

2G Energy

Fifth successive year of growth

2G Energy's FY20 results marked the fifth successive year of revenue growth, despite the coronavirus pandemic. Customers in Germany and elsewhere continued to invest in combined heat and power (CHP) systems that help cut electricity costs, reduce dependence on overstretched electricity grids and address the variability of output from wind and solar sources. Importantly 2G's CHP systems can be upgraded to run on hydrogen, future proofing the investment as the sector decarbonises.

FY20 revenue and profit growth in line with guidance

Group sales rose by 4.4% y-o-y during FY20 to €246.7m, which is towards the top end of management's €235–250m guidance. EBIT grew by 6.4% to €16.4m, with EBIT margins (as a percentage of net sales) increasing very slightly to 6.7%. This was also towards the top end of management's 5.5–7.0% guidance. Cash flow from operating activities was significantly higher during FY20 than the previous year (€9.8m vs €1.9m) because of lower working capital outflow and tax payments, resulting in a €5.4m increase in net cash during FY20 to €5.6m at the year end.

Management expects further growth in FY21

Noting an order book totalling €136.6m at end Q121 and a c 35% year-on-year jump in revenues during Q121 to €43m, management expects net sales of €245–260m for FY21 as a whole, with an EBIT margin of 6.0–7.5%. This view assumes that the pandemic does not worsen again in the markets where 2G operates. Management has reiterated its longer-term goal of hitting €300m revenues in 2024 and raising the EBIT margin to 10%. This margin improvement would be achieved through a combination of efficiency gains realised through internal programmes, economies of scale and a higher proportion of service revenues.

Valuation: Premium for fuel-agnostic approach

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 will still be significant demand for 2G's biogas and natural gas-powered systems if adoption of hydrogen as an energy storage medium is delayed or derailed. We believe that this fuel-agnostic approach justifies 2G's share price, currently trading on multiples towards the upper end of our sample of companies offering conventional power generation equipment.

Consensus estimates

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/19	236.4	15.3	2.33	0.45	40.3	0.5
12/20	246.7	16.5	2.70	0.45	34.8	0.5
12/21e	258.9	18.3	2.82	0.53	33.0	0.6
12/22e	284.3	22.4	3.32	0.83	28.2	0.9

Source: Refinitiv

Industrials

12 May 2021

Price €93.90

Market cap €425m

Share price graph



Share details

Code	2GB
Listing	Deutsche Börse Scale
Shares in issue	4.5m
Net cash at end December 2020	€5.6m

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 depend on spark gap.
- Low free float (47.7%).

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FY20: Growth in a time of coronavirus

FY20 growth in line with management guidance

Group sales rose by 4.4% y-o-y during FY20 to €246.7m, which is towards the top end of management's €235–250m guidance. While travel restrictions caused by the coronavirus pandemic had delayed the commissioning and installation of new CHP plants during H120, there was very little disruption to production and no order cancellations, enabling the group to more than recover the lost ground in the second half. Exports grew more quickly than domestic sales, boosted by strong performances in the United States and the UK, and accounted for 43% of CHP system sales (39% in FY19). Revenues from services and the sale of replacement parts grew by 4% to €93.3m, accounting for 38% of total revenues. The 4% increase in revenues from CHP systems was attributable to demand for natural gas systems in Germany and elsewhere, which more than compensated for lower sales of biogas systems.

Cost of materials as a proportion of total operating revenue increased by 0.9pp to 65.8%. Management notes that the metric is similar to the previous year if the distorting impact of changes in inventory is removed, showing that cost-saving measures in previous years, particularly in the area of engine procurement, have proved sustainable. Personnel costs as a proportion of operating revenue increased by 0.2pp to 17.4%, in line with rising output. EBIT grew by 6.4% to €16.4m, with EBIT margins (as a percentage of net sales) increasing very slightly, by 0.1pp to 6.7%. This was also towards the top end of management's 5.5–7.0% guidance. Dividend payments were maintained at FY19 levels, ie €0.45/share.

Strong cash generation

Net cash rose by €5.4m during FY20 to €5.6m at the year end. In January 2021, the group raised €5.3m (gross) through a placing at €95.60/share. The funds raised are being used to provide additional liquidity to accommodate the working capital requirements of individual major projects. Cash flow from operating activities was significantly higher during FY20 than the previous year (€9.8m vs €1.9m) because of lower working capital outflow and tax payments. Working capital increased by €5.6m, much of which was attributable to final invoices issued during December to external financing partners by the group's internal financing operation which were not due as of the balance sheet date. Capex totalled €2.4m (gross), around half of which was spent on purchasing new vehicles.

