: Credit lines agreed with banks with a volume of €100 million contain a change of control clause that includes the special termination right of the relevant bank.

Number 9: If the employment contract with a member of the Managing Board ends after being terminated by the member of the Managing Board within a period of six months after a change of control, this member is entitled to severance pay amounting to his/her remuneration rights for the remaining term of the employment contract, however, no longer than a period of two years.

Niestetal, March 29, 2022

SMA Solar Technology AG
The Managing Board

CONSOLIDATED FINANCIAL STATEMENTS

Income statement SMA group

in €'000	Note	2021	2020
Sales	3	**983,671**	**1,026,583**
Cost of sales		808,217	859,815
Gross profit		**175,454**	**166,768**
Selling expenses		85,420	86,256
Research and development expenses		50,235	55,988
General administrative expenses		50,368	50,606
Other operating income	4	44,462	93,336
Other operating expenses	4	66,863	39,348
thereof impairments according to IFRS 9		334	706
Operating profit (EBIT)		**−32,970**	**27,906**
Income from at-equity-accounted investments	11	−304	0
Financial income		2,112	984
Financial expenses		2,464	1,660
Financial result	6	**−656**	**−676**
Profit before income taxes		**−33,626**	**27,230**
Income taxes	7	−10,626	−861
Net income		**−23,000**	**28,091**
of which attributable to shareholders of SMA AG		−23,000	28,091
Earnings per share, basic (in €)	8	−0.66	0.81
Earnings per share, diluted (in €)		−0.66	0.81
Number of ordinary shares (in thousands)		34,700	34,700

Statement of comprehensive income SMA group

in €'000	Note	2021	2020
Net income		**−23,000**	**28,091**
Unrealized gains (+)/losses (−) from currency translation of foreign subsidiaries		4,673	−5,838
Changes recognized outside profit or loss[1] (currency translation differences)		**4,673**	**−5,838**
Overall result		**−18,327**	**22,253**
of which attributable to shareholders of SMA AG		−18,327	22,253

[1] All items of other comprehensive income may be reclassified to profit or loss in subsequent periods.

Balance sheet SMA group

in €'000	Note	2021/12/31	2020/12/31
ASSETS			
Intangible assets	9	62,700	44,263
Property, plant and equipment	10	194,173	207,180
Investment property	12	14,521	17,988
Other financial assets, non-current	15, 24	2,662	19,428
Deferred tax assets	7	59,113	39,674
Non-current assets		**333,169**	**328,533**
Inventories	13	273,024	255,469
Trade receivables	14, 24	142,674	121,872
Other financial assets, current (total)	15, 24	133,689	156,145
Cash equivalents with a duration of more than 3 months and asset management		105,857	72,113
Rent deposits and cash on hand pledged as collaterals		10,188	41,556
Remaining other financial assets, current		17,644	42,476
Income tax assets	7	9,897	28,032
Value added tax receivables	15	27,401	28,808
Other non-financial assets, current	14	5,966	8,629
Cash and cash equivalents	16, 24	113,978	123,707
		706,629	722,662
Assets held for sale	17	12,698	0
Current assets		**719,327**	**722,662**
Total assets		**1,052,496**	**1,051,195**
LIABILITIES			
Share capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		256,509	285,246
SMA Solar Technology AG shareholders' equity	18	**410,409**	**439,146**
Provisions, non-current	19	104,431	84,524
Financial liabilities, non-current	20, 24	28,485	29,658
Contract liabilities, non-current	23	155,094	152,249
Other non-financial liabilities, non-current	23	1,550	3,769
Deferred tax liabilities	7	364	278
Non-current liabilities		**289,924**	**270,478**
Provisions, current	19	104,467	83,053
Financial liabilities, current	20, 24	18,170	11,475
Trade payables	21, 24	134,026	144,210
Income tax liabilities	7	6,629	6,648
Contract liabilities (advances)	23	24,206	22,560
Other contract liabilities, current	23	43,330	44,617
Other financial liabilities, current	22, 24	538	538
Other non-financial liabilities, current	23	20,797	28,470
Current liabilities		**352,163**	**341,571**
Total equity and liabilities		**1,052,496**	**1,051,195**
Total cash (in € million) Cash and cash equivalents + cash equivalents with a duration of more than 3 months and asset management + rent deposits and cash on hand pledged as collaterals		230	237
Net cash (in € million) Total cash minus interest-bearing financial liabilities to banks		222	226

Statement of cash flows SMA group

in €'000	Note	2021	2020
Net income		–23,000	28,091
Income taxes		–10,626	–861
Financial result		656	676
Depreciation and amortization of property, plant and equipment and intangible assets		41,674	43,578
Change in provisions		41,321	14,344
Result from the disposal of assets		410	2,957
Change in non-cash expenses/revenue		21,204	–14,780
Interest received		1,956	984
Interest paid		–910	–998
Income tax paid		11,990	2,260
Gross cash flow		**84,675**	**76,251**
Change in inventories		–23,420	892
Change in trade receivables		–21,267	23,022
Change in trade payables		–10,184	–30,532
Change in other net assets/other non-cash transaction		64,453	–101,017
Net cash flow from operating activities		**94,257**	**–31,384**
Payments for investments in property, plant and equipment		–17,572	–20,225
Proceeds from the disposal of property, plant and equipment		231	195
Payments for investments in intangible assets		–29,940	–18,546
Proceeds from the sale of shares in associates and available-for-sale assets less cash given up		0	2,273
Outflow of funds for the acquisition of shares in joint ventures		–750	0
Proceeds from the disposal of securities and other financial assets		40,900	45,000
Payments for the acquisition of securities and other financial assets		–74,488	–45,229
Net cash flow from investing activities		**–81,619**	**–36,532**
Payments for lease liabilities		–7,292	–8,562
Redemption of financial liabilities		–3,060	–3,810
Dividends paid by SMA Solar Technology AG		–10,410	0
Net cash flow from financing activities		**–20,762**	**–12,372**
Net increase/decrease in cash and cash equivalents		–8,124	–80,288
Changes due to exchange rate effects		–1,605	–10,798
Cash and cash equivalents as of January 1		123,707	214,793
Cash and cash equivalents as of December 31	27	**113,978**	**123,707**

Statement of changes in equity SMA group

in €'000	Note	Share capital	Capital reserves	Difference from currency translation	Other retained earnings	Consolidated shareholders' equity
Shareholders' equity as of January 1, 2020		**34,700**	**119,200**	**5,315**	**257,678**	**416,893**
Net income					28,091	28,091
Other comprehensive income after tax				–5,838		–5,838
Overall result						22,253
Shareholders' equity as of December 31, 2020		**34,700**	**119,200**	**–523**	**285,769**	**439,146**
Shareholders' equity as of January 1, 2021		**34,700**	**119,200**	**–523**	**285,769**	**439,146**
Net income					–23,000	–23,000
Other comprehensive income after tax				4,673		4,673
Overall result						–18,327
Dividend payments of SMA Solar Technology AG					–10,410	–10,410
Shareholders' equity as of December 31, 2021		**34,700**	**119,200**	**4,150**	**252,359**	**410,409**

NOTES SMA GROUP

General information

1. Basics

The Consolidated Financial Statements of SMA Solar Technology AG as of December 31, 2021, were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU, as well as in compliance with the regulations of Section 315e of the German Commercial Code (HGB). The requirements of the standards applied were met completely and provide a fair view of the net assets, financial position and results of operations of SMA Solar Technology AG and its subsidiary companies included in the scope of consolidation (hereinafter: SMA group).

The registered office of the company is Sonnenallee 1, 34266 Niestetal, Germany. The company is registered at the commercial court of Kassel under the trade register number HRB 3972. Shares of SMA Solar Technology AG have been traded publicly since June 27, 2008. They are listed in the Prime Standard of the Frankfurt Stock Exchange. The company has been listed in the SDAX since September 24, 2018.

The Consolidated Financial Statements are prepared using the amortized acquisition cost principle. Exceptions to this are provisions, deferred taxes, derivative financial instruments and available-for-sale securities as well as institutional mutual funds.

The income statement is classified according to the cost of sales method. The Consolidated Financial Statements were prepared in Euro. Unless indicated otherwise, all amounts stated are in euro rounded to whole thousands (TEUR) or millions (€ million), rounding differences may arise as a result.

The Managing Board of SMA Solar Technology AG authorized the Consolidated Financial Statements on March 29, 2022, for submission to the Supervisory Board. The Supervisory Board has the duty of reviewing the Consolidated Financial Statements and declaring whether it approves the Consolidated Financial Statements.

SMA Solar Technology AG (SMA AG) and its subsidiaries (SMA group) develop, produce and sell solar inverters, transformers, chokes and monitoring systems for solar power systems. In addition, the company offers intelligent energy management solutions and services, including operation and maintenance services for photovoltaic power plants (O&M business). Another business segment is digital services for the future energy supply.

More detailed information on the segments is provided in section 3.

1.1. CONSOLIDATION PRINCIPLES

All domestic and foreign subsidiaries in which SMA Solar Technology AG, directly or indirectly, has the option of controlling the financial and operating policies are included in the Consolidated Financial Statements of the SMA group. The included statements are prepared based on uniform principles.

An associate is a company over which the group exercises significant influence. Significant influence means the option to participate in the financial and operating policy decisions of the company, in which the investment is held, but not to exercise control or joint control over the decision-making processes.

A joint venture is a company in which an SMA group company exercises joint control together with one or more external parties. Joint control exists if decisions on significant activities of the joint venture require the unanimous approval of the jointly controlling parties.

Non-controlling interests are recognized at the proportionate value of the assets acquired and liabilities assumed. They are not accounted for at fair value.

1.2. SCOPE OF CONSOLIDATION

With the exception of elexon GmbH, all companies within the scope of consolidation are fully consolidated. elexon GmbH is recognized as a joint venture in the consolidated financial statements according to the equity method. In April 2021, SMA Solar Technology AG increased its interest in elexon GmbH from previously 33.34% to 42.00%. UNIKIMS GmbH, which is reported in the list of shareholdings under investments, is accounted for as a financial investment. The scope of consolidation as of December 31, 2021 increased in comparison to December 31, 2020 due to the establishment of SMA Solar Turkey Teknoloji Limited Şirketi.

The scope of consolidation of the SMA group is presented in the complete list of shareholdings shown below pursuant to Section 313 of the German Commercial Code:

Name of parent company	Registered office	Share in capital	Consolidation
SMA Solar Technology AG	Niestetal, Germany		F
Shares in affiliated companies			
Australia Zeversolar New Energy Pty. Ltd.	Sydney, Australia	100%	F
coneva GmbH	Munich, Germany	100%	F
emerce Africa (Pty) Ltd	Cape Town, South Africa	100%	F
emerce GmbH	Fritzlar, Germany	100%	F
SMA America Holdings LLC	Denver, U.S.	100%	F
SMA Solar Technology America LLC	Rocklin, U.S.	100% [3]	F
SMA Australia Pty. Ltd.	North Sydney, Australia	100%	F
SMA Benelux BV	Mechelen, Belgium	100% [1]	F
SMA France S.A.S.	Saint Priest, France	100%	F
SMA Ibérica Tecnología Solar, S.L.	Sant Cugat del Vallès (Barcelona), Spain	100%	F
SMA Immo Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Immo GmbH & Co. KG	Niestetal, Germany	100%	F
SMA Italia S.r.l.	Milan, Italy	100%	F
SMA Japan Kabushiki Kaisha	Tokyo, Japan	100%	F
SMA Magnetics Sp. z o.o.	Modlniczka, Poland	100%	F
SMA Middle East Limited	Abu Dhabi, United Arab Emirates	100%	F
SMA Solar Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar India Private Limited	Thane, India	100% [1]	F
SMA Solar Technology Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar Technology Canada Inc.	Vancouver, Canada	100%	F
SMA Solar Technology de México S. de R.L. de C.V.	Santiago de Querétaro, Mexico	100%	F
SMA Solar Technology (Shanghai) Co., Ltd.	Shanghai, China	100%	F
SMA Solar Technology South Africa (Pty.) Ltd.	Cape Town, South Africa	100%	F
SMA Solar Turkey Teknoloji Limited Şirketi	Istanbul, Turkey	100%	F
SMA Solar (Thailand) Co., Ltd.	Bangkok, Thailand	100% [2]	F
SMA Solar UK Ltd.	Banbury, Great Britain	100%	F
SMA South America SpA	Santiago, Chile	100%	F
SMA Brasil Tecnologia Ferroviária e Solar Ltda.	Campinas, Brazil	100% [3]	F
SMA Sunbelt Energy GmbH	Niestetal, Germany	100%	F
Investments			
elexon GmbH	Aachen, Germany	42.00%	R
UNIKIMS GmbH	Kassel, Germany	9.6%	N

F = fully consolidated; N = not consolidated; R = recognized at equity
[1] 0.1% are held by SMA Solar Technology Beteiligungs GmbH.
[2] 0.001% are held by SMA Solar Technology Beteiligungs GmbH and 0.001% are held by SMA Solar UK Ltd.
[3] indirect investment

SMA Solar Technology AG and SMA Magnetics Sp. z o.o. are manufacturing companies. The others are sales and service companies.

All SMA group companies prepare their Annual Financial Statements as of December 31, with the exception of our Indian subsidiary SMA Solar India Private Limited, which prepares its Financial Statements as of March 31 due to statutory regulations.

The company SMA Immo GmbH & Co. KG (Section 264b German Commercial Code – HGB) exercised exemption clauses regarding the preparation and publication of Financial Statements.

1.3. TRANSLATION OF FINANCIAL STATEMENTS INTO FOREIGN CURRENCIES

The Consolidated Financial Statements are prepared in euro, which is the reporting currency of the group. Each company within the group defines its own functional currency, which is normally the local currency. The items contained in the Financial Statements of each company are valued using this functional currency.

Transactions denominated in foreign currencies are translated initially into the functional currency by applying the spot rate valid at the time of the transaction. On each subsequent due date, monetary assets and liabilities denominated in foreign currencies are translated into the functional currency by applying the spot rate valid on that day. All translation differences are recognized through profit or loss.

Assets and liabilities of subsidiaries preparing their balance sheets in a currency other than the euro are translated using the current exchange rate on the balance sheet date. Items on the income statement are translated periodically using the average rate of the relevant month. The equity components of subsidiaries are translated at the corresponding historical exchange rate applicable upon accrual. Any resulting translation differences are recorded under other income within equity as adjustment items for foreign currency translation or in shares of other shareholders. The accumulated amount recorded in equity is recognized through profit or loss upon the disposal of the foreign subsidiary concerned.

2. Accounting principles and amendments to accounting standards

2.1. NEW IASB ACCOUNTING STANDARDS AND INTERPRETATIONS TO BE APPLIED FOR THE FIRST TIME IN THE FISCAL YEAR

New standards and interpretations that are not explained in detail here do not result in any significant changes in the group at present. If changes have a material effect on the group’s accounting, this is explained separately. If no explanation of the effects is given, the changes have no material effect on the group’s accounting.

Extension of the exemption regarding the application of IFRS 9 (amendments to IFRS 4 Insurance Contracts)

The amendments mean that the specified expiry of the temporary exemption from the application of IFRS 9 in IFRS 4 is postponed to fiscal years commencing on or after January 1, 2023.

Interest Rate Benchmark Reform (Phase 2) – Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16

To assess the potential impact of the benchmark interest rate reform (“IBOR reform”) on financial reporting, the IASB included the IBOR project in its standardsetting program in December 2018, and divided it into the following two phases:

Phase 1: Questions concerning financial reporting in the period before the replacement of an existing benchmark interest rate with an alternative interest rate.

Phase 2: Questions concerning financial reporting at the time a benchmark interest rate is replaced with an alternative interest rate. The standard amendments reflect the outcome of the second phase and address aspects that could impact financial reporting following reform of a benchmark interest rate, including its replacement with alternative benchmark interest rates.

Covid-19-Related Rent Concessions (Amendments to IFRS 16)

The amendments mean that lessees are exempt from assessing whether rent concessions (e.g. rent-free periods, temporary rent reductions, etc.) granted due to the coronavirus pandemic constitute a rent modification. If advantage is taken of the exemption, the rent concessions shall be entered in the balance sheet as if they did not constitute a modification to the rental contract. The amendments apply to rent concessions that reduce rent payments due on or before June 30, 2021.

STANDARDS AND INTERPRETATIONS PUBLISHED BUT NOT YET MANDATORY

In its 2021 Consolidated Financial Statements, the SMA group did not apply the following accounting standards, which had already been adopted by the IASB but were not yet mandatory for this fiscal year.

They will be implemented in the year of compulsory first-time application if they are implemented and applied in the EU. Earlier application is generally not permitted. There is an exception here with regard to earlier application of the amendment to IAS 37 Onerous Contracts – Cost of Fulfilling a Contract. If a significant impact on the group's accounting is expected, a separate description is provided for the relevant issue.

Amendments to IFRS 16 – Covid-19-Related Rent Concessions beyond 30 June 2021

The amendments mean that lessees are exempt from assessing whether rent concessions (e.g. rent-free periods, temporary rent reductions, etc.) granted due to the coronavirus pandemic constitute a rent modification. If advantage is taken of the exemption, the rent concessions shall be entered in the balance sheet as if they did not constitute a modification to the rental contract. The amendments apply to rent concessions that reduce rent payments due on or before June 30, 2022. The amendments are applicable for the first time for fiscal years beginning on or after April 1, 2021.

IFRS 17 Insurance Contracts

The new IFRS 17 standard was published in May 2017. This standard applies to reporting periods beginning on or after January 1, 2023. Possible effects of their application on group accounting have been analyzed, and they are not expected to have any material effects.

Amendments to IFRS 17 "Initial Application of IFRS 17 and IFRS 9 – Comparative Information"

The amendments relate to the transitional provisions of IFRS 17, if IFRS 17 and IFRS 9 are applied for the first time simultaneously. Under the amendments, a company is permitted to present comparative information about a financial asset as if the classification and measurement requirements of IFRS 9 had been applied to that financial asset before. In the event that they are endorsed, the amendments shall apply from January 1, 2023.

Annual Improvements to IFRS (2018 to 2020 cycle)

The improvements relate to minor amendments to IFRS 1 First-time Adoption of IFRSs, IFRS 9 Financial Instruments, IFRS 16 Leases, and IAS 41 Agriculture. The amendments have to be applied for the first time for annual periods beginning on or after January 1, 2022.

Amendments to IAS 1 Classification of liabilities as current or non-current

The amendments to IAS 1 only affect the classification as current or non-current and have no impact on the amount or timing of the recognition of assets, liabilities, income or expenses, or the disclosure requirements. The amendments are applicable for the first time for financial years beginning on or after January 1, 2023.

Amendments to IAS 16 Income before the operational status

Income from the sale of products produced during test runs of not yet completed plants and the costs for the production of these items shall be recorded in the operating result. It is not permissible to deduct the income from the cost of the assets. The amendments have to be applied for the first time for annual periods beginning on or after January 1, 2022.

Amendments to IAS 37 Scope of compliance costs for onerous contracts

The amendments specify the scope of the compliance costs, meaning that all directly attributable costs shall be taken into account. This encompasses all costs that would not be incurred without the contract as well as other costs that shall be directly attributable to fulfillment of the contract. The amendments are mandatory for the first time for financial years beginning on or after January 1, 2022. In the case of onerous contracts, there is an impact on group accounting because only unavoidable incremental costs have been recognized to date.

This standard has already been applied early in the SMA group. This does not give rise to any significant accounting consequences.

Amendments to IFRS 3 Reference to the Conceptual Framework

The amendments to IFRS 3 concern an adjustment of the reference to the 2018 conceptual framework. They relate to the recognition of assets and liabilities from acquisitions and the exception from the application of the general criteria for recognition for liabilities from acquisitions. In addition, they include a clarification that the recognition of contingent assets in the context of an acquisition is prohibited. The amendments have to be applied for the first time for annual periods beginning on or after January 1, 2022.

Amendments to IAS 1 Presentation of Financial Statements including amendments to the practice statements

The amendments to IAS 1 will only require “material” rather than “significant” accounting policies to be explained in the notes in future. An accounting policy is material if, together with other information in the financial statements, it could influence the decisions taken by users of financial statements on this basis. This is specified further in the accordingly adjusted IFRS Practice Statement 2. The amendments shall apply from January 1, 2023.

Amendments to IAS 8 Changes in Accounting Estimates and Errors

The amendments to IAS 8 relate to how companies can better distinguish between changes in accounting policies and changes in estimates. To this end, it specifies that an accounting estimate always represents a monetary amount in the financial statements that is subject to measurement uncertainty. The difference from changes in accounting policies is thus clarified; it is important because changes in estimates have to be accounted for prospectively, whereas changes in accounting policies have to be accounted for retrospectively. The amendments shall apply from January 1, 2023. They will have effects on group accounting with regard to changes in estimates and changes in the accounting method.

Amendments to IAS 12 Income taxes

The amendments to IAS 12 clarify the application of the initial recognition exemption and limit its scope. If a transaction gives rise to both deductible and taxable temporary differences in the same amount, these no longer come under the initial recognition exemption and therefore deferred tax assets and liabilities must now be recognized. In the event that they are endorsed, the amendments shall apply from January 1, 2023. They will not have any material effects on group accounting.

