2015

2G Energy AG Annual Report

2G. Cogeneration.

Contents

Multi-year overview of Group key figures

Results of operations

	2015	2014	2013
	TEUR	TEUR	TEUR
Consolidated net income	**2,603**	**6,883**	**1,029**
Operating result	4,772	11,442	2,780
Financial result	-285	-498	24
Earnings before interest, tax, depreciation and amortisation (EBITDA)	8,071	14,032	5,524
Earnings before interest and tax (EBIT)	4,772	11,287	3,117
Profitability			
Return on sales	3.1%	6.1%	2.5%
Return on equity	4.9%	13.2%	2.2%
Return on total assets	5.0%	12.2%	3.5%
ROCE[1]	8.6%	20.6%	6.1%
Income structure			
Net sales	152,884	186,605	126,130
Change vs. previous year	-18.1%	47.9%	-13.9%
Total operating revenue	154,713	189,556	137,510
Geografical sales distribution			
Net sales Germany	73%	79 %	78%
Net sales international	27%	21%	22%
Composition of sales revenues per business unit			
CHP unit	60%	72%	71%
Service	34%	20%	22%
After Sales	6%	8%	7%
Expense structure			
Cost of materials	100,621	133,972	96,939
Materials intensity*	65.0%	70.7%	70.5%
Personnel costs	29,315	25,458	21,471
Average number of employees	566	522	494
Labour intensity*	18.9%	13.4%	15.6%
Depreciation and amortisation	3,299	2,745	2,407
Income tax	1,885	4,060	1,775

Financial position

	2015	2014	2013
	TEUR	TEUR	TEUR
Total assets	**95,855**	**92,617**	**88,629**
Asset structure			
Fixed assets	23,475	22,691	21,927
Tangible fixed assets to total assets ratio**	18.4%	18.3%	17.9%
Current assets	71,036	68,706	65,355
Inventory turnover ratio			
Inventories	4.7	6.0	4.5
Receivables	6.2	8.5	5.5
Capital structure			
Equity	52,647	52,069	47,152
Equity ratio	54.9%	56.2%	53.2%
Share capital	4,430	4,430	4,430
Provisions	11,697	11,191	10,009
Liabilities due to banks	5,913	6,144	7,232
Working Capital[2]	**31,781**	**31,991**	**28,832**
Financing			
Investments in plant	3,318	3,833	3,425
Dividends	1,639[3]	1,639	1,639
Cash inflow/cash outflow from			
Operating activities	2,062	8,262	4,442
As % of sales	1.3%	4.4%	3.5%
Investing activities	-1,016	-3,484	-2,964
Financing activities	-1,888	-3,139	-5,071
Change in liquid assets	-842	1,639	-3,594
Liquidity as of 31 Dec.	10,128	11,394	10,110

2G Share

	2015	2014	2013
Earnings per share before minority interests	0.59 €	1.55 €	0.23 €
Dividend per share	0.37[3] €	0.37 €	0.37 €
Dividend yield[4]	1.71%	2.24%	1.38%
Price-Earnings-Ratio[4]	36.8	10.7	115.4
Price-Cash-Flow-Ratio[4]	46.5	8.9	26.7

* related to total output | ** related to the balance sheet total | 1 = EBIT / (fixed assets + working capital) | 2 = current assets - current liabilities
3 = proposal to the Annual General Meeting | 4 = based on year-end XETRA closing price

2G. Foreword of the Management Board.

Management Board of 2G Energy AG: Ludger Holtkamp, Christian Grotholt and Dietmar Brockhaus

Foreword of the Management Board

Dear shareholders,

We are living in an era of a major historic shift away from existing and well-known ways of energy supply and energy utilisation. More and more needs are being met by decentralised, highly efficient and partly regeneratively operated power plants. And rightly so – as this paradigm shift enables 2G to participate in a dynamic growth market.

The industrial revolution and the era of fossil primary fuel sources started with constructive improvements to the steam engine in the 18th century. Approximately a quarter of a millennium later, we can point to enormous progress achieved in the utilisation of fossil fuels for energy conversion. With combined heat and power generation, we now have a technology that stands for resource efficiency and CO_2 avoidance through considerably lower primary energy consumption of around 40 to 60 per cent compared with conventional power plants. And with electric efficiency of 42.5 per cent, the 4-series of 2G's agenitor and avus 500 plus are at the leading edge of technical development. Total efficiencies of up to 90 per cent are meanwhile by and large standard for 2G power plants, offering operators very good economic viability and profitability. Although these are entirely revolutionary changes, they do not yet extend far enough where climate-harming primary energy sources are concerned.

The shift from utilising primary energy sources toward renewables could grind to a standstill. Mixed signals for the new energy policy direction are currently emerging from Germany and the EU (falling investments in renewable energies in Germany, for example, and the promotion of nuclear power that the EU Commission appears to be aiming for).

Here, it should be noted that secure energy supplies generated mainly from renewable energies can also be implemented technically for a highly developed industrialised nation such as Germany: a broad spectrum is available, ranging from wind and solar energy, hydropower and biomass through to biogas,

landfill gas, and sewage gas, as well as hydrogen. As ever more wind power and photovoltaic systems feed into the grid, greater demand arises for efficient power plants that can be switched on quickly to offset volatile fluctuating production from wind and solar energy utilisation. 2G power plants are predestined for this purpose, as they can be integrated fully into balancing energy operation with their electronic control and software applications. 2G has already set benchmarks with regard to the central challenge posed by the new energy policy direction – optimal system integration. Inexpensively produced electric energy – converted into gaseous form by electrolysis – can also be stored on an interim basis in existing gas networks – before being converted back into electricity and heat with 2G plants during sustained periods of dull weather conditions. In this way, 2G power plants also help to reach the target agreed at the UN Climate Change Conference in Paris in December 2015, of limiting global warming to significantly below two degrees Celsius – as market-tested CHP technology already today offers the resource efficiency, high total efficiencies, ability to vary deployment of renewable and low CO_2 energy sources, and digitalisation of output and system controls needed to reach the objective of almost CO_2 neutral production and CO_2 neutral consumption (so-called decarbonisation) by 2020. The expansion of combined heat and power generation supports supply security and electricity supply system flexibilisation, and compensates for the planned decline (from currently 40 GW to around 20 GW by 2030) of fossil, baseload driven production output from conventional power plants.

So much for the convincing arguments in favour of modern CHP power plants to which we and our customers subscribe. These arguments do not always also carry weight at policymaking and legislative level, however. Fossil baseload power plants' business models are fighting against their abolition. In the reporting year, we expended a great deal of energy on policymaking-related work in the legislative process for the amended German Cogeneration Act. This year, the opinion-forming process for the 2016 German Renewable Energies Act and the German Electricity Market Act will also require a great deal of commitment.

In our operating business in 2015, we experienced a year of transition between the amendment to the Renewable Energies Act (EEG) as of 1 August 2014 and the amendment to the German Cogeneration Act (KWK-G) as of 1 January 2016. Both of these legislative amendments resulted in atypical ordering patterns among customers in our core market of Germany, and in capacity utilisation fluctuations at our Heek production site. As a flexible medium-sized company, 2G is prepared for such situations. We met our supply commitments with our very high quality standards. The fact that we made further investments in the efficiency and effectiveness of our existing business processes, production processes and development processes in the reporting year – thereby continuously improving the deployment of essential resources – also contributed in this context. 2G relies consistently on digital solutions to optimise many of its internal process steps, and structure external processes with customers and suppliers. To this end, we invested in high-end control electronics and software solutions to make CHP systems flexible in integrated grid operation, and invested in the quality of our service business, and of our operating and plant management. We see digitalisation as a key value driver for our CHP plants. Development is making great strides forward here: our R&D department is working on

expanded possibilities – with the help of outage and predictive models – to utilise intelligent evaluations of CHP operating data from plants in the field. Outage information, remote maintenance and performance data evaluations provide important parameters to monitor a 2G power plant's lifecycle as part of long-term service and maintenance agreements, in order to thereby maximise customer benefit through plant availability, and enhance customer satisfaction. This is particularly interesting for utilities and contractors that are currently reorganising their electricity purchasing and production portfolios, because conventional business models are under pressure. Increasingly they are including third-party electricity generation in their purchasing portfolios, and bolstering their positions as balancing group managers.

As a consequence, 2G is differentiating itself from its competitors not only through its CHP modules high electric efficiencies and system solutions expertise, but also its high degree of digitalisation of integrated machine and control software, and service and maintenance.

We have also rapidly integrated the expansion of the 2G value chain into Group structures to include the rental and leasing business, and the UTILITY services offered by 2G Rental GmbH. This has created a proprietary, attractive instrument to sell our CHP systems in Germany, which strengthens our ability to sell, reduces investment hurdles, and makes the business gradually less dependent on a shifting subsidy backdrop. Our Groupwide diversification strategy aims at growth across various gas types, regional markets, sectors and products, to make us largely independent of individual markets and regulatory changes. We are also advancing this strategic approach in order to more quickly achieve an approximately even distribution of new order intake, and consequently of production utilisation. The further expanded proportion of our sales revenue generated abroad in the reporting year is very pleasing in this respect. For the first time in the company's history, international business contributed more than one third of all our revenue deriving from selling CHP systems. In terms of consolidated revenue – including service business and after-sales – 2G expanded its international share to more than one quarter. Both our foreign subsidiaries and our cooperation ventures with existing and new foreign sales and service partners contributed to this positive trend in our international business. We are expanding this network further. 2G has set itself the medium-term objective of reaching a 50 per cent export ratio in the sale of CHP systems by 2018. With this strategic goal, 2G aims to actively expand its position on growth markets in Europe and overseas, and continuously further diversify its business opportunities and risks.

Measured in terms of our own expectations, the success of our US business has been somewhat modest to date. With the full takeover of 2G Cenergy Inc. in 2015, we are convinced that we have created a better base for sustained business success, having unified the corporate group's legal structures and realigned its organisation. Its first positive results contribution in the reporting year and its solid sales revenue are encouraging. We aim to continue further on this path in a consistent manner, and expand our market shares in the slowly opening CHP market in the USA.

Our Service division performed well in 2015. The division now accounts for one third of our total Group sales revenue, compared with one sixth three years ago. This proportion will increase further as a result

of the growing number of installed CHP systems in the field. With the reorganisation of customer service that we concluded in the reporting year, and our investments in the far-reaching digitalisation of our service and maintenance activities, we are convinced that we can also gradually boost this division's profitability. This business's structure offers 2G the possibility to generate continuous and predictable cash flows, thereby optimising its liquidity position in what is also in a seasonally affected business, and further strengthening its balance sheet structures. To date, our service business has been based mainly on sold and rented/leased natural gas operated CHP systems. Service contracts for biogas driven CHP systems are signed mainly abroad. With growing requirements of flexibilisation and direct marketing, new service contracts can also be originated through repowering biogas systems in Germany.

For the first time in 2G's corporate history, we are generating a slightly higher Group revenue share through selling natural gas operated CHP systems than through selling biogas systems. We were early in focusing on the growth market of natural gas with technical developments and attractive concepts for new customer groups. We expect that natural gas based cogeneration will also become gradually established on international markets. Good preconditions exist in countries such as the United Kingdom, Italy, Benelux as well as some parts of the USA, with well extended gas supply networks.

Despite overall positive trends in many subareas, when we presented our half-year figures at the end of September 2015, we adjusted our earnings forecast – while retaining our expectations for sales revenue growth. Firstly, due to the uptrend in business in the second half of the year, 2G maintained capacities during the preceding months in order to ensure punctual production, delivery and commissioning of 2G systems. Secondly, adjustment and start-up measures at the subsidiaries in Germany and abroad caused one-off legal, advisory and personnel costs, to the tune of approximately EUR 3.0 million. 2G reached its adjusted 2015 forecast with an EBIT margin of 3.1% and revenue of EUR 152.9 million. We have also carried forward an order surplus of EUR 85.5 million into the new 2016 financial year.

With this momentum, we are entering the new business year with confidence. The focus areas of business development along our value chain lie on expanding partner concepts in international sales, such as those we have entered into with a Veolia subsidiary in the United Kingdom and with Fuji Electrics for Asia. These types of strategic alliances also offer benefits for 2G for the North American market and parts of Europe through better market and customer access on a regional basis. We are also paying attention to partnerships where 2G produces CHP modules for renowned sector companies as an OEM supplier. We have already gained experience in the 20 kW and 50 kW performance class with CHP modules for Vaillant and the Remeha Group. This model is also conceivable for resellers such as biogas plant manufacturers in higher performance ranges, for example. Through such partnerships, we aim to gain further presence in Germany and abroad and expand our market shares.

Our aim with the partner concepts is to illustrate the overall CHP concept, and deliver arguments for customer benefit, as added value for customers (and sales partners) is not just restricted to highly efficient CHP modules: compact design, the plug & play principle,

integration into existing supply infrastructure, compliance with international quality and energy standards, low-emission operation and digitally supported service all together deliver the economic efficiency and plant availability that make investing in a 2G CHP system attractive – including in a comparison with competitors. 2G supplies solutions to its customers, reducing the complexity of decentralised energy supply.

We are convinced that 2G is very well positioned in this sense, actively accepting the future challenges in a dynamically changing energy market, and helping to shape and offer solutions. Investments in renewable energies rose by five per cent in the reporting year to reach a record level of USD 286 billion, according to a report by the United Nations Environment Programme. Electricity markets are changing worldwide with a growing installed output base of electricity generators that depend on the weather and the diurnal cycle. This signifies two things in consequence: firstly, demand is growing for efficiently functioning, decentralised power plants that can be switched on quickly, and which offset volatility in wind and solar electricity generation. And secondly, electricity from quickly accessible and controllable production units is being ascribed a higher economic value on electricity markets. In Germany, for example, this is already reflected in the German Renewable Energies Act (EEG) with its flexibilisation premium, and in the German Cogeneration Act (KWK-G) with mandatory direct marketing. Further steps in this direction will follow with the Electricity Market 2.0. In the long term, only the market is capable of efficiently coordinating with demand the 1.5 million generation units that are situated in Germany.

The Management Board appraises the business opportunities for 2G in the current financial year and in subsequent years as promising. In the 20 kW to 4 MW performance range for decentralised energy supplies, our aim is to become also internationally an important, customer-oriented supplier of CHP systems and solutions for the cogeneration of electricity and heat that is sparing on resources and environmentally compatible. Here, 2G relies on sustainable processes, independence of individual target markets and sectors, its robust market standing, and entrepreneurial courage in thinking and investing ahead. For our customers, we are striving for growing profitability of CHP systems. For our shareholders, we aim to generate a rising return on the equity that they have invested. For 2016, we assume sales revenue between EUR 150 million and EUR 170 million. Earnings should also be ahead of the previous year with an EBIT margin between 3% and 5%. In the medium term, we continue to pursue the objective of growing our revenue to up to EUR 300 million by 2020, while achieving a double-digit EBIT margin.

Steam engines helped to elevate our world to today‘s level of industry and prosperity. With its highly efficient CHP power plants, 2G assists in exploiting fossil fuels in a highly efficient manner and in making renewable energies a main energy producer through optimal system integration, thereby shaping a future offering a high quality of life.

The year 2015 was a demanding one for 2G employees, given the fact that the market environment in which we operate was changing continuously, and at high speed. Our employees addressed the issues at hand, accepted the challenges and helped to structure new processes and business models. We are all pulling together in same direction. We would like to thank

our employees for their strong commitment and their valuable contributions.

We would like to thank you, our company's shareholders, for your continued interest and the confidence and trust that you have invested in 2G.

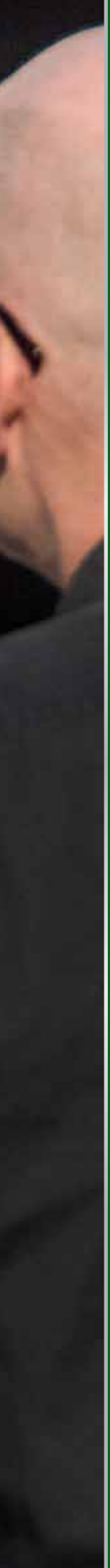
Heek, May 2016
2G Energy AG

Yours sincerely,

Christian Grotholt
Management Board Chairman (CEO)

Ludger Holtkamp
Management Board member

Dietmar Brockhaus
Management Board member



2G. Share.

2G Energy AG share

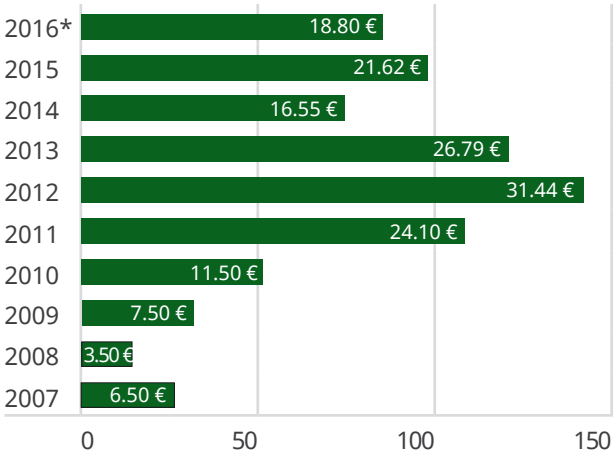
The 2G share started the 2015 stock market year at a price of EUR 16.61. A subsequent, brief, sharp share price dip on 20 January then resulted in its low for the year of EUR 13.01. The countertrend that followed led the share up to its high for the year of EUR 23.18 on 27 May. This performance was prompted by various positive corporate news items, about the strong FY 2014 figures, new sales instruments, and the complete takeover of the US business.

A modified forecast of expected earnings as part of announcing the half-year figures and uncertainties about the content of the forthcoming amendment to the German Cogeneration Act dragged the 2G share down to a level of EUR 16.26 by 24 September, during a phase of general weakness on the stock market. Announcements of (large) international orders and cooperation agreements delivered a renewed boost to the share. The year closing price of EUR 21.62 represented a pleasing share price gain of 30.6%.

The 2G share thereby performed significantly better than the DAX index of leading German shares, which closed the 2015 stock market year with an appreciation of 9.6% (previous year: 2.7%). The DAX meanwhile traded at an all-time high of 12,391 points on 10 April. The TecDax index was up by 33.5% (previous year: 17.5%), as well as the sector indices that are specific to 2G – the DAXsector All Industrial (15.7%, previous year: -4.6%) and the DAXsubsector All Renewable Energies (93.9%, previous year: -16.1%).

The market capitalisation of 2G Energy AG grew from EUR 73.4 million to EUR 95.8 million on unchanged share capital.

2G Energy AG market capitalisation EUR millions



*XETRA closing price 9 May 2016

Market capitalisation 2007 to 2015 as of 31 December; 2016 as of 9 May 2016, XETRA closing prices

The trading liquidity of the 2G share has improved compared with the previous year, and was at a satisfactory level during the year under review. Average daily volumes on the XETRA and tradegate trading platforms as well as the German regional stock exchanges amounted to around 13,000 shares (previous year: around 6,500 shares).

The change in the ownership structure that began in 2014 continued at the start of the 2015 stock market year. Investors who had bought into 2G during the biogas boom years, which had been driven by the German Renewable Energies Act (EEG), sold their interests, some of them doing so in a concentrated manner. In 2015, the Management Board and the company's investor relations managers continued to target Central European investors with both longer investment horizons and a more fundamental understanding of

CHP technology, its application areas, and European and American markets. New investors with a focus on the company's continuous growth in a very promising international growth environment have gradually become involved as owners of 2G Energy AG.

Investor relations activities

Intensive dialogueue with the capital market and continuous reporting on relevant corporate events remained very important to 2G Energy AG in 2015. Investor relations work aims not only to establish trust and confidence in the company's strength, but also to create the transparency required to enable analysts, shareholders and potential investments to appraise and value the company on a regular and comprehensible basis. Interest in investing in the 2G share was also evident in many requests for roadshows in Europe and Germany in 2015, as well as invitations to investor conferences and investor visits to the production site in Heek. The Management Board presented 2G's business model at various capital market events and roadshows, explaining its products, technological development work, market trends and sales strategies in international markets. Analyst interest remains great: with First Berlin, Hauck & Aufhäuser, Warburg, equinet, WGZ, and Solventis, six renowned institutions monitor and evaluate the company's development. Most of the analysts identify further share price growth potential for the 2G stock based on their valuation models, and recommend it as a „Buy".

2G neither approved nor implemented any capital measures during the period under review.

Renewed approved and conditional capital

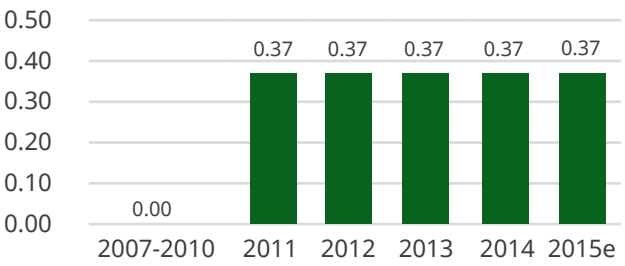
The 2015 Ordinary Annual General Meeting passed a resolution to cancel the existing Approved Capital 2010 of EUR 2,215,000.00, and create a new conditional capital that corresponds in terms of content to the Approved Capital 2010 that has existed to date. The Management Board has thereby been authorised until 7 July 2020, with Supervisory Board approval, to increase the company's share capital once or on several occasions by up to a total of EUR 2,215,000.00 (Approved Capital 2015), through issuing new shares against non-cash or cash capital contributions. The AGM also passed a resolution that authorises the Management Board, with Supervisory approval, until 7 July 2020 to issue once or on several occasions convertible bonds and/or bonds with warrants in a total nominal amount of up to EUR 100,000,000.00 with a maximum 20-year maturity. This measure opens up greater scope for maneuver for the company within the possibilities offered by the German Stock Corporation Act, although no capital measures are planned from today's perspective.

Unchanged dividend proposed

2G Energy AG pursues the objective of its shareholders participating continuously and long-term in the company's success and profitability through a stable dividend. At the same time, the company's financial and innovative strength is to be maintained and strengthened for further growth. Value and growth-oriented investors are set to benefit in the long term from the continuous appreciation in the company's value as a consequence. Based on the unappropriated profit generated in the 2015 financial year, the Management and Supervisory boards have authorised a proposal to the Ordinary AGM to be held on July 5, 2016, that it

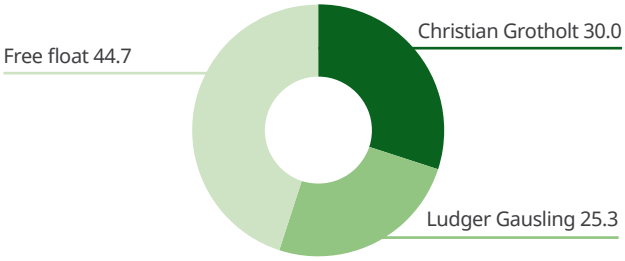
approve the payment of a dividend of 37 euro cents per share for the financial year elapsed (previous year: 37 euro cents per share). In relation to the 2015 year-end closing price, this corresponds to a 1.71% dividend yield (previous year: 2.24%) and a 63.0% payout ratio (previous year: 23.8%). The distribution of a dividend at a year-on-year unchanged level reflects not only a wish for stability, but also sends a signal of confidence for the current 2016 financial year.

Dividends 2007 - 2015e EUR



The shareholder structure of 2G Energy AG remained largely unchanged during the reporting year. Company founders Christian Grotholt and Ludger Gausling held 30.0% and 25.3% of the shares respectively, and consequently together 55.3%. The free float consists of 44.7% of the shares in issue.

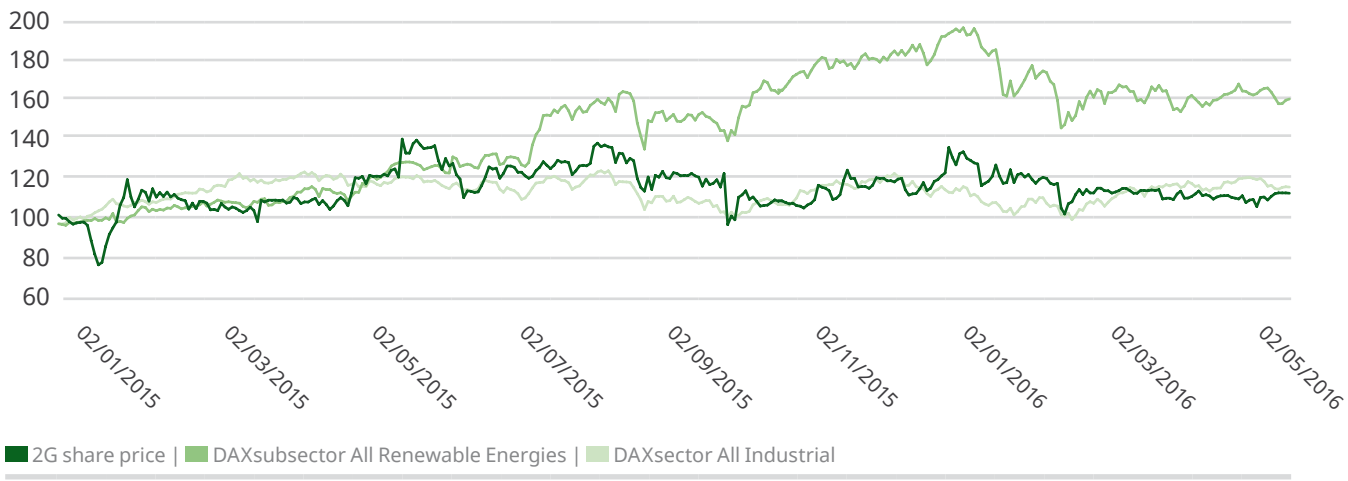
2G Energy AG shareholder structure Share%



As of 31 December 2015

As a listed company, open, continuous and prompt dialogue with all capital market participants forms an important element of 2G's corporate communications. Through transparent, compliant and factual reporting, 2G endeavours to make its business model, and growth and earnings potentials comprehensible to all capital market participants. 2G is convinced that this will be reflected in an appropriate valuation of its shares, which also takes into account the company's medium-term growth prospects on the international CHP market.

2G share price performance 2015/2016 (indexed)



2G. Report by the Supervisory Board.

Report by the Supervisory Board

Dear shareholders,

During the entire 2015 reporting year, the Supervisory Board of 2G Energy AG performed with the requisite care the controlling and consultative duties that are incumbent upon it pursuant to the law, the company's bylaws, and the rules of business procedure. The Supervisory Board continuously monitored the management of the company by the Management Board, and consulted with them regularly concerning such management. We were convinced at all times of the legality, efficiency and proper nature of the Management Board's work in this context. The Management Board performed its reporting duties, and informed us regularly, promptly and comprehensively in both written and verbal form about all matters of relevance for the company and the Group in relation to strategy, planning, business trends, as well as the position of the Group and specific subsidiaries. This also included discussions about the risk position and business opportunities. The Supervisory Board received frequent reports about the company's financial position and performance to this end.

The Supervisory Board members, especially its Chairman, were also in frequent contact with the Management Board outside the scope of Supervisory Board meetings, informing themselves about the current trend in the business position and significant business transactions. The Supervisory Board was also informed between meeting dates on the basis of reports about important projects and plans that were of particular significance for the company. The Supervisory Board members examined the reports that were made available to them, and added their own suggestions. The Supervisory Board was directly involved in all decisions of fundamental significance for the company. The Supervisory Board granted its approval to specific business transactions where required by the law, the company's bylaws or the rules of business procedure for the Management Board.

Organisation of Supervisory Board work

The Supervisory Board of 2G Energy AG consists exclusively of owners' representatives as elected by the General Meeting of Shareholders. In the reporting year, the Supervisory Board consisted of Dr. Lukas Lenz (Chairman), Heinrich Bertling (Deputy Chairman) and Wiebe Hofstra. The Supervisory Board of 2G Energy AG consists intentionally of three members in order to thereby enable efficient work and fruitful discussion on a plenary basis of both strategic matters and in-depth questions. The formation of separate supervisory board committees is not considered justifiable or efficient for this reason.

Supervisory Board meetings and resolutions

By way of utilisation of the exemptions pursuant to Section 110 (3) Clause 2 of the German Stock Corporation Act (AktG), two regular Supervisory Board meetings were held in the 2015 financial year, on 26 May and 19 November. All Supervisory Board members attended all of these Supervisory Board meetings. At the meetings, the Supervisory Board used the written and verbal Management Board reports and presentations to consult in-depth about the company's economic and financial position, its operational and strategic development both in Germany and abroad, and its operating segments.

The Supervisory Board had itself informed about important specific questions relating to the company, its risk position and personnel trends, and consulted concerning these. Events of extraordinary significance for the position and development of the 2G Group, as well as transactions that require Supervisory Board approval, were always discussed immediately. For example, given the urgency of resolutions on 26 February and 15 September 2015, the Supervisory Board voted on these electronically and by way of telephone respectively. Based on Management Board's submissions, unanimous resolutions were passed on personnel matters and in relation to legal structural changes to the US subsidiaries.

