

## 2G Energy

### Enabling the energy revolution

2G Energy continues to diversify its activities by expanding export markets and developing service revenues so that it is less exposed to changes in the regulatory environment for renewables and CHP in Germany. This strategy delivered a 10.8% y-o-y increase in FY18 sales to a record €209.8m, and a 56.2% jump in EBIT to €11.5m.

### Revenues exceeded €200m for first time in FY18

Group sales of €209.8m were at the top end of management guidance of €190–210m. Growth was driven by a 20.9% rise in service revenues to 37% of the total and a continued rise in demand for bio-fuel powered CHP systems in Germany capable of providing a more flexible output to complement electricity generated from renewable sources. Exports rose by 9.0% y-o-y to represent 34.7% of the total (FY17: 35.2%), with growth attributable entirely to service revenues. The associated EBIT margin (5.5% vs 3.9% in FY17) was also at the top end of management guidance (4–5.5%), supported by higher service revenues and the 'Lead-to-Lean' efficiency programme. Management proposes raising the dividend by 7% to €0.45/share. Net cash fell from €9.8m to €6.3m.

### Further sales and EBIT margin growth in FY19

Noting an order book of over €156m at end Q119 (€130.5m at end Q118), management guidance is for €210–230m FY19 sales at an EBIT margin of 5.5–7%. This margin uplift is attributable to higher sales from the same production base and further process improvements arising from the 'Lead-to-Lean' initiative. We note signs of a recovery in demand for natural gas power systems in Germany now the EEG levy waiver has been reinstated.

### Valuation: Fairly priced at current levels

The share price has picked up from a low of €20.20 at the end of December 2018 as the reinstatement of the EEG levy waiver on electricity has renewed interest in natural gas-powered CHP systems in Germany. At the current level, a comparison against established boiler manufacturers shows 2G Energy trading at a discount to the sample mean for year one and year two EV/sales multiples, in line with the sample mean for year one and year two EV/EBITDA multiples and a premium to the sample mean for year one and year two P/E multiples. This suggests that the shares are reasonably priced at current levels.

#### Consensus estimates

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/17	189.4	7.2	1.11	0.42	29.9	1.3
12/18	209.8	11.2	1.72	0.45	19.3	1.4
12/19e	228.5	12.9	2.13	0.73	15.6	2.2
12/20e	247.5	15.9	2.58	0.85	12.9	2.6

Source: Refinitiv, company data

#### Advanced materials technology

20 May 2019

Price €33.20

Market cap €147m

#### Share price graph



#### Share details

Code	2GB
Listing	Deutsche Börse Scale
Shares in issue	4.4m
Last reported net cash end December 2018	€6.3m

#### Business description

2G Energy is a leading international manufacturer of highly efficient combined heat and power plants (CHP). These are deployed in the housing industry, agriculture, commercial and industrial companies, public energy utilities and municipal and local government authorities.

#### Bull

- Decentralised CHP solutions reduce CO<sub>2</sub> emissions by improving conversion efficiency.
- Remote control capability improves service margins and supports flexibilisation.
- Remote control capability aids integration into virtual power plants.

#### Bear

- Uptake affected by green regulation
- Economics depends on spark spread.
- Low free float (46.5%).

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## **Service growth drives record FY18 results**

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### **Drive to increase services benefits domestic and export revenues as well as EBIT margin**

Group sales rose by 10.8% y-o-y to a record €209.8m. Growth was driven by a 20.9% rise in service revenues to 37% of the total and a continued rise in demand for bio-fuel powered CHP systems in Germany capable of providing a more flexible output to complement electricity generated from renewable sources. Exports rose by 9.0% y-o-y to represent 34.7% of the total (FY17: 35.2%), with growth attributable entirely to service revenues. The strongest performers were the UK at €13.8m sales and France at €13.1m. Personnel costs reduced slightly as a proportion of sales (by 0.4pp to 16.8%) demonstrating the positive impact of the 'Lead-to-Lean' efficiency programme. Other operating expenses increased in line with sales as higher logistics costs and travel costs associated with exports were balanced by lower sales commissions. EBIT jumped by 56.2% to €11.5m. The associated 1.6pp increase in EBIT margin was the result of higher service revenues and the 'Lean-to-Lead' initiative.

