

# Thin Film Electronics

Continued progress on commercialisation

Commercialisation update

Tech hardware & equipment

22 April 2021

**Price** **NOK0.84**  
**Market cap** **NOK982m**

Net debt (\$m) at end December 2020 8.8  
(excluding \$1.6m restricted cash and \$12.2m financial lease liabilities)

Shares in issue 1,168.8m

Free float 60.7%

Code THIN

Primary exchange OSLO

Secondary exchange OTCQB

Following the strategic shift announced in January 2020, Thinfilm is using its proven printed technology to develop solid-state lithium microbatteries with the intention of manufacturing them in volume in its roll-to-roll (R2R) production facility. Consistent with this strategy, the company has announced material progress with regards to commercial discussions, technical validation and manufacturing validation. It remains on track to generate initial microbattery revenues in Q421.

Year end	Revenue (\$m)	EBITDA (\$m)	PBT* (\$m)	EPS* (\$)	DPS (p)	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.

Following the tape-out (effectively formal completion) of the first product design in January this year, Thinfilm has been able to progress engagement with potential customers and is now in commercial agreement discussions with five OEMs in the hearables and wearable electronics markets. These discussions will define individual customer product requirements, particularly regarding specific form factors, as well as potential contractual arrangements.

Following the tape-out, Thinfilm has manufactured its first prototype cells based on this initial design. These have demonstrated the key performance parameters expected. The company is carrying out further refinements of the individual processing steps to increase energy density, ensure consistently high cycle life and enable production in high volumes. The company has also demonstrated its ability to stack cells, and continues to improve its stacking and packaging capability.

In parallel, the operations team is continuing with its programme to transfer process technology from the sheet-based production line to the much higher-volume R2R line, which was previously mothballed. Successful production of the first prototype cells has confirmed which processes are required. This has enabled the company to order the remaining tool conversions required to adapt the R2R line for microbattery production. Importantly, Thinfilm has successfully run the ultra-thin steel tools that are a key enabler of the high-energy densities achievable using its technology. The R2R factory and microbattery product platform are showcased in a new [video](#) created by the company.

## Share price performance



## Business description

Thin Film Electronics' 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 hearables and wearable devices.

## Analyst

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