Above and beyond this, the Supervisory Board Chairman frequently also discussed specific topics with the Management Board members outside the scope of meetings.

Summary of focal points of Supervisory Board consultations

The Supervisory Board discussed with the Management Board the transactions that are subject to its approval pursuant to the law and the company's bylaws, and reviewed and approved them. These included decisions and measures that are of fundamental significance for the company's financial position and performance, decisions modifying corporate structures and Group strategy, as well as decisions affecting personnel matters. Supervisory Board consultations at all meetings during the reporting period focused on corporate strategy, especially for the US market and individual European markets, planning and business development and trends, especially revenue and earnings trends in Germany and abroad, the risk position, risk management, as well as trends in overall conditions on various markets for combined heat and power generation.

The following topics were discussed in detail at the individual meetings:

Important agenda items at the Supervisory Board meeting on May 26, 2015 especially included business trends and Group profitability during the previous 2014 financial year, the progression of business during the first months of the current financial year, and the company's medium-term liquidity, financial, investment and personnel planning. At this Supervisory Board meeting, the Supervisory Board primarily conducted an in-depth discussion of the separate annual financial statements, the consolidated financial statements, the management reports for both 2G Energy AG and the Group for the 2014 financial year, and the external auditor's audit reports, as well as the Management Board's proposal for the application of unappropriated retained earnings. This meeting was attended by both the Management Board and the auditors – specifically by the auditors who signed the audit certificate. All of the questions from Supervisory Board members were answered in depth, and individual matters were discussed in detail. Following the conclusive result of the mandatory review conducted by the Supervisory Board, the Supervisory Board determined that it had no objections to raise. The Supervisory Board unanimously approved the annual financial statements and management reports for the 2014 financial year for the company and the Group, which the Management Board had submitted. The financial statements were adopted as a consequence. Following in-depth discussion, the Supervisory Board approved the Management Board's

proposal for the application of unappropriated retained earnings. By way of conclusion, the Supervisory Board prepared for the 2015 Ordinary AGM, and approved the agenda for it, as well as proposed resolutions to be submitted to the AGM. The Supervisory Board also discussed the situation at the US subsidiaries, and approved Management Board proposals that required its assent.

At the second Supervisory Board meeting on November 19, 2015, the Management Board discussed business progress during the third and fourth quarters, the results of the half-year financial statements, trends on markets in North America and European countries other than Germany, as well as trends in the company's sales and pricing policy there. As far as the German market was concerned, the board discussed the potential effects of the amendment to the German Cogeneration Act. The Supervisory and Management boards also discussed topics relating to the financial position and performance. In addition, the introduction of a business intelligence system to support operational and strategic decision-making processes was approved. The Supervisory Board unanimously authorised Management Board transactions requiring its approval, and noted with approval the code of conduct that the Management Board had established.

No conflicts of interest arose among the members of the Supervisory Board during the reporting period.

No changes occurred to the composition of either the Management Board or Supervisory Board during the year under review.

Audit of the separate and consolidated financial statements for the 2015 financial year

The Management Board prepared the separate financial statements, the consolidated statements and the Group management report for 2G Energy AG for the 2015 financial year in accordance with the regulations set out in the German Commercial Code (HGB). PricewaterhouseCoopers AG, Wirtschaftsprüfungsgesellschaft, Osnabrück, the auditors of the the financial statements elected by the AGM on 8 July 2015, audited the separate financial statements, the consolidated financial statements and Group management report of 2G Energy AG for the 2015 financial year, including the financial accounting, awarding them unqualified audit certificates. Audit focus areas for the 2015 financial year included the valuation of inventories, trade receivables, intragroup deliveries and invoicing, the valuation of provisions, and deferrals relating to the origination of receivables, as well as the realization of revenue and earnings on the reporting date.

The separate financial statements, consolidated financial statements and Group management report, as well as the auditors' reports, were submitted on time to all Supervisory Board members. The Supervisory Board discussed these documents in detail together with the Management Board and the auditors, who reported on the significant audit results, and were available to provide information and explanations. The auditors gave comprehensive replies to all of the Supervisory Board's questions.

After its own review of the separate annual financial statements, the consolidated financial statements and the Group management report, the Supervisory Board

concurred with the result of the audit as conducted by the external auditor. No objections were raised. The Supervisory Board approved the separate annual financial statements and consolidated financial statements at its meeting on 25 May 2016. The separate financial statements for 2G Energy AG for 2015 have thereby been adopted pursuant to Section 172 of the German Stock Corporation Act (AktG).

Subsequent to its own review and taking into account earnings trends and the financial position, the Supervisory Board concurs with the Management Board's proposal to distribute from the unappropriated profit of EUR 41,663,989.37 – consisting of retained earnings of EUR 36,720,980.20 and net profit for the year of EUR 4,943,009.17 – a dividend of EUR 1,639,100.00, in other words, EUR 0.37 per share, and to carry the remaining profit forward to a new account.

The Supervisory Board would like to thank the Management Board and all employees at 2G Energy AG and its Group companies for their strong commitment and for their valuable contributions.

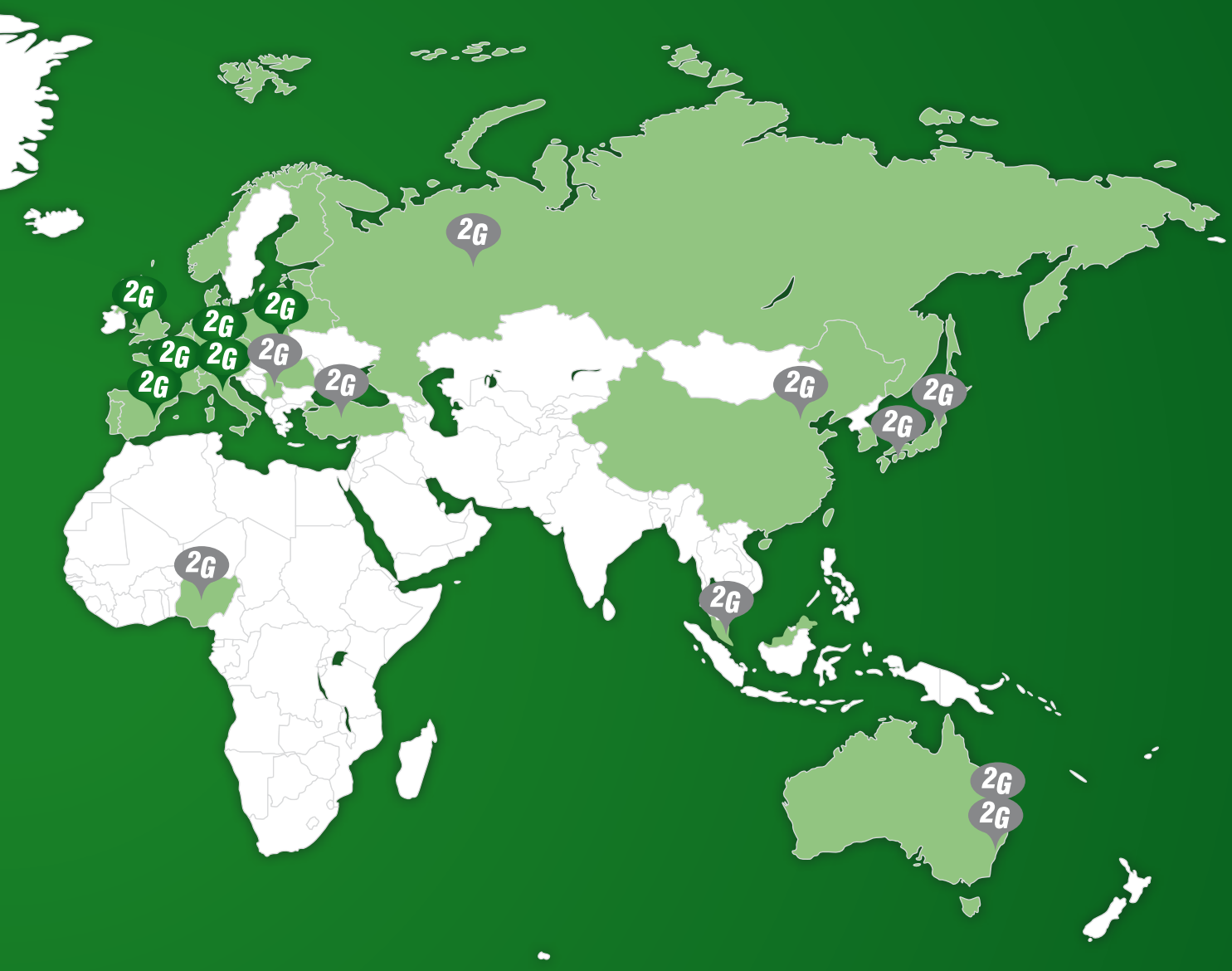
Heek, 25 May 2016

The Supervisory Board

Dr. Lukas Lenz
Supervisory Board Chairman

2G 2G Sites

2G 2G Sales Partner



2G Energy AG Annual Report.

Group management report

Reservation in relation to forward-looking statements

This management report includes forward-looking statements that are based on management estimations that are current as of the time when this management report is prepared. Such statements relate to future periods, or are characterised by terms such as „expect“, „forecast“, „predict“, „intend“, „plan“, „estimate“ and „anticipate“. Forward-looking statements are connected with the risks and uncertainties. Many of such risks and uncertainties are determined by factors that are not subject to the 2G Group‘s influence. As a consequence, actual results can differ significantly from those described below.

A. The 2G Group

Business activity and corporate structure

The 2G Energy AG Group is an internationally leading manufacturer and provider of decentralised energy supply systems. Comprising the development, production and technical installation, as well as digital network integration, of combined heat and power systems (CHP systems), the company is offering comprehensive solutions on the high growth market for highly efficient combined heat and power generation. Comprehensive after-sales and maintenance services comprise an important additional performance criterion. The product range includes CHP modules with an electric output range between 20 and 4,000 kW for operation deploying natural gas, biogas, other lean gases and hydrogen. All systems function highly efficiently, conserve resources, and reduce or neutralise CO_2 emissions in combined energy production. With more than 4,000 systems in almost 40 countries, 2G power plants in various applications supply heating, cooling and electrical energy to a broad spectrum of customers that includes companies in the housing industry, agriculture, commercial and industrial companies, public energy utilities, and municipal and local government authorities.

2G Energy AG is a holding company that combines nine subsidiaries under its management.

2G Energy AG	
2G Energietechnik GmbH	
2G Drives GmbH	
2G Home GmbH	
2G Rental GmbH	
2G Energy Ltd.	
2G Energy Inc.	
2G Italia Srl	
2G Solutions S.L.	
2G Polska Sp. z o.o.	

Diagram 1: 2G Energy AG corporate and ownership structure (as of 31 December 2015)

2G Energietechnik GmbH (2GE), which is based at Group headquarters in Heek, in Germany‘s western Münster region, comprises the main operating entity. The company combines the planning, sales, production, installation and commissioning of 2G CHP modules. It

also centrally manages and coordinates after-sales services for CHP modules. 2G Energietechnik GmbH also maintains dependent branches in Schonstett near Munich, in Hamburg, and in Halle/Saale.

2G Drives GmbH (2GD) is also based at the Heek site. Its business purpose is to conduct research and development in the areas revolving around the 2G product range. As a technology services provider, 2GD concentrates mainly on optimising gas engines, control electronics, as well as the new and further development of hightech peripheral components. Improved efficiencies, longer maintenance intervals, and grid integration capacity allow 2G's customers to generate greater utility and benefits. Moreover, software development and the digitalisation of plants and processes has great significance for the maintenance, networking and controllability of decentralised combined heat and power units. Very high efficiencies of the products that the company develops itself, and the integrative capacity of CHP systems, comprise important keys to 2G's success, with such USPs generating additional competitive advantages. The link between mechanics and software, as well as rapid availability, reliability and a high level of flexibility, enable decentralised CHP units to function as large-scale intelligent power plants (Virtual Power Plants / VPPs). Two renowned and internationally recognised experts in the field of gas engine development each hold a 10% interest in 2GD.

2G Home GmbH (2GH) also operates its headquarters in Heek. The company is also represented in the lower output range of heat-controlled CHP systems with its core products, the g-box 20 and the g-box 50. The g-box is an efficient small power plant in the electric output range between 20 and 50 kW, and is supplied as a turnkey compact module for small and medium-sized business operations, hospitals, hotels, craft businesses and housing complexes. In addition, g-boxes can be integrated profitably into municipal utilities' purchasing and sales concepts. As OEM (Original Equipment Manufacturer), 2G also produces and supplies the g-box 20 to renowned heating sector companies.

2G Rental GmbH (2GR), headquartered in Heek, supplies 2G power plants to energy service providers (contractors) or directly to customers through leases, or for rent instead of a plant buy. In a first step initially limited to the German market, 2G has thereby created a proprietary instrument to promote sales of CHP systems produced by 2GE. Along with the leasing of 2G plants, 2G Rental can also offer a leasing solution through a cooperation agreement with an independent financing partner.

Internationally, the 2G Group has evened the path to further tap important foreign markets during the period under review. At the end of February 2015, 2G Energy AG acquired the remaining 51% interest in 2G Cenergy Power Systems Technologies Inc., St. Augustine, Florida. Following a reorganisation in the reporting year relating to both corporate structure and organisation, 2G in the USA can now offer its customers all services on a one-stop-shop basis under the 2G Energy Inc. umbrella, and profile itself to a greater extent as an integral unit on the US market. 2G Energy Inc. bundles all activities in sales, production, project management and service.

Besides 2G Energy Inc., foreign subsidiaries operating regionally as sales and service companies, and with native speakers providing local service, have been

established within the Group for several years:

- 2G Energy Ltd. based in Sutton Weaver, Runcorn, responsible for the United Kingdom and Ireland.
- 2G Italia Srl based in Verona, responsible for Italy.
- 2G Polska Sp. z o.o. based in Bielsko-Biala, responsible for Poland and the Baltic States, and
- 2G Solutions of Cogeneration S.L. based in Vic (Barcelona) covers Spain, and also serves the French market through a liaison office in Rennes.

In addition, important industrial and raw material markets are secured through sales cooperation ventures in Japan, Southeast Asia, Australia, Africa and Russia, for example.

B. Business environment

Macroeconomic situation

Only moderate global economic growth overall in 2015

In its updated 2015/2016 annual survey that it published in November 2015, the German Council of Economic Experts forecast 1.7% gross domestic product growth in Germany for the year under review (2014: 1.6%). The uptrend in the German economy continued from 2014 into 2015. Impulses derived mainly from the domestic economy and from some special factors such as the euro's depreciation, which improved price competitiveness, the sharp drop in energy prices, which boosted purchasing power, and the falling interest-rate level, which once again improved the investment climate. Experts believe that the German economy was prevented from delivering a faster rate of expansion by factors including the economic slowdown in emerging economies and China, and moderate Eurozone economic growth.

In their report, the Council described the rate of Eurozone economic growth in the reporting year as disappointing. It forecasts gross domestic product (GDP) growth of 1.6% (2014: 1.4%). In particular, the moderate trend gave rise to the extremely expansive policy of the European Central Bank (ECB), which has resulted in a depreciation of the euro since early 2014 and improved financing conditions. The sharp fall in the oil price has also boosted private households' spending power. Hardly any restrictive impulses continued to derive from fiscal policy in the reporting year, as some member states have discontinued their reform and consolidation efforts. The Council draws a sobering conclusion for 2015: without the favourable conditions, the Eurozone's growth rate would have corresponded to its potential growth at best. Accordingly, the recovery is not self-supporting, and is reliant upon impulses from special factors.

As far as the trend in the world economy is concerned, the Council forecasts a moderate growth rate of 2.6% in 2015 (2014: 2.6%). This is primarily attributable to weaker growth in emerging economies. The waning dynamics of the Chinese economy, the drop in worldwide demand for raw materials, and the moderate trend in the Eurozone are burdening global growth. The trend in some industrialised nations such as the USA and the United Kingdom proved more favourable.

Sector trends in Germany

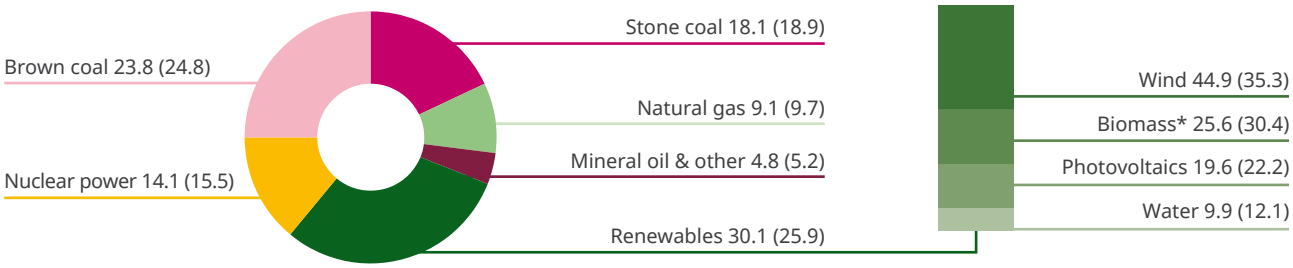
Renewable energies and decentralised energy production secure position on German energy producer market

Renewable energies' share in gross power generation

increased by 25.9% year-on-year to 30.1% in 2015, according to data published by the German Federal Ministry of Economics and Technology (BMWi, AGEE Stat). Electricity generated from solar, wind, hydropower and biomass reached a new record level of 195.9 billion kWh (previous year: 162.5 billion kWh). Renewable energies' share of gross electricity consumption grew by more than five per cent to 32.6% in 2015 (2014: 27.4%) according to the BMWi – especially due to continued strong expansion of wind energy utilisation and good wind conditions. As in the previous year, renewable energies represented Germany's most important electricity source in 2015, even ahead of lignite, according to the BMWi. The by far most important regenerative electricity source is meanwhile wind energy with 44.9%, with biogas (including biomethane) at 25.6% accounting for the second largest share, ahead of photovoltaic at 19.6%. Minor electricity volumes have been generated to date in Germany from gas from purification plants (0.2%) and landfill gases (0.7%).

In the reporting year, the German government introduced a paradigm shift to the so-called Electricity Market 2.0. This is a market economy arrangement that – even given high proportions of renewable energies – is intended to ensure safe, inexpensive and environmentally compatible electricity supplies – including via further developed balancing power markets, free price formation, transparency, an intermeshing of individual electricity supply areas, and embedding within the European electricity market. Along with expanding renewable energies in final energy consumption, improving energy efficiency also represents one of the two core objectives of the government's new energy concept. The quantitative expansion target is to grow renewable energies' share of electricity supplies to between 40 and 45% by 2025, and to between 55 and 60% by 2035. The aim of energy efficiency is to consume less energy. Efficient modern technologies are to be promoted and supported to this end, because the most cost efficient and environmentally compatible kilowatt hour of energy is energy that does not need to be produced from the outset at all. Combined heat and power (CHP) technology is one of the technologies that allow substantial energy savings and CO_2 reductions to be generated immediately. Gas operated CHP

Gross electricity generation by energy sources in Germany 2015 Share %



( ) Previous year | * incl. biogenic share of household waste

Diagram 2: Gross electricity production by energy sources in Germany 2015, total 651.8 billion kWh (previous year: 627.8 billion kWh)
Source: Federal Statistical Office, Energy Balances Working Group (AGEB), 28 January 2016

technology is also an important building block for the expansion of renewable energies. Firstly, it efficiently utilises nonfossil fuels such as biogas, mine gas, landfill gas, gas from purification plants, and hydrogen. Secondly, based on both fossil and nonfossil gases, it is an important combining and offsetting element as a balancing energy component in the electricity grid in interplay with wind and solar electricity producers.

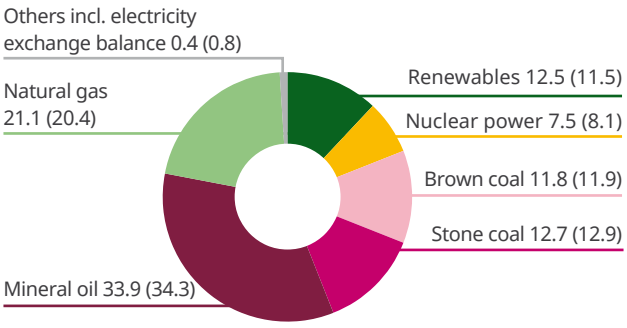
Overarching political objectives – as part of the energy policy target triangle of economic efficiency, supply security and environmental compatibility – in this context include reducing greenhouse gas emissions by 40% (1990 basis year) by 2020, the gradual exit from the deployment of lignite power plants, with the prospect of shutting down 2.7 GW of capacity by 2023 in a first step, exiting nuclear energy by 2022, and securing supply security and competitiveness.

Numerous acts were approved and initiatives launched to this end in the reporting year. The so-called 10-Point Energy Agenda of the German Federal Ministry of Economics and Technology (BMWi) forms the central guiding principle. Some acts and legislation that are of particular relevance for 2G come into force in 2016. These include the amended German Cogeneration Act (KWK-G 2016). The section entitled „Regulatory environment“ covers some of the main related aspects.

The provision of heating generated from renewable energies amounted to a total of 155.2 billion kWh in 2015 (2014: 145.5 billion kWh). This represents approximately 6.5% year-on-year growth due to the additional consumption of renewable heating. A share of total final energy consumption for heating and cooling of 13.2% was thereby achieved (2014: 12.5%). Heating of 18.1 billion kWh was generated from biogenic, gaseous fuels (biogas, biomethane) in the reporting year – 11.6% of the entire renewable heating (previous year: 17.2 billion kWh or 11.8%). On the whole, however, the growth of renewable energies in the heating market will have to accelerate in order to reach the target of 14% of total heat consumption by 2020, as set by the German government in its integrated energy and climate program.

Renewable energies in Germany do achieve one particular target every year, however: through replacing fossil fuel sources, they help reduce energy-derived greenhouse gas emissions. This allowed a total of around 167.5 million tonnes of greenhouse gas emissions to be avoided in Germany in 2015 (previous year: around 148 million tonnes). Around 122 million tonnes of CO_2 equivalents were attributable to the electricity sector (previous year: 109 million tonnes), of which around 102.5 million tonnes (previous year: 80 million tonnes) were due to electricity volumes that are entitled to compensation under the German Renewable Energies Act (EEG). In the heating sect, around 40.6 million tonnes of CO_2 equivalents were avoided (previous year: 34 million tonnes).

Structure of primary energy consumption in Germany 2015 Share %



( ) Previous year

Diagram 3: Structure of primary energy consumption in Germany in 2015
Source: Energy Balances Working Group (AGEB), press release 18 March 2016

Differentiated CHP market with further expansion potential

The economically important CHP market that 2G addresses can be divided into two areas: the market for natural gas operated CHP systems and the market for CHP systems driven by biogas or lean gas. Both markets differ from each other in terms of volume, technology, customer structure and regulation, as shown in the image below.

In gas operated CHP systems, energy is generated in a coupled process in the form of electricity and heating/cooling from biomass, gas from purification plants and landfill gases, or natural gas. In addition to their high efficiency level as a result of the simultaneous generation of power and heating/cooling, their advantage lies in their very good net CO_2 balance, high number of operating hours – baseload-capable, irrespective of volatile external input factors – and their resultant ability to supplement or offset generation fluctuations from wind farms or solar parks in a balancing energy market such as the Electricity Market 2.0. CHP power plants are already utilised today for control and system services, and are integrated into existing grids. This allows them to make a stabilizing contribution to offset the fluctuating electricity

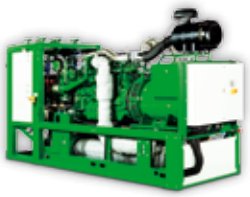
Differentiating characteristics of German gas fuelled CHP market

	Natural Gas	Biogas	Sewage-, landfill- and mine gas	Hydrogen
Regulation	KWK-G	EEG	EEG	EEG/KWK-G
Customers	Municipal utilities	Farmer	Municipalities	Wind farm operators
	Utilities	Financial investors	Disposal companies	Gas supplier
	Contractors	IPP	Municipal utilities	Municipal utilities
	Industry	Resellers		F&E
	Municipalities			Projektträger Jülich, BMUB
	Housing industry			ZIM**
Market vol. 2014*	566 MW	403 MW	< 10 MW	n.a.

Source: 2G Energy AG own data; *Öko-Institut, Energie & Management, November 2015; ** German Federal Ministry of Economics and Technology's ZIM program (Central Innovation Program for Small andMedium-Sized Businesses)

production from renewable energies that is fed into existing grids. Besides the supply security argument, combined energy production offers a further important advantage compared with the separated generation of electricity and heating/cooling: total efficiencies of more than 80%. Although neither Germany nor Europe can influence global energy markets' price and volume trends, they can nevertheless exert very significant influence over resource and production efficiency in energy production of imported and domestic energy sources. Given these factors, too, the potential and ratio of combined heat and power can be gauged as very high.

Framework conditions to date in Germany have envisaged a target of expanding CHP electricity production as a proportion of total electricity production to 25.0% by 2020. This proportion amounted to 17.3% in 2014 (no data available for 2015). The amended German Cogeneration Act (KWK-G) that came into force on 1 January 2016 set designated volume targets for expansion in absolute terawatt hours (TWh): CHP net electricity generation is to be increased to 110 TWh (corresponding to 19%) by 2020, and to 120 TWh (corresponding to 20%) by 2025. Given approximately 6,000 operating hours per

> 20 kW*	**2G CHP modules**	< 4,000 kW**
20 to 50 kW	50 to 550 kW	750 to 4,000 kW
		
Standard CHP modules	Modifications developed by 2G • Gas engine • Control electronics, software • Customised solutions	Customised solutions, incl. project planning
Plug & Play | Rental & Leasing | Service		

*no single-family homes | **no large-scale power plants
Diagram 4: CHP output range of 2G Energy AG
Source: 2G Energy AG

year and an output average per system of 500 kW, these 120 TWh would correspond to around 40,000 CHP systems. Although the KWK-G thereby falls short of its previous expansion target of 25% by 2020, the maximum production volume will double to an annual EUR 1.5 billion. As to date, support is to be financed through a CHP levy via grid payments.

The German Federal Office for Economic Affairs and Export Control (BAFA) constantly records natural gas operated CHP systems (supported by the KWK-G). Not all new plants have yet been registered for 2015, or recorded by the BAFA. This will not be announced until June 2016. And 20,000 plants were newly installed in Germany in the years 2012 to 2014 in the output range from 2 kW to over 100 MW. This corresponds to electric output of 3,795 MW. Output ranges up to 10 kW and above 2 MW were stable. Approvals figures in the output range above 10 kW to 2 MW for natural gas operated CHP power plants have increased to 3,266 in 2014 with an average annual growth rate of 30%. In addition to the overall CHP market there are the CHP plants in Germany operated by biogas, landfill gases and gases from purification plants, which are EEG-supported. The German Biogas Association reports construction of an additional 163 systems for 2014 (2013: 350 plants), with electric capacity of 268 MW (2013: 285 MW).

Positive sector growth trends also continue abroad

The sector's positive growth trends of many years standing continues, according to the results of an annual survey of CHP plant manufacturers operating in Germany that was published in November 2015 by Germany's Öko-Institut, the German Federal Cogeneration Association (B.KWK) and the magazine Energie & Management. Based on the forecast figures for 2015, CHP output sold will for the first time exceed the previous record year of 2011 – characterised by the biogas boom that preceded the 2012 German Renewable Energies Act (EEG) – by 10.8% to reach 2,528 MW (previous year: 2,175 MW). This corresponds to a 9.6% CAGR (compound annual growth rate) in the 2012 to 2015 period. The continuously rising export share of 64.6% also reflects a record in the reporting year (previous year: 55.4%). The CAGR amounted to 13.2% in the 2011 to 2015 period. The proportion of natural gas operated CHP systems in Germany also grew significantly with a CAGR of 9.4% between 2011 and 2015. It is expected that natural gas operated CHP systems with 629 MW of output will have been sold in the reporting year, 11.1% more than in the previous year (previous year: 566 MW). The proportion in Germany thereby rises to 70.4% (previous year: 58.4%) compared with systems operated with lean gases.

