

12 November 2024

Sparc Hydrogen - The key upside driver for SPN value in our view

NEED TO KNOW

- Front end engineering and design (FEED) of Sparc Hydrogen's production pilot plant nears completion
- Sparc Hydrogen's closest globally listed comparative company, SunHydrogen, trades at a market capitalisation of ~US\$107m

The Sparc Hydrogen Joint Venture (JV) FEED for the photocatalytic water splitter (PWS) hydrogen production pilot plant (to be located at the University of Adelaide's Roseworthy Campus) is forecast to complete shortly. At that stage, the JV will enter Stage 2, upon which Fortescue (\$1.45m) and SPN (\$1.025m) will contribute funds for the construction of the pilot plant. SPN's stake in the JV will then be 36%.

September cash position of \$1.8m. A research and development tax incentive claim of ~\$1.1m is expected in November, which will fund SPN's expected \$1.025m contribution to the Sparc Hydrogen JV for Stage 2.

Investment Thesis

We think SPN has a unique position given its business technology mix. With the forecast commercialisation of ecosparc® in the next 12-18 months (MSTe first income in 2H FY26), we estimate that SPN will then be self funding and will be free to continue to progress the Sparc Hydrogen project without calling on its shareholders or debt providers for further capital.

Once the green hydrogen pilot plant has been commissioned and the operational metrics have been determined we believe the SPN board and management will then need to determine whether to hold on to its 36% ownership stake and progress commercialisation or whether to sell the stake; outright for cash or including some type of royalty arrangement.

We believe SunHydrogen (HYSR-USA); market capitalisation of ~US\$107m (~A\$162m), is the closest globally listed comparable company to Sparc Hydrogen. If SPN's 36% stake in Sparc Hydrogen was to trade at a similar value, SPN's stake would be worth ~\$59m.

Valuation

Our 12-month forward sum of the parts valuation for SPN is based on our discounted cash flow valuation of ecosparc®, the book value of SPN's contributions to Sparc Hydrogen post Stage 2 execution (\$3.25m), with no contribution from SPN's Sodium battery technology.

Our valuation has lowered from \$0.48 to \$0.36. This results primarily from pushing out our first EcoSparc earnings to 2H FY26 and a higher share count reflecting further equity issuance in FY25 and FY26.

If we include the potential Sparc Hydrogen valuation (~\$59m) noted above, our valuation lifts to \$0.79.

Key risks

Key risks include access to funding, technology commercialisation delays, significant increased research and development costs.

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Materials

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Sparc Technologies Limited (ASX:SPN) is an Australian company pioneering transformative new technologies that will deliver sustainability gains. Sparc has established offices in Australia, Europe and North America and is focused on pioneering new technologies in coatings and composites, green hydrogen, and sodium-ion batteries.

<https://sparctechnologies.com.au>

Valuation	A\$0.36 (from A\$0.48)
Current price	A\$0.17
Market cap	A\$16m
Cash on hand	A\$1.8m (30 September 2024)

Upcoming Catalysts / Next News

Period	
End CY 2024	Pilot plant FEED completes
CY 2025	Construction of Hydrogen Pilot Plant
End CY 2024	Sparc Hydrogen Stage 2 investment
CY 2025	ecosparc® trials complete

Share Price (A\$)



