EDISON

Windar Photonics

Interim results

Continued strong growth in revenues

Alternative energy

H118 has started well with 33% y-o-y jump in revenues taking Windar close to EBITDA breakeven. The distribution agreement with Vestas announced in June should help drive sales to independent power providers (IPPs) globally. However, a shortage of key components in Q218 means the company has issued FY18 revenue guidance of €4.0–4.5m, which is significantly below our previous estimate. We revise our estimates and adjust our indicative valuation from 125p/share to 124p/share.

Year end	Revenue (€m)	EBITDA* (€m)	PBT* (€m)	EPS (c)	DPS (c)	P/E (x)
12/16	1.2	(2.4)	(3.0)	(7.6)	0.0	N/A
12/17	2.2	(1.2)	(2.1)	(5.0)	0.0	N/A
12/18e	4.5	0.1	(0.3)	(0.6)	0.0	N/A
12/19e	18.6	7.6	7.2	12.6	0.0	8.3

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

H118 growth held back by component shortages

Revenues increased by 33% year-on-year in H118 to €1.7m as Windar worked through the order for 300 WindEye low-cost light detection and ranging (LiDAR) systems from a Chinese distributor, announced last December. Growth was held back by a shortage of key long lead-time components. EBITDA losses narrowed from €0.4m to €0.1m as the combination of higher sales on a smaller cost base took Windar close to breakeven. Net cash (excluding the Growth Fund Loan) reduced by €0.9m during H118 to €0.2m at the end of the period, primarily because of an increase in working capital. In July and August Windar raised £2.2m (gross) through a subscription at 82.5p/share. The net proceeds will mainly be used to support working capital requirements as volumes continue to ramp-up during H218 and FY19.

Direct integration into OEM wind turbine close

Noting that Windar will not be able to catch up on the deliveries that were delayed during H118 because of component shortages, we reduce our FY18 revenue estimates by 21%. We also reduce our FY19 estimates (by 27%) because, while Windar appears close to announcing that one of the wind turbine OEMs it is working with is about to launch a model with integrated LiDAR, it is not clear when volume deliveries to the OEM segment will start to ramp-up as a result.

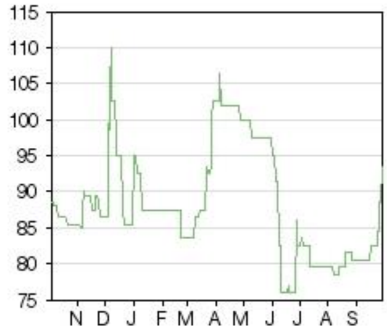
Valuation: Further orders should drive share price

Our valuation analysis is based on a DCF using a terminal growth rate of 2%. We continue to apply a discount factor of 40% to reflect current levels of risk because the company is still waiting for confirmation that its technology will be designed-in to one or more turbine models and for a follow-on order to the large Chinese contract. This implies an indicative value of 124p/share (previously 125p). Receipt of further volume orders should give investors better visibility on the technology adoption and market penetration, reducing the discount applied for risk. A 20% discount would give an indicative valuation of 339p/share.

1 October 2018

Price	**93.5p**
Market cap	**£39m**
	£/€1.12
Net cash (€m) at end-June 2018, excluding Growth Fund Loan and £2.2m from subscription in Q318	0.2
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	16.2	8.7	5.7
Rel (local)	18.0	10.3	2.9
52-week high/low		110.0p	76.0p

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

Prelims	June 2019

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Windar Photonics is a research client of Edison Investment Research Limited

Progress on execution of strategy

Penetration of retrofit market

In June Windar announced it had signed a global distribution agreement with wind turbine manufacturer Vestas Wind Systems. Vestas will now sell and market Windar's two-beam LiDAR system as a retrofit after-sales solution to the wind industry. We believe this is an exciting development for Windar because Vestas is the largest maintenance provider in the industry. It has more than 78GW of assets under service, of which more than 8GW are non-Vestas turbines. According to Global Wind Energy Council statistics, 78GW is 14% of the global cumulative installed wind capacity. Assuming an average turbine size of 2.5MW, this 78GW represents around 31 thousand turbines. The agreement is consistent with the strategy adopted in 2016 to reduce the cost-base of using external distribution partners in retrofit markets. It connects Windar to a service network of more than 10,000 people in 63 countries.

