ASX ANNOUNCEMENT

26 August 2025

Sparc Achieves Significant Anticorrosion Improvement in Graphene Enhanced Water-Based Coatings

HIGHLIGHTS

- **Salt spray testing has demonstrated up to 60% corrosion reduction in graphene enhanced water-based coatings versus commercially available products**
- **Water-based coatings are experiencing strong market interest as sustainable alternatives to solvent-based coatings which contain fossil fuel derived organic solvents**
- **Latest results reiterate Sparc's leading market position in developing graphene based additives for protective coatings and complement ecosparc®, Sparc's flagship product which is currently in field testing**

Sparc Technologies Limited (**ASX: SPN**) (**Sparc, Sparc Technologies** or the **Company**) is pleased to announce positive results from further testing on commercially available water-based epoxy coatings. These results follow on from initial proof of concept testing based on accelerated electrochemical methods announced in December 2024. The current results show significant anticorrosion benefits from the successful incorporation of low dosages of select graphene grades in two commercial products from a leading supplier. Neutral salt spray testing over 480 hours, 960 hours and 1,680 hours in Sparc's laboratories has confirmed the performance improvements to international standards.

Water-based coatings are gaining prominence for their low environmental impact compared to more widely used solvent-based coatings which contain fossil fuel derived organic solvents. These results confirm Sparc's graphene additives significantly improve the anticorrosion performance of water-based coatings. This extends Sparc's reach into a new and rapidly growing area of the coatings market where there are clear performance challenges to address. It also complements Sparc's flagship **ecosparc®** product range which is targeted for solvent-based coatings and is undergoing field testing.

Sparc Managing Director, Mr. Nick O'Loughlin commented:

> *"I am pleased with the very strong follow-on results from our initial testing in water-based coatings. The recent salt spray results demonstrate up to 60% anticorrosion performance improvement using Sparc's graphene based additives within multiple commercial products which has the potential to unlock significant growth in this developing area of the protective coatings market. These results have been achieved leveraging Sparc's proprietary knowledge and expertise working with graphene based additives in the significantly larger solvent-based anticorrosion market and are allowing us to broaden customer engagement and value-add as we approach commercialisation."*

Neutral salt spray testing was conducted on commercially available 2-pack acrylic and Bis-A/F water-based epoxy products with dry film thicknesses of approximately 100 microns applied to garnet blasted cold rolled steel. Multiple grades of graphene were added at low dosage rates and compared to the unmodified commercial reference coatings. Multiple coated panels were tested in cyclic corrosion salt spray chambers within Sparc's laboratory with results assessed over 480 hours, 960 hours and 1,680 hours. Corrosion performance (scribe creep[1]) was evaluated according to ASTM D1654-08 (Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments). The tests have not been independently verified.

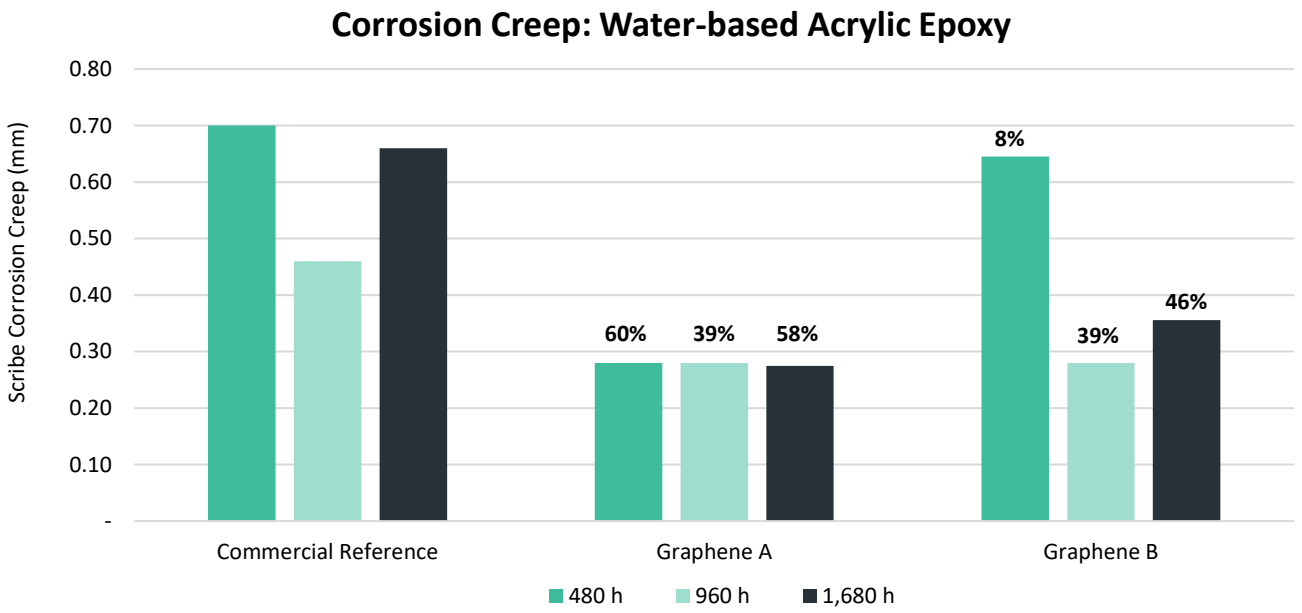

Figure 1: Scribe creep results for water-based acrylic epoxy under neutral salt spray (ISO 9227) - Evaluation by ASTM D1654. Data labels represent % improvement versus the commercial reference