Source: FactSet, MST Access

Figure 1: SPN financial summary

Sparc Technologies						SPN-AU
Year end June						
MARKET DATA						12 month relative performance versus S&P/ASX Small Ordinaries Index (XSO)
Price	\$					\$0.165
52 week high / low	\$			\$0.415	\$0.160	
Sum of the parts valuation (12 month forward)	\$					\$0.36
Valuation upside	\$					\$0.79
Market capitalisation	\$m					15.8
Shares on issue (basic)	m					95.9
Performance rights	m					10.0
Options (Various exercise dates)	m					26.3
Current potential diluted shares on issue	m					132.2
INVESTMENT FUNDAMENTALS						
EPS (Reported)	¢	(5.4)	(4.9)	(3.9)	(2.5)	(0.6)
EPS Underlying	¢	(4.4)	(4.1)	(3.9)	(2.5)	(0.6)
Share Price (year end) / Spot	\$	0.27	0.21	0.17	0.17	0.17
P/E EPS (Reported)	x	n/m	n/m	n/m	n/m	n/m
P/E (Underlying)	x	n/m	n/m	n/m	n/m	n/m
Dividend	¢	0.0	0.0	0.0	0.0	0.0
Payout ratio	%	0%	0%	0%	0%	0%
Yield (Y/E/ spot)	%	0.0	0.0	0.0	0.0	0.0
Franking	%	n/a	n/a	n/a	n/a	n/a
Gross Yield (Y/E/ spot)	%	0.0	0.0	0.0	0.0	0.0
Operating cash flow per share ^{Note 1}	¢	(3.1)	(2.7)	(2.4)	(1.4)	0.5
Price to operating cash flow	x	n/m	n/m	n/m	n/m	30.2
Free cash flow per share ^{Note 1}	¢	(2.8)	(2.4)	(3.7)	(1.9)	0.5
Price to free cash flow	x	n/m	n/m	n/m	n/m	43.8
Book value / share	¢	4.1	3.1	2.7	1.8	2.3
Price to book (NAV)	x	6.6	6.9	6.1	9.2	7.1
NTA / share	¢	4.0	3.0	2.7	1.8	2.3
Price to NTA	x	6.7	6.9	6.2	9.3	7.2
Year end shares	m	85.6	95.9	112.0	126.1	126.1
Average shares on issue	m	83.4	87.5	101.2	119.1	126.1
Year end share price / Spot	\$	0.27	0.21	0.165	0.165	0.165
Market cap (Y/E / Spot)	\$m	23	20	18	21	21
Net debt / (Cash)	\$m	(3)	(3)	(3)	(2)	(2)
Minority interests	\$m	0	0	0	0	0
EV (Basic)	\$m	20	17	16	19	19
Net debt / Enterprise Value	x	(0.1)	(0.2)	(0.2)	(0.1)	(0.1)
Gearing (net debt / EBITDA)	x	n/m	n/m	n/m	n/m	n/m
EV/Sales		n/m	n/m	n/m	11.4	3.6
EV/EBITDA (Basic)	x	n/m	n/m	n/m	n/m	n/m
EV/Adjusted EBITDA ^{Note 1}	x	n/m	n/m	n/m	n/m	n/m
EV/EBIT	x	n/m	n/m	n/m	n/m	n/m
Interest cover (EBIT / Net interest)	x	n/m	n/m	n/m	n/m	n/m
Divisionals						
Ecosparc Forecasts (Graphine based additives)						
Plant capacity (kg GBA)		140,000	140,000	140,000	140,000	140,000
Capacity paint dosed (mega litres (ML))		7.0	7.0	7.0	7.0	7.0
GBA (kg / litre) paint		0.02	0.02	0.02	0.02	0.02
Forecast paint (ML)		0.0	0.0	0.0	1.0	3.0
Kg GBA		0	0	0	20,000	60,000
Units GBA (20kg)		0	0	0	1,000	3,000
Sale Price (A\$/unit)		0	0	1,650	1,691	1,734
Sales		0.0	0.0	0.0	1.7	5.2