2.2. DISCLOSURES TO THE ACCOUNTING AND VALUATION POLICIES

Intangible assets acquired with a finite useful life are valued at acquisition costs. They decline via straight-line amortization over their useful lives and accumulated impairments.

The costs for internally generated intangible assets are recognized in the period in which they accrue, with the exception of development expenses that can be capitalized.

Research and development expenses include all expenses that can be attributed directly to research or development activities. Research expenses are recognized as expenditure in the period in which it is incurred. Development expenses of a project are capitalized as an intangible asset, only after the SMA group can demonstrate both the technical and economic feasibility of the intangible asset so that it will be available for internal use or sale and has the intention to complete the intangible asset and either use or sell it. Development expenses are recognized at cost pursuant to IAS 36.66, less accumulated amortization and impairment. Amortization commences at the end of the development phase and from the moment the asset can be used. Amortization is effected over the period during which future benefit will be expected. No borrowing costs are capitalized in connection with the activation of development expenses. In addition, there are currently no qualifying assets for which borrowing costs are capitalized.

Company acquisitions in previous years resulted in **low goodwill**. See also Section 9. Intangible assets. There were no other intangible assets with an indefinite useful life in the periods under review.

Intangible assets with finite useful lives are amortized on a straight-line basis over a period of three to five years, including development projects, software and licenses. Patents are written off over ten years. In the case of intangible assets with a finite useful life, the period of amortization and the amortization method are reviewed at least at the end of each fiscal year. Any adjustments to the amortization period that become necessary because of changes in the expected useful life are accounted for as changes to estimates. Amortization is recorded under the expense category that corresponds to the function of the intangible asset in the enterprise.

Any gains or losses from derecognition of intangible assets are determined as the difference between the net disposal proceeds and the book value of the asset. They are recognized in profit or loss in the period in which the asset is derecognized.

Property, plant and equipment is valued at cost of acquisition or sales less straight-line depreciation and accumulated impairment losses. Borrowing costs are added to cost of acquisition and sales in the event of qualifying assets. The cost of replacement of a part of a fixed asset is included in the book value of this asset when incurred if the criteria for recognition are fulfilled. When major inspections are carried out, the costs are capitalized according to the book value of the relevant assets if the criteria for recognition are met. All other maintenance and repair costs are expensed immediately.

The depreciation period is based on the expected useful life. Depreciation is recognized under the expense category that corresponds to the function of assets in the enterprise. Scheduled straight-line depreciation is based on the following useful life of assets:

	Useful life
Leasehold improvements	10 years
Buildings	25 to 35 years
Technical equipment and machinery	6 to 8 years
Business and office equipment	5 to 10 years

A fixed asset is derecognized either upon its disposal or when no further economic benefit is expected from the further use or sale of the asset. Gains or losses from derecognition of the asset are determined as the difference between the net disposal proceeds and the book value of the asset. This difference is recognized through profit or loss in the income statement as other operating income or other operating expenses when the asset is sold.

The residual values, useful lives and depreciation methods are reviewed at the end of each fiscal year and adjusted if necessary.

Property, plant and equipment that is held to generate rental income are recognized as “Investment Property” in accordance with IAS 40. Investment properties must be capitalized at cost on acquisition. The SMA group recognizes investment properties at amortized cost. The buildings are depreciated on a straight-line basis over their economic useful life. Attributable expenses must be assigned in full to the investment properties responsible for generating the rental income. An external opinion on the determination of the market value is regularly drawn up. The market value of the property was determined on the basis of a tax valuation method. The main input parameters are the discount rate, estimated vacancy and the development of market rents, and the method reflects a level 3 rating in the sense of IFRS 13. The market value corresponds to the highest and best benefit of the property. In addition, SMA AG rents a partial plot of land that is recognized at original cost. An internal appraisal was also prepared for this. This was based on a price that could be achieved between two independent market participants on an active market for such a plot of land. This reflects a level 2 rating as defined in IFRS 13. The market value corresponds to the highest and best benefit of the real estate property. The market value thus measured for the level 3 rating is €8.6 million (2020: €27.4 million) and €18.6 million (2020: not present) for the level 2 rating. These are cumulative figures. Please refer to the explanations in Section 12. Investment property.

Property, plant and equipment that constitute non-current assets held for sale and discontinued operations are classified as held for sale according to IFRS 5. The condition is that the associated book value is realized largely through disposal and not through continued use. On the date of classification, these assets are measured at the lower value of book value and fair value less costs to sell, and no longer depreciated or amortized.

Impairment of intangible assets and property, plant and equipment: On each balance sheet date, the group reviews whether there are any indicators that the value of an asset might be impaired. In the current fiscal year, the forecast corrections for the current fiscal year that were published by ad hoc reports led to such indications. If such indicators exist or if an annual impairment test of an asset is required, the group determines the recoverable amount of the relevant asset. The recoverable amount of an asset is its fair value less costs to sell or its value in use, whichever is higher. As a rule, the recoverable amount will be determined for each individual asset. If it proves impossible to determine the recoverable amount for individual assets because the cash flows depend on those of other assets, the cash flows are determined for the next higher group of assets (cash-generating unit).

In assessing the value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments regarding the interest effect and the risks specific to the asset. These estimated future cash flows are subject to considerable uncertainty in connection with the global coronavirus pandemic and the continued tight supply situation for electronic components due to significantly increased global demand in the context of the economic recovery and progressive digitalization. To determine the fair value less costs to sell, an adequate valuation model is used.

If the book value of an asset or a cash-generating unit exceeds the recoverable amount, impairment is recognized for the asset or the cash-generating unit in question, and it is written down to the recoverable amount. Impairment costs are recognized under the expense category that corresponds to the function of the impaired asset in the enterprise. As in the previous year, the impairment tests performed in the fiscal year did not reveal any indications of impairment.

For assets, a test is carried out on each balance sheet date to determine whether a previously recognized impairment loss has ceased to exist or has diminished. Additions are made if the recoverable amount has increased in subsequent periods. An impairment loss recognized in prior periods is reversed only if there have been significant changes to the measurement parameters used to originally determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the book value of the asset is increased to as much as its recoverable amount. However, an addition is limited to the amount that would have resulted based on scheduled depreciation without recognizing an impairment. The addition is recognized in the income statement. Impairment on goodwill is not reversed. This was not the case in the reporting year or in the previous year.

Inventories are measured at the lower value of the cost of acquisition or sales and net realizable value. The costs of acquisition or production include all costs incurred during acquisition and production as well as other costs incurred in bringing the inventories to their present location and condition. Borrowing costs are not taken into account here. In general, when determining the acquisition costs of raw materials, consumables and supplies, moving average prices are used. The cost of sales of work in progress and finished goods is determined using detailed cost accounting. The net realizable value consists of the estimated sales proceeds that can be achieved through the ordinary course of business, less the estimated costs incurred up to completion and the estimated necessary selling expenses. Value adjustments are particularly made in the case of a lack of standardization, discontinued products and surplus stocks of non-product-specific materials.

A time horizon of 36 months is used to carry out range analyses. In the case of stock items that are used exclusively in a discontinued product and are also not required by Service, a value adjustment is carried out for their full value. If the reasons that have resulted in an impairment of inventories no longer exist, a corresponding addition is made.

As a rule, **financial instruments** are reported as soon as an entity of the SMA group becomes a contracting party to a financial instrument. A financial instrument is a contract that gives rise to both a financial asset held by one entity and a financial liability or an equity instrument held by another entity. If the trading date and the settlement date of financial assets are different, then the settlement date is decisive for initial recognition. The date of contract conclusion is only decisive in the case of financial derivatives.

Financial assets and financial liabilities are measured at fair value upon their initial recognition. Financial instruments are also designated to measurement categories in accordance with IFRS 9. Further explanations are provided in Section 24. Additional disclosures relating to financial instruments. If permitted and necessary, redesignations are made at the end of the fiscal year. In the case of financial instruments for which there is no measurement at fair value through profit or loss, the transaction costs that are directly attributable to the purchase of the financial asset or to the issue or assumption of the financial liability are also included. These are those directly attributable to the acquisition of the financial asset or the issue of financial liabilities.

Financial instruments are generally stated separately. They are netted only if there is a right of offsetting them on the relevant date and also if the intention is to perform the settlement on a net basis.

Their subsequent measurement is based on the previous categories pursuant to IFRS 9. For the SMA group, the measurement categories "Amortized Cost" and "Fair Value Through Profit or Loss" are particularly relevant. Any loans and receivables granted and other financial liabilities are measured at amortized cost of acquisition using the effective interest method.

Assets measured "At Fair Value Through Profit or Loss" are measured at fair value. These primarily include derivative financial instruments that are not part of an effective hedging relationship. Derivative financial instruments are reported as assets or liabilities if their fair values are positive or negative. Gains and losses resulting from changes in the fair value of derivative financial instruments are recognized directly through profit or loss, as long as no hedging relationship was created for them. Gains or losses resulting from subsequent measurement are recognized through profit or loss in the income statement.

At each reporting date, the accounting values of the financial assets, which are not measured at fair value through profit or loss, are then examined to see whether objective evidence indicates an impairment. Any impairment loss, which is based on a lower value than the carrying amount, is recognized in the income statement.

A financial asset is removed from the books if the enterprise has relinquished control of the contractual rights related to the financial asset. A financial liability is removed from the books if the obligation underlying the liability is discharged, cancelled or has expired.

For the majority of the financial instruments that come under the impairment regulations at the SMA group, trade receivables without a significant financing component, the standard mandatorily stipulates a simplified two-level model. Under this model, a risk provision in the amount of the expected losses over the remaining term is recognized for all instruments, irrespective of their credit quality. The amount of the risk provision at level 2 is calculated based on a flat rate. This rate is applied to the entire SMA group, as there are no different default rates for different regions or business units. The application of IFRS 9 resulted in a rate of 0.35% (2020: 0.40%). When determining the default rate, a looking-forward component is taken into account, in the sense that the SMA group is in a very volatile environment and, despite all market fluctuations and changes, there were no significant influences on the default rates of the receivables. Due to the management assessment, no change is expected in the future.

As described, trade receivables are all allocated to level 2 on acquisition and are transferred to level 3 if there are objective indications of impairment. Despite the general focus on internal risk management, it is assumed that a default event occurs at the latest when a receivable is 90 days past due. However, this assumption can be disproved based on suitable information. Because high-risk receivables are collateralized and high-risk customers receive services only if they pay in advance, the level of bad debt losses in the group is not significant (less than 1% of receivables). For this reason, a default event is not assumed until the receivable is 180 days past due. Receivables are impaired after being overdue. For all other financial instruments (cash and cash equivalents, debt securities [non-market-traded], rent collateral and pledges, time deposits and other short-term deposits [> 3 months], contractual assets, receivables from joint ventures) that fall under the impairment requirements of IFRS 9, the general model is applied. Additional information on default risk and expected credit losses of the relevant balance sheet items (cash and cash equivalents, bonds [non-market-traded], rental collateral and pledges, time deposits and other short-term deposits [> 3 months], contractual assets, receivables from joint ventures) is waived for materiality reasons.

Government grants are not recognized until there is reasonable assurance that the SMA group will meet all the conditions for receiving the grants. Government grants that are paid to compensate for expenses or losses already incurred or to provide immediate financial support without directly associated expense are recognized in the income statement in the period in which the corresponding claim arises.

Provisions account for all recognizable present (legal and constructive) obligations of the group to third parties as a result of past events that are expected to lead to an outflow of resources with an economic benefit to settle the obligation and the amount of which can be estimated reliably. Provisions are recognized in line with IAS 37 at the estimated amount required to settle them. Insofar as the group expects to receive a repayment, at least in part, for a reported provision (e.g., for an insurance contract), the repayment is recorded as a separate asset if the inflow of the payment is highly probable. The expense arising from the formation of the provision is recognized in the income statement. Non-current provisions are carried in the balance sheet at their settlement amount discounted to the balance sheet date using corresponding term-dependent market interest rates. If the amount is discounted, the increase of provisions caused by expiration is recorded under finance costs. Additions to the provisions for guarantees outlined under Section 19. Provisions are recognized in cost of sales. It is not carried out by a delimitation of revenue. In addition to individual circumstances, provisions for general warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five to ten years is generally adopted as a base.

At the beginning of the contract, the group as a lessee assesses whether the contract contains a **lease**. For all leases where the group is the lessee, the group recognizes a right-of-use asset and a corresponding lease liability. Exceptions to this include short-term leases (term up to 12 months) and leases for low-value assets (printers et al.). For these leases, the group recognizes lease payments on a straight-line basis over the lease term under "Other expenses," unless another systematic basis is more representative.

Upon initial recognition, the lease liability is measured at the present value of the lease payments not yet paid at the beginning of the lease, discounted at the interest rate underlying the lease. If this interest rate cannot be determined easily, the group uses the incremental borrowing rate. Upon initial recognition, it is also taken into account whether the contracts have an extension option. If such options exist, an assessment must be made at the outset, or when new evidence becomes available, as to whether the extension options will be exercised. The group has building contracts with extension options. In general, contracts have an annual option to extend by one year or an option to extend for another five years.

The discount rate is calculated using the following method in each case: First, the risk-free interest rate with matching maturities is calculated within a region (as an EU state, Poland initially has an identical interest rate to Germany, but this is adjusted by a country-specific risk premium). A rating result for SMA AG has to be calculated based on credit quality.

The following lease payments are included in the assessment of the lease liability:

→ Fixed lease payments

→ Variable lease payments

→ Expected lease payments due to residual value guarantees

→ Exercise prices of call options

→ Penalties for the early termination of leases

Variable lease payments that do not depend on an index or exchange rate are not included in the assessment of the lease liability and the right-of-use asset.

The lease liability is subsequently measured by increasing the carrying amount by the interest on the lease liability and reducing the carrying amount by the lease payments made.

In the following cases, the group modifies the lease liability and adjusts the right-of-use asset accordingly if this involves a change that was not provided for in the original contractual arrangement:

→ The term of the lease has been amended

→ Amendments to lease payments

If one of these cases occurs, the existing lease is modified in accordance with these changes. A separate lease is not recognized.

The rights of use are initially measured at the amount of the corresponding lease liability less lease payments made at or before the beginning of the lease, lease incentives received and initial direct costs. Subsequent measurement is at original cost less accumulated amortization and impairment.

If the group is obliged to dismantle or reduce a leased asset, to restore the site on which the asset is located or to restore the asset underlying the lease to the condition required by the terms of the lease, a provision is recognized and measured in accordance with IAS 37. If the costs relate to a right-of-use asset, the costs are recognized in the corresponding right-of-use asset, unless these costs are incurred for the production of inventories.

The examination as to whether a value adjustment of a right-of-use asset is necessary is carried out in accordance with IAS 36.

Due to the relief provisions, a separation between non-leasing components and leasing components was waived and leasing agreements with associated non-leasing components were accounted for accordingly as a single agreement in accordance with IFRS 16.

The group makes use of the relief provision to not report separately the leasing component and the non-leasing components.

If the group – in its capacity as lessor – has concluded a sublease, the main lease and sublease are accounted for as two separate contracts. Classification as a finance or operating lease of the sublease is based on the right-of-use asset and not the asset underlying the lease from the main lease.

Rental income from operating leases is recognized on a straight-line basis over the term of the respective lease. Initial direct costs incurred in negotiating and agreeing a lease are added to the carrying amount of the leased asset and allocated on a straight-line basis over the lease term.

Amounts payable from lessees under finance leases are reported as receivables in the amount of the group's net investment in the leases. Income from finance leases is distributed over the respective reporting periods to ensure a constant periodic rate of return on the group's net investment outstanding in respect of the leases.

Employee benefits are usually reported as a liability if the employee has provided work in exchange for benefits payable in the future and are recognized as an expense if the entity has received the economic benefit resulting from the work provided by an employee in exchange for future benefits.

Long-service rewards and death benefits are granted on the basis of a company agreement. Measurement of obligations to pay benefits is carried out by applying the projected unit credit method. This method takes into account both the claims for payment of long-service rewards and death benefits and the acquired pension rights known as of the balance sheet date, and payments of long-service rewards and death benefits expected in the future.

In 2009, SMA Solar Technology AG introduced value-based lifelong working-time accounts. Under certain conditions, employees may have time credits or special benefits reposted to these value accounts. They may take paid leave of absence at a later date using the credit balances extrapolated. The employees' value claims are protected against insolvency and are reinsured. Personnel expenses of €0.4 million were added in the current year (2020: €0.5 million).

Income from goods deliveries is recognized at the time of transfer of control. Prepayments for part deliveries are recognized as contract liabilities (prepayments received) within other liabilities. For transportation services, which constitute a performance obligation in their own right, revenue is recognized on a time proportion basis. Sales revenue from services, provided these services are not rendered over time, is recognized at the point in time at which the obligation to the customer is satisfied in accordance with IFRS 15.38. Sales from services recognized at a point in time are generated by the SMA group when commissioning large-scale projects and carrying out repair orders. Revenue from services rendered over time, including extended warranty or service/maintenance contracts, is recognized over the contractual periods to which these services relate according to the output-based customer perspective. The output-based method leads to an accurate presentation as it best represents the value of the goods and services transferred in the context of the constant commitment to the customer. Cash inflows received in advance do not contain any material finance components. They are the result of a number of end-customer contracts each with small individual contract volumes. With regard to the delivery of goods, in the Home and Business Solutions segments full payment is made on delivery depending on the transfer of control, while in the Large Scale & Project Solutions segment advance payments on deliveries are often made in addition to this. These are recognized in revenue upon full delivery depending on the transfer of control.

Services provided over time, such as extended warranties in the Home and Business Solutions segments, are paid mainly in full in advance. They are reported as non-current contractual obligations and recognized in revenue over the contractual term. Service and maintenance contracts in the Large Scale & Project Solutions segment are paid beforehand over shorter periods, generally for a period of 12 months. Over this period, they are recognized in revenue in line with the passage of time. There were no significant changes in the balances of assets and contractual obligations as defined in IFRS 15.118 in 2021. Depending on the region and product group, the products of the SMA group are sold with a factory warranty of 2, 5, 10, 15 or 25 years. The factory warranty includes the statutory warranty and grants the right to an exchange or replacement in the case of defects that are not caused by external factors.

There are no general rights of return for purchased products. Transaction prices are not adjusted retroactively.

Customer bonuses in the Home Solutions segment are reported as contract liabilities. The reported sales revenue and impairment on receivables relate exclusively to items from contracts with customers as defined in IFRS 15.

Expected contractual penalties (malus payments) are recognized as contractual obligations.

Contract assets arising from contracts with customers are reported under the balance sheet item "Other financial assets."

In the case of customer contracts under which multiple performance obligations recognized at different points in time are sold for a single transaction price or a discount has to be assigned, there is an allocation of the transaction price. This allocation is based on the ratio between the individual sale prices, which are determined based on historical prices for comparable customers in comparable circumstances. If different options are available, the probability of their being exercised is assessed based on comparable cases. As of December 31, 2021, the total amount of outstanding performance obligations came to €886.6 million (December 31, 2020: €855.4 million). Of this amount, €408.8 million was attributable to product business. In the product business, revenue will mainly be realized in 2022. €477.8 million of the order backlog was attributable to service business (December 31, 2020: €469.1 million). Revenue in the service business will be largely recognized in the next five to ten years.

Interest income is recognized when an interest claim has accrued (using the effective interest rate, i. e., the internal rate used to discount estimated future cash inflows over the expected term of the financial instrument to the net book value of the financial asset). Dividend income is recognized when the right to receive payment is established.

Current **tax receivables and tax liabilities** for the ongoing and for previous periods are measured at the amount which is expected to be reimbursed by the tax authority or to be paid to the tax authority. Tax rates and tax laws applicable on the balance sheet date are used to calculate this amount. Income taxes include current and deferred taxes. Current taxes that relate to items stated directly in equity are not recognized in the income statement but in equity.

Deferred taxes are calculated according to IAS 12 based on the standard international balance-sheet-related liability method. This requires deferred tax items to be recognized for all temporary differences between the tax base of an asset or liability and the carrying amount in the consolidated balance sheet as well as for tax loss carryforwards. However, deferred tax assets are recognized only if there will be sufficient taxable income available in the future.

Deferred taxes are measured using the tax rates that, under current legislation, would apply in the future on the probable date of reversal of the temporary differences. The effects of amendments to tax legislation on deferred tax assets and liabilities are recognized in profit or loss in the period in which the material conditions for such amendments to come into force arise. Deferred tax assets and liabilities are not discounted according to the regulations of IAS 12. Deferred tax assets and deferred tax liabilities are offset at the same maturity, provided that they relate to the same entity.

2.3. SIGNIFICANT JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

Preparation of the Consolidated Financial Statements requires the company management to make judgements, estimates and assumptions that affect the amounts of revenues and expenses, assets and liabilities reported on the reporting date as well as the disclosure of contingent liabilities. Uncertainty related to these assumptions and estimates may lead to results that require material adjustments to the book values of the relevant assets or liabilities in the future. When applying the accounting and valuation policies, the company management made the judgements outlined below, which had a significant effect on the amounts recognized in the Consolidated Financial Statements.