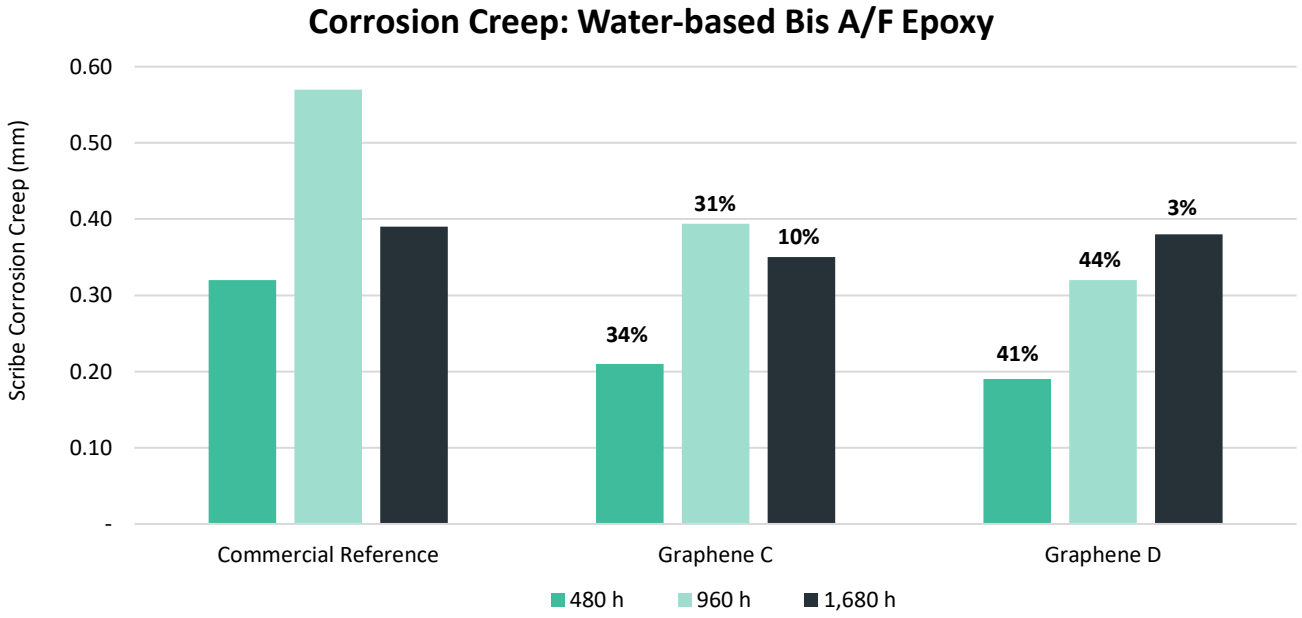

Figure 2: Scribe creep results for water-based Bis-A/F epoxy under neutral salt spray (ISO 9227) - Evaluation by ASTM D1654. Data labels represent % improvement versus the commercial reference

[1] Scribe creep describes the scribing of coated steel panels through the coating layer using a scribe tool. The resulting corrosion is measured on either side of the scribe, with a lower scribe creep value indicating less corrosion and therefore higher corrosion resistance.

In addition to the now completed electrochemical and accelerated corrosion testing, Sparc has successfully incorporated relevant graphene grades into additives suitable for use in water-based epoxy coatings which continue to show good stability. This demonstrates the potential for Sparc to market and commercialise a water-based graphene additive product as a complement to **ecosparc®** which is targeted for use in solvent-based epoxy coatings.

Water-based epoxy coatings use water as a carrier instead of fossil fuel derived organic solvents. The key benefits of water-based epoxy coatings include non-toxicity, low odour and low VOCs (volatile organic compounds) and ease of application and clean up. Despite these advantages, the durability, performance and cost of water-based epoxy coatings is generally worse than equivalent solvent-based products which has limited market adoption to date. With tightening regulations on VOC content and both industry and individual consumers seeking more environmentally friendly alternatives, there is an increasing push to develop higher performing water-based products. The global water-based epoxy market was valued at US$1.6 billion in 2022 and is projected to reach US$2.9 billion by 2029, at a CAGR of 8.9% during the forecast period[2]. In comparison, the global market for anticorrosion coatings is estimated at US$43 billion by 2029[3].

Commercialisation Pathway

Sparc is progressing its dual-track approach to commercialise the **ecosparc®** graphene based additive in widely used epoxy-based protective coatings, targeting both major coatings companies and large asset owners. Sparc is actively engaged with five of the eight largest global protective coatings companies on the testing and use of **ecosparc®**. In addition, Sparc is working with large asset owners across government, oil & gas and mining on both field trials and confidential testing programs. Sparc views the strong level of engagement from the coatings industry and asset owners as evidence that graphene is gaining traction as a product enhancement tool and that Sparc is seen as a leader in this emerging area due to its experience and extensive data.