COGS / unit (A\$/20kg)		0	0	500	518	536
COGS		0.0	0.0	0.0	(0.5)	(1.6)
Gross margin		0.0	0.0	0.0	1.2	3.6
<i>Notes: 1. Operating cash flow, free cash flow and EBITDA adjusted for lease liability repayments & interest</i>						
PROFIT AND LOSS						
Sales	\$m	0	0	0	2	5
Other income / R&D Incentive	\$m	1	1	1	1	1
Total income	\$m	1	1	1	3	6
COGS	\$m	(1)	(1)	(1)	(2)	(3)
Gross margin	\$m	0	0	0	1	4
Gross margin	%	0%	0%	0%	42%	57%
Operating expenses	\$m	(4)	(4)	(5)	(5)	(5)
EBITDA	\$m	(3)	(3)	(4)	(3)	(1)
Impairments / Associates	\$m	(1)	(1)	0	0	0
Reported EBITDA	\$m	(4)	(4)	(4)	(3)	(1)
Depreciation & amortisation	\$m	(0)	(0)	(0)	(0)	(0)
EBIT	\$m	(4)	(4)	(4)	(3)	(1)
Net interest	\$m	(0)	(0)	0	0	0
Pretax profit	\$m	(4)	(4)	(4)	(3)	(1)
Tax expense	\$m	0	0	0	0	0
Group NPAT	\$m	(4)	(4)	(4)	(3)	0
Minority interest	\$m	0	0	0	0	0
NPAT	\$m	(4)	(4)	(4)	(3)	(1)
Underlying NPAT	\$m	(4)	(4)	(4)	(3)	(1)
BALANCE SHEET						
Cash	\$m	3	3	3	2	2
Receivables	\$m	0	0	0	0	0
Inventory	\$m	0	0	0	0	0
Other / Prepayments	\$m	0	0	0	0	0
Current assets	\$m	3	3	3	2	2
PPE	\$m	0	0	1	1	1
Intangibles	\$m	0	0	0	0	0
Right of use assets	\$m	0	0	0	0	0
Other	\$m	0	0	0	0	0
Non current assets	\$m	1	1	1	1	1
Total Assets	\$m	4	3	4	3	3
Accounts Payable	\$m	0	0	0	0	0
Borrowings	\$m	0	0	0	0	0
Lease liabilities	\$m	0	0	0	0	0
Employee Benefits / Other	\$m	0	0	0	0	0
Current liabilities	\$m	1	0	0	0	0
Borrowings	\$m	0	0	0	0	0
Lease liabilities	\$m	0	0	0	0	0
Other	\$m	0	0	0	0	0
Non current liabilities	\$m	0	0	0	0	0
Total Liabilities	\$m	1	1	1	0	0
Equity	\$m	21	23	26	28	28
Retained earnings	\$m	(26)	(30)	(34)	(37)	(38)
Reserves / Minority Interests	\$m	8	10	12	11	13
Shareholder's equity	\$m	4	3	3	2	3
CASH FLOW						
EBITDA pre non cash op costs	\$m	(2)	(1)	(3)	(2)	(0)
Change in working capital / Other	\$m	(2)	(2)	(0)	(0)	(0)
Net interest	\$m	0	0	0	0	0
R&D refund	\$m	2	1	1	1	1
Tax paid	\$m	0	0	0	0	0
Operating cash flow	\$m	(2)	(2)	(2)	(2)	1
Stay in business capex	\$m	0	0	0	0	0
Growth capex	\$m	(0)	(0)	(0)	(0)	(0)
Investments in Associates	\$m	(0)	0	(1)	0	0
Other	\$m	(0)	(0)	(0)	(0)	(0)
Investing cash flow	\$m	(0)	(0)	(1)	(0)	(0)
Change in Equity	\$m	4	2	2	2	0
Increase / (decrease) in borrowings	\$m	0	0	0	0	0
Lease liability repayments	\$m	(0)	(0)	(0)	(0)	(0)
Dividends	\$m	0	0	0	0	0
Other	\$m	0	(0)	(0)	(0)	0
Financing cash flow	\$m	3	2	2	2	(0)
Foreign exchange movements	\$m	0	0	0	0	0
Change in Cash / FX	\$m	1	(0)	(1)	0	0
Cash year end	\$m	3	3	2	2	2

