

## 2G Energy

### Continued internationalisation reduces losses

2G Energy has diversified its activities, 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 supported a 13.5% year-on-year increase in sales during H117 and a substantial reduction in operating losses. We note that the first half is typically loss making while 2G Energy works on CHP projects for delivery in the second half.

### Exports drive H117 sales growth

Group sales increased by 13.5% year-on-year to €72.4m, supported by exports, which accounted for over half of CHP sales for the first time, and service revenues. A more favourable product and country mix resulted in higher gross profit, leading to a narrowing in EBIT losses from €1.9m to €0.5m. This was achieved even though personnel costs were 9% higher because of the French sales office and additional service and R&D engineers. Net cash increased by €7.0m to €11.0m, despite a €1.0m investment in CHP plant for use by the in-house leasing operation. Order intake during the first eight months of FY17 was ahead of the same period in FY16, resulting in an order book totalling €122.7m at the end of August. This has encouraged management to refine previous FY17 revenue guidance of €160-180m to the top end of that range.

### Continued progress against strategic objectives

The H117 sales growth clearly demonstrates the importance of developing both export markets and the service offer. We note that in August 2G calculated its first licence fees for the use of the customer and partner portal, extending its service offer. It continued to develop differentiated product, recently launching the ultra-low emission aura range, which meets extremely stringent requirements such as the TA Luft air pollution control regulations in Germany.

### Valuation: Potential for uplift as margins improve

A comparison with established boiler manufacturers shows 2G Energy trading at a discount to the mean for the sample with respect to EV/sales multiples (0.5x vs 1.0x year one mean), in line with EV/EBITDA multiples (7.5x vs 8.9x year one mean), at a premium to year one P/E ratios (16.5x vs 15.7x mean) and at a discount to year two P/E multiples (12.7x vs 15.9x mean). This indicates that the shares are fairly priced at current levels with potential for uplift as margins improve.

#### Consensus estimates

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/15	152.9	4.6	0.59	0.37	35.4	1.8
12/16	174.3	3.6	0.40	0.40	52.3	1.9
12/17e	179.7	8.4	1.27	0.40	16.5	1.9
12/18e	189.7	10.8	1.64	0.41	12.7	2.0

Source: 2G Energy data, Bloomberg

#### Advanced materials technology

09 October 2017

**Price** €20.9  
**Market cap** €93m

#### Share price graph



#### Share details

Code	2GB
Listing	Deutsche Börse Scale
Shares in issue	4.4m
Last reported net cash as of 30 June	€11.0m

#### Business description

2G Energy is a leading international manufacturer of highly efficient combined heat and power plants. 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 (47.7%).

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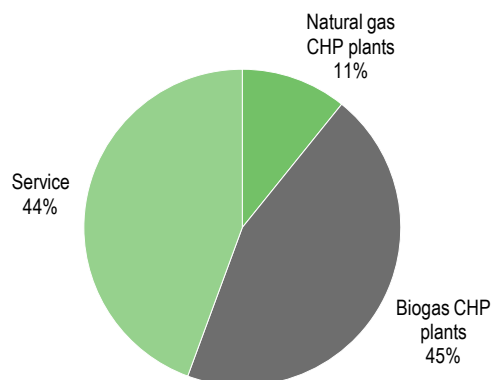
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## H117 financials demonstrate benefit of strategy

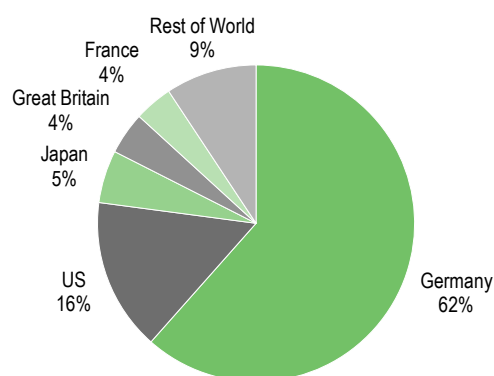
2G's challenge is to maintain profitability despite major fluctuations in demand in Germany caused by legislation. The H117 results show that development of export markets and services has helped stabilise sales.

**Exhibit 1: H117 revenue breakdown by segment**



Source: Edison Investment Research

**Exhibit 2: Order backlog breakdown, 31 August 2017**



Source: Edison Investment Research

## Internationalisation delivers H117 revenue growth

The H117 results are of limited value in indicating performance for the year as whole because CHP plants take several months to design, build and test. Typically 30% of the value of a CHP contract is payable in advance, 60% on factory acceptance prior to shipping and 10% on final acceptance. Since a high proportion of customers want their CHP systems delivered towards the year end (ie at the beginning of the period when most heating is required), sales and profits are typically skewed towards the second half of the year. While sales increased by 13.5% year-on-year to €72.4m, this reflects a higher proportion of manufacturing activity being deployed on projects where some revenues were recognised during the period rather than increased activity overall. H117 sales were flattered by the postponement of some projects, primarily ones in the UK, from H216 into H117. Total operating revenues, which include an element recognising work in progress, were very similar to H116 (€85.4m vs €85.5m). Nevertheless, some encouraging trends may be observed. 55% of the CHP system sales were to customers outside Germany. This is the consequence of expanding the direct sales network, for example opening an office in France during FY16, supporting distribution partners through the my.2-g.com portal and investment ensuring that 2G's CHP plants are compliant with the environmental and operating standards in place in its target geographies. Revenues from the services and spare parts business were 44% of the total (H116: 43%). These revenues are linked to the size of the installed base, giving additional protection from potential downturns in demand for CHP equipment in Germany.

