

June 2025 Quarterly Activities Report

HIGHLIGHTS

Sparc Hydrogen

- Sparc Hydrogen and the University of Adelaide awarded A\$2.75M Australian Government grant, subsequent to quarter end
- Sparc Hydrogen progressed construction of a first-of-its-kind green hydrogen pilot plant on schedule and budget with commissioning expected to commence in July 2025
- Pilot plant opening ceremony held 24 June 2025 at the University of Adelaide's Roseworthy Campus with key stakeholders in attendance

Graphene Based Additives

- First coatings inspections at Streaky Bay, Port Bonython and Golden Grove mine confirm positive performance of **ecosparc®** enhanced anti-corrosion coatings
- Field trials and confidential testing programs continue to progress with global coatings companies and asset owners
- Continued strong laboratory results in water-based coatings showing up to 60% corrosion improvement against an unmodified commercial product
- Sparc and Detmold Packaging enter into a Collaboration Agreement with the goal of developing graphene-enhanced paper packaging products
- Three ISO certifications achieved for the provision of technologies using graphene materials

Corporate

- ~A\$3.2M (before costs) capital raise completed via share placement and significantly oversubscribed share purchase plan
- Cash balance of A\$3.3M as at 30 June 2025

Sparc Technologies Limited (ASX: SPN) (**Sparc** or the **Company**) is pleased to provide its June 2025 Quarterly Activities Report.



Sparc Hydrogen

Sparc Hydrogen is a joint venture between Sparc Technologies, Fortescue Ltd and the University of Adelaide, which has been developing patented photocatalytic water splitting (**PWS**) reactor technology since 2022. During the quarter, several key milestones were achieved with respect to construction of a first-of-its-kind photocatalytic water splitting pilot plant at the University of Adelaide's Roseworthy Campus in South Australia.

Construction is progressing on schedule and budget, with commissioning expected to commence during July 2025. An opening ceremony was held on the 24th of June with key stakeholders in attendance including senior representatives from the Sparc Hydrogen joint venture partners, the South Australian Government and Shinshu University. The ceremony included speeches from senior University of Adelaide and Sparc Hydrogen representatives followed by a site walkaround. It was attended by over 30 invitees including one of Sparc Hydrogen's key overseas collaborators, Professor Kazunari Domen, from Shinshu University in Japan.

The pilot plant represents a major step towards scaling and commercialising Sparc Hydrogen's patented PWS reactor technology – enabling next generation green hydrogen production that is scalable, modular, and importantly, requires limited electricity. Operating the pilot plant will enable testing of different reactor designs and photocatalyst materials under real world conditions supporting and validating laboratory testing. Sparc Hydrogen is not aware of any similar facilities for testing and scale up of PWS under concentrated solar conditions.



Figure 1: Roseworthy pilot plant opening ceremony held 24 June 2025

In July 2025, Sparc Hydrogen and the University of Adelaide were awarded A\$2.75M in cash grant funding under the Australia's Economic Accelerator (**AEA**) Innovate program administered by the Australian Government Department of Education. The grant was awarded following a rigorous and highly competitive selection process, with Sparc Hydrogen's application chosen from a large number of proposals nationally — providing strong validation of the technology's innovation and commercial potential.

The AEA grant funds will support operation of Sparc Hydrogen's pilot plant at Roseworthy along with research & development and commercialisation activities. The cash grant covers a 24 month period and will be fully supported by matched financial and in-kind commitments from Sparc Hydrogen and its shareholders – all within the existing Stage 2 scope and budget and funded from already committed cash resources. This grant follows A\$470,511 funding awarded to the University of Adelaide and Sparc Hydrogen under the AEA Seed round in 2023.



Other activities relating to Sparc Hydrogen undertaken during the quarter included:

- Sparc's Managing Director, Mr Nick O'Loughlin, hosted an investor webinar to provide an update on Sparc Hydrogen's green hydrogen technology and pilot plant development.
- Ongoing engagement with several patent offices regarding Sparc Hydrogen's exclusively licensed PWS reactor technology following a first patent grant in Morocco in January 2025.
- Sparc Hydrogen's team continued engagement with a number of concentrated solar equipment providers and photocatalyst developers around R&D, testing and scale-up activities.

Sparc Hydrogen continues to differentiate its PWS technology from conventional methods (electrolysis) for the production of green hydrogen. By using concentrated solar radiation, the process increases reaction rates and reduces the quantity of photocatalyst material required, offering the potential for a scalable, sustainable, and cost-effective alternative to conventional green hydrogen production methods.

Commercialisation of Sparc Hydrogen's PWS reactor technology could help Australia drive the emerging green hydrogen industry, expected to be worth US\$1.4 trillion per year in 2050 requiring US\$9.0 trillion of cumulative investment¹. The potential to produce both hydrogen and industrial heat (low grade steam) could significantly broaden the technology's commercial applications.