Source: Company presentations and MST Access

Transfer of Research Coverage

Coverage of Sparc Technologies has been transferred at MST Access.

We provide below a link below to our initiation which gives a detailed overview of Sparc Technologies and the portfolio of technologies SPN is looking to commercialise:

["Disrupting and Transforming Industry"](#)

The purpose of this note is to update the market on recent company developments and to revise our financial forecasts and update our valuation.

Our 12 month sum of the parts valuation for SPN is based on our discounted cash flow valuation of ecosparc®, the book value of SPNs contributions to Sparc Hydrogen post Stage 2 execution (\$3.25m) with no contribution from SPNs Sodium Ion battery technology.

Our valuation has lowered from \$0.48 to \$0.36. This results primarily from pushing out our first EcoSparc earnings to 2H FY26 and a higher share count reflecting further equity issuance in FY25 and FY26.

We believe **SunHydrogen (HYSR-USA)**; market capitalisation of ~US\$107m (~A\$162m), is the closest listed comparable company globally to Sparc Hydrogen.

SunHydrogen states that it has developed a breakthrough technology to produce renewable hydrogen. Utilising the science of water electrolysis at the nano-level, its photoelectrochemical technology uses sunlight to separate hydrogen from water.

[SunHydrogen](#)

If SPNs 36% stake in Sparc Hydrogen was to trade at a similar value, SPNs stake would be worth ~\$59m.

If we include the potential value the market may ascribe to Sparc Hydrogen once the pilot plant has commissioned (\$59m), our SPN valuation would lift to \$0.79.

We note that Hazer Group (HZR-AU), market capitalisation \$79m, is engaged in the research and development of novel graphite, and hydrogen production technology. It's process converts natural gas into hydrogen and graphite, using iron ore as a process catalyst.

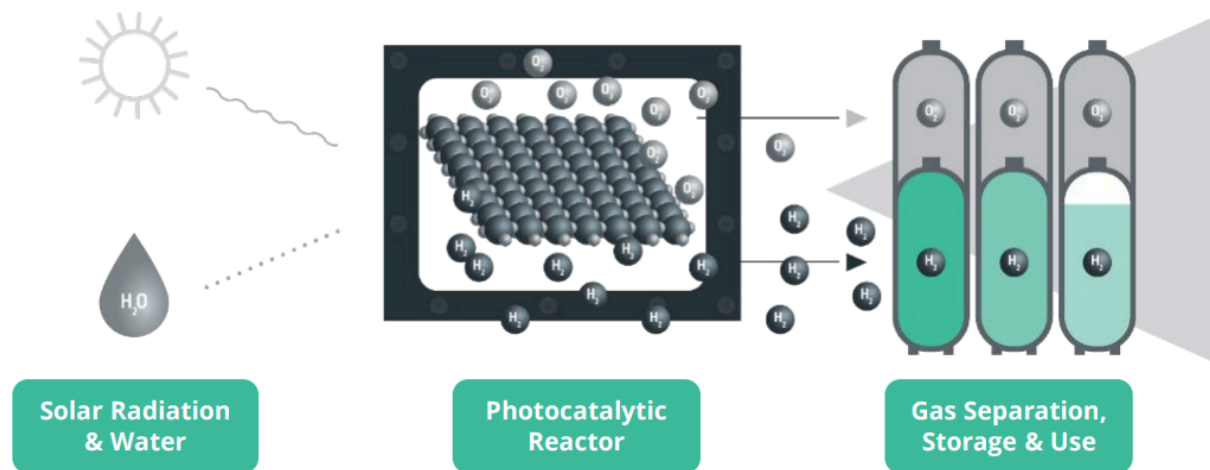
Again on the basis SPNs 36% stake in Sparc Hydrogen was to trade at a similar value, SPN's stake would be worth ~\$28m with no contribution for ecosparc® and compared with SPN's current market cap of \$16m.

Sparc Hydrogen Pilot Plant FEED nearing completion

The Sparc Hydrogen pilot plant will produce green hydrogen using photocatalytic water splitting (PWS) reactor technology without using electrolyzers.

Figure 2: Sparc Hydrogen photocatalytic water splitting technology schematic

Sparc Green Hydrogen utilises photocatalytic water splitting (or artificial photosynthesis) to split water into hydrogen and oxygen, using sunlight



Source: Company

Key advantages of PWS over electrolyzers are:

- Photocatalysis does not use electricity to produce hydrogen from water thereby decoupling green hydrogen and energy costs,
- the simplicity of PWS, as a direct solar to hydrogen production system,
- Sparc Hydrogen uses concentrated solar infrastructure which is flexible and scalable, and
- has a comparative advantage over electrolysis in off-grid and remote locations.

The Sparc Hydrogen Joint Venture (JV) FEED (being carried out by Incitias) for the photocatalytic water splitter (PWS) hydrogen production pilot plant (to be located at the University of Adelaide's Roseworthy Campus) is forecast to complete shortly.