CHP systems sold in Germany and abroad in MW

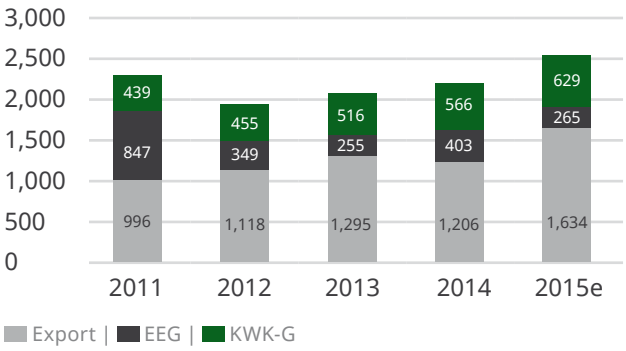
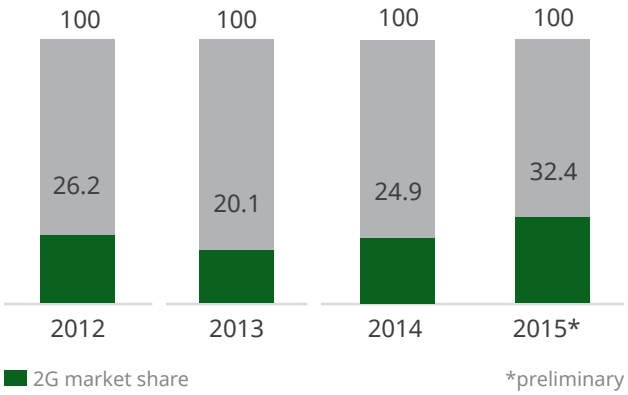


Diagram 5: CHP systems from companies active in Germany, sold in Germany and abroad in MW 2011 – 2015e: Biogas operated CHP systems supported by the EEG, natural gas operated CHP systems supported by the KWK-G
Source: Energie & Management, Öko-Institut (German Institute for Applied Ecology), November 2015

Over the past years, 2G has continuously expanded its market share – in relation to installed electric capacity – in Germany in the area of natural gas operated CHP systems, in its core capacity range from 20 kW to 2 MW. According to the German Federal Office for Economic Affairs and Export Control (BAFA), in the three years from 2012 to 2014, 7,619 systems with 980 MW of electric output have been added to this output spectrum that the company mainly addresses with its CHP power plants. In terms of installed output in its core performance range above 50 kW and up to 500 kW, 2G has maintained its market share in Germany at just under one quarter over this period. In the further performance range from 20 kW to 2 MW, the proportion is somewhat lower at 17.1% most recently. The figures for 2G in the images for market share in Germany for 2015 will respectively differ slightly to the downside, as the BAFA will not have completed most of the recording of new plants until June 2016.

Trends in 2G's market share in German CHP market 2012 - 2015 for natural gas operated CHP power plants in the core performance range > 50 - 500 kW

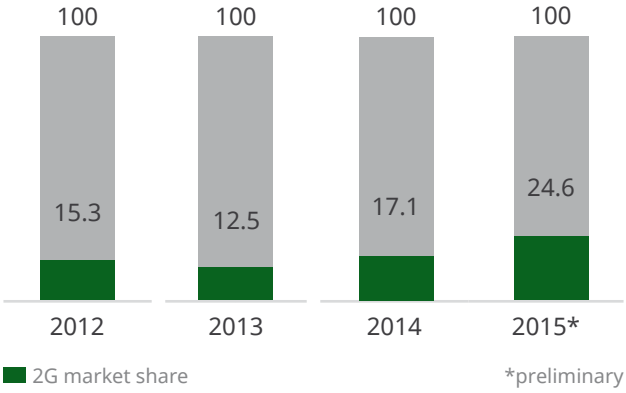
in %



Digram 6: Trends in 2G's market share in German CHP market 2012 - 2015 for natural gas operated CHP power plants in the core performance range > 50 - 500 kW
Source: 2G Energy AG; German Federal Office for Economic Affairs and Export Control (BAFA), as of 8 April 2016

Trends in 2G's market share in German CHP market 2012 - 2015 for natural gas operated CHP power plants in the > 20 - 2,000 kW performance range

in %



Digram. 7: Trends in 2G's market share in German CHP market 2012 – 2015 for natural gas operated CHP power plants in the 20-2,000 kW performance range
Source: 2G Energy AG; German Federal Office for Economic Affairs and Export Control (BAFA), as of 8 April 2016

No comparable data source that allows a corresponding market share analysis exists for the biogas market in Germany.

For 2G, the markets for natural gas and biogas operated CHP systems enjoy strategically similar weightings. Practice in Germany and many foreign markets has shown that the state-sponsored utilisation of biogas quickly opens up new customer groups, application possibilities and utilisation potentials for the technology of gas-driven, efficient and decentrally operated combined heat and power generation. The CHP principle – the combined generation of electricity and heating – is experiencing increasing awareness among the general public. In countries that typically already have well expanded natural gas infrastructure, this is then followed by a continuous upswing in demand for natural gas operated CHP systems in the lower and medium performance range of around 20 kW to 4 MW.

Besides Germany, this type of ratio is also registered in Italy and the United Kingdom, for example. Support for biogas systems has undergone significant change or reduction in terms of structure and level over the past years, with an attendant identifiable demand shift to natural gas driven CHP plants. A similar development is foreseeable for other countries in the future. Germany serves to a certain extent as a blueprint for the CHP markets in other regions.

The biogas market in Germany

The technical specifications of biogas operated CHP plants are designed to achieve as high a level of electrical efficiency as possible. Dependent on the existing infrastructure, heating tended to be an ancillary product without conceptual re-utilisation until the introduction of the German Renewable Energies Act (EEG) in 2012. With most systems, the annual heating volume generated (kWh) exceeds the production of electric energy (kWh), however. Heating, or cooling generated through an absorber can be emitted as a high-value product with corresponding cost-effectiveness, if the possibility exists for direct use (livestock management, thermal and process heat, drying, cold storage house, air conditioning etc), or given the availability of a local heating grid. Already with the Renewable Energy Sources Act 2012, the operators of new plants are required to use 60% of heat. Overall, biogas further expanded its position within the energy mix in 2014 and 2015. Especially for heating generation, biogas‘s contribution rose by 4.7%. Biogas‘s share of total regenerative electricity and heating production was up from 13.2% in the previous year to 13.6% in the reporting year.

Remuneration structures were streamlined again, and reduced significantly, when the amended EEG came into force as of 1 August 2014. Annual construction of new bioenergy systems to produce electricity was restricted to 100 MW of installed electrical capacity (gross). The plants receive basic remuneration, and gradual mandatory direct marketing depending on installed output was introduced. Direct marketing according to the EEG is now possible only with the help of the market premium. The green electricity privilege has been abolished. Plants must be remotely controllable in order to qualify for the market premium. 2G CHP modules already meet this precondition as well as so-called grid codes as of the end of 2014 / early 2015 for most of the CHP systems that it offers as a result of certification according to the Low Voltage Directive and Medium Voltage Directive. The plants can be remote-controlled in operation for contractors and energy supply companies to 2G‘s own control software. 2G thereby created the conditions at an early stage to access both the market for new biogas systems as well as the promising market for repowering investments. Business will focus on repowering over the coming years, according to capital market analysts. Investments in new biogas plants will remain comparatively low, as they cannot be operated in an economically efficient manner.

Greater focus is placed on biogas system flexibilisation and repowering

Conditions for the repowering and flexibilisation of existing biogas systems were re-regulated along with the 2014 amendment to the German Renewable Energies Act (EEG). This regulation aims at promoting the offsetting of fluctuating energy generated from wind and solar with electricity generated from biogas plants. Once biogas operated CHP systems have

reached the end of their basic life-cycle of around 60,000 operating hours (eight years on average), operators face a choice between a general overhaul, or replacement investments in combination with a technical re-dimensioning and flexibilisation (so-called „superstructure“) of the respective plant. Due to current CHP models‘ higher efficiencies compared to older models, the same biogas input can generate more electric energy for feeding into the public grid (and for compensation). Exchanging power plants can already be worthwhile from a one per centage point efficiency enhancement, according to a study published by the German Federal Ministry of Economics and Technology (BMWi) in December 2015 entitled „Repowering biogas plants – efficiency enhancement measures for existing plants“. The somewhat minor utilisation of waste heat to date can also be exploited as part of repowering through an improved waste heat concept (process heating, district heating grids) to generate efficiency improvements. Thermal energy utilised as part of cogeneration is also compensated according to the German Renewable Energies Act (EEG). Together with the flexibility premium and additional income from direct marketing, more economic operation of the plant can be achieved compared with its original condition.

Biogas systems with remuneration entitlement according to the EEG 2000, 2004, 2009 or 2012 are limited in terms of the potential expansion and flexibilising of their electricity production. Every kilowatt hour of electricity that exceeds the plant‘s maximum rated output is compensated only at the monthly market value (actual monthly average of our contracts (EPEX Spot SE) on the Paris energy exchange). The commissioning year of the system is decisive to determine maximum rated output. All plants can continue to utilise the flexibility premium. Such entitlement no longer applies if the aggregate additional construction to the plant park in Germany exceeds an additional installed electric capacity of 1,350 MW. Given an assumed average additional installed electric output of 150 kW per system, this would correspond to unit sales potential of 9,000 CHP modules. The capacity installed in the plant park by 31 July 2014 forms the reference for the „output cap“. 2G serves this market including with its CHP systems from its filius, patruus and agenitor series.

Development of number of biogas plants and of total installed electrical power (MW) 2000 - 2015e

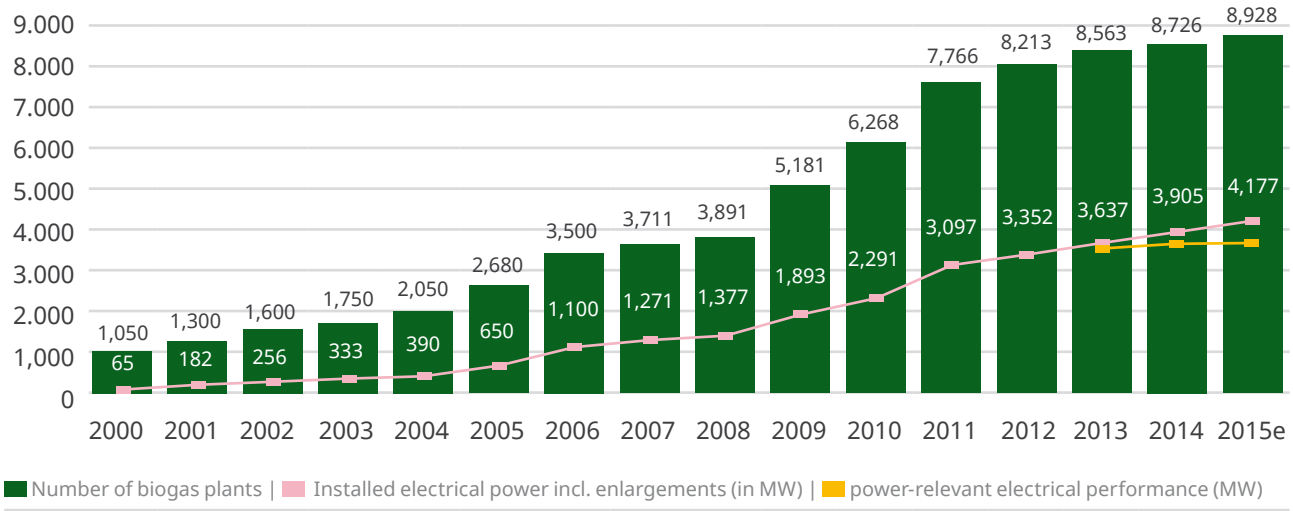


Diagram 8: Trend in number of biogas systems and total installed electrical power 2000 – 2015e
Source: German Biogas Association, 2014/2015 forecasts, as of November 2015

In its sector forecasts published in November 2015, the German Biogas Association assumes that 202 new plants will be installed in 2015 (2014: 163 new plants). Together with plant upgrades (repowering), this would represent an increase in installed electrical output in 2015 of 272 megawatts (total installed electrical output 2014: 3,905 MW; 2015e: 4,177 MW). Of this, around 253 MW of output, or 93%, was built additionally as part of plant expansions for flexible electricity generation, but only 19 MW installed with new plant capacity. The 100 MW capacity addition via new systems introduced as a „cap“ by the 2014 EEG is consequently far from being exhausted. For the end of 2015, the Association assumes total plant capacity of 8,928 with output of 4,177 MW in Germany. Of this amount, 3,739 MW are operationally relevant, in other words, actually deployed for electricity production, and 438 MW comprise superstructure, or are flexible – in other words, they are available when required and are not called upon permanently. The installed output of systems that were commissioned before 1 August 2014 increased to 130 MW in the August 2014 to March 2016 period (attribution to the 1,350 MW subsidy cap). Compared with 2014, output expansion rose overall by just 1.5% in the reporting year (2014 compared with 2013: 9%), and new plant construction registered a further marked decline of around 84% (prior-year comparable period: 72% fall). The base of biogas systems that has been established in Germany over the past more than 15 years supplied a notional 9.3 million households with biogas electricity, and 21.2 million tonnes of CO_2 emissions were saved, according to 2015 data from the German Biogas Association.

The association is of the view that, within a flexible electricity market, the flexible fuel source of biogas assumes a special role within the renewable energies mix. Firstly, biogas can be stored, thereby supplementing fluctuating energy suppliers such as wind and solar through energy generation from CHP power plants. Secondly, electricity from modern biogas operated CHP systems can also be deployed as balancing energy, thereby also helping to offset natural volatilities, irrespective of the weather or diurnal cycle.

In the reporting year, sales revenues in the biogas CHP systems business in Germany were at a very low level of EUR 16.1 million for 2G, as expected, due to the restrictive support policy (previous year: EUR 39.2 million). Firstly, the accelerated purchasing effect for new systems played a (statistical) role before the coming into force of the 2014 amendment to the German Renewable Energies Act (EEG) as of 1 August. Secondly, plant operators initially proved reticent to invest in repowering due to intervention into the existing base as a result of the setting of maximum measurement output and additional anticipated approvals requirements. This knot loosened in the second half of 2015, and 2G especially sold CHP plants that are oriented especially to smaller biogas systems as part of repowering. In the performance range up to 250 kW, 2G sold 42 biogas operated systems in Germany in the reporting year (of a total of 67).

In Europe, around 17,200 biogas systems are installed (previous year: around 14,570 systems) with electric output of around 8.3 GW (previous year: 7.9 GW) according to the European Biogas Association (status as of: end of 2014). This corresponds to around 18% growth. In its „EBA Biogas Report 2015“ that it published in December 2015, the EBA notes that this growth is based mainly on significant new installations in individual countries such as the United Kingdom, France and Belgium. The number of biogas systems in the United Kingdom in 2015 doubled compared with the previous year, for instance. In France, too, the indications point to further growth in the biogas sector with the passing of the country's new energy transition act at the end of July 2015. A total of 1,500 new biogas systems are to be constructed by 2020. France currently operates a total of 274 MW of installed plant output, with average plant output of 217 kW. With the construction of an additional approximately 325 MW, installed output would consequently more than double by 2020. To this end, the French Ministry of Ecology, Sustainable Development and Energy has restructured feed-in payments for electricity generated from biogas plants. Both existing and new biogas systems can benefit. On the other hand, there were a number of European countries in the reporting year that took no, or just a few, new plants into production, such as Austria, Hungary, the Czech Republic and Germany.

Number of biogas plants and installed electrical capacity (MW) in Europe 2010 - 2014

	2010	2011	2012	2013	2014
Number of biogas plants	10,433	12,397	13,812	14,569	17,240
Installed electrical capacity (MW)	4,136	5,360	7,646	7,857	8,339

Source: European Biogas Association, Biogas Report 2015, December 2015

On European markets, biogas continues to represent an important fuel for CHP plants, and generally receives state subsidies to varying degrees. For 29 European countries, the average annual growth rate (CAGR) of biogas plants amounted to 13.4% between 2010 and 2014, according to the EBA. Demand for biogas plants also increased in Asian markets and in the USA. In the USA, however, growth remained weak, according to data from an initial monitoring report published in December 2015 relating to the implementation of the Biogas Opportunity Roadmap of the EPA (Environmental Protection Agency), the DOE (Department of Energy), the USDA (US Department of Agriculture) and the participating industry associations, which was initiated in August 2014 as part of the Climate Action Plan. The potential is currently estimated at around 11,000 plants according to the report, with the current base still amounting to around 2,000 systems.

The generation of energy from biogas is still relatively expensive compared with other primary energies and generation forms such as natural gas or renewable energies from wind and solar power, for example. Operation of biogas plants, whose substrates originate primarily from renewable resources or waste materials, is insufficiently profitable in the foreseeable future without subsidies. The operation of a CHP plant with gases from a purification plant, methane or landfill gases is configured as required based on locally available raw materials as waste materials, and is more economically viable. With respect to the operation of biogas plants, however, state remuneration models and regulatory requirements still exert a major influence on the development of the biogas sector in individual countries.

Natural gas is important bridge energy source for the energy revolution

2G is of the view that natural gas is assuming a key role for sustainable energy supplies as part of the new energy policy direction. Natural gas has made a reliable contribution to energy supplies in Germany and Europe for decades. As part of the new energy policy direction, policymakers have formulated ambitious CO_2 emission reduction targets. The highly varied deployment of natural gas as an energy source is combined with enormous CO_2 reduction potential that can be exploited quickly and cost-efficiently. Natural gas thereby offers affordable, socially compatible and quick climate protection at low CO_2 avoidance costs. In combined electricity and heating generation, flexible, highly efficient and gas operated CHP power plants can provide secured electric and thermal performance on a decentralised basis at comparatively low investment costs, and as a partner to renewable energies contribute significantly to their system integration. Natural gas represents a multitalented energy supplier on the electricity and heating markets, and among all fossil fuel sources enjoys a beneficial net carbon dioxide impact in combustion within technical applications, and thanks to its high efficiencies. When being converted into electricity, natural gas releases 50% less CO_2 than lignite. Gaseous primary energy sources also combust with less residue and soot formation than diesel fuels, for example. Overall, gases can be stored underground in large volumes, and can be transported rapidly through pipeline systems. This allows energy that corresponds to German electricity requirements to be stored for three months. In Germany alone, the transportation and distribution of natural gas occur via a complex grid infrastructure consisting of around

510,000 km of gas pipes (2003: 380,215 km), according to the German Energy and Water Sector Association (BDEW). Of these, transmission networks of around 40,000 km form the backbone of the entire gas transportation system in Germany. The existing natural gas infrastructure represents an economic asset and a long-term investment in Germany as a location. Germany also forms a hub for natural gas transport in Europe. Over the past years, the further expansion of the trans-regional natural gas supply network, such as the North European Natural Gas Pipeline (NEL) and the Gazelle/Baltic Sea Pipeline Connection (OPAL) have helped to further boost supply security and performance in Germany and its neighboring countries. Besides transportation via long-distance gas pipelines, natural gas is also conveyed in a highly compressed liquid form as LNG (Liquefied Natural Gas) in tankers to a growing number of special terminals in Europe. This represented 15% of gas volumes (net) imported into the EU in 2014. The LNG EU import capacity amounted to an equivalent of 2,195 TWh in 2014 (2013: 2,123 TWh), corresponding to five times the volume imported in the same year.

Natural gas infrastructure in selected European countries

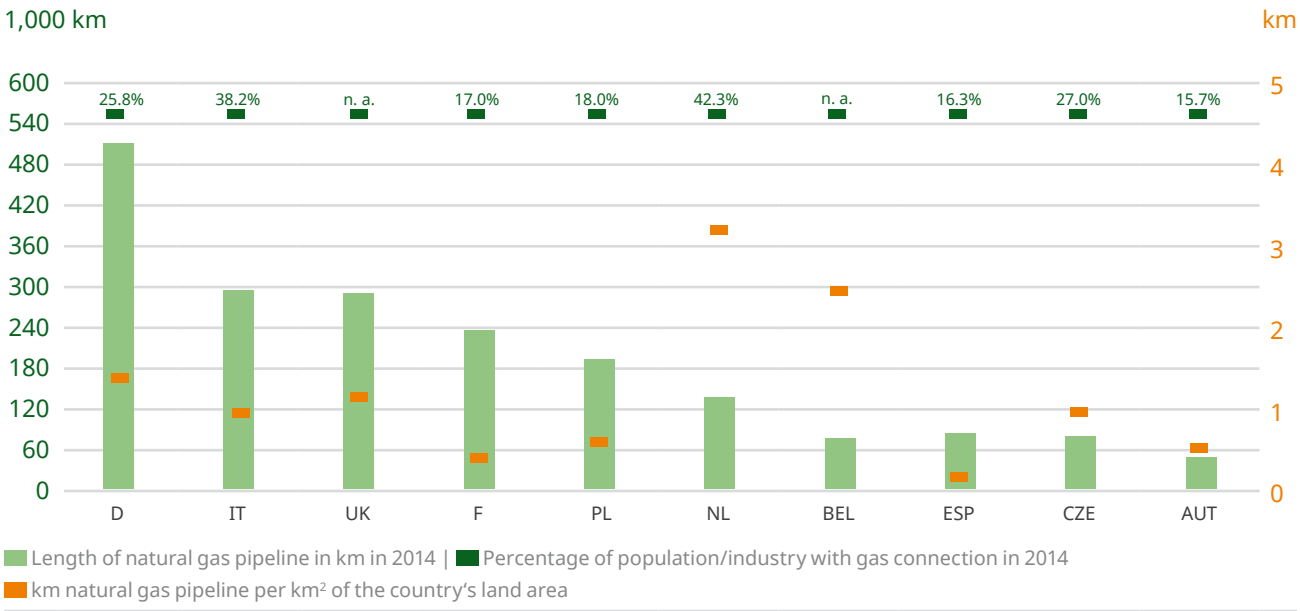


Diagram 9: Natural gas infrastructure in selected European countries
Source: eurogas, Statistical Report 2015, 19 January 2016; 2G calculations

In its 2015 annual statistics, European sector association eurogas assumes that the extent of natural gas reserves, the reserves-to-production ratio (RPR) – which compares the time availability of known natural gas reserves with constant production at today's level, and given no new discoveries of deposits – amounted to around 54 years in 2014 (2000: around 58 years). According to eurogas, these figures show that the discovery of new gas fields has kept pace with gas production and consumption. This situation has also

been assisted by improved technologies and more efficient production methods that make tapping shale gas and coalbed methane economical, for example. With regard to the future, eurogas assumes that global natural gas reserves are significantly higher than expressed in today's RPR figures as the result of further unconventional natural gas deposits that are not yet known. The German Association of Energy and Water Industries (BDEW) suggests in a study that worldwide coverage of more than 200 years can now be assumed. Global resource estimates have successively been upgraded further over recent years. Assuming overall moderate price growth for natural gas – even if varying from region to region – consequently appears plausible from today's perspective.

The potential of natural gas for sustained energy supplies for the new energy policy direction has already become evident over recent years with the expansion of natural gas operated combined heat and power systems. In Germany alone, installed electric capacity of natural gas operated CHP systems has risen annually by around one quarter between 2009 and 2014, according to BAFA data.

In 2G's view, the aforementioned environmental characteristics, infrastructure and prospectively long-term good supply of natural gas suggest that this primary energy source will comprise an important pillar to achieving the greatest extent of energy supplies with renewable energies. All of the conditions for an attractive growth market for decentralised CHP power plants are also met as a consequence.

System-viable and economic utilisation of favourably available electricity generated from wind and solar can also be achieved via the power-to-gas method by conversion into hydrogen or methane, and storing it in large volumes in the existing natural gas infrastructure, or converting it in line with needs into electricity and heating utilising CHP technology. This allows renewable energies, CHP technology, gas grids, and local and district heating applications to be combined with each other in a manner that is beneficial, complimentary, and in line with systems. 2G is already involved in a pilot project with renowned industrial companies to utilise hydrogen to this end, and has collected important empirical data for engine technology with hydrogen fuel. Natural gas driven CHP systems today no longer deliver just primary heating (heating-managed). Electricity demand is now being applied additionally as a control parameter increasingly frequently. With a software solution and new developments in control technology, 2G has created the „virtual power plant" operating type as a valuable operating alternative. Overall, the 2G power plant is thereby operated on a basis that is „heating-managed and electricity-oriented" in order to significantly simplify integration within a grid group. In other words, when demand for electricity increases – for own use or to stabilise the supply grid – 2G power plants can be activated accordingly. The heating that is produced at the same time is also available through storage systems for subsequent consumption-managed utilisation. Natural gas operated CHP systems can be operated with a high degree of efficiency, and can be deployed flexibly. Application examples are manifold: in supplied premises themselves (computing centres, healthcare, swimming pools, apartment blocks, retail centres, etc.) or in industrial and business operations with continuously high heating (process or thermal heat) or cooling requirements.

Decentralised energy supply comprises a further advantage to the operation of CHP systems with natural gas. Natural gas operated CHP plants can relieve the pressure on power grids to be reconfigured as part of the new energy policy direction on the basis of in general already existing supply logistics for natural gas provision and for feeding excess heat into local and district heating grids. Heating and electricity are generated directly where they are to be utilised, in line with demand. In conjunction with other renewable energy forms – provided they are equipped with modern electronics and software – natural gas operated (and biogas operated) CHP plants make an important contribution as virtual power plants to offsetting the volatilities involved in generating power from wind and solar power plants. This is recognised politically in the EU and the USA, and is institutionalised as standard in the market through regulatory adjustments for technical operation, such as the EU Medium Voltage Directive and the Low Voltage Directive in Germany. These serve to ensure quality of supply and the integration of decentralised, smaller power generating units such as PV systems, wind turbines, and CHP plants run on fossil fuels or renewable resources.

Amended German Cogeneration Act restores investment security

In 2015, German legislators amended the Cogeneration Act (KWK-G), with the amendment coming into force on 1 January 2016. 2G is of the view that the new statutory conditions on the German market restore the legal and investment security that the CHP sector requires. Demand from Germany for natural gas operated CHP systems was moderate in the reporting year. In particular, investments by private and public utilities were postponed, with reference to the uncertainty surrounding forthcoming new regulations. The possibilities to further boost CHP systems‘ share of electricity and heating supplies – applying suitable concepts and products – have now been restored. The KWK-G essentially creates opportunities for 2G. Details about the act are presented in the „Regulatory environment“ section.

Gas prices continue to drop, electricity price stable at high level

The price of natural gas has tended to fall since 2014. This trend accelerated during 2015. The sharp drop in the price of crude oil that has been observable since mid-2014 (Brent crude oil: 20 June 2014: USD 114.96; 30 December 2015: USD 36.63) until the end of the reporting year of around 68% also exerts a delayed effect on the price trend for natural gas via partly long-term supply contracts of natural gas importers and the partly existing link to the oil price (the natural gas price follows the oil price with a delay of around six months). Price swings are generally less than those of oil price changes, as the gas cost portion of the selling price is lower than the portion for transportation and distribution costs, taxes and profit margins. In a study published in March 2015, energy market experts at Delta Energy & Environment report on global price trends in 2015. Due to the fall in the oil price, the gas price is also declining, especially in Europe (including Germany and the United Kingdom). For parts of Asia, Delta assumes a marked price decline of up to 30%, as Japan has started to gradually bring its nuclear power plants back onto the grid after the Fukushima accident. This falling gas price trend is supported by a good supply situation, a globally expanding distribution infrastructure and high supply security.

Development of gas prices for industrial customers and households in Germany
(Index 2010 = 100)

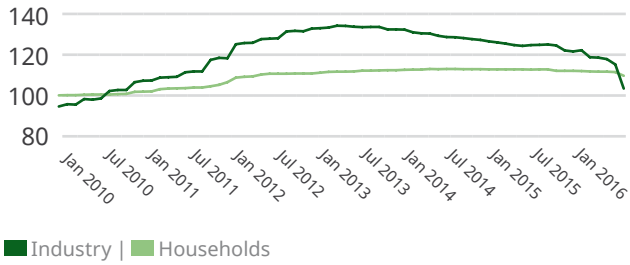


Diagram 10: Development of gas prices for industrial customers and private households in Germany
Source: Federal Statistical Office, data of energy price development, February 2016

Electricity prices remain at high level for users

Electricity prices in Germany remain at a high level for consumer households and small- and medium-sized industrial operations. The proportion of government-imposed special charges (taxes, levies and transfers) on electricity prices in Germany has risen considerably in this context, according to the German Association of Energy and Water Industries (BDEW). Meanwhile, their share comprised half of the electricity price for industrial customers in 2014, and even a little more of 52% for household customers. This is particularly true for the absolute level of charges: whereas the proportion of taxes, charges and levies amounted to just 0.19 cents/kWh in 1998, and 0.59 cents/kWh in 2000, they amounted to 6.82 cents/kWh by 2014 for industrial customers without EEG relief (2013: 5.73 cents/kWh) (in each case excluding electricity tax). The introduction of individual state transfers and levies also created a large number of exception regulations for larger industrial consumers, in order to provide partial relief or completely exempt energy intensive production processes from electricity price components. Such relief regulations for industry result in higher burdens for non-privileged electricity customers, as such customers are then required to contribute a higher proportion to finance the respective transfer. In this context, a look at the trend in average industrial electricity prices for small and medium-sized industrial operations (see diagram 11) shows that prices for production/transportation/sales have fallen, and lie at their 2004 level, and also significantly below their 1998 level (price for production/transportation/sales: 9.15 ct/kWh), when liberalisation of Germany's electricity market started. This is countered by higher state charges, resulting in an increase in the total price per kWh.