We note this agreement is in effect a major endorsement for the technology and expect it will generate substantial interest amongst wind park operators that are not serviced by Vestas as well as other wind turbine OEMs. Management is sharing details of IPPs that have already evaluated its LiDAR with Vestas as the credibility of this larger partner appears to be encouraging IPPs to take the step from a successful evaluation to deployment in volume.

Penetration of OEM market

Windar continues to work with the majority of the top 20 wind turbine OEMs on integration projects for new turbine designs. Some of these projects have moved from the development phase to final turbine certification, so management expects sales to this segment to contribute to a significant growth in revenue from FY19 onwards and to be at least equal to retrofit sales. However since it is not able to influence ramp-up of sales of new turbine models with integrated LiDAR, it is not able to gauge with certainty when in FY19 it will start to ship meaningful volumes to the segment.

Product development

The two-year Energy Development and Demonstration Programme with the Danish Technical University showed good progress during the period. The programme, which started in October 2016, expands the capabilities of Windar's analytics to include wake detection and turbine optimisation. It is on track for field testing early in FY19.

H118 financial performance

Strong revenue growth despite component shortages

Revenues increased by 33% year-on-year during H118 to €1.7m as Windar worked through the order for 300 WindEye LiDAR systems from a Chinese distributor, announced last December. H117 revenues were distorted by €0.2m of revenue deferred from the previous year, so the underlying improvement was 47%. Growth would have been stronger if Windar had been able to complete all of the deliveries relating to the major Chinese order, but this was held back by a shortage of key long lead-time components. Gross margin improved by 3.6pp to 49.1%, reflecting reduced manufacturing costs. There was also a 6% reduction in operating costs (excluding depreciation, depreciation and warrant costs) as the full impact of the cost-reduction programme instigated in FY16 was finally realised. EBITDA losses narrowed from €0.4m to €0.1m as the combination of higher sales on a smaller cost base took the company close to breakeven.

Subscription post-period end to support anticipated working capital requirements

Net cash (excluding the Growth Fund Loan) reduced by €0.9m during H118 to €0.2m at the end of the period. Most of this movement was attributable to a €0.7m increase in working capital as receivables were not only higher because of the growth in revenues, but also two large payments were still outstanding. We note that these two payments have now been settled and management has taken steps to ensure the customer does not get into arrears again. In July and August, Windar raised £2.2m (gross) through a subscription at 82.5p/share. The net proceeds of the subscription will primarily be used to support working capital requirements as volumes continue to ramp-up during H218 and FY19.

Revisions to estimates

We make the following adjustments to our estimates:

- We note that Windar will not be able to catch up on the deliveries that were delayed during H118 because of component shortages. While it remains likely that the Chinese distributor who placed the transformational order in December 2017 will place a follow-on order, it has not yet received all of the 300 units from the original order. Management has consequently issued revenue guidance of €4.0–4.5m for FY18, which is significantly below our previous estimate. We reduce our FY18 revenues in line with this guidance.
- We also revise our FY19 estimates downwards to reflect the uncertainty regarding onset of ramp-up in deliveries to OEMs, though our revenue ramp-up assumes that at least one OEM will have begun to ship turbine with integrated LiDAR by the middle of the year.
- We reduce our operating costs in line with H118 reported levels.
- We raise FY19 investment in intangible and tangible assets from €0.3m to €3.0m to cover the cost of developing the next generation product platform which will be more compact. The core optical and electronic technology will be manufactured using more advanced production techniques such as pick and place and wire bonding, which need to be undertaken in a clean room environment. The remaining production stages, eg enclosing the LiDAR in an aluminium case and installing it on a bracket may, if required, be carried out local to the point of sale.

Exhibit 1: Changes to forecasts

	FY17	FY18e			FY19e		
	Actual	New	Old	% change	New	Old	% change
Revenue (€m)	2.2	4.5	5.6	20.9%	18.6	25.3	26.7%
EBITDA (€m)	(1.2)	0.1	0.7	85.0%	7.6	8.8	13.5%
PBT (€m)	(2.1)	(0.3)	0.2	N/A	7.2	8.3	13.5%
EPS (c)	(5.0)	(0.6)	0.4	N/A	12.6	15.6	23.8%
Net cash*	(1.1)	(1.8)	(2.7)	34.7%	(2.4)	(5.9)	59.4%

Source: Edison Investment Research. Note: *Excluding loan from Growth Fund.

Valuation

We continue to use a DCF valuation, rolling it out to 2027, based on modest assumptions regarding the rate of market penetration, ie 15% of the OEM market and 4% of the larger retrofit market in the longer term, and an average selling price of <€15k. The base case represents our current financial estimates. Although we have revised both our FY18 and FY19 revenue estimates downwards to reflect lower volume deliveries, we have not adjusted our base case model for FY20 onwards. This is because the component shortage which impacted H118 has already been addressed by holding higher levels of inventory now that Windar has the cash resources to do so. While management has expressed some uncertainty as to when in FY19 OEMs will start to sell turbines with integrated LiDAR, it is confident that this will be underway by the end of the year. As profitability is particularly sensitive to the rate of market penetration, we also present a 'low' scenario, in which we assume 10% lower penetration than in our base case (on the same cost base) and a 'high' scenario, in which market penetration is 10% higher than in our base case (also on the same cost base). Exhibit 2 shows our assumed expansion rates in each scenario using GWEC market forecast data.

Exhibit 2: Scenario analysis showing impact of different rates of market penetration

	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e
Base case										
Share of retrofit market	0.13%	0.33%	1.65%	2.50%	3.00%	3.50%	4.00%	4.00%	4.00%	4.00%
Share of OEM market	0.28%	4.04%	4.42%	6.00%	8.00%	10.00%	12.00%	13.50%	15.00%	15.00%
Number of units	356	1,614	5,344	8,551	11,253	14,247	17,524	19,049	20,478	21,592
Revenues (€m)	4.5	18.6	61.5	84.7	109.2	135.5	163.3	173.9	183.3	189.4
EBITDA (€m)	0.1	7.6	29.7	39.5	51.9	65.3	79.8	84.8	90.0	93.5
Low case										
Number of units	320	1,452	4,809	7,697	10,127	12,822	15,772	17,144	18,515	15,449
Revenues (€m)	4.0	16.7	55.3	76.2	98.3	121.9	147.0	156.5	164.9	170.4
EBITDA (€m)	(0.1)	6.5	25.9	34.8	45.7	57.7	70.7	75.1	79.8	82.8
High case										
Number of units	392	1,774	5,879	9,406	12,378	15,673	19,276	20,954	22,630	18,882
Revenues (€m)	4.9	20.4	67.6	93.1	120.1	149.0	179.6	191.3	201.6	208.3
EBITDA (€m)	0.3	8.7	33.3	44.2	58.0	72.9	89.0	94.6	100.3	104.1

Source: Edison Investment Research

Our financial model for each of these scenarios assumes a tax rate of 22%, a terminal growth rate of 2% and a discount rate of 40% to reflect that we are still waiting for an announcement confirming that an OEM has decided to design-in Windar's LiDAR system into one or more of its turbine models. This gives an indicative base case value at current levels of risk of 124p/share (previously 125p/share). The change in indicative valuation is relatively insignificant, not just because our model is unchanged from FY20 onwards, but because we have reduced the cost base in FY18 and FY19 in line with H118 levels. The low and high case indicative valuations are shown in Exhibit 3. Management is confident that Windar will be awarded one or more design-in contracts in the near future. This would justify a more moderate discount for risk. A 20% discount would imply an indicative base case valuation of 339p.

Exhibit 3: DCF analysis including scenarios for varying rates of market penetration

		Low case				Medium case				High case		
		Discount rate				Discount rate				Discount rate		
		20.0%	40.0%	60.0%		20.0%	40.0%	60.0%		20.0%	40.0%	60.0%
Term growth	0.0%	198.5	87.0	49.6	0.0%	325.3	123.2	70.0	0.0%	367.7	154.0	83.1
	1.0%	200.2	87.4	49.7	1.0%	331.8	123.6	70.1	1.0%	370.4	154.7	83.3
	2.0%	201.9	87.9	49.8	2.0%	338.9	124.1	70.2	2.0%	373.3	155.4	83.5
	3.0%	203.7	88.3	50.0	3.0%	347.0	124.6	70.3	3.0%	376.4	156.2	83.8
	4.0%	205.6	88.8	50.1	4.0%	356.0	125.2	70.3	4.0%	379.6	157.0	84.0

Source: Edison Investment Research

Exhibit 4: Financial summary

€'000	2016	2017	2018e	2019e
Year-end 31 December	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS				
Revenue	1,196	2,214	4,450	18,550
Cost of Sales	(627)	(1,301)	(2,227)	(8,468)
Gross Profit	569	913	2,223	10,082
EBITDA	(2,422)	(1,219)	100	7,613
Operating Profit (before goodwill amortisation and exceptionals)	(2,850)	(1,770)	(150)	7,363
Goodwill Amortisation	0	0	0	0
Exceptionals	0	0	0	0
Warrants	(317)	(235)	(100)	(100)
Operating Profit	(3,167)	(2,006)	(250)	7,263
Net Interest	(107)	(286)	(200)	(150)
Profit Before Tax (norm)	(2,957)	(2,057)	(350)	7,213
Profit Before Tax (FRS 3)	(3,274)	(2,292)	(450)	7,113
Tax	128	66	0	0
Profit After Tax (norm)	(2,957)	(2,057)	(273)	5,626
Profit After Tax (FRS 3)	(3,146)	(2,226)	(450)	7,113
Average Number of Shares Outstanding (m)	39.0	41.1	42.9	44.5
EPS - normalised (c)	(7.6)	(5.0)	(0.6)	12.6
EPS - normalised fully diluted (c)	(7.6)	(5.0)	(0.6)	12.6
EPS - (IFRS) (c)	(8.1)	(5.4)	(1.0)	16.0
Dividend per share (c)	0.0	0.0	0.0	0.0
Gross Margin (%)	47.6	41.2	50.0	54.4
EBITDA Margin (%)	N/A	N/A	2.3%	41.0%
Operating Margin (before GW and except.) (%)	N/A	N/A	-3.4%	39.7%
BALANCE SHEET				
Fixed Assets	1,357	1,014	964	3,714
Intangible Assets	1,184	869	819	819
Tangible Assets	119	107	107	2,857
Investments	54	39	39	39
Current Assets	2,705	2,767	4,072	10,830
Stocks	994	740	957	2,948
Debtors	898	676	1,097	3,049
Cash	783	1,117	1,783	4,599
Other	31	235	235	235
Current Liabilities	(1,276)	(1,504)	(858)	(3,054)
Creditors	(1,271)	(1,499)	(853)	(3,049)
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	2,832	9,894
CASH FLOW				
Operating Cash Flow	(1,549)	(271)	(1,184)	5,866
Net Interest	(10)	(36)	(50)	(50)
Tax	(22)	0	0	0
Investment in intangible & tangible assets	(462)	(225)	(200)	(3,000)
Acquisitions/disposals	0	0	0	0
Financing	1,995	1,334	2,250	0
Dividends	0	0	0	0
Net Cash Flow	(48)	801	816	2,816
Opening net debt/(cash)	(564)	(758)	(1,095)	(1,762)
HP finance leases initiated	0	0	0	0
Other	242	(464)	(150)	0
Closing net debt/(cash)	(758)	(1,095)	(1,762)	(4,578)

Source: Company accounts, Edison Investment Research

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