Net cash fell from €9.8m to €6.3m. Key elements included a €5.5m increase in trade receivables related to high levels of activity towards the year end, €4.7m income tax payments, €4.0m expenditure on the additional facility at the group's headquarters in Heek, a further €1.0m in the vehicle fleet and purchase of tools and IT equipment, and a €0.5m (FY17: €3.7m) investment in CHP plant for use by the in-house leasing operation.

### **Changing legislative environment in Germany favourable to bio-gas flexibilisation projects**

The pick-up in sales of biogas plants related to 'flexibilisation' projects facilities noted in FY17 continued in FY18. 'Flexibilisation' is the term for replacing older biogas plants that operate at a fairly constant output with higher output plants that can produce a variable output to balance any shortfall in electric power generated from wind or solar sources, which are inherently variable. The German Biogas Association estimates that 268MW of capacity related to flexibilisation was installed during 2018 compared with only 22MW of new biogas plants. 2G continued to expand its share of this market segment (from 22% to 27%) because it already has a large installed base of older plants that need upgrading, plus the control systems embedded in its CHP generators are highly suitable for flexible operation as part of a network of generation options. The 25% y-o-y improvement in domestic sales of bio-gas powered systems was partly offset by a further reduction (25%) in domestic sales of natural gas-powered systems. Demand for natural gas systems was severely affected by uncertainty regarding the waiver of the EEG (Renewable Sources Energy Act) levy. Until the end of 2017, operators of CHP plants only had to pay 40% of the EEG levy (ie 6.9c/kWh) on self-generated electricity. This exemption terminated at end-2017. In December 2018 the exception was reintroduced, with the waiver applied retrospectively from 1 January 2018.

### **Favourable outlook supported by order book**

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New order intake during Q119 totalled €39.2m. As anticipated by management, this was substantially below the record €54.7m secured in Q118, which benefited from a one-off boom in the German biogas sector, but was well above both the Q117 level (€28.7m) and the long-term average. Almost 50% of new orders were exports, with a particularly strong new order intake at the US subsidiary (€6.4m) following the change in management. Noting that the order book total at end Q119 was €156.3m, a 20% year-on-year increase, management reiterated the FY19 revenue guidance given in March (when the lower bound was revised upwards) of €210–230m. Based on

further margin improvements resulting from the 'Lead-to-Lean' programme and higher sales from the same production base, management raised FY19 EBIT margin guidance from 4.0–5.5% to 5.5–7%.

## Progress against strategic objectives

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### Product development

2G continues to develop differentiated product. For example, in September 2018 it received its first order for a CHP system powered by hydrogen that was generated by electrolysing water using surplus renewable energy. This first order is from Stadtwerk Hassfurt. Surplus electricity from a nearby wind park is used to generate hydrogen, which is stored until a time when demand for electricity exceeds supply, at which point 2G's CHP system converts the hydrogen to electricity and heat. The heat generated will be used in a neighbouring malt factory, school and kindergarten. The advantage of using a CHP system over a fuel cell is that the former does not require ultra-pure hydrogen, so the gas can be mixed with hydrogen-rich waste gases from the chemical industry, landfill gases or natural gas.

### Digitalisation: Live start of 'IRIS' intelligent service assistance

During FY18, 2G introduced its IRIS software platform, which was developed in-house. Up to 400 million plant and sensor values per week are now intelligently evaluated in real time and correlated to extract logical conclusions about CHP systems' current and future behaviour. This information is used by the service department for predictive maintenance: identifying possible faults and initiating appropriate countermeasures, thus preventing unplanned downtimes. The resultant efficiency gains represent meaningful savings for customers as well as for 2G. We note that the group is able to resolve 70% of error messages created by its diagnostic software online, substantially reducing the cost of site visits and cutting equipment down-time.

### Investment in service offer

Revenues from the services and spare parts business were 37% of the total (FY17: 34%). Management is keen to develop sales from this segment, since it reduces the risk of potential downturns in demand for CHP equipment in Germany and export markets as well as providing a mechanism for removing some of the seasonality in sales. While segmental sales are linked to the size of the installed base, which is increasing, management is pushing segmental growth that is faster than that for the group as a whole by encouraging partners to include service contracts with system sales, by investing in software that improves efficiency while providing a better service for customers overseas (see below) and strengthening the service team through the acquisition of a 50% stake in HJS Motoren for an undisclosed sum. This enhances the group's service capability in southern Germany. In addition, the new 6,000m<sup>2</sup> building in Heek gives significantly higher storage capabilities, allowing 2G to purchase spares in bulk, thus improving segmental profitability, as well as ensuring availability of parts for customers.

