

Windar Photonics

Trading update

Supply chain issues dampen FY18 growth

Windar's revenues from product sales grew by 80% year-on-year during FY18, enabling it to reduce EBITDA losses from €1.2m to €0.4m. Growth was slower than expected because of supply chain issues. Although these issues have now been resolved, they have a knock-on effect on follow-on orders for FY19, so we reduce our estimates for both forecast years.

Year end	Revenue (€m)	EBITDA (€m)	PBT* (€m)	EPS* (c)	DPS (c)	EV/sales (x)
12/16	1.2	(2.4)	(3.0)	(7.6)	0.0	27.1
12/17	2.2	(1.2)	(2.1)	(5.0)	0.0	14.8
12/18e	3.5	(0.4)	(0.8)	(1.5)	0.0	9.3
12/19e	6.0	0.6	0.2	0.4	0.0	5.4

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

FY18 growth dampened by supply chain issues

FY18 revenues increased by 59% year-on-year to €3.5m, as Windar shipped a substantial proportion of the 300 units required for the Chinese order announced in December 2017. Supply chain issues, which have been resolved, meant that not only was Windar unable to complete all of the deliveries under this contract by the year-end, but follow-on orders from the customer were delayed. Nevertheless, the improvement in revenues enabled Windar to get substantially closer to its goal of reaching break-even, despite incurring additional operational costs relating to the Shanghai sales and service office, investment in wind analytics software and support for OEM turbine integration. In July and August Windar raised £2.2m (gross) through a subscription at 82.5p/share. Net cash (excluding restricted cash and Growth Fund Loan) increased by €0.6m during the year to €1.7m at end FY18.

Vestas agreement underpins FY19 growth

Management is confident that the global distribution agreement with Vestas announced in June 2018 will help deliver further revenue growth in FY19. Vestas is the largest maintenance provider in the industry with, we estimate, around 31 thousand turbines under service. Management also expects continued demand from its Asian partners for retrofit applications. Windar continues to work on turbine integration projects with OEMs, some of which are in the final verification stages. Noting delays in achieving OEM certification, we remove any volume deliveries from our FY19 estimates, so certification during the year could generate upside.

Valuation: Long-term value from OEM volumes

Management's stated target is to retrofit 2% of the installed base each year and equip one third of all new turbines with its LiDAR within three years. Our scenario analysis shows this generating c €100m revenues and c €35m PAT at the top end of estimates (see page 2 for details).

Alternative energy

28 February 2019

Price **72.5p**
Market cap **£30m**

€1.14/€

Net cash (€m) at end December 2018, excluding restricted cash and Growth Fund Loan 1.7

Shares in issue 41.8m

Free float 51.1%

Code WPHO

Primary exchange AIM

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (9.4) (14.2) (13.2)

Rel (local) (12.9) (15.5) (10.8)

52-week high/low 106.5p 76p

Business description

Windar Photonics is a UK-registered, Copenhagen-based developer and manufacturer of an innovative low-cost light detection and ranging system. Approaching wind direction and speed is measured ahead of a wind turbine, allowing appropriate yaw alignment, increasing efficiency.

Next events

FY18 results May 2019

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Revisions to estimates

We revise our FY18 and FY19 estimates to reflect:

- Lower retrofit sales in FY18 caused by delays in completing deliveries for the major Chinese contract received in FY17 because of supply chain issues, which management notes have now been resolved.
- Lower retrofit sales in FY19 reflecting the knock-on impact on follow-up orders from the major Chinese customer, as well as it taking longer than originally expected for Vestas to close contracts with IPPs. We note from discussions with management that equipping two of the sites in North America where discussions are currently ongoing represents total unit sales of around double the number shipped during the whole of FY18.
- Lower OEM sales in both FY18 and FY19. We had previously assumed that one OEM would start integrating Windar's LiDAR into one of its commercial models by the end of FY18, followed by a volume ramp-up during FY19 as other turbine manufacturers followed suit. Since it is difficult to predict when one or more of the OEMs currently evaluating Windar's LiDAR will move to integration of units in commercial turbines, we now model volume ramp-up as starting after the end of the forecast period, though there remains scope for this to commence later in FY19. This represents upside to our FY19 forecasts.

