Leclanché

FY17 results

Completion of financing heralds a new dawn

Alternative energy

As flagged in Leclanché's March trading update, FY17 revenue development was held back by lack of funding. Management has recently completed a sequence of financing transactions that it estimates will be sufficient to take the company through to an EBITDA-positive position in FY20. We reinstate our estimates, which were withdrawn following the March trading update.

Year end	Revenue (CHFm)	EBITDA* (CHFm)	PBT* (CHFm)	EPS* (CHF)	DPS (CHF)	P/E (x)
12/16	28.1	(27.4)	(36.8)	(0.9)	0.0	N/A
12/17	11.7	(31.2)	(37.9)	(0.7)	0.0	N/A
12/18e	62.1	(18.5)	(29.7)	(0.4)	0.0	N/A
12/19e	101.2	(8.8)	(21.1)	(0.3)	0.0	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Treating outstanding loan notes as debt.

Progress held back during FY17 by access to finance

Revenues, excluding CHF3.5m grant income primarily for a European ferry project, halved year-on-year during FY17. Revenue growth would have been substantially stronger if Leclanché had secured sufficient funding to make faster progress on two large stationary energy storage projects in North America, which it expects to complete this year. EBIT loss widened, from CHF34.5m to CHF36.1m, as the restructuring and cost-reduction exercises taken in late FY16 and early FY17 were offset by higher consulting costs and commissions on financing. The financing situation did not prevent the company from adding to its pipeline of projects in both the stationary storage and e-transport sectors.

Recent financing supports volume ramp-up

Over the last six months management has secured c CHF94m funding, which it estimates is sufficient to fully finance Leclanché to positive EBITDA in FY20. This provides the cash to deliver on the pipeline of contracts already received for delivery during FY18, which total over 50MWh of capacity, representing CHF40-50m. These include a 33MWh battery storage plant in Cremzow, Germany, completion of two major energy storage projects in Canada and the US and projects with Skoda Electric and an Indian automotive integrator. We note that the bulk of the financing is through convertible loans from a shareholder who we estimate currently holds a 53% stake in the company. We estimate that these convertible loans would, if fully converted at the current share price, represent an additional 39.6m shares.

Valuation: Dependent on execution of projects

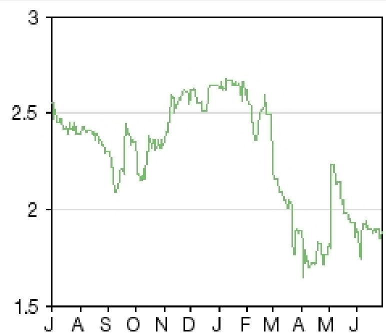
Our valuation is based on a DCF calculation, taking the growth rate adopted in our estimates and now applying a terminal growth rate of 3% and WACC of 10.0%, as we believe both the technology and Leclanché's ability to execute on large projects are proven. This gives an indicative valuation of CHF2.51/share. Our previous indicative valuation of CHF4.34/share assumed substantially faster volume roll-out by working on large projects where Leclanché needed to find project finance and applied a WACC of 15% to reflect funding concerns, which we believe have now been resolved.

29 June 2018

Price	**CHF1.88**
Market cap	**CHF152m**

Net debt (CHFm) at end Dec 2017 (including CHF22.7m convertible loan) before issue of 43.5m convertible loan in February 2018 and CHF20.0m convertible loan in June 2018	19.5
Shares in issue	80.7m
Free float	43%
Code	LECN
Primary exchange	SIX
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(2.8)	0.5	(23.3)
Rel (local)	0.8	4.0	(17.7)
52-week high/low		CHF2.7	CHF1.6

Business description

Leclanché is a fully vertically integrated energy storage solution provider. It delivers a wide range of energy storage solutions for homes, small offices, large industries and electricity grids as well as hybridisation for mass transport systems such as bus fleets and ferries.

