

SPARC INVESTOR WEBINAR PRESENTATION

Sparc Technologies Limited (ASX: SPN) (Sparc or the **Company)** is pleased to announce its participation in the ShareCafe Small Cap "Hidden Gems" Webinar, to be held Friday 11th of March 2022 from 12:30pm AEDT / 9:30am AWST.

Sparc Technologies is pioneering new technologies to disrupt and transform industry for cleaner, more sustainable outcomes. Managing Director Mike Bartels will provide an overview of the Company's Graphene and Green Hydrogen Divisions.

Sparc Graphene is concerned with the formulation and adoption of Graphene Based Additives targeting Coatings, Composites and Concrete.

The Green Hydrogen Project will utilise a technology known as Thermo-Photocatalysis, which employs the suns radiation and thermal properties to convert water into hydrogen and oxygen.

This webinar is able to be viewed live via Zoom and will provide viewers the opportunity to hear from, and engage with, a range of ASX-listed leading micro/mid cap companies.

To access further details of the event and to register at no cost, please click on the following link or copy and paste the link into your internet browser:

https://us02web.zoom.us/webinar/register/9516463504855/WN_7qd5Pl7lSSa7QHV10tPafQ

A recorded copy of the webinar will be made available following the event.

A copy of the investor presentation to be delivered during the webinar is attached.

-ENDS-

Authorised for release by: Stephen Hunt, Executive Chairman.

For more information:

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Directors

Stephen Hunt - Executive Chairman Mike Bartels – Managing Director Stephanie Moroz – Non-Executive Director Daniel Eddington - Non-Executive Director





Investor Webinar

March 2022 ASX: SPN

Transformational Technology for Global Industries

Sparc Technologies – Introduction





Capitalisation	
ASX Code	SPN
Share price*	\$0.80
Shares on Issue	79.1m
Market Capitalisation	\$63.3m
Cash (as at 31 Dec 21)	\$3.4m
Cash (as at 31 Dec 21) Debt (as at 31 Dec 21)	\$3.4m Nil
Cash (as at 31 Dec 21) Debt (as at 31 Dec 21) Enterprise Value	\$3.4m Nil \$59.9m

* As at 10 March 2022

Major Shareholders	% held
University of Adelaide	8.3%
Director's and Management	15.1%

Pioneering new technologies to disrupt and transform industry for cleaner, more sustainable outcomes

- Company was listed on the ASX in November 2020 – based on a graphene technology platform from the University of Adelaide. University of Adelaide has an 8.3% shareholding in the company
- Relatively small volume of shares / tightly held (TOP 20 Shareholders hold approx. 40% of shares)
- Sparc has two primary areas of focus –
 Graphene and Energy



GRAPHENE



- Allotrope of Carbon
- First isolated in 2004 via exfoliation of Graphite (University of Manchester)
- "2 Dimensional" i.e., very thin layers of Sp2 hybridised carbon atoms
- High mechanical strength, large surface area per unit weight, high resistance to degradation, electrical conductivity









- With a unique array of characteristics graphene, with time, will be incorporated into everything from Building Materials to Electronics and Medical Equipment
- Sparc Graphene is focused on enhancing and disrupting products within the Building Materials sector
- This sector is multi-billion dollar, established and global offering significant commercial opportunities
- Customers within this segment invariably have ESG objectives that can benefit courtesy of product enhancement or substitution delivered by the adoption of a graphene based material
- Sparc Graphene is concerned with the formulation and adoption of *Graphene Based Additives* targeting Coatings, Composites and Concrete (cementitious materials)

Sparc Technologies – Graphene

- Graphene Based Additives are developed for targeted end use;
 - Formulations aimed at enhancing product performance as opposed to simple dispersions aimed at supporting handleability (typically the approach of graphene producers)
 - Targeting multiple graphene sources with specific performance criteria means we cannot be captive to a manufacturing process (that dictates graphene characteristics)
- Sparc has established a purpose built Research and Development facility
- R&D activities are augmented by a number of collaborative arrangements with Australian universities
- Capabilities
 - Inherent understanding of graphene
 - Know-How regards formulating with graphene
 - Know-How regards manufacture and scale-up
 - R&D Capabilities
- Active program regards the patenting of products within Coatings