Exhibit 1: Changes to estimates

€m	FY17	FY18e			FY19e		
	Actual	New	Old	% change	New	Old	% change
Revenue	2.2	3.5	4.5	-21.3%	6.0	18.6	-67.7
EBITDA	(1.2)	(0.4)	0.1	N/A	0.6	7.6	-92.1
PBT	(2.1)	(0.8)	(0.3)	130.7%	0.2	7.2	-97.2
EPS (c)	(5.0)	(1.5)	(0.6)	130.7%	0.4	12.6	-97.2
Net cash*	1.1	1.7	1.8	5.7%	1.0	4.6	-77.6

Source: Edison Investment Research, Windar Photonics accounts. Note: *Excluding restricted cash and Growth Fund Loan.

Valuation

Since there remains considerable uncertainty on when volume sales to OEMs are likely to begin, and these could be at least as large as retrofit sales, we are dropping the use of a DCF valuation. Instead, we present a scenario analysis showing what revenues and profits could look like at different levels of market penetration, without being specific as to the year in which the company will reach that level. We note however, that management's stated targets for penetration of the retrofit and OEM segments three years from now are 2% and 33% respectively. We adopt these levels as the higher bound of our analysis (Exhibit 2). For the lower bound of our analysis, we adopt the level of market penetration, ASP, gross margin and operating costs used in our FY19 estimates, while excluding £150k interest as we have no visibility of what this could be in future years.

Windar is the only established company able to offer systems at a cost-point where it is possible to mount LiDAR on individual turbines to give real-time monitoring of the speed and direction of incoming wind, it is already in trials with the majority of wind turbine OEMs and has access to 14% of global installed wind capacity through its distribution agreement with Vestas Wind Systems. Consequently it is extremely well placed to benefit from potential industry-wide adoption of "one turbine per LiDAR" methodology. As discussed above however, there is no certainty of when widespread deployment will commence. The order for 300 units received in December 2017 indicated that the industry was beginning to adopt the methodology, but since supply chain issues have meant that not all of these 300 units have been shipped yet, there have been no follow-on

orders to confirm that the transition to volume deployment will be sustained. In September 2018 management was confident that the first OEM would begin commercial integration by the year end, resulting in OEM sales being at least as big as retrofit sales in FY19. While this certification process is taking longer to complete than management had expected, it remains confident that multiple turbine OEMs will adopt the technology; the uncertainty is whether this will happen in FY19 or FY20.

At present, the company is trading on prospective multiples that are in keeping with one on the cusp of profitability, with FY19 EV/sales of 5.4x and P/E of 170x. Once the company starts to gain market penetration and generate meaningful profits as shown in Exhibit 2, applying even a modest 10x P/E would justify a share price substantially higher than the current level.

Exhibit 2: Scenario analysis

Retrofit segment					
Wind turbine installed base end 2017 (GW)	540*				
Estimated number of turbines under service	216,000				
% turbines under service retrofitted with LiDAR in one year	0.2%	0.5%	1.0%	1.5%	2.0%
Number of turbines under service retrofitted with LiDAR in one year	478	1,080	2,160	3,240	4,320
Revenues (€m)	5.5	12.2	23.8	32.4	38.9
Gross profit per unit (€k)	5.6	5.0	5.0	5.0	5.0
Gross profit (€m)	2.7	5.4	10.8	16.2	21.6
Share of operating costs (€m)	-2.4	-3.1	-4.2	-5.1	-5.8
Tax rate	0%	22%	22%	22%	22%
Profit after tax (£m)	0.3	1.8	5.1	8.7	12.4
OEM segment					
New wind turbine installations 2017 (GW)	53*				
Estimated number of turbines	21,200				
% new turbines shipped with LiDAR in one year	0.20%	5.0%	10.0%	20.0%	33.0%
Number of new turbines shipped with LiDAR in one year	43	1,060	2,120	4,240	6,996
ASP (€k)	11.5	11.3	9.0	9.0	8.5
Revenues (€m)	0.5	11.9	19.1	38.2	59.5
Gross profit per unit (€k)	5.6	5.0	5.0	5.0	5.0
Gross profit (€m)	0.2	5.3	10.6	21.2	35.0
Share of operating costs (€m)	-0.3	-1.4	-2.1	-4.0	-6.2
Tax rate	0%	22%	22%	22%	22%
Profit after tax (£m)	0.0	3.0	6.6	13.4	22.5