Favourable outlook supported by order book

Good start to FY21

New order intake for systems grew by c 5% y-o-y during FY20, resulting in an order book at end FY20 of €111.2m compared with €116.8m at end FY19. New orders grew by 3% in Q121, contributing to an order book totalling €136.6m at end Q121. More than 50% of the new orders related to exports. Preliminary data for Q121 show a c 35% jump in revenues to €43m. Significantly, the revenues included final invoicing for a number of the projects which were partly completed at the end of FY20, showing that management is succeeding in reducing the imbalance of revenues between the fourth and first quarters.

Based on the order book position and the current general business trend in Germany and elsewhere, management expects net sales of €245–260m for FY21 as a whole, with an EBIT margin of 6.0–7.5%. 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, delaying commissioning of systems. Management has reiterated its longer-term goal of

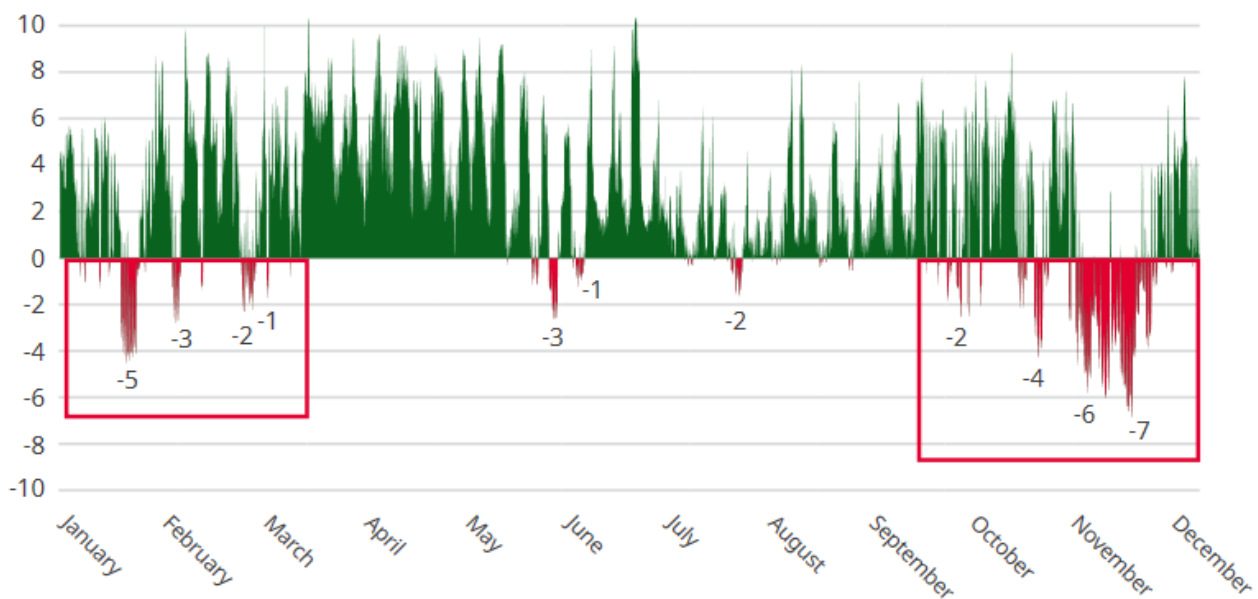
hitting €300m revenues in 2024 and raising the EBIT margin to 10%. This margin improvement would be achieved through a combination of efficiency gains realised through the use of partners to develop international markets, the 'Lead-to-Lean' project and digitalisation of maintenance and services, as well as economies of scale and a higher proportion of service revenues.

Supporting global energy transition

Management expects there is likely to be a reduction in domestic sales of biogas systems from H221 onwards because the subsidies to replace older systems with ones able to provide more flexible output will finish at the end of July 2021. However, demand for biogas systems is not likely to go away. The European Biogas Association estimates that implementation of the EU Green Deal brings opportunities to scale-up biogas and biomethane production across Europe from 167 TWh in 2019 to a minimum of 380 TWh by 2030. Moreover management expects the short-term decline in demand for biogas systems in Germany will be more than offset by domestic demand for natural gas systems 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.

Addressing energy shortfall in 2023 as Germany turns off coal and nuclear power stations

Exhibit 1: Calculated surplus capacities or capacity bottlenecks by 2023



Source: 2G Energy

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. Management estimates that if the coal and nuclear power plants in Germany are shut down as now required by law, there will be insufficient electricity being generated for 15% of the hours in a year from 2023 onwards. This view is supported by a report from the German Federal Audit Office which calculates a shortfall of up to 4.5GW of generation capacity by 2024. 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.