Graphene Based Additives

Anti-corrosive Coatings: **ecosparc**®

During the quarter, Sparc generated first results from its ongoing field trials and, in collaboration with a global coatings company, commercially produced another batch of **ecosparc**® enhanced anti-corrosive coating to support upcoming testing and trials. Independent visual inspections conducted at Port Bonython in South Australia (May 2025), Golden Grove mine in Western Australia (May 2025) and Streaky Bay in South Australia (April 2025) confirmed no early failure indicators – such as cracking, peeling, blistering, rust breakthrough – for the **ecosparc**® enhanced coatings across all trial sites. These results demonstrate the efficacy of **ecosparc**® enhanced anti-corrosive coatings across several relevant real-world environments and support ongoing commercial and specification discussions with major coatings companies and asset owners.



Figure 2: Trial inspection photos showing coatings performing well at the Streaky Bay Jetty, South Australia (April 2025)

¹ Green hydrogen: Energizing the path to net zero, Deloitte's 2023 global green hydrogen outlook (figures have been expressed in Australian dollars)

Field testing with BHP Mitsubishi Alliance has also progressed with coating of infrastructure at the Caval Ridge Mine in Queensland expected during July 2025.

Sparc continues its dual-track approach to commercialising the **ecosparc**[®] graphene-based additive in widely used epoxy-based protective coatings through:

1. Collaborating with major coatings companies on testing and field trials; and
2. Conducting testing and field trials with large asset owners (government, oil & gas, mining) that are significant potential end customers for **ecosparc**[®] enhanced coatings.

Sparc is participating in testing programs with several global protective coatings companies, and, in addition to the field trials referenced above, is progressing testing with other large asset owners. The strong level of engagement is viewed as validation of both graphene's potential as a performance-enhancing additive and Sparc's position as a leader in this emerging field, supported by its technical expertise and extensive data.

With field trial results and lab testing in commercially applicable products progressing during H2 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 addressable market (revenue opportunity) for **ecosparc**[®] within the broader anticorrosive protective coatings market is estimated at ~US\$1.0bn per annum.

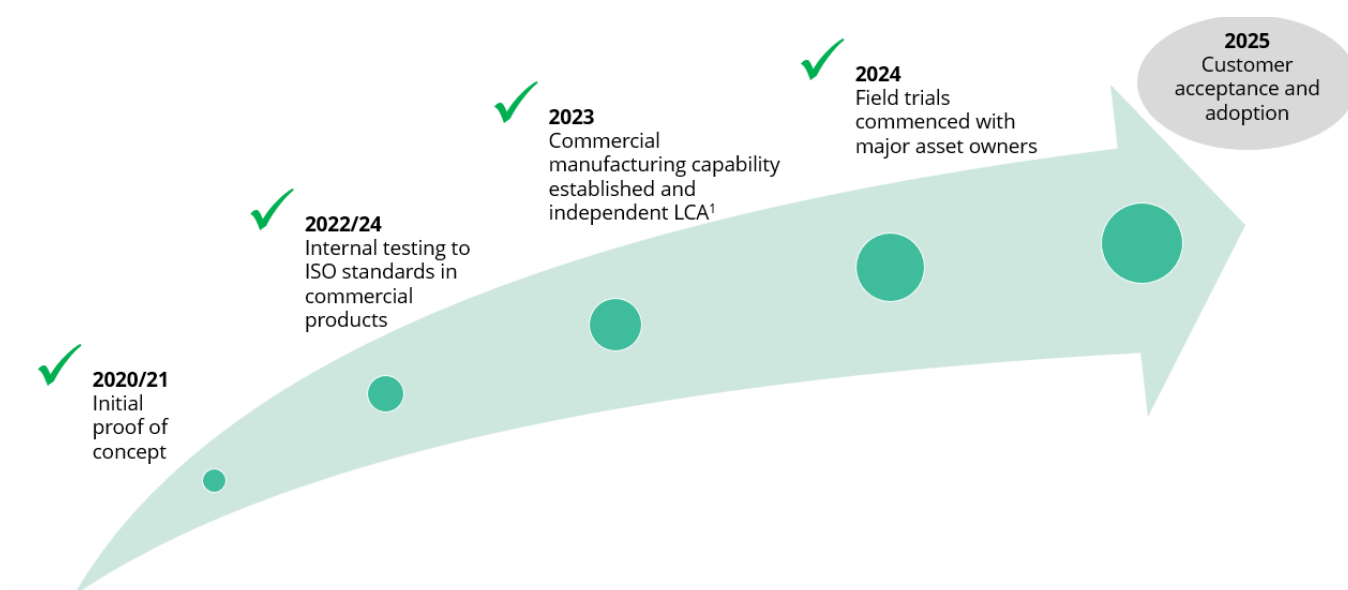


Figure 3: **ecosparc**[®] development and commercialisation pathway

Other R&D Activities

Sparc continues to advance R&D across adjacent technologies, leveraging its expertise in the sourcing, characterisation, and dispersion of graphene in coatings and polymers.