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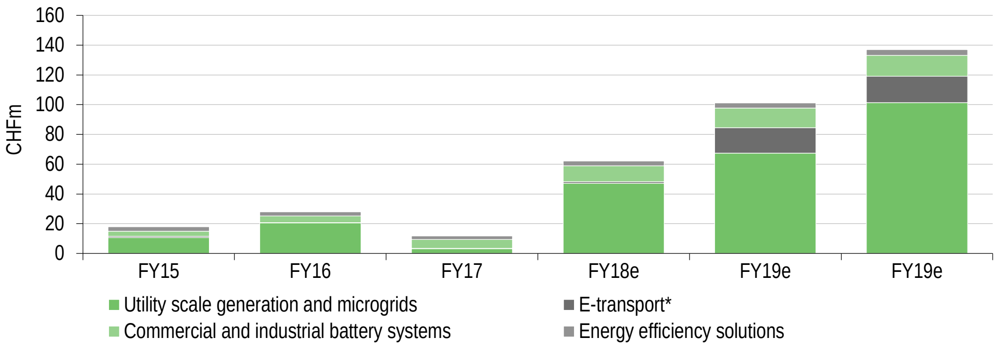
FY17 performance

Exhibit 1: Analysis of revenues by segment



Source: Company data. Note: *Excluding grants for e-mobility projects.

FY17 performance affected by lack of finance

Revenues, excluding CHF3.5m grant income primarily for a European ferry project, halved to CHF11.7m year-on-year during FY17. Lack of finance prevented the ramp-up in large-scale energy storage systems that management had expected, resulting in a fall in revenues from this sector from CHF20.4m in FY16 to CHF3.1m. Revenues from the commercial and industrial battery systems segment rose by 32% year-on-year to CHF6.0m, boosted by a subsidy in the Swiss canton of Vaud for energy storage systems deployed at the individual household level. Revenues from the energy efficiency solutions segment dropped by 22% to CHF2.2m as the business focused on more profitable lines. Revenues from e-transport, excluding CHF3.4m grant for the European ferry project that was classified as 'other income', were similar to FY16.

As in FY16, the cost of raw materials and consumables was roughly in line with revenues (including the ferry project) as the company worked on projects with low or negative margins to take market share (management has decided not to pursue this strategy). Personnel costs fell CHF1.5m to CHF17.9m as a result of the restructuring and cost-reduction exercises in late FY16 and early FY17. However, this was offset by a CHF3.0m increase in consulting costs to CHF5.2m and a CHF1.5m rise in commissions on financing to CHF2.1m, as a result of which EBIT loss widened from CHF34.5m to CHF36.1m. Net finance costs reduced from CHF3.2m to CHF2.6m because of lower levels of convertible loans.

Financing programme completed in June 2018

The 2017 cash flow was adversely affected by a CHF14.9m increase in working capital. Inventories rose CHF3.1m because of a build-up of modules for the Canadian project, which were mostly delivered in H118, and because modules delivered for the Cremzow project are treated as WIP until the revenue is recognised on completion of the project. Receivables increased by CHF8.3m because of the short-term loan related to the Canadian storage project and advances to suppliers. Payables decreased by CHF3.5m as financial constraints eased towards the year end. Capital expenditure, primarily on R&D equipment and two module assembly lines, one for stationary storage projects and the other for e-mobility projects, totalled CHF2.5m. Management was very active during the year, reducing indebtedness and raising additional finance. Although cash used in operating activities plus capex totalled CHF47.2m, net debt (including CHF24.1m convertible loans) increased by only CHF1.7m to CHF19.5m. The financing activity continued into Q218 (see Exhibit

2). Management notes it has sufficient funding to fully finance the company through to FY20, when it expects to be EBITDA positive.