Average electricity price for industrial customers (incl. electricity tax) 2000 - 2015 Cent per kWh

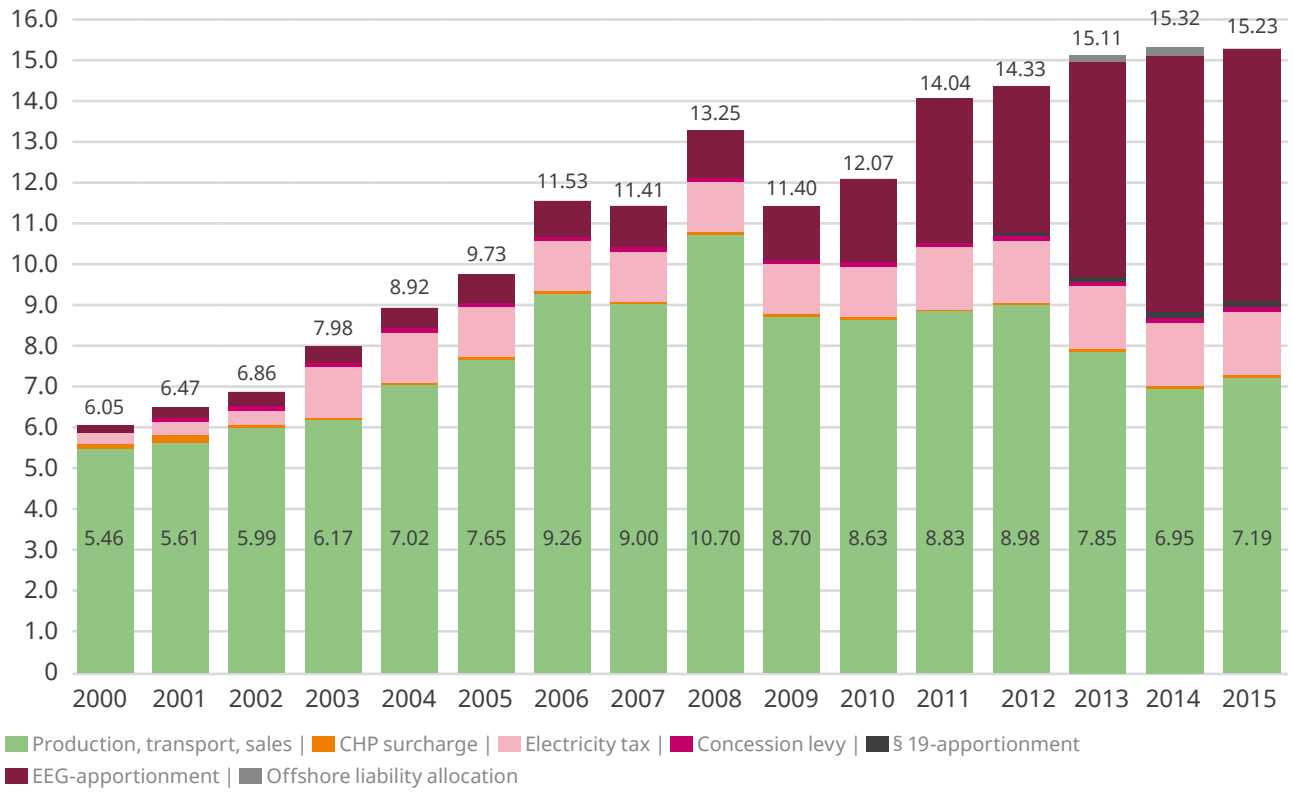


Diagram 11: Average electricity price for industry 2000 – 2015 (including electricity tax) in Germany in cents per kWh (annual consumption 160 to 20,000 MWh), medium voltage supplies (intake 100 kW / 1,600 h to 4,000 kW / 5,000 h)
Source: BDEW, Energy Information, industrial electricity prices, August 2015

For the first time in years, average electricity prices for private households and medium-sized industrial operations fell slightly year-on-year during the first half of 2015, by 1.4% and 0.6% respectively, according to data produced by the German Energy and Water Sector Association (BDEW). For private households, this represents the first decline since 2000. Along with some state-imposed taxes, surcharges and levies, the German Renewable Energies Act (EEG) levy fell by 1.12% from 6.24 cents/kWh to 6.17 cents/kWh for both customer groups. For private consumers, the costs for procurement, grid charges and distribution were down by 4.5%, from 7.38 cents/kWh in 2014 to 7.05 cents/kWh. For industry, by contrast, such costs rose by 3.5%, from 6.95 cents/kWh to 7.19 cents/kWh, during the corresponding observation period.

Wholesale prices on the EEX Leipzig Energy Exchange continue to fall, amounting in 2015 (data until August 2015), depending on product, at EUR 31.01/MWh (baseload) 5% (spot market) or at EUR 40.36/MWh (baseload) 9% (forward market) below the 2014 year

average. This is evident not only in the continued high EEG levy (differential costs between EEG feed-in compensation and electricity market price), but also in a price-reducing effect due to preferential feed-in and marketing of EEG electricity volumes. It can be noted overall that electricity prices for medium-sized industry as an electricity consumer have remained at a high level since the end of 2012. No trend turnaround has been identifiable to date, including during the course of the current reporting year.

The Delta Energy & Environment study from March 2015 assumes a global increase in electricity prices for the reporting year. The experts identify the growing proportion of renewable energies and the creation of capacity markets as the reason. In the USA, following a number of extreme weather events over the past years, the focus is on electricity grid reliability and flexibility. According to the Delta study, this is resulting not only in rising electricity prices but also in the greater deployment of decentralised electricity generating units with gas motors.

As a consequence, due to the outlined trend on both the German market and foreign markets of relevance for 2G, gas and electricity prices performed beneficially for the economic efficiency of 2G CHP power plants in 2015. Generally, potential customers face an economic decision as to whether to invest in a gas operated CHP power plant and thereby become largely independent of public supplies and save energy costs through the combined generation of electricity and heating/cooling, or to remain with conventional energy supplies. Assessing this situation is based on the so-called spark spread (relationship between the electricity price and the natural gas price). Delta's experts assume that market conditions start to become interesting for an investment given a factor greater than 2.5. A factor greater than 3.0 already signals attractive conditions, and a factor greater than 3.5 promises very attractive terms.

Spark Spread Ratios in Europe and USA 2008 - 2015

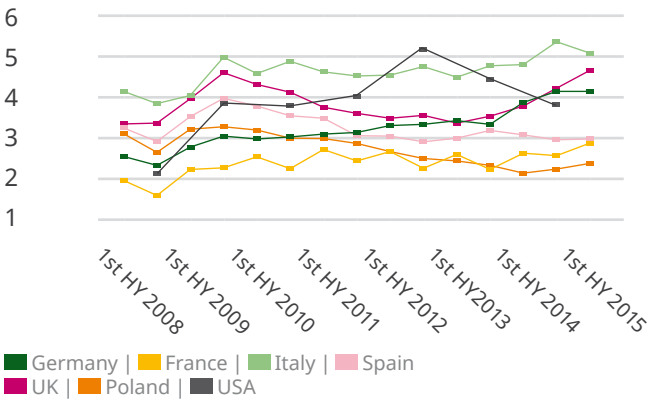


Diagram 12: Sparks spread trends in selected European countries and the USA 2009 – 2015
Source: German Federal Statistical Office, energy price trend data, 29 February 2016; UK Department of Energy & Climate Change, Industrial Electricity & Gas Prices in the IEA, 22 December 2015; 2G calculations

As shown by the graphical presentation of spark spread trends in markets of primary interest for 2G, the underlying conditions have tended to improve continuously for the economic operation of combined electricity and heating generation since 2012/2013 with the widening of the gap between electricity and gas prices. Apart from Poland, the spark spread factor stands at more than 2.5 in all of the countries depicted.

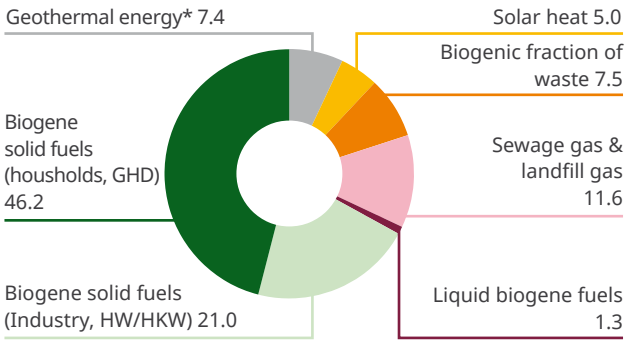
Heating market offers further potential for combined heat and power

The reduction of greenhouse gas emissions by 40% by

2020 comprises the main goal of Germany's new energy policy direction. In other words, an additional 22 million tonnes of CO_2 compared with 1990 must be saved. This target is to be achieved through boosting energy efficiency, reducing specific CO_2 emissions, lowering energy consumption, and through greater deployment of renewable energies. Around 40% of total energy consumption flows into heating generation. In other words, great potential exists here to deploy renewable energies and efficient technology. Enormous CO_2 reduction potentials, especially in decentralised heating generation, nevertheless continue to lie unexploited. The multi-level decentralised utilisation of heat for energy supply in the housing industry, in companies as process or thermal heat, or by regional energy providers (such as public utility companies/ local authorities) in local and district heating grids is particularly important as a sales market for CHP systems.

Renewable energies' share of the heating market increased slightly year-on-year from 12.5% to 13.2% in 2015. Private households' wood consumption increased due to the weather, and the utilisation of solar and geothermal heat also rose. At approximately 155 billion kWh, a total of 6.5% more renewable heating was consumed than in the previous year (145.5 billion kWh). More than 88% of chiefly solid biomass (bioenergy in the form of wood pellets, wood off-cuts and scrap wood and biogenic waste material) is utilised directly in the decentralised provision of heat from renewable energies. Although gaseous biomass (biogas, biomethane, gas from purification plants, and landfill gases) increased their share of final energy consumption for heating in absolute terms by 5.2% from 17,181 GW hours to 18,069 kWh, their proportion of final energy consumption for heating from renewable energies of 11.6% in 2015 with almost unchanged compared to 11.8% in 2014. Biogas and other lean gases, such as gas from purification plants and landfill gases, represent a good addition to natural gas in the heating market.

Use of heat from renewable energies in Germany 2015 Share %



* near surface geothermal energy, geothermal heat, deep geothermal energy

Diagram 13: Use of heat from renewable energies in Germany 2015 | Source: German Federal Ministry for Economic Affairs and Energy (BDEW): Renewable Energies in Germany, 2015 Trend Data, status as of February 2016

The German government's integrated energy and climate program plans to increase the share of renewable energies in the heating market to 14% by 2020.

Regulatory environment

The amended KWK-G 2016 reflects the German government's paradigm shift to the „Electricity Market 2.0". Given high proportions of renewable energies, too, Electricity Market 2.0 aims to ensure secure, price-efficient and environmentally-compatible electricity supplies, including through the further development of load-balancing markets, free price formation

and transparency. The KWK-G bolsters the feed-in of electricity into the public grid through higher compensation rates (irrespective of the respective performance category), introducing mandatory direct marketing for systems from 100 kW from 2016. Both of these instruments will help to better integrate CHP systems into the demand-led electricity market via energy supply companies and municipal utilities.

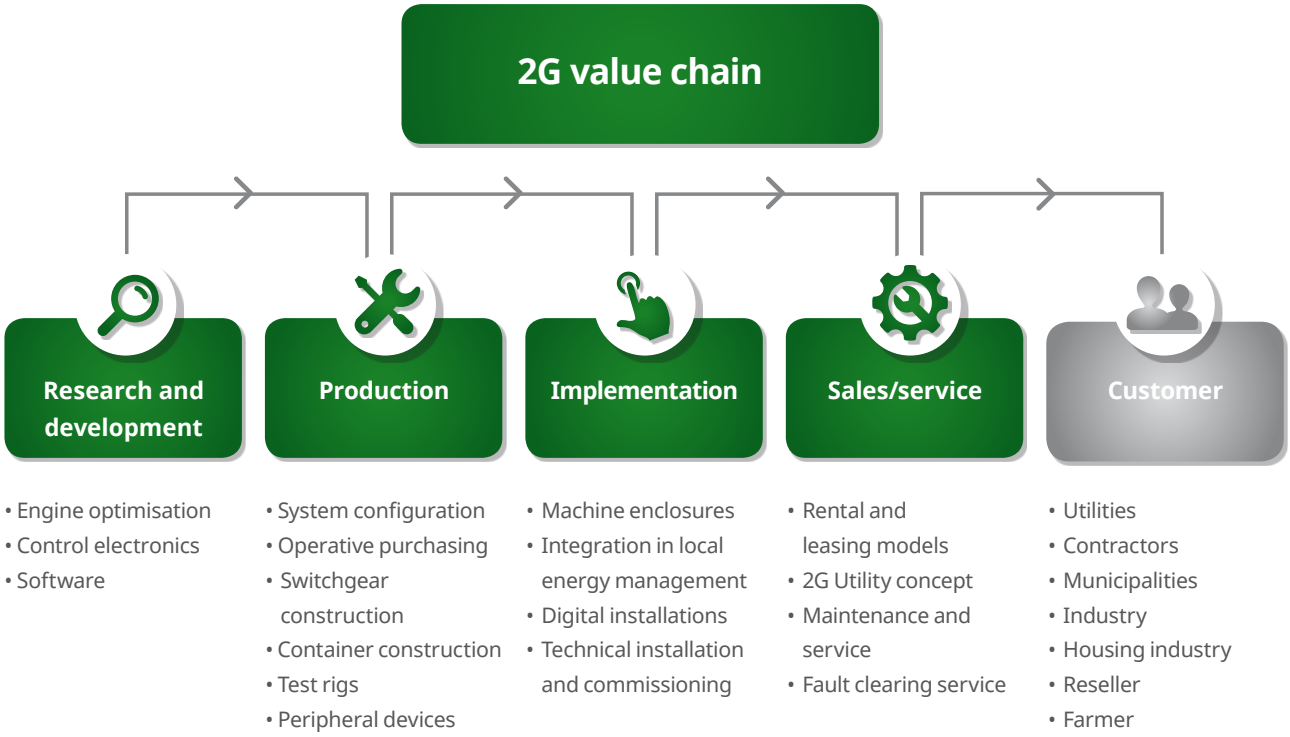
The amendment to the KWK-G restores economic opportunities for energy contractors that supply CHP generated electricity locally within client systems or closed distribution grids as part of the supply of industrial areas, tenant electricity and city districts solutions, for example, rather than within public supply grids. Such systems receive their own CHP subsidy for supplies to properties, as well as corresponding CHP subsidies when being fed into public grids, if the full German Renewable Energies Act (EEG) levy is paid on the CHP electricity that they generate. Moreover, smaller CHP systems up to 50 kW benefit from the setting of the subsidy duration to 60,000 full utilisation hours without time limitation. The potentials of such contracting models – which are desirable from an energy policy perspective – can be tapped by energy utilities and contractors especially in the residential sector, and within industrial and commercial structures.

The only fly in the ointment in relation to the amended KWK-G is the reduction in compensation for self-utilised electricity generated from proprietary CHP systems: by about one quarter in the case of lower performance classes up to 100 kW, and the CHP subsidy is discontinued entirely for new systems above 100 kW electric output. As announced, a proportional EEG levy (2016: 35%, 2017: 40%) still needs to be paid until the end of 2017 for CHP systems for proprietary supply ordered after August 1, 2014. Overall, the highly efficient cogeneration of electricity and heating remains an attractive alternative for decentralised site supplies following the amendment to the KWK-G. 2G is convinced of this, as the EEG levy and grid payments will rise further prospectively, so that costs for proprietary electricity can lie significantly below grid electricity purchasing costs. In combination with heating utilisation concepts for the respective site, investments in gas operated CHP power plants remain economical, with relatively short amortisation periods.

The KWK-G 2016 now sets designated volume targets for expansion in absolute terawatt hours (TWh): CHP net electricity generation is to be increased to 110 TWh (corresponding to 19%) by 2020, and to 120 TWh (corresponding to 20%) by 2025. Given approximately 6,000 operating hours per year and an average of 500 kW, these 120 TWh would correspond to around 40,000 CHP systems. Although this falls short of the previous expansion target of 25% of total electricity generation by 2020, maximum generation volumes are doubled to EUR 1.5 billion annually. As to date, support is to be financed through a KWK-G levy via grid payments.

2G Energy is diversified and strongly positioned in CHP market

2G is a medium-sized type company with flat hierarchies, organisational flexibility and quick decision-making processes. The company is more than 50% owned by its two founders. In its more than 20 years of operating activities in the combined heat and power system market, 2G has developed from a package of CHP plant components to a supplier of customer-specific solutions in the area of gas operated CHP systems, with sales in



almost 40 countries. The company has continuously expanded its value chain surrounding the core of the CHP system – the gas engine and the generator.

2G operates in a market environment that is more or less characterised by regulatory changes – with attendant planning uncertainties for both customers and the company. Thanks to its economic strength and healthy balance sheet structures, 2G can invest countercyclically in tapping important foreign markets, expand its value chain, and advance the expansion of its technology leadership in combined heat and power generation through its continuous R&D work. Through high motor efficiencies, intelligent peripheral devices and the far-reaching digitalisation of CHP systems, 2G generates added values for customers and competitive advantages with high capacity utilisation rate and a broad deployment spectrum for its CHP power plants. The company thereby continuously bolsters its strong market position, also with regard to future challenges.

Digitalisation develops into value and growth driver

The growing digitalisation of the energy sector also represents a challenge for CHP system manufacturers. CHP power plants today are embedded in very different energy systems. They have to fulfill complex technical requirements for this reason – including to maximise income. 2G invested at an early stage in control electronics and software development, and in meeting complimentary technical standards, and equips its CHP systems with fully developed control software.

Insofar as CHP plants adjust the production of electricity and heating to demand – in other words, insofar as they generate flexibly – they can be operated in a manner that serves systems, and that proves economically viable for the operator. Cogenerative electricity production can be released from heating demand for a certain period through the utilisation of heating storage devices. The aim of all operators is to cover or replace the maximum proportion of energy demand with suitable plant configuration and a demand-based regulating strategy, and to achieve a high share of full utilisation hours.

Flexibly operated and controllable CHP systems also make an active contribution due to their physical properties, by helping to cover electricity demand and secure grid stability in extreme situations – during sustained periods of dull weather when no electricity is generated from wind and solar plants – and can also be regulated or switched off. This requirement for flexible operability is increasing every year through renewable energies' growing share within the system. The question concerning capacity cover within the electricity system is also playing a greater role as a consequence: plants that can be operated flexibly and thereby provide secured output are required increasingly urgently in order to offset sustained periods of dull weather conditions that cause fluctuating energies.

In 2G's assessment, this will lead to a further major increase in the flexibility requirements that are made of CHP plants over the coming years. This demands, firstly, reliable and dependable gas engine mechanics to a greater extent than ever before, and, secondly, further plant digitalisation. The latter extends from electronic access rights for maintenance personnel, and greater plant intelligence, including self-diagnosis when plant operation is interrupted, through to full integration into the electricity market of the future via virtual power plants. 2G has already established very high standards within the sector in all of the aforementioned areas. The company has underscored its position as technology leader with the development of the 4-series of its agenitor (250 kW, 360 kW) and its avus 500 plus (550 kW). The combination of efficient, long-lived technology, high availability and grid integration evens 2G's path to further boosting its market share in existing and new markets.

Strong demand for digital services

In its Service division, too, 2G exploited the possibilities offered by digitalisation for further efficiency enhancements and cost reductions in the reporting year. 2G Service has become the largest business division over the past years – measured in terms of the number of employees. It ensures that 2G power plants worldwide produce electricity and heat with the greatest possible availability and highest efficiency. With the rapidly growing number of installed plants of the past years, the Service division has encountered

limits in some areas. This prompted 2G in the reporting year to conduct a review of its processes and structures. Along with hiring further employees, the opening of a qualified partner network and the reorganisation of some service units, primarily technical solutions such as digital maintenance forms („Airforms“) and notifications generated automatically by the plant („Power Plant“) proactively improve 2G Services‘ reliability, quality and response time.

With constantly rising demands of CHP power plants as system energy suppliers, optimal processes and (digital) capabilities to provide information to customers and utilities form an important basis for good and reliable service and economically optimised plant availability, as many 2G customers in Germany and abroad conclude long-term service and maintenance agreements so that 2G attends to their products over their entire life cycles. To provide optimal support for maximum plant availability via Service, 2G has developed and introduced a software solution entitled „Power Plant“. The CHP modules‘ operating data and measurements (pressures, gas quality, temperatures, operating hours, etc.) are automatically stored and evaluated. 2G has reached the milestone with this plant monitoring: the connection of power plants to 2G‘s own corporate software is developed to such an extent that a plant disruption that is not due to the operator triggers a work process at 2G Service, independently submitting suggested solutions. Customers are increasingly prioritising these types of remote maintenance options, although they presuppose that solutions are available that enable a perfect interplay of mechanical position and integrated software applications. 2G believes that it is progressing well with a number of such practice-tested applications, and has already created many conditions for the future „Industry 4.0“ standard for CHP power plants.

External sales force staff are based regionally, acting as fixed contacts for a defined number of customers locally. The service area heads are the personal contacts for customers during the entire plant duration. They are available to provide advice to customers ranging from joint maintenance planning through to replacement parts sourcing, and consulting on plant modification and expansion.

2G asserts strong market position

The results published by Germany‘s Öko-Institut, the German Federal Cogeneration Association (B.KWK) and the magazine Energie & Management (see table, page 53) underscore 2G‘s strong market position among plant manufacturers operating in Germany in 2014 – more recent data are not available – the company ranked third in terms of megawatt output, with 123.6 MW of annual output (previous year: 94.1 MW). Only group-tied companies Caterpillar Energy Solutions (MWM) with 199.5 MW (previous year: 158.2 MW) and GE Jenbacher with 158.6 MW (previous year: 158.1 MW) exceeded 2G‘s output. Here, the two competitors offer CHP modules in higher performance ranges from 400 kW up to 4.5 MW, and 200 kW up to 10 MW respectively. 2G differentiates itself from both of the aforementioned engine manufacturers through its CHP system solutions that are tailored to customer wishes in performance classes above 50 kW to 4 MW, and are delivered and installed turnkey. In the assessment of research house First Berlin, smaller companies will struggle to compete with 2G (also see table). The study identifies 2G‘s strength especially in its technological know-how, international business, expertise in natural gas and biogas operated engines, established customer relationships with utilities, municipal operators and energy service providers, as

well as its very solid balance sheet and access to both equity and debt funding through its stock market listing.

Output in MW of selected CHP system producers 2012 - 2014, and average module size in MW

Company (CHP core performance range)	2014		2013		2012	
	Output	Module size	**Output**	Module size	**Output**	Module size
Caterpillar (MWM) (400 kW to 4.5 MW)	199.5	1.028	158.3	0.920	234	0.818
GE Jenbacher (200 kW to 10 MW)	158.6	0.891	158.1	1.163	158.9	1.160
2G Energy (50 kW to 550 kW)	123.6	0.255	94.1	0.270	105	0.239
Elektro Hagl (30 kW to 530 kW)	95.8	0.283	33.5	0.207	39.3	0.197
MTU Onsite Energy (120 kW to 2.5 MW)	76.8	0.739	95.8	0.833	80.4	0.717
Schnell (100 kW to 525 kW)	71.6	0.250	46.4	0.256	37.2	0.234

Source: Energie & Management, November 2015; 2G calculation; information provided by the companies listed

2G expands international revenue share in 2015

Although the German market was again the most important market for 2G in the reporting year with a 73.1% revenue share (previous year: 79.1%), it further increased its international share of revenue to 26.9% in 2015 (previous year: 20.9%). 2G is exploiting rising global demand for its own growth on the basis of its international subsidiaries and branch operations, as well as sales cooperation ventures, in Europe, the North American market, Asia and Japan.

Preconditions improved for 2G on American market

Compared with previous years, 2G in the reporting year improved its conditions for sustained long-term growth on the American market with the unification of its corporate structures in the USA, and an organisational realignment. 2G acquired the entirety of its subsidiary 2G Cenergy Inc., St. Augustine, Florida, at the end of February, and consistently reorganised its business in the following months. Experienced managers were newly appointed to its management level, the sales team was expanded to include specialists with sector and product experience, and the service function was bolstered. 2G Cenergy Inc. was fully consolidated within the 2G Group in the half-year financial statements as of June 30, 2015. 2G Manufacturing Inc., which owns all the shares of 2G Cenergy since the complete takeover, was renamed 2G Energy Inc. in August 2015. Activities in sales, production and service are now bundled under the umbrella of 2G Energy Inc., St. Augustine, Florida. This concentration enables 2G Energy Inc. to offer its customers the entire range of services on a one-stop-shop basis, and to profile itself to a greater extent as an integral unit on the American market. Synergies from

aggregating previously independently operating units are being leveraged successively, with positive effects on revenue and earnings.
With the aforementioned measures and adjustments, 2G has invested in an attractive market, and is strengthening its presence on this market. The market potential of the US business derives from many different factors such as significant catchup effects in relation to climate and environmental topics, infrastructure modernisation requirements, the desire for supply security during weather extremes via microgrids and district energy, and general further demand growth for decentralised energy supplies. According to planning at 2G, the US market is set to develop in the short term into the largest international sales market for the company's CHP systems outside Germany. To tap the market further, the company is focusing on long-term cooperation with regional sales and service partners with good networks.
Economic conditions and acceptance for smaller and medium-sized CHP systems in the USA has improved considerably over the past quarters, according to an analysis by ICF International. To date, mainly large-scale industrial plants have been installed, comprising around 86% of all CHP power plants with 71 GW of total output. Decentralised CHP systems in commercial and institutional facilities represent the remainder of 14% or 12 GW. The analysis cites four main reasons as the drivers for the changes:

1. The amortisation period and consequently the economic viability of CHP systems has improved due to the positive trend in the spark spread. This particularly affects California and the North Eastern US states, and potentially also the Midwest.

2. CHP plants are increasingly being offered as complete system solutions – plug & play – in compact design, enabling them to be integrated into existing infrastructure / buildings without major expense. Installation, operating and maintenance costs can be reduced due to the fact that control and service modules are meanwhile integrated. The easier handling of CHP plants over their entire lifecycles and the elimination of entry hurdles is thereby fostering acceptance of CHP technology. Moreover, plug & play solutions offer the advantage that they can be installed countrywide as standard units, including in hotel and supermarket chains, for example.

3. Rent and lease models for smaller energy generation units have become known in the USA through the photovoltaic market. Corresponding financing instruments might also boost sales opportunities on the CHP market.

4. Prospects of additional revenues from operating CHP plants through the sale or attribution of CO_2 avoidance potentials are slowly coming into view. US states face the challenge of setting up programmes that comply with the requirements of the US Environmental Protection Agency (EPA) as part of the Clean Power Plan (CPP), which sets CO_2 reduction targets for each state. In the expanded framework of energy efficiency measures, CHP systems can be attributed for target attainment. In addition, utilities can benefit from decentralised CHP installation via storage and load relocation, and additional services such as grid voltage and frequency balancing. In future, operators can market these CHP-based services for utilities via regional transmission organisations (RTOs). The states of New York and California are already preparing corresponding distribution markets. The economic

viability of CHP systems would improve further through such additional income sources.

Based on the conditions for CHP installations that have prevailed on the US market to date, ICF assumes that around 18 GW of new CHP capacities will be added up to 2030. With the economic improvements that are becoming evident and growing acceptance of CHP plants, the ICF believes that even higher growth rates are entirely possible.

In a study published in March 2016, the US Department of Energy investigated the technical expansion potential of CHP systems in the USA. In the DOE's view, deploying CHP power plants reduces burdens on the electricity grid, cuts CO_2 and other harmful emissions, reduces the need for a new transmission and distribution infrastructure, and exploits vast domestic availability of clean energy sources such as natural gas and biogas. Overall, the DOE estimates the technical potential at 240 GW, distributed over more than 291,000 installations. In contrast with already existing CHP capacities that are mainly installed in large industrial plants, the DOE identifies most of the remaining technical potential in commercial, decentralised applications in a dimension of around 58 GW solely in the CHP performance range between 50 kW and 5 MW. This corresponds to one quarter of the overall potential. If decentralised systems for industrial applications (around 26 MW) are added to this performance range, it comprises more than one third of the identified potential.

Technical CHP potential in the USA for selected performance plant classes

	50 kW - 500 kW		500 kW - 1 MW		1 MW - 5 MW		5 MW - 20 MW	
Application	Locations	Capacity MW	Locations	Capacity MW	Locations	Capacity MW	Locations	Capacity MW
Decentralised CHP systems for industrial applications	34,502	6,281	6,069	4,341	7,424	15,567	1,901	17,036
Decentralised CHP systems for commercial applications	185,625	20,068	37,939	18,100	15,535	20,284	1,084	9,452
Total	**220,127**	**26,349**	**44,008**	**22,441**	**22,959**	**35,851**	**2,985**	**26,488**
Potential capacity in total								**111,129**

Source: Combined Heat and Power (CHP) Technical Potential in the United States, U.S. Department of Energy, March 2016

Analysed according to CHP application possibilities, the DOE study shows that significant potential exists for combined heat and power especially in commercial and building sectors (commercial buildings, schools, universities), as well as in the food manufacturing industry and in healthcare.
By way of addition to the market drivers listed in the ICF analysis, the DOE makes reference to political support at federal and state level. The government currently provides a 10% tax credit for investments in CHP plants. At state level, various climate protection and energy initiatives exist that support CHP power plants in order to reach targets for cleaner energy supplies.

