

2G Energy

Hydrogen ready

2G Energy's product portfolio of CHP systems positions it to benefit from the transition from coal and nuclear-powered electricity generation to increasing use of wind and solar sources augmented by natural gas to balance supply and demand. In the longer term, 2G has proven technology to address the potential switch from natural gas to hydrogen. However, there still will be significant demand for 2G's bio-gas and natural gas powered systems if adoption of hydrogen as an energy storage medium is delayed or derailed.

Pandemic delays plant commissioning

The coronavirus pandemic has had minimal impact so far on 2G's ability to manufacture CHP systems and demand appears unaffected. However, the pandemic has prevented 2G from completing the installation and commissioning of some systems as planned, resulting in a €10.2m y-o-y reduction in group sales during H120 to €85.6m. EBIT reduced by €0.5m to €2.3m, primarily as a result of not being able to recognise revenues until units are commissioned. The group moved from €0.1m net cash at end FY19 to €4.1m net debt at end H120. The major factor behind this shift was the increase in work-in-progress and completed goods related to the inability to install and commission some systems by the end of H120.

Management reiterates February guidance

Noting that new order intake has remained robust despite the pandemic, rising by 16% y-o-y during the seven months ended July 2020 to €94.9m, management has reiterated its FY20 guidance given in February. This is for revenues of €235–250m with an EBIT margin of 5.5–7.0%.

Valuation: Low-risk play on hydrogen economy

2G's share price is now almost 50% higher than at the start of the year. At the current level 2G's shares are trading on prospective EV/EBITDA and P/E multiples that are at a premium to our sample of conventional power generator manufacturers. Consensus estimates show 2G Energy's revenues growing substantially more quickly than the sample average, justifying multiples that are at a premium to the sample mean, in our view. We note that 2G Energy provides a route for participating in the potential development of a global hydrogen economy but without the technology and execution risk of fuel cell or electrolyser stocks.

Consensus estimates

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/18	209.8	11.2	1.72	0.45	40.1	0.7
12/19	236.4	15.3	2.33	0.45	29.6	0.7
12/20e	244.0	16.1	2.41	0.58	28.6	0.8
12/21e	268.0	19.6	2.97	0.70	23.2	1.0

Source: Refinitiv

Industrials

22 September 2020

Price €68.90
Market cap €305m

Share price graph



Share details

Code 2GB
Listing Deutsche Börse Scale
Shares in issue 4.4m
Last reported net debt at end June 2020 €4.1m

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

- Increasing demand for flexible and decentralised generation of power and heat worldwide as coal and nuclear power stations are closed down.
- Decentralised CHP solutions reduce CO₂ emissions by improving conversion efficiency.
- Hydrogen-fuelled systems offer mechanism for storing surplus power from renewables.

Bear

- Uptake affected by green regulation.
- Economics depends on spark gap.
- Low free float (47.7% at end June 2020).

Analyst

Anne Margaret Crow +44 (0)20 3077 5700

industrials@edisongroup.com
[Edison profile page](#)

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H120 performance

Pandemic impairs ability to commission and install plants

Group sales fell by €10.2m y-o-y during H120 to €85.6m. Travel restrictions caused by the coronavirus pandemic prevented personnel from accessing customer sites to support the commissioning and installation of new CHP plants and in some cases installation and commissioning was delayed because the pandemic had prevented customers from obtaining the equipment from third parties required to complete a project. 2G does not recognise revenues until a customer has formally accepted a system following commissioning, so delays to installations have meant that 2G was not able to raise invoices for systems that had been built during H120 but not commissioned. The H120 sales result obscures the fact that the production in Heek experienced very little disruption from the pandemic and there were no order cancellations. This is demonstrated by the total operating revenue figure, which includes work-in-progress and finished goods, and rose by €8.0m to €115.5m in H120, in line with management's expectations. While there were some minor supply issues relating to components sourced within Europe, the high levels of engine inventory meant that assembly schedules were not affected. Service revenues grew by €3.1m to €45.7m, accounting for 53% (H119: 44%) of total revenues given the decrease in product sales. Exports were more severely affected by the pandemic, reducing to 36% of total sales (H119: 38%).