This is a major milestone for the JV which will see further investment from SPN (\$1.025m) and Fortescue (\$1.45m) as part of the Stage 2 schedule.

The decision to initiate the FEED study, secure site approvals, and procure long-lead equipment followed the achievement of several key milestones related to the pilot plant in the last 12 months.

These milestones included:

- Securing an in-principle agreement from the University of Adelaide to locate the plant on its Roseworthy Campus.
- Advancing the pilot scale design and engineering.
- Signing a Collaboration Framework Agreement with Shinshu University in Japan, a leading developer of photocatalyst materials.

Each of these milestones represented significant de-risking of the pilot plant development workstreams, building on the pre-FEED study and the successful prototyping work completed at the CSIRO Energy Centre in April 2024.

Pilot plant construction and funding

A final investment decision by the Sparc Hydrogen board and shareholders to move to Stage 2 and commit the additional \$2.5m investment to fund the construction of the pilot plant and ongoing lab work is due shortly.

The pilot plant will be located approximately 50km north of Adelaide on the University of Adelaide's Roseworthy campus, which is still contingent on the execution of a formal lease agreement between the UoA and Sparc Hydrogen.

The company believes the facility can be built and operational ~6 months from the funding being committed by the shareholders.

Due to its clean nature and advancement of the technology, we believe Sparc Hydrogen is well positioned to benefit from funding support from Australia, the US, EU and other jurisdictions with clean hydrogen policies becoming more prevalent as governments commit to emissions targets.

Sparc Hydrogen has funding for the FEED costs, reactor manufacturing, site approvals and procurement of linear Fresnel solar concentrators for the pilot plant.

We note Sparc Hydrogen has recently received a \$0.5m research and development tax refund (September 2024).

Sparc Hydrogen has submitted an application for AEA Innovate funding which if successful will provide additional funding for the pilot plant construction and R&D. Results for this application are expected later in CY 2024 or early CY 2025. This would follow on from the successful AEA seed funding that was awarded in October 2023.

At the end of the quarter SPN has cash of \$1.8m. A research and development tax incentive claim of ~A\$1.1m is expected in November, which will fund SPN's expected \$1.025m contribution to the Sparc Hydrogen JV for Stage 2.

Sparc Hydrogen ownership structure

In February 2022, SPN announced a joint venture (JV) with the University of Adelaide (UoA) and Fortescue aimed at progressing the PWS reactor technology.

The JV comprised two stages, with the stages outlined in Figure 3.

The ownership is currently as per Stage 1.

Stage 2 will see Fortescue and SPN invest further capital and Fortescue will increase its ownership in the JV through proportionately higher additional funding, as shown in Figure 3.

Once Stage 2 occurs, SPN's ownership in Sparc Hydrogen will reduce to 36%.

Figure 3: Sparc Hydrogen staged investment structure and process

Sparc Hydrogen JV	University of Adelaide	Sparc Technology	Fortescue
Stage 1	IP Contribution	Pays A\$0.45m and issues 3m SPN shares	Pays A\$1.8m for initial share
Ownership	28%	52%	20%
Stage 2	Remains the same	Pays A\$1.025m and dilutes holding	Pays A\$1.45m increasing share
Ownership	28%	36%	36%
Total value Stages 1 & 2 = A\$9.1m	A\$2.55m	A\$3.275m	\$3.275m

Source: Company

Promising commercial partnership with Fortescue

We view Sparc Hydrogen's commercial partnership with Fortescue as a strong validation of not only the PWS technology but also the management team's ability to engage an organisation of that calibre with and deliver a strategic partnership. This gives confidence for future commercial partnerships to be executed with similar efficiency.

Why is Fortescue interested in the PWS technology and willing to invest?