The key assumptions concerning the future and other key sources of estimation uncertainty on the reporting date associated with a significant risk of causing a material adjustment to the book values of assets and liabilities during the next fiscal year are explained below:

Development expenses are capitalized when all required conditions are given. Initial capitalization of expenses is based on an estimate by the company management that a project's technical and economic feasibility has been proven. This is normally the case when a development project has reached a specific milestone or a specific quality gate in the development process. When determining the amounts to be capitalized, the company management makes further valuation assumptions regarding the amount of expected future cash flows from assets, the discounting rates to be applied and the period of inflow of expected future cash flows generated by assets. With this in mind, development expenses of €27.4 million (2020: €15.2 million) were capitalized in the 2021 fiscal year. Research and development expenses of €50.2 million (2020: €56.0 million) were incurred.

In addition to individual circumstances, **provisions** for general warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five or ten years is generally adopted as a base. The expected warranty expenditure is based on historical values in previous fiscal years. Depending on the amount, expenses are forecasted based on historical values and then allocated to forecasted undesirable developments. The undesirable developments are based on historical values of the different product groups. This provides a forecast for the future development of group-wide warranty costs. Individual facts are recognized separately if they are not part of the general warranty provisions. This may be the case if they are to be assessed separately on the basis of their significance, or if they represent a special circumstance that has not yet been reflected in historical values. The value of the provision for individual cases and general warranty risks amounted to €145.5 million as of December 2021 (December 31, 2020: €152.1 million). Further provisions are recognized for current legal or constructive obligations to third parties whose due date or amount are uncertain if these obligations are based on past business transactions or events, are likely to lead to outflows of assets and these outflows can be reliably determined. The amount of the provisions is based on the anticipated expenses that are estimated on the basis of an assessment of the circumstances in the individual case using historical values, results of comparable circumstances, or estimates by internal or external experts. The estimates are based on an analysis of the main influencing parameters. If the effect is material, the resulting nominal provision requirements are discounted at a market interest rate before taxes that takes account of the term and risks. More information is provided in Section 19. Provisions.

For the measurement of **provisions for anticipated losses** from the termination of a long-term contract for operation and maintenance (O&M) services for PV power plants, various estimates were made for different factors that have a significant influence on the amount of the provision for anticipated losses. This total expense is made up of future one-time payments for withdrawal from the contract, liquidated damages to be incurred in the future, and future rebates on goods and services and compensation payments (cash conversion) for unused rebates. The maximum period for the payments is 9 years. The provision is calculated using a probability calculation for one-time payments and liquidated damages to be paid in the future and for rebates to be granted and compensation payments for unused rebates, discounted at a suitable risk-adjusted discount rate. Liquidated damages are defined as generalized compensation for reduced output of the individual PV power plants as regulated in the contract. The provision for anticipated losses varies depending on the date of the end of services for the individual PV power plants in the context of terminating the contract, the amount of the rebates granted and the amount of the compensation payments for unused rebates as well as the level of the risk-adjusted discount rate. This results in a wide range for the amount of the provision. For terminating the long-term contract, it amounts to at least €30.5 million and up to an estimated maximum of €68.5 million. The SMA group maps the most likely scenario, which is based on the intention of both parties to have fully processed the contractual relationship by the end of 2022. To this end, a sum of €47.4 million was added to provisions, see 19. Provisions.

Sales from long-standing service and maintenance contracts and extended warranties are collected over the contract term as sales because a linear progression of warranty costs is adopted as the best possible estimation method. Whether bonus or malus payments can be expected is based on the available information and historical values.

On each balance sheet date, the SMA group examines whether there are indicators for an impairment of **non-financial assets**. Estimating the value in use requires the company management to make an estimate of the expected future cash flows from the asset or the cash-generating unit and to choose a suitable discount rate. The discounted cash flows are then used to determine the present value of the asset or cash-generating unit. No discretionary impairments were recognized on non-financial assets in 2021.

Deferred tax assets are recognized for all unused tax loss carryforwards to the extent that it is probable that there will be sufficient taxable profit to enable the loss carryforwards to actually be used. Determining the amount of deferred tax assets requires the company management to use significant discretion regarding the expected time of accrual and the amount of taxable income in the future as well as regarding future tax planning strategies. Deferred tax assets on loss carryforwards amounting to €23.8 million were recognized in the fiscal year on the basis of the current tax planning (2020: €20.6 million).

A significant portion of the reported assets is based on planning assumptions in the detailed three-year plan developed by the Managing Board and approved by the Supervisory Board. Significant assumptions regarding the sales performance and cost reduction and the development of different markets are therefore of considerable significance to the amount of assets.

3. Segment reporting

The segments of the SMA group are described in the organizational and reporting structure on page 16 as well as individually explained in Results of Operations in the Management Report on page 50 et seq. SMA's segment structure has not changed in comparison with the previous year.

Segment	Activities
Home Solutions	In the **Home Solutions segment**, the SMA group caters to global markets for small PV systems with and without storage systems and connections to a smart home solution. The SMA Energy System Home is an end-to-end, single-source system package featuring all the hardware, software and service components required for an independent household electricity supply. It comprises single- and three-phase string inverters with power of up to 12 kW, integrated services, storage systems and charging solutions for electric vehicles. Communication products and accessories, services, such as extended warranties, spare parts and modernization of PV systems (Repowering) to enhance performance as well as digital energy services complete the offering.
Business Solutions	In the **Business Solutions segment**, the focus is on global markets for medium-sized PV systems with and without energy management, battery storage and electric vehicle charging solutions. SMA Energy System Business, featuring matched hardware, software, tools and services, gives small and medium-sized commercial enterprises and the housing sector the option of producing, storing and selling solar power themselves. The application shows the companies' energy flows in a transparent way and thus contributes to cost savings. It comprises three-phase inverters, storage solutions and holistic energy management solutions for smaller and medium-sized PV systems. Solutions for charging management and billing of electric vehicle fleets complete the offering. In addition, the SMA group offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services.
Large Scale & Project Solutions	The **Large Scale & Project Solutions segment** focuses on complete solutions on international PV power plant markets that perform grid service and monitoring functions on the basis of central inverters and system controllers. The outputs of string and central inverters in this segment range from 100 kW to the megawatts. Another focus is on storage solutions for large-scale PV and storage power plants and on solutions for the hydrogen production. The portfolio is supplemented by services, for example, for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business). In addition, the SMA group implements PV diesel hybrid and large-scale storage projects worldwide in this segment.

The operating result of the segments is monitored separately by the Managing Board to make decisions on the allocation of resources and to determine the profitability of the segments. Group financing, currency and interest rate hedging and the income tax burden are controlled at the group level and are therefore not allocated to the individual operating segments.

Regarding information on geographical segments, sales are assigned to countries using the destination principle. The company refrains from presenting non-current assets or other items such as the breakdown of sales deductions per segment, as these are not included in monthly reports and the costs of producing this information would be excessively high.

The group measures the performance of its segments through a measurement of segment profit or loss, which is referred to as EBIT in the internal management and reporting system. This measurement comprises gross profit, selling expenses, general administrative expenses, research and non-capitalized development expenses as well as other operating income (balance of other operating income and expenses).

Segment assets comprise the intangible assets attributed to each segment and its property, plant and equipment, inventories and trade receivables. Segment liabilities include trade payables that are directly attributable to the relevant segments. Internal management reporting is in line with the accounting policies of external reporting.

The transfer prices between the business segments are determined using management prices based on usual arm's length market conditions. Income from external third parties is reported using the same valuation parameters as shown in the income statement.

No asymmetrical allocations are made to individual segments.

Financial ratios by segments and regions

in € million	External product sales 2021	External product sales 2020	External services sales 2021	External services sales 2020	Total sales 2021	Total sales 2020	Operating profit (EBIT) 2021	Operating profit (EBIT) 2020
Segments								
Home Solutions	251.0	250.4	14.7	13.3	265.7	263.7	37.9	12.8
Business Solutions	242.9	290.3	2.5	2.3	245.4	292.6	–18.0	–29.9
Large Scale & Project Solutions	422.6	415.4	50.0	54.9	472.6	470.3	–62.8	48.5
Total segments	916.5	956.1	67.2	70.5	983.7	1,026.6	–42.9	31.4
Reconciliation	0.0	0.0	0.0	0.0	0.0	0.0	9.9	–3.5
Continuing operations	**916.5**	**956.1**	**67.2**	**70.5**	**983.7**	**1,026.6**	**–33.0**	**27.9**

in € million	Segment assets 2021	Segment assets 2020	Segment liabilities 2021	Segment liabilities 2020	Capital expenditure 2021	Capital expenditure 2020	Depreciation and amortization 2021	Depreciation and amortization 2020
Segments								
Home Solutions	78.7	56.2	3.4	1.9	11.1	6.6	3.6	3.6
Business Solutions	98.4	78.2	8.1	20.0	13.3	8.8	4.2	4.1
Large Scale & Project Solutions	212.4	304.7	30.3	24.6	4.7	1.3	4.1	5.0
Total segments	389.5	439.1	41.8	46.5	29.1	16.7	11.9	12.7
Reconciliation	650.3	612.1	600.2	565.6	27.3	40.4	29.8	30.9
Continuing operations	**1,039.8**	**1,051.2**	**642.0**	**612.1**	**56.4**	**57.1**	**41.7**	**43.6**

Sales by regions (target market of the product)

in € million	2021	2020
EMEA	511.5	511.4
Americas	318.0	323.2
APAC	183.0	221.5
Sales deductions	–28.8	–29.5
External sales	**983.7**	**1,026.6**
thereof Germany	253.9	215.4

Reconciliation of the segment figures to the correlating figures in the Financial Statements is as follows:

in € million	2021	2020
Total segment earnings (EBIT)	–42.9	31.4
Elimination	9.9	–3.5
Consolidated EBIT	–33.0	27.9
Financial result	–0.6	–0.7
Earnings before income taxes	**–33.6**	**27.2**
Total segment assets	389.5	439.1
Other central items and eliminations	134.6	41.4
Centrally administered land and buildings	162.9	166.3
Cash and long-term time deposits	186.1	195.8
Financial instruments not designated and other assets	97.6	140.9
Deferred tax assets and income tax receivables	69.1	67.7
Group assets	**1,039.8**	**1,051.2**
Total segment liabilities	41.8	46.5
Other central items and eliminations	116.4	120.3
Financial instruments not designated, liabilities and provisions	476.8	438.4
Income tax liabilities and deferred tax assets	7.0	6.9
Group liabilities	**642.0**	**612.1**

Circumstances are shown in the reconciliation, which by definition are not part of the segments. In particular, this comprises unallocated parts of group head offices, including centrally managed cash and cash equivalents, financial instruments, financial liabilities and buildings, the expenses of which are allocated to the segments. Business relationships between the segments are eliminated in the reconciliation.

In 2021, as in the previous year, no customer accounted for a share of more than 10% of group sales.

Notes to the SMA group income statement

4. Other operating income and expenses

Other operating income includes a positive effect on earnings of €9.9 million that was generated partly due to the success in negotiations regarding an early single payment of the purchase price (earn-out) in connection with the former Chinese subsidiaries. This resulted in a positive effect in a high single-digit million amount as compared to the purchase price claim measured at fair value. This item also includes government grants of €1.7 million (2020: €2.2 million) and income from foreign currency translation of €19.1 million (2020: €19.5 million). The previous year had been influenced by a positive one-time item relating to the conclusion of a multi-year settlement with a supplier due to quality defects amounting to €55.0 million. This compensation claim compensates for expenses incurred in recent years.

Other operating expenses include a sum of €36.5 million resulting from the addition to the provision for anticipated losses in connection with the termination of the long-term contract for operation and maintenance (O&M) services for PV power plants. In addition, expenses from foreign currency translation in the amount of €21.4 million (2020: €27.0 million) are reported.

5. Employee and temporary employee benefits

in €'000	2021	2020
Wages and salaries	196,351	190,309
Expenses for temporary employees	12,021	18,229
Social security contribution and welfare payments	31,145	29,628
	239,517	**238,166**

Wages and salaries include expenses in an insignificant amount in connection with bike leasing contracts, attributable to employee benefits.

Voluntary contributions to private pensions amounted to €1.2 million in 2021 (2020: €1.2 million).

The average number of employees in the group amounted to:

	2021	2020
Research and Development	471	452
Production and Service	1,780	1,615
Distribution and Administration	1,030	983
	3,281	**3,050**
Trainees and learners	148	82
Temporary employees	270	448
	3,699	**3,580**

6. Financial result

in €'000	2021	2020
Loss from at-equity-accounted investments	**304**	**0**
Interest income	1,940	289
Other financial income	161	650
Income from interest derivatives	11	45
Financial income	**2,112**	**984**
Interest expenses	1,679	1,523
Other financial expenses	785	126
Interest portion from valuation of provisions	0	11
Financial expenses	**2,464**	**1,660**
Financial result	**–656**	**–676**

The increased interest income in the current fiscal year includes €1.5 million in interest received from tax reimbursements.

Interest expenses from leases amounted to €0.8 million in the reporting year (2020: €0.5 million).

7. Income taxes

Actual income taxes (paid or payable) and deferred taxes are recognized as income taxes. They break down as follows:

in €'000	2021	2020
Actual income taxes		
for current fiscal year	7,576	8,337
for previous years	12	–6,819
Deferred taxes		
from temporary differences	–15,010	–6,062
from tax loss carryforwards	–3,204	3,683
Income taxes	**–10,626**	**–861**

Income taxes comprise trade tax, corporation tax and the solidarity surcharge in Germany as well as comparable income taxes abroad. The expected income tax expense that would result from applying the tax rate of the parent company SMA Solar Technology AG to the IFRS net income before taxes can be reconciled to income taxes shown in the income statement as follows:

in €'000	2021	2020
Net income before income taxes	**–33,626**	**27,230**
Tax rate of the parent company	32.8%	33.1%
Expected income tax expenses	**–11,026**	**9,003**
Differences related to differing tax rates domestic and abroad	5,385	5,961
Effects due to changes in tax rates	727	7
Tax-free income	–3,916	3
Non-deductible expenses	–719	595
Tax effects from loss carryforwards	–1,086	–10,233
Taxes relating to previous years	12	–6,819
Other tax effects	–3	622
Actual income taxes (according to income statement)	**–10,626**	**–861**
Effective group tax rate	31.6%	–3.2%

The corporation tax rate of 15% and the solidarity surcharge rate of 5.5% are to be applied to corporations based in Germany. In addition, domestic companies and partnerships are subject to trade tax, which is influenced by assessment rates specific to the particular municipality. The average effective group tax rate was affected in particular by the decrease in deferred taxes on loss carryforwards associated with corporate planning, temporary differences and the use of loss carryforwards for current taxes. The average trade tax rate to be applied at the level of the parent company was 16.97% (2020: 17.2%). The overall tax rate of the group's parent company was thus 32.8% (2020: 33.1%).

The effects of deviations between the relevant tax rates at the level of the domestic and foreign group companies and the overall tax rate at the level of the group's parent company are shown in the reconciliation statement under deviations related to tax rate in Germany and abroad.

No deferred taxes were formed for the undistributed profits of foreign subsidiaries, including accrued currency translation differences because this income and these translation differences are either not subject to corresponding taxation or will not be distributed in the foreseeable future.

As of December 31, 2021, there were current income tax receivables amounting to €9.9 million (2020: €28.0 million) and current income tax liabilities of €6.6 million (2020: €6.6 million). Tax liabilities are the result of global business activity and a share of foreign sales of 74.9%. As a result, the SMA group is subject to various tax laws and regulations in other countries. Tax changes in Germany and abroad could affect the tax positions of SMA. In addition to changes of legal regulations, the assessment and interpretation of complex tax regulations, for example the transfer prices, can influence our earnings, financial and asset position. We work closely with tax consulting companies in the individual countries to identify risks, perform regular audits and take appropriate precautions.

In 2021, translation differences of €1.1 million (2020: €2.0 million) resulted from the currency translation of deferred foreign tax assets and liabilities. Deferred tax assets and liabilities were distributed across the following items:

	2021/12/31		2020/12/31	
in €'000	**Deferred tax assets**	**Deferred tax liability**	**Deferred tax assets**	**Deferred tax liability**
Intangible assets	147	–17,701	178	–12,280
Property, plant and equipment	10,153	–3,941	5,068	–2,538
Inventories	16,665	–726	12,733	–878
Other assets	2,612	–4,750	2,833	–1,170
Other provisions	16,110	–2,724	3,514	–8,369
Other liabilities	23,625	–4,500	20,250	–520
Gross amount	69,312	–34,342	44,576	–25,755
Loss carryforwards	23,779	0	20,575	0
Balancing	–33,978	33,978	–25,477	25,477
	59,113	**–364**	**39,674**	**–278**

The company has examined the right to a possible offsetting of temporary differences by increasing the validity of the financial statements and the better comparability with the financial statements of other companies. For transparency reasons, advance offsetting of deferred tax liabilities for temporary differences against deferred tax assets from loss carryforwards of SMA Technology AG is not used in the gross presentation of deferred tax assets and liabilities, in contrast to the previous year. The previous year's figures have been adjusted accordingly for better comparability.

The deferred tax assets are considered realizable as far as sufficiently high future taxable income is to be expected. This was based on a planning horizon of three years. Based on the current corporate planning in the current fiscal year, deferred tax assets for loss carryforwards of €23.8 million (2020: €20.6 million) were recognized in the current fiscal year.

Of the deferred taxes for loss carryforwards, €22.5 million (2020: €8.7 million) is attributable to domestic loss carryforwards and €1.3 million (2020: €1.6 million) to foreign loss carryforwards.

With €276.7 million (2020: €281.0 million), no deferred taxes were recognized in the current fiscal year on tax loss carryforwards of the group as a whole of €349.1 million (2020: €343.3 million).

The majority of the non-usable loss carryforwards are attributable to SMA Solar Technology AG. As of December 31, 2021, corporation tax loss carryforwards of €308.6 million (2020: €304.4 million) existed, of which no deferred taxes were recognized on €241.1 million (2020: €250.6 million), and trade tax loss carryforwards of €336.6 million (2020: €333.4 million), of which no deferred taxes were recognized on €269.2 million (2020: €279.5 million). These loss carryforwards have no time limit. In the case of foreign companies, the main loss carryforwards do not expire before 2031.

8. Earnings per share

Earnings per share are calculated by dividing the net income attributable to the shareholders by the weighted average of ordinary shares in circulation during the period. The number of shares in the 2021 fiscal year amounted to 34.7 million, as in the previous year.

The net income attributable to the shareholders is the net income after tax. As there were no shares held by the company on the reporting date or any other special cases, the number of ordinary shares issued equated to the number of shares in circulation.

The calculation of earnings in relation to the weighted average number of shares in accordance with IAS 33 resulted in earnings of −€0.66 per share for the period from January 1, 2021 to December 31, 2021, with an average weighted number of shares of 34.7 million and earnings of €0.81 per share for the period from January 1, 2020 to December 31, 2020, with an average weighted number of shares of 34.7 million.

There were no options or conversion options as of the reporting date. Therefore, there were no diluting effects and the diluted and basic earnings per share were the same.

Notes to the balance sheet SMA group

9. Intangible assets

Intangible assets and goodwill evolved in the fiscal years under review as follows:

in €'000	Goodwill	Development projects	Patents/ licenses/rights	Software	Intangible assets in progress	Total
Acquisition costs						
2021/01/01	482	215,253	6,171	54,161	18,213	294,280
Changes in currency	0	–63	0	4	–1	–60
Additions	0	1,341	28	476	28,095	29,940
Disposals (–)	0	0	14	36	0	50
Transfers	0	1,881	48	948	–2,909	–32
2021/12/31	482	218,412	6,233	55,553	43,398	324,078
Depreciation and amortization	**0**	**0**	**0**	**0**	**0**	**0**
2021/01/01	0	193,957	3,110	50,257	2,693	250,017
Changes in currency	0	–63	0	–1	0	–64
Additions	0	8,820	422	2,232	0	11,474
Disposals (–)	0	0	14	35	0	49
2021/12/31	0	202,714	3,518	52,453	2,693	261,378
Net value 2020/12/31	**482**	**21,296**	**3,061**	**3,904**	**15,520**	**44,263**
Net value 2021/12/31	**482**	**15,698**	**2,715**	**3,100**	**40,705**	**62,700**
Acquisition costs						
2020/01/01	482	211,924	6,090	50,593	8,596	277,685
Changes in currency	0	–543	0	–44	0	–587
Additions	0	2,130	52	2,075	14,289	18,546
Disposals (–)	0	1,497	0	51	0	1,548
Transfers	0	3,239	29	1,588	–4,672	184
2020/12/31	482	215,253	6,171	54,161	18,213	294,280
Depreciation and amortization						
2020/01/01	0	186,737	2,693	48,335	2,693	240,458
Changes in currency	0	–543	0	–25	0	–568
Additions	0	9,144	417	1,998	0	11,559
Disposals (–)	0	1,381	0	51	0	1,432
2020/12/31	0	193,957	3,110	50,257	2,693	250,017
Net value 2019/12/31	**482**	**25,187**	**3,397**	**2,258**	**5,903**	**37,227**
Net value 2020/12/31	**482**	**21,296**	**3,061**	**3,904**	**15,520**	**44,263**

€25.4 million (2020: €13.0 million) of the additions of intangible assets in progress included development projects.

