

Ensurge Micropower

Q221 results

Still on track to deliver first microbatteries in Q421

Ensurge has signed two commercial agreements so far this year, giving it a route to market in both of its initial target markets. The company has validated the performance of battery cells deposited using its existing roll-to-roll production line and is installing cell stacking equipment, keeping it on track to deliver initial product revenues in late 2021.

Year end	Revenue (\$m)	EBITDA (\$m)	PBT* (\$m)	EPS* (\$)	DPS (\$)	P/E (x)
12/17**	5.9	(50.9)	(54.5)	(0.06)	0.00	N/A
12/18**	3.4	(49.3)	(54.3)	(0.93)	0.00	N/A
12/19**	1.2	(30.6)	(35.9)	(0.61)	0.00	N/A
12/20	0.5**	(11.4)	(15.3)	(0.04)	0.00	N/A

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

Cash runway into Q122 secured

Ensurge did not generate revenues during H121 and the \$0.5m revenues in H120 related to sales of legacy stock of anti-theft tags. Payroll costs were \$1.6m higher year-on-year in H121 as management invested in engineering, manufacturing and business development personnel, resulting in a widening of EBITDA losses, excluding share-based payments, by \$1.5m to \$6.9m. Following a fund-raising programme generating \$11.2m (net) from a private placing and exercise of warrants, cash (excluding restricted cash) totalled \$5.5m. Management estimates that this cash, together with \$13.6m (gross) generated from the remaining warrants during Q3, is sufficient to fund the company into Q122. Management has stated that it intends to seek additional financing, including institutional investment in Europe and the United States, to fund the company's activities further into 2022.

Still on track for first microbattery sales by end FY21

Ensurge formally completed its first product design in January and has manufactured its first prototype cells. It is continuing with its programme to transfer process technology from a sheet-based production line to the much higher-volume roll-to-roll line ahead of delivery of samples by end FY21. The company now has customer agreements in both of its two initial target markets, having signed an agreement in May with a Fortune Global 500 company addressing the broader wearables market and an agreement with a global leader in the medical hearables market in July. Management notes that there are additional commercial agreements in the pipeline and has identified a priority list of more than 10 additional customers that will be receiving some of the initial samples.

Valuation: Potential market of over 1bn units a year

Ensurge is initially targeting the medical wearables and hearables markets, followed by the connected sensor and sport and fitness wearables markets. Our scenario [analysis](#) calculates that a 5–10% share of these markets represents annual revenues of \$330–550m and EBITDA of \$211–365m. However, we note that the company is at the early stage of its development, with execution, delivery and funding availability key to its success.

Tech hardware & equipment

31 August 2021

Price **NOK0.65**

Market cap **NOK1,008m**

US\$1.0/NOK8.83

Net debt (\$m) at end June 2021 7.5
(excluding \$1.6m restricted cash, \$0.1m paid for unissued shares and \$11.6m financial lease liabilities)

Shares in issue 1550.6m

Free float 87.6%

Code ENSU

Primary exchange OSLO

Secondary exchange OTCQB

Share price performance



% 1m 3m 12m

Abs 2.2 (14.4) 123.9

Rel (local) 0.2 (18.5) 75.5

52-week high/low NOK1.2 NOK0.2

Business description

Ensurge Micropower's solid-state lithium battery technology combines advanced energy cell design with proprietary materials and manufacturing innovation to produce thin, flexible batteries that can power safer and more capable wearable devices and connected sensors.