Sparc Hydrogen aims to combine its PWS technology with concentrated solar to maximise the photocatalysis reaction in each reactor minimising the need for a large number of reactors. The benefits of Sparc Hydrogen's novel approach to PWS are as follows:

- Lower photocatalyst use for given volume of hydrogen production.
- Incorporation of PWS into a modular, scalable concentrated solar field; Sparc Hydrogen is aiming to buy off-the-shelf linear Fresnel mirrors and retrofit the existing receiver (typically used to produce heat in the form of steam) with its patent-pending solar reactor,
- The potential to use the heat generated in the reactor for industrial uses or energy production provides the opportunity for a dual revenue source with hydrogen production,
- The production process also generates steam as a by-product which could hypothetically be used by nearby industries that require steam like chemical, pharmaceutical production and many more.

Although not stated anywhere, we believe Fortescue will be looking at whether it can utilise the technology at its Australian sites as a source of energy for its Western Australian operations.

As an example we note that in a paper on the

[Pathways towards full use of hydrogen as reductant and fuel](#)

it was noted that direct reduced iron (DRI) steel production requires ~63 kg/t for steel production and 12 kg/t for heating.

The heating component requirement being a direct result of the endothermic process associated with the reaction between iron and hydrogen.

If Fortescue was to onshore its steel making onshore (100 Mtpa), hydrogen demand for heating alone would be 1.2 Mtpa.

On the basis of 1 Mtpa steel production, hydrogen demand would be 12m kg per annum or \$25m -\$60m of revenue per annum at \$2/kg- \$5/kg.

On the assumption that operating costs will be relatively low with the key ongoing inputs being free (sunlight) and the major operating cost being reactor catalyst, we forecast hydrogen production from PWS will be a high gross margin business allowing the plant capex to be repaid in a relatively short period of time.

ecosparc®

For a detailed report of SPN's ecosparc® technology and potential opportunities see our initiation:

["Disrupting and Transforming Industry"](#)

ecosparc® is a graphene-based additive (GBA) for coatings and composites, designed to increase the anticorrosion capabilities of commercially available epoxy coatings.

SPN has performed a vast body of testing on the ecosparc® product over the last five years. Much of this work has been focused on incorporating ecosparc® into anti-corrosive paints and assessing the scribe creep improvement (effectively a mm measure of rust propagation) over 3 to 6-month accelerated corrosion testing to international standards. Announced results have consistently shown improvement in scribe creep of 26–73%. These results are significant, and in the company's assessment, it is the most advanced globally when it comes to its data package and commercial readiness for a GBA in the anti-corrosion coatings market.

Over the September quarter field trials with the South Australian Department of Infrastructure and Transport (DIT) and 29Metals Limited progressed well. Steel sections within processing plant infrastructure at the Golden Grove mine site were coated and feedback from the applicator of the ecosparc® enhanced coating was very positive. Initial 6-month inspections at both Streaky Bay and Golden Grove are expected to occur in late Q1 CY2025 / early Q2 CY2025.

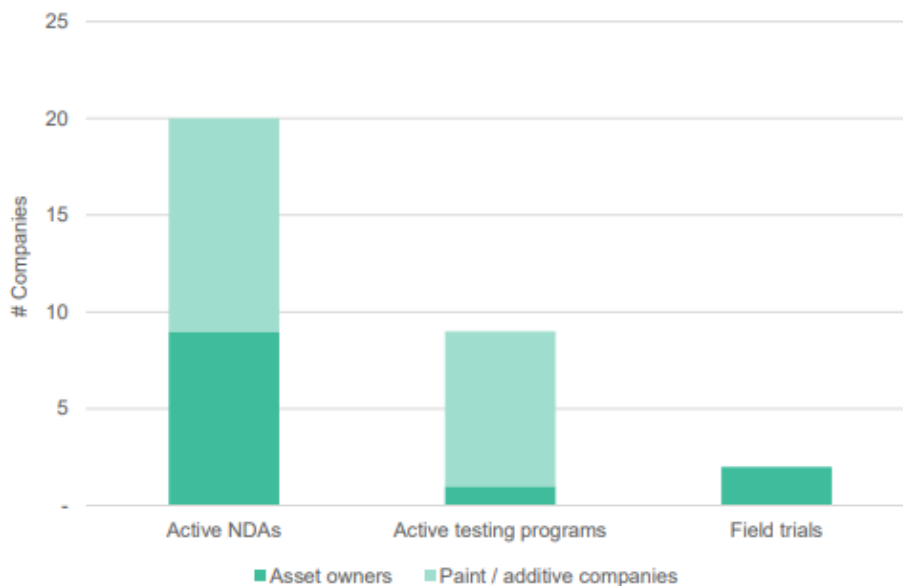
SPN is awaiting guidance on the timing of commencement of works for the second trial with DIT at West Beach Bridge in Adelaide. SPN expects this to commence next financial year but timing has not been confirmed yet.

