

## **MARCH QUARTERLY REPORT TO SHAREHOLDERS**

The Directors of Integrated Green Energy Solutions Ltd (“IGES” or “the Company”) are pleased to provide Shareholders with an update of operating environment and the activities of the Company.

### **The Global Crisis of Plastic Pollution**

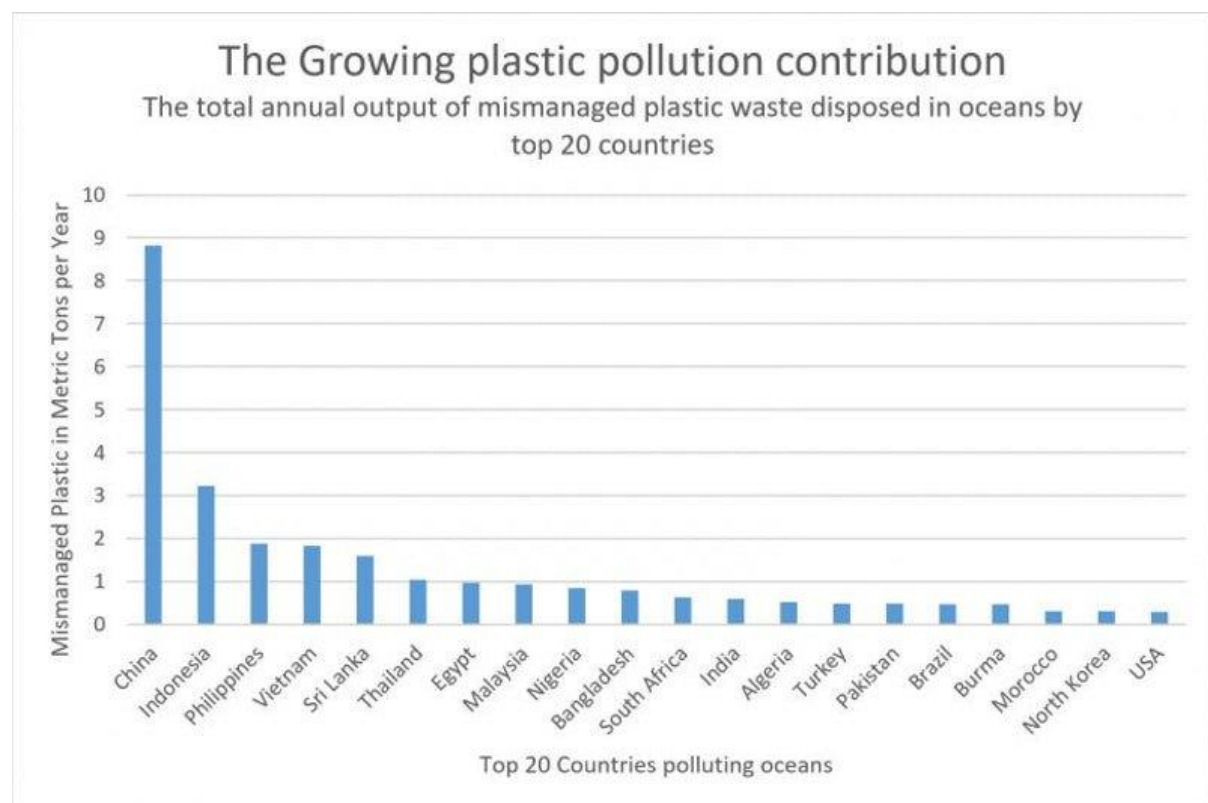


Scientists across the globe are increasingly finding wildlife that has been killed after ingesting or becoming entangled in plastic. Ninety percent of sea birds, for example, have been found to have plastic in their bellies. And the problem is only getting worse: The estimated 19 billion pounds of plastic that ends up in the ocean every year is expected to double by 2025. These plastics will not only kill more animals; they'll decimate coral reefs, and damage human health as microplastics enter the food chain. They'll create more and bigger dead zones where nothing can live, harm biodiversity, and change ecosystems. There will likely be additional, unknown impacts; researchers have only been studying ocean plastics for less than two decades.