Exhibit 2: Recent financing activity

Transaction	Value	Number of shares
Talisman – warrants exercise	CHF0.3m March 2017	0.2m new shares issued
Bridge loan – GP*	CHF2.7m March 2017	1% per month, maturity date extended to March 2020
Baring Asset Management – capital increase	CHF2.5m April 2017	1.0m new shares issued
Capital increase	CHF3.4m July 2017	1,750,001 new shares issued @CHF2.0/share
Mandatory convertible loan note – Bruellan	CHF 1.0m July 2017	Converted to 666,668 shares @ CHF1.50/share
Mandatory convertible loan note – Trialford	CHF0.5m July 2017	Converted to 333,334 shares @CHF1.50/share
Convertible Llan – ACE/JADE/LECN	CHF12.0m end H117 CHF11.8m end H117	Transferred to GP*, converted to 7,333,333 shares @ CHF1.50 in September and October 2017. Maturity date extended to 30 June 2018, value outstanding end FY17 CHF12.9m**
Mandatory convertible loan note – GP	CHF12.0m July 2017	Converted to 8,000,000 shares @ CHF1.50/share in September 2017
Mandatory convertible loan note – Bruellan	CHF3.0m July 2017	Converted to 2,000,00 shares @ CHF1.50/share in September 2017
Convertible loan – GP/JADE/LECN	CHF11.0m Sept 17	New agreement. 8%, maturity date September 2020
Mandatory convertible loan note – GP	CHF16.5m Dec 2017	Converted to 11.0m shares @ CHF1.50/share in February 2018
Convertible loan – GP	CHF43.5m Feb 18	CHF34.0m drawn down end April CHF24.0m of this to be converted to equity, subject to takeover waiver
Loan – GP	CHF14.0m Feb18	To repay convertibles maturing June 2018
Convertible loan – GP	CHF20.0m June 2018	Details not disclosed
Conditional facility – GP	CHF50m June 2018	Facility provided for acquisitions and JVs on a 'right-of-first-offer' basis for GP <CHF20m allocated for Indian JV

Source: Edison Investment Research. Note: *Golden Partner. **Principal and interest.

As a result of this financing activity, Golden Partner, which is the ultimate holder of funds administered by Finexis, has substantially increased its stake in the company. At the end of FY17, it held 31.4m shares, representing a 45.1% stake. We estimate that, following the conversion of the CHF16.5m convertible loan in February 2018, this stake increased to 52.6%, hence the award of an exemption from a mandatory takeover at that time. We model the outstanding convertible loan as debt. Excluding the CHF11.8m that will be repaid in June 2018 this totals CHF74.5m, which is equivalent to 39.6m shares at the current share price. If these were all exercised, this would give Golden Partner and its associates a 68.2% stake in the company. Golden Partner has recently confirmed its plans to convert CHF20m of its debt to equity (this is in addition to the CHF16.5m converted in February). A further takeover waiver is being sought to cover this transaction, which we estimate will take Golden Partner's shareholding to 59.0%. Golden Partner has also agreed to provide a conditional CHF50m facility for acquisitions and joint ventures; up to CHF20m has already been allocated to set up a JV in India. We note that Leclanché is acquiring an energy management software suite from a US vendor.

Outlook

Management notes it is working on a confirmed order book of over 50MWh, which is scheduled for delivery during FY18. This represents CHF40-50m of revenue. It expects the combination of revenue and margin growth to result in a break-even situation at EBITDA level in FY20 rather than late FY18/H119 as per our November note. It is focused on developing the utility scale generation and e-transport segments, which is where the largest growth opportunities are. We reinstate our estimates, which are based on the assumptions outlined below.

Utility Scale Generation and Microgrids

While the ramp-up in growth in large-scale energy storage systems that was expected during FY17 was held back by lack of financing, these projects have been delayed rather than awarded to competitors and additional work has been secured during the period. However, the total volume of confirmed orders is less than the 115MWh referred to in our November note because management has decided not to proceed with any projects where it needs to help provide finance. We note that

Leclanché has demonstrated conclusively that it can deliver large-scale projects, having delivered 30MWh of capacity during FY16. Our estimates show the year-on-year increase in megawatt hours delivered: 70MWh in FY18, 100MWh in FY19 and 150MWh in FY20, converting to strong revenue growth throughout the forecast period. The committed projects detailed in Exhibit 1 underpin our FY18 estimates. Our view of growth in FY19 and FY20 is based on an order pipeline, which remains at the 450MWh level because projects where help with financing was required have been replaced by other activities.