SPN is targeting the announcement of additional end user led trials during Q4 2024. SPN continues its dual-track approach to develop the market for ecosparc® in protective coatings, focusing on both major coatings companies and large asset owners (end users).

During the quarter, SPN successfully engaged with several additional coatings and additive companies, with testing programs either commenced or soon to commence.

SPN has also successfully engaged with several other large end users of protective coatings with a view to conducting field trials and specification testing. Discussions with new and existing collaborators are supported by recent in-house and external data, which validates ecosparc® in significantly improving the mechanical and anti-corrosion performance of commercially available protective coatings.

Figure 4: ecosparc® customer engagement continues to grow



Source: Company

ecosparc® has massive potential globally with an increased need for anti-corrosion products: Industry reports suggest the global anti-corrosion coatings market will grow to nearly US\$50 bn by 2030, given the ageing infrastructure in developed economies and increased marine demand. ecosparc®'s ability to prolong the time between maintenance events will drive healthy uptake.

Financial forecasts

We have revised our financial forecast for ecosparc®.

Previously we had first sales in FY25. We have pushed first sales out to the second half of FY26 on the basis of the time taken to convert trials to commercial orders. We suspect however we may be being overly conservative now given the progress of the trials to date.

We table below our key assumptions for SPN for the ecosparc® division. We expect this division to contribute the majority of revenues for SPN in the forecast period as it is the only commercially ready product in the portfolio.

We anticipate meaningful revenue from the division will kick in in FY27 with SPN being EBITDA positive from FY28.

We view the uptake of ecosparc® at a paint manufacturing level as a significant factor in our forecast rapid revenue increase. Multiple global paint companies are currently undertaking product evaluation of the ecosparc® additive in their anti-corrosive coatings, with results for this testing due in CY 2025. Results from this independent testing should be a significant catalyst in delivering a meaningful revenue uplift for ecosparc®.

The key drivers of our forecasts and the financial outputs are tabled below.

Figure 5: SPN divisional forecasts to the gross margin line

A\$m	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
ecosparc®						
Plant capacity (kg GBA)	140,000	140,000	140,000	140,000	140,000	180,000
Capacity paint dosed (MI)	7.0	7.0	7.0	7.0	7.0	7.0
GBA (kg) / l paint	0.020	0.020	0.020	0.020	0.020	0.020
Forecast paint (MI)	0	1	3	5	7	9
Kg GBA	0	20,000	60,000	100,000	140,000	180,000
Units GBA (20kg)	0	1,000	3,000	5,000	7,000	9,000
Sale Price (A\$/unit)	1,650	1,691	1,734	1,777	1,821	1,867
Sales	0	2	5	9	13	17
COGS /(A\$/unit)	500	518	536	554	574	594
COGS	0	(1)	(2)	(3)	(4)	(5)
Income Statement						
A\$m	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
ecosparc®	0.0	1.7	5.2	8.9	12.7	16.8
Sparc Hydrogen						
Sodium Ion						
Sales revenue	0.0	1.7	5.2	8.9	12.7	16.8
ecosparc®	0.0	(0.5)	(1.6)	(2.8)	(4.0)	(5.3)
Sparc Hydrogen						
Sodium Ion						
COGS	0.0	(0.5)	(1.6)	(2.8)	(4.0)	(5.3)
Gross Margin	0.0	1.2	3.6	6.1	8.7	11.5

Source: MST estimates

Valuation of A\$0.36 with an upside valuation of \$0.79

Our 12-month forward sum of the parts valuation (November 2025) (Figure 7) for SPN is based on our discounted cash flow valuation of ecosparc® (Figure 6), the book value of SPNs contributions to Sparc Hydrogen post Stage 2 execution (\$3.25m), with no contribution from SPNs Sodium Ion battery technology.