In the meantime, anti-plastic campaigns can make a small difference. Banning straws—or plastic bags, or take-out containers—is not enough to solve the scourge of ocean plastics. In fact, no single country can make a significant enough impact to solve it before some of the impacts become irreversible. Efforts to ban plastic straws and bags, for example, can raise awareness and change behaviour over time, but these campaigns generally take place in the

developed countries that aren't contributing to the bulk of the problem. Engaging developing countries, through financial incentives and binding targets, is the only way to stem the flow of plastics into the oceans.

Indeed, as can be seen from the graph below Asia disproportionately affects the impacts of plastic pollution. The majority of garbage put into the ocean ends up beyond national boundaries, in the infamous swirling "garbage patches" in oceanic gyres. In March, scientists published evidence that one of these whirls of trash—the Great Pacific Garbage Patch—contains about 80,000 tons of plastic, 16 times larger than previously thought. And as larger plastics linger in the water, they break down into microplastics that scientists are now finding everywhere: in fish, fertilizers, table salt, and in 93 percent of bottled water.

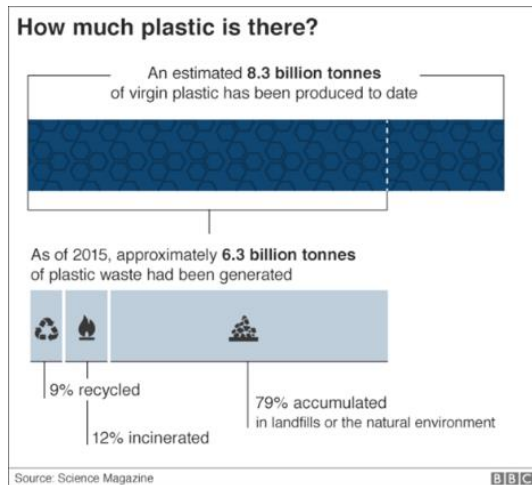


Due to the borderless nature of ocean plastics, scientists and activists are increasingly advocating for a global solution. Steps are being taken toward a global agreement. In December, nearly 200 countries including the U.S., China, and India signed a United Nations resolution to eliminate ocean plastic pollution. A draft of the resolution had included legally binding, specific pollution reduction targets, but was ultimately rejected by the U.S. China and India. Therefore, the final agreement achieved only a call for working toward the creation of binding targets.

(Source: The New Republic, The Global Crisis of Plastic Pollution, By Emily Atkin, April 16, 2018)



The extent of the plastics crisis that already exists is clearly illustrated below:



#### 8 statistics on plastic pollution

- 13 million** tons of plastic leak into our oceans annually.
- 500 billion** disposable plastic bags are used worldwide each year.
- 50 percent** of consumer plastics are single use.
- 83 percent** of tap water has been found to contain plastic particles.
- 100,000** marine animals are killed by plastics each year.
- One million** plastic bottles are purchased every minute.
- 100 years** is how long it takes for plastic to degrade in the environment.
- 17 million** barrels of oil are used on plastic production annually.

Source: UN Environment

### Change in Government Policy generates a windfall for IGES

In an earlier announcement IGES reported that China officially banned the importation of plastics as of January 2018. At the time, India was mentioned as one destination for plastic rubbish as a “short term” alternative destination to China.



*The Independent, Thursday 7 March 2019*

Indeed, last year a Department for Environment, Food & Rural Affairs for the UK Government (Defra) spokesperson told a leading UK newsagent (The Independent) the government's ambition "was to handle more of our waste in the UK" but that "in the short term, alternative markets have been found in response to the China restrictions including Malaysia, Turkey and India".

However as has been widely reported India has now also decided to ban imports of waste plastic to tackle their environmental crisis: "The country has now completely prohibited the import of solid plastic waste by amending the Hazardous Waste Rules on March 1," an environment ministry official said. (The Independent, Thursday 7 March 2019).

In summary, the tighter rules that China implemented prompting western nations to send rubbish elsewhere to places including India have prompted India to follow in the path of China and ban the importation of waste plastics.

India generates some 26,000 tons of plastic waste every day from its own population and remains a rich source of non-recyclable plastics in their own right.