US business reports moderately positive trend in 2015

The trend on the American CHP market continue to be somewhat restrained in the reporting year, from 2G's perspective. The US market remains characterised by heterogeneous structures, and by various factors and investment subsidies at federal, state and district level. Despite state-led efforts to accelerate CHP market growth, continued unfavourable overall conditions are hampering the unfolding of more broadly based investment activities. Measures to improve grid connection, grid integration, and the regulation of fees incurred by suppliers (standby and backup charges), continue to be extremely important to market growth in this context. Requirement for harmonisation still exists in the USA in this context, and uniform federal standards need to be created. The government has recognised this, and harmonization at federal level is progressing.

The year in overview

2G achieves solid result in 2015 transition year

The 2015 financial year was a year of transition between the amendment to the Renewable Energies Act (EEG) as of 1 August 2014 and the amendment to the German Cogeneration Act (KWK-G) as of 1 January 2016. Both of these amendments resulted in atypical ordering patterns among customers in the German core market, which also exerted an impact on the reporting year. Firstly, accelerated orders of CHP systems before the new EEG came into force dampened business expectations in 2015. Secondly, public opinion-forming in the legislative process concerning the KWK-G, which started from the second quarter of the year, resulted in a marked reticence to place orders for natural gas operated systems. This was not resolved until the KWK-G was approved on 18 December 2015. Many investors utilised the window until the year-end to submit delayed CHP orders, and secure the moderate transition regulations and options. When ordering a plant by December 31, 2015, future plant operators were able to choose whether the plant is to receive the CHP subsidy and support periods according to the previous KWK-G 2012 or according to the KWK-G 2016, if the plant is commissioned by December 31, 2016. In addition, mandatory direct marketing from 2016 relates initially only to CHP systems above 250 kW.

Ordering patterns in Germany that were strongly influenced from the regulatory side were partially offset by brisk demand from abroad in the reporting year. For the first time in the company's history, international business contributed more than one third of all revenues deriving from the sale of CHP systems. Compared with the previous year, 2G significantly increased this proportion from 27.7% to 35.3%. In terms

of consolidated revenue, including the service business and after sales revenues, 2G expanded its international share from 21.0% to 27.0% in the year under review. Both existing foreign subsidiaries (for more information see the „Results of operations“ section) and cooperation ventures with foreign sales partners contributed to this pleasing trend in international business. The company further expanded this network and also established its first contacts in China.

2G invested further in the efficiency and effectiveness of its existing business, production and develop processes in the reporting year, thereby continuously improving the deployment of essential resources. New business areas, such as the lease business of 2G Rental GmbH, were integrated rapidly into Group structures. Following the takeover of 2G Cenergy Inc., 2G also achieved a smooth standardisation of its corporate group structures and an organisational realignment of its US subsidiaries. 2G relies consistently on digital solutions to improve many of its internal process steps, and to structure external processes with customers and suppliers. To this end, 2G has invested in high-end control electronics and software solutions to make CHP systems flexible in integrated grid operation, and in the quality of the service business, and of operating and plant management. These were joined in 2015 by the digital form system for the Service division‘s external sales force, the „Airform“, and a standardised business intelligence solution that provides important corporate data and early indicators under the name „2G Facts“. In the so-called „2G Power Plant“, the development department is working on expanded possibilities – with the help of outage and predictive models – to utilise intelligent evaluations of CHP operating data from plants located in the field. For the monitoring of the lifecycle of a CHP power plant as part of long-term service and maintenance agreements, outage information, remote maintenance and performance data evaluations provide important parameters to maximise customer benefits through plant availability and enhance customer satisfaction.

2G thereby differentiates itself from its competitors through both the high electric efficiencies of its CHP modules and the high degree of digitalisation of the integrated machine and control software.

At the end of September, the Management Board of 2G Energy AG had to reduce its earnings forecast for the 2015 financial year to a low, positive EBIT result (previously: EBIT margin of between 5% and 7%). Various factors contributed to this adjustment. Due to the upturn in business in the second half of the year, 2G had to maintain capacities during the preceding months in order to ensure punctual production, delivery and commissioning of 2G systems. The lack of even distribution of orders over the course of the business year, and the fact that production always occurs on an order-related basis, make it very difficult to manage manufacturing utilisation. Major fluctuations in orders in Germany have been able to offset the growing business abroad to only a partial extent to date. To achieve an approximately even distribution of new order intake more quickly, 2G is continuing to focus on expanding its international business to its own subsidiaries, as well as international cooperation and partner concepts. Requisite adaptation measures have caused one-off legal, consulting and personnel costs, burdening the earnings side to the tune of around EUR 3.0 million. The main one-off effects are:

- Various personnel measures (mainly sales at 2G Home GmbH, 2G Italia Srl., sales/service in Southern Germany, service at 2G Energy Ltd.),

- Complete takeover of 2G Cenergy Inc. in the USA and the consolidation and integration of the US units,

- Start-up costs for 2G Rental GmbH.

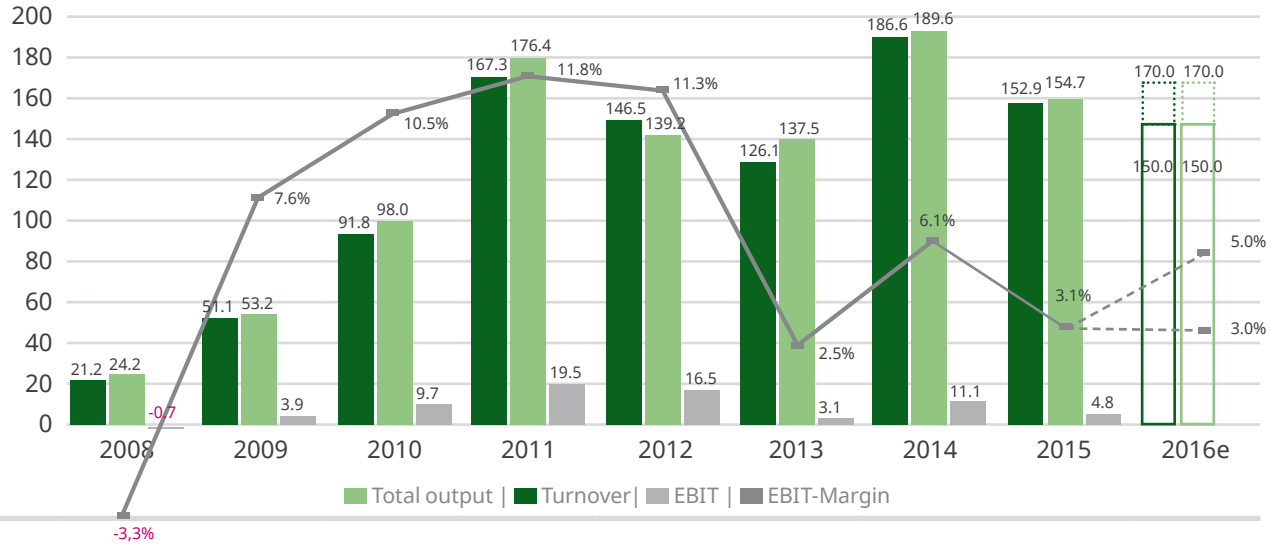
2G reached its adjusted 2015 forecast with an EBIT margin of 3.1% and revenue of EUR 152.9 million. In addition, a significant overhang of orders in a volume of EUR 85.5 million (including 39% work in progress) was transferred to the new 2016 financial year.

2G has set itself the medium-term objective of reaching a 50% export ratio in the sale of CHP systems by 2018. With this strategic goal, 2G aims to actively expand its position on the growth markets in Europe and overseas, and continuously further diversify its business opportunities and risks. With a revenue share of meanwhile 34% (previous year: 20%), the strong Service business also helps to give the 2G business model a strong revenue base overall with calculable cash flows, and reduce dependency on regulatory changes in individual markets.

The expansion of the value chain in relation to 2G CHP modules also contributes in this context. With 2G Rental GmbH, 2G has created its own attractive instrument to sell its CHP systems. By way of alternative to a direct purchase, 2G thereby offers is customers the rental of 2G power plants under the „Innovation without Investment“ slogan in order to realise energy generation concepts on a one-stop-shop basis. Feedback from customers in the first year is good. The most attractive argument for customers is the possibility to implement decentralised combined heat and power generation on a basis that is easy, sparing on liquidity and payable in installments. This rental offering is supplemented by a leasing option that 2G has implemented together with a vendor finance specialist.

2G Group
Total output, turnover, EBIT
EBIT margin

EUR millions
in %



Digram 14: Trends in turnover, total operating revenues, EBIT and EBIT margin of 2G Energy AG during years 2008 to 2015, and forecast for 2016

C. Results of operations

Net sales

Revenue target reached

2G achieved consolidated revenue of EUR 152.9 million in the reporting year (previous year: EUR 186.6 million), thereby meeting its full-year forecast of between EUR 140 million and EUR 160 million. Compared with the previous year, this represents a reduction in revenue of 18.1%. A comparison with 2014 is nevertheless possible to only a limited basis due to the accelerated purchasing effects as part of the amendment to the German Renewable Energies Act (EEG).

Taking into account EUR 0.1 million of inventory changes (previous year: EUR 2.9 million) and EUR 1.8 million of other work performed by the company and capitalised (previous year: EUR 0.1 million), total operating revenue amounted to around EUR 154.7 million (previous year: EUR 189.6 million). The increase in work performed by the company and capitalised arises from the operating activities of 2G Rental GmbH, with which 2G Energietechnik GmbH turned over around EUR 1.9 million up until the reporting date. Other operating income of EUR 3.3 million (previous year: EUR 3.2 million) includes EUR 1.3 million of currency translation income (yen and US dollar).

A high order surplus of around EUR 85.5 million (previous year: around EUR 42.3 million) was carried over to the 2016 financial year. Strong new order intake at the year-end was mainly due to the approval of the amendment to the German Cogeneration Act (KWK-G) on 18 December 2015.

Distribution of revenues

After a 2014 year that was characterised by the amendment to the German Renewable Energies Act (EEG), a year of transition occurred given the expected legislative amendment to the German Cogeneration Act (KWK-G). International business partly offset the wait-and-see ordering behaviour on the German market over the course of the year, however.

The complete takeover of the US business in February 2015, among other factors, contributed to this development. 2G Energy Inc. or 2G Cenergy Inc. achieved around EUR 12.8 million of (consolidated) revenue in 2015. A meaningful comparison to the previous year cannot be drawn as only the meanwhile renamed 2G Manufacturing Inc. was fully included in the 2014 consolidated financial statements. UK-based 2G Energy Ltd was again the largest foreign branch operation with a revenue contribution of around EUR 13.3 million (previous year: EUR 14.9 million). The sales of the other foreign subsidiaries performed in line with expectations. 2G Italia Srl. grew its revenue from its previous year's level of EUR 4.3 million to around EUR 5.4 million, while 2G Solutions S.L. recorded a revenue fall from EUR 4.4 million to EUR 3.4 million. A demand recovery is anticipated in the markets of 2G Solutions S.L. in the future as a result of the coming into force of the French Energy Transformation Act and related increases in feed-in compensation for biogas plants.

Through services rendered to installed 2G systems, 2G achieved a further year-on-year marked increase in sales revenue. Compared with 2014, the company grew its revenue in this business area by a 40%, from EUR 37.2 million to EUR 52.1 million. The continuously growing Service business based on installed new plants generates predictable and stable cash flows for 2G. The essential decentralised nature of the service structure and the small-scale business make great demands of service efficiency. Such efficiency must be ensured in order to achieve high plant availability, and consequently customer satisfaction. The After-Sales division fell by EUR 5.9 million, from EUR 14.4 million to EUR 8.5 million, in 2014, returning to its 2013 level (EUR 8.5 million). The growth in 2014 was particularly attributable to the high ordering figures connected with the amendment to the German Renewable Energies Act (EEG) as of 1 August 2014. The need to comply with this deadline necessitated quick setups of CHP systems so that subsequent plant operation still fell under the EEG 2012 compensation regulations. The later full commissionings were then connected with necessary residual work, so that After-Sales revenue in 2014 was significantly above that in 2013 and 2015.

The international share in relation to total consolidated revenue amounted to 27% in 2015 (previous year: 21%). The continuous diversification in sales markets is even clearer in the foreign share of revenue from the sale of CHP systems. This amounted to 35.3% in 2015 (previous year: 27.7%). In terms of CHP systems sold in Germany and abroad, in 2015 2G achieved for the first time in its company's history higher revenue through selling natural gas operated CHP systems (52.5%; previous year: 47.9%) than through selling biogas driven CHP plants (47.5%; previous year: 52.1%). In terms of gas types, sales abroad present an almost

unchanged picture with 85.2% (previous year: 82%) of CHP system revenue being achieved with biogas operated CHP systems. In Germany, by contrast, the past years' trend continued, with 2G achieving almost three quarters (73.1%, previous year: 60%) of revenue in its core business with natural gas driven systems. In terms of unit numbers, almost one in five CHP plants sold in Germany is biogas operated.

Overall, 2G sold 456 CHP units in the reporting year (previous year: 608 units). The share of the CHP business reduced by 12 per centage points compared with the previous year to 60%, while the service share increased from 20% to 34%. After-Sales' revenue share fell two per centage points to 6%.

The following table presents the distribution of revenue in both absolute and relative figures:

Composition of sales revenues and additional key indicators

	2015			2014		
	Germany	Abroad	Total	Germany	Abroad	Total
Sales revenues, in EUR millions	111.8	41.1	152.9	147.6	39.0	186.6
CHP modules	59.7	32.6	92.3	97.6	37.4	135.0
of which biogas	16.1	27.8	43.8	39.2	31.1	70.3
of which natural gas	43.6	4.8	48.4	58.4	6.3	64.7
of which syngas	0	0	0	0	0	0
Service	43.9	8.2	52.1	36.1	1.1	37.2
After-Sales	8.2	0.3	8.5	13.9	0.5	14.4
CHP modules Units	330	126	456	484	124	608
CHP modules Ø value per unit (in EUR/unit)	180,832	258,712	202,351	201,595	301,584	221,988
Electric capacity sold. in kW			121,071			166,090
Electric capacity sold. Ø kW per unit			266			273

Per centage composition of sales revenues by product areas

	2015			2014		
	Germany	Abroad	Total	Germany	Abroad	Total
Turnover, in %	73%	27%	100%	79%	21%	100%
CHP modules	39%	21%	60%	52%	20%	72%
Service	29%	5%	34%	19%	1%	20%
After Sales	5%	0%	6%*	7%	0%	8%*

* Rounding differences

Group results

Transition year concluded with solid EBIT of EUR 4.8 million

2G generated consolidated earnings before interest and tax (EBIT) of EUR 4.8 million in the 2015 financial year (previous year: EUR 11.3 million), which is partly impacted by the aforementioned one-off effects and negative results contributions by some subsidiaries. The 3.1% EBIT margin lies within the range of the earnings forecast for 2015 that was amended when the half-year consolidated financial statements were presented.

Consolidated results were particularly burdened by the EUR 2.3 million loss that 2G Home GmbH incurred (previous year: profits of TEUR 26). This loss was chiefly due to the approximately 59% year-on-year increase in personnel costs (EUR 2.0 million; 2014: EUR 1.3 million; 2013: EUR 0.7 million), while revenue fell from EUR 8.6 million to EUR 7.5 million. A 21-member sales team that was appointed in three phases from the fourth quarter of 2014 on, was released again during the course of 2015.

Foreign subsidiaries performed largely positively in the reporting year. The most successful foreign branch operation in 2015 was US subsidiary 2G Energy Inc., which achieved a result of EUR 0.9 million. UK-based 2G Energy Ltd. contributed a EUR 0.6 million profit to consolidated results (previous year: EUR 0.9 million). Of the foreign companies, only 2G Italia Srl. incurred a loss, amounting to EUR 0.6 million (previous year: EUR -0.1 million). Here, especially EUR 0.3 million of losses on receivables and EUR 0.2 million of severance payments to departed staff members affected results negatively.

2G reduced its cost of materials ratio year-on-year from 70.7% to 65.0%. Compared to the last two balance sheet dates, the company reports an almost unchanged inventory of finished goods and work in progress. To this extent, the at-cost measurement of inventory changes does not reduce income, while recognised revenues have boosted income within gross profit. It is also pleasing that production efficiency was boosted while tangible price pressure continues to prevail on the market.

The personnel expense ratio increased from 13.4% to 18.9% due to the high fixed cost component and the year-on-year lower capacity utilisation. The increase in absolute personnel expenses from EUR 25.5 million to EUR 29.3 million is chiefly due to higher personnel

expenses at 2G Energy Ltd. and 2G Home GmbH, as well as personnel costs for 2G Cenergy Inc., which were not yet included in the previous year.

Selling & marketing, operating, administrative and other expenses of EUR 19.9 million (previous year: EUR 19.1 million) developed as follows:

Sales and marketing expenses:
EUR 5.3 million (previous year: EUR 5.2 million)
Along with a slight increase in advertising and trade fair costs, travel expenses rose by around TEUR 350 to EUR 1.7 million.

Operating expenses:
EUR 5.8 million (previous year: EUR 5.5 million)
Besides higher maintenance costs for hardware and software of TEUR 500 (previous year: TEUR 375), vehicle expenses (excluding fuel costs) grew by around TEUR 280 to EUR 1.2 million. Fuel costs reduced by around TEUR 120 to EUR 0.9 million due to the fall in the oil price.

Administration expenses:
EUR 2.7 million (previous year: EUR 2.2 million)
Along with a slight rise in costs incurred abroad for preparing and auditing financial statements, the increase in administration expenses arises mainly from significantly higher legal and advisory costs of TEUR 907 (previous year: TEUR 536). This is also mainly due to the complete takeover of 2G Cenergy Inc. in February 2015 and subsequent litigation. Legal advisory costs of EUR 0.2 million were incurred in this connection in the full 2015 reporting year.

Other expenses:
EUR 6.0 million (previous year: EUR 6.2 million)
Other expenses are composed of the addition to the provision for warranties (EUR 3.1 million; previous year: EUR 3.1 million), losses on receivables and credits relating to other accounting periods (EUR 2.7 million; previous year: EUR 2.6 million), losses on disposals of fixed assets (TEUR 40; previous year: TEUR 55), and miscellaneous other expenses (TEUR 249; previous year: TEUR 52).

The EUR 2.7 million of losses on receivables and credits relating to other accounting period arise chiefly from losses on receivables incurred at 2G Energietechnik GmbH (EUR 1.5 million), 2G Solutions S.L. (TEUR 119), and 2G Italia Srl. (TEUR 359). An amount of TEUR 619 relates to credits for the previous year‘s sales.

After a net financial result of EUR -0.3 million (previous year: EUR -0.5 million), mainly resulting from EUR 1.9 million of interest on loans and commissions for guarantees of bills, as well as income taxes (previous year: EUR 4.1 million), the Group reports EUR 2.6 million of consolidated net income (previous year: EUR 6.9 million).

In the year under review, the tax office conducted a tax audit of 2G Energy AG, 2G Energietechnik GmbH and 2G Drives GmbH for the 2010 – 2013 assessment years. The requisite adjustment bookings were applied in the reporting year, exerting a marginally positive effect on net income for the year.

Proposal for appropriation of profit

With regard to the 2015 year, 2G Energy AG reports an unappropriated profit of EUR 41,663,989.37 on the

basis of German Commercial Code (HGB) accounting regulations. The Management and Supervisory boards propose to the Ordinary Annual General Meeting to approve the payment of a dividend of EUR 0.37 per share, as in the previous year.

Based on 4,430,000 dividend-entitled shares on 31 December 2015, the cash dividend corresponds to a payout amount of EUR 1,639,100.00. The Management and Supervisory boards will propose to the Annual General Meeting that it carry forward the remaining amount to a new account. Consequently, the 2G Group is further strengthening its financial stability and independence, and expanding its financial foundations for its planned sales growth.

D. Financial position

Securing sufficient liquidity at all times comprises an important precondition for successful business activity and the attainment of the company's objectives. An overarching financial management function secures the supply of liquidity to all corporate areas. The Group parent company in Germany conducts central strategic financial management within the 2G Group by supplying the individual Group companies with corresponding liquidity in line with their operating requirements.
The following condensed cash flow statement presents the Group's financial position:

Consolidated cash flow statement

	31/12/2015	31/12/2014
	TEUR	TEUR
Consolidated net profit for the year	**2,603**	**6,883**
Depreciation, amortization and impairment losses	3,299	2,745
Change in provisions	251	383
Other non-cash expenses/income	0	155
Change in inventories	-1,091	-3,082
Change in trade payables and other liabilities that are not allocable to investing or financing activities	-3,106	1,276
Change in trade payables and other liabilities that are not allocable to investing financing activities	-285	-1,022
Cash flow from operating activities	**2,062**	**8,262**
Cash flow from investing activities	**-1,016**	**-3,484**
Cash flow from financing activities	**-1,888**	**-3,139**
Liquid assets on December 31 December *	**10,128**	**11,394**

* Reported including short-term bank overdraft drawdowns

Cash flow from operating activities reduced to EUR 2.1 million in 2015 (previous year: EUR 8.3 million). The main reasons for this were the EUR 4.3 million lower net income for the year and a EUR 2.6 million buildup in receivables due from customers.
The change in trade payables and other liabilities is composed not only of a higher level of prepayments received (EUR 2.0 million) but also of other assets/ liabilities (a net EUR -2.7 million) assumed from 2G Cenergy Inc.
Trade payables were reduced by EUR 0.2 million in the reporting year.

The full takeover of 2G Cenergy Inc. generated a net cash inflow of EUR 2.1 million (after deducting the EUR 0.9 million purchase price payment). Expenditures for investments of EUR 3.3 million (previous year: EUR 3.8 million) are comprised as follows:

- EUR 0.3 million to acquire intangible assets (software)
- EUR 1.7 million due to investments by 2G Rental GmbH in CHP systems purchased from 2G Energietechnik GmbH for leasing
- EUR 1.3 million connected with the purchase of machines, vehicles, and operating and office equipment.

As part of financing activities, EUR 1.5 million of borrowings were repaid, as planned, while 2G Rental GmbH drew down EUR 1.7 million of refinancing loans in 2015.

After taking into account currency-related changes in cash equivalents (EUR -0.4 million), the Group reports overall liquid assets of EUR 10.1 million as of the balance sheet date (previous year: EUR 11.4 million), after deducting TEUR 22 of current bank borrowings.

Liquidity in the form of bank deposits amounted to EUR 10.1 million as of 31 December. The solvency of the 2G Group was secured at all times. Free lines of credit were also available from banks if required.

E. Net assets

2G continues with very solid financing structure

Overview of the net asset position of the 2G Group:

Assets

	31/12/2015	31/12/2014
	TEUR	TEUR
A. Fixed assets	23,475	22,691
B. Current assets	71,036	68,707
C. Prepayments and accrued income	381	339
D. Deferred tax assets	963	880
Total assets	**95,855**	**92,617**

Equity and liabilities

	31/12/2015	31/12/2014
	TEUR	TEUR
A. Equity	52,647	52,069
B. Provisions	11,697	11,191
C. Liabilities		
I. Bank borrowings	5,914	6,144
II. Other liabilities	25,597	23,213
Total assets	**95,855**	**92,617**

The total consolidated assets of the 2G Group grew by 3.5% to reach EUR 95.9 million as of the 31 December 2015 reporting date. This increase mainly reflects a high level of receivables due from customers, as well as CHP systems rented to customers, which continue to be recognised under „other assets".

Fixed assets of EUR 23.5 million (previous year: EUR 22.7 million) include EUR 5.8 million of intangible assets (previous year: EUR 5.4 million). The rise in this balance sheet item is due to an increase in goodwill due to the first-time consolidation of 2G Cenergy Inc.

Tangible fixed assets include land and buildings of EUR 8.9 million (previous year: EUR 8.8 million), which serve the business purpose, and offer possibilities to expand and optimise production. In the 2015 reporting year, machinery, technical and other assets,

and operating and office equipment, with a value of EUR 8.8 million (previous year: EUR 7.8 million) include for the first time CHP systems that 2G Rental GmbH leases as part of its business model. This also relates to crane plant, special tools and equipment, the vehicle fleet, and necessary operating and office equipment that is depreciated and regularly replaced.

Financial assets reduced by EUR 0.4 million to TEUR 10 in 2015, as 2G Cenergy Inc. was fully consolidated for the first time within the Group. The remaining TEUR 10 includes an investment in a biogas plant.

Raw materials and supplies of EUR 24.1 million (previous year: EUR 23.5 million) increased by around EUR 0.5 million as of 31 December 2015. The position of work in progress and finished goods, which is measured at cost in accordance with the accounting principles of the German Commercial Code (HGB), increased only slightly to a level of EUR 27.4 million compared with the previous year (EUR 27.3 million). Prepayments of EUR 20.9 million (previous year: EUR 20.3 million) for orders were deducted from inventories.

The position of receivables and other assets grew from EUR 25.7 million to EUR 28.6 million when comparing the two balance sheet dates. Other assets of EUR 4.0 million (previous year: EUR 2.9 million) arise mainly from tax reimbursement claims of 2G Energy AG (EUR 1.3 million), as well as from reclamation claims you from suppliers (EUR 1.1 million). Working capital (the difference between current assets and current liabilities) reported only a marginal year-on-year reduction, from EUR 32.0 million to EUR 31.8 million.

As a result of retained earnings as of 31 December 2015, the equity of the 2G Group increased to EUR 52.6 million as of 31 December 2015 (previous year: EUR 52.1 million). Due to the higher level of total assets, the equity ratio reduced to 54.9% on the reporting date (previous year: 56.2%). The equity capital difference from currency translation is an offsetting item that arises as part of Group consolidation.

When forming tax provisions (EUR 1.0 million) and other provisions (EUR 10.7 million), the obligations that are determined accordingly, and contingent risks (for warranties, for example), are taken into account according to the principle of due commercial prudence.

Total bank borrowings reduced by EUR 0.2 million, from EUR 6.1 million to EUR 5.9 million. The loans of 2G Rental GmbH involve standard bank collateralisation, entailing transfers of receivables arising from its lease agreements. Sufficient lines exist at banks for standard bank sureties, guarantees and credit terms, and as a potential cash reserve. Free lines of around EUR 16.5 million were available as of 31 December 2015. Prepayments received for orders increased from EUR 12.8 million to EUR 14.8 million in a year-on-year reporting date comparison, and trade payables were reduced slightly compared with the previous year (TEUR -230). Other liabilities of EUR 5.4 million essentially result from current wages and tax liabilities.

Overall statement on the business situation

The Group achieved good results in 2015, a year of transition. Across all of its divisions, 2G professionally responded to and managed the challenges arising from the special employment and utilisation situation in being caught between the 2014 amendment to the German Renewable Energies Act, which came into effect on 1 August 2014, and the approval of the

amendment to the German Cogeneration Act (KWK-G) on 18 December 2015.

2G is the largest German manufacturer of CHP systems for operation with biogas and natural gas that is independent of other corporate groups. 2G addresses a broad customer base ranging from large industry, through to the residential and building sectors, and energy utilities and contractors. With its sector experience and CHP product range, 2G is positioned on a diversified basis within relevant submarkets as well as through its growing international business, and along with its new plant business is also increasingly generating calculable and secure revenues from its continuously growing service business. This allows seasonal capacity utilisation fluctuations to be even better offset and managed. With the help of the integrated management system that it has introduced over the past years, the company plans, executes and monitors all procedures, processes and activities within the 2G Group. The application and validity scope of the quality management, occupational safety, environmental and energy management systems extends to the development, production, sale and service of combined heat and power systems. Anchoring such processes, 2G continued with its efforts in the reporting year towards greater elasticity in order to be able to quickly adapt structures, the organisation and commercial activity to changes in market conditions, as well as to boost cost efficiency and realize investments. 2G's solid finances form the foundation for these activities and objectives.

F. Non-financial performance indicators

Research & development

Tapping future prospects through innovation

Research and development, which is bundled within 2G Drives, is of strategic significance for the 2G Group. It secures the Group's innovative and technological strength within a market that is becoming more intensely competitive. A team of experienced engineers and developers works in various disciplines to optimise combustion engines in the 50 to 550 kW output range, and to develop new and existing high-tech components. The aim is to generate USPs that create advantages and additional benefits for customers when utilising a 2G module compared with competitors' products. The focus of development work surrounding the 2G product programme is shifting from realising the greatest possible electric efficiency, or extraordinary total efficiency, towards service and maintenance applications that cater for better availability and integration of CHP systems into balancing energy cycles, in order to thereby realise a further improvement in economic efficiency and profitability. In the reporting year, the company made significant investments in the area of „digitalisation" with software development and electronic controls, in order to make 2G systems fit for Industry 4.0 applications, and to be able to offer proprietary applications. Total spending on R&D amounted to EUR 4.9 million (previous year: EUR 4.4 million).

