



December 2022

# Returning Waterways to Health

World leaders in water remediation

ShareCafe – Market Update, February 2023

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Full year 2022 results to be  
released on Feb 28<sup>th</sup> 2023



# Disclaimer

Statements contained in this presentation, particularly those regarding possible or assumed future performance, estimated company earnings, potential growth of the company, industry growth or other trend projections are or may be forward looking statements. Such statements relate to future events and expectations and therefore involve unknown risks and uncertainties. Actual results may differ materially from those expressed or implied by these forward looking statements.





# About PET:

## Phoslock

## Environmental

## Technologies



A global leader in the treatment and remediation of water impacted by excessive levels of phosphorous.



- PET is an Australian company that has been operating in environmental water remediation for more than 20 years
- Global footprint with a team of 22 full time staff plus numerous agents, licensees and distributors
- Headquartered in Melbourne, Australia and listed on the Australian Securities Exchange (ASX Code: PET)
- Flagship proprietary product is Phoslock® - originally developed by the CSIRO - which binds phosphorus so it settles in an environmentally benign state
- Recent additional product "Phosflow" for flowing water P binding
- Extensively assessed by independent experts – over 100 peer reviewed scientific publications
- Distinct advantages over competitive treatments
- More than 300 successful applications globally to date

# A global challenge

Nutrient load is a widespread problem which affects water bodies worldwide. It is a natural phenomenon which usually occurs over centuries, as water bodies fill with sediments.

Human activity accelerates this process.

**“Phosphorus is the most common cause of water quality failures under the WFD in England and is the number one reason for waterbodies not achieving good ecological status”.**

European Environment Agency (2019).