Cost of materials as a proportion of total operating revenue was similar to the prior year period at 69.5%. Personnel costs increased as a proportion of operating revenue (by 1.1pp to 19.0%) partly because of additional service and sales people, partly because of wage inflation since unemployment rates in the Heek area are very low and partly because of the measures to protect against transmission of the COVID-19 virus, which led to reductions in efficiency. EBIT reduced by €0.5m to €2.3m, primarily as a result of the delayed revenues. EBIT margins (as a percentage of net sales) reduced very slightly, by 0.3pp to 2.7%.

Cash absorbed by making systems that were not installed

The group moved from €0.1m net cash at end FY19 to €4.1m net debt at end H120. The major factor behind this shift was a €22.9m increase in work-in-progress and completed goods, part of which is linked to higher order intake, part to the inability to install and commission some systems. This rise in working capital was offset to a large extent by higher levels of pre-payments, which include advance payments for new plants and full maintenance contracts. 2G typically receives a 30% advance payment on CHP systems of 30% on receipt of the order, a 60% payment on factory acceptance and 10% once the CHP system has been commissioned. Capex totalled €1.5m (gross), around half of which was spent on purchasing new vehicles.

Favourable outlook supported by order book

Management reiterates FY20 guidance

New order intake grew by 16% y-o-y during the seven months ended July 2020 to €94.9m. This growth was driven primarily by a 37% jump in orders in Germany. Demand for natural gas-powered systems benefited from the Bundestag agreeing two significant amendments to the German Renewable Energy Sources Act and the German Co-generation Act in June 2019. These amendments provided clarity on the how the mandatory levy on energy produced by new CHP plants installed since August 2014 and consumed in-house, rather than exported to the grid, would be structured. Lack of clarity prior to June 2019 had depressed demand, adversely affecting H119 orders. While relatively few new biogas plants have been installed in Germany for several years because of an unfavourable subsidy regime, customers are replacing older systems with ones able

to provide more flexible output. The existing subsidies supporting this replacement programme have been extended from the end of November 2020 to the end of July 2021. This supports demand for longer, though it is likely to fall once the subsidies end. The order book at end July 2020 totalled c €159.5m compared with €149.6m a year previously.

Based on the order book position and the current general business trend in Germany and elsewhere, as of early September management was confident that the group would increase sales and earnings during the second half, enabling it to meet the FY20 guidance given at the end of February. This is for €235–250m net sales generating 5.5–7.0% EBIT margin. This view assumes that the pandemic does not worsen again in the markets where 2G operates, which could lead to temporary closures of construction sites in key foreign markets. 2G is currently completing the outstanding installations, which typically require only two or three days on site, and raising the associated invoices. Management expects that the extensive employee protective measures it has implemented and the additional cost incurred in purchasing hard-to-get parts will continue to adversely affect efficiency, offsetting the leverage benefit from higher revenues.

With regards to the impact of the coronavirus on demand, management notes that typically less than 5% of sales are from the leisure/hospitality sector, which is the sector most affected by the pandemic. Since the company's technology provides a cost-effective way of providing heat and hot water as well as generating electricity, cost-cutting measures being implemented in response to the pandemic are in effect resulting in increased demand for CHP in some industrial markets.

Long-term investment case intact

Management expects the likely reduction in domestic sales of biogas systems from H221 onwards (which was already noted above) will be more than offset by demand for natural gas systems in Germany to complement renewable generation sources. It expects that this deployment of natural gas power generation systems as a substitute for coal-based power generation will then be followed by gradual adoption of hydrogen-fuelled systems as part of the move to a completely carbon neutral power generation industry.

Transitioning from coal and nuclear generation to natural gas

In July 2020 Germany's lower house of parliament passed a bill to phase out coal-fired power stations in the country by 2038 at the latest. The bill means that more than 40GW of electricity capacity will gradually be withdrawn from the market, in addition to more than 9GW of capacity loss because of the phasing out of nuclear power by the end of 2022. In total, this represents around 40% of the available base load capacity being withdrawn. Gas-based CHP plants such as those offered by 2G Energy represent a solution for bridging the immediate generation capacity shortfall. This is because 2G Energy's systems have a flexible output; they can be installed close to the point of consumption, reducing investment in transmission and distribution grids; and their planning and construction time is substantially less than that for wind farms or utility-scale, gas-powered generation facilities. Having a flexible output is particularly helpful as the proportion of energy generated from renewable sources increases since wind and solar generation sources are inherently intermittent. As part of the coal phase out, the subsidies for larger CHP systems have been enhanced with the funding period expanded to the end of 2029 and the annual cap raised from €1.5bn to €1.8bn.