Focus of development work: Digitalisation

Through consistent and intensive research and development efforts, 2G has developed a leading technological position in the market for combined

heat and power generation systems in the 20 KW to 4,000 KW output class in recent years. This is reflected not only in thermal and electric efficiencies that rank among the highest within the international competitive environment, but also in state-of-the-art control electronics and software-based remote control possibilities, as well as in reduced maintenance intervals. Customer benefits lie in the efficiency, availability, controllability and useful life of the CHP modules, as well as lower maintenance costs. Overall, through their high availability, 2G CHP systems ensure short investment and amortisation periods, low ongoing maintenance costs, as well as high and sustainable economic efficiency.

Rising demands are made on CHP plants by customers, energy service providers, grid operators and regulatory authorities. 2G confronts these challenges, and sets technological standards itself with its own research and development work. Besides higher efficiencies, the complexity of installation conditions is also increasing constantly. Emission limits are becoming more stringent, and customer demands for low outage and maintenance operation, as well as the ability to integrate plants into existing energy management systems, are on the rise.

Against this backdrop, 2G focused its R&D activities in the year under review on the following areas, among others:

- With the aim of keeping maintenance costs at a low level, the company further developed special wearable parts that are exposed to particular demands over a 2G module's lifecycle.
- Further development of spark plugs, allowing downtime to more than double, including in the agenitor series, for example.
- Optimising cylinder heads, thereby more than halving the modules' oil consumption.
- Natural gas is provided from various geographic regions, as well as from LNG feed-in. The methane level, which is responsible for engines' tendency to knock, depends on the supply region. Given this knocking tendency, R&D has achieved adjustments in the combustion process that ensure that the knocking interval is increased while maintaining constantly high efficiency.
- The motor control was optimised for balancing energy requirements, and equipped with a rapid throttle valve. Rapid deceleration of acceleration curves is critical for participation in the secondary reserve and primary reserve markets. New grid protection requirements also necessitate this type of fast acceleration, which is also important for grid stability.
- The digitalisation development area has expanded 2G systems' Internet connections to the company's software to the extent that plant outages and anticipated output disruptions trigger a working process at 2G Service without the need for the operator to do anything – frequently allowing such cases to be remedied online, or triggering rapid service deployment locally. In the so-called „2G Power Plant", the R&D is working on expanded possibilities – with the help of outage and predictive models – to utilise intelligent evaluations of operating data

from plants located in the field. Firstly, this enables 2G service technicians to prepare good remote analyses, receiving early automatic notification of any disruptions affecting availability. Secondly, with the greater deployment of CHP systems to provide balancing energy, precise predictions are becoming more important as to when a plant can be brought on grid with what output.

Overall, the R&D work aims at boosting the economic efficiency of 2G power plants through optimisations, and mechanical as well as electrotechnical and digital innovations. This not only boosts customer benefit and satisfaction, but also secures the 2G competitive as a technology leader. With attractive, mature and constantly further developed products, 2G is able to expand its market position in Germany and abroad.

Moreover, individual R&D projects and development projects are carried out in cooperation with supplier companies or customers. As a result of close cooperation with globally recognised specialists and development cooperation ventures with experienced research institutions and universities (Institute for Internal Combustion Engines and Thermodynamics at Graz University of Technology, Münster University of Applied Sciences), empirical data and new information is integrated into development, thereby making the technology sustainably reproducible. Such cooperation ventures allow 2G to drive ahead with technical innovations and optimization measures on a targeted basis.

These projects are partly sponsored by the German Federal Ministry of Economics and Technology's ZIM program (Central Innovation Program for Small and Medium-Sized Businesses).

Integrated management system

Continuous certification process

With the help of the integrated management system (IMS) that it has introduced and established over the past years, the company plans, executes and monitors all procedures, processes and activities within the 2G Holding including the subsidiaries as listed in the application scope. The application and validity scope extends to the development, production, sale and service of combined heat and power systems. The IMS aims to

- secure and enhance customer satisfaction,
- improve the energy efficiency of companies and products,
- avoid or reduce risks and burdens in relation to health, occupational safety and environmental protection,
- ensure compliance with statutory and regulatory requirements,
- provide a simple, practically oriented, reproducible and documented system to manage and direct activities within the 2G Group for all employees.

The IMS includes not only quality topics but also environmental and occupational safety topics of relevance for the company's operations. At 2G Energy AG the IMS is managed by the Management Board, and at the respective subsidiary by the managing director. Officers are appointed for the individual management systems, who work together very closely on specific topical areas. In the reporting year, 2G defined four application areas within the IMS:

- Quality management system pursuant to the requirements of DIN EN ISO 9001:2015 for 2G Energy AG, 2G Energietechnik GmbH, 2G Drives GmbH,

- Occupational safety management system pursuant to OHSAS 18001 for 2G Energietechnik GmbH; the principles of this occupational safety management system are applied for all corporate units (in implementation by June 2016),

- Environmental management system pursuant to the requirements of DIN EN ISO 14001:2015 for 2G Energietechnik GmbH (in implementation by September 2016),

- Energy management system pursuant to the requirements of DIN EN ISO 50001:2011 for 2G Energy AG, 2G Energietechnik GmbH including its branch operations in Germany, 2G Rental GmbH, 2G Drives GmbH, 2G Home GmbH (in implementation by December 2016).

Ongoing ensurance of compliance with standards is realised through regular supervisory audits conducted by TÜV NORD CERT GmbH, Essen, of the operating and strategic areas for the relevant Group company 2G Energietechnik GmbH according to the DIN EN ISO 9001 quality management standard. The company plans to gradually extend this quality benchmark to other corporate areas and other Group companies. Group parent company 2G Energy AG is already integrated into certification. The areas of Service as well as 2G Drives GmbH were also certified in 2015, in each case at the Heek site. Internally, audits comprise an important instrument to identify improvement potentials, maintain a high level of awareness for quality as a means to satisfy customer requirements, optimise processes, and ensure the replicability of products and working processes through standardisation and documentation. Externally, 2G is thereby strengthening its expertise on the growing German market for natural gas operated CHP plants, and on international markets in the context of tenders. As a consequence, 2G is also taking into account the change in the customer structure toward energy utilities, energy service providers, and large-scale industrial and commercial companies.

IMS application scope expanded

In the reporting year, 2G prepared its existing and practiced occupational health and safety concept for certification based on the UK's OHSAS 18001 standard for occupational health & safety schemes, in order to integrate it into the IMS. The certification will be concluded prospectively in the second quarter of 2016. To ensure that 2G Group operating activities are continuously aligned with environmental protection standards, the company also started in 2015 with preparations to confirm its certification according to the ISO 14001 international environmental management standard. In the current 2016 financial year, this is being combined with the introduction of an energy management system according to ISO 50001. The measures that have already been implemented for inhouse environmental protection and deployment of the company's own CHP systems to supply production and administration with electricity and heat form a sound and advanced basis for both forthcoming certifications. This addition to the integrated management system allows both the statutory requirements contained in the new German Energy Service Act (EDL-G) as well as the efforts of the 2G Group to manage energy responsibly to be

met. Customers, users and decision-makers can also become more aware of the possibility of efficient energy utilisation through highly efficient CHP plants, which will also favour investments in 2G products. This results in a kind of self obligation, whereby 2G commits itself to leading by good example. 2G wishes to set an example for other companies, and demonstrate the potentials that efficient energy and environmental management open up economically.

The 2G code of conduct

A code of conduct is in place for the 2G Group that documents for all Group employees as well as for customers and suppliers the values, principles and modes of behavior that guide 2G's business activities as it aims to achieve its economic objectives and the aforementioned quality, safety and environmental standards. As a binding basis for all 2G Group activities, the code of conduct also provides regulations relating to anticorruption and money laundering prevention, competition, transparent information, as well as how to interact with customers and suppliers, as the 2G Group's successful growth and positive image is the joint success of all 2G employees, in close and trusting collaboration with our customers, suppliers and service providers.

All of our employees are ambassadors of these 2G values in their daily work, contributing jointly to the company's sustainable success with creative ideas and commitment. 2G's mission is to produce highly efficient power plants for the combined generation of electricity and heat, or cooling, and to provide service and maintenance worldwide. 2G's claim is to set standards within the sector. 2G is convinced that a high quality level across all of the corporate areas of 2G Energy AG forms a decisive factor in sustainably ensuring the company's own business success and the satisfaction of its customers. In this sense, too, 2G works actively on improving environmental conditions and on designing a future life worth living.

Order book position, cost and price trends

Order book position has grown considerably

2G starts the 2016 financial year with a good order book position for CHP systems. In the fourth quarter of 2015, 2G registered new order intake significantly above the previous year's figures, which the company has transferred into the current financial year. The order book position as of 31 December 2015 amounted to EUR 85.5 million (previous year: EUR 42.3 million). After the approval of the amendment to the German Cogeneration Act (KWK-G) on 18 December 2015, CHP systems were ordered by many investors who had previously adopted a wait-and-see attitude due to the unclear legislative situation, as well as investors who wished to exploit advantages from the optional and transitional regulations that were granted ahead of the coming into force of the 2016 amendment to the KWK-G. This is also reason for the somewhat subdued ordering patterns from Germany during the course of the first quarter of 2016 when new order intake amounted to EUR 13.3 million (previous year: EUR 18.7 million). The order book position as of 31 March 2016 remained at its high level of EUR 86.9 million (previous year: EUR 49.0 million), as new order intake and orders that were finally invoiced were approximately equal to each other in the January to March period. The foreign share of orders amounted to 43% on 31 March 2016 (previous year: 28%).

On the German market, the transformation and

realignment process among CHP plant providers and regulatory changes have boosted customers' sensitivity to the price-performance relationship, highlighting differences on both submarkets.

The market for biogas operated CHP systems has undergone fundamental change due to the significant modification to subsidy conditions. The building of new biogas systems in Germany has more or less ground to a standstill, leaving hardly any scope for sales potential. Based on 2G's own installed plants over the past six to ten years, the repowering of existing systems offers the company good business opportunities to replace such existing plants at the end of their lifecycles with state-of-the-art, flexibly manageable, digitally controllable and better performing plants, or to supplement them with add-on solutions. The prices that can be implemented are based on further guaranteed feed-in payments for the plants to be replaced in the context of viability calculations for CHP systems. In this replacement business, the possibility also exists to displace competitors' plants and acquire new customers.

In the market for natural gas operated CHP systems, projects are also put out to tender by energy suppliers and large companies, in part multinational industrial or commercial enterprises, or are assigned in the context of auctions. As investing in combined heat and power generation is profitable, 2G sets itself apart with its range of services as a quality leader, system supplier and service provider. Customers are afforded a high level of investment, installation and operating security. Due to the convincing technical design of 2G power plants, which also includes the existing infrastructure, consumption parameters and the tapping of efficiency potentials, customers accept the plants' slightly higher price.

The comprehensible financial solidity of the CHP provider also plays an increasingly major role for customers for both biogas operated CHP systems and natural gas operated CHP systems. To summarise, the significant parameters affecting a decision in favour of a particular provider include product technology, contemporary control possibilities, service network, recognised quality standards, as well as corporate financial strength and the resultant probability that the provider will remain on the market long-term. Important door-openers in a market that is becoming more mature also include sector specific references from well-known companies and an established brand with a positive image. 2G is well-positioned in all these aspects, and upholds compliance with these quality criteria at a competitive level through technical specification sheets, new projects and investments in presenting its proprietary product portfolio.

On the purchasing side, as in the previous year, stable conditions prevail due to the price trends for energy and raw materials in general, as well as the US dollar to euro exchange rate. Given its central purchasing department, master agreements with suppliers, and order volume grouping, 2G is in a good negotiating position to ensure cost stability.

Employees

Attractive employer

2G is on a growth track worldwide. In the reporting year, employee numbers rose especially in the strategically important countries of the USA, the United Kingdom and Germany. Here, the company has hired personnel, especially in the areas of Service – due to the growing plant base – and in Sales. As the Group has also experienced a major expansion in

the structure and breadth of its tasks over the past years, the management has created the basis for a common understanding of values and principles among all employees worldwide with a joint 2G mission statement and code of conduct. This corporate culture establishes orientation internally, and for the public – from shareholders to customers – and it defines the values that 2G stands for, and what motivates 2G teams daily in meeting performance commitments for customers. Based on the guiding principles of innovation, reliability, efficiency and transparency, the 2G mission statement provides a positive support to current change processes, and creates a foundation for the further development of organisational structures.

As a result of the company's conviction that committed, professionally competent, loyal, and healthy employees comprise one of 2G's key strengths, the company supports a high degree of identification among its staff with its product and services around the globe. 2G employees are the guarantor of the company's long-term success. Employee commitment is also evident in constructive ideas and suggestions geared to continuously improving products and working processes in the commercial and technical areas. The company has addressed, evaluated and implemented much of this, thereby saving resources, leveraging efficiencies and improving productivity.

The training and further training of our workforce in both technical and commercial areas of the company is valued highly. Early responsibility and varied career opportunities (in Germany as well as abroad) enable the 2G Group to offer its employees attractive career development opportunities. The company will consequently be able to satisfy most of its future requirements in terms of qualified, well-trained employees and managers from among its own ranks. Furthermore, 2G is committed to recruiting the best candidates from schools and colleges. 2G offers young academics the option of anchoring their dissertations to work experience in the area of research and development, software and project development. Consequently, 2G positioned itself once again as a technology savvy company committed to the environment with many initiatives on the jobseeker market in the reporting year. The aim is to bolster the external perception of 2G as an attractive employer among the target group of young, committed and technically adept individuals. The multifaceted nature of the working environment at 2G, with its international and successful business model, is also reflected in numerous external applications in response to job advertisements, as well as unsolicited applications from qualified specialists.

As of 31 December 2015, the Group employed 607 staff (previous year: 580 employees), including 80 female employees in technical and commercial professions. The Group employed 55 staff on a part-time basis (previous year: 54 employees). The share of employees at foreign companies increased to 84 (previous year: 68 employees), representing an approximately 14% share of the Group total (previous year: around 12%). Due to the reorientation and strengthening of sales and service units around the 2G power plants and international business alignment, 2G appointed 36 new employees in order to achieve its growth targets. The average age of the workforce in Germany amounts to 34 years, approximately the previous year's level. 2G remains refreshingly young and open, although (professional) experience also counts, offering young employees important orientation and knowledge input.

2G employees by age group Number

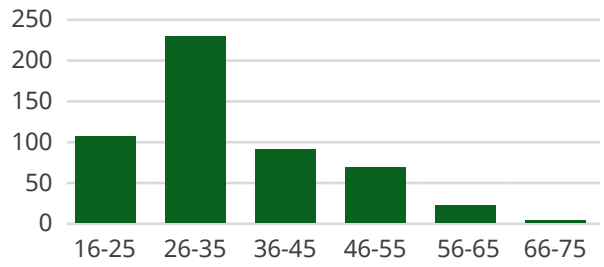


Diagram 14: Age structure of employees in all 2G Group companies (Germany) by age group, total 580 employees

The distribution over the individual Group companies is presented in the table below:

Investment in tomorrow's employees

Every year, 2G trains young employees in technical and commercial trainee positions as junior staff. It consequently fulfills its regional and social responsibility to offer good job prospects to young people. 2G trained 30 young employees in five different job profiles during the reporting year.

- Industrial clerk
- Office clerk
- Operating technology electrician
- Mechatronics technician
- Warehousing logistics specialist

Number of employees by subsidiaries

	Numbers of employees	Of which trainees	Of which part-time	Of which temporary
2G Energietechnik GmbH	423	29	11	34
2G Home GmbH	30	1	2	0
2G Drives GmbH	43	0	0	3
2G Rental GmbH	2	0	0	0
2G Solutions GmbH	9	1	2	0
2G Italia Srl	10	0	0	0
2G Polska Sp. z. o. o.	2	0	0	0
2G Energy Ltd.	26	0	0	0
2G Energy Inc.	46	0	0	0
2G Energy AG	16	0	1	0
Total	**607**	**31**	**16**	**37**

2G offered employment contracts to all six apprentices on qualification. In addition to classic apprenticeships, trainees can also take advantage of a dual course of study, in Electrical Engineering (Bachelor of Science) or Business Administration (Bachelor of Arts), for example. Two apprentices took up this option in the reporting year.

G. Events after the reporting date

The following events of key significance for 2G Energy AG occurred after the 31 December 2015 balance sheet date.

With effect as of 1 April 2016, the 2G Group took out credit insurance to insure against defaults on receivables. Along with future receivables, this policy also insures receivables that originated after 1 December 2015. 2G is thereby hedging against credit and default risks inherent in its increasingly international business along an expanded value chain.

Amendment to the German Cogeneration Act

The German Cogeneration Act (KWK-G) that came into force on 1 January 2016 is subject to approval by the EU Commission (state aid law review). The EU Commission has not yet issued the respective approval, so that even three and a half months after being enacted it cannot be implemented. Whether subsidy rates that the act contains remain as they are, or whether they are restructured on orders from the EU Commission as part of an amending act, thereby still remains an open issue for investors and future operators. The hands of the German Federal Office for Economic Affairs and Export Control (BAFA) are also tied as far as approving new CHP plants and issuing corresponding preliminary decisions is concerned. Although a number of projects are still being realised as part of the transition regulations that have been established – subsidy principles of the 2012 KWK-G – manufacturers and planners cannot present any reliable financial viability calculations to their customers for new projects based exclusively on the 2016 KWK-G, by contrast. This uncertainty among both manufacturers and future operators can have negative effects on business trends and the forecast.

H. Corporate responsibility

Risks and opportunities

Business activities are inseparably connected with risks. Corporate success is characterised by the fact that – after giving due in-depth consideration to all important decisions – the respective opportunities outweigh the risks entailed. 2G interprets risk in the broadest sense as the risk of failing to achieve financial and operational targets as planned, and within the narrowest bounds as the risk of jeopardising the company as a going concern. In this sense, risk management forms an element of all decisions and business processes. Due to increasingly global business activities and the growing number of markets, locations and employees, the timely and detailed procurement, management and processing of information is becoming an increasingly more demanding task. For this reason, 2G is working on the basis of a standardised business intelligence solution with a qualified information system that is gradually being launched at all Group companies under the name of „2G Facts“. The aim is to evaluate and document important corporate figures in order to secure the company‘s long-term success and profitability. This entails having information of relevance to decisions and management available at the right place, at the

right time and on a secured basis. It also comprises analysing risks, and avoiding, minimising or eliminating them through appropriate measures. The evaluations and reports (so-called dashboards and cockpits) are standardised in presentation for the management level, and provided with further detail in terms of data and information depth. These instruments nevertheless retain the option of a refined analysis of causes. Consequently, 2G's active information management also opens up business opportunities. Risks are explained in the order of their importance. At the time of producing this report, the management was not aware of any risks that might jeopardise the 2G Group as a going concern.

Management of risks and opportunities

2G is involved in business across the world, and is consequently exposed to many external and internal influences. For this reason, all corporate decisions are made against the background of the respective associated risks and opportunities. 2G does not deploy a specialised software system exclusively for risk management. 2G has operated an Enterprise Resource Planning (ERP) system since 2010 to map processes with data analyses to monitor risks to the company. With the exception of 2G Solutions of Cogeneration SL, Spain/France, 2G Polska Sp. z. o. o., Poland, and 2G Energy Ltd., Great Britain, all 2G Group companies are integrated into the ERP system. The company plans to gradually fully integrate all Group companies in consideration of cost-benefit aspects, and depending on the scope of operating activities. The live start of the ERP system in the United Kingdom is planned for summer 2016. The identification of defined risks at the Group companies and reporting on the position of the respective company occurs by demand, and at least quarterly through close involvement of the respective managing director responsible. 2G has not set up a central risk manager position. The Supervisory Board receives important key data for business trends and the risk evaluation as part of quarterly reporting. These include trends in the order book position by country, key income statement data, liquidity planning and employees.

The Management Board, the managing directors of all 2G companies, and relevant department heads, are all defined as risk managers in the company-wide risk management process. These risk managers reappraise the areas that they manage and their risk situations at regular intervals, reporting identified risks to the next higher instance, or as part of regular Group-wide reporting duties. All risks are measured on the basis of their event probabilities and potential financial effect. The current risk portfolio of the Group and the individual companies is determined and made available to the Management Board on the basis of this information. Significant changes in the assessment of known risks as well as new significant risks are reported immediately. Deliberate and controlled handling of opportunities and risks consequently comprises a central management element in the 2G Group. 2G continuously records and evaluates new challenges and opportunities due to internationalisation, expanding the depth of vertical manufacturing, and services, such as the rental of 2G power plants. The consistent saving of resources and rising efficiency of 2G power plants, as well as continues optimisation of service, have led to improved profitability and greater customer benefits. The identification of opportunities and new business opportunities, in terms of production, sales and service, is equally important for the further development and growth of the 2G Group. At regular conferences, the Management Board and

divisional heads develop strategic options, new products and business models for the medium and long-term prospects of 2G Energy AG.

For 2G's business, the management has assessed the following risks as relevant for the company's further development, and measured them as to their event probability and loss level. This mainly entails listing risks whose materialisation would have a significantly negative effect on the company's financial position and performance. 2G is potentially exposed to further risks, although these are not yet known, or are currently not yet gauged as significant. The following risks were identified as bearing reportable risk factors as of the reporting date and as of the date of the preparation of this management report, taking existing management and controlling measures into account:

Business-related risks

The total revenues and the results of the 2G Group are based on a large number of worldwide markets and different 2G products in varying performance classes, application areas and operating gas types. This diversification should contribute towards minimising risks since the international markets are different in terms of their structure and economic cycles. It also lends expression to 2G's strategy of becoming an internationally operating company that is independent of national legislation or economic cycles. In this context, 2G integrates its risk management into the processes involved in sustainable business planning. Potential negative developments, such as changes in customer demand or changes in political and legal framework conditions, are described and assessed in the risk report.

Such an approach allows countermeasures to be launched at an early stage where actual events differ from planning. This analysis also influences investment and expansion projects.

Political and regulatory risks

As an internationally active company, 2G is exposed to political and regulatory changes in many countries and markets. In 2011, after Fukushima, many countries' commitment to exiting nuclear power resulted in an active fostering of alternative and renewable energies. In some countries, however, this trend turnaround in energy policy was brought to a standstill by the continuing euro crisis, and an attendant weakening economy and more restrictive fiscal policy. Uncertainties or complexity surrounding the statutory provisions for subsidising combined heat and power systems, as well as the modification or significant reduction in subsidies, may have a negative impact on the profitability of 2G products, and may delay or even jeopardise the success of market developments and the sale of new systems. Close communication with policymakers and active measures to explain the advantages of CHP technology serve as preventative risk control instruments. The destabilisation of political systems and the potential imposition of trade barriers, as well as changes to currency exchange rates, may also lead to sales problems in certain countries and regions. It should be possible to reduce the potential negative impact by diversifying regional sales markets. Entry into developing markets and a withdrawal from saturated sub-markets are considered in the process.

Research and development risks

From the outset, innovation has comprised a key

element of 2G corporate strategy, with a view to setting the company apart from its competitors through technological and electrical engineering expertise. This is associated with the latent risk that research and development projects are delayed, anticipated budgets are exceeded, or targets not met. Ongoing research and development projects are monitored permanently for this very reason, and are discussed regularly and reorganised where appropriate. Decisions regarding investments in new technologies, for example, are made with the aim of minimising risks as far as possible.

Product quality and availability risks

As a manufacturer of complex technical systems, 2G is exposed to heightened product liability risks. Ongoing quality controls and documentation along the entire value chain minimise such risks. This starts with the qualification of suppliers and continues with comprehensive quality requirements for the materials and semi-finished products used, as well as long-term strategic cooperation in the case of preliminary products, and an HR policy that is strongly geared to quality consciousness. Supplies delivered to deadline are an important competitive factor. 2G sets store by alternative purchasing sources, avoids dependencies, and ensures parts availability and supply capability through order volume optimisation and stock holding.

Financial risks

As an internationally active company, 2G is exposed to various financial risks. Such risks primarily include liquidity risks, default risks, currency and market price risks.

In order to secure itself as a going concern, a company must be able to fulfill its commitments arising from operational and financial activities at all times. 2G manages its liquidity across the entire Group centrally through 2G Energietechnik GmbH in Heek in order to minimise any liquidity risks.

Default risks can arise both in connection with financial investments, the drawing down of borrowings, financing commitments, or through the rental transfer for use of 2G power plants, and in the case of operating receivables. Inherent credit and default risks are hedged through a credit insurance policy that is in place. This also installs professional ongoing credit monitoring and debt collection. The impact of the Eurozone financial crisis continues to entail a heightened level of default risk. 2G consequently carefully checks all the positions of customers and trade partners in the specific related countries, and takes precautions against default risk where required. 2G minimises these risks through its active prepayment policy. Only a few significant financial transactions entailing credit risk are concluded, and only with banks with good credit ratings. Moreover, the 2G Group has extremely good liquidity, which significantly reduces its dependency on lenders. As a matter of principle, it cannot be excluded that, in markets that are at times changing extremely rapidly, specific trading partners or customers with CHP rental agreements default, even if such counterparties have excellent credit ratings.

The euro has comprised the main currency within the 2G Group to date. With a few minor exceptions, invoicing and the procurement of goods have not been associated with any noteworthy currency risks. The company will inevitably be exposed to currency and interest risks in the future as it increases its international

presence and business activities in different currency and interest rate regions. In addition, both temporary and sustainable currency opportunities can arise through exporting plants and core components at favourable exchange rate (e.g. USD/EUR parity).

As a result of its global group structure, and associated financial transactions, trade receivables and payables, as well as anticipated future cash inflows and outflows from sales and costs denominated in foreign currencies, 2G will also be affected by these market price risks and opportunities. 2G has minimised currency risks due to exchange rate and interest rate fluctuations, especially through forward currency transactions. Financial transactions, outstanding operating receivables, and obligations are to be conservatively exchange-rate hedged in the main.

Legal risks

2G is also exposed to litigation risks. These include risks in the areas of product liability, competition and antitrust law, patent law and environmental protection. As a research-based technology company, 2G owns a portfolio of industrial property rights, such as patents and brand names. These may become the target of attacks and infringements. 2G generally strives to minimise and manage all legal risks.

Wherever possible and practical, the 2G Group limits liability and loss risks in the countries where it operates through insurance cover, whose type and scope are constantly adjusted in accordance with current requirements. Here, 2G can already make recourse to experience gained in numerous countries outside Europe. The company also calls upon a country-specific advisory network consisting of auditors, tax consultants and lawyers who attend to the Group's cross-border affairs.

An integrated global insurance programme for the 2G Group closes gaps in cover and liability, and provides expanded insurance protection, including through higher or additional limits within the corporate Group, for example. Insurance premiums are adjusted through appropriate and manageable deductibles.

Human resource risks

The future success and growth of all 2G companies is highly dependent on its employees. Consequently, the expertise and commitment of employees in all the areas in which 2G operates are crucial to its success.

The regional talent markets relevant to 2G are characterised by intensive competition. Competition is additionally intensified by the scarcity of qualified specialists in the sectors in which 2G operates and by demographic challenges in global markets. As a consequence, sourcing, recruiting and retaining qualified specialists and talents within 2G represents one of the key priorities for the company. 2G is extremely committed to training its own staff and recruiting qualified specialists to supervise training. In addition, 2G offers its employees a catalog of voluntary social benefits in order to additionally boost its attractiveness as an employer.

Corporate growth risks

2G aims to continue its growth both in Germany and abroad particularly through organic growth and, where appropriate, through strategic alliances and acquisitions of companies or parts of companies. The

appointment of suitable managers and employees, the selection of strategic partners and takeover candidates, and the raising of the necessary financial resources are required in order to exploit such opportunities. The meaningful expansion of appropriate organisational structures is also required, especially in the areas of financial accounting, controlling, personnel, and sales and marketing. Strong growth, acquisitions and strategic alliances are inherently connected with integration and execution risks. Tools utilised by the management to measure growth opportunities and risks include forward-looking planning, and analyses through regular target/actual comparisons.

IT risks

IT risks with an impact on operating results occur when information is unavailable or incorrect, unintentionally disclosed, or when processes have been programmed in IT systems in a form that is too inflexible, too complex, or illegal. Security gaps and insufficient emergency planning measures can quickly become incidents affecting the entire company.

Data protection violations due to incorrect authorisations generate a negative external impression. Increasing dependency on IT, as well as the growing networking of IT landscapes, requires companies to invest heavily in maintenance and upgrades. As the complexity of the IT landscape increases, so do the potential risks, despite efficient processing and programming. Significant risk scenarios for 2G include the failure of central IT systems, the publication of confidential research and development and business development data, as well as the manipulation of IT systems.

