

Australian Government Grant Received for Graphene-Enhanced Aquaculture Netting Technology

HIGHLIGHTS

- Sparc Technologies and Flinders University awarded A\$353,098 AEA grant
- Grant funds will be used to accelerate development of graphene-enhanced netting for the mitigation of biofouling in the aquaculture industry
- Project leverages Sparc's expertise developing graphene-enhanced polymer materials
- Sparc's third successful project application under Australia's Economic Accelerator (AEA) grant program

Sparc Technologies Limited (ASX: SPN) (Sparc, Sparc Technologies or the Company) is pleased to announce that Flinders University, in partnership with Sparc Technologies, has been awarded funding under Australia's Economic Accelerator (AEA) Ignite grant program.

The 12-month project aims to accelerate development and validation of a graphene-enhanced material that can be utilised in aquaculture nets to mitigate biofouling and increase net strength and durability. This technology has the potential to result in a significant reduction in fish farm operational costs, environmental impact, biosecurity and fish health risks. During the project, Sparc and Flinders University aim to achieve a prototype demonstration in real-world conditions, proving the graphene-enhanced material's effectiveness in reducing biofouling, increasing net durability and extending the operational lifespan of aquaculture infrastructure. Sparc has engaged an Australian aquaculture company to support the project through providing a test site for prototyping along with access to information and advice to ensure industry applicability.

Sparc Managing Director, Mr Nick O'Loughlin commented:

"We are delighted to receive grant funding from the Federal Government's highly competitive AEA program to accelerate development of graphene-enhanced net materials for the aquaculture industry. This project utilises Sparc's deep expertise working with graphene-enhanced polymer materials for the coatings industry and builds on Sparc's track record of working with Australian universities to develop and commercialise novel technologies."

Flinders University Lead Entrepreneur, Professor Mats Andersson commented:

"I am very pleased to see this project fully funded by the AEA program. This project builds on ongoing work between Sparc and Flinders University which demonstrates substantial reductions in marine biofouling and has high potential to offer the aquaculture industry a solution which reduces costs and environmental impact and improves fish health."



The funded project builds on technology principles developed by Sparc and Flinders University for mitigating biofouling in the marine industry within the ARC Training Centre for Biofilm Research and Innovation. The grant funding will enable acceleration of research and development to progress from technology readiness level (TRL)-3 (experimental proof of concept, initial testing) to TRL-5 (prototype demonstrated in operational environment), paving the way for piloting and full commercial deployment. New intellectual property developed during the project is to be jointly owned by Sparc and Flinders University.

The global aquaculture market was valued at approximately US\$311 billion in 2023 and is projected to reach ~US\$574 billion by 2035¹. Within this sector, the global market for fishing nets and aquaculture cages was estimated at US\$3.0 billion in 2023, with expectations to grow to US\$4.3 billion by 2033, reflecting a compound annual growth rate (CAGR) of 3.7% from 2024 to 2033¹.

The economic burden of biofouling control in aquaculture is significant, with conservative estimates indicating costs ranging between 5-10% of total production expenses, equivalent to US\$1.5 to US\$3.0 billion annually².

Beyond its considerable economic and environmental benefits for the aquaculture industry, this innovative technology presents a major opportunity in the advanced manufacturing sector, particularly in the development of aquaculture nets and graphene-enhanced materials within Australia.

-ENDS-

Authorised for release by: Nick O'Loughlin, Managing Director.

For more information:

Nick O'Loughlin
Managing Director
info@sparctechnologies.com.au

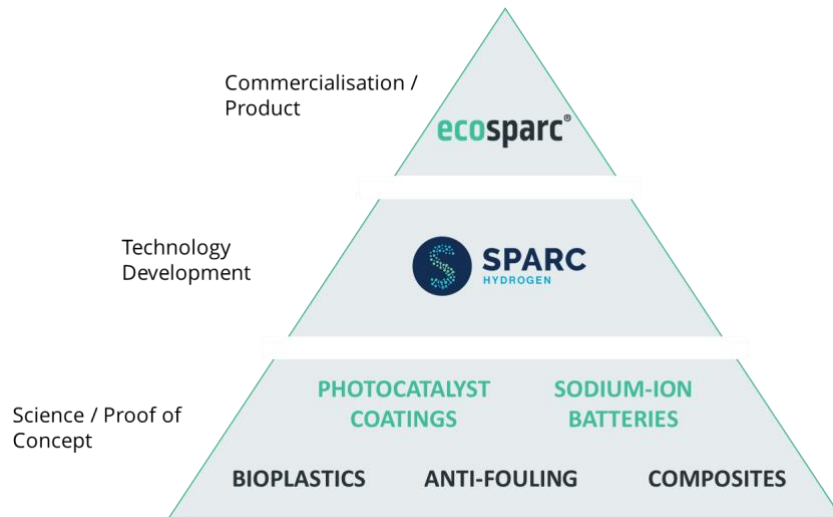
Aiden Bradley
Investor Relations
aiden@nwrcommunications.com.au
+61 414 348 666

¹ Allied Market Research, 2024, *Aquaculture Market Size, Share, Competitive Landscape and Trend Analysis Report, by Environment, by Fish Type : Global Opportunity Analysis and Industry Forecast, 2024-2035*. <https://www.alliedmarketresearch.com/aquaculture-market>

² Fitridge I, Dempster T, Guenther J, de Nys R. The impact and control of biofouling in marine aquaculture: a review. *Biofouling*. 2012;28(7):649-69



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 Limited 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 electrolyzers - 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

For more information about **ecosparc®** please visit: ecosparc.com.au