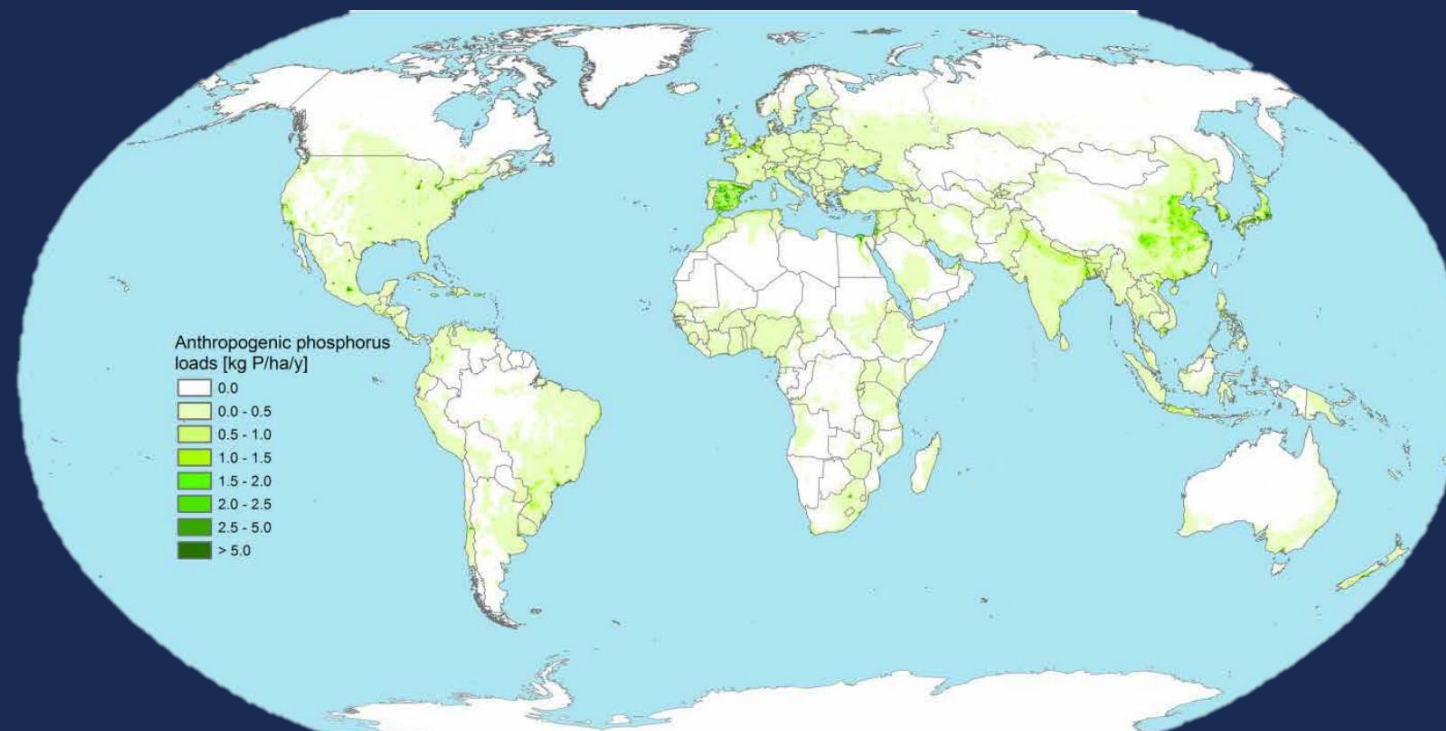




# Global phosphorus pollution



Phosphorus pollution is a global issue



Brownlie et al., (2022) *Our Phosphorus future*.

**71%** of lakes in the United States have impaired water quality

Haque (2021). *Sustainability*, 13(12): 6565

**~40%** of lakes under the remit of the Water Framework Directive(WFD) fail ecological quality targets

European Parliament (2000).

“Phosphorus is the most common cause of water quality failures under the WFD in England and is the number one reason for waterbodies not achieving good ecological status”.

European Environment Agency (2019).

**>83%** of freshwater habitats in the European Union are classed as being in unfavourable condition (higher than any other ecological type)

European Environment Agency (2015).



# A proven technology and an economic solution

## PHOSLOCK<sup>®</sup>

- Our flagship product – a unique fresh waterbodies remediation management tool.
- It improves ecological structure and function in waterbodies.
- Developed by the CSIRO in the 1990s.
- Once applied to water, Phoslock<sup>®</sup> binds available phosphorus and makes it inert within the system.
- It has been extensively researched by independent experts as having distinct advantages over other competitive in-lake phosphorus control treatments.



Over the past 25 years, Phoslock<sup>®</sup> has been applied to more than 300 waterbodies, including lakes, ponds, reservoirs, impounded rivers, and brackish and saline waters and used in more than 20 countries.



# A “total water solutions” provider

## Phosflow™

- A solution to help reduce the amount of nutrients before entering waterbodies and waterways.
- It can be used across a number of both diffuse and point sources, such as:

Agricultural  
Run-off



Waterway  
Restoration

Livestock  
Run-off



Aquaculture

Stormwater  
Management



Wastewater  
Treatment



- Significant potential as another measure in global water remediation , particularly flowing water applications
- Allows for restoration within new sectors previously not engaged
- Potential to be re-generated and the phosphorus recycled to be used as a slow release fertiliser



# Sales Strategy Key Drivers

Customer &  
Commercial



Manufacturing  
& Supply Chain



Research &  
Development



People,  
Performance &  
Culture

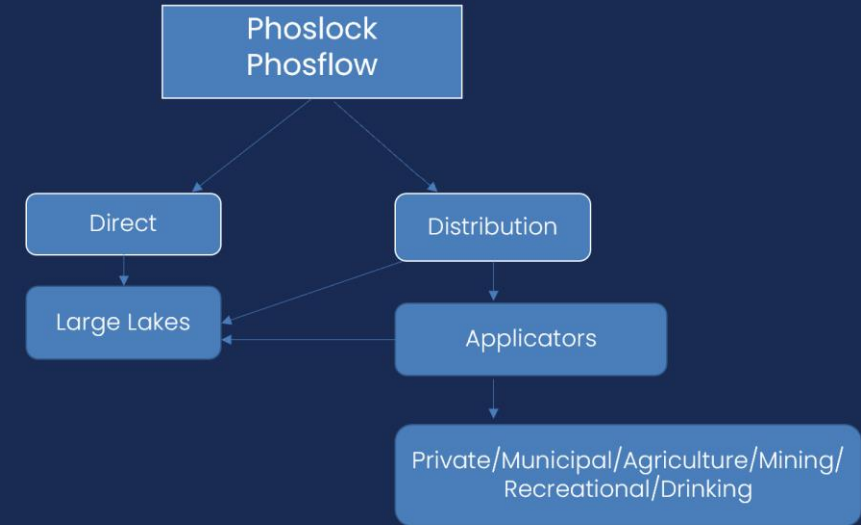




# Customer & commercial

## Expanding our market reach

- We are transitioning to a 'distribution-led' go-to-market model in all regions, complemented by 'direct' sales to the 'large lakes' segment;
- Distribution relationships have been established in South America (Brazil and Uruguay ) with other regional markets to follow);  
Europe (multiple distributors servicing in country markets and diverse market segments);  
US.
- We are in the process of identifying suitable distribution partnerships in ANZ
- Completed a restructuring for our China operation from a direct sales to distribution model;
- As we complete and bed-down our distribution relationships, we are reviewing our operating presence on a region to region basis in order to right-size our structure and ensure we have appropriate commercial oversight and management in place.