2G ensures the required availability of business-critical systems and access to business-relevant data through redundant configuration of technical components, networks and sites, as well as suitable, tested contingency measures. Appropriate organisational and technical precautions for access control, access rights, virus protection and data protection further limit such risks. A dedicated process ensures that IT risks are evaluated, and appropriate measures taken.

Based on the measures adopted, we can assume that the probability that a serious IT risk materialises is low. 2G works with external data protection officers to back up and protect personal information.

Environmental and safety risks

2G is a company maintaining production operations and is exposed to risks of possible personal injury, as well as damage to property and its image. We minimise the risks to individuals and the environment by auditing, advising and training in matters of environmental protection, as well as occupational health and safety. Safety officers manage these risks both at individual sites and on our customers' building sites to protect the company's interests. 2G ensures the preservation of its goods and assets by adhering to high technical standards, strict codes of conduct, and all legal requirements for environmental protection and occupational health and safety. 2G itself is also committed to saving resources, and will certify the introduction of a qualified energy management system on the basis of ISO 50001:2011.

Overall statement on risk situation

The risk strategy has the character of that of a medium-

sized company, and is deliberately opportunity-orientated. The company's management focuses on organisational and especially financial stability, whereby plans can be diverged from in the company's interest. Taking existing steering and controlling measures into account, neither one of the specific risks is gaged as a going concern risk, nor does the company identify an aggregate going concern risk given the simultaneous occurrence of several individual risks, and, from today's perspective, it does not identify any such going concern risks for the future. The listed risks nevertheless exert a negative effect on the company's financial position and performance.

The company has the capacity to withstand risks on account of its available and potential financial reserves, good balance sheet ratios, and a highly developed insurance concept. The business and entrepreneurial opportunities outweigh the potential risks entailed.

Opportunities

In the year under review, 2G implemented a number of measures to create the basis for the Group's further, earnings-based growth and development, to identify and measure business opportunities, and to put them into practice on a controlled basis.

This includes expanding and systematising sales instruments through rent and lease options for 2G power plants and the marketing of the 2G UTILITY concept among the important target groups of contractors, municipal utilities and energy supply companies. It also includes further developing the Service division both in terms of direct customer service locally, and through further digitalising the management, maintenance, and operating reliability and availability of 2G power plants. Additional factors include greater business commitment to the foreign core markets of North America, the United Kingdom, as well as Japan and South Korea in Asia, in order to reach the company's target 50% export share of revenue. This also includes the constant adaptation of the company's organisation to rising requirements in international competition, as well as in relation to qualifying environmental, compliance, technology and quality standards that benefit customers.

Overall, the Management Board identifies attractive opportunities for 2G on both the German and foreign markets. This assessment is based on the trend on the spark spread that is important for CHP systems' economic viability: the electricity price is tending to rise, or stay at a high level, and the gas price is falling.

I. Outlook

The 2G Group outlook takes account of relevant facts and events that were known on the date when the consolidated financial statements were prepared, and which can influence future business development and growth.

Group focus over the next two financial years

2G is continuing to vigorously pursue its objective of strengthening its brand as one of the internationally leading manufacturers of gas operated combined heat and power systems that is independent of other corporate groups, and of expanding its market shares on a profitable basis. The strategic guiding principles for growth and profit are:

- internationalising sales of CHP systems and services,
- diversifying primary energy sources for CHP utilisation,
- further developing the value chain,
- intensifying research and development,
- consistently digitalising CHP engine management, as well as service and maintenance, and
- expanding the sales and service partner concept by connecting it to 2G's proprietary information technology.

These guiding principles will determine business activities over the next two years. The company is further advancing its organic growth in all of the markets, customer groups and regions that it addresses. By 2018, sales of CHP systems abroad are to amount to 50%, with 2G focusing on the regions of North America, Japan and Asia, as well as Central and Eastern Europe. To supplement its positioning as a technologically leading developer and producer of CHP power plants, 2G is to increasingly establish itself as a supplier of CHP systems that can be integrated and controlled digitally for high-end balancing energy operation. Additionally, 2G regards itself as a service provider and product partner in the context of customers' energy purchasing and generation concepts. 2G is thereby positioning itself within the new competitive framework of the Electricity Market 2.0. To this end, 2G has developed solutions for its target customer groups' new business models with sales financing for its CHP systems in Germany and its services as part of its UTILITY concept, among other approaches. 2G aims to retain its high innovation rate, supported by its own research & development work.

2G relies on correspondingly developed production capacities in Germany and the USA, a streamlined administration, and its product portfolio's technological maturity. Based on this, the Management Board is endeavoring to further improve the EBIT margin across all corporate areas over the next two years.

Future macroeconomic situation

In its survey of macroeconomic trends in Germany that it updated at the end of March 2016, the German Council of Economic Experts forecast 1.5% GDP growth for this year due to an overall weaker external economic environment. The moderate uptrend continues, driven by domestic consumption spending. For 2017, the experts forecast slightly higher GDP growth of 1.6%. During the first months of 2016, the German Engineering Federation (VDMA) registered only reticent demand growth from Euro countries and other regions. The VDMA notes that the basic economic trend in new order intake remains weak, and that real production growth in mechanical engineering is anticipated to stagnate during the current year.

Although it sees economic recovery advancing further in the Eurozone, this recovery is nevertheless fragile and burdened by the fact that the effect of special supportive factors over the last two years might fade during the current year. These include the depreciation in the euro's external value, improved financing terms for companies and private households, the fall in the oil price, and Eurozone countries' consolidation efforts. The German Council of Economic Experts believes that the structural weaknesses that persist in many member states might nevertheless impede more dynamic recovery to the same extent as political uncertainty in countries such as Ireland, Portugal and Spain, for example. Greater

uncertainty might negatively affect confidence among corporations and consumers, holding back investment projects and consumption spending, according to the Council. Overall, the economic experts expect 1.5% GDP growth for the Eurozone in 2016. Growth of 1.5% is also forecast for 2017.

The Council slightly downgraded its global economic GDP growth forecast to 2.5% (2017: 2.8%), as emerging economies' growth has reduced markedly due to the fall in the prices of raw materials, as well as structural problems. The uptrend in the USA remains intact, despite just moderate economic growth recently. The experts underscore that they believe that the moderate uptrend in large industrialised nations remains in place overall, and no cross-border downtrend is identifiable.

For the Council, the forecasts for Germany, the Eurozone and the world economy are subject to high medium-term risks. The Council sees these especially in a crisis-type deterioration of the economic situation in China and other emerging economies, potential turbulence on international financial markets, and in geopolitical conflicts coming to a head. A renewed flareup of the euro crisis due to a marked reduction in the resolve to reform and consolidate, and the difficult political situation in many Eurozone countries, cannot be excluded.

Future sector situation

Electricity market legislation delivers momentum

Overall, the Management Board appraises the conditions that have been newly set by the KWK-G 2016 as an important impulse to exploit the economic, as well as climate and resource conservation, benefits of CHP technology for a further expansion of the Electricity Market 2.0 in Germany – because the German government, with the new arrangement of electricity market legislation that is to be approved by the middle of this year, aims to ensure secure, inexpensive and environmentally compatible electricity supplies, including with high proportions of renewable energies, and to optimally intermesh individual electricity supply areas. Two basic mechanisms are especially important in the Electricity Market 2.0: Firstly, electricity prices need to continue to be formed freely on the electricity market. Secondly, electricity suppliers are to be consistently obligated to meet their supply commitments as entities responsible for the balancing cycle (electricity suppliers and electricity traders). Further measures help to make the electricity market flexible, thereby enabling inexpensive integration of renewable energies. In other words, the act should help to harmonise the growing proportion of renewable energies with the rest of electricity production.

Market observers assume that the electricity market act will lead to price spikes on the electricity market. The electricity generation type that can react quickly to price signals can exploit this situation to its advantage with market economy profit incentives. In this environment, two reasons enable CHP systems to play an important role in this new market: Firstly, they are easy to integrate due to their technical and digital characteristics of controllability and remote manageability. Secondly, their purchase costs are relatively low, and high plant availability results in competitive electricity production costs and additional revenues from heat utilisation. Opportunities arise for attractive business models that 2G believes can trigger new investments especially at utilities, municipal energy companies and energy service providers, as the role of conventional large-scale power plants is

undergoing significant change, and utilities are being forced to reorganise their electricity purchasing and generation portfolios. Electricity from decentralised, smaller and efficient CHP systems can be fed more quickly into the grid than electricity from traditional power plants. 2G power plants can deliver their full output in less than four minutes, and already deliver their first electricity after less than one minute. In the new electricity market design, one megawatt hour of electricity that can be delivered within a few minutes is significantly more valuable than a megawatt hour of electricity that is not provided until some hours later, as occurs with conventional power plants. In the interplay with volatile electricity generation from wind power and photovoltaic plants, decentrally located, flexible and efficient CHP systems form an important building block for supply security. Conceivable are virtual power plants – aggregating decentralised electricity generation units – as well as modular-combined, central power plants consisting of several smaller CHP modules that can be started up separately.

Digitalisation as a growth driver

German electricity market legislation is closely connected with the German Act to Digitalise the New Energy Policy Direction, which is currently in the parliamentary process. Fluctuating electricity production from renewable energies requires a communication network that combines generation, consumption and the electricity grid, as the grid always has to keep ready sufficient production-ready, flexible generating capacities to balance renewable energies. This can only occur if production plants and flexible loads utilise secure standardised communication connections, exchanging information about generation and consumption situations via such paths. Energy supplies based on market economy price signals must be able to deliver transparency on supply and demand among consumers and producers. So-called „smart meters“ form the communication platform in the intelligent energy grid of the future, harmonising electricity supply and demand, and contributing to a long-term reduction in energy consumption.

2G anticipated this trend at an early stage, optimising its CHP engines and engine controls for demanding balancing and partial load operation. 2G regards itself as well positioned for the aforementioned market opportunities with CHP solutions that meet the high standards of digitally characterised energy generation, both for natural gas and biogas operated CHP systems. 2G assumes that the investments that it has realised in this area will generate competitive advantages both on the German market, and medium-term also in further developed markets such as the United Kingdom, Italy and the USA, as the mechanical and digital level of CHP plants and peripheral equipment that 2G has developed and attained over the past years comprises corporate expertise that cannot be acquired on the market through third-party suppliers. Today, these represent de facto barriers to market entry.

Biogas benefits from growing repowering

The Management Board believes that the market for biogas driven CHP systems in Germany will continue to be characterised by the repowering business. 2G anticipates very good competitive opportunities for itself. Firstly, ever-increasing numbers of CHP systems that the company has installed during the 2006 to 2010 period are reaching the end of their life-cycle, and must be overhauled or replaced. Secondly, currently applicable subsidy conditions offer operators the

opportunity to expand, structure more efficiently, and flexibilise their plants, and integrate them into economically viable heat utilisation concepts. Here, 2G can bring into play its technological expertise in mechanics, controls and digitally operated service and maintenance, and also acquire new customers as part of repowering. Demand for flexible plant operation is growing significantly. Biogas driven CHP systems are making great strides to leave behind their „isolated electricity production at maximum full load operation", and move forward to feed electricity into grids in line with demand, and apply heat utilisation concepts, thereby assuming an important role in system stabilisation in the Electricity Market 2.0.

The German government aims to approve the 2016 Renewable Energies Act (EEG) this year. Feed-in payments for biogas plants are also to be set via state tenders. According to the German Biogas Association, however, the draft legislation that was submitted in April has lacked specific regulations to date for future compensation of existing biogas systems, and for their role as reliable balancing energy to secure fluctuating electricity production from wind and photovoltaic plants. Such regulations are urgently needed, however, as the proportion of wind energy (44.9%) and photovoltaic (19.6%) in electricity generated from renewable energies increased by a further 7 per cent in 2015. Biogas can assume this function to greater extent in the future if coal power plants and nuclear reactors are shut down, as approved by the German government. In this sense, the Association is involving itself in the current legislative process to lobby for significantly improved regulations for both existing and new biogas plants.

Market for natural gas operated CHP systems dominates revenue in Germany

The 2G management believes that the amended German Cogeneration Act has created good conditions for further growth in demand for natural gas operated CHP power plants in Germany over the coming years. Highly efficient combined generation of electricity and heat remains an attractive alternative for decentralised local supplies for industrial and commercial operations, as well as the residential sector. To these are added new business models for the utilities and contractor customer group, supported by the 2016 KWK-G, as the EEG transfer and grid payments will prospectively rise further, with costs for self-generated electricity lying significantly below grid electricity purchasing costs. In combination with heating utilisation concepts for the respective site, investments in gas operated CHP power plants remain economical, with relatively short amortisation periods. The Management Board expects that revenue shares will shift further in favour of natural gas operated systems in the range of 75%.

Globally growing CHP market

In a market study that research firm Delta Energy & Environment published in February 2016, its experts are cautiously optimistic for global growth in the CHP business in 2016 and following years. The arguments cited include not only the good order book position carried over from 2015, but also beneficial market trends, such as greater support for CHP technology in emerging economies, and a growing trend toward flexible, gas operated energy production. The market study also sees factors for an economically beneficial spark spread developing well, with electricity prices at a high level with a somewhat rising trend, and natural

gas prices stagnating at a low level, or registering slight increases at best. The gas distribution infrastructure is expanding, including with new LNG terminals in the USA and Asia. In the medium to long term, this might equalise the regional price differences that have existed to date, and result in a more uniform supply structure with more transparent prices.

Growth impulses await US market

With regard to the world's largest market, the USA, the study assumes growing sales opportunities for the coming years. Despite the continued prevalence of a heterogeneous market structure and very differing conditions in individual US states, the experts believe that growth potentials exist in the performance range below 5 MW and also in the range above 5 MW. The study establishes a connection between rising, non-balancing electricity production from wind and photovoltaic – which some US states are promoting to achieve renewable energy proportion targets by the 2020 to 2025 period – and resultant demand for flexibly and quickly available electricity generation units. Demand for CHP power plants should grow in combination with a further good supply of natural gas, a stable spark spread, and regulatory pressure on large-scale power plants and industrial boiler plants to cut emissions. Policymakers at state and federal level are also supporting CHP technology, including as a supply reserve for electricity outages.

Following the reorganisation of its subsidiary in the USA, with a bundling of production, sales and service units, 2G regards itself as in a good position to participate in the continuously developing American CHP market. 2G CHP power plants already meet as standard many of the characteristics demanded on the market. These include a broad product range in the lower performance range from 64 kW to 2 MW, compact design, modular combination options up to 10 MW, delivery as a plug & play solution, low-emission combustion, and comprehensive service and maintenance offerings. Wigh regard to the US market, the company is also planning to expand the product offerings in 2016 to include the compact g-box 50 with 50 kW. Higher grid frequency in the US public electricity network (60 Hz compared with 50 Hz in Europe) necessitated electrotechnical adjustments to the g-box, to continue supplying them in the USA in the future. The g-box is currently on the test stand in St. Augustine/Florida. The aim is to generate year-on-year higher revenue with both natural gas and biogas driven 2G power plants, and to achieve a positive result again.

For European markets outside Germany, especially in the UK, France and Eastern Europe, 2G is assuming further new plant business for biogas operated CHP power plants. France, for example, approved legislation for its new energy policy direction at the end of July 2015, thereby laying the ground for strong biogas sector growth – 1,500 new biogas plants are to be constructed by 2020. To this end, the French Ministry of Ecology, Sustainable Development and Energy has restructured feed-in payments for electricity generated from biogas plants, and extended the payment period from 15 to 20 years. Both existing and new biogas systems can benefit. Given the new support framework, 2G is already registering a tangible pickup in inquiries for biogas driven CHP plants. Inquiries are coming both from the French 2G liaison office in Rennes, and through French biogas plant builders.

With regard to the United Kingdom, in a market study

published in July 2015, the research firm Delta Energy & Environment assumed that the biogas market will report growth at the past year's level of around 20 MW to 25 MW per year up to 2020, presupposing that the beneficial subsidy backdrop remains in place. The latter will also favour the trend to smaller installation sizes in the 400 kW to 2 MW performance range, as flexibility and modular approaches are enjoying growing demand. According to Delta, this also applies to natural gas operated CHP power plants, for which the experts impute annual growth potential of around 100 MW up to 2020. Subsidy conditions in this segment will not change significantly, according to Delta. The principal growth driver will remain the prospectively further improvement in the spark spread into the 3.5 to 4.5 range.

Demand for CHP systems operated with landfill gases or gases from purification plants is also growing in Europe. With regard to this area, 2G has developed a technology that enables 2G power plants to form a homogeneous mixture of two different types of gas sources, including natural gas and gas from purification plants, for example. This avoids the previous need to shut down a plant for the change of gas, thereby boosting efficiency.

Overall, growth in European markets outside of Germany continues to depend mainly on economic growth and subsidy conditions in the biogas segment. With regard to the natural gas segment, the indications of a further favourable trend in the spark spread in individual countries already exist from today's perspective, prompting 2G to assume that growth in this segment will continue mainly in countries with a sufficiently good gas distribution infrastructure.

Asia-Pacific gains momentum

In the Asia-Pacific region, 2G entered into agreements with new sales partners in Japan and Australia in the year under review. This region can certainly become a growth market for 2G over the coming years. Incentives to invest derive from the CO_2 savings effects that are achievable with CHP systems, among other factors. In early March 2015, 2G signed a master agreement with Fuji Electrics, Japan, to sell 2G CHP power plants in Japan and the Southeast Asian region. This sales cooperation venture was reinforced in April 2016 with delegation from Fuji paying a visit to 2G's headquarters in Heek. The venture can help to further increase market penetration in the Far East. 2G has continuously developed a good market position on the Japanese market since 2004, seeing recent growth in its sales figures. Through its regional sales partners, 2G for the first time won against the regional market leader in direct competition in tenders in 2015. 2G delivered three biogas driven CHP plants with electric output of 75 kW each for a purification plant. Commissioning of the reference plant that is still under construction is planned for summer 2016. High potential exists for this application alone over the coming years to win orders and realise sales given the around 2,000 clarification plants in Japan (only 20% of these are equipped with a system to exploit the energy contained in the gases from clarification plants). 2G is at present the only provider in Japan in the area of smaller biogas driven systems of 75 kW to 400 kW electric output. Compared with its competitors, 2G can offer Japanese customers higher CHP system efficiency accompanied by optimisation of space requirements through container solutions and compact powerhouse installation design.

Sales revenue to grow further continuously

During the first three months of the current 2016 financial year, 2G recorded lower year-on-year new order intake of EUR 13.3 million (previous year: EUR 18.7 million). The order book position as of 31 March 2016 amounted to a high level of EUR 86.9 million, however (previous year: EUR 49.0 million). This results partly from orders from Germany that were triggered by the approval of the amended German Cogeneration Act on 18 December 2015, in order to thereby exploit optional rights and transition regulations granted by the legislator. The first quarter of this year was impacted by uncertainties arising from the fact that the EU Commission has not yet ratified the 2016 German Cogeneration Act. By contrast with this, it is encouraging that 41% of the order book position derives from abroad (previous year: 26%). This underscores and confirms the correctness of the company's internationalisation and diversification strategy.

The Management Board is very confident overall that it can once again report solid business trends in the current financial year. Its forecast envisages sales revenue of between EUR 150 million and EUR 170 million.

Along with growing sales revenues from the service business, combined with replacement parts sales of around EUR 60 million (2015: EUR 52 million), greater impulses are expected from the rental and leasing business that was launched via 2G Rental GmbH in early 2015. In addition, business with large industrial companies from highly varied sectors, as well as energy utilities, is growing in importance, along with the significance of foreign markets. Based on varied activities in the form of cooperation agreements – such as with a Veolia subsidiary in the United Kingdom, and the sales partnerships that have been concluded – and after the repeated operating success in the United Kingdom, 2G assumes rising sales figures, especially for Asia and the USA. Some of these are already evident in the current financial year, but should gain significantly greater weighting over coming years.

Prospective earnings trend

The earnings forecast for the 2016 financial year comprises an EBIT margin of 3% to 5%, thereby slightly above the previous year's level.

Should temporary uncertainties arise among investors in Germany due to the still forthcoming statutory projects such as the 2016 Renewable Energies Act (EEG) and electricity market legislation, 2G will continue to maintain the capacities and resources that it requires for the sales revenue growth that is planned for 2016. The company is retaining the flexibility to be able to service larger order peaks that arise short-term, and growing demand from abroad. Over the past years, the company has shown impressively on several occasions that it is able to cope with order spikes and tight deadlines without compromising on its quality.

The Management Board is confident that it can gradually improve the profit margin from the service business as a result of the organisation modifications that it implemented in 2015, the technical maturity of CHP systems that are newly coming onto the market, and its consistently advancing digitalisation of service and maintenance activities.

The Management Board is consequently retaining its medium-term forecast with a sales revenue target of up to EUR 300 million, and the re-attainment of a double-digit EBIT margin by 2020.

Heek, 18 May 2016

Christian Grotholt
Management Board Chairman (CEO)

Ludger Holtkamp
Management Board member

Dietmar Brockhaus
Management Board member


2G
www.2-g.de
2G
2G
2G
2G

2G. Consolidated balance sheet.

Consolidated balance sheet of 2G Energy AG

Assets

	31/12/2015	31/12/2014
	EUR	EUR
A. Fixed assets		
I. Intangible fixed assets		
Purchased concessions, industrial property rights and similar rights and assets, and licenses to such rights and assets	792,774.34	769,967.24
Goodwill	4,959,166.71	4,546,202.51
Prepayments rendered	41,904.53	73,965.00
	5,793,845.58	**5,390,134.75**
II. Tangible fixed assets		
Land, land rights and buildings, including buildings on third-party land	8,883,877.17	8,794,212.46
Plant and machinery	1,373,795.33	1,222,878.45
Other factory and office equipment	7,402,807.76	6,557,666.63
Prepayments rendered and plants under construction	10,659.03	332,547.77
	17,671,139.29	**16,907,305.31**
III. Financial fixed assets		
Participating interests in associated companies	0.00	383,980.68
Other participating interests	10,000.00	10,000.00
	10,000.00	**393,980.68**
	23,474,984.87	**22,691,420.74**
B. Current assets		
I. Inventories		
Raw materials and supplies	24,064,791.40	23,519,340.87
Work-in-progress	26,276,421.51	26,414,612.31
Finished goods and merchandise	1,133,840.46	923,737.84
Prepayments rendered	1,640,313.87	635,711.87
Prepayments received for orders	-20,866,890.59	-20,336,406.57
	32,248,476.65	**31,156,996.32**
II. Receivables and other assets		
Trade receivables	24,631,376.70	21,983,846.08
Receiveables due from participating interests	0.00	738,792.01
Other assets	4,006,108.19	2,934,148.19
	28,637,484.89	**25,656,786.28**

Assets

	31/12/2015	31/12/2014
	EUR	EUR
III. Securities	**0.00**	**30,000.00**
IV. Cash in hand, bank balances	**10,149,730.55**	**11,862,712.95**
	71,035,692.09	**68,706,495.55**
C. Prepayments and accrued income	**380,835.93**	**339,390.01**
D. Deferred tax assets	**963,428.11**	**879,953.21**
Total	**95,854,941.00**	**92,617,259.51**

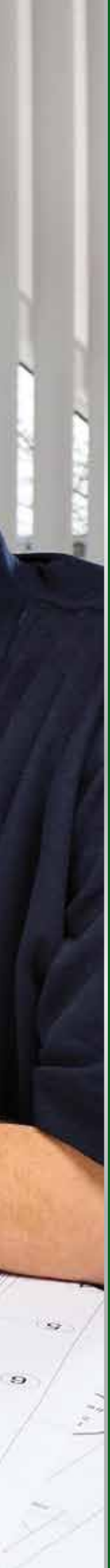
Equity and liabilities

	31/12/2015	31/12/2014
	Euro	Euro
A. Equity		
I. Subscribed share capital	4,430,000.00	4,430,000.00
II. Capital reserve	11,235,300.00	11,235,300.00
III. Consolidated net income	37,085,299.94	35,947,762.27
IV. Minority interests	499,049.63	772,769.13
V. Equity difference from currency translation	-602,681.20	-316,729.14
	52,646,968.37	**52,069,102.26**
B. Provisions		
Tax provisions	998,458.87	918,775.57
Other provisions	10,698,960.01	10,272,513.05
	11,697,418.88	**11,191,288.62**
C. Liabilities		
Bank borrowings	5,913,451.26	6,144,209.79
Prepayments received for orders	14,786,642.66	12,833,895.94
Trade payables	5,387,208.80	5,616,962.17
Liabilities due to participating interests	0.00	62,158.93
Other liabilities	5,423,251.03	4,699,641.80
	31,510,553.75	**29,356,868.63**
Total	**95,854,941.00**	**92,617,259.51**

2G. Consolidated profit and loss account.

Consolidated profit and loss account of 2G Energy AG

	01/01/2015 to 31/12/2015	01/01/2014 to 31/12/2014
	EUR	EUR
Net sales	**152,883,663.32**	**186,605,118.25**
Increase in work-in-progress and finished goods	71,911.82	2,874,472.79
Other own work capitalised	1,757,695.59	76,042.45
	154,713,270.73	**189,555,633.49**
Other operating income	3,284,036.34	3,204,069.86
	157,997,307.07	**192,759,703.35**
Cost of materials		
a) Costs of raw materials and supplies, and for purchased merchandise	81,789,422.45	107,636,868.11
b) Costs of purchased services	18,831,604.39	26,335,215.79
	100,621,026.84	**133,972,083.90**
Personnel costs		
a) Wages and salaries	24,109,166.74	20,808,896.83
b) Social security, pension and other benefits	5,205,623.67	4,649,560.43
	29,314,790.41	**25,458,457.26**
Depreciation and amortization applied to tangible and intangible fixed assets	**3,298,519.49**	**2,744,673.86**
Other operating expenses	19,902,184.17	19,069,486.39
Income from associated companies	0.00	-155,168.20
Income from other participating interests	200.00	0.00
Other interest and similar income	79,322.09	59,029.61
Interest and similar expenses	364,088.47	402,326.88
Profit/loss on ordinary activities	**4,576,219.78**	**11,016,536.47**
Taxes on income	1,884,865.39	4,060,361.74
Other taxes	88,436.22	72,780.04
Consolidated net profit for the year	**2,602,918.17**	**6,883,394.69**
Share of net profit/loss attributable to other shareholders	173,719.50	-388,691.69
Consolidated net profit	**2,776,637.67**	**6,494,703.00**
Retained earnings	35,947,762.27	31,092,159.27
Dividend payment	-1,639,100.00	-1,639,100.00
Consolidated net retained earnings	**37,085,299.94**	**35,947,762.27**



2G. Notes to the consolidated financial statements

Notes to the consolidated financial statements for the 2015 financial year of 2G Energy AG

A. General information about the consolidated statements

1. Basic information

2G Energy AG is a public limited company under German law. The company's shares are traded on the Regulated Unofficial Market of the Frankfurt Stock Exchange (FWB), as operated by Deutsche Börse AG, which is consequently not on an organized market.

The company is entered in the commercial register of the Coesfeld District Court (commercial register sheet number 11081), and has its headquarters at Benzstrasse 3, 48619 Heek, Germany.

2. Line of business

The company and its subsidiaries primarily plan and install combined heat and power („CHP") systems and other systems for the recovery or efficient exploitation of electrical energy, and provide after-sales services associated with CHP systems. One subsidiary is responsible for optimising gas engines, and for manufacturing and marketing Otto spark ignition gas engines.

3. Accounting policies

The consolidated financial statements of 2G Energy AG were prepared in accordance with Section 290 et seq. of the German Commercial Code (HGB), and the supplementary regulations of the German Stock Corporation Act (AktG).

The regulations for public limited companies in the meaning of Section 264 et seq. of the German Commercial Code (HGB), the relevant provisions of the German Stock Corporation Act (AktG), and the provisions pursuant to Section 290 et seq. of the German Commercial Code (HGB) in relation to consolidated financial statements apply to the Group's accounting procedures.

The Group's functional currency is the euro. All amounts are consequently presented in euros or thousands of euros (TEUR). Foreign companies' balance sheet items are translated at the respective exchange rates on the balance sheet date. Equity items are translated at historical rates. Cost and income items are translated at average rates for the year.