In May, Sparc and Detmold Packaging (**Detmold**) executed a Collaboration Agreement regarding the development of graphene-enhanced paper packaging products. The agreement outlines the framework under which the parties will undertake research and development with a view to developing paper packaging products with improved barrier resistance, weight, strength, flexibility and/or durability, using graphene. The commercialisation of any Detmold paper packaging products incorporating Sparc's graphene-enhanced materials will be governed by the terms of a separate agreement between the parties to be negotiated in the future. Detmold Group has operations in 17 countries, employing 2,800 people, and produces over 20,000 distinct food and retail packaging products. The group supplies premium packaging solutions to some of the



world's largest and most iconic food and retail brands and is committed to sustainability, including reducing waste and designing packaging ranges to be reusable, recyclable and compostable.

As reported in March 2025, Sparc and Flinders University received ~A\$353K under the AEA Ignite grant program. The grant funded project aims to accelerate development and validation of a graphene-enhanced materials for use in aquaculture nets, designed to mitigate biofouling and enhance net strength and durability. Equipment procurement, hiring of personnel and engagement with net manufacturers and aquaculture farmers took place during the quarter with the 12 month grant funded project officially commencing in June 2025. This project builds on ongoing work conducted by Sparc and Flinders within the ARC Training Centre for Biofilm Research and Innovation (**ITTC**).

Sparc continued its testing and development of graphene additives for water-based protective coatings during the quarter. Initial results from accelerated corrosion testing using salt spray within Sparc's laboratory have shown corrosion performance improvements of up to 60% against an unmodified commercial product. Extended corrosion testing results are expected during Q3 2025. Sparc is engaged with several coatings companies regarding graphene additives for water-based products. Water-based coatings are gaining increasing interest as a more sustainable alternative to solvent-based coatings, though they typically underperform in anti-corrosion. Amid tightening VOC regulations and growing demand from both industry and consumers for more environmentally friendly alternatives, there is mounting pressure for high 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 period².

During the quarter, Sparc achieved certification for the following ISO management systems:

- ISO 9001:2015 (Quality Management Systems);
- ISO 14001:2015 (Environmental Management Systems); and
- ISO 45001:2018 (Occupational Health and Safety Management Systems).

The ISO certifications apply to the "provision of technologies using graphene materials" and reflects Sparc's strong internal systems and rigorous processes as it advances its graphene additive portfolio, including the near term commercialisation of **ecosparc**®. The ISO certifications were awarded by LRQA, a global leader in assurance and certification services, and provides independent validation of Sparc's operational standards. This is an important milestone for the Company as it moves through real world testing of **ecosparc**® and progresses engagement with prospective commercial customers, end users and partners.

Other activities relating to Sparc's graphene based additives undertaken during the quarter include:

- In June, Sparc's General Manager – Graphene, Dr Denis Wright, presented a webinar to the Advanced Carbons Council titled "The Effects and Impacts of Graphene in Protective Coatings and Polymers". Over 435 people registered for the webinar and several business leads were generated. A recording can be viewed via the following link: <https://www.youtube.com/watch?v=75A6bEjBIOs>
- In May, Sparc's Innovation and Business Development Manager, Mr Paul Baccanello, attended the IPACK-IMA Plastics Conference in Milan where he engaged with dozens of companies around the potential uses of graphene in plastics and packaging materials.

Corporate

Capital Raising

During the quarter, the Company completed a share placement (**Placement**) and share purchase plan (**SPP**) to raise ~A\$3.2M before costs (**Capital Raise**). Sparc's Directors subscribed for 400,002 shares in the

² Sourced from 24ChemicalResearch, <https://www.24chemicalresearch.com/reports/202538/global-waterborne-epoxy-coating-market-2023-2029-411>



Placement, totalling A\$60,000. The issuance of shares to Directors is subject to shareholder approval, which will be sought at the Company's annual general meeting. The Capital Raise was conducted at an issue price of 15 cents per share (A\$0.15).

Proceeds from the Capital Raise are intended to be used for:

- Field trials and commercialisation activities for **ecosparc®**;
- Supporting Sparc's investment in Sparc Hydrogen;
- R&D and patenting activities; and
- General working capital.

Cash

As at 30 June 2025, the Company had a reported cash position of A\$3.3M. This includes a A\$0.73M advance of its expected FY25 R&D tax incentive claim provided by Rockford RDF Pty Ltd.