With field trial results and lab testing in commercially applicable products and specification programs progressing during 2025, Sparc expects commercial acceptance and adoption of **ecosparc®** enhanced products during FY26. As commercial manufacturing capability is already established, the Company expects to support ramp up of product volumes without a significant increase in investment or working capital. The target addressable market for **ecosparc®** within the broader anticorrosive protective coatings market is estimated at ~US$1.0bn per annum[4]. As with any target addressable market, there are barriers to accessing a target addressable market, including manufacturing capacity, regulatory requirements, distribution and logistical hurdles, intellectual property protections and barriers to competition. Investors are cautioned that there are no guarantees that a target addressable market can be converted into revenue, and the target addressable market should not be mistaken for a guidance on potential revenue.

About ecosparc® - A performance additive for protective coatings

Sparc Technologies has conducted over 6 years of research and development on **ecosparc®**, its flagship graphene based additive range. The addition of very small quantities of **ecosparc®** has demonstrated substantial anti-corrosion improvement in commercially available epoxy-based coatings, ensuring the reliability, longevity, safety and cost-effectiveness of the steel infrastructure they cover.

In 2023, the Company commissioned its **ecosparc®** commercial production facility. The facility enables Sparc to provide commercial quantities of graphene based additive product for the coatings industry and to support field

[2] Sourced from 24ChemicalResearch, https://www.24chemicalresearch.com/reports/202538/global-waterborne-epoxy-coating-market-2023-2029-411
[3] Sourced from Exactitude Consultancy https://exactitudeconsultancy.com/reports/3960/anti-corrosion-coatings-market/
[4] Calculated based on Sparc's estimate of the proportion of products in the global protective and marine coatings markets suited to the ecosparc® product (25%) along with Sparc's proposed selling price relative to coating sales value (12%) in 2030.

trials. Multiple global coatings companies continue to undertake product evaluation of **ecosparc®** in their anti-corrosive coatings. Further to this, Sparc is progressing a campaign targeting asset owners with a view to conducting field trials utilising **ecosparc®** enhanced coatings on key steel infrastructure such as frames, tanks and structures in a variety of corrosive environments. Infrastructure owners being targeted include government, defence, mining, and oil and gas companies.

-ENDS-

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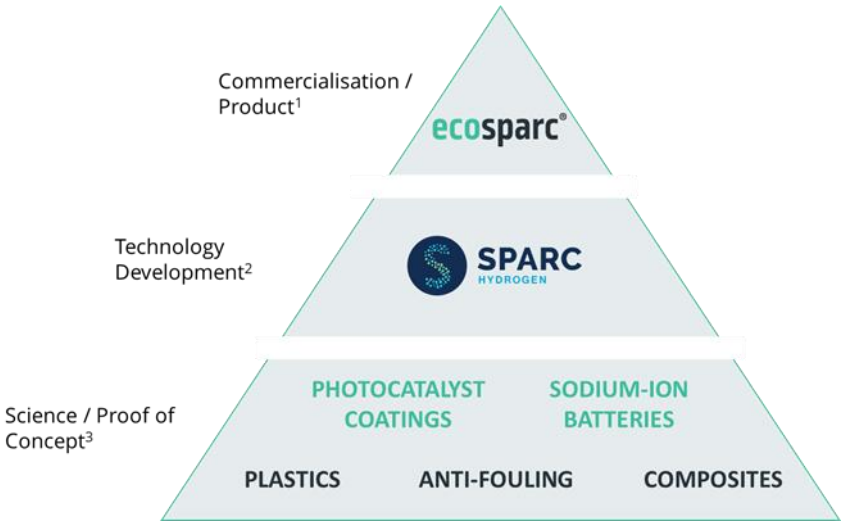
About Sparc Technologies



Sparc Technologies Limited ('Sparc', ASX: SPN) is an Australian technology company developing solutions that enhance environmental and sustainability outcomes for global industries. Sparc has two transformative technology areas in which it works: green hydrogen and graphene enhanced materials. Sparc conducts research and development in-house and has extensive engagement and relationships with the university sector in Australia and globally.

1. **Sparc Hydrogen** is a joint venture between Sparc Technologies, Fortescue Ltd and the University of Adelaide which is pioneering next-generation green hydrogen production technology. Photocatalytic water splitting (PWS) is an emerging method to produce green hydrogen without electrolysers - using only sunlight, water and a photocatalyst. Given lower infrastructure requirements and energy use, PWS has the potential to deliver cost and flexibility advantages over existing hydrogen production methods.

2. Sparc has developed and is commercialising a **graphene based additive** product, **ecosparc®**, which at low dosages significantly improves the performance of commercially available epoxy-based protective coatings. Sparc has commissioned a manufacturing facility to produce **ecosparc®** and is engaging with global coatings companies and large asset owners on testing, trials and commercial partnerships.

For more information about the company please visit: sparctechnologies.com.au

For more information about Sparc Hydrogen please visit: sparchydrogen.com