This change in government direction has given IGES a plentiful supply of non-recyclable plastics as the feedstock for plastics road ready fuel plants as countries are now given no option but to find real solutions for their plastics. This has created a situation where what was a cost impost for IGES has now been transmuted into revenue stream. For example, IGES will enjoy a 20 euro per tonne revenue for the receiving of cleaned, dried and bundled plastics.

### **Amsterdam Project**

The construction of the 100 tonne per day ("TPD") Amsterdam facility continues to progress. As announced on 8 April 2019, the first set of these modules arrived onsite and is now in the process of having ancillary equipment fitted and installed.

In line with the site's existing environmental approval, initial cold and hot testing is expected to commence within 6 weeks. This testing is a precursor to the commissioning process and will be conducted to ensure the safe and efficient start-up of the plant in line with our permit to operate.

The construction of the second 50TPD module is nearing completion and is scheduled for shipment by 10 May 2019. It is expected that this module will arrive onsite in Amsterdam in July, with installation to occur immediately. Once both modules are installed, the Amsterdam facility will have the capacity to process 100 TPD of plastic and produce 35 million litres of fuel per annum as has been approved under the permit from the Amsterdam Competent Authority.

### **United Kingdom**

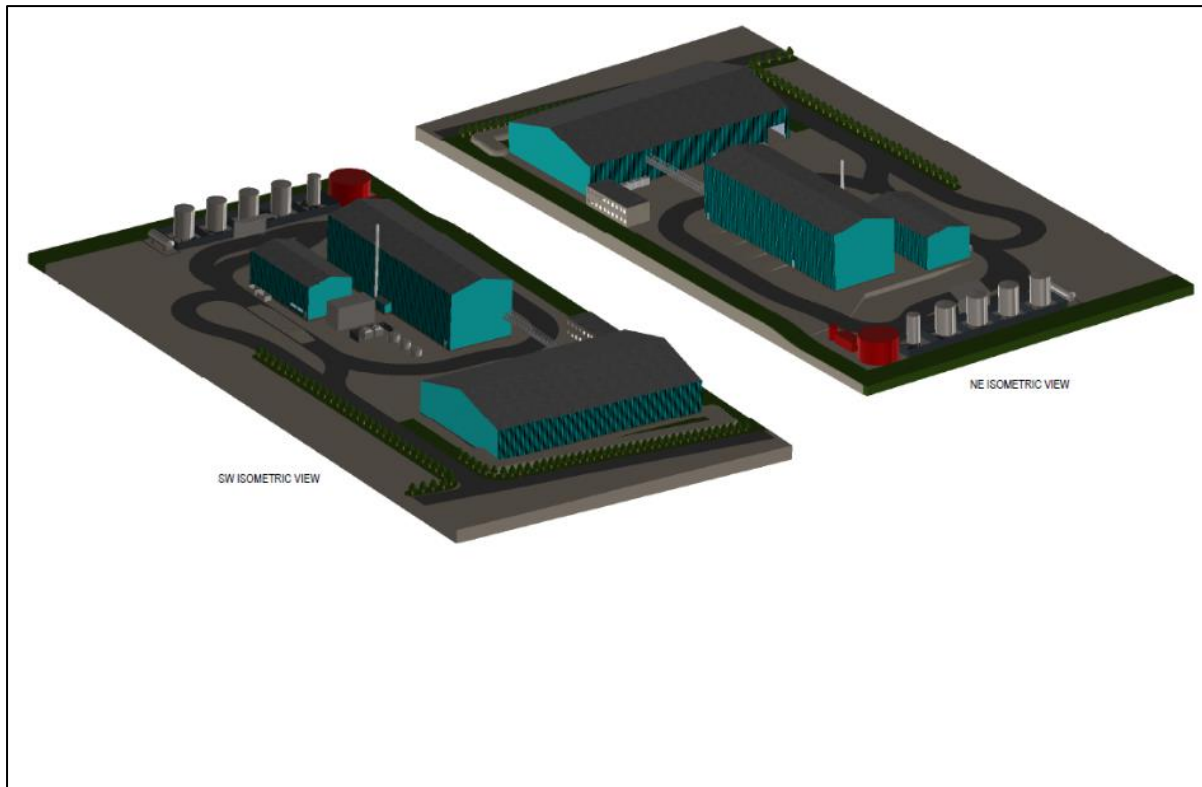
As previously announced, IGES has selected a site in Northampton, United Kingdom, to construct and operate a 200TPD plastics to fuel facility. IGES has now been informed that the site has been granted a draft permit for this project. A final permit is expected to be provided for the site in a matter of weeks.

