

DECEMBER 2022 QUARTERLY REPORT

IperionX Limited (ASX: IPX) (the "Company" or "IperionX"), is pleased to provide its quarterly report for the period ended December 31, 2022. Highlights during and since the quarter included:

IperionX wins U.S. Air Force titanium recycling challenge

- IperionX won the Air Force Research Laboratory ("AFRL") Grand Challenge, hosted by the National Security Innovation Network.
- The AFRL Grand Challenge involved selecting the most commercially promising technology for producing titanium metal powders from scrap titanium and rejuvenating out-of-spec titanium powders for use in additive manufacturing.
- Winning the prestigious AFRL Grand Challenge validates the commercial and technical superiority of IperionX's patented technologies to produce circular, low-carbon and lower-cost titanium metal powders.
- Additive manufacturing, or 3D printing, is a critical technology for the U.S. Air Force to manufacture novel and complex geometry titanium alloy parts, including for aerospace and hypersonic missile applications.

Panerai places order for production series titanium watch cases

- Officine Panerai ("Panerai") placed its first purchase order for 'production series' titanium watch cases to be additively manufactured using IperionX's low carbon, circular titanium.
- Panerai recently completed testing on the IperionX prototype titanium watch cases and will produce a limited
 edition run of several hundred watch case blanks. The production series titanium watch cases are being
 additively manufactured using IperionX's low carbon, circular titanium powders.
- The Panerai purchase order validates the performance of IperionX's patented titanium technologies and the quality its low carbon, circular titanium metal powders.
- IperionX provides the only commercially available circular, low-carbon titanium production process that uses 100% recycled titanium as a feedstock.
- IperionX now has over 40 potential customers signed onto a confidential sales delivery process. The highest
 priority potential customers have progressed from the exchange of technical data to titanium metal powder
 qualification and titanium part prototyping.

IperionX extends titanium metal technologies agreement

- IperionX extended the purchase and license option agreements over its patented titanium technologies.
- The titanium technologies represent the only commercially available 100% fully circular, low-carbon titanium production process and were instrumental in producing the first circular 'production series' 3D printed titanium watch blanks for Panerai.
- The revised agreement retains the option to acquire the full range of the technologies including HAMR, GSD, low carbon synthetic rutile, titanium alloying, zirconium metal and rare earth recycling as well as retaining the option to secure the exclusive rights to the global licenses over all intellectual property.
- The revised agreement extends the option expiry date by two years to December 31, 2024.
- This successful renegotiation extends the timing of both cash and equity payments, materially reduces IperionX's near term capital requirements, providing a pathway to potentially accelerate the development of the Titanium Demonstration Facility in South Boston, Virginia.



Corporate Office

Titan mineral project technical studies

- IperionX continued to progress exploration and technical studies at the Titan Project in West Tennessee, including pre-feasibility development work, feasibility study level metallurgical test work and initial permitting investigations.
- IperionX holds a 100% interest in the critical minerals Titan Project, which has the largest JORC mineral resource of titanium, rare earth and zircon rich mineral sands in the United States.

IperionX appoints Toby Symonds as Company President

- IperionX appointed Toby Symonds as President of the Company. Mr. Symonds has worked with IperionX since 2021, first as an advisory board member and then as Chief Strategy Officer. He is a highly experienced executive with more than 30 years of experience across a range of senior roles in operations, sales, strategy, finance and asset management.
- Mr. Symonds previously served as a senior advisor to private equity, hedge funds and real estate asset managers, including Coliseum Capital Management, Sweetwater Capital Partners and Mosaic Real Estate Investors. Toby was a Managing Director at SAC Capital's Business Development Group and was a founding partner of ENA Investment Capital in London and Altai Capital Management in New York.
- Prior to his career in asset management he spent over 11 years at JP Morgan and Morgan Stanley.

For further information and enquiries please contact:

investorrelations@iperionx.com

+1 704 461 8000

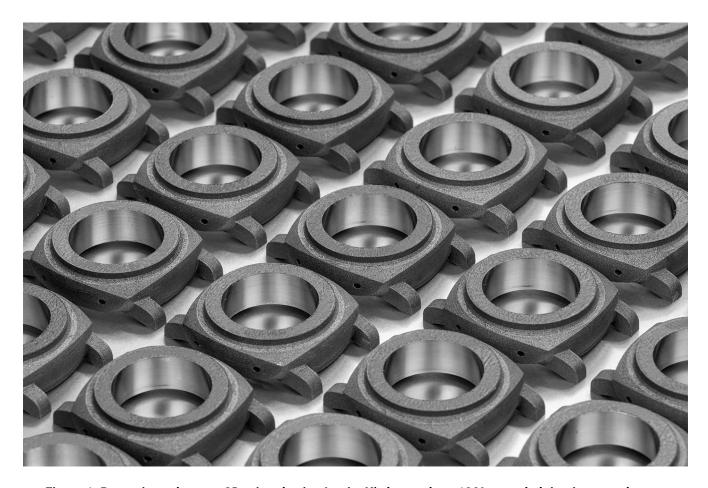


Figure 1: Panerai watch cases 3D printed using IperionX's low carbon, 100% recycled titanium powders.