In relation to development projects, amortization of intangible assets is posted in the income statement under cost of sales. Amortization of software is allocated to the functional areas dependent on use.

The goodwill is assigned to cash-generating units depending on the organizational structure. The goodwill resulting from the asset deal with Phönix is assigned to the Large Scale & Project Solutions segment (€0.2 million), while that of SMA Magnetics (€0.3 million) is assigned to the Home Solutions segment.

10. Property, plant and equipment

Property, plant and equipment evolved as follows in the 2021 fiscal year:

in €'000	Land and buildings, incl. buildings on third party property	Rights of use for buildings	Technical equipment/ machinery	Rights of use for technical equipment/ machinery	Other equipment, plant and office equipment	Rights of use for vehicle fleet	Prepayments and assets under construction	Total
Acquisition costs								
2021/01/01	223,747	36,420	69,790	1,053	180,323	5,729	7,114	524,176
Changes in currency	130	177	62	0	274	273	20	936
Additions	58	5,604	87	0	938	3,285	16,489	26,461
Disposals (–)	119	1,567	1,373	25	7,013	905	0	11,002
Transfers	5,651	0	6,519	0	5,080	0	–17,218	32
Reclassified to "investment property" (–)	9,253	0	0	0	0	0	0	9,253
Classified „As held for sale" (–)	939	0	0	0	0	0	0	939
2021/12/31	219,275	40,634	75,085	1,028	179,602	8,382	6,405	530,411
Depreciation and amortization								
2021/01/01	100,014	11,813	47,149	324	155,512	2,184	0	316,996
Changes in currency	99	128	47	0	229	68	0	571
Additions	7,975	5,703	4,074	–8	9,376	2,119	0	29,239
Disposals (–)	118	1,562	1,277	0	6,751	860	0	10,568
2021/12/31	107,970	16,082	49,993	316	158,366	3,511	0	336,238
Net value 2020/12/31	**123,733**	**24,607**	**22,641**	**729**	**24,811**	**3,545**	**7,114**	**207,180**
Net value 2021/12/31	**111,305**	**24,552**	**25,092**	**712**	**21,236**	**4,871**	**6,405**	**194,173**

Property, plant and equipment of €8.0 million (2020: €10.6 million) were negatively affected by mortgage liens used to secure financial liabilities.

The additions to rights of use to buildings mainly resulted from the extension and modification of a lease at the Kassel site, Germany, in the U.S., Japan and Australia. The additions to assets under construction include around €5 million for the testing hall for electromagnetic compatibility that was commissioned in the fiscal year. The additions to assets under construction and the transfers to technical equipment/machinery and other equipment, plant and office equipment include a large number of immaterial investments. The reclassification to "investment property" includes a partial plot of land that is no longer used by the group itself.

Amounts recognized in the income statement as part of accounting in accordance with IFRS 16:

in €'000	2021	2020
Expenses from short-term leases	39	32
Expenses from leases with low-value assets	485	264

Expenses from short-term leases and from leases with assets of lower value correspond to the cash outflows.

Property plant and equipment evolved as follows in the 2020 fiscal year:

in €'000	Land and buildings, incl. buildings on third party property	Rights of use for buildings	Technical equipment/ machinery	Rights of use for technical equipment/ machinery	Other equipment, plant and office equipment	Rights of use for vehicle fleet	Prepayments and assets under construction	Total
Acquisition costs								
2020/01/01	229,076	23,602	70,229	0	182,017	3,258	5,718	513,900
Changes in currency	–303	–457	–632	0	–589	–155	–13	–2,149
Additions	34	13,731	210	1,053	724	3,522	19,257	38,531
Disposals (–)	1,813	457	3,901	0	11,199	896	5	18,271
Transfers	4,404	1	3,884	0	9,370	0	–17,843	–184
Reclassified to "investment property" (–)	7,651	0	0	0	0	0	0	7,651
2020/12/31	223,747	36,420	69,790	1,053	180,323	5,729	7,114	524,176
Depreciation and amortization								
2020/01/01	96,215	6,115	46,023	0	155,992	1,383	0	305,728
Changes in currency	–190	–255	–434	0	–453	–54	0	–1,386
Additions	8,636	6,386	3,907	324	10,126	1,733	0	31,112
Disposals (–)	1,619	433	2,347	0	10,153	878	0	15,430
Reclassified to "investment property" (–)	3,028	0	0	0	0	0	0	3,028
2020/12/31	100,014	11,813	47,149	324	155,512	2,184	0	316,996
Net value 2019/12/31	**132,861**	**17,487**	**24,206**	**0**	**26,025**	**1,875**	**5,718**	**208,172**
Net value 2020/12/31	**123,733**	**24,607**	**22,641**	**729**	**24,811**	**3,545**	**7,114**	**207,180**

11. Investments in joint ventures

SMA holds a 42% interest in elexon GmbH, a joint venture in the field of charging infrastructure facilities.

The financial information is as follows:

in €'000	2021/12/31	2020/12/31
Net assets elexon	652	0
Holdings (%)	42.00	33.34
Group share in the net assets	274	0
Goodwill	0	0
Other adjustments	180	8
Book value of the group investment	**454**	**8**

A loan issued by SMA is reflected in the information on related parties.

12. Investment property

in €'000	2021/12/31	2020/12/31
Level at the beginning of the year	**17,988**	**14,274**
Transfers from property, plant and equipment (net book value)	9,253	4,623
Depreciation and amortization (-)	961	909
Transfers to "Assets available for sale"	11,759	0
Level at the end of the reporting period	**14,521**	**17,988**

Income and expenses included in the profit and loss account

in €'000	2021	2020
Rental income	2,316	1,887
Attributable expenses	539	519

The SMA group rents several buildings and plots of land that it had previously been using itself. This is allocated on the balance sheet to the item "Investment property." In the third quarter of 2021, the SMA group decided to sell parts of the previous "investment properties" within twelve months. These are classified as "assets held for sale" in the balance sheet and are further explained in section 17.

The tenancy agreements for the buildings do not contain any conditional rental payments, but they each offer an option to extend, which can be exercised by the tenant. The original non-cancelable rental period was five or six years. If the extension options are not exercised by the tenants, the agreements will end in 2025 at the latest. The distribution of rental income is shown in the table below.

in € million	< 1 year	> 1 – 5 years	> 5 years	Total
Rental income	0.6	1.9	0.0	2.5

13. Inventories

SMA group inventories are made up as follows:

in €'000	2021/12/31	2020/12/31
Raw materials, consumables and supplies	99,609	93,433
Unfinished goods, work in progress	9,164	8,583
Finished goods and goods for resale	137,335	142,431
Prepayments	26,916	11,022
	273,024	**255,469**

Inventories are measured at the lower value of the cost of acquisition or sales and net realizable value. The balance of impairment accounts amounted to €35.4 million as of the end of the fiscal year (2020: €40.4 million). They are not allocated to the segments. The addition to impairment on inventories, included under expenses as cost of sales, amounted to €9.1 million (2020: €24.1 million). The carrying amount of inventories written down to net realizable value amounted to €9.5 million as at 31 December 2021 (2020: €8.9 million).

14. Trade receivables and other receivables

Trade receivables are non-interest-bearing and usually due between 30 and 90 days. No significant extensions to payment terms were granted in the reporting period. It is possible that different payment terms are granted in project business.

The other receivables mainly comprise prepaid expenses and other receivables due from tax authorities, which were not overdue on the reporting date.

The age structure of trade receivables was as follows on the reporting dates:

in €'000	Book value	Neither overdue nor impaired	Not impaired portion of overdue receivables			
			< 30 days	30 to 60 days	60 to 90 days	> 90 days
2021	142,674	114,919	11,482	3,571	2,156	10,546
2020	121,872	105,111	9,560	910	2,716	3,575

As of December 31, 2021, value adjustments with a nominal value of €21.7 million (2020: €22.0 million) were carried out on aging trade receivables. No additional value adjustments to be recognized across the general calculation of value adjustments were made regarding overdue trade receivables of €28.1 million as of December 31, 2021 (December 31, 2020: €16.8 million), as there were no significant changes in the credit rating of customers. Settlement of the receivables is expected. The credit rating of customers with whom trade receivables exist, which are neither overdue nor impaired, is considered to be good.

The value adjustment account of trade receivables evolved as follows:

in €'000	Specific valuation allowance	Value correction on portfolio basis	Total
As of 2020/01/01	23,673	521	24,194
Additions with effect on the expenses (net)	3,480	78	3,558
Usage	–2,449	0	–2,449
Release	–2,675	–177	–2,852
Exchange rate difference	–61	–11	–72
As of 2020/12/31	21,968	411	22,379
Additions with effect on the expenses (net)	3,169	33	3,202
Usage	–1,186	0	–1,186
Release	–2,809	–59	–2,868
Exchange rate difference	113	18	131
As of 2021/12/31	21,255	403	21,658

Furthermore, no adjustments had to be made for other receivables. With regard to other financial assets, please refer to the information below under note 15. The receivables are adjusted individually based on individual assessments. The maximum default risk equates to the carrying amount shown in the balance sheet.

15. Other financial assets and value added tax receivables

The other non-current financial assets mainly include loan receivables from joint ventures. The previous year's figure had also included anticipated future purchase price payments from the MBO in 2019. This receivable was settled with an early one-time compensation payment of €9.9 million.

The other current financial assets as of December 31, 2021, include in particular financial assets and time deposits with a term to maturity of more than three months, accrued interest totaling €105.9 million (2020: €72.1 million) and a current component for claims to compensation payments of €15.0 million from a supplier. Receivables from tax authorities from sales tax refund claims of €27.4 million were recognized as of December 31, 2021 (2020: €28.8 million).

16. Cash and cash equivalents

Cash and cash equivalents comprise cash in hand as well as bank balances, checks, payments in transit and deposits with an original term to maturity of less than three months. Bank balances bear interest at variable interest rates applicable to deposits subject to call. In the current fiscal year, the parent company received claims to compensation payments of €30.0 million from a supplier.

As of December 31, 2021, the SMA group had unused credit lines amounting to €72.5 million (2020: €79.4 million), for which all conditions for use had been met.

17. Assets and asset groups held for sale

In the third quarter of 2021, the Managing Board of SMA AG decided to sell parts of the previous "investment properties" within twelve months, as the group no longer plans to use these itself. For the buildings held for sale, there was a reclassification within the balance sheet from the "Investment property" item. It is assumed that the sale of the building will generate a positive result. For this reason, no impairment was recognized.

18. Equity

The change in equity, including effects not recognized in profit or loss, is shown in the statement of changes in equity. The main effects were the consolidated result and the effects of currency gains/losses.

The capital reserve contains agio amounts from the issuance of SMA Solar Technology AG shares.

The other retained earnings contain mainly the retained profit and the statutory reserve. In addition, retained earnings include other equity components such as the difference between foreign currency translation.

Shares in SMA AG are no-par value bearer shares, which were fully paid in.

The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €3.4 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period ending May 23, 2023. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders: (a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, (b) for the purpose of issuing shares to employees of the company and companies affiliated with the company, (c) to exclude fractions, and (d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount, and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded may not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on June 1, 2021, the Managing Board, in the period up to May 30, 2026, is entitled on behalf of the company to acquire its own shares up to a value of 10% of the existing capital stock at the time the resolution was adopted by the Annual General Meeting and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange or an offer made to all the shareholders, provided the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the company, or with one of its affiliated companies, or members of bodies in companies that depend on the company. Furthermore, if the Managing Board sells the company's own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any own shares acquired after obtaining the consent of the Supervisory Board.

The Annual General Meeting of SMA Solar Technology AG held on June 1, 2021, followed the Managing and Supervisory Boards' proposal to distribute a dividend for the 2020 fiscal year amounting to €0.30 per dividend-bearing share (2019: €0.00 per dividend-bearing share).

The objectives of capital management are to maintain SMA's financial substance and ensure necessary flexibility.

The equity ratio is used to measure the financial security of SMA. This is the ratio of equity shown in the consolidated balance sheet to total assets. Accordingly, the financing structure is characterized by a conservative capital structure dominated by internal financing. As of the reporting date, the equity ratio was 39.0% (2020: 41.8%). External financing occurs almost exclusively through liabilities arising from operative business.

19. Provisions

Provisions accounted for all discernible risks from pending transactions and contingent liabilities on the balance sheet dates and broke down as follows:

in €'000	Warranties	Personnel	Other	Total
As of 2021/01/01	**152,094**	**4,453**	**11,030**	**167,577**
Additions	50,459	1,895	52,268	104,622
Usage	49,144	666	3,510	53,320
Release	8,525	0	2,147	10,672
Changes in currency	568	11	112	691
As of 2021/12/31	**145,452**	**5,693**	**57,753**	**208,898**
Current in 2021	64,747	1,892	37,828	104,467
Non-current in 2021	80,705	3,801	19,925	104,431
	145,452	**5,693**	**57,753**	**208,898**

in €'000	Warranties	Personnel	Other	Total
As of 2020/01/01	**138,862**	**4,221**	**10,150**	**153,233**
Additions	67,920	1,319	3,906	73,145
Usage	51,671	1,017	1,617	54,305
Release	2,239	38	1,232	3,509
Compounding	0	11	0	11
Changes in currency	−778	−43	−177	−998
As of 2020/12/31	**152,094**	**4,453**	**11,030**	**167,577**
Current in 2020	71,813	714	10,526	83,053
Non-current in 2020	80,281	3,739	504	84,524
	152,094	**4,453**	**11,030**	**167,577**

The provisions for statutory warranties are attributable to the segments as follows:

in €'000	2021/12/31	2020/12/31
Home Solutions	49,437	52,098
Business Solutions	45,061	48,648
Large Scale & Project Solutions	50,954	51,348
	145,452	**152,094**

Warranty provisions consist of general warranty obli-gations (periods of between five and ten years) for the various product areas within the group. In addition, provisions are set aside for individual cases that are mainly used in the following year. Warranty provisions for individual cases amount to €28.0 million and are expected to lead to cash outflows within one year. Lump-sum warranty provisions exist in the amount of €117.4 million. For the short-term portion of €36.7 million, an outflow of funds is expected within one year; for the long-term portion, an outflow of funds is ex-pected within a period of five to ten years.

Personnel provisions mainly include obligations for long-service anniversaries, death benefits and partial retirement benefits. Personnel provisions affect cash in relation to contractual commitments made.

The additions to other provisions include a provision for anticipated losses for the anticipated expenses from the termination of a long-term contract for operation and maintenance services in North America in a total amount of €47.4 million. For further details, see section 2.3 Significant judgments, estimates, assumptions. In addition, other provisions include in particular restoration obligations, provisions for tax risks and purchase commitments. An outflow of funds for the major part is expected within one year.

20. Financial liabilities

in €'000	2021/12/31	2020/12/31
Liabilities due to credit institutions	8,362	11,422
Derivative financial liabilities	7,607	597
of which liabilities from derivatives outside of hedge accounting	7,607	597
Lease liabilities	30,687	29,114
	46,656	**41,133**

In the 2021 fiscal year, liabilities to credit institutions mainly comprise liabilities for the financing of SMA Immo properties and an SMA AG PV system. They have an average time to maturity of ten years. Changes in liabilities to banks and from leases are reflected in the net cash flow from financing activities.

Derivative financial liabilities predominantly include negative market values for currency futures presented in hedge accounting.

The following table shows the development of the SMA group's liabilities including cash-effective and non-cash changes:

in €'000	Financial liabilities	Lease liabilities
Balance sheet as of January 1, 2021	**12,019**	**29,115**
Redemption of loans granted	3,060	0
Payments for lease liabilities	0	7,292
Non-cash additions to financial liabilities	7,021	0
Non-cash additions to leases	0	10,408
Other non-cash movements and interest	–11	–1,805
Effects of changes in exchange rates	0	261
Balance sheet as of December 31, 2021	**15,969**	**30,687**

in €'000	Financial liabilities	Lease liabilities
Balance sheet as of January 1, 2020	**15,429**	**18,971**
Redemption of loans granted	3,810	0
Payments for lease liabilities	0	8,562
Additions to leases	0	18,306
Other non-cash movements and interest	400	200
Effects of changes in exchange rates	0	200
Balance sheet as of December 31, 2020	**12,019**	**29,115**

21. Trade payables

Trade payables are non-interest bearing and are nor-mally due within 30 to 90 days.

22. Other financial liabilities

The other financial liabilities include costs for preparing the financial statements and are due within one year.

23. Other liabilities

in €'000	2021/12/31	2020/12/31
Contract liabilities	222,629	219,426
Accrual item for extended warranties	165,545	165,744
Liabilities from prepayments received	24,206	22,560
Accruals for service and maintenance contracts	14,526	12,339
Other contract liabilities, current	18,352	18,783
Liabilities in the Human Resources department	17,644	25,554
Other non-financial liabilities, current	4,703	6,685
	244,976	**251,665**
Current	88,333	95,647
Non-current	156,643	156,018
	244,976	**251,665**

Contract liabilities (prepayments received) include prepayments and deliveries of goods. The decline is due mainly to the completion of a major project in the U.S. Other contract liabilities entail accrual items for extended warranties, service and maintenance contracts and bonus agreements. Non-current contractual obligations mainly include liabilities from chargeable extended warranties granted for products from the Home Solutions and Business Solutions business units. The fulfillment of the non-current contractual obligations will extend over a period of 5 to 15 years from the start of the extended warranties. Current contractual obligations mainly include prepayments received, accruals for service and maintenance contracts and bonus agreements. The current contractual obligations will mostly be fulfilled within the next 12 months.

In the fiscal year revenues in the amount of €22.4 million (2020: €89.7 million) were realized, which were included in the balance of contract liabilities at the beginning of the period.

Liabilities in the Human Resources department contain obligations to employees regarding performance-based bonuses and positive vacation and flextime balances, Christmas bonus as well as variable salary components and contributions to the workers' compensation association and to social insurance systems. Other miscellaneous liabilities include liabilities to tax authorities amounting to €3.3 million (2020: €2.3 million), which chiefly consist of tax liabilities from payroll accounting, and liabilities from subsidies received in the amount of €0.5 million (2020: €0.6 million), which include taxable government grants from funds of the common-task program "Improvement of the Regional Economic Structure" (EU GA), granted as investment subsidies.

Liabilities from bonus agreements with customers are also reported.

24. Additional disclosures relating to financial instruments

in €'000	Assessment category according to IFRS 9	2021/12/31 Book value	2020/12/31 Book value
Cash and cash equivalents	AC	113,978	123,707
Trade receivables	AC	142,674	121,872
Other financial assets		**136,350**	**175,573**
of which other financial investments	FVOCI	3	3
of which institutional mutual funds	FVPL	105,857	72,113
of which other (time deposits)	AC	30,490	98,867
of which other securities	FVPL	0	2,255
of which derivatives that do not qualify for hedge accounting	FVPL	0	2,335
Trade payables	AC	134,026	144,210
Financial liabilities		**46,656**	**41,133**
of which liabilities due to credit institutions	AC	8,362	11,422
of which lease liabilities	–	30,687	29,114
of which derivatives that do not qualify for hedge accounting	FVPL	7,607	597
Other financial liabilities	AC	**538**	**538**
Of which aggregated according to valuation categories in accordance with IFRS 9			
Financial assets measured at amortized cost	AC	287,142	344,446
Financial liabilities measured at amortized cost	AC	142,926	156,170
Financial assets measured at fair value through profit and loss	FVPL	105,857	76,703
Financial liabilities measured at fair value through profit and loss	FVPL	7,607	597
Fair Value through Other Comprehensive Income	FVOCI	3	3

The book values represent reasonable approximations of the fair values of the assets and liabilities, which is why a separate indication of the fair amounts is omitted. The fair value of liabilities to credit institutions also differs only insignificantly from the book value.

Cash and cash equivalents, trade receivables and time deposits mainly have short terms to maturity. Accordingly, their book values on the reporting date were almost identical to their fair value.

The fair values of other non-current receivables correspond to the present values of the payments related to the assets while taking into account current interest parameters, which reflect market- and partner-related changes in conditions and expectations (level 2).

Other financial investments relate to investments not included in the scope of consolidation.

Trade payables and other current financial liabilities normally have short terms to maturity. The recognized values are almost identical to the fair values.

Fair values of other non-current financial liabilities are determined by referring to the present values of the payments associated with the debts. For discounting, term-related commercially available interest rates are used (level 2).

For most borrowings, the fair values are not materially different from the book values, as interest payments on these borrowings are either close to current market rates or borrowing is short-term.

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options inside and outside of hedge accounting. In principle, these instruments are only used for hedging purposes. As is the case with all financial instruments, they are recognized at fair value upon initial recognition. The fair values are also relevant to subsequent measurements. The fair value of traded derivative financial instruments is identical to the market value. This value may be positive or negative. The measurement of forward transactions is based on forward contract rates. The parameters that were used in the valuation models are in line with market data.