Source: Edison Investment Research. Note: *Global Wind Energy Council data.

Exhibit 3: Financial summary

	€000s	2016	2017	2018e	2019e
Year-end 31 December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue		1,196	2,214	3,500	6,000
Cost of Sales		(627)	(1,301)	(1,787)	(3,063)
Gross Profit		569	913	1,713	2,937
EBITDA		(2,422)	(1,219)	(357)	605
Operating Profit (before goodwill amortisation and exceptionals)		(2,850)	(1,770)	(607)	355
Intangible Amortisation		0	0	0	0
Exceptionals		0	0	0	0
Warrants		(317)	(235)	(100)	(100)
Operating Profit		(3,167)	(2,006)	(707)	255
Net Interest		(107)	(286)	(200)	(150)
Profit Before Tax (norm)		(2,957)	(2,057)	(807)	205
Profit Before Tax (FRS 3)		(3,274)	(2,292)	(907)	105
Tax		128	66	0	0
Profit After Tax (norm)		(2,957)	(2,057)	(629)	160
Profit After Tax (FRS 3)		(3,146)	(2,226)	(907)	105
Average Number of Shares Outstanding (m)		39.0	41.1	42.9	44.5
EPS - normalised (c)		(7.6)	(5.0)	(1.5)	0.4
EPS - normalised fully diluted (c)		(7.6)	(5.0)	(1.5)	0.4
EPS - (IFRS) (c)		(8.1)	(5.4)	(2.1)	0.2
Dividend per share (c)		0.0	0.0	0.0	0.0
Gross Margin (%)		47.6	41.2	49.0	49.0
EBITDA Margin (%)		N/A	N/A	-10.2%	10.1%
Operating Margin (before GW and except.) (%)		N/A	N/A	-17.3%	5.9%
BALANCE SHEET					
Fixed Assets		1,357	1,014	964	1,714
Intangible Assets		1,184	869	819	819
Tangible Assets		119	107	107	857
Investments		54	39	39	39
Current Assets		2,705	2,767	3,432	3,303
Stocks		994	740	749	953
Debtors		898	676	767	1,068
Cash		783	1,117	1,682	1,046
Other		31	235	235	235
Current Liabilities		(1,276)	(1,504)	(676)	(991)
Creditors		(1,271)	(1,499)	(671)	(986)
Short-term borrowings		(5)	(5)	(5)	(5)
Long-Term Liabilities		(961)	(1,096)	(1,346)	(1,596)
Long-term borrowings		(21)	(16)	(16)	(16)
Other long-term liabilities (including loan from Growth Fund)		(940)	(1,080)	(1,330)	(1,580)
Net Assets		1,825	1,182	2,375	2,430
CASH FLOW					
Operating Cash Flow		(1,549)	(271)	(1,284)	414
Net Interest		(10)	(36)	(50)	(50)
Tax		(22)	0	0	0
Investment in intangible & tangible assets		(462)	(225)	(200)	(1,000)
Acquisitions/disposals		0	0	0	0
Financing		1,995	1,334	2,250	0
Dividends		0	0	0	0
Net Cash Flow		(48)	801	716	(636)
Opening net debt/(cash)		(564)	(758)	(1,095)	(1,661)
HP finance leases initiated		0	0	0	0
Other		242	(464)	(150)	0
Closing net debt/(cash)*		(758)	(1,095)	(1,661)	(1,025)

Source: Windar Photonics accounts, Edison Investment Research. Note: *Excludes restricted cash and Growth Loan Fund.

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