Decoupling 2G's fortunes from demand in Germany remains important. German CHP sales declined by 22% year-on-year. There was a pick-up in sales of bio-gas plants related to projects making existing co-generation facilities more flexible, as 2G's programme to help operators decide how to deal with the new legislative framework bore fruit. However, this was not sufficient to compensate for a dip in sales of natural gas plants related to uncertainty in the legislative framework, such as the tendering process for 1-50MW systems.

The cost of materials reduced by €3.8m, reflecting a more favourable product and country mix, resulting in a €3.8m improvement in gross profit. This was partly offset by a €1.3m increase in personnel costs related to increased investment in R&D, servicing support and expansion in France, so EBIT losses reduced by €1.9m to €0.5m. This result was in line with management

expectations. As noted above, the first half is typically loss making. We await the full year results to see how the “Lean to Lean” programme is progressing. This aims to improve margins through organisational adaptation and adoption of software to standardise processes and make them more efficient.

## **Balance sheet and cash flow**

The group was cash generative during the period. Operating cash flow of €9.2m benefited from a €6.7m reduction in trade receivables and a €2.1m increase in payables reflecting generally higher production utilisation at the end of the period. Investment in tangibles totalled €2.0m, double the prior year level, as €1.0m was invested in plants for the rental business to lease out. Net cash increased by €7.0m to €11.0m.

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

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During H117, new orders totalling €65.3m were received (H116: €61.7m) followed by a further €28.6m during July and August (€22.7m July and August 2016). The order backlog at end August 2017 was €122.7m (€127.2m at end August 2016). At the end of June the total order-book value of bio-gas fuelled plants in Germany was €53.7m, so a recovery in demand related to successful exploitation of the flexibilisation opportunity combined with export development is responsible for the healthy outlook. Management notes that this order level secures double shift working through to the end of Q118. It has encouraged management to refine previous FY17 revenue guidance of €160-180m to the top end of that range.

## **Valuation**

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### **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 prospective EV/sales 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, and on P/E multiples that are similar.

A comparison with established boiler manufacturers shows 2G Energy trading at a discount to the mean for the sample with respect to EV/sales, but in line with the sample mean for EV/EBITDA multiples, towards the upper bound of our sample with regard to year one P/E ratios and at a discount to year two P/E multiples. This indicates that the shares are fairly priced at current levels with 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 for Generac Holdings.

**Exhibit 3: 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
AFC Energy	50	8.5	2.6	-	-	-	-	-
Ballard Power Systems	722	7.3	6.0	1,374	181	-	-	-
Ceres Power Holdings	160	41.8	23.7	-	-	-	-	-
Electro Power systems	95	6.1	0.8	-	23.7	-	59.9	-
Enertime	6	0.8	0.7	-	-	-	-	-
Fuelcell Energy	91	2.9	1.8	-	-	-	-	-
Hydrogenics Corp	107	2.3	1.5	-	26.7	-	-	-
Intelligent Energy Holdings	4	0.5	-	-	-	-	-	-
ITM Power	134	12.4	23.4	-	-	-	-	-
Nordex	950	0.4	0.4	4.7	5.1	14.0	16.1	-
Plug Power	512	5.1	3.3	-	555	-	-	-
Redt Energy	78	5.2	1.7	-	108	-	-	-
Senvion	755	0.5	0.4	6.3	5.2	16.4	12.9	-
SFC Energy	43	0.9	0.8	82.2	30.4	-	-	-
Vestas Wind Systems	16,455	1.4	1.3	7.9	7.8	16.4	15.0	-
<b>Renewable energy equipment mean</b>		<b>6.4</b>	<b>4.9</b>	<b>6.3</b>	<b>16.5</b>	<b>15.6</b>	<b>14.7</b>	
Deutz	818	0.5	0.5	4.4	4.8	15.2	17.0	6.3%
Generac Holdings	2,399	2.4	2.3	13.4	12.5	16.2	14.7	14.4%
Rafako	89	0.1	0.1	2.4	2.5	6.0	6.1	4.7%
<b>Conventional Boiler mean</b>		<b>1.0</b>	<b>1.0</b>	<b>8.9</b>	<b>8.7</b>	<b>15.7</b>	<b>15.9</b>	
2G Energy	95	0.5	0.5	7.5	6.2	16.8	13.0	4.9%

Source: Bloomberg. Note: Prices at 28 September 2017. Grey shading indicates exclusion from mean.

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