IPERIONX WINS U.S. AIR FORCE TITANIUM RECYCLING CHALLENGE

Subsequent to the end of the quarter, IperionX announced that it was the winner of the U.S. Department of Defense's National Security Innovation Network ("NSIN") Air Force Research Laboratory ("AFRL") Grand Challenge contract.

The AFRL Grand Challenge involved selecting the most commercially promising technology for producing titanium metal powders from scrap titanium and rejuvenating out-of-spec titanium powders for use in additive manufacturing.

As a result, IperionX will be eligible to produce titanium metal powders from scrap materials and rejuvenate used or out-of-specification titanium powder for the AFRL.

Winning this Grand Challenge, against a field of leading titanium industry participants, is an important validation of IperionX's patented technologies to produce circular, low-carbon and lower cost titanium metal from 100% recycled titanium scrap or out-of-specification titanium powder feedstocks.

The U.S. Air Force and U.S. Department of Defense are accelerating the use of additive manufacturing to reduce long lead cycle times and to produce large volumes of complex parts for advanced weapons systems.

Only 20%-40% of titanium powder used in additive manufacturing ends up in fabricated parts. Titanium metal powders are typically reused only a limited number of times before the quality is compromised by elevated contaminant levels or inferior powder morphology. Out-of-specification titanium powders increase the probability of defects and jeopardize the structural integrity of additively manufactured components.

Titanium metal produced by the current "Kroll Process" is high carbon, energy intensive and expensive. Leading companies across the defense, automotive, consumer electronics and luxury goods sectors want to source low carbon, low-cost titanium from traceable recycled sources. IperionX's patented technologies offer a pathway to significantly lower cost, and lower carbon, titanium metal powders for titanium components in these industries.

The patented technologies were developed by Dr. Zak Fang, an American Professor of Metallurgical Engineering at the University of Utah, and uniquely position IperionX to upcycle a wide variety of low-grade, high oxygen content titanium scrap which has historically been downcycled to lower value markets. IperionX is able to achieve greater yields of nearly 100% from low-grade scrap without the need for blending the scrap with high-grade primary metal.

Winning the Grand Challenge also complements IperionX's project with Materials Resources, LLC to qualify titanium alloy powders for the U.S. Navy and test titanium flight critical metal replacement components for the U.S. Department of Defense.

The winner of the Grand Challenge is eligible for a contract award up to \$500,000 across four phases, with IperionX successfully completing Phase 1, and will complete Phases 2 – 4 as part of routine production operations at its Titanium Pilot Facility in Utah.

PANERAI PLACES ORDER FOR PRODUCTION SERIES TITANIUM WATCH CASES

During the quarter, IperionX announced that Officine Panerai ("Panerai"), a division of Compagnie Financière Richemont SA (SWX:CFR, market capitalization US\$83 billion) placed its first purchase order for 'production series' titanium watch cases to be additively manufactured using IperionX's low carbon, circular titanium.

Panerai recently completed testing on the IperionX prototype titanium watch cases and will produce a limited edition run of several hundred watch case blanks. The production series titanium watch cases are being additively manufactured using IperionX's low carbon, circular titanium powders.

IperionX continues to work with Panerai to evaluate additional titanium watch designs for future production series manufacturing.

ABN: 84 618 935 372 3

Titanium watches are preferred for their higher strength, lighter weight and superior corrosion resistance, and titanium has now become the choice of material for flagship models amongst many leading watch manufacturers. The sustainability, quality and production manufacturing capabilities required to meet the demanding specifications for the luxury watch market transfers directly into a range of other titanium market verticals, including the automotive, consumer electronic and defense sectors.

The global automotive and consumer electronic sectors are leading the move towards building low carbon supply chains that maximize the use of circular materials. Leading companies in these sectors have near term targets for net zero carbon supply chains and for their products to utilize fully recycled materials.

The Panerai purchase order validates the performance of IperionX's patented titanium technologies and the quality of its low carbon, circular titanium metal powders. Although the quantum of the initial purchase order is not material, it demonstrates the commercial value of a low carbon, circular supply of titanium, which is superior to aluminum and stainless-steel in many applications.

This validation is important for customers in our other high priority sales verticals – especially the global automotive, bicycle and consumer electronic markets. These global markets are many times larger than luxury watches and offer IperionX a near-term pathway to rapidly scale our business.