The "Other securities" item was originally reported due to the earn-out provisions granted in connection with the sale of the Chinese SMA New Energy companies.

The previous year's figure of €2.3 million increased by €0.7 million due to the intra-year fair value measurement and was written back in full due to a buy-out agreement concluded in the fiscal year.

The buyer made payments totaling €12.9 million in the reporting year. The surplus amount was recognized in income under other operating income.

The following table shows the allocation of our financial assets and liabilities measured at fair values in the balance sheet, using the three levels of the fair value hierarchy:

in €'000

2021	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets, measured at fair value				
Institutional mutual funds	105,857	0	0	105,857
Other financial investments	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	7,607	0	7,607
2020				
Financial assets, measured at fair value				
Institutional mutual funds	72,113	0	0	72,113
Other securities	0	0	2,255	2,255
Derivative financial instruments	0	2,335	0	2,335
Other financial investments	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	597	0	597

The levels of the fair value hierarchy and their application to our assets and liabilities are described below.

Level 1: Quoted prices for identical assets or liabilities in active markets

Level 2: Inputs other than quoted prices that are observable directly (e.g., prices) or indirectly (e.g., derived from prices)

Level 3: Inputs that are not based on observable market data for assets and liabilities

The 2021 net results for financial instruments are as follows:

in €'000	From interest	From subsequent measurement		From disposal	Net result
		Currency translation	Value corrections/ market value fluctuations		
Financial assets measured at amortized cost (AC)	–629	8,897	334	–88	8,514
Financial liabilities measured at amortized cost (AC)	–24	0	0	0	–24
Financial assets measured at fair value through profit and loss (FVPL)	–862	0	–5,858	–5,433	–12,153
Financial liabilities measured at fair value through profit and loss (FVPL)	–784	0	11	0	–773
Total	**–2,299**	**8,897**	**–5,513**	**–5,521**	**–4,436**

The 2020 net results for financial instruments are as follows:

in €'000	From interest	From subsequent measurement		From disposal	Net result
		Currency translation	Value corrections/ market value fluctuations		
Financial Assets Measured at Amortised Cost (AC)	295	–10,515	706	539	–8,975
Financial Liabilities Measured at Amortised Cost (AC)	–38	0	0	0	–38
Financial Assets Measured at Fair Value through Profit and Loss (FVPL)	–907	0	916	1,930	1,939
Financial Liabilities Measured at Fair Value through Profit and Loss (FVPL)	–171	0	45	0	–126
Total	**–821**	**–10,515**	**1,667**	**2,469**	**–7,200**

Interests from financial instruments are shown in the financial result. The SMA group recognizes other components of the net result in other operating expenses and other operating income.

In detail, the nominal payment obligations of financial liabilities are as follows:

in €'000	Book value	Total cash flows	< 1 year	1 to 3 years	4 to 5 years	> 5 years
2021						
Trade payables	134,026	134,026	133,956	70	0	0
Financial liabilities	46,656	51,058	18,596	16,882	8,258	7,322
of which from liabilities due to credit institutions	8,362	8,947	2,674	4,130	2,143	0
of which from lease liabilities	30,687	34,504	8,315	12,752	6,115	7,322
of which from derivatives outside of hedge accounting	7,607	7,607	7,607 [1]	0	0	0
Other financial liabilities	538	538	538	0	0	0
2020						
Trade payables	144,210	144,210	144,210	0	0	0
Financial liabilities	41,133	46,376	12,295	14,495	13,585	6,001
of which from liabilities due to credit institutions	11,422	12,333	3,402	4,760	3,850	321
of which from lease liabilities	29,114	33,446	8,296	9,735	9,735	5,680
of which from derivatives outside of hedge accounting	597	597	597	0	0	0
Other financial liabilities	538	538	538	0	0	0

1 Contains the net cash flow from forward exchange transactions amounting to €7,607k, providing a gross fulfillment. Payment obligations amount to €179,050k, payment claims amount to €171,443k. The closing rate was used for the conversion of the foreign currency transactions.

An average interest rate of 2.54% was used to calculate future cash flows from liabilities due to credit institutions.

25. Other financial liabilities

At the end of the reporting period, other financial liabilities to third parties under the purchase order commitment for investment orders placed amounted to €5.0 million (2020: €4.6 million). There were financial liabilities for intangible assets amounting to €7.5 million (2020: €8.8 million). Obligations from leasing contracts for short-term and low-value leasing objects exist in the amount of €1.5 million (2020: €0.9 million), the other financial obligations are within the normal business practice.

26. Contingencies

As of December 31, 2021, there were no changes compared to the previous year (€0.05 million).

27. Cash and cash equivalents reconciliation

For purposes of the Consolidated Statement of Cash Flows, cash and cash equivalents include cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months. Cash and cash equivalents at the end of the fiscal year, as presented in the Consolidated Statement of Cash Flows, can be reconciled to the corresponding items of the Consolidated Balance Sheet as follows:

in €'000	2021	2020
Cash on hand and bank balances	113,690	123,680
Short-term deposits (maturity < 3 months)	288	27
	113,978	**123,707**

The SMA group does not have direct access to the financial resources reported in the balance sheet item "Rent deposits and cash on hand pledged as collaterals."

Other disclosures

28. Events after the balance sheet date

In March 2022, an agreement was reached regarding the termination of an operation and maintenance service contract for PV power plants (O&M). The effects of the agreed early termination of this contract were taken into account in the consolidated financial statements as at December 31, 2021.

At the beginning of March 2022, considerable uncertainties came to light regarding the growth forecasts made by IMF experts in January: The escalation of the conflict between Russia and Ukraine and the resulting sanctions against Russia will have a substantial impact on the global economy and financial markets, which will also affect other countries. The Managing Board currently sees no threat to the forecast due to the war in Ukraine. A conclusive assessment is currently not possible.

29. Related party disclosures

According to the definition contained in IAS 24, related persons are persons responsible for planning, controlling and monitoring the company's activities. Related persons include the members of the Managing Board and the Supervisory Board of SMA Solar Technology AG as well as their close relatives. Danfoss A/S and elexon GmbH, based in Aachen, Germany, belong to the group of related entities. The controlling shareholder of Danfoss A/S is Bitten og Mads Clausens Fond, which is allocated the shares held by Danfoss A/S in accordance with Section 39 of the German Securities Trading Act (WpHG).

Related persons:

On the SMA Solar Technology AG Managing Board, Chief Executive Officer Dr.-Ing. Jürgen Reinert is responsible for Strategy, Sales and Service, Operations and Technology. Ulrich Hadding is in charge of Finance, Human Resources and Legal.

Dr.-Ing. Jürgen Reinert sits on the supervisory board of Danfoss A/S, Denmark, and in the advisory committee of KraftPowercon, Sweden.

In the fiscal year under review, the members of the Supervisory Board of SMA Solar Technology AG were as follows:

Shareholder Representatives:
Uwe Kleinkauf,
General Manager WELL development GmbH,
Chairman

Kim Fausing,
General Manager and CEO Danfoss A/S,
Deputy Chairman

Roland Bent,
Chief Representative International Standardization,
Phoenix Contact GmbH & Co. KG

Jan-Henrik Supady,
Managing Partner at Liesner & Co. GmbH

Alexa Hergenröther,
Tax Consultant/General Manager

Ilonka Nußbaumer,
Senior Vice President,
Head of Group HR Danfoss A/S.

Employee Representatives:
Johannes Häde

Yvonne Siebert

Dr. Matthias Victor

Martin Breul

Oliver Dietzel,
Trade Union Secretary

Romy Siegert,
Trade Union Secretary

Remuneration of key management members of the group, which must be disclosed under IAS 24, includes remuneration of the Managing Board and the Supervisory Board.

The total compensation of the members of the Managing Board amounted to €1.8 million in the reporting year (2020: €2.8 million. All salary components are classified as short-term benefits in accordance with IAS 24.17. The Managing Board members receive no separate remuneration for carrying out tasks at subsidiaries.

The total compensation of the members of the Supervisory Board amounted to €0.4 million in the reporting year under review (2020: €0.4 million). Of this amount, €0.3 million (2020: €0.3 million) was attributable to non-performance-related fixed compensation and €0.1 million (2020: €0.1 million) to compensation for committee activities. As in the previous year, no variable compensation is included. Kim Fausing and Ilonka Nußbaumer renounce their claims against society. The union representatives pay their salaries. The compensation for members of the Managing Board and Supervisory Board is presented individually in a separate remuneration report in accordance with the recommendations of the Corporate Governance Code.

Members of the Supervisory Board hold the following positions in statutory supervisory boards and similar controlling bodies of commercial enterprises:

Kim Fausing, member of the board at Hilti AG, Liechtenstein, member of the board at LafargeHolcim AG, Switzerland.

Related entities:

On May 28, 2014, SMA concluded an agreement regarding a close strategic partnership with Danfoss A/S. As part of this partnership, Danfoss acquired a 20% stake in SMA and therefore belongs to the group of related entities. SMA entered into a strategic partnership with Danfoss in the areas of purchasing, sales and research and development. SMA also performs services on behalf of Danfoss. All agreements were concluded under fair market conditions. The business relationships between SMA and Danfoss in the fiscal year are presented in the table below. There is no material collateralization nor are there guarantees. No impairment losses were recognized from transactions with Danfoss.

in € million	2021	2020
Goods acquired by SMA	1.7	30.1
Services acquired by SMA	0.8	5.8
Services sold by SMA	0.0	0.0
Outstanding receivables at the end of the year	0.0	0.0
Outstanding liabilities at the end of the year	0.0	1.9

Furthermore, elexon GmbH is recognized as a joint venture. It is a joint venture in the field of charging infrastructure facilities, in which the SMA group holds a 42.00% stake.

in € million	2021	2020
Goods acquired by SMA	0.1	0.1
Goods sold by SMA	0.2	0.0
Outstanding receivables at the end of the year	2.0	2.0

30. Objectives and methods concerning financial risk management

Financial risk management is integrated into the group-wide hedging policy. Deliberate treatment of potential risks and sound control as well as successful management of such risks when they occur are supported by an accompanying information and communication policy as well as by further education and training of employees. The principle underlying the group's hedging policy in the financial field is to protect against significant price, currency and interest risks by means of contracts and hedging transactions to an economically reasonable extent.

The financial instruments of the group relate primarily to trade receivables and cash resulting directly from operating activities. In addition, there is a particular amount of trade payables that also arise from operating activities. The group also uses derivative financial instruments as part of exchange and interest rate hedging. The group's main risks in relation to financial instruments are interest-based cash flow risks as well as liquidity, currency and credit risks. The strategies and procedures for controlling individual types of risks defined in the context of the group's overall hedging policy are presented below.

INTEREST RATE RISK

Interest rate risks within the SMA group mainly arise in the case of financial liabilities and non-current portions of certain provisions. Interest on liabilities and provisions is not paid by the contracting party and is therefore discounted at the interest rate usual in the market, which means that there is no separate control of the interest rate risk. The variable interest-bearing portion of existing financial liabilities was secured through an interest rate swap and was also repaid in 2021. The interest on existing financing is hedged on a long-term basis and can thus be calculated over the contract's term. As of the balance sheet date, no such financial instruments were held.

FOREIGN CURRENCY RISK

As a globally active company, the SMA group is exposed to both transaction-related and translation-related foreign currency risks.

SMA assesses risks from an economical point of view. Using this point of view, foreign currency risks arise in the form of direct transaction risks that derive from any (current or planned) receivable or payable denominated in a foreign currency and the resulting payment flow. The SMA group's extensive business activity in North America means that foreign currency risks arise to a great extent in USD. In light of the fact that a pro-rata portion of the local added value attributable to the North American companies and supplier contracts based on USD is generated locally and sales in the local currency are balanced by expenditure in the local currency, the operational foreign currency risk in the SMA group is limited.

Currency risks also arise in particular from the sales activity of our Australian subsidiary.

An intra-group guideline ensures that SMA companies report their foreign currency risks to Corporate Treasury, provided there are no country-specific restrictions in this regard. The remaining group-wide risk is hedged by Corporate Treasury through the use of currency derivatives concluded externally with banks. Forward exchange transactions are the most commonly used method in this case. The use of options as part of the hedging strategy is also possible.

Translation risks mainly occur when the assets and liabilities of subsidiaries denominated in a foreign currency are converted to the parent company's domestic currency when preparing the Consolidated Financial Statements. Translation risks are not included within the scope of the active control of foreign currency risks.

Items denominated in foreign currencies and the development of the exchange rate of those currencies are monitored continuously and the risks are hedged, provided this is economically reasonable. The risks from hedging transactions in themselves are limited to the possibility that opportunities arising from a better price performance cannot be realized.

To present market risks, IFRS 7 requires sensitivity analyses which show the effects of hypothetical changes in relevant risk variables on earnings and equity. Currency risks are caused by financial instruments that are denominated in a currency other than the functional currency and which are of a monetary nature; differences related to exchange rates from the translation of financial statements into the group currency are not taken into account. The USD, JPY and AUD are relevant risk variables. The currency sensitivity analysis is based on original financial instruments in the form of receivables. Through the use of hedging transactions (derivatives), which are designed to hedge the underlying transaction, the opposing effects that accompany changes in the exchange rates are evened out. Measurement of the hedging transactions concluded for the 2021 fiscal year results in a negative contribution to earnings of -€7.6 million from fair value measurement (2020: €1.7 million). There are no direct effects on equity.

An increase of 5% in the euro with respect to the USD on December 31, 2021, would have led to a positive change in the currency derivatives of €5.1 million (2020: €4.4 million). A decrease of 5% in the euro on December 31, 2021, would have led to a reduction in the value of the currency derivatives of –€8.6 million (2020: –€0.5 million).

An increase of 5% in the euro with respect to the AUD on December 31, 2021, would have led to a positive change in the currency derivatives of €2.3 million (2020: €0.2 million). A decrease of 5% in the euro on December 31, 2021, would have led to a reduction in the value of the currency derivatives of –€2.9 million (2020: –€1.7 million).

As of December 31, 2021, the currency hedges related to EUR/USD and EUR/AUD.

As of December 31, 2021, there were no currency hedgings that were shown in hedge accounting as in the previous year.

Pursuant to IFRS, currency risks affect monetary financial instruments that are denominated in a foreign currency (i. e., in a currency other than the functional currency). This means that the foreign currency is the relevant risk variable. Translation-related risks are not taken into account. Because the individual group companies mainly conduct their operative business in their own functional currency, we rate the risk from exchange rate fluctuations resulting from our ongoing business activity as insignificant.

CREDIT RISK

For all deliveries to customers, collateral is requested depending on the volume of the respective transaction and the specific customer and country risk. Data from the customer's previous business relationship, including payment practices and additional credit reports, are also used to avoid non-payment. In addition, the group performs a customer credit check, which is based on certain financial key ratios. By setting a credit limit in a timely manner or suspending orders, the group avoids being exposed to a significant risk of non-payment. If possible, the default risk is also limited by commercial credit insurance. The maximum non-payment risk is limited to the book value disclosed in Section 14. Trade receivables and other receivables. There are no major concentrations of non-payment risks within the group.

With respect to all of the group's other financial assets, such as cash and cash equivalents, available-for-sale financial investments and derivative financial instruments, the maximum credit risk, should the counterparty fail to pay, corresponds to the book value of these instruments. This counterparty default risk is analyzed on a continuous basis and managed by means of corresponding business allocation – also considering potential opportunities – with regard to cluster risks and credit risks.

LIQUIDITY RISK

One element of liquidity protection is the credit line of €100 million agreed upon with three domestic banks in 2016. The term of this credit line was successfully extended in 2021. At the end of 2021, the credit line was only utilized in the form of guarantee credits.

The company uses financial planning tools for early detection of future liquidity requirements. According to current planning, it can be assumed that the financial requirements will be covered in a reliably predictable time frame. Insurance contracts are concluded to hedge against the financial consequences of possible liability risks and damage claims, insofar as this is reasonable and possible. The cover provided by such contracts is reviewed and adapted regularly.

CAPITAL MANAGEMENT

The strategic objective of capital management within the SMA group is to ensure financial flexibility and independence to make rapid use of the opportunities in a photovoltaic market characterized by strong growth. Profitable employment of the capital is measured through regular monitoring of net working capital. Within the SMA group, net working capital is defined as the sum of inventories and trade receivables less trade payables. To be able to usefully measure relative capital consumption even in the event of strong corporate growth, net working capital is expressed in relation to sales. Through debtor management, which ensures that receivables are collected in good time, and linking inventories to sales as well as a constant dividend policy, the company positions itself to achieve its objectives of financial flexibility and independence. In accordance with our intra-group guidelines, the net working capital ratio determined in this way has to be below 25%. In the reporting year, the equity ratio of the SMA group was 39.0% (2020: 41.8%) and the net working capital ratio was 26.2% (2020: 20.5%).

31. Auditor's fees

The fees paid to the auditor and recorded as an expense in the year under review break down as follows:

in €'000	**2021**	**2020**
Financial statement auditing	680	513
Other audit-related services	68	0
Other services	50	12
	798	**525**

The cost of financial statement auditing comprises the fees for the audit of the Consolidated Financial Statements as well as for the audit of the Annual Financial Statements of SMA Solar Technology AG and its domestic subsidiaries, provided they are obligated to perform an audit pursuant to Section 316 of the German Commercial Code. The fees for other audit-related services include expenses for EMIR audits, the non-financial statement and the remuneration report. The other services were provided for the readiness check of the non-financial statement 2020.

32. Declaration on the German Corporate Governance Code in accordance with Section 161 AktG

The declaration required under Section 161 AktG on the recommendations issued by the Government Commission German Corporate Governance Code was given by the Managing Board and the Supervisory Board on December 8, 2021, and made permanently available to shareholders on the SMA website at www.SMA.de/en.

33. Consolidated Financial Statements

As the supreme parent company, SMA Solar Technology AG prepared the Consolidated Financial Statements as of December 31, 2021, which are filed with the operator of the Electronic Federal Gazette and subsequently published in the Electronic Federal Gazette.

Niestetal, March 29, 2022

SMA Solar Technology AG
The Managing Board

Dr.-Ing. Jürgen Reinert   Ulrich Hadding

RESPONSIBILITY STATEMENT

We assure to the best of our knowledge that, in accordance with the applicable accounting standards, the Consolidated Financial Statements give a fair view of the net assets, financial position and results of operations of the group and that the Consolidated Management Report gives a fair view of the course of business including the results of operations and the group's position and describes the fundamental opportunities and risks of the probable development of the group.

Niestetal, March 29, 2022

SMA Solar Technology AG
The Managing Board

Dr.-Ing. Jürgen Reinert Ulrich Hadding

INDEPENDENT AUDITOR'S REPORT

To SMA Solar Technology AG, Niestetal

Note about the audit of the consolidated financial statements and combined management report

Audit opinion

We audited the Consolidated Financial Statements of SMA Solar Technology AG, Niestetal, Germany, and its subsidiaries (the group) – which consisted of the consolidated balance sheet as of December 31, 2021, consolidated income statement, consolidated statement of cash flows and the consolidated statement of changes in equity for the fiscal year from January 1 to December 31, 2021, as well as the Notes to the Consolidated Financial Statements, including a summary of the relevant accounting methods. In addition, we audited the Consolidated Management Report of SMA Solar Technology AG, Niestetal, including the Management Report of the parent company for the fiscal year from January 1 to December 31, 2021. The contents of the sections of the Combined Management Report mentioned in the annex to the auditor's report have not been audited in accordance with German law.

In our opinion, based on the findings of the audit:

→ The Consolidated Financial Statements attached comply with the IFRS as adopted by the EU in all material respects and the additional requirements of the German statutory provisions pursuant to Section 315e (1) of the HGB, and give a true and fair picture of the assets and financial position of the group as of December 31, 2021, and its results of operations for the fiscal year from January 1 to December 31, 2021, in accordance with these requirements.

→ On the whole, the Combined Management Report attached provides a suitable illustration of the group's position. In all material respects, this Combined Management Report is consistent with the Consolidated Financial Statements, complies with German statutory provisions and suitably presents the opportunities and risks of future developments. Our audit opinion on the Combined Management Report does not include the contents of the sections of the Combined Management Report mentioned in the annex to the auditor's report.

In accordance with Section 322 (3) Sentence 1 of the HGB, we declare that our audit did not raise any objections against the correctness of the Consolidated Financial Statements and the Combined Management Report.

Basis for the audit opinion

We performed our audit of the Consolidated Financial Statements and the Combined Management Report in accordance with Section 317 of the HGB and the EU regulation on statutory audits of public interest entities (no. 537/2014) in consideration of the generally accepted standards for financial audits in Germany as defined by the Institute of Public Auditors (IDW). Our responsibility under these provisions and standards is described in more detail in the "Responsibility of the auditor to check the Consolidated Financial Statements and the Combined Management Report" section of our auditor's report. We are independent of the group companies in compliance with EU law provisions, German commercial law and the German rules of professional conduct, and we have fulfilled our professional obligations applicable in Germany in accordance with these requirements. Furthermore, in accordance with Article 10, Paragraph 2 f) of the EU regulation on statutory audits of public interest entities, we declare that we did not render any prohibited non-audit services as per Article 5, Paragraph 1 of the EU regulation on statutory audits of public interest entities. We believe that the audit evidence we have obtained is sufficient and suitable to provide a basis for our audit opinion on the Consolidated Financial Statements and the Combined Management Report.