This is an ideal site to lead the Company's UK rollout, with:

- Power to 4.5MW available, in addition to existing water, roads, security;
- Waste sites nearby who have committed to supply sufficient feedstock;

- Arterial roads and motorway infrastructure within 5km; and
- Good size, flat ground and the ideal shape for an IGES facility.

Planning for this facility is already well underway. Once this final permit is received, IGES will begin the remaining design and construction phase of the facility, which when completed will be capable of producing over 70 million litres of road ready fuel per annum. We anticipate the process to begin with a comprehensive site clearing in July and to be operationally fit for purpose within twelve months from the date of onsite construction commencing.



*Northampton 3D Drawings*

## **Thailand**

On 29 March 2019 IGES announced that the Company received official confirmation that the Thailand project had been approved by the Thailand Board of Investment (“BOI”) for promotion under category 1.16.2 Manufacture of Fuel from Waste.

This project will see IGES Thailand establishing a 200TPD plastic to fuel processing site, producing 70 million litres of road ready fuel that meets the EN 590 diesel specification and EN 228 petrol specification. This fuel will require no further blending, refining or additives and will be used to replace existing fossil fuels that are currently being used.

As part of the approval IGES will be able to enjoy several incentives, including:

1) Authorisation to proceed with the following activities in Thailand:

- Ownership of land;
- Utilisation of foreign skilled workers and experts to progress the Thailand project; and
- Transfer of funds internationally.

2) The following tax exemptions have been granted:

- Import duties on machinery; and
- Corporate income tax on the initial net profit and dividends derived from the promoted activity (to the extent of the capital investment).

This project is of great significance as it signifies the start of the IGES expansion into the new region of South East Asia.

### **Hong Kong and China**

#### **Hong Kong**

As announced on 29 March 2019, IGES appointed international engineering consulting firm Meinhardt to conduct an Environmental Feasibility Study for IGES's proposed 200 TPD facility located at Eco Park, Hong Kong. The scope of work comprised two main aspects:

- 1) the Environmental Impact Assessment requirements; and
- 2) implications of the proposed project.

The results of this independent feasibility study supported the IGES initiative and concluded that the EcoPark precinct is fit for purpose. The Company will continue to work with the local government and regulatory bodies to obtain the necessary approvals for the construction of the IGES facility in Hong Kong.

In early May a contingent of IGES executives will travel to Hong Kong to progress the joint venture project with its partners Hong Kong Telford Envirotech Group Limited ("**Telford**"). As announced on 2 July 2018, IGES will hold a 70% equity stake in the joint venture company with Telford and will control 3 seats of the 5-seat board, in addition to controlling the appointment of all key management personnel.

#### **China**

In China, IGES continues to work closely with its local joint venture partner, Beautiful China Holdings Company Limited and has lodged various approval documents for the project with a range of local government agencies. The Company expects preliminary approvals shortly, at which point it will progress to full design and environmental approvals.