### Lean philosophy

Management continued with its 'Lead to Lean' programme during FY18. Further lean philosophy measures have been initiated to improve production processes, and enable shorter delivery times, cost reductions and quality enhancements. By consistently implementing the lean philosophy and further shortening lead times, management intends to increase existing capacity by a further 10%, catalysing additional earnings potential. Given the very high order book position at end Q119 (see above), management expects to fully utilise two shifts throughout FY19.

## Peer valuation

A comparison of prospective peer multiples for companies providing equipment for generating renewable energy yields limited information because few of the companies have reached commercial revenues and even fewer are generating meaningful profits. 2G Energy is trading on multiples that are lower than our sample mean, which is to be expected given that it has been generating substantial revenues and profits for several years.

The share price has picked up from a low of €20.20 at the end of December 2018 as the reinstatement of the EEG levy waiver on electricity has renewed interest in natural gas-powered CHP systems in Germany. At the current level, a comparison against established boiler manufacturers shows 2G Energy trading at a discount to the sample mean for year one and year two EV/sales multiples, in line with the sample mean for year one and year two EV/EBITDA multiples and a premium to the sample mean for year one and year two P/E multiples. This suggests that the shares are reasonably priced at current levels, although we note potential for an uplift if management is able to raise EBIT margins above the levels shown in the consensus estimates so they are closer to those of Generac Holdings, for example. We note that management raised the dividend by 7% to €0.45, representing a 1.4% yield at current levels.

**Exhibit 1: Peer multiples**

Name	Market cap (€m)	EV/sales 1FY (x)	EV/sales 2FY (x)	EV/EBITDA 1FY (x)	EV/EBITDA 2FY (x)	P/E 1FY (x)	P/E 2FY (x)	EBIT margin 1FY (%)
Ballard Power Systems Inc	701	6.3	4.3	(18.2)	(35.1)	(17.6)	(29.6)	(32.1)
Ceres Power Holdings PLC	323	13.7	12.6	(31.8)	(35.8)	(39.6)	(46.5)	(53.9)
Enertime SAS	6	1.3	0.8	(16.2)	21.6	(11.6)	46.3	(11.8)
FuelCell Energy Inc	16	2.7	1.7	(6.4)	(14.6)	(0.2)	(0.2)	(57.7)
Hydrogenics Corp	136	3.1	2.1	(51.2)	45.7	(24.2)	344.8	(10.4)
ITM Power PLC	106	10.8	4.4	(8.1)	(13.7)	(12.4)	(18.4)	(130.1)
Nordex SE	1,302	0.4	0.4	9.4	6.2	(59.8)	28.4	0.4
Plug Power Inc	513	3.7	2.8	(2,507.9)	27.3	(6.5)	(12.5)	(18.4)
Redt Energy PLC	17	3.4	1.5	(1.2)	(1.7)	(1.1)	(1.7)	(293.7)
SFC Energy AG	111	1.6	1.4	19.0	13.3	41.5	25.7	6.0
Vestas Wind Systems A/S	15,184	1.2	1.1	8.8	7.8	19.3	16.2	9.0
<b>Renewable energy equipment mean</b>		<b>3.4</b>	<b>2.1</b>	<b>12.4</b>	<b>12.2</b>	<b>30.4</b>	<b>29.2</b>	
DEUTZ AG	1,016	0.5	0.5	5.1	5.1	11.7	10.9	5.7
Generac Holdings Inc	3,220	2.1	2.0	10.4	10.1	12.5	11.9	17.3
Rafako SA	59	0.1	0.2	3.0	4.5	3.6	10.0	4.1
<b>Conventional boilers mean</b>		<b>0.9</b>	<b>0.9</b>	<b>6.2</b>	<b>6.6</b>	<b>9.2</b>	<b>10.9</b>	
2G Energy AG	147	0.6	0.5	6.8	5.9	15.6	12.9	6.8

Source: Refinitiv. Note: Prices at 13 May 2019. Grey shading indicates exclusion from mean.

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