Key audit matters in the Consolidated Financial Statements audit

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Consolidated Financial Statements for the financial year from January 1, 2021 to December 31, 2021. These matters were considered as a whole in conjunction with our audit of the Consolidated Financial Statements and also taken into account when we formed our audit opinion. We do not provide a separate audit opinion on these matters.

Below, we outline the key audit matters from our point of view:

1. Realization of revenue on an accrual basis
2. Evaluation of the general warranty provision
3. Evaluation of inventories
4. Evaluation of a provision for an onerous contract

We have structured our presentation of these key audit matters as follows:

a) Description of key audit matter (including reference to related information in the Consolidated Financial Statements)

b) Auditing procedure

1. REALIZATION OF REVENUE ON AN ACCRUAL BASIS

a) Total sales of €983,671,000 are stated in the accounts from the supply of PV inverters and the associated equipment as well as service provisions and maintenance services. With this item of significant amount, there is a risk that the revenue will not be realized at the correct time, especially when close to the balance sheet date. Particularly with regard to the delivery of PV inverters, for which an Incoterm must be agreed upon as a delivery condition and according to which, unlike the standard process, the transfer of risk takes place only in the target country or with the shipment on board, there is the risk of premature revenue recognition. An additional risk regarding revenue recognition on an accrual basis results from the application of the rules of IFRS 15.

   Due to the risk of revenue recognition on a non-accrual basis in relation to IFRS 15 and the intrinsic fraud risk, we have defined the realization of revenue as a whole as well as in relation to certain Incoterms, in particular, as a key audit matter.

   Information from the legal representatives on sales can be found especially in the sections "Disclosures to the Accounting and Valuation Policies," "Significant Judgements, Estimates and Assumptions," "Segment Reporting," "Other Financial Liabilities" and "Other Liabilities" of the Notes to the Consolidated Financial Statements.

b) Prior to the risk assessment, we assessed the results of the internal audit concerning this matter. In our audit, we then evaluated the appropriate implementation of revenue realization, in particular through a structural and functional check of the sales process as well as by means of a substantial audit procedure in the form of random samples and analytical validation of the revenue split up according to business unit. With regard to the high-risk Incoterms, we accomplished cut-off audit procedures before and after the balance sheet date. We have verified the reliability of the processes implemented by carrying out random checks comparing the postings on the revenue accounts with the corresponding outgoing invoices along with the proof of delivery and have satisfied ourselves that the required evidence was recorded in accounting.

2. EVALUATION OF THE GENERAL WARRANTY PROVISION

a) In the Consolidated Financial Statements under the balance sheet item "Provisions," provisions for statutory warranties totaling €145,452,000 (i. e., 14% of the consolidated balance sheet total) are stated in the accounts, of which €117,407,000 represents general warranty risks and €28,045,000 represents individual circumstances.

   Because of the risk of an erroneous evaluation of the general warranty provision and due to the size of the amount, we identified the measurement of general warranty provisions as a key audit matter.

   Information from SMA Solar Technology AG's legal representatives on the general warranty provisions can be found in the sections "Disclosures to the Accounting and Valuation Policies," "Significant Judgements, Estimates and Assumptions" and "Provisions" in the Notes to the Consolidated Financial Statements.

b) In particular, we checked the completeness of historical warranty claims resulting from reported damage and made sure that allocation of the respective error patterns to the relevant equipment groups was correct. In addition, we examined the selected forecast method and reviewed it with regard to completeness and correctness of the quantity component (number of expected warranty cases). To assess the reliability of the estimates for error pattern frequency, we compared the historical forecasts with the actual events of damage in the past. Subsequently, we checked the accuracy of the calculation of costs for remediation of expected damage. To this end, we inspected the cost accounting for full allocation of warranty costs to the individual error patterns. More specifically, in the review of total costs per claim for each equipment group, we assured that recognition of direct costs was correct and inclusion of indirect costs was appropriate.

3. EVALUATION OF INVENTORIES

a) Inventories totaling €273,024,000 (i. e., 26% of the consolidated balance sheet total) are stated in the accounts. This takes into account additions to value adjustments amounting to €9,145,000, which were formed, in particular, due to special circumstances in relation to finished products and in the event of low inventory turnover. In addition, devaluations for discontinued products and surplus inventories of materials unrelated to specific products are included as these inventories are no longer likely to be used in the production process based on the days in inventory analysis performed. SMA Solar Technology AG uses a time horizon of 36 months for the usage of the item to calculate excess inventories. In the case of stock items that are used exclusively in a discontinued product and are also not required by Service, a value adjustment is carried out for their full value.

   We determined this as a key audit matter because impairments and risks resulting from the scope for decisions of judgement in the inventory valuation regarding this item of significant amount for the Consolidated Financial Statements are considerable.

   Information from SMA Solar Technology AG's legal representatives on the inventory value adjustments can be found in the sections "Disclosures to the Accounting and Valuation Policies" and "Inventories" of the Notes to the Consolidated Financial Statements.

b) As part of the audit of the valuation of the inventories, we attached particular importance to performing a structural and functional check to assess the valuation of the moving average price. We also assessed the correct use of the group-specific devaluation regulations by the system within the scope of testing the lowest values according to turnover for raw materials, consumables and supplies as well as unfinished and finished goods. In the case of materials that have been discontinued or that are part of a discontinued product, we were satisfied with the correct execution of the exclusivity test, which is performed by Supply Chain Management in collaboration with Controlling and Procurement and forms the basis for the respective discontinuation as well as the days in inventory analysis, including the resulting value adjustments posted. Subsequently, we checked whether the devaluations determined from the lowest value tests were considered to be correct and complete as per the inventory valuation.

4. EVALUATION OF A PROVISION FOR AN ONEROUS CONTRACT

a) In the Consolidated Financial Statements, a provision for anticipated losses for an onerous contract for operation and maintenance services in North America totaling €47,414,000 (i.e. 4.5% of the consolidated balance sheet total) is reported under the balance sheet item "Provisions." This relates to a service contract that was terminated early by the contracting parties through a termination agreement at the end of March 2022, effective as of December 31, 2022. On March 1, 2022, the legal representatives published an ad hoc disclosure regarding the adjusted guidance for fiscal year 2021 due to the pre-contractual agreement on the extraordinary termination of the service contract.

   Due to the risk of incomplete consolidation of expenses incurred as well as the incorrect exercise of discretionary leeway and estimates by legal representatives in connection with the measurement of this provision and due to the amount, we determined the measurement of this provision to be a key audit matter.

   Information from SMA Solar Technology AG's legal representatives on the provisions can be found in the sections "Significant judgements, estimates and assumptions" and "Provisions" in the Notes to the Consolidated Financial Statements and in the sections "Results of operations," "Net assets" and "Sales and earnings per segment" of the Combined Management Report.

b) In particular, we examined compliance with the requirements of IAS 37.66 et seq. for the measurement of onerous contracts. For this purpose, the amount of an impending loss was verified by our assessment of the complete and correct inclusion of income and expenses in connection with the early termination of the contract. During our audit, we assessed the termination agreement, which was signed with legally binding effect at the end of March 2022.

   We compared the parameters taken into account in the model developed by the legal representatives with the contents of the original contract and the termination agreement and checked the plausibility of the assumptions with regard to the discretionary leeway exercised and estimates made, taking into account the historical value contributions from the service contract and the expectations derived from them of the economic development up to the termination of the contract. We conducted interviews with the legal representatives and the project managers involved in the negotiations on the termination agreement and inspected and critically analyzed the documents submitted by them, such as draft contracts for the termination agreement, the ad hoc disclosure, accompanying calculations, transcripts from the contract negotiations, minutes of discussions, Managing Board meeting minutes and Supervisory Board minutes. Assumptions were made based on these factors. On the whole, we have assessed in the course of our audit whether the methods applied, assumptions made and data used by the legal representatives can be judged to be reasonable.

Furthermore, with the involvement of our valuation specialists, we have built our own calculation model to quantify our expectation regarding possible future scenarios determined independently of the company's model. We calculated sensitivities for all parameters included in the model, which were subject to estimates, and in this way determined different scenarios, which we compared with the company's calculation. In doing so, we assessed whether the range of possible future cash outflows indicated by the company and the value recognized in the provision are consistent with the sensitivity analyses we performed. We have also verified that the relevant disclosures in the Notes to the Consolidated Financial Statements are complete and correct.

Other information

The legal representatives and the Supervisory Board are responsible for other information. The other information contains:

→ The Supervisory Board Report

→ The Remuneration Report

→ The sections of the Combined Management Report mentioned in the annex to the auditor's report, the content of which has not been audited

→ The responsibility statement of the legal representatives according to Section 297 (2) Sentence 4, resp. Section 315 (1) Sentence 5 of the HGB on the Consolidated Financial Statements and Combined Management Report

→ All the other sections of the Annual Report

→ Excluding the Consolidated Financial Statements, information in the Combined Management Report, the content of which has not been audited, and our associated auditor's report.

The Supervisory Board is responsible for the Supervisory Board Report. The legal representatives and the Supervisory Board are responsible for the Corporate Governance Statement in accordance with Sections 289f and 315d HGB that is included in the "Corporate Governance Report" section of the Combined Management Report and the Remuneration Report according to Section 289a (2). In addition, the legal representatives are responsible for other information.

Our audit opinions on the Consolidated Financial Statements and the Combined Management Report do not extend to the other information and, accordingly, we do not provide an audit opinion or any other kind of audit conclusion on them.

In connection with our audit, we have a responsibility to read the other information mentioned above and, in doing so, to assess whether the other information

→ demonstrates any significant inconsistencies with the Consolidated Financial Statements, the information in the Combined Management Report, the content of which has been audited, or the knowledge that we have acquired from the audit, or

→ otherwise appears incorrect.

Responsibility of the legal representatives and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The legal representatives are responsible for the preparation of the Consolidated Financial Statements, which comply with the IFRS as applicable in the EU and the additional statutory regulations applicable in Germany as per Section 315e (1) of the HGB in all material respects, and for ensuring that the Consolidated Financial Statements give a true and fair picture of the net assets, financial position and results of operations of the group in compliance with these requirements. Furthermore, the legal representatives are responsible for the internal controls they have deemed necessary to enable preparation of Consolidated Financial Statements that are free of material misstatements, whether intentional or unintentional.

When preparing the Consolidated Financial Statements, the legal representatives are responsible for assessing the group's ability to continue with its business activity. In addition, they are in charge of disclosing any matters related to the continuation of the business activity, where relevant. Furthermore, they are responsible for reporting on the continuation of the business activity based on the accounting policy unless there is an intention to liquidate the group or cease business operations, or if there is no realistic alternative.

The legal representatives are also responsible for preparing the Combined Management Report, which provides an accurate view of the group's position overall, is consistent with the Consolidated Financial Statements in all material respects, complies with German law and suitably presents the risks and opportunities of future development. Moreover, the legal representatives are responsible for the precautions and measures (systems) that they considered necessary to enable the preparation of a Combined Management Report in compliance with the applicable legal regulations in Germany and the provision of suitable evidence for statements made in the Combined Management Report.

The Supervisory Board is responsible for monitoring the accounting process of the group for preparing the Consolidated Financial Statements and the Combined Management Report.

Responsibility of the auditor to check the Consolidated Financial Statements and the Combined Management Report

Our aim is to obtain reasonable assurance about whether the Consolidated Financial Statements as a whole are free of material misstatements – whether intentional or unintentional – as well as whether the Combined Management Report provides an accurate view of the group's overall position, is consistent with the Consolidated Financial Statements and any knowledge gained from the audit in all material respects, complies with German law, suitably presents the risks and opportunities of future development, and to provide an auditor's report containing our audit opinions on the Consolidated Financial Statements and the Combined Management Report.

Reasonable assurance is a high degree of certainty but no guarantee that an audit performed in compliance with Section 317 of the HGB and the EU regulation on statutory audits of public interest entities in consideration of the generally accepted standards for financial audits in Germany as defined by the Institute of Public Auditors (IDW) will always reveal a material misstatement. Misstatements may result from inaccuracies or infringements and are considered material if it could be reasonably expected for them to influence the economic decisions made by the addressees, whether individually or as a whole, based on these Consolidated Financial Statements and Combined Management Report.

During the audit, we exercise professional judgement and maintain a critical stance. Furthermore:

→ We identify and assess the risks of material misstatements – whether intentional or unintentional – in the Consolidated Financial Statements and the Combined Management Report, plan and implement audit procedures as a response to these risks and gather audit evidence that is sufficient and appropriate to serve as the basis for our audit opinions. The risk that material misstatements will not be revealed is higher in the event of infringements as opposed to inaccuracies because infringements may include fraudulent collaboration, forgeries, intentional incompleteness, misleading representations, or the bypassing of internal controls.

→ We gain an understanding of the internal control system relevant to the audit of the Consolidated Financial Statements and of the precautions and measures relevant to the audit of the Combined Management Report in order to plan audit activities that are appropriate for the given circumstances. However, we do not aim to provide an audit opinion on the effectiveness of these systems.

→ We assess the appropriateness of the accounting methods applied by the legal representatives as well as the tenability of the values estimated by the legal representatives and the related information.

→ We draw conclusions about the appropriateness of the accounting policy for the continuation of business activity used by the legal representatives and, based on the audit evidence acquired, whether a material uncertainty exists in connection with occurrences or circumstances, which may raise significant doubts about the ability of the group to continue with its business activity. If we reach the conclusion that a material uncertainty exists, we are obliged to draw attention to the relevant information in the Consolidated Financial Statements and the Combined Management Report in the auditor's report or, if these statements are inadequate, modify our respective audit opinion. We draw our conclusions based on the audit evidence obtained up to the date of our auditor's report. However, future occurrences or circumstances can result in the group no longer being able to continue with its business activity.

→ We assess the overview, structure and content of the Consolidated Financial Statements, including the information provided, and check whether the Consolidated Financial Statements present the underlying business transactions and occurrences in such a way that the Consolidated Financial Statements give a true and fair picture of the net assets, financial position and results of operations of the group in accordance with the IFRS as applicable in the EU and the additional statutory regulations applicable in Germany as per Section 315e (1) of the HGB.

- We obtain sufficient and appropriate audit evidence for the accounting information of the companies or business activities within the group in order to provide audit opinions on the Consolidated Financial Statements and the Combined Management Report. We are responsible for guiding, monitoring and implementing the audit of the Consolidated Financial Statements. We bear sole responsibility for our audit opinions.

- We assess the correlation of the Combined Management Report with the Consolidated Financial Statements, its compliance with the law and the view of the group's position conveyed by it.

- We subject the forward-looking statements presented by the legal representatives in the Combined Management Report to audit procedures. In particular, we use sufficient and suitable audit evidence to trace the significant assumptions on which the forward-looking statements are based and assess the proper deduction of the forward-looking statements stemming from these assumptions. We do not provide a separate audit opinion on the forward-looking statements or the underlying assumptions. There is a significant unavoidable risk that future occurrences may differ significantly from the forward-looking statements.

Among other things, we discuss the planned scope and timing of the audit with those responsible for overseeing it as well as significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We provide those responsible for overseeing the audit with a declaration that we have met the relevant independence requirements and discuss with them all the relationships and other circumstances that could reasonably be expected to affect our independence and the precautions taken for this purpose.

From the matters we discussed with those responsible for overseeing the audit, we determine those that were most significant to the audit of the Consolidated Financial Statements for the current reporting period and are therefore the key audit matters. We describe these key audit matters in the auditor's report unless the public disclosure of a key matter is ruled out by law or other statutory provisions.

Other legal and statutory requirements

Note about the audit of the electronic reproductions of the Consolidated Financial Statements and of the Combined Management Report in accordance with Section 317 (3a) HGB that were prepared for purposes of disclosure.

Audit opinion

We have carried out an audit in accordance with Section 317 (3a) HGB with reasonable assurance as to whether the reproductions of the Consolidated Financial Statements and of the Combined Management Report (hereinafter also referred to as "ESEF documents") contained in the provided file, which has the SHA- 256 value C0644743526472A5E10130-FE29066C-F89A03C9F97E970D9A1E74EE1764 E0D6DE, and prepared for purposes of disclosure comply with the regulations of Section 328 (1) HGB for the electronic reporting format ("ESEF format") in all material respects. In accordance with the German statutory provisions, this audit extends only to the transfer of the information in the Consolidated Financial Statements and Combined Management Report to the ESEF format and therefore neither to the information contained in these reproductions nor to the information contained in the aforementioned file.

In our opinion, the reproductions of the Consolidated Financial Statements and the Combined Management Report contained in the aforementioned, provided file and prepared for purposes of disclosure comply with the regulations of Section 328 (1) HGB for the electronic reporting format in all material respects. Beyond this audit opinion and our audit opinions contained in the above "Note about the Audit of the Consolidated Financial Statements and Combined Management Report" concerning the enclosed Consolidated Financial Statements and the enclosed Combined Management Report for the fiscal year from January 1, 2021, to December 31,2021, we do not provide any audit opinion whatsoever on the information contained in these reproductions or on the other information contained in the aforementioned file.

Basis for the audit opinion

We carried out our audit of the reproductions of the Consolidated Financial Statements and of the Combined Management Report contained in the aforementioned, provided file in accordance with Section 317 (3a) HGB taking into account the draft audit standard of the Institute of Public Auditors (IDW) in Germany: "Auditing of electronic reproductions of financial statements and management reports prepared for purposes of disclosure in accordance with Section 317 (3a) HGB (IDW PS 410 (10.2021))." Our responsibility under these requirements is further described in the section "Responsibility of the auditor of the Consolidated Financial Statements for the audit of the ESEF documents." In carrying out the audit, we applied the requirements stipulated for a quality assistance system in the IDW's quality assurance standard "Quality assurance requirements in auditing practice" (IDW QS 1).

Responsibility of the legal representatives and the Supervisory Board for the ESEF documents

The company's legal representatives are responsible for preparing the ESEF documents with the electronic reproductions of the Consolidated Financial Statements and of the Combined Management Report in accordance with Section 328 (1) sentence 4 no. 1 HGB and for marking up the Consolidated Financial Statements in accordance with Section 328 (1) sentence 4 no. 2 HGB.

In addition, the company's legal representatives are responsible for such internal controls as they deem necessary to enable the preparation of the ESEF documents that are free from material violations, whether intentional or unintentional, of the requirements for the electronic reporting format stipulated in Section 328 (1) HGB.

The Supervisory Board is responsible for monitoring the preparation process of the ESEF documents as part of the accounting process

Responsibility of the auditor of the Consolidated Financial Statements for the audit of the ESEF documents

Our aim is to obtain reasonable assurance as to whether the ESEF documents are free from material violations, whether intentional or unintentional, of the requirements stipulated in Section 328 (1) HGB. During the audit, we exercise professional judgement and maintain a critical stance. Furthermore:

→ We identify and assess the risks of material violations of the requirements stipulated in Section 328 (1) HGB, whether intentional or unintentional, design and carry out audit procedures that respond to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion.

→ We gain an understanding of the internal controls relevant to the audit of the ESEF documents in order to design audit procedures that are appropriate in the circumstances, but not with the aim of expressing an opinion on the effectiveness of such control.

→ We assess the technical validity of the ESEF documents, i. e., whether the provided file containing the ESEF documents meets the requirements relating to the technical specification for this file stipulated in the Delegated Regulation (EU) 2019/815 in the version applicable on the date of the financial statements.

→ We assess whether the ESEF documents enable reproduction of the audited Consolidated Financial Statements and audited Combined Management Report with the identical content in XHTML format.

→ We assess whether marking up the ESEF documents with Inline XBRL technology (iXBRL) in accordance with Articles 4 and 6 of Delegated Regulation (EU) 2019/815, as applicable at the balance sheet date, enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Remaining information in accordance with Article 10 of the EU regulation on statutory audits of public interest entities

We were selected as the group auditor at the Annual General Meeting on June 1, 2021. We were commissioned by the Supervisory Board on June 17, 2021. We have worked continuously as a group auditor for SMA Solar Technology AG, Niestetal, since fiscal year 2009.

We hereby declare that the audit opinions contained in this auditor' s report conform with the additional report submitted to the audit committee in accordance with Article 11 of the EU regulation on statutory audits of public interest entities (auditor's report).

Other matters – use of the Auditor's Report

Our Auditor's Report should always be read in conjunction with the audited Consolidated Financial Statements and the audited Combined Management Report and the audited ESEF documents. The Consolidated Financial Statements and Combined Management Report converted to the ESEF format – including the versions to be published in the Federal Gazette – are merely electronic reproductions of the audited Consolidated Financial Statements and the audited Combined Management Report and do not replace them. In particular, the ESEF note and our audit opinion contained therein can only be used in conjunction with the audited ESEF documentation provided in electronic form.