Our 12-month forward valuation has lowered from \$0.48 to \$0.36. This results primarily from pushing out our first ecosparc® earnings to 2H FY26 and a higher share count reflecting further equity issuance in FY25 and FY26.

SPN currently has ~95.9m shares on issue. There are currently 26.3m options outstanding with exercise prices ranging from \$0.35-\$1.00, together with ~10m performance shares.

We are forecasting SPN will issue \$4.8m of equity over the next two years at average prices of \$0.16 per share, issuing ~30m shares.

For valuation purposes we assume all the performance shares issue, no options issue and 30m shares are issued taking the forecast share count to ~136m.

Figure 6: DCF Valuation for Sparc Technologies (ecosparc® contribution only)

Sum of discounted forecast cash flows	8.8	Target Debt / Enterprise Value Ratio	0.0%
Nominal long run growth rate	3.5%	Statutory Tax Rate	30.0%
Discounted terminal value	31.7	Risk Free Rate	5.0%
Enterprise Value	40.5	Equity Beta	1.96
Plus year end net cash / (net debt)	2.7	Expected Market Return	10.0%
Assumed option exercise	0.0	Cost of Equity	14.8%
Valuation of SPN (ecosparc® only)	43.2	WACC	14.8%

Source: MST Access

We believe **SunHydrogen (HYSR-USA)**; market capitalisation of ~US\$107m (~A\$162m), is the closest listed comparable company globally to Sparc Hydrogen.

SunHydrogen states that it has developed a breakthrough technology to produce renewable hydrogen. Utilising the science of water electrolysis at the nano-level, its photoelectrochemical technology uses sunlight to separate hydrogen from water.

If SPN's 36% stake in Sparc Hydrogen was to trade at a similar value, SPN's stake would be worth ~\$59m.

If we include the potential value the market may ascribe to Sparc Hydrogen once the pilot plant has commissioned (\$63m), our SPN valuation would lift to \$0.79.

Figure 7: Sparc Technologies Sum of the Parts Valuation

A\$m	Base case	Upside case
Valuation of ecosparc® only	43.2	43.2
Book value Sparc Hydrogen Investment	3.3	
Value Sparc Hydrogen based on SunHydrogen		58.5
Valuation Sparc Technologies	46.4	101.7
Forecast diluted shares on issue (m)	136.1	136.1
FY25 Value per share (A\$)	0.34	0.75
12 month forward valuation (November 2025) (A\$)	0.36	0.79

Source: MST estimates

Risks to our view

We think that the key risks to our valuation are one or a combination of the following:

- Execution risk associated with commercialisation and delivery of ecosparc® revenue due to one or a combination of the following elements:
- Market penetration to key coatings companies.
- Unforeseen problems and costs associated with the integration of the additive in the current anti-corrosive supply chain.
- Commercialisation timeline delays leading to further funding required.
- R&D costs are required to maintain and continue to develop the Sparc hydrogen and sodium-ion battery anode technologies.
- Funding risks associated with access to capital to support growth in the long term.
- A significant change in the key exchange rates as the majority of sales will likely be in US\$.
- The market appetite for companies with sustainable technology solutions.

Personal disclosures

David Fraser received assistance from the subject company or companies in preparing this research report. The company provided them with communication with senior management and information on the company and industry. As part of due diligence, they have independently and critically reviewed the assistance and information provided by the company to form the opinions expressed in this report. They have taken care to maintain honest and fair objectivity in writing this report and making the recommendation. Where MST Financial Services or its affiliates has been commissioned to prepare content and receives fees for its preparation, please note that NO part of the fee, compensation or employee remuneration paid has, or will, directly or indirectly impact the content provided in this report.

Company disclosures

The companies and securities mentioned in this report, include:

Sparc Technologies (SPN.AX) | Price A\$0.17 | Valuation A\$0.36;

Price and valuation as at 12 November 2024 (not covered)*

Additional disclosures

This report has been prepared and issued by the named analyst of MST Access in consideration of a fee payable by: Sparc Technologies (SPN.AX)

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