For example, the Swiss watch industry produces ~13 million watches p.a.¹ for a select group of global customers that expect the highest quality, strength and sustainability metrics from their watch purchase. In comparison, the global smart watch market is over 173 million units p.a.² with a like-minded customer base who also demands strength, quality and sustainability. In addition to smart watches, the global consumer electronic market extends to tablets, laptop computers and mobile phones.

IperionX provides the only commercially available circular, low-carbon titanium production process that uses 100% recycled titanium as a feedstock. IperionX now has over 40 potential customers signed onto a confidential sales delivery process.

IPERIONX EXTENDS TITANIUM METAL TECHNOLOGIES AGREEMENT

During the quarter, IperionX announced that it successfully negotiated to extend the purchase and license option agreements for its breakthrough titanium technologies.

The revised agreement includes the option to acquire all of the assets of Blacksand Technology LLC ("Blacksand"), which developed the global patents to the titanium and metal alloy technologies, as well as the option agreements for exclusive global licenses over technologies held by Blacksand, including hydrogen assisted metallothermic reduction ("HAMR"), granulation sintering deoxygenation ("GSD"), low carbon titanium mineral enrichment (synthetic rutile), titanium dioxide ("TiO₂") and titanium alloying technologies.

The revised agreement extends the payment terms by two years and this capital flexibility provides a pathway to potentially accelerate the development of the Titanium Demonstration Facility in South Boston, Virginia.

Should IperionX choose not to exercise the purchase option to acquire all the assets of Blacksand, it retains options to license key technologies from Blacksand, including HAMR and GSD.

Blacksand purchase option - Key terms			
	Original	Revised	
Option purchase price	\$12m	\$12m	
Option / purchase payment profile	\$12m payment on December 31, 2022	4x \$1.5m payments over eighteen months + 1x \$6m payment on December 31, 2024	
% payable in scrip	30%, payable at option exercise	30%, payable at option exercise	
Option expiry date	December 31, 2022	December 31, 2024	

¹ LuxeConsult, Morgan Stanley Research estimates

² Statista - Smartwatches - Statistics & Facts

TITAN PROJECT TECHNICAL STUDIES

During the quarter, IperionX continued to progress exploration and technical studies at the Titan Project in West Tennessee, including pre-feasibility development work, feasibility study level metallurgical test work and initial permitting investigations.

IperionX holds a 100% interest in the critical minerals Titan Project, which has the largest JORC compliant mineral resource of titanium, rare earth and zircon rich mineral sands in the United States.

IPERIONX APPOINTS TOBY SYMONDS AS COMPANY PRESIDENT

During the quarter, IperionX appointed Toby Symonds as President. Mr. Symonds has worked with IperionX since 2021, first as an advisory board member and then as Chief Strategy Officer. He is a highly experienced executive with more than 30 years of experience across a range of senior roles in operations, sales, strategy, finance and asset management.

Mr. Symonds previously served as a senior advisor to private equity, hedge funds and real estate asset managers, including Coliseum Capital Management, Sweetwater Capital Partners and Mosaic Real Estate Investors. Toby was a Managing Director at SAC Capital's Business Development Group and was a founding partner of ENA Investment Capital in London and Altai Capital Management in New York. Prior to his career in asset management he spent over 11 years at JP Morgan and Morgan Stanley.

ASX - ADDITIONAL INFORMATION

Mining properties - Titan Project

At December 31, 2022, the Titan Project comprised of approximately 11,071 acres of surface and associated mineral rights in Tennessee prospective for heavy mineral sands ("HMS"), rich in minerals critical to the U.S, including titanium, rare earth minerals, high grade silica sand and zircon, of which approximately 453 acres are owned and approximately 10,618 acres are subject to exclusive option agreements. These exclusive option agreements, upon exercise, allow us to lease or, in some cases, purchase the surface property and associated mineral rights.

Mining properties - Milford Project

At December 31, 2022, the Milford Project comprised the following tenements:

Tenements	Location	Interest
ML-001 to ML-100, ML-051a (total of 101 claims)	Utah, USA	100%

Mining exploration expenditures

During the quarter, the Company made the following payments in relation to mining exploration activities.

Activity	US\$000
Drilling and assaying	(6)
Metallurgical test work	(73)
Geological consultants	(62)
Permitting	(103)
Technical studies	(497)
Field supplies, vehicles, travel and other	(495)
Total as reported in Appendix 5B	(1,236)

There were no mining or production activities or expenses during the quarter.

Related party payments

During the quarter, the Company made payments of approximately US\$150,000 to related parties and their associates. These payments relate to executive directors' remuneration, non-executive directors' fees, employer 401(k) contributions, superannuation contributions.