Next event

Q321 results 17 November 2021

Analyst

Anne Margaret Crow +44 (0)20 3077 5700

tech@edisongroup.com

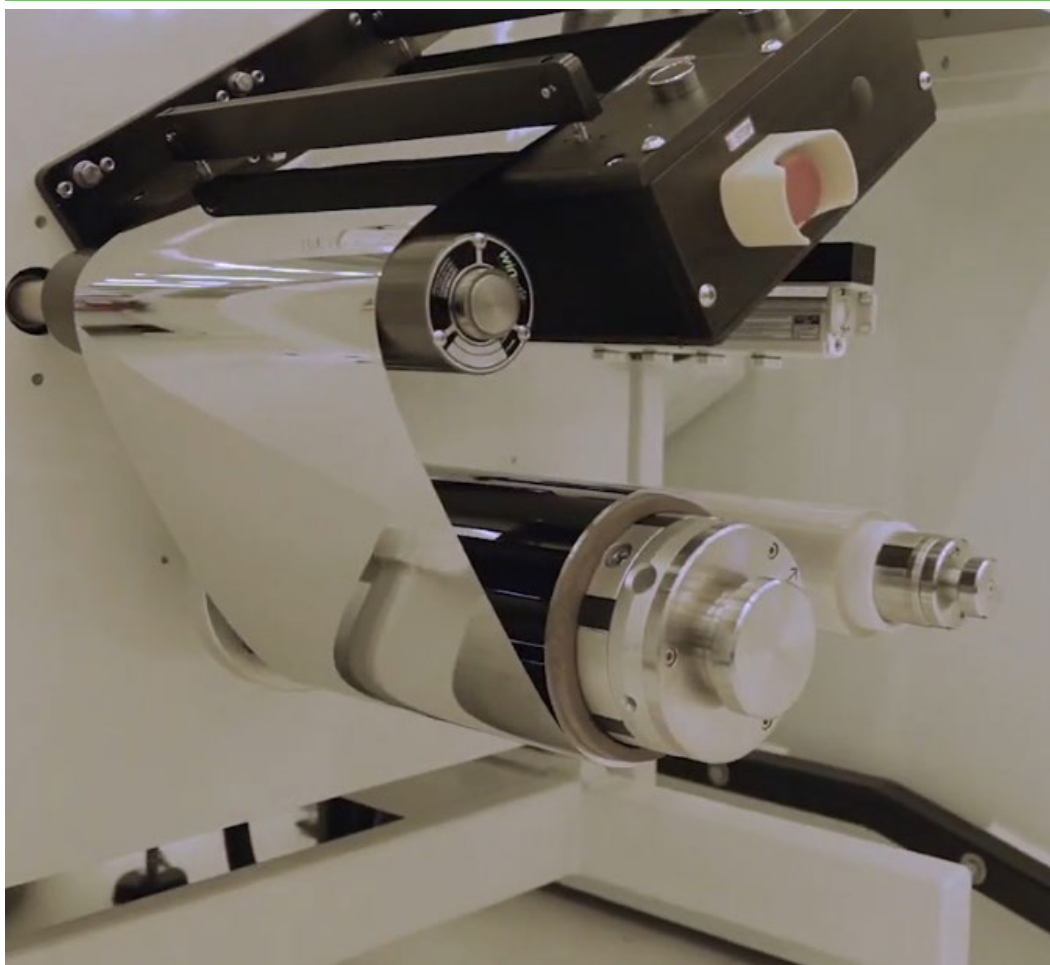
[Edison profile page](#)

**Ensurge Micropower is a
research client of Edison
Investment Research Limited**

Preparing for manufacture of samples

A critical part of preparing to deliver samples during Q421 is ensuring that the roll-based production line at its facility in San Jose, California is ready. A key milestone was reached in this regard with the successful deposition of battery materials on ultrathin 10-micron steel substrates using existing roll-to-roll equipment. The company has also confirmed, ahead of schedule, validation of the complete roll to-roll tool set. This validation activity resulted in an increase in manufacturing expenses, raising the cost associated with premises and supplies by \$0.8m year-on-year to \$2.0m.

Exhibit 1: Roll-to-roll equipment working with ultrathin steel substrate



Source: Ensurge Micropower

The roll-to-roll equipment deposits multiple layers, forming a battery cell on the steel substrate. These layers need to be stacked to create cells with sufficient energy storage capacity and the high volumetric energy density desired for the wearables market. Ensurge has received initial deliveries of equipment that enables the stacking of multiple ultrathin stainless steel-based layers. This equipment is critical to achieving high volumetric energy densities up to double that of comparable lithium-ion microbatteries. It is also critical for matching stacking capacity to the output of the roll-to-roll line so Ensurge can manufacture complete battery cells in commercially relevant quantities. We note that capital expenditure during H121 was \$1.2m, compared to \$0.1m in H120 and \$0.2m in H220. Management has not disclosed the capital expenditure required for the stacking equipment, but it is modelled in management's cash runway guidance.