Exhibit 3: Ongoing stationary storage projects

Project	Size	Notes
Cremzow, Germany	31MWh	Part of the primary control reserve mechanism in the state of Brandenburg, evening out imbalances between electricity generation and consumption to maintain grid stability. Leclanché is acting as turnkey systems integrator and engineering, procurement and construction contractor, integrating battery and power conversion systems and energy management software, as well as supplying the battery modules. First 2MW of plant was operational from April 2018. Completion by end 2018.
Marengo, Illinois	19.5MWh	Battery energy storage system for frequency regulation. Completion by end 2018.
IESO Basin 1 & 2, Ontario	13.8MWh	Battery storage system to support grid stabilisation and resiliency. Completion by end Q318.
SWB Bremen, Germany	15MWh	Hybrid storage system with a battery energy storage system and heating system. Commissioning Autumn 2018.
Romande Energie, Switzerland	5 MWh	Storage for photo-voltaic solar integration.
Canadian Solar, Ottawa	2.8MWh	Provision of grid ancillary services for IESO, connected directly to the provincial transmission grid.

Source: Company data

E-transport

Leclanché is involved in a range of projects in the e-transport sector. Our estimates show segmental revenues ramping up from CHF1.0m in FY18 to CHF16.9m in FY19 and CHF17.9m in FY20 as two key projects transition to volume production (one with Skoda Electric, the other with an Indian automotive integrator). Assuming trials of the technology are successful and the Indian integrator rolls out its network of fast-charging points as planned, the annual volume delivered for this project would be 90-150MWh (equivalent to 3,000-5,000 Nissan Leafs) from FY20 onwards.

Commercial and industrial battery systems

Management expects revenues from the Swiss army to continue at around FY16 levels during the forecast period. We expect this to be supplemented by revenues from the material handling segment and sales of the energy storage systems suitable for individual homes and businesses. We note that Leclanché's PowerPack energy storage solution for households with solar panels was the first to meet the requirements of a subsidy provided by the canton of Vaud.

Efficiency solutions

Leclanché is engaged in initiatives that will expand both the portfolio of third-party batteries it offers and the sales channels. Management expects these will deliver segmental growth through to FY20.

Revisions to estimates

Revenues: we assume that now the company has resolved its funding issues, the sales pipeline will convert more rapidly, resulting in strong revenue growth throughout the forecast period and a break-even position in FY20. The main reason for the reduction in our revenue estimates is management's decision not to pursue projects where it would need to help provide financing.

Gross margin: noting that management has decided not to pursue projects without a satisfactory gross margin, we model 10% margin on stationary systems in FY18, rising to 20% in FY19 as module production is brought in-house.

Capex: our model allocates CHF14.0m for capex in FY18, CHF12m of which is to rebuild the equipment damaged in the fire and CHF1m to upgrade the enterprise resource planning system.

The CHF5.5m capex allocated for FY19 includes c CHF2m expanding battery production capacity in Germany and c CHF2m establishing a module assembly line elsewhere (probably in China or India) to serve local projects.

Financing: our model treats all of the outstanding convertible loans as debt. We assume the interest relating to this debt is added to the principal.

Exhibit 4: Changes to estimates

	FY17			FY18e			FY19e			FY20e
	Actual	Old	% change	New	Old	% change	New	Old	% change	New
Group revenues (CHFm)	11.7	28.1	58.3%	62.1	114.7	45.9%	101.2	184.9	45.3%	137.0
Group EBITDA (CHFm)	(31.2)	(18.4)	69.3%	(18.5)	1.4	N/A	(8.8)	17.1	N/A	0.1
Group PBT (CHFm)	(37.9)	(22.6)	67.5%	(29.7)	(2.6)	N/A	(21.1)	13.8	N/A	(12.1)
EPS (CHF)	(0.7)	(0.4)	N/A	(0.4)	0.0	N/A	(0.3)	0.2	N/A	(0.2)
Net debt at year end (CHFm)	19.5	4.6	323.5%	37.3	19.0	96.3	69.7	23.5	196.6	93.9

