

Phoslock Environmental Technologies (PET)

World Leaders in Water Remediation



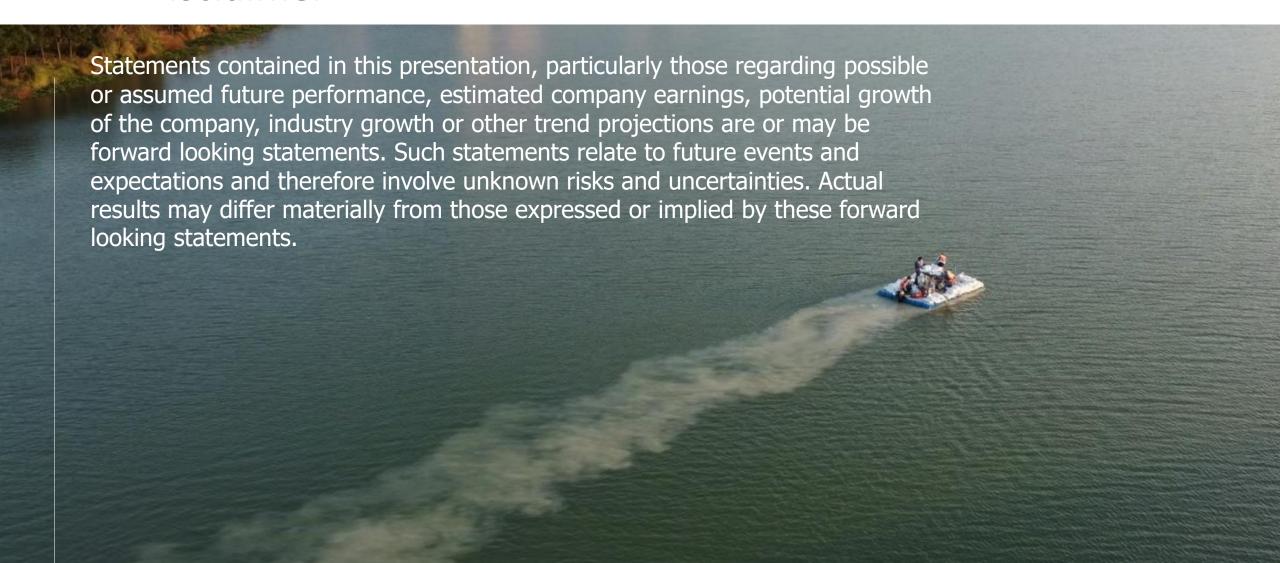
Business and strategy update



Driving sustainable growth



Disclaimer







COVID-19 negatively impacts on both project timing and working capital

Significant setback in China due to fraud and accounting irregularities

- Substantial work undertaken with auditors, legal and external consultants to ensure future compliance in all areas
- Shares remain in trading suspension until accounts are without disclaimer

Further investments in management strength; process and systems improvements; R&D and corporate governance... and a review of manufacturing expansion options

Positive progress on business diversification strategy

- Additional resources to support geographic expansion
- New distributors appointed; subsidiaries established



2020 Full Year Results

Key Financial Results	12 Months To December 2020	12 Months To December 2019 (Restated)
Revenues	\$6.9 million	\$19.8 million
Gross Profit	\$4.1 million	\$11.4 million
Underlying EBIT ¹	(\$7.4 million)	\$0.4 million
NPAT ²	(\$26.0 million)	\$(1.1) million
Net Operating Cash Flow	(\$12.6 million)	\$7.6 million

Key balance sheet metrics

Receivables	\$2.7 million	\$12.4 million
Inventory	\$4.0 million	\$4.7 million
Cash at bank	\$30.4 million	\$15.0 million

^{1.} Underlying EBIT is a financial measure which is not prescribed by Australian Accounting Standards ('AAS') and represents the profit or loss under AAS adjusted for the add back of income tax, finance costs and certain non-cash income and expense items that are deemed to not have an ongoing affect to the underlying performance of the business. The Company believes that presenting Underlying EBIT provides a better understanding of its financial performance by facilitating a more representative comparison of financial performance between financial periods.





Results impacted by a number of issues

Lower revenues due to China flooding; COVIDrelated delays (global); and review of China contracts following fraud/accounting investigations Higher expenses due to restructuring costs in China; investigationrelated costs and management transition expense

Cash flow impacts include severance and restructuring costs and safety stock inventory build in early stages of COVID environment

One-off impacts include write-downs of inventory, China receivables and other assets



COVID-19 Impacts



Major impact on Government spending priorities and treatment windows

Difficulty in accessing sites; restricted travel conditions

Deferral of some remediation projects – but relatively few cancellations

Impact on business development activity

Comprehensive business continuity; and employee safety and welfare programs implemented



Limited impact on manufacturing / production



China Issues & Reset



What Happened

PET shares go into voluntary suspension

Irregularities identified during audit of first half accounts – investigations initiated

> China based nonexecutive directors resign in September

Investigation findings include incidents of fraud (including falsification of contracts and invoices); undisclosed related party transactions; unsubstantiated forecasts; incorrect bonus payments and share options

distribution.

Major contract compliance review

Significant tax and cost impacts

Our Response



Thorough and independent investigation of all matters

Comprehensive review of financial reporting procedures, delegated authority policies and general risk management framework

