ASX ANNOUNCEMENT

6 September 2024



Sparc Hydrogen Receives \$490k R&D Tax Refund

HIGHLIGHTS

- Sparc Hydrogen has received a \$490,285 R&D tax refund for FY24
- Additional funds will support Sparc Hydrogen's pilot plant development activities
- Targeting a pioneering plant utilising photocatalytic water splitting (PWS) technology
- This innovative technology employs a photocatalyst material and sunlight to produce green hydrogen directly from water

Sparc Technologies Limited (**ASX: SPN**) (**Sparc, Sparc Technologies** or the **Company**) is pleased to announce that Sparc Hydrogen, a joint venture between Sparc Technologies, the University of Adelaide and Fortescue Limited (ASX:FMG) (**Fortescue**), has received a research and development (R&D) tax refund totalling \$490,285 as part of the Australian Government's R&D tax incentive¹, relating to the 2024 financial year.

Sparc Hydrogen's research and development activities for the fiscal year ending on 30 June 2024 have been acknowledged through the receipt of a tax refund. This refund will strengthen the company's cash position providing support for Sparc Hydrogen's pilot plant development activities including front-end engineering and design and PWS reactor manufacturing.

Sparc Technologies Managing Director, Mr. Nick O'Loughlin, commented: "We are very pleased that Sparc Hydrogen has received a substantial R&D rebate for the fiscal year 2024. This non-dilutive funding is instrumental in supporting ongoing research and development efforts and development of a first-of-its-kind pilot plant utilising Sparc Hydrogen's photocatalytic water splitting technology."

Advantages of Photocatalytic Water Splitting (PWS)

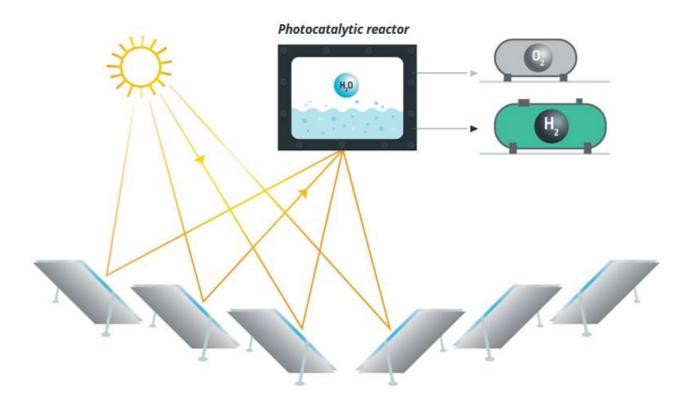
Sparc Hydrogen's novel utilisation of PWS technology sets it apart from conventional approaches in the production of green hydrogen. Crucially, PWS does not rely on renewable energy sources such as solar or wind farms, nor expensive electrolysers, to produce hydrogen from water. This addresses a fundamental issue in the nascent green hydrogen industry - the cost of renewable power. Sparc Hydrogen's pioneering technology employs a photocatalyst material and sunlight to produce green hydrogen directly from water. Hydrogen produced from PWS can serve as a clean fuel or feedstock to decarbonise hard-to-abate industries. Key advantages over electrolysis include:

- Photocatalysis does not use electricity to produce hydrogen from water thereby decoupling green hydrogen and energy costs;
- The simplicity of PWS being a direct solar to hydrogen production system drives potential for very low costs;
- Sunlight is the only energy input driving the process delivering emissions free hydrogen;
- Sparc Hydrogen utilises concentrated solar infrastructure which is inherently flexible and scalable;
- PWS has a comparative advantage over electrolysis in off-grid and remote locations.



About Sparc Hydrogen

Sparc Hydrogen is a joint venture between Sparc Technologies, the University of Adelaide and Fortescue developing a next generation green hydrogen technology using a process known as photocatalytic water splitting (PWS). This process requires only sunlight, water and a photocatalyst to produce green hydrogen, without an electrolyser. Sparc Hydrogen's patent pending reactor utilises concentrated sunlight to improve the economics of PWS and to deliver a modular, scalable system. Given lower infrastructure requirements and electricity use, PWS has the potential to deliver a cost and flexibility advantage over electrolysis.



Sparc Hydrogen schematic demonstrating combination of concentrated solar and photocatalytic water splitting

-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

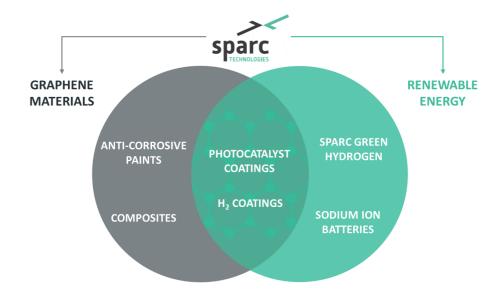
aiden@nwrcommunications.com.au

+61 414 348 666



¹ The R&D tax incentive scheme is a program jointly administered by the Australian Taxation Office and AusIndustry under which registered companies can receive up to a 48.5% refundable tax offset for eligible expenses on research and development activities.

About Sparc Technologies



Sparc Technologies Limited ('Sparc', ASX: SPN) is an Australian company pioneering new technologies to disrupt and transform industry while seeking to deliver a more sustainable world. Sparc has established offices in Australia, Europe and North America and is focused on three core areas of technology development.

- Sparc is the majority shareholder of Sparc Hydrogen which is a company pioneering the development of a
 photocatalytic water splitting (PWS) green hydrogen production technology. PWS is an alternative to producing
 green hydrogen via electrolysis, using only sunlight, water and a photocatalyst. Given lower infrastructure
 requirements and energy use, the process has the potential to deliver a cost and flexibility advantage over
 electrolysis.
- 2. Sparc has spent over 5 years developing a **graphene based additive** product, **ecosparc***, which has demonstrated 40% anti-corrosion improvement in commercially available epoxy-based coatings. Sparc recently commissioned a manufacturing facility to produce **ecosparc*** and is engaging with global coatings companies and asset owners to conduct field trials.
- 3. Sparc is also developing sustainable **sodium ion battery anode technology** utilising agricultural bio-waste materials.

For more information please visit: sparctechnologies.com.au

For more information about **ecosparc**® please visit: <u>ecosparc.com.au</u>

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