Source: Company data, Edison Investment Research

Valuation

Exhibit 5: DCF analysis, CHF/share

		Low case			Base case			High case		
		Discount rate			Discount rate			Discount rate		
		9.0%	10.0%	13.0%	9.0%	10.0%	13.0%	9.0%	10.0%	13.0%
Terminal growth	1.0%	1.75	1.25	0.29	2.37	1.79	0.67	2.98	2.32	1.04
	2.0%	2.13	1.52	0.41	2.80	2.11	0.81	3.48	2.68	1.20
	3.0%	2.63	1.88	0.56	3.39	2.51	0.98	4.15	3.15	1.39
	4.0%	3.34	2.35	0.74	4.20	3.06	1.19	5.08	3.77	1.63
	5.0%	4.41	3.01	0.96	5.43	3.82	1.44	6.48	4.64	1.92

Source: Edison Investment Research

Because Leclanché's revised strategy has not yet generated operating profits, the use of peer-based multiples is limited as a valuation methodology. Moreover, while management has good visibility of projects totalling over 1GWh of capacity, there remains considerable uncertainty as to how quickly it will be able to deliver on the projects. Given this level of uncertainty, we present a scenario analysis with the base case adopting the rate of revenue growth and costs as shown in our estimates from 2018 to 2020. Using this as our basis, we model potential revenues and EBITDA out to 2027, assuming that a substantial proportion of battery cell manufacture from FY20 onwards will be carried out by local partners for projects in China or India, thus reducing capex, and that large projects will be funded by third parties. Applying a terminal growth rate of 3% and WACC of 10%, our base case gives an indicative valuation of CHF2.51/share. Our previous indicative valuation of CHF4.34/share assumed that Leclanché would be able to work with third parties to create special purpose vehicles for financing large projects, thus delivering substantially faster volume ramp-up. This previous valuation also applied a WACC of 15% to reflect the risk associated with completing the financing for Leclanché itself, which has now been secured, and finding financing for large projects, which are no longer included in the cash-flow projections.

Clearly there is no certainty that the individual projects contributing towards the revenue growth adopted in our valuation will progress as expected. However, we note the technology being deployed is proven and Leclanché has already demonstrated it can deliver on large projects. While there remains a risk that individual projects may not come to fruition, there is rising demand for battery energy storage for both stationary grid-related and e-transport applications, with very few companies able to offer the battery modules, energy management software and engineering, procurement and construction services as Leclanché can. This puts it in a good place to win work on alternative projects. Given the lower levels of funding risk, we now adopt a WACC of 10% for our indicative valuation.

The current share price suggests the market is assuming a slower growth rate than that adopted in our estimates. Our reverse DCF calculation generates an indicative value similar to the current share price when revenues are scaled back by 5%. This indicates the potential for substantial share price appreciation as Leclanché demonstrates it is able to convert the existing pipeline and achieve the growth rate shown in our estimates. Conversely, scaling up revenues by 5% gives an indicative value of CHF3.15/share.