### Targeting market segments that generate more accessible, reliable and repeatable business

- Previous focus on large lake projects has proven to be unpredictable, 'lumpy', business which has been disproportionately impacted by funding delays and constraints relating to COVID;
- Our new distribution network is focused on smaller, but more accessible, reliable and repeatable projects involving nutrient control in smaller drinking water catchments/reservoirs, private waterways, golf courses, recreational water, treatment plants and operations , mining and water reclamation;
- Securing the rights to Phosflow opens up a large new market segment for PET – flowable remediation and nutrient control projects;
- Larger lake projects will remain a target for PET, but these are likely to continue to be difficult to forecast from a timing perspective.





## Canada

### Subsidiary

Pending registration – multiple large projects on standby

## USA

GM Appointed

Commercial Lead and Sales x 2

Manufacturing MOU signed for Western hemisphere manufacture

Multiple distribution agreements in place for repeatable non lake segment

Ongoing trial work with US Army Corp of Engineers and City of Orlando

Multiple large lake projects

# Global Operating Presence

## Europe

Commercial Manager (UK)

Head of Aquatic Science (Scotland)

Applications Lead ( Germany )

Agreements signed with distributors and partners in the UK (SSI), Germany, Spain; pending in France and Italy

Significant Large Lake projects in Finland, Norway , Germany and the Netherlands

## Brazil

Distribution licensee – Hydrosience

Multiple projects on going and developing in Brazil

New distribution partner in Uruguay

**Total Staff 22**

## China

Manufacturing & R&D (Changxing)

Whole sale sales model / distribution and water engineering partnerships

## Australia / New Zealand

Corporate Office (Melbourne)

R&D, Operations, Finance, Sales

Segments developing in Mining , water remediation partnerships – private sector distribution agreements.

Large Lake opportunities require funding

Sales Agent and Application (NZ)



# Project/commercial activity in review

## Australia / New Zealand

Projects recently completed in Western Australia and NZ

Trial work undertaken in multiple locations around Australia – mining and dredging (Phoslock & Phosflow)

Contract signed for mining tailings ponds treatment (NT)

## China

Focus on business reset and determining optimum business model to balance opportunities with risks

Few smaller projects completed in the 1<sup>st</sup> half

Multiple projects initiated but slow uptake

COVID restrictions impacted sales opportunities

## Europe

Profile builds following successful completion of Netherlands project at Kraslingse Plas – several smaller projects completed recently

Treatments completed in Scotland and Nordics

New distributors appointed in Spain, Germany, UK

New UK partnership with SSI (part of South Staffs Water)

## South America

Hydroscience (Brazil distributor) placed significant orders for Phoslock during 2022.

Work continues on Pampulha project and several drinking water reservoirs

Approval secured for Uruguay application scheduled for 2<sup>nd</sup> half – pending

Developments underway by Ecuador's largest shrimp producer – important new market segment

## North America

Review of distribution strategy; new senior commercial role filled

Distribution agreements signed

Good progress made with trial work in Florida and with US Army Corps of Engineers

Significant new larger lake opportunities presenting in key regions (Great Lakes & Florida)