RESPONSIBLE AUDITOR

The auditor responsible for the audit is Elmar Meier.

Annex to the auditor's report: Sections of the Combined Management Report, the content of which has not been audited

We have not audited the content of the following sections of the Combined Management Report:

→ The Corporate Governance Statement in accordance with Sections 289f and 315d HGB that is contained in the "Corporate Governance Report" section of the Combined Management Report

→ The non-financial statement according to Sections 289b to 289e and 315b and 315c of the HGB, which is contained in the "Non-Financial Statement" section of the Combined Management Report

→ The other sections of the Combined Management Report marked as unaudited.

Hanover, March 29, 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Thorsten Schwibinger	Elmar Meier
German Public Auditor	German Public Auditor

NOTE ABOUT THE AUDIT OF THE NON-FINANCIAL STATEMENT

Limited Assurance Report of the Independent Auditor Regarding the consolidated non-financial statement

To SMA Solar Technology AG, Niestetal

Our Engagement

We have performed a limited assurance engagement on the consolidated non-financial statement of SMA Solar Technology AG, Niestetal, (hereinafter referred to as "the Company") included in the Group Management Report, which is combined with the Management Report, for the fiscal year from January 1 to December 31, 2021 (here-inafter referred to as "non-financial reporting").

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the non-financial reporting in accordance with §§ 315c in conjunction with 289c to 289e German Commercial Code (HGB) and Article 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereafter referred to as "EU Taxonomy Regulation") and the delegated acts adopted thereon, as well as with their own interpretation of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon, as is presented in section "EU-Taxonomy" in the non-financial reporting.

These responsibilities of the executive directors include the selection and application of appropriate methods regarding non-financial reporting and the use of assumptions and estimates for individual non-financial disclosures which are reasonable under the given circumstances. In addition, the executive directors are responsible for internal controls they have determined necessary to enable the preparation of the non-financial reporting that is free from – intentional or unintentional – material misstatement due to fraudulent behavior (accounting manipulation or misappropriation of assets) or error.

Some of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon are still subject to considerable interpretation uncertainty and have not yet been officially clarified. Therefore, the executive directors have laid down their own interpretation of the EU Taxonomy Regulation and of the delegated acts adopted thereon in section "EU-Taxonomy" of the non-financial reporting. They are responsible for the selection and reasonableness of this interpretation. As there is the inherent risk that indefinite legal concepts may allow for various interpretations, evaluating the legal conformity is prone to uncertainty.

The accuracy and completeness of environmental data in the non-financial reporting is thus subject to inherent limitations resulting from the way how the data was collected and calculated and from assumptions made.

Independence and Quality Assurance of the Firm

We have complied with the German professional regulations on independence and other professional rules of conduct.

Our auditing firm applies the national statutory rules and professional announcements – particularly of the "Professional Charter for German Public Auditors and German Sworn Auditors" and of the IDW Quality Assurance Standard "Quality Assurance Requirements in Audit Practices" (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW) and does therefore maintain a comprehensive quality assurance system comprising documented regulations and measures in respect of compliance with professional rules of conduct, professional standards, as well as relevant statutory and other legal requirements.

Responsibilities of the Auditor

Our responsibility is to express a conclusion opinion on the non-financial reporting based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (ISAE 3000 (Revised)), adopted by the IAASB. This Standard requires that we plan and perform the assurance engagement so that we can conclude with limited assurance whether matters have come to our attention to cause us to believe that the non-financial reporting of the Company has not been prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in section "EU-Taxonomy" of the non-financial reporting.

The procedures performed in a limited assurance engagement are less in extent than in a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the auditor's professional judgment.

Within the scope of our limited assurance engagement, which we performed during the months from February to March 2022, we performed, among others, the following procedures and other work:

→ Gaining an understanding of the structure of the sustainability organization, and of the involvement of stakeholders

→ Inquiries of the executive directors and relevant personnel who have been involved in the preparation of the non-financial reporting, about the preparation process, about the internal control systems relating to this process, as well as about disclosures in the non-financial reporting

→ Identification of probable risks of material misstatements in the non-financial reporting

→ Analytical evaluation of selected disclosures in the non-financial reporting

→ Cross validation of the selected disclosures and the corresponding data in the consolidated financial statements as well as in the group management report

→ Assessment of the presentation of the disclosures

→ Evaluation of the process to identify taxonomy-eligible economic activities and the corresponding disclosures in the non-financial reporting

As the EU Taxonomy Regulation and the delegated acts adopted thereon contain indefinite legal concepts, it is necessary that the executive directors make an interpretation. The executive directors' assessment of their interpretation's legal conformity is subject to uncertainties, which, in this respect, is also true for our assurance engagement.

Auditor's Conclusion

Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial reporting of the company for the period from January 1, to December 31, 2021 has not been prepared, in material respects, in accordance with Secs. 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in section "EU-Taxonomy" of the non-financial reporting.

Restriction of Use and Liability

We would like to point out that the assurance engagement was carried out for the purposes of the company and the report is only intended to inform the company about the findings of the assurance engagement. Consequently, it may not be suitable for any purpose other than the above. The note is therefore not intended for third parties to make (financial) decisions based on it.

Our responsibility is solely towards the company and is also limited according to the "General Terms and Conditions for Auditors and Auditing Firms" of January 1, 2017 of the Institut der Wirtschaftsprüfer in Deutschland e.V. However, we do not accept or assume liability to third parties. Our conclusion of the assurance engagement is not modified in this respect.

Hanover, March 29, 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Thorsten Schwibinger German Public Auditor	Daniel Oehlmann German Public Auditor

REMUNERATION REPORT

The Remuneration Report provides detailed, personalized information about the remuneration granted and owed to the members of the Managing Board and Supervisory Board of SMA Solar Technology AG in the reporting year. In addition, the Remuneration Report summarizes the principles that are decisive when it comes to determining remuneration for the Supervisory Board and the Managing Board and also explains the remuneration structure and the emoluments payable. The Report meets the requirements of Section 162 of AktG. Further detailed information regarding the remuneration systems for the Managing Board and Supervisory Board members can be found on the company's website at http://www.sma.de/en.

Remuneration of the members of the Managing Board

A REVIEW OF THE FISCAL YEAR WITH REGARD TO REMUNERATION

In the reporting year, the Supervisory Board decided to approve adjustments to the remuneration system for the Managing Board, which had been in place since 2017, to take effect starting in the 2021 fiscal year. The adjustments made accounted for the new statutory requirements imposed by the Second Shareholder Rights Directive (ARUG II) as well as the new version of the German Corporate Governance Code. The adjusted remuneration system for the Managing Board (hereinafter referred to as the 2021 remuneration system) was put to a vote at the ordinary annual general meeting on June 1, 2021, in accordance with Section 120a (1) of AktG and approved by a majority of 84.45%. The 2021 remuneration system will be applied to future employment contracts with members of the Managing Board in the event of both the reappointment of an existing Managing Board member and the appointment of a new member. For appointments to the Managing Board already in progress, the company is applying the 2017 remuneration system on the basis of Section 26j (1), sentence 3 of the introductory legislation to the German Stock Corporation Act (EGAktG). This system was approved at the Annual General Meeting on May 23, 2017.

The major differences between the 2017 and 2021 remuneration systems can be summarized as follows:

Changes to the remuneration system

Subject	Previous regulation (2017 remuneration system)[1]	New regulation (2021 remuneration system)[1]
Variable remuneration: annual bonus	→ 40% EBT target (150% max.) → 30% sales target (150% max.) → 30% personal targets, e.g., quality, ESG (100% max.) → Cap at 100% fulfillment	→ 1st component: 40% EBIT target (150% max.) → 2nd component: 30% financial performance target (150% max.) → 3rd component: 30% two personal targets (150% max.), of which 50% from financial and 50% from non-financial performance criteria; non-financial criteria from ESG
Variable remuneration: long-term bonus	→ Average EBIT margin over three fiscal years → Overfulfillment not possible (cap at 100%) → Paid out after third fiscal year	→ One to two long-term financial performance targets over four fiscal years (150% max.) → Discretionary factor (0.8 to 1.2) for ESG targets → Overfulfillment possible up to 180% max. (cap including discretionary factor)
Maximum remuneration	→ No defined maximum remuneration, but an upper limit of 100% on short-term and long-term variable components, including in the event of overfulfillment of underlying targets	→ Maximum remuneration defined; implemented via limits on amounts paid out in variable remuneration
Share ownership guideline	→ Expectation for Managing Board members to invest portions of long-term bonuses in SMA shares	→ If short- and long-term bonuses > 100% à Obligation to invest 40% of amount in SMA shares
Change of control	→ Entitlement to severance pay if contract is terminated by mutual consent in the event of a change of control	→ No entitlement to severance pay if contract is terminated in the event of a change of control

1 The 2021 remuneration system will apply to future contracts for appointment or reappointment to the Managing Board. However, the 2017 remuneration system will continue to apply to existing positions. There are no changes to the way in which this will take place.

In the event of major changes to the remuneration systems, or at least every four years, the applicable remuneration system for the Managing Board of SMA Solar Technology AG will be submitted at the Annual General Meeting for approval.

PRINCIPLES BY WHICH REMUNERATION IS SET

The Supervisory Board as a whole is responsible for deciding the form that the remuneration system for the Managing Board takes and for setting the separate emoluments and other material contract elements. The Presidial Committee assists the Supervisory Board with this and prepares Supervisory Board resolutions. In arranging both the 2017 and 2021 remuneration systems, the Supervisory Board worked on the basis of the following parameters:

→ Making the system transparent and easy to understand

→ The company's financial situation and long-term sustainable development

→ Linking the interests of shareholders in the sustainable development of their stakes in the company to corresponding performance incentives for the members of the Managing Board

→ Ensuring that remuneration is competitive on the market for highly skilled executives

→ Basing remuneration on the assignments, responsibilities and success of each individual member of the Managing Board

→ Linking a significant proportion of overall remuneration to the achievement of ambitious long-term performance targets

→ Establishing an appropriate ratio of fixed remuneration to performance-based remuneration

→ Maintaining an appropriate level in both horizontal and vertical terms

In setting remuneration, the Supervisory Board diverged from the 2017 remuneration system in the following respects in the reporting year:

The use of the EBIT (rather than EBT) margin as the means of measuring the annual bonus and long-term variable remuneration, in contrast to the approved remuneration system as used in previous years, took place as a result of measurement being adjusted to the standard commonly used at stock corporations.

The change relative to the approved remuneration system to termination by the Managing Board member (rather than "termination by mutual consent") as a prerequisite for entitlement in the event of a change of control occurred because the envisaged mutual consent as a prerequisite for entitlement did not grant the Managing Board the intended freedom of choice in the event of a change of control.

The intended post-contract covenant not to compete for Managing Board members is no longer agreed, as this is suitable only to a limited extent for preventing any transfer of knowledge to a competing company. In view of the expenses on the part of the company associated with the post-contract covenant not to compete, the Supervisory Board therefore decided to discontinue the policy.

LINK BETWEEN REMUNERATION SYSTEM AND CORPORATE STRATEGY

The components of the 2017 and 2021 remuneration systems are essentially fixed remuneration, additional benefits, one-year variable remuneration and long-term variable remuneration. The link between these components and the corporate strategy is as follows:

Together with the other remuneration components, fixed remuneration and additional benefits form the basis for allowing the Managing Board to secure and retain for the long term the highly skilled members required for the development and implementation of the corporate strategy. Both components are intended to be competitive offers on the market for highly skilled Managing Board members.

One-year variable remuneration in line with the 2017 remuneration system is intended to motivate members of the Managing Board to achieve ambitious and challenging financial, operational and strategic objectives during a fiscal year. These objectives are based on the corporate strategy and, in addition to profitability and sales as the material key figures of an efficiently operating company, they incorporate further strategy-based objectives in the form of personal performance targets for the Managing Board members. The 2021 remuneration system follows on from the previous philosophy and sets a stronger incentive for Managing Board members by means of the potential for them to surpass objectives in a way that will then be reflected in their remuneration.

Multiyear variable remuneration under the 2017 remuneration system is indicative of the company's strategic approach of encouraging members of the Managing Board to secure and improve profitability and the value of the company on a long-term basis by setting ambitious objectives linked closely with the multi-year performance of the company's earnings. The evaluation period of three years stipulated for the 2017 remuneration system has helped to ensure that the Managing Board's actions are focused partly on the long-term development of the company. The 2021 remuneration system reinforces the emphasis on the long-term development of the SMA group by extending the evaluation period for multi-year variable remuneration to four years. Furthermore, additional strategic objectives can be incorporated into the performance criteria for the long-term variable portion and more weight can be given to sustainability objectives in particular via a discretionary factor.

SETTING OF TARGET REMUNERATION

When setting remuneration in accordance with the 2017 remuneration system, the Supervisory Board considers the general principles outlined in this section in particular, as well as the criteria for appropriate remuneration.

A twelfth of the agreed annual fixed remuneration is paid out each calendar month. If an employment contract begins or ends in the course of a fiscal year, the remuneration for that fiscal year will be paid out on a pro rata basis.

The fixed remuneration, like the other remuneration components, can be adjusted or reset for the duration of a new employment contract as part of the existing remuneration system for the members of the Managing Board. Furthermore, all remuneration components can be reviewed if the duties or responsibilities of a member of the Managing Board should change.

One-year variable remuneration is measured on the basis of two key group figures and one personalized performance factor based on the performance of the member of the Managing Board in question and the achievement of stakeholder objectives. The performance period is the fiscal year as defined by SMA Solar Technology AG.

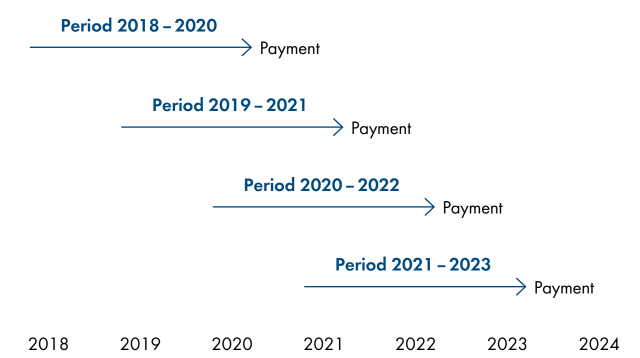
A personal target amount to be paid out upon 100% achievement of objectives is agreed in the employment contract of each member of the Managing Board. With regard to the target amount agreed, the Supervisory Board refers to the general principles outlined in the section "Principles by which remuneration is set". Objectives by which success is measured include the EBIT (earnings before interest and taxes) margin, the sales of the SMA group and the personal performance targets of the Managing Board members. The Supervisory Board sets the figures for these performance targets for the applicable fiscal year.

"EBIT margin" counts for 40% and "sales" and "personal performance" count for 30% each of the one-year variable remuneration. The "EBIT margin" and "sales" components can also be fulfilled up to 150%. If the annually defined lower limits of the respective components are not met, they are graded with a "0." If the sum of the percentages of the components reaches 100% or more, this entitles payment of the full agreed target amount. If the agreed targets are exceeded, this does not entitle to payment of an overall variable remuneration above 100%.

Multi-year variable remuneration is paid in accordance with the fulfillment of a performance target measured by average profitability over three consecutive fiscal years. The parameter used to measure this is the EBIT margin. A personal target amount to be paid out upon 100% achievement of objectives is agreed in the employment contract of each Managing Board member. With regard to the target amount agreed, the Supervisory Board also referred to the general principles outlined in the section "Principles by which remuneration is set".

The upper and lower limits of the target value (EBIT margin) are determined annually by the Supervisory Board for a period of three fiscal years. If the upper limit for the target value is reached, the member will be entitled to the full target amount. The Managing Board member is not entitled to the bonus until the lower threshold for the target value is reached. Values inbetween are determined on a linear basis. If the target value is exceeded, this does not entitle to payment of a higher long-term bonus (cap). The bonus is payable, at the very earliest, upon expiration of the three-year period. Payment takes place after the third Consolidated Financial Statements have been approved, usually at the end of March, even if the employment contract ends before the end of the performance period.

Installments for long-term variable remuneration (2017 remuneration system)

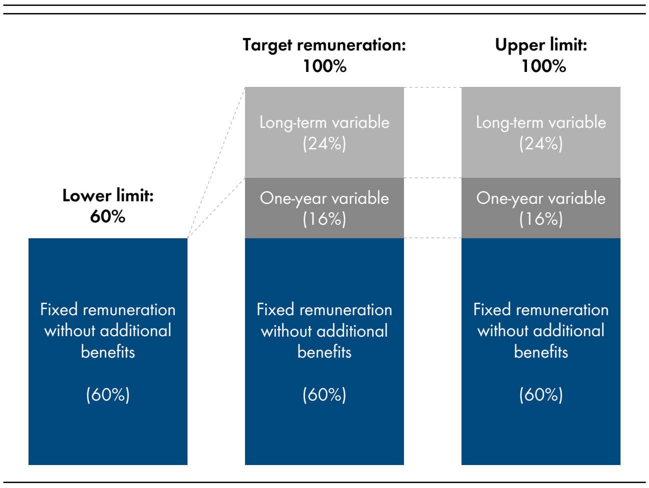


The Supervisory Board set a target value for the average EBIT margin for every period over the three year period.

ADHERENCE TO MAXIMUM REMUNERATION

The 2017 remuneration system to be applied to existing Managing Board contracts does not currently contain any expressly defined maximum remuneration. However, it does stipulate an upper limit of 100% of the agreed remuneration component for the variable portions of Managing Board salaries, and this cannot be exceeded even if the underlying targets are surpassed. Overall, therefore, payments from both one-year variable remuneration and multi-year variable remuneration are limited to 100% of the target amount per performance period.

Distribution of Managing Board remuneration
(2017 remuneration system)



The percentages provided are approximate values. When assessing the target amount of the respective component, a deviation of up to five percentage points is permitted.

In the 2021 fiscal year, the remuneration paid and owed to the Managing Board members fell short of the maximum possible remuneration, in particular, due to the fact that long-term targets were only partially achieved in 2020 [1]. Refer to the remuneration tables on page 151 et seq. for further details of remuneration paid and owed.

ASSESSMENT OF APPROPRIATENESS

The Supervisory Board used the disclosed remuneration figures of companies listed on the SDAX for comparison purposes when assessing if the remuneration for Managing Board members was appropriate.

It also included Managing Board remuneration in relation to remuneration of the top-level executives and the workforce as a whole, taking into account changes over time, and thus laid out comparable peer groups from top-level executives (employees at the first and second levels below the Managing Board working in Germany) and the workforce (all employees working in Germany).

APPLICATION OF THE REMUNERATION SYSTEM DURING THE FISCAL YEAR

Fixed remuneration components

According to the 2017 remuneration system, a twelfth of the agreed fixed annual remuneration is paid out each calendar month.

All Managing Board members are also entitled to the following additional benefits:

→ A company car, including for personal use; or, alternatively, a gross monthly vehicle allowance of €1,150

→ Reimbursement of travel costs and any expenses incurred on company business in accordance with the SMA Solar Technology AG travel expenses policy

→ Continued payment of remuneration for up to nine months in the event of temporary sick leave

→ Payment of the hypothetical employer's contribution up to the contribution assessment ceiling of the statutory social insurance scheme (pension, health, nursing care), even in the case of voluntary insurance and without any proof being furnished

→ Appropriate accident insurance

→ Appropriate directors and officers liability insurance ("D&O insurance") in case one or more members of the Managing Board should be subject to a claim for financial loss from a third party or the company based on statutory liability provisions under private law on the grounds of a breach of duty committed in the course of business. There is a deductible for D&O insurance of 10% of the damages up to a maximum of one and a half times the fixed annual remuneration

→ Criminal defense insurance covering the members of the Managing Board for legal expenses incurred in criminal and administrative proceedings if these relate to action or failure to act associated with their activities on behalf of SMA Solar Technology AG.

Any taxes due on additional benefits must be borne by the Managing Board member. The members of the Managing Board do not receive any extra payment for a private pension beyond the employer's contribution paid when the contribution assessment ceiling for statutory pension insurance is reached.

[1] According to the explanations of the IDW (Institute of Public Auditors in Germany) FAQ of December 21, 2021 for the preparation of the remuneration report

Variable remuneration components

The performance criteria for one-year and multi-year variable remuneration are based on the strategic objectives of the company. The SMA group's EBIT margin and sales serve as material performance criteria for variable remuneration. They are used to measure success as regards increasing profitability and efficiency while making optimized use of capital. The agreement of personal performance criteria for Managing Board members takes place in addition to the aforementioned performance criteria. This gives the Supervisory Board the option to promote the sustainability of the SMA group in a more targeted way while taking the interests of shareholders and other stakeholders into account.

One-year variable remuneration

In 2020, on the basis of the 2017 remuneration system, the Supervisory Board stipulated minimum, target and maximum figures for the key financial and, in the case of personal targets, selected issues of "managing net working capital" and "reducing quality costs" for variable remuneration for the one-year variable remuneration paid and owed in the reporting year. In doing so, the Supervisory Board ensured that the target values for the performance criteria were ambitious and challenging. The Supervisory Board set the financial targets for the 2020 fiscal year on the basis of the group's medium-term financial planning, meaning without considering any impact of the coronavirus crisis on business at the company – any such impact being impossible to foresee at the time the targets were set. No adjustments were made to the target values.