The proposed decarbonisation of fossil fuels in industrial processes and transportation will also result in increased demand for electricity. For example, the German government announced its €9bn hydrogen strategy in June 2020. This proposed converting domestic steel production, refining and ammonia production to hydrogen, resulting in an additional 150,000GWh of electricity annually, ie an increase of around one quarter.

Transitioning from natural gas to hydrogen

Governments are increasingly introducing policies intended to encourage the use of hydrogen so they can meet their obligations to achieve carbon neutrality. For example, in July 2020 the EU published 'A hydrogen strategy for a climate-neutral Europe.' This document sees hydrogen playing a key role in achieving decarbonisation of EU energy consumption by 2050. The roadmap envisages progressive uptake of hydrogen leading to a repurposing of parts of the existing natural gas infrastructure to transport hydrogen. The hydrogen gas will primarily be used to replace fossil fuels in some carbon-intensive industrial processes and to power fuel-cell trucks, buses and other heavy vehicles. There is also a role for hydrogen as an energy storage medium to address the imbalance between supply from renewable energy sources and demand. Hydrogen presents an alternative to utility-scale battery energy storage systems, using surplus electricity from renewable sources to generate hydrogen by electrolysis water. In September 2018, 2G Energy received its first order for a CHP system powered by hydrogen for a project realised together with the public utility of Haßfurt. This site is fully operational. In March 2020 APEX Energy Teterow in Rostock-Laage commissioned 2G to supply a hydrogen cogeneration plant. 2G's systems are particularly appropriate in this context because CHP systems by definition use the heat produced during electricity generation, for example, to heat water in a hospital or care home, thus improving the overall efficiency of the process. Moreover, the design of 2G's systems means that it is possible to carry out the conversion from running on natural gas to hydrogen at a customer's site.

Valuation

A comparison of prospective peer multiples for companies manufacturing fuel cells or electrolyser 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. It is interesting to note that all of these stocks have increased in value since the start of the year, despite the coronavirus related sell-off in March, as have 2G Energy's shares. We note that 2G Energy provides a route for participating in the potential growth in the global hydrogen economy but without the technology and execution risk of the stocks in this sample, in our view. Moreover, there still will be significant demand for 2G's bio-gas and natural gas powered systems if the transition to a hydrogen economy is delayed or derailed.

Exhibit 1: Peer multiples comparison

Name	Ytd performance (%)	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)	Revenue CAGR*
Ballard Power Systems	126.2	3,311	32.3	24.3	(118.5)	(178.1)	(87.5)	(146.7)	23.1%
Ceres Power Holdings	124.4	1,111	38.0	35.6	(104.9)	(177.2)	(100.4)	(147.3)	31.6%
Fuelcell Energy	4.2	532	11.5	9.2	(44.0)	(97.9)	(6.5)	(11.2)	22.1%
ITM Power	296.6	1,485	349.9	80.3	(78.5)	(122.1)	(58.9)	(109.5)	99.5%
Plug Power	329.1	4,357	16.5	12.4	333.0	99.8	(46.5)	(56.1)	36.1%
SFC Energy	54.7	199	3.7	2.9	(457.0)	29.4	(37.6)	120.3	13.1%
Hydrogen power generation equipment mean			20.4	16.9	N/A	64.6	N/A	120.3	30.6%
China Yuchai International	35.1	625	0.2	0.2	1.8	1.7	6.3	5.7	5.0%
Cummins	18.4	26,599	1.9	1.7	13.7	11.6	22.3	18.0	(7.8%)
DEUTZ	(14.6)	578	0.6	0.4	57.1	4.8	(7.1)	11.9	0.2%
Generac Holdings	81.6	9,750	5.1	4.6	23.1	20.7	31.6	28.4	9.8%
Conventional generation equipment mean			1.9	1.7	12.9	9.7	20.1	16.0	1.8%
2G Energy	49.1	305	1.3	1.1	14.8	12.6	28.6	23.2	7.0%

Source: Refinitiv. Note: Grey shading indicates exclusion from mean. *Year 3 to year 0. Prices at 19 September 2020.

At the current level, a comparison with companies manufacturing conventional power generation equipment shows 2G Energy trading at a discount to the sample mean for prospective EV/sales multiples, but at a premium to the sample mean for prospective EV/EBITDA and P/E multiples. Consensus estimates show 2G Energy's revenues growing substantially more quickly than the sample average, potentially justifying multiples that are at a premium to the sample mean.

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