### **Independent Testing**

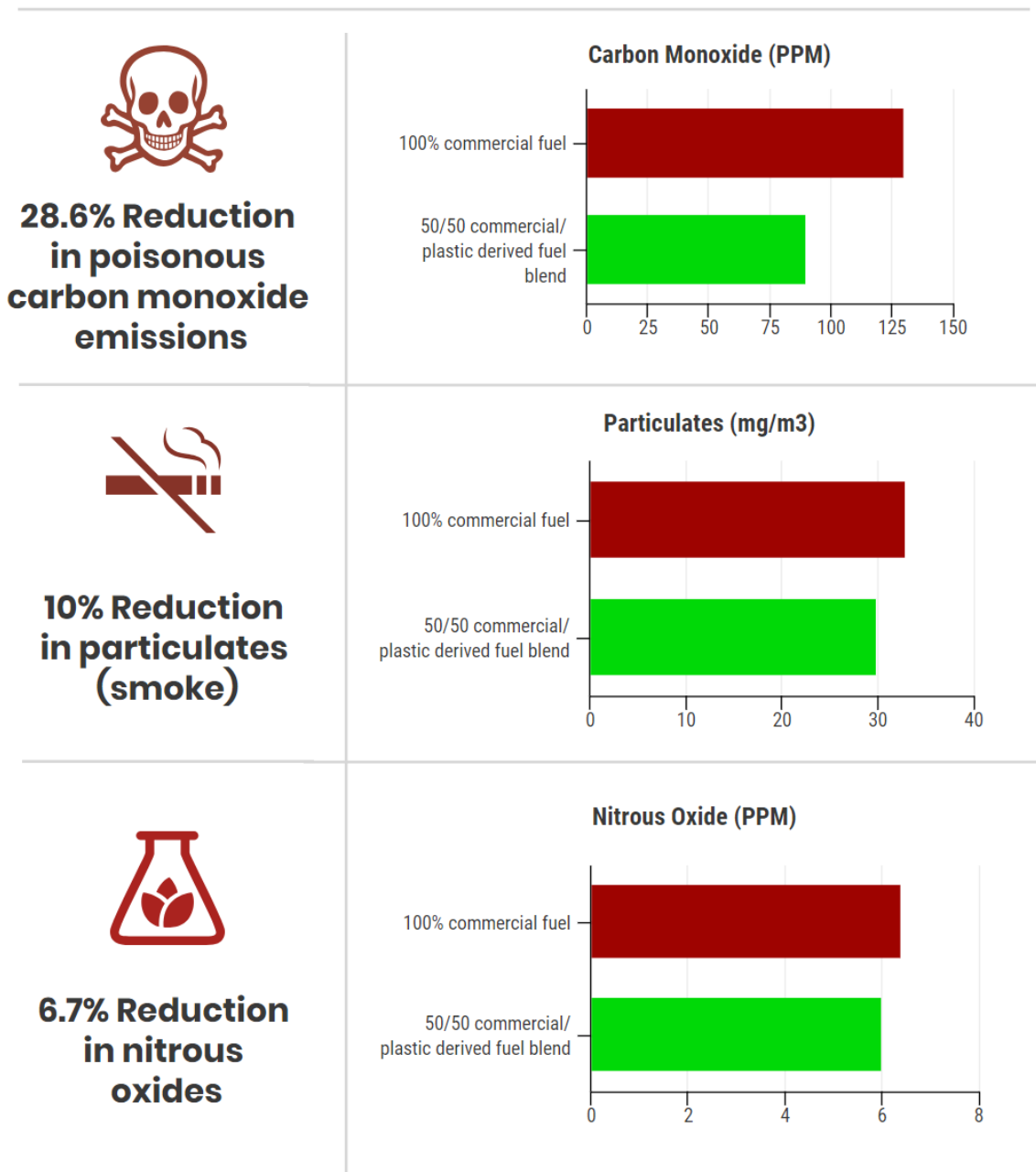
As announced on 19 February IGES received results of independent testing of its diesel product produced using the companies patented waste plastic to liquid fuels product.

IGES has successfully tested blends of petroleum based commercial diesel and diesel derived from waste plastic produced using IGES in-house patented technology. Blends of up to 50% IGES fuel and regular bowser fuel were tested. The Company chose this percentage to give a real-world operating environment that may be representative of the highest blends that would be seen in a wholesale market where the IGES product may necessarily be added to a customer's existing fuel inventories. It must be noted that the Company has a patented plastic to fuels process that results in a range of fuels and products that meet all standards, including EN590 (Road Ready Diesel), EN228 (Road Ready Petrol), Naphtha, Marine fuel and Marine Diesel Oil (MDO) requiring no further blending or refining before being used in a vehicle, ship, or equipment.