B. Consolidation methods

1. Consolidation scope and shareholdings

The following financial statements are included in the consolidated financial statements of 2G Energy AG (parent company):

Subsidiary

	Interest in%	Subscribed capital in TEUR	Equity in TEUR	Profit/loss for year in TEUR	Initial consolidation
2G Energietechnik GmbH Heek, Germany	100	1,000	2,832	0	30/06/2007
2G Drives GmbH, Heek, Germany	80	25	3,387	-89	24/03/2010
2G Home GmbH, Heek, Germany	90	125	-2,459	-2,258	31/12/2007
2G Rental GmbH, Heek, Germany	100	50	-346	-395	31/12/2014
2G Solutions of Cogeneration S.L., Vic Barcelona, Spain	90	3	-150	32	31/01/2008
2G Italia Srl, Vago di Lavagno (Verona), Italy	100	10	-339	-572	15/03/2011
2G Energy Ltd., Cheshire, United Kingdom	100	1	1,012	550	19/09/2011
2G Polska Sp. z o.o., Bielsko-Biala, Poland	100	1	-34	146	07/11/2011
2G Energy Inc. (formerly 2G Manufacturing Inc.), St. Augustine (FL), USA	100	1	1,057	-727	27/02/2012
2G CENERGY Power Systems Technologies Inc., St. Augustine (FL), USA	100	1	2,152	1,702	26/02/2015

The purpose of the subsidiaries 2G Energietechnik GmbH, 2G Home GmbH, 2G Solutions of Cogeneration S.L., 2G Italia Srl, 2G Energy Ltd., 2G Polska Sp. z. o. o., 2G Energy Inc. and 2G CENERGY Power Systems Technologies Inc. is to plan and install combined heat and power systems, trade in components for CHP systems, and provide after-sales services associated with CHP systems.

The purpose of subsidiary company 2G Drives GmbH is to optimise gas engines, and to manufacture and market Otto spark ignition gas engines.

The purpose of the subsidiary 2G Rental GmbH is to trade in, and rent, combined heat and power systems.

All of the companies are included as subsidiaries in the consolidated financial statements due to the parent company owning the majority of their voting rights.

Apart from 2G CENERGY Power Systems Technologies Inc., the parent company itself holds the interests directly. 2G Energy Inc. holds the shares in 2G CENERGY Power Systems Technologies Inc., and are consequently indirectly attributable to 2G Energy AG.

2G Energy AG acquired the remaining 51% interest in 2G CENERGY Power Systems Technologies Inc. during the financial year under review, before transferring them to 2G Energy Inc. against membership rights in the company. 2G CENERGY Power Systems Technologies Inc. is being fully consolidated in the consolidated financial statements for the first time in the 2015 financial year, having been equity accounted previously.

2. Consolidation methods applied

Closing date for consolidated financial statements and companies included in the consolidation scope

The consolidated financial statements are based on the separate financial statements of 2G Energy AG and the financial statements of the subsidiaries included in the consolidation scope. The financial statements are prepared as of the 31 December 2015 closing date.

Capital consolidation

Capital is consolidated according to the revaluation method pursuant to Section 301 (1) of the German Commercial Code (HGB). All balance sheet items at subsidiary level are recognised at fair value on the first-time consolidation date. Share acquisition costs are offset subsequently against revalued proportionate equity. The residual differential amount from capital consolidation (goodwill) is capitalised and amortised straight-line over a prospective 20-year useful life pursuant to Section 309 (1) of the German Commercial Code (HGB). By way of divergence in this context, straight-line amortisation over a 5-year useful life was applied to the differential amount from capital consolidation (goodwill) as of the date of the first-time consolidation of 2G CENERGY Power Systems Technologies Inc., as the company had already been equity accounted in the consolidated financial statements for several years previously (transition consolidation). The duration of amortisation depends on the lifecycle of the acquired companies' products.

Interests in subsidiaries which are included in the consolidated financial statements, but which are not held by 2G, are reported as minority interests.

Consolidation of liabilities

Liabilities are consolidated pursuant to Section 303 (1) of the German Commercial Code (HGB). Accordingly, prepayments rendered and other receivables, provisions and liabilities between the companies included in the consolidated financial statements are to be eliminated. Offsetting differences in connection with the consolidation of liabilities are recognised through profit or loss if they comprise year-on-year changes. Otherwise, they are recognised directly in equity. Minor offsetting differences were recognised in the reporting year.

Treatment of unrealised results of intragroup transactions

Unrealised results of intragroup transactions are eliminated pursuant to Section 304 (1) of the German Commercial Code (HGB). Accordingly, assets that are based fully or partly on deliveries or services between the companies included in the consolidated financial statements must be recognised at the amount at which they could be recognised in the annual balance sheet for the respective company prepared on the closing date of the consolidated financial statements, if the companies included in the consolidated financial statement were also to form a single entity in legal terms.

The consolidated profit and loss account is adjusted to reflect profit or loss contributions from intragroup transactions as part of consolidating income and expenses in accordance with Section 305 of the German Commercial Code (HGB).

Consolidation of income and expenses

Income and expenses are consolidated in accordance with Section 305 (1) of the German Commercial Code (HGB). The purpose of this is to present only income and expenses in the consolidated profit and loss account according to type and amount that result from business relationships with third parties outside the Group. Consolidation measures exclusively comprise eliminations.

C. Information about accounting policies

The individual financial statements of 2G Energy AG and its subsidiaries are prepared in accordance with standard accounting policies.

The annual financial statements of the companies included in the consolidation scope are prepared in accordance with the regulations set out in the German Commercial Code (HGB) and the German Stock Corporation Act (AktG).

Valuation methods were applied unchanged compared with the previous year.

Valuation details are as follows:

1. Intangible fixed assets
Acquired intangible fixed assets are recognised at acquisition cost and, if they comprise depreciating assets, less straight-line amortisation. Prepayments rendered are recognised at nominal value.

2. Tangible fixed assets
Tangible fixed assets are recognised at acquisition cost and, if they are subject to wear and tear, less scheduled

depreciation. Depreciation is applied straight-line according to the assets' prospective useful lives. Prepayments rendered are recognised at nominal value.

3. Financial fixed assets
Financial assets are recognised at the lower of their cost or fair value on the balance sheet date. If the value of financial assets calculated in accordance with the principles referred to above is higher than the fair value on the balance sheet date, an extraordinary write-down is applied. If the grounds for a lower valuation no longer exist, a write-up is applied pursuant to Section 253 (5) Clause 1 of the German Commercial Code (HGB).

4. Inventories
Raw materials and supplies are recognised at the lower of cost or fair value.

Work-in-progress and finished goods are recognised at the lower of cost or fair value. In addition to directly attributable specific costs of materials and production, production costs also include materials and production overheads, as well as general administrative costs to the extent that they can be allocated to production. Borrowing costs are not included in production costs.

Merchandise is recognised at the lower of cost or fair value. Prepayments rendered are recognised at nominal value. If prepayments received do not exceed the value of the work in progress, they are offset with work-in-progress to the level of the satisfaction amount on a project basis.

5. Receivables and other assets
Receivables and other assets are recognised at nominal value. Appropriate specific valuation allowances are applied to all risky items. General default and credit risk is reflected through general valuation allowances.

6. Short-term investments
Other securities are recognised at cost. Where required, the lower fair value on the balance sheet date is recognised in compliance with the principle of lower of cost or market.

7. Cash in hand and bank balances
Cash in hand and bank balances are measured at nominal value.

8. Prepayments and accrued income
Prepayments and accrued income include payments received before the balance sheet date as far as they represent costs for a particular time period after that date.

9. Equity
Equity is measured at nominal value.

10. Tax provisions
Tax provisions include taxes that have not yet been assessed.

11. Other provisions
Other provisions are created for contingent liabilities at their settlement value in accordance with reasonable commercial judgment, and taking into account all identifiable risks and contingent liabilities.

12. Liabilities
Liabilities are recognised at their settlement amounts.

13. Prepayments received
Prepayments received include advance payments

for new plants, and advance payments from full maintenance contracts. If prepayments received do not exceed the value of the work-in-progress, prepayments received for new plants are offset on a project basis with work-in-progress to the level of the satisfaction amount. Any surplus is reported as a prepayment received on the liabilities side of the balance sheet. Prepayments received for full maintenance contracts are accrued on a percentage of completion basis according to the specific contract. Prepayments received for full maintenance contracts are recognised in sales revenues according to percentage of completion. Any surplus prepaid amount is accrued as a prepayment received.

14. Deferred tax

Deferred tax assets and deferred tax liabilities have not been offset against each other. An average consolidated tax rate of 30% has been applied to measure deferred tax assets.

Offsetting applied as part of consolidation generates a differential amount that is to be reported as goodwill. Deferred taxes are not charged on this differential amount (German Accounting Standard/ DRS 18 section 25).

15. Currency translation

Items in the annual financial statements that are based on amounts denominated in foreign currencies are translated at the cash exchange rate in compliance with Section 256a of the German Commercial Code (HGB).

D. Notes to the consolidated balance sheet

1. Fixed assets

For information about changes in fixed assets during the financial year under review, please refer to the corresponding presentation in the statement of changes in fixed assets. This statement also presents depreciation, amortisation and extraordinary write-downs applied for each balance sheet item during the financial year.

Fixed assets include TEUR 1,850 of rental plants from the operating activities of 2G Rental GmbH.

2. Inventories

Inventories amounted to TEUR 32,248 as of the balance sheet date. Along with raw materials and supplies (TEUR 24,065), they comprise work-in-progress (TEUR 26,276), finished goods and merchandise (TEUR 1,134), and prepayments rendered (TEUR 1,640).

Pursuant to Section 268 (5) of the German Commercial Code (HGB), prepayments received for orders (TEUR -20,867) were deducted openly from the inventories item.

3. Receivables and other assets

Specific and general valuation allowances of TEUR 3,030 were applied to trade receivables.

All receivables and other assets have a residual term of less than one year.

Other assets include TEUR 183 of VAT reimbursement claims that do not originate in legal terms until after the reporting date.

4. Deferred tax assets

Deferred tax receivables of TEUR 963 arise from tax loss carryforwards (TEUR 165) at 2G Rental GmbH, 2G Solutions S. L. and 2G Polska Sp. z. o. o. No

deferred tax assets were formed in relation to the loss carryforwards of 2G Home GmbH, 2G Italia Srl. and 2G Energy Inc. due to their having generated net losses in previous years. In this context, a cautious approach was adopted that does not take into account positive expectations arising from current structural changes. In addition, deferred taxes were formed in relation to eliminated intragroup gains on fixed assets (TEUR 244) and inventories (TEUR 444) deriving from intragroup deliveries and services as of the balance sheet date, and on temporary differences (TEUR 110). These temporary differences arise mainly from recognising differing valuations for inventories and provisions in the financial statements and in the tax accounts.

It is assumed with sufficient probability that the tax benefits connected with the loss carryforwards can be realised over the coming financial years.

No deferred tax liabilities required reporting as of the balance sheet date.

5. Consolidated equity

The share capital amounts to TEUR 4,430, and is divided into 4,430,000 ordinary bearer shares each with a nominal value of EUR 1.

Capital reserves of EUR 11,235 arise mainly from share premiums from capital increases at 2G Energy AG.

In a resolution passed at the Annual General Meeting on 8 July 2015, the Management Board was authorised to increase the company's subscribed share capital during the period until 7 July 2020, with Supervisory Board approval, once or on several occasions, by up to a total of EUR 2,215 by issuing new shares against cash or non-cash capital contributions (Approved Capital 2015).

An amount of TEUR 37,085 is available to shareholders for distribution in the year under review. Notional dividend payout restrictions exist in relation to deferred taxes of TEUR 963.

No restricted amounts that cannot be distributed exist in the separate financial statements of 2G Energy AG.

For more information about changes in consolidated equity during the financial year under review, please refer to the corresponding presentation in the consolidated statement of changes in equity.

6. Other provisions

The composition on the balance sheet date and changes in other provisions during the reporting year are shown in the following statement of changes in provisions:

Other provisions, in TEUR

	31/12/2014	Consolidation addition	Con-sumption	Release	Formation	31/12/2015
Warranty commitments	6,414	0	6,328	86	6,965	6,965
Residual work on completed plants / outstanding invoices	2,057	0	2,049	8	1,952	1,952
Amounts owed to staff	1,293	0	1,283	10	1,274	1,274
Professional cooperative contributions	297	0	274	23	301	301
Costs of preparing and auditing financial statements	92	0	92	0	119	119
AGM and annual report	46	0	46	0	47	47
Archiving of business documents	29	0	29	0	29	29
Litigation costs	0	176	18	158	13	13
Anticipated losses related to incomplete contracts	44	0	44	0	0	0
Total	**10,273**	**176**	**10,163**	**285**	**10,699**	**10,699**

7. Liabilities

Liabilities consist of the following:

Residual terms, in TEUR (previous year's amounts in brackets)

	Total	Up to 1 year	1 to 5 year	More than 5 years
Bank borrowings	5,913 (6,144)	1,961 (2,312)	3,006 (3,115)	947 (718)
Prepayments received for orders	14,787 (12,834)	14,787 (12,834)	0 (0)	0 (0)
Trade payables	5,387 (5,617)	5,387 (5,617)	0 (0)	0 (0)
Liabilities to participating interests	0 (62)	0 (62)	0 (0)	0 (0)
Other liabilities	5,423 (4,700)	5,423 (4,591)	0 (109)	0 (0)
Total	**31,511** **(29,357)**	**27,558** **(25,416)**	**3,006** **(3,223)**	**947** **(718)**

The following collateral instruments are connected with bank borrowings:

• EUR 2.63 million land charge, Benzstrasse, Heek

• Collateral assignment of a crane plant

Other liabilities comprise tax liabilities of TEUR 3,059 (previous year: TEUR 2,674), and social security liabilities of TEUR 49 (previous year: TEUR 72).

E. Notes to the consolidated profit and loss account

The profit and loss account is prepared applying the nature of expense method, and structured according to Section 275 (2) of the German Commercial Code (HGB).

1. Net sales

Net sales are divided geographically and by operating activities as follows:

Net turnover, in TEUR

	Germany	Abroad	Total
CHP systems	59,674	32,598	92,272
Service + replacement parts	43,905	8,226	52,131
After-sales + other	8,178	303	8,481
Total	**111,757**	**41,126**	**152,884**

2. Other operating income

Other operating income comprises TEUR 789 of income related to other accounting periods (previous year: TEUR 1,582) that consists mainly of insurance compensation payments and loss compensation payments (TEUR 293), the release of provisions (TEUR 285), and the elimination of specific and general valuation allowances on receivables (TEUR 32).

Other operating income includes income of TEUR 1,347 from currency translation (previous year: TEUR 1,249).

3. Other operating expenses

Other operating expenses consist of the following:

Other operating expenses, in TEUR

	2015	2014
Operating expenses	5,845	5,451
Administration expenses	2,709	2,183
Sales and marketing expenses	5,312	5,199
Miscellaneous	6,035	6,237
Total	**19,902**	**19,069**

Other operating expenses comprise TEUR 2,666 of income related to other accounting periods (previous year: TEUR 2,921) that consists mainly of valuation allowances applied to receivables, the application of specific and general valuation allowances to receivables, and losses incurred on receivables.

Other operating expenses include expenses of TEUR 122 from currency translation (previous year: TEUR 122).

4. Personnel costs

Social security contributions and pension and benefit expenses include TEUR 406 of pension expenses (previous year: TEUR 402).

5. Taxes on incomeg

The following items are recognised in the profit and loss account under taxes on income:

Income from deferred taxes, in TEUR

	2015	2014
Deferred tax income	244	326
Deferred tax expenses	161	424
of which attributable to loss carryforwards (net balance)	41	386
Income from deferred taxes	**83**	**-97**

F. Additional information

1. Consolidated cash flow statement

The cash flow statement is prepared in compliance with German Accounting Standard/DRS 21. This standard is to be complied with for the first time for the 2015 financial year. Prior-period amounts were also calculated applying this standard's regulations, and consequently differ from the figures stated in the previous year's cash flow statement.

Cash and cash equivalents shown in the cash flow statement include cash at banks and in hand, less short-term liabilities of TEUR 22 (previous year: TEUR 468).

2. Notifications pursuant to Section 20 of the German Stock Corporation Act (AktG)

Christian Grotholt and Ludger Gausling notified the company in accordance with Section 20 of the German Stock Corporation Act (AktG) that they each own more than one quarter of the shares in 2G Energy AG.

Both notifications were submitted to the electronic Federal Gazette (Bundesanzeiger) on 30 July 2007.

3. Contingent liabilities

No contingent liabilities in the meaning of Section 251 (HGB) of the German Commercial Code existed for third-party liabilities as of the balance sheet date.

4. Other financial obligations

Other financial obligations existed in relation to contracts as follows:

Other financial obligations, in TEUR
(previous year's figures in brackets)

	Up to 1 year	1 to 5 years
	216	480
Rental contracts	(209)	(104)
	58	44
Lease contracts	(5)	(0)
	274	**524**
Total	**(214)**	**(104)**

5. Average number of employees during the financial year

The average number of employees pursuant to Section 267 of the German Commercial Code (HGB) is composed as follows:

Number of employees

	2015	2014
Wage earners	288	265
Salaried staff	278	257
	566	**522**
of whom part-time employees	49	45

6. Management Board

The Management Board is currently composed as follows:

Management Board

	Member since	Appointed until
Mr. Dipl.-Ing. Christian Grotholt, Business executive, Ahaus	17/06/2007	16/07/2017
Mr. Ludger Holtkamp, Business executive, Gronau	17/06/2007	16/07/2017
HMr. Dipl.-Betriebsw. (FH) Dietmar Brockhaus, Business executive, Havixbeck	01/07/2013	31/12/2016

More information about the Management Board members of 2G Energy AG is provided on 2G's website in the section entitled Company.

7. Supervisory Board

The following individuals were appointed as members of the Supervisory Board during the year under review:

Supervisory Board

	Member since
Dr. Lukas Lenz (Chairman) Lawyer, Hamburg	17/07/2007
Mr. Heinrich Bertling (Deputy Chairman) Tax adviser, Gronau	28/08/2012
Mr. Wiebe Hofstra Senior Manager Van der Wiel Holding BV, Drachten/NL	17/07/2007

The Supervisory Board members are appointed until the end of the AGM that passes a resolution concerning the discharge of the directors for the 2016 financial year. More information about the Supervisory Board members of 2G Energy AG is provided on 2G's website in the section entitled Company.

8. Directors' compensation

Compensation of TEUR 651 was paid to the Management Board in the financial year under review (previous year: TEUR 623), and compensation of TEUR 20 to the Supervisory Board (previous year: TEUR 20).

9. Auditor's fee

Other operating expenses include the fees expensed for the auditor of the financial statements. The auditor's fees totaled TEUR 75 and relate exclusively to audit services.

10. Proposed appropriation of profits

The Management Board will recommend that the Supervisory Board present the following proposal for the appropriation of profits to the Annual General Meeting for approval.

The unappropriated profit of EUR 41,663,989.37 reported in the annual financial statements of 2G Energy AG as prepared according to the German Commercial Code, consisting of net profit of EUR 4,943,009.17 for the year and EUR 36,720,980.20 of net retained profits, are to be distributed in an amount of EUR 1,639,100.00, and an amount of EUR 40,024,889.37 is to be carried forward to a new account.

11. Exemption rules

Utilisation was made of the exemption in Section 264 (3) of the German Commercial Code (HGB) with regard to the obligation to prepare a management report and publish the annual financial statements for the subsidiary 2G Energietechnik GmbH, Heek.

Heek, 24 May 2016

Christian Grotholt
Management Board Chairman (CEO)

Ludger Holtkamp
Management Board member

Dietmar Brockhaus
Management Board member

Consolidated statement of changes in fixed assets

	Cost						
	01/01/2015	Currency translation	Addition from consolidation	Additions	Transfers	Disposals	31/12/2015
Intangible fixed assets							
Purchased concessions, industrial property rights and similar rights and assets, and licenses to such rights and assets	1,684,516.04	401.36	0.00	290,692.31	73,965.00	14,611.30	2,034,963.41
Goodwill	7,269,303.32	0.00	0.00	931,715.25	0.00	0.00	8,201,018.57
Prepayments rendered	73,965.00	0.00	0.00	41,904.53	-73,965.00	0.00	41,904.53
	9,027,784.36	**401.36**	**0.00**	**1,264,312.09**	**0.00**	**14,611.30**	**10,277,886.51**
Tangible fixed assets							
Land, land rights and buildings, including buildings on third-party land	9,805,032.83	79,298.47	0.00	63,153.92	135,410.28	80,024.11	10,002,871.39
Plant and machinery	1,618,918.21	6,796.72	0.00	236,547.96	198,938.91	79,883.00	1,981,318.80
Other factory and office equipment	11,175,649.52	80,377.71	196,226.87	2,672,901.02	0.00	315,589.94	13,809,565.18
Prepayments rendered and plants under construction	332,547.77	0.00	0.00	12,460.45	-334,349.19	0.00	10,659.03
	22,932,148.33	**166,472.90**	**196,226.87**	**2,985,063.35**	**0.00**	**475,497.05**	**25,804,414.40**
Financial fixed assets							
Participating interests in associated companies	301,538.10	0.00	0.00	0.00	0.00	301,538.10	0.00
Other participating interests	10,000.00	0.00	0.00	0.00	0.00	0.00	10,000.00
	311,538.10	**0.00**	**0.00**	**0.00**	**0.00**	**301,538.10**	**10,000.00**
Total	**32,271,470.79**	**166,874.26**	**196,226.87**	**4,249,375.44**	**0.00**	**791,646.45**	**36,092,300.91**

Depreciation and amortisation						Book value	
01/01/2015	Currency translation	Addition from consolidation	Additions	Disposals	31/12/2015	31/12/2014	31/12/2015
914,548.80	276.63	0.00	336,125.02	8,761.38	1,242,189.07	769,967.24	792,774.34
2,723,100.81	0.00	0.00	518,751.05	0.00	3,241,851.86	4,546,202.51	4,959,166.71
0.00	0.00	0.00	0.00	0.00	0.00	73,965.00	41,904.53
3,637,649.61	**276.63**	**0.00**	**854,876.07**	**8,761.38**	**4,484,040.93**	**5,390,134.75**	**5,793,845.58**
1,010,820.37	0.00	0.00	270,167.96	161,994.11	1,118,994.22	8,794,212.46	8,883,877.17
396,039.76	1,365.91	0.00	219,885.80	9,768.00	607,523.47	1,222,878.45	1,373,795.33
4,617,982.89	26,352.80	21,126.91	1,953,589.66	212,294.84	6,406,757.42	6,557,666.63	7,402,807.76
0.00	0.00	0.00	0.00	0.00	0.00	332,547.77	10,659.03
6,024,843.02	**27,718.71**	**21,126.91**	**2,443,643.42**	**384,056.95**	**8,133,275.11**	**16,907,305.31**	**17,671,139.29**
-82,442.58	0.00	0.00	0.00	-82,442.58	0.00	383,980.68	0.00
0.00	0.00	0.00	0.00	0.00	0.00	10,000.00	10,000.00
-82,442.58	**0.00**	**0.00**	**0.00**	**-82,442.58**	**0.00**	**393,980.68**	**10,000.00**
9,580,050.05	**27,995.34**	**21,126.91**	**3,298,519.49**	**310,375.75**	**12,617,316.04**	**22,691,420.74**	**23,474,984.87**

Consolidated cash flow statement

		01/01/2015 to 31/12/2015	01/01/2014 to 31/12/2014
		EUR	EUR
	Consolidated net profit/loss for the year	**2,602,918.17**	**6,883,394.69**
+	Depreciation, amortisation and fixed asset write-downs	3,298,519.49	2,744,673.86
±	Change in provisions	250,861.70	382,768.63
±	Other non-cash expenses/income	0.00	155,168.20
±	Change in inventories	-1,091,480.33	-3,082,239.94
±	Change in trade payables and other liabilities that are not allocable to investing or financing activities	-3,105,619.43	1,275,539.83
±	Change in trade payables and other liabilities that are not allocable to investing financing activities	-284,705.68	-1,022,463.17
±	Loss/gain from fixed asset disposals	26,788.94	40,609.29
+	Interest and similar expenses	364,088.47	278,467.54
-	Other interest and similar income	-79,322.09	-192,654.32
-	Other income from participating interests	-200.00	-600.00
+	Taxes on income	1,884,865.39	4,060,361.74
±	Income tax payments	-1,805,182.09	-3,261,277.96
=	**Cash flow from operating activities**	**2,061,532.54**	**8,261,748.39**
+	Proceeds from fixed asset disposals	70,501.08	155,493.66
-	Payments for investments in intangible fixed assets	-332,596.84	-484,803.03
-	Payments for investments in tangible fixed assets	-2,985,063.35	-3,348,058.82
+	Cash inflows from acquisition of consolidated companies	2,121,899.79	0.00
+	Cash inflows due to financial investments as part of short-term cash management	30,000.00	0.00
+	Interest received	79,522.09	193,254.32
=	**Cash flow from investing activities**	**-1,015,737.23**	**-3,484,113.87**

		01/01/2015 to 31/12/2015	01/01/2014 to 31/12/2014
		EUR	EUR
+	Proceeds from raising of loans	1,735,000.00	0.00
-	Outgoing payments for redemption of loans	-1,519,459.01	-1,221,155.43
-	Interest paid	-364,088.47	-278,467.54
-	Dividends paid to parent company shareholders	-1,639,100.00	-1,639,100.00
-	Dividends paid to other shareholders	-100,000.00	0.00
=	**Cash flow from financing activities**	**-1,887,647.48**	**-3,138,722.97**
=	**Net change in cash and cash equivalents**	**-841,852.17**	**1,638,911.55**
	Currency-related change in cash and cash equivalents	-424,830.71	-354,589.23
+	Cash and cash equivalents at start of period	11,394,371.84	10,110,049.52
=	**Cash and cash equivalents at end of period**	**10,127,688.96**	**11,394,371.84**

	01/01/2015 to 31/12/2015	01/01/2014 to 31/12/2014
	EUR	EUR
Composition		
Liquid assets	10,149,730.55	11,862,712.95
Short-term bank borrowings	-22,041.59	-468,341.11
	10,127,688.96	**11,394,371.84**

Consolidated statement of changes in equity

Consolidated statement of changes in equity, in EUR

	Parent company			
	Subscribed share capital	Capital reserves	Adjustment item from foreign currency translation	Other accumulated consolidated earnings
Balance on 01/01/2014	**4,430,000.00**	**11,235,300.00**	**10,825.34**	**6,375.40**
Consolidation-related currency differences			-327,554.48	
Payments to shareholders				
Consolidated profit for the year				
Balance on 31/12/2014	**4,430,000.00**	**11,235,300.00**	**-316,729.14**	**6,375.40**
Balance on 01/01/2015	**4,430,000.00**	**11,235,300.00**	**-316,729.14**	**6,375.40**
Consolidation-related currency differences			-285,952.06	
Payments to shareholders				
Consolidated profit for the year				
Balance on 31/12/2015	**4,430,000.00**	**11,235,300.00**	**-602,681.20**	**6,375.40**

		Minority shareholders			Consolidated equity
Retained earnings	**Total**	Minority capital	Retained earnings attributable to minority interests	**Total**	
31,085,783.87	**46,768,284.61**	**4,991.42**	**379,086.01**	**384,077.44**	**47,152,362.05**
	-327,554.48				**-327,554.48**
-1,639,100.00	**-1,639,100.00**				**-1,639,100.00**
6,494,703.00	**6,494,703.00**		388,691.69	**388,691.69**	**6,883,394.69**
35,941,386.87	**51,296,333.13**	**4,991.42**	**767,777.70**	**772,769.13**	**52,069,102.26**
35,941,386.87	**51,296,333.13**	**4,991.42**	**767,777.70**	**772,769.13**	**52,069,102.26**
	-285,952.06				**-285,952.06**
-1,639,100.00	**-1,639,100.00**		-100,000.00	**-100,000.00**	**-1,739,100.00**
2,776,637.67	**2,776,637.67**		-173,719.50	**-173,719.50**	**2,602,918.17**
37,078,924.54	**52,147,918.74**	**4,991.42**	**494,058.20**	**499,049.63**	**52,646,968.37**

2G. Auditor’s report.

Auditor’s report

We have audited the consolidated financial statements prepared by the 2G Energy AG, Heek, comprising the balance sheet, the income statement, statement of changes in equity, cash flow statement and the notes to the consolidated financial statements, together with the group management report for the business year from January 1 to December 31, 2015. The preparation of the consolidated financial statements and the group management report in accordance with German commercial law is the responsibility of the parent Company‘s Board of Managing Directors. Our responsibility is to express an opinion on the consolidated financial statements and the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § (Article) 317 HGB („Handelsgesetzbuch“: „German Commercial Code“) and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with (German) principles of proper accounting and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of the companies included in consolidation, the determination of the companies to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Company‘s Board of Managing Directors as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion based on the findings of our audit, the consolidated financial statements comply with the legal requirements and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with (German) principles of proper accounting. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group‘s position and suitably presents the opportunities and risks of future development.

Osnabrück, 24 May 2016

PricewaterhouseCoopers
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Norbert Niedenhof	ppa. Stefan Heitmeyer
German Public Auditor	German Public Auditor

Colophon

Published by
2G Energy AG
Benzstraße 3 | 48619 Heek | Germany
Phone +49 (0) 2568 9347-0
ir@2-g.com | www.2-g.com

Design and layout
Werbeagentur Holl GmbH & Co. KG
www.werbeagentur-holl.de


2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G
2G

2G Energy AG
Benzstraße 3 | 48619 Heek | Germany
Phone +49 (0) 2568 9347-0
ir@2-g.com | www.2-g.com