2G's natural gas CHPs are hydrogen-ready

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. As discussed in Edison's [Hydrogen report](#), 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. Importantly, hydrogen can store energy for a period of several months, while batteries can only provide storage for up to a week.

2G Energy received its first order for a CHP system powered by hydrogen in September 2018. This was for a project in Germany. The company will be implementing its first hydrogen-based projects in Japan and the UK during 2021. Its hydrogen CHPs give comparable performance to those operating on natural gas and are offered at similar prices. Management has recently committed to converting the company's natural gas CHP systems to run on up to 100% hydrogen after approximately 30,000 operating hours as part of the regular maintenance schedule. This policy is very attractive for operators because it eliminates the risk of stranded investments.

Valuation: Premium for fuel-agnostic approach

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 most of these hydrogen-related stocks have reduced in value since the start of the year as investors have realised that many of the valuations were [over-hyped](#). 2G Energy's share price also benefited from investor interest in hydrogen-related stocks during 2020 and has doubled in value over the last year. We believe that 2G Energy should be more resilient than many of the other stocks in our sample to a continued downturn in investor sentiment regarding the sector because it provides a route for participating in the potential growth in the global hydrogen economy without technology or execution risk. Moreover, there still will be significant demand for 2G's biogas and natural gas-powered systems if the transition to a hydrogen economy is delayed or derailed.

Exhibit 2: Peer multiples comparison

Name	Performance ytd (%)	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)
AFC Energy	(26.8)	491	213.4	95.4	(69.7)	(71.8)	(50.1)	N/A
Ballard Power Systems	(35.5)	3,854	31.4	21.3	(71.7)	(126.9)	(74.6)	(128.4)
Bloom Energy Corp	(24.5)	3,087	4.5	3.6	54.5	32.5	(223.9)	104.0
Ceres Power Holdings	(15.4)	2,398	65.3	57.2	(150.5)	(153.9)	(128.5)	(126.8)
Doosan Fuel Cell Co	(26.9)	2,073	5.5	3.7	65.3	37.3	128.0	66.5
ITM Power	(19.3)	2,644	336.9	71.4	(122.1)	(124.9)	(94.9)	(161.9)
Plug Power	(28.4)	10,131	24.6	15.8	428.8	134.1	(105.2)	(138.6)
Bloom Energy Corp	(24.5)	3,087	4.5	3.6	54.5	32.5	(223.9)	104.0
Doosan Fuel Cell Co	(26.9)	2,073	5.5	3.7	65.3	37.3	128.0	66.5
McPhy Energy	(16.4)	796	22.2	13.8	(90.1)	(69.4)	(77.6)	(80.5)
Nel	(32.9)	2,822	25.5	15.6	(87.7)	(107.9)	(43.4)	(87.9)
Powercell Sweden (publ)	(39.0)	1,008	47.7	24.3	(147.8)	295.6	(85.0)	7,173.8
SFC Energy	49.0	342	4.7	3.3	55.7	24.2	565.5	59.4
Hydrogen power generation equipment mean			21.9	15.1	120.7	84.8	273.8	74.1
China Yuchai International	(2.1)	543	0.2	0.2	1.7	1.7	6.5	6.1
Cummins	14.9	31,668	1.7	1.6	10.9	9.9	17.3	14.7
DEUTZ	34.5	827	0.6	0.5	8.0	4.9	20.4	10.6
Generac Holdings	40.4	16,686	5.7	5.0	22.5	19.6	31.7	28.8
Conventional generation equipment mean			2.0	1.8	10.8	9.0	19.0	15.1
2G Energy	4.57	415	1.6	1.4	17.8	15.0	33.0	28.2

Source: Refinitiv. Note: Grey shading indicates exclusion from mean. Prices at 6 May 2021.

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. Manufacturers of conventional power generation equipment have started to take the steps needed to ensure they have a place in a fully decarbonised energy generation. For example, Cummins acquired fuel cell manufacturer Hydrogenics in September 2019, while DEUTZ acquired German battery specialist Futavis in 2019. Generac offers a range of combined solar and storage systems for homeowners. 2G has a proven range of energy generation systems that are able to use natural gas to address the predicted shortfall in generation capacity when coal- and nuclear-powered plants are turned off in Germany and elsewhere. These systems can then be converted to use hydrogen during the transition to a fully decarbonised power generation environment. We believe that 2G's fuel-agnostic approach justifies multiples that are at the upper end of our sample.

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