Remuneration of Executive Directors

Effective from January 1, 2023, Mr. Anastasios Arima, Managing Director & CEO, will be paid a salary of US\$300,000 per annum and a discretionary performance bonus of up to US\$180,000 per annum and Mr. Todd Hannigan, Executive Chairman, will be paid fees of US\$210,000 per annum and a discretionary performance bonus of up to US\$105,000 per annum.

ABOUT IPERIONX

IperionX's mission is to be the leading developer of low carbon titanium for advanced industries including space, aerospace, electric vehicles and 3D printing. IperionX's breakthrough titanium technologies can produce titanium products that are low carbon and fully circular. IperionX is producing titanium metal powders from titanium scrap at its operational pilot facility in Utah and intends to scale production at a Titanium Demonstration Facility in Virginia. IperionX holds a 100% interest in the critical minerals Titan Project, which has the largest JORC compliant mineral resource of titanium, rare earth and zircon rich mineral sands in the United States.

This announcement has been authorized for release by the CEO & Managing Director.

Forward Looking Statements

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding the timing of any Nasdaq listing, plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance, or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation, as well as other uncertainties and risks summarized in filings made by the Company from time to time with the Australian Securities Exchange and in the Form 20-F filed with the U.S. Securities and Exchange Commission.

Forward looking statements are based on the Company and its management's assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

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. Except as required by applicable law or stock exchange listing rules, 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.

Competent Persons Statement

The information in this announcement that relates to Production Targets, Process Design, Mine Design, Cost estimates and Financial Analysis is extracted from IperionX's ASX Announcement dated June 30, 2022 ("Original ASX Announcement") which is available to view at IperionX's website at www.iperionx.com. IperionX confirms that a) it is not aware of any new information or data that materially affects the information included in the Original ASX Announcement; b) all material assumptions included in the Original ASX Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the Original ASX Announcement.

The information in this announcement that relates to Mineral Resources is extracted from IperionX's ASX Announcement dated October 6, 2021 ("Original ASX Announcement") which is available to view at IperionX's website at www.iperionx.com. IperionX confirms that a) it is not aware of any new information or data that materially affects the information included in the Original ASX Announcement; b) all material assumptions included in the Original ASX Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the Original ASX Announcement.

ABN: 84 618 935 372 **7**

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
IperionX Limited	
ABN	Quarter ended ("current quarter")
84 618 935 372	31 December 2022

Con	solidated statement of cash flows	Current quarter USD\$'000	Year to date (6 months) USD\$'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	6	6
1.2	Payments for		
	(a) exploration & evaluation	(1,236)	(2,855)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(1,189)	(2,388)
	(e) administration and corporate costs	(846)	(1,853)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	42	47
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material):		
	(a) business development	(263)	(640)
1.9	Net cash from / (used in) operating activities	(3,486)	(7,683)

2.	Ca	sh flows from investing activities		
2.1	Payments to acquire:			
	(a)	entities	-	-
	(b)	tenements	(221)	(519)
	(c)	property, plant and equipment	(762)	(1,289)
	(d)	exploration & evaluation	-	-
	(e)	investments	-	-

Cons	solidated statement of cash flows	Current quarter USD\$'000	Year to date (6 months) USD\$'000
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material):		
	(a) cash acquired on asset acquisition	-	-
2.6	Net cash from / (used in) investing activities	(983)	(1,808)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	975	16,118
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	121
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(35)	(983)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	940	15,256

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	14,873	5,659
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,486)	(7,683)

ASX Listing Rules Appendix 5B (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms. Page 9

Con	solidated statement of cash flows	Current quarter USD\$'000	Year to date (6 months) USD\$'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(983)	(1,808)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	940	15,256
4.5	Effect of movement in exchange rates on cash held	88	8
4.6	Cash and cash equivalents at end of period	11,432	11,432

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 USD\$'000	Previous quarter USD\$'000
5.1	Bank balances	10,916	13,571
5.2	Call deposits	516	1,302
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)	11,432	14,873

6.	Payments to related parties of the entity and their associates	Current quarter USD\$'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(150)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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

7.	Financing facilities 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.	Total facility amount at quarter end USD\$'000	Amount drawn at quarter end USD\$'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qua	arter end	-

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.

Not applicable

8.	Estimated cash available for future operating activities	USD\$'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(3,486)
8.2	(Payments for exploration & evaluation classified as investment activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(3,486)
8.4	Cash and cash equivalents at quarter end (item 4.6)	11,432
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	11,432
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	3.3

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 Solution 8.8.1. 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?

Not applicable.

8.8.2. 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?

Not applicable.

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

Not applicable.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 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:	January 25, 2023
Authorised by:	Company Secretary
	(Norman of hands on officer and harder and an art of A)
	(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 6: Exploration for and Evaluation of Mineral Resources and 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 standards apply 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.