Continued to address regulatory issues in Canada

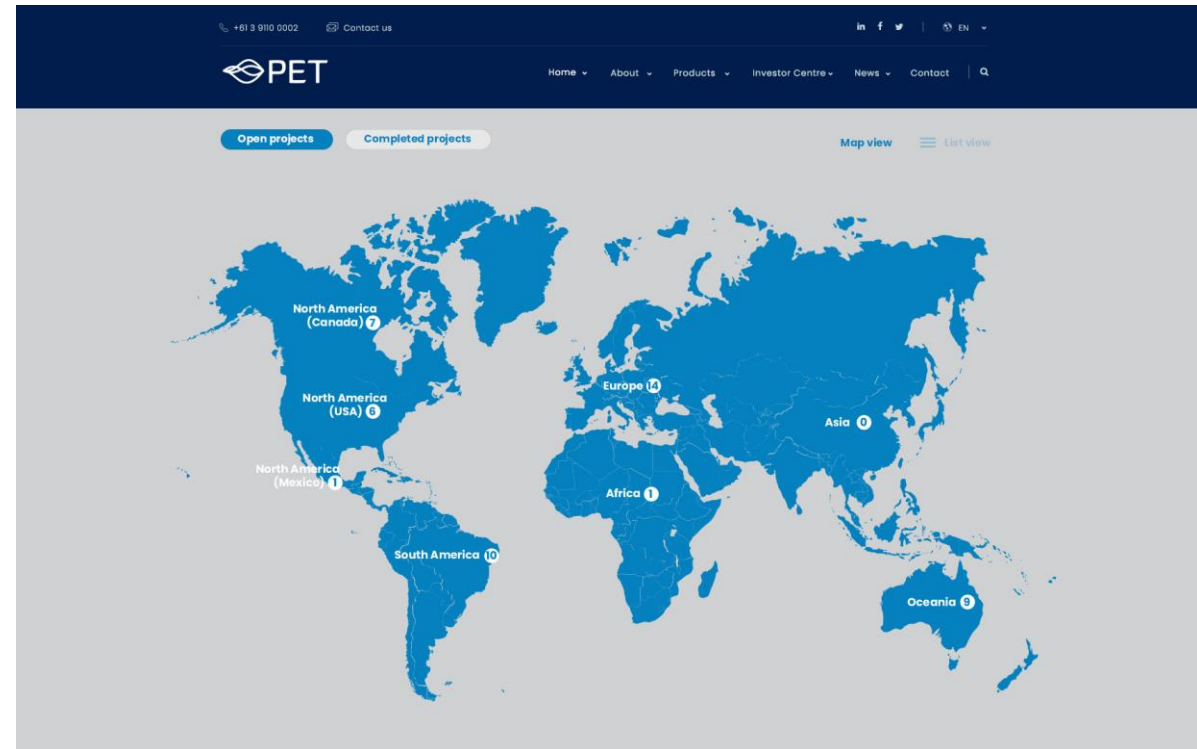


# New web page for Open Projects across the globe



**To provide stakeholders a greater transparency and better insight into PET's pre-contracted and in-progress projects a new web page is being developed:**

- The Open Projects will be displayed using an interactive map interface
- A clear and simple way of presenting the projects with the idea to provide an insight into the work PET has underway or is currently targeting globally
- Regular updates on each project's progress and information on type, size, technology and first engagement will be available





# R&D program is targeting new growth opportunities

Focus has been on products for treatment of flowing water – a new market segment, allowing PET to provide total solutions

- Phosflow, a patented product proven to be effective in the removal of phosphorus from freshwater sources including stormwater, agricultural runoff and municipal waste water
  - Exclusive global distribution agreement signed July 2022
  - To be distributed via PET sales channels and distribution partners
  - Represents medium to long term opportunity as market development continues

## Additional flowing water opportunities

- Other lanthanum impregnated substrates
- Other metal impregnated Activated Carbon Impregnated Activated Carbon
- Nitrogen capture

## Enhancement of Phoslock®

- Phoslock® Eco
- Phoslock® Plus

## Alternative/New Uses for Phoslock®/Phosflow™

- Dredging
- Mining
- Mechanical Harvesting





# Outlook

## Key priorities

In the short to medium term the outlook remains challenging from a revenue perspective as we look to bed down our new distribution-led business model; rebuild our sales pipeline and execute on our growth strategy, while incurring some ongoing costs associated with legacy issues.

For the remainder of 2023, we see opportunities in a number of our markets, especially the USA, Europe and ANZ.

The focus will be on securing 'winnable' projects that positively impact short term revenues.

We believe Phosflow and our other R&D developments complement Phoslock and provide customers a 'total remediation solution'.

### Execute on sales strategy



- Clear focus on 'winnable' sales opportunities across target geographies as we bed down new distribution arrangements
- Review funding opportunities to develop projects faster
- Seek appropriate partnerships with other water remediation technologies



- Expedite and Execute on currently contracted projects
- Resources deployed appropriately and commensurate with sales levels



- Continue implementation of review recommendations re People & Culture; R&D;
- Manufacturing/supply chain adjustments to fit forecasted demand



- Continue to address regulatory issues in Canada



- Embed new sales model in China.



# Funding Position



Management and Board are focused on cash flow while business rebuild progresses

Strong focus on redeployment of resources to support best cash generation opportunities

Abnormal costs associated with China investigations and audit reducing

Cash / cash equivalents (as at 31 December 2022): \$14.5 million

Full year 2022 results to be released on Feb 28<sup>th</sup> 2023





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