The target values for one-year variable remuneration and its weighting and the degree of fulfillment achieved for both Managing Board members in 2020, set at the same level, are presented below:

Target values and degree of fulfillment for one-year variable remuneration

Criterion and weighting	0% target	100% target	150% target	Actual figures in 2020	Degree of target fulfillment
Sales (30%)	€869.6 million	€1,087.0 million	€1,195.7 million	€1,026.6 million	94.4%
EBIT margin (40%)	0%	2.00%	3.00%	2.72%	136%
Personal target 1: NWC ratio (15%)	→ 22% NWC – ratio at end of year → 24% NWC – ratio on monthly average	→ 20% NWC – ratio at end of year → 22% NWC – ratio on monthly average	→ 19% NWC – ratio at end of year → 21% NWC – ratio on monthly average	→ 20.5% NWC – ratio at end of year → 23.8% NWC – ratio on monthly average	43%
Personal target 2: Quality costs (15%)	€117 million total quality costs	€110 million total quality costs	€106.5 million total quality costs	€108.9 million	116%

Long-term variable remuneration

The average EBIT margin actually achieved as a parameter for measuring long-term remuneration is calculated on the basis of the margins actually achieved in the fiscal years covered by the respective period. The degree of target fulfillment thus cannot be calculated, nor can any long-term remuneration be paid, until the respective period has finished. Any advance payments are not possible.

During the reporting year, the Supervisory Board regularly assessed the degree of target fulfillment of the common target value set for both Managing Board members for long-term Managing Board remuneration relating to the period from 2018 to 2020, as follows:

Target value and degree of fulfillment for multi-year variable remuneration

Criterion and weighting	0%	100%	Cap	Actual figure 2018 – 2020	Degree of target fulfillment
Average EBIT margin 2018–2020 (100%)	0% EBIT margin	3% EBIT margin	3% EBIT margin	–6.20%	0%

Share Ownership Guidelines

If the employment contract still has a term of at least two years to run when payment becomes due, then the Managing Board members are expected to invest the net amount payable, in part, in shares in SMA Solar Technology AG and to hold these shares until their Managing Board duties with the company have ended.

According to a disclosure made by the members of the Managing Board, they held, either directly or indirectly, a total stake of 0.03% in all shares issued as of the end of the fiscal year. The Managing Board members neither acquired nor sold shares in the company during the fiscal year.

Retention/clawback

The 2017 remuneration system does not allow for any further retention or clawback rights beyond the options provided for in law for compensating for misconduct on the part of the Managing Board. The Supervisory Board has not made use of the option to claw back or retain variable remuneration components from Managing Board members either partially or in full in the 2021 remuneration system either.

Benefits in the event of termination of Managing Board duties

In the event of early termination of Managing Board duties without good cause, the compensation payable is limited to the total remuneration for the remaining term of the contract and up to a maximum of two years' emoluments (severance pay cap). If an employment contract with a member of the Managing Board ends after being terminated by the member within a period of six months from a change of control, this member is also entitled to severance pay amounting to his/her remuneration rights for the remaining term of the employment contract, however, no longer than a period of two years. SMA Solar Technology AG will not grant any benefits in the event of regular termination of Managing Board duties.

Benefits from third parties

Managing Board members receive no separate remuneration for carrying out work at subsidiaries relating to their Managing Board activities at SMA Solar Technology AG.

MANAGING BOARD REMUNERATION AMOUNTS IN THE FISCAL YEAR

Remuneration paid and owed

The following tables itemize the remuneration paid and owed to each member of the Managing Board in the 2021 fiscal year. The payments specified for the reporting year encompass the fixed remuneration components actually paid out in the reporting year plus the variable remuneration due and paid out in the fiscal year. According to Section 162 of AktG, remuneration paid and owed refers to the amounts that were due in the reporting period and have already been paid to the specific Managing Board member or are due and have yet to be paid.

The figures for each payment are divided into fixed and variable remuneration components. The fixed remuneration components include the non-performance-based basic salaries and additional benefits.

The variable performance-based remuneration components are divided into one-year and multi-year variable remuneration.

Managing Board remuneration paid and owed

	Ulrich Hadding Board Member for Finance, HR and Legal Joined 2017/01/01				Dr.-Ing. Jürgen Reinert Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology Joined 2014/04/01			
	2021 €'000	2021 [2]	2020 €'000	2020 [2]	2021 €'000	2021 [2]	2020 €'000	2020 [2]
Fixed remuneration	683	71%	683	72%	949	72%	949	75%
Additional benefits / Others	29	3%	29	3%	21	2%	21	2%
Total	**712**	**74%**	**712**	**75%**	**970**	**74%**	**970**	**76%**
One-year variable remuneration [1]	250	26%	232	25%	348	26%	300	24%
Multi-year variable remuneration		0%						
Three-year variable remuneration 2017 – 2019			0	0%			0	0%
Three-year variable remuneration 2018 – 2020	0	0%	0	0%	0	0%	0	0%
Total	**250**	**26%**	**232**	**25%**	**348**	**26%**	**300**	**24%**
Pension contribution	0	0%	0	0%	0	0%	0	0%
Total	**962**	**100%**	**944**	**100%**	**1,318**	**100%**	**1,270**	**100%**

1 In the 2020 fiscal year, Ulrich Hadding received a special bonus of €225,000 and Jürgen Reinert of €300,000 following a resolution adopted by the Presidial Committee and Supervisory Board. This special bonus is included in the one-year variable remuneration 2020 shown here. In addition, the Managing Board members declared to the Supervisory Board in 2019 that they would be waiving part of their salaries owing to the company's difficult situation. This salary waiver was implemented by the non-payment of significant parts of the one-year variable remuneration in 2020.

2 The relative portions given here refer to the remuneration components "paid and owed" in the respective fiscal year in accordance with Section 162 (1), sentence 1 of AktG. They thus include all benefits actually allocated in the fiscal year in question, irrespective of the fiscal year for which they were allocated to the members of the Managing Board. Consequently, the relative portions given here are not comparable with the relative portions in the description of the remuneration system according to Section 87a (1), no. 3 of AktG submitted to the Annual General Meeting with this remuneration report. The portions specified in the remuneration system refer to the applicable target values.

Comparison of remuneration and earnings performance

The comparison of the changes in Managing Board remuneration, the company's earnings and the average remuneration of the workforce presented in the table below in accordance with Section 162 (1), sentence 2, no. 2 of AktG shows a consistent one-year correlation, as the comparison with average workforce remuneration over the past five years required by law in accordance with Section 26j (2), sentence 2 of the introductory legislation to the Stock Corporation Act does not need to be extended to the years prior to introduction of Section 162 (1), sentence 2, no. 2 of AktG.

The comparison with the progression in average employee remuneration is based on the average remuneration of the workforce of SMA AG. Because remuneration varies, particularly at the subsidiary companies outside Germany, the comparison with the progression in average remuneration is based only on the workforce of SMA AG. This reference group was also used in the appropriateness assessment on the remuneration of the members of the Managing Board. This took into account the remuneration of all employees, including executive staff as defined in Section 5 (3) of the German Works Constitution Act (BetrVG). Any remuneration additionally received by employees as members of the Supervisory Board of SMA AG was disregarded. For ease of comparison, the remuneration of part-time staff was adjusted to full-time equivalent level

Comparison of annual changes in Managing Board remuneration in accordance with Section 162 (1) no. 2 of AktG

Annual change	2021 vs. 2020
Managing Board remuneration and emoluments [1]	
Dr. Jürgen Reinert	4%
Ulrich Hadding	2%
Earnings performance	
SMA Solar Technology AG [2]	–85.7%
SMA group [3]	–87.8%
Average remuneration of employees on full-time equivalent basis	
Employees of the company	8%

1 Remuneration paid and owed in accordance with Section 162 (1), sentence 1 of AktG. Fixed remuneration including additional benefits and one-year and multi-year variable remuneration.
2 Annual earnings as referred to in Section 275 (2), no. 17 of HGB.
3 EBITDA of the SMA group

Remuneration of the members of the Supervisory Board

The remuneration system for the Supervisory Board detailed in the Articles of Incorporation of SMA Solar Technology AG was submitted unchanged to the Annual General Meeting for approval in the reporting year and approved by a majority of 99.99%.

STRUCTURE OF SUPERVISORY BOARD REMUNERATION

In accordance with the remuneration policy adopted at the Annual General Meeting on May 23, 2013, and approved at the Annual General Meeting on June 1, 2021, the members of the Supervisory Board have received exclusively fixed remuneration since the 2013 fiscal year. The ordinary members of the Supervisory Board receive remuneration of €25,000 for each fiscal year in accordance with Section 11 (1) of the Articles of Incorporation. The chairperson receives €50,000 and the deputy chairperson receives €37,500.

The chairperson of the Audit Committee receives an additional €15,000, while other members of the Audit Committee receive an additional €7,500 each. The chairperson of the Presidial Committee receives an additional €10,000, while other members of the Presidial Committee receive an additional €5,000 each. The members of other committees do not receive any additional remuneration.

Any members of the Supervisory Board who leave the Supervisory Board or positions on any of its committees that receive additional remuneration during a fiscal year are remunerated on a pro rata basis.

The members of the Supervisory Board also receive an attendance fee of €750 per meeting, up to a maximum of two meeting fees on one day. Furthermore, SMA has taken out professional indemnity insurance in case one or more members of the Supervisory Board should be subject to a claim for financial loss from a third party or the company based on statutory liability provisions under private law on the grounds of a breach of duty committed in the course of business.

SUPERVISORY BOARD REMUNERATION AND EMOLUMENT AMOUNTS

In accordance with Section 162 (1), sentence 1, sentence 2, no. 1 of AktG, all fixed and variable remuneration components that were "paid and owed" to the individual members of the Supervisory Board in the 2021 fiscal year have to be disclosed. The figures presented in the table below refer to the remuneration components "paid and owed" in the respective fiscal year in accordance with Section 162 (1), sentence 1 of AktG. They thus include all benefits actually allocated or owed in the fiscal year in question, irrespective of the fiscal year for which they were allocated to the members of the Supervisory Board. The amounts for the 2020 fiscal year that were not paid out until the 2021 fiscal year in accordance with the Articles of Incorporation are considered on a value basis.

Remuneration paid and owed to the Supervisory Board in the 2021 fiscal year[1]

	Fixed remuneration in €'000		Fixed remuneration for committee duties in €'000		Meeting fees in €'000		Total
Roland Bent	25.0	87%		0%	3.8	13%	28.8
Martin Breul[2]	14.4	86%		0%	2.3	14%	16.6
Oliver Dietzel	25.0	59%	7.5	18%	9.8	23%	42.3
Peter Drews[3]							
Dr. Erik Ehrentraut[3]							
Kim Fausing[4]							
Johannes Häde	25.0	59%	7.5	18%	9.8	23%	42.3
Heike Haigis[5]	10.7	83%		0%	2.3	17%	12.9
Alexa Hergenröther	25.0	50%	15.0	30%	9.8	20%	49.8
Uwe Kleinkauf[2]	28.8	80%	5.8	16%	1.5	4%	36.0
Ilonka Nußbaumer[4]							
Yvonne Siebert	25.0	67%	5.0	13%	7.5	20%	37.5
Romy Siegert[2]	14.4	86%		0%	2.3	14%	16.6
Jan-Henrik Supady[2]	14.4	60%	4.3	18%	5.3	22%	23.9
Dr. Matthias Victor	25.0	67%	5.0	13%	7.5	20%	37.5
Hans-Dieter Werner[5]	10.7	83%		0%	2.3	17%	12.9
Total	**243.3**		**50.1**		**63.8**		**357.1**

1 Due to rounding differences, the total amount shown in this table does not correspond exactly to the sum of individual amounts shown in the table.
2 All remuneration components from June 4, 2020, onward (pro rata)
3 No remuneration paid or owed in the 2021 fiscal year; left Supervisory Board on June 4, 2020
4 Kim Fausing and Ilonka Nußbaumer waived remuneration for the Supervisory Board roles.
5 All remuneration components up to June 4, 2020 (pro rata)

Comparison of remuneration and earnings performance

The comparison with the progression in average employee remuneration is based on the average remuneration of the workforce of SMA AG, because remuneration varies, particularly at the subsidiary companies outside Germany. This reference group was also used in the appropriateness assessment on the remuneration of the members of the Managing Board. This took into account the remuneration of all employees, including executive staff as defined in Section 5 (3) of the German Works Constitution Act (BetrVG). Any remuneration additionally received by employees as members of the Supervisory Board of SMA AG was disregarded. For ease of comparison, the remuneration of part-time staff was adjusted to full-time equivalent level.

Comparison of annual changes in Supervisory Board remuneration in accordance with Section 162 (1), no. 2 of AktG

Annual change	2021 vs. 2020
Supervisory Board remuneration and emoluments [1]	
Roland Bent	3%
Martin Breul [2]	
Oliver Dietzel	0%
Peter Drews [3]	
Dr. Erik Ehrentraut [3]	
Kim Fausing [4]	0%
Johannes Häde	0%
Heike Haigis	–56%
Alexa Hergenröther	2%
Uwe Kleinkauf [2]	
Ilonka Nußbaumer [4]	0%
Yvonne Siebert	2%
Romy Siegert [2]	
Jan-Henrik Supady [2]	
Dr. Matthias Victor	2%
Hans-Dieter Werner	-56%
Earnings performance	
SMA Solar Technology AG [5]	–85.7%
SMA group [6]	–87.8%
Average remuneration of employees on full-time equivalent basis	
Employees of the company	8%

1 Changes depend in particular on the date on which a member joined the Supervisory Board, a member's subsequent departure and the number of meetings attended.
2 No remuneration in 2020
3 No remuneration in 2021
4 No remuneration in 2020 or 2021
5 Annual earnings in the context of Section 275 (2), no. 17 of HGB
6 EBITDA of the SMA group

REPORT OF THE INDEPENDENT AUDITOR ON THE AUDIT OF THE REMUNERATION REPORT IN ACCORDANCE WITH SEC. 162 (3) GERMAN STOCK CORPORATION ACT (AKTG)

To SMA Solar Technology AG, Niestetal

Audit opinion

We have formally audited the remuneration report of SMA Solar Technology AG, Niestetal, for the financial year from 1 January 2021 until 31 December 2021 whether the disclosures pursuant to Sec. 162 (1) and (2) AktG were made in the remuneration report. In line with Sec. 162 (3) AktG, we have not audited the content of the remuneration report.

In our opinion, the remuneration report contains all the information required by Sec. 162 (1) and (2) AktG in all material respects. Our audit opinion does not cover the content of the remuneration report.

Basis for the Audit Opinion

We conducted our audit of the remuneration report in accordance with Sec. 162 (3) AktG and in compliance with IDW Auditing Standard: The Audit of the Remuneration Report in Accordance with Sec. 162 (3) AktG (IDW PS 870 (08.2021)). Our responsibility under that provision and standard is further described in the section “Responsibilities of the Auditor” of our report. Our audit firm applies Quality Assurance Standard: Requirements for Quality Assurance in Audit Practices (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW). We have fulfilled the professional responsibilities in accordance with the German Public Auditor Act (WPO) and the Professional Code of Conduct for German Public Auditors and Sworn Auditors (BS WP/vBP) including the requirements for independence.

Responsibilities of the Management Board and the Supervisory Board

The management board and the supervisory board are responsible for the preparation of the remuneration report, including the related disclosures, which complies with the requirements of Sec. 162 AktG. They are further responsible for such internal control as they determine is necessary to enable the preparation of the remuneration report, including the related disclosures, that is free from material misstatement, whether due to fraud or error.

Responsibilities of the Auditor

Our objective is to obtain reasonable assurance about whether the information required by Sec. 162 (1) and (2) AktG has been disclosed in all material respects in the remuneration report and to express an opinion thereon in an auditor’s report.

We planned and performed our audit to obtain evidence about the formal completeness of the remuneration report by comparing the disclosures made in the remuneration report with the disclosures required by Sec. 162 (1) and (2) AktG. In accordance with Sec. 162 (3) AktG, we did not audit the accuracy of the disclosures, the completeness of the individual disclosures or the fair presentation of the remuneration report.

Hanover, March 29, 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Thorsten Schwibinger
German Public Auditor

Elmar Meier
German Public Auditor

OTHER INFORMATION

FINANCIAL GLOSSARY

E

Earn-out
An earn-out clause in a purchase agreement defines a portion of the purchase price that is paid at a later date on a performance-related basis.

EBIT
Earnings before interest and taxes

EBITDA
Earnings before interest, taxes, depreciation and amortization

EBITDA margin
The higher the percentage, the higher the earnings power. The EBIT margin is calculated by putting the EBITDA in relation to sales.

EBIT margin
The higher the percentage, the higher the earnings power. The EBIT margin is calculated by putting operating profit in relation to sales.

EBT
Earnings before taxes

Equity ratio
Shows the share of equity in total assets.

F

Free Cashflow
Operating cash flow minus investments plus negative investments in fixed and intangible assets. Free cash flow is important because it allows a company to pay dividends or to buy back shares. Therefore, free cash flow is a measure of how much cash can be paid to the shareholders of a company.

Free Cash Flow (adjusted)
Operating cash flow minus investments plus negative investments in fixed and intangible assets before cash inflows or outflows from time deposits or investments in securities. Adjusted free cash flow is an indicator of the ability to repay debt financing.

G

Gross Cash Flow
Shows the operating income prior to any commitment of funds. It is calculated by considering earnings before income tax and the financial result – plus interest received, depreciation and amortization, changes in other provisions, profit/loss from the disposal of fixed assets and other non-cash expenses/revenues less interest paid and income tax paid.

Gross Profit
Sales minus cost of sales

I

IAS
International Accounting Standards; newer standards refer to the initials IFRS.

IASB
International Accounting Standards Board

IFRIC
Interpretations of the International Financial Reporting Interpretations Committee on IAS/IFRS

IFRS
International Financial Reporting Standards defined by the IASB

N

Net Cash
Liquid funds and securities contained within working capital and cash on hand pledged as collateral less interest-bearing financial liabilities to banks

Net Cash Flow From Financing Activities
Outflow/inflow of liquid funds from equity financing and debt financing

Net Cash Flow From Investing Activities
Outflow/inflow of liquid funds from investments and disinvestments

Net Cash Flow From Operating Activities
Outflow/inflow of liquid funds, unaffected by investments, disinvestments and financing activities

Net Working Capital
The total amount of short-term, interest-free working capital (inventories plus trade receivables less trade payables and liabilities from advanced payments received for orders)

Net Working Capital Ratio
Net working capital in relation to net sales

O

Operating Profit (EBIT)
Earnings before interest and taxes

Order Backlog
This includes current sales and sales expected in the future. In this context, the requirements for all orders pending delivery and deliveries that have already been made but not yet posted as goods issue are taken into account based on their volume and value.

R

Return on Assets (After Taxes)
The return on assets (after taxes) is the consolidated net profit (not taking account of the interest expense for lenders) divided by the average total assets of the reporting period (average of total assets at the beginning and end of the reporting period).

Return on Equity (After Taxes)
The return on equity (after taxes) is the consolidated net profit divided by the averaged total equity for the reporting period (average of total equity at the beginning and end of the reporting period).

Return on Sales
Ratio of EBT to sales

REGISTERED TRADEMARKS

The SMA company logo, as well as the names coneva, emerce, Energy that changes, ennexOS, JOIN, ShadeFix, SMA, SMA Magnetics, SMA Smart Connected, SMA Solar Academy, SMA Solar Technology, SMA Sunbelt, Sunny, Sunny Boy, Sunny Central, Sunny Design, Sunny Highpower, Sunny Highpower Peak, Sunny Home Manager, Sunny Island, Sunny Tripower, Sunny Tripower Core, Zeversolar are registered trademarks of SMA Solar Technology AG in many countries in the world.

DISCLAIMER

The Annual Report, in particular the Forecast Report included in the Management Report, includes various forecasts and expectations as well as statements relating to the future development of the SMA group and SMA Solar Technology AG. These statements are based on assumptions and estimates and may entail known and unknown risks and uncertainties. Actual development and results as well as the financial and asset situation may therefore differ substantially from the expectations and assumptions made. This may be due to market fluctuations, the development of world market prices for commodities, of financial markets and exchange rates, amendments to national and international legislation and provisions or fundamental changes in the economic and political environment. SMA does not intend to and does not undertake an obligation to update or revise any forward-looking statements to adapt them to events or developments after the publication of this Annual Report.

FINANCIAL CALENDAR

2022/5/11	Publication of Quarterly Statement: January to March 2022 Analyst Conference Call: 13:30 p.m. (CEST)
2022/5/31	Annual General Meeting 2022
2022/8/11	Publication of Half-Yearly Financial Report: January to June 2022 Analyst Conference Call: 13:30 p.m. (CEST)
2022/11/10	Publication of Quarterly Statement: January to September 2022 Analyst Conference Call: 13:30 p.m. (CET)

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