- Based on comprehensive testing to applicable industry standards, we have demonstrated the ability to deliver significant product enhancement in Coatings
 - up to 40% in anti-corrosive coatings performance¹
- The global Coatings market represents the first opportunity for Sparc to enter into a commercial agreement
- Currently in discussions with a number of global paint companies objective is to enter into a formal collaborative technical agreement as the precursor to a commercial agreement

Technology can be monetised via supply of Graphene Based Additives / or via transfer of Know-How and licensing

- Critically we have both global expertise and access to multi-national Customers
- Approach in Coatings (i.e., formulation for a targeted end use, testing to recognised industry stds, customer engagement employing subject mater experts) is now being developed in Composites and Concrete

SPARC GREEN HYDROGEN

 H_2

Sparc Green Hydrogen – Overview

Photocatalytic Hydrogen - Next generation technology to transform global green hydrogen production



No Wind or Solar PV Farms Required



No Electrolysis Required

- **Globally disruptive** technology developed by University of Adelaide and Flinders University
- > Hydrogen produced directly from sunlight and water in a single step process
 - Photocatalytic water splitting
 - Avoids conversion of solar or wind energy into electrical energy then into hydrogen in a green electrolysis process
- Infrastructure requirements are different than green electrolysis
 - No large scale wind or solar PV farms required
 - No electrolysers or heavy duty electricity infrastructure
 - Opportunity for **scalable** deployment
 - **Zero carbon** process
- Further research & development work is targeting a system with **industry leading costs**
- Best-in-class partners University of Adelaide and Fortescue Future Industries¹



The Colours of Hydrogen



How does Sparc Green Hydrogen Work?



Sparc Green Hydrogen does not use solar PV and/or wind farms, nor electrolysis as with conventional green hydrogen – only a photocatalyst and solar radiation

As Opposed to...



Conventional green hydrogen technologies use electricity derived from solar PV and/or wind farms to produce hydrogen using an electrolyser

"Such systems (photocatalytic water splitting) offer great potential for cost reduction of electrolytic hydrogen, compared with conventional two-step technologies." (CSIRO National Hydrogen Roadmap¹)

Sparc Green H ₂	Green H ₂	Blue H ₂	Grey H ₂
Photocatalysis	Electrolysis via renewable electricity	Using SMR with CCUS*	Steam methane reforming (SMR)
🗸 Water	🗸 Water	× Natural gas, Water	× Natural gas, Water
✓ Pure O₂	✓ Pure O ₂	 Emissions sequestered 	CO _{2,} NO _x , SO _x , PM
🗸 Nil	🗸 Nil	0.76kg CO ₂ / 1kg H ₂	8.5kg CO ₂ / 1kg H ₂
✓ Solar resource	 Solar +/- wind resource & electrical infrastructure 	Gas source and suitable storage	Gas source
🗸 Scalable	× Very large	× Very large	× Large
	Sparc Green H₂ Photocatalysis ✓ Water ✓ Pure O₂ ✓ Nil ✓ Solar resource ✓ Scalable	Sparc Green H₂Green H₂PhotocatalysisElectrolysis via renewable electricity✓ Water✓ Water✓ Pure O₂✓ Pure O₂✓ Nil✓ Nil✓ Solar resource✓ Solar +/- wind resource & electrical infrastructure✓ Scalable✓ Very large	Sparc Green H2Green H2Blue H2PhotocatalysisElectrolysis via renewable electricityUsing SMR with CCUS*✓ Water✓ Water× Natural gas, Water✓ Pure O2✓ Pure O2Emissions sequestered✓ Nil✓ Nil× 0.76kg CO2 / 1kg H2✓ Solar resource× Solar +/- wind resource & electrical

* Carbon capture, use and storage

Disrupting global industries with transformational technology



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