Exhibit 2: Financial summary

	US\$m	2017	2018	2019	2020
Year end December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue		5.9	3.4	1.2	0.5
EBITDA		(50.9)	(49.3)	(30.6)	(11.4)
Operating Profit (before amort. and except.)		(54.8)	(53.3)	(34.5)	(11.4)
Intangible Amortisation		0.0	0.0	0.0	0.0
Exceptionals		(3.0)	(15.6)	(42.4)	0.0
Share-based payments		(2.2)	(1.8)	(0.2)	(0.6)
Operating Profit		(60.1)	(70.6)	(77.1)	(12.0)
Net Interest		0.4	(1.1)	(1.4)	(3.9)
Profit Before Tax (norm)		(54.5)	(54.3)	(35.9)	(15.3)
Profit Before Tax (FRS 3)		(59.7)	(71.7)	(78.5)	(39.1)
Tax		0.1	(0.0)	0.0	0.0
Profit After Tax (norm)		(54.3)	(54.4)	(35.9)	(15.3)
Profit After Tax (FRS 3)		(59.6)	(71.7)	(78.4)	(39.1)
Average Number of Shares Outstanding (m)		862.7	58.6	58.6	393.2
EPS - normalised (\$)		(0.06)	(0.93)	(0.61)	(0.04)
EPS - (IFRS) (\$)		(0.07)	(1.22)	(1.34)	(0.10)
Dividend per share (\$)		0.00	0.00	0.00	0.00
EBITDA Margin (%)		N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)		N/A	N/A	N/A	N/A
BALANCE SHEET					
Fixed Assets		34.2	35.3	0.6	0.8
Intangible Assets		2.2	2.4	0.0	0.0
Tangible Assets		20.5	22.5	0.0	0.2
Other		11.5	10.4	0.6	0.6
Current Assets		115.1	44.1	11.7	6.9
Stocks		0.7	2.6	0.0	0.0
Debtors		16.2	8.9	2.8	1.1
Cash including restricted cash		98.1	32.6	8.9	5.8
Other		0.0	0.0	0.0	0.0
Current Liabilities		(7.3)	(8.1)	(6.8)	(32.7)
Creditors		(7.3)	(8.1)	(5.5)	(29.5)
Short term borrowings		0.0	0.0	(1.4)	(3.2)
Long Term Liabilities		(12.1)	(11.5)	(25.1)	(21.9)
Long term borrowings excluding finance leases		0.0	0.0	(11.8)	(9.7)
Other long-term liabilities		(12.1)	(11.5)	(13.2)	(12.2)
Net Assets		129.9	59.7	(19.7)	(46.9)
CASH FLOW					
Operating Cash Flow		(52.3)	(52.3)	(29.1)	(11.9)
Net Interest		0.3	0.3	(1.4)	(3.2)
Tax		(0.0)	(0.1)	0.0	0.0
Capex		(27.1)	(11.2)	(5.1)	(0.3)
Acquisitions/disposals		0.0	0.0	0.0	0.0
Financing		103.3	(0.0)	0.0	13.3
Dividend payments and other items		0.2	(1.6)	0.0	0.0
Net Cash Flow		24.4	(64.9)	(35.5)	(2.1)
Opening net debt/(cash) excluding finance leases		(74.2)	(98.1)	(32.6)	4.3
Finance leases initiated		0.0	0.0	0.0	0.0
Other		(0.5)	(0.6)	(1.4)	(0.7)
Closing net debt/(cash) excluding finance leases		(98.1)	(32.6)	4.3	7.2

Source: Company accounts

General disclaimer and copyright

This report has been commissioned by Ensurge Micropower and prepared and issued by Edison, in consideration of a fee payable by Ensurge Micropower. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) followed by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2021 Edison Investment Research Limited (Edison).

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

United States

Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

Frankfurt +49 (0)69 78 8076 960
Schumannstrasse 34b
60325 Frankfurt
Germany

London +44 (0)20 3077 5700
280 High Holborn
London, WC1V 7EE
United Kingdom

New York +1 646 653 7026
1185 Avenue of the Americas
3rd Floor, New York, NY 10036
United States of America

Sydney +61 (0)2 8249 8342
Level 4, Office 1205
95 Pitt Street, Sydney
NSW 2000, Australia