Cash expenditure for the quarter was in line with expectations.

Related Party Payments

In line with its obligations under ASX Listing Rule 5.3.5, Sparc Technologies Limited notes that the only payments to related parties of the Company, as advised in Appendix 4C for the period ended 30 June 2025, pertain to payments to directors in arrears for Directors Fees, salary and superannuation in the amount of A\$133K.

-ENDS-

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

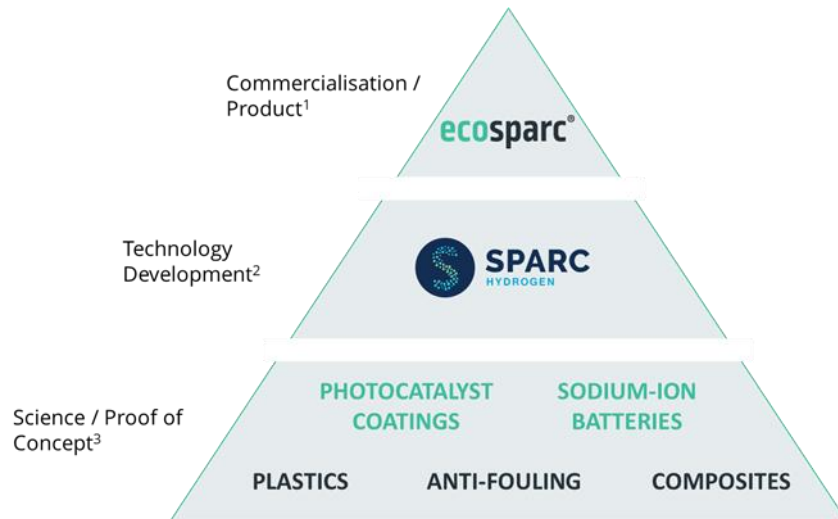
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About Sparc Technologies



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 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



Forward Looking Statements

Some information included in this release constitutes forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by words such as the following: expects, plans, anticipates, forecasts, believes, intends, estimates, projects, assumes, potential and similar expressions. Forward-looking statements also include reference to events or conditions that will, would, may, could or should occur.

These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable at the time they are made, are inherently subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation the matters set out in this announcement.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.



Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Sparc Technologies Limited

ABN

13 009 092 068

Quarter ended ("current quarter")

30 June 2025

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	0	0
1.2 Payments for		
research and development	(332)	(1,466)
product manufacturing and operating costs	(0)	(0)
advertising and marketing	(82)	(160)
leased assets	0	0
staff costs	(243)	(813)
administration and corporate costs	(179)	(892)
1.3 Dividends received (see note 3)	0	0
1.4 Interest received	21	84
1.5 Interest and other costs of finance paid	0	0
1.6 Income taxes paid	0	0
1.7 Government grants and tax incentives	0	1,128
1.8 Other (provide details if material)	0	0
1.9 Net cash from / (used in) operating activities	(815)	(2,118)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
entities	0	0
businesses	0	0
property, plant and equipment	0	(26)
investments	0	(1,075)
intellectual property	0	(2)
other non-current assets	0	0



Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from disposal of:		
	entities	0	0
	businesses	0	0
	property, plant and equipment	0	0
	investments	11	11
	intellectual property	0	0
	other non-current assets	0	0
2.3	Cash flows from loans to other entities	0	0
2.4	Dividends received (see note 3)	0	0
2.5	Other (provide details if material)	0	0
2.6	Net cash from / (used in) investing activities	11	(1,092)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	3,166	3,166
3.2	Proceeds from issue of convertible debt securities	0	0
3.3	Proceeds from exercise of options	0	0
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(98)	(98)
3.5	Proceeds from borrowings	0	729
3.6	Repayment of borrowings	0	0
3.7	Transaction costs related to loans and borrowings	0	0
3.8	Dividends paid	0	0
3.9	Other (provide details if material)	0	0
3.10	Net cash from / (used in) financing activities	3,068	3,797

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,030	2,707
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(815)	(2,118)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	11	(1,092)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,068	3,797



Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	3,294	3,294

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,294	1,030
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,294	1,030

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	133
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other Rockford Capital R & D Advance	730	0
7.4	Total financing facilities	730	0
7.5	Unused financing facilities available at quarter end		0
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		



8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	815
8.2	Cash and cash equivalents at quarter end (item 4.6)	3,294
8.3	Unused finance facilities available at quarter end (item 7.5)	0
8.4	Total available funding (item 8.2 + item 8.3)	3,294
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	4.04

Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.

8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:9 July 2025.....

Authorised by:The Board.....

(Name of body or officer authorising release – see note 4)



Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