The tests were performed by ERP Engineering Pty Ltd (“ERP”), an independent engineering firm based in the Illawarra region. ERP was selected as it is an Australian owned and operated company that has 20 years’ experience in diesel emissions measurement.

While the Board acknowledges that further analysis is required on a broader sample size, the results from ERP of the IGES fuels show a marked decrease in pollutants across the board in the tested blends.

### RESULTS – Significant decrease in pollutants across the board in the tested blends



Further details can be found here:

<https://www.igesolutions.org/wp-content/uploads/White-Paper-Emissions-Comparison.pdf>

### **About IGES**

IGES is focused on creating a cleaner planet for the next generation through the conversion of end of life plastic into valuable fuels. Plastic used in the process would otherwise be sent to landfill or be discarded into the environment. The Company has a patented plastic to fuels process that results in a range of fuels and products, including EN590 (Road Ready Diesel), EN228 (Road Ready Petrol), Naphtha, Marine fuel and Marine Diesel Oil (MDO). The specific products we provide from our range are determined by the territory requirements for each individual site location. The Company believes that utilising its technology will inevitably reduce the amount of plastic entering the environment. It will also help to develop circular economies, thereby creating a cleaner planet for the next generation, while bringing value to shareholders.

### **FOR FURTHER INFORMATION CONTACT:**

**Joshua Herbertson, Company Secretary      +61(0) 438 771 846**



## Appendix 4C

### Quarterly report for entities subject to Listing Rule 4.7B

Introduced 31/03/00 Amended 30/09/01, 24/10/05, 17/12/10, 01/09/16

**Name of entity**

Integrated Green Energy Solutions Ltd

**ABN**

23 003 669 163

**Quarter ended ("current quarter")**

31 March 2019

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	-	-
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	-1	-1
(d) leased assets	-	-
(e) staff costs	-774	-2,497
(f) administration and corporate costs	-1,648	-3,721
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	1
1.5 Interest and other costs of finance paid	-77	-808
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	474	1,346
1.8 Other (provide details if material)	-220	1,751
<b>1.9 Net cash from / (used in) operating activities</b>	<b>-2,244</b>	<b>-3,928</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-3,513	-11,389
(b) businesses (see item 10)	-	-
(c) investments	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
	(d) intellectual property	-	-
	(e) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) property, plant and equipment	-	-
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	-	-
	(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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-3,513</b>	<b>-11,389</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	5,375
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-1,246
3.5	Proceeds from borrowings	7,500	12,449
3.6	Repayment of borrowings	-92	-92
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>7,408</b>	<b>16,986</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of quarter/year to date	1,365	1,346
4.2	Net cash from / (used in) operating activities (item 1.9 above)	-2,244	-3,928
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-3,513	-11,389
4.4	Net cash from / (used in) financing activities (item 3.10 above)	7,408	16,986

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of quarter</b>	<b>3,016</b>	<b>3,016</b>

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	3,016	3,016
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>3,016</b>	<b>3,016</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Current quarter  
\$A'000

225

-

Directors fees

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Current quarter  
\$A'000

-

-

-

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities	125,000	12,500
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

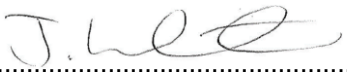
Interest rate is 8.5% on funds drawn down. Funding is secured by real property and equipment.

9. <b>Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Research and development	-
9.2 Product manufacturing and operating costs	-
9.3 Advertising and marketing	-
9.4 Leased assets	-
9.5 Staff costs	953
9.6 Administration and corporate costs	1,277
9.7 Other (Construction of Amsterdam Facility)	11,200
<b>9.8 Total estimated cash outflows</b>	<b>13,430</b>

10. <b>Acquisitions and disposals of business entities (items 2.1(b) and 2.2(b) above)</b>	<b>Acquisitions</b>	<b>Disposals</b>
10.1 Name of entity	-	-
10.2 Place of incorporation or registration	-	-
10.3 Consideration for acquisition or disposal	-	-
10.4 Total net assets	-	-
10.5 Nature of business	-	-

### 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.

Sign here:  ..... Date: ....30 April 2019.....  
(Director/Company secretary)

Print name: ...Joshua Herbertson.....

### Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly 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 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.