Exhibit 6: Financial summary

CHFm	2016	2017	2018e	2019e	2020e
Year-end Dec					
PROFIT & LOSS					
Revenue	28.1	11.7	62.1	101.2	137.0
Cost of Sales	(26.2)	(15.7)	(47.2)	(71.3)	(96.2)
Gross Profit	1.9	(4.0)	14.9	29.9	40.8
EBITDA	(27.4)	(31.2)	(18.5)	(8.8)	0.1
Operating Profit (pre amort. of acq intangibles & SBP)	(33.6)	(35.4)	(21.4)	(12.1)	(3.2)
Amortisation of acquired intangibles	0.0	0.0	0.0	0.0	0.0
Share-based payments	(1.0)	(0.7)	(0.7)	(0.7)	(0.7)
Exceptionals	0.0	0.0	0.0	0.0	0.0
Operating Profit	(34.5)	(36.1)	(22.1)	(12.8)	(3.8)
Net Interest	(3.2)	(2.5)	(8.3)	(9.0)	(9.0)
Profit Before Tax (norm)	(36.8)	(37.9)	(29.7)	(21.1)	(12.1)
Profit Before Tax (FRS 3)	(37.8)	(38.5)	(30.4)	(21.8)	(12.8)
Tax	0.6	0.1	0.0	0.0	0.0
Profit After Tax (norm)	(36.3)	(37.8)	(29.7)	(21.1)	(12.1)
Profit After Tax (FRS 3)	(37.2)	(38.5)	(30.4)	(21.8)	(12.8)
Minority interest	0.0	0.0	0.0	0.0	0.0
Net income (norm)	(36.3)	(37.8)	(29.7)	(21.1)	(12.1)
Net income (FRS 3)	(37.2)	(38.5)	(30.4)	(21.8)	(12.8)
Average Number of Shares Outstanding (m)	42.7	55.3	75.2	80.7	80.7
EPS - normalised (CHFc)	(85.0)	(68.4)	(39.5)	(26.1)	(15.0)
EPS - normalised fully diluted (CHFc)	(85.0)	(68.4)	(39.5)	(26.0)	(14.9)
EPS - FRS 3 (CHFc)	(87.2)	(69.6)	(40.4)	(26.8)	(15.7)
Dividend per share (CHFc)	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)	6.8	N/A	24.0	29.6	29.8
EBITDA Margin (%)	N/A	N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)	N/A	N/A	N/A	N/A	N/A
BALANCE SHEET					
Fixed Assets	16.9	16.6	27.7	30.0	32.3
Intangible Assets	6.9	4.5	3.9	3.3	2.7
Tangible Assets and Deferred tax assets	10.0	12.1	23.8	26.7	29.6
Current Assets	35.6	52.1	86.9	78.8	79.1
Stocks	9.6	12.7	17.0	27.7	37.5
Debtors	21.5	32.8	11.9	16.6	22.5
Cash	4.5	6.6	58.0	34.4	19.0
Current Liabilities	(46.2)	(35.7)	(11.1)	(17.5)	(23.4)
Creditors including tax, social security and provisions	(23.9)	(20.6)	(10.5)	(16.9)	(22.8)
Short term borrowings	(22.3)	(15.1)	(0.6)	(0.6)	(0.6)
Long Term Liabilities	(11.6)	(22.1)	(105.8)	(114.6)	(123.5)
Long term borrowings*	0.0	(11.0)	(94.7)	(103.5)	(112.4)
Retirement benefit obligation	(9.5)	(8.5)	(8.5)	(8.5)	(8.5)
Other long term liabilities	(2.1)	(2.6)	(2.6)	(2.6)	(2.6)
Net Assets	(5.3)	11.0	(2.2)	(23.3)	(35.4)
Minority interest	0.0	0.0	0.0	0.0	0.0
Shareholders equity	(5.3)	11.0	(2.2)	(23.3)	(35.4)
CASH FLOW					
Operating Cash Flow	(34.2)	(44.6)	(12.1)	(17.9)	(9.7)
Net Interest	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Tax	0.0	0.1	0.0	0.0	0.0
Investment activities	1.6	(6.6)	(14.0)	(5.6)	(5.6)
Acquisitions/disposals	0.0	0.0	0.0	0.0	0.0
Equity financing and other financing activities	3.9	6.5	0.0	0.0	0.0
Dividends	0.0	0.0	0.0	0.0	0.0
Net Cash Flow	(28.7)	(44.7)	(26.2)	(23.6)	(15.4)
Opening net debt/(cash)	5.3	17.8	19.5	37.3	69.7
HP finance leases initiated	0.0	0.0	0.0	0.0	0.0
Other**	(16.2)	(43.0)	(8.3)	8.9	8.9
Closing net debt/(cash)	17.8	19.5	37.3	69.7	93.9

Source: Company data, Edison Investment Research. Note: *Treating all outstanding convertible loan notes as debt, including CHF24m where approval is sought from the Swiss Takeover Board for conversion. Excluding conditional facility from GP. **Other relates to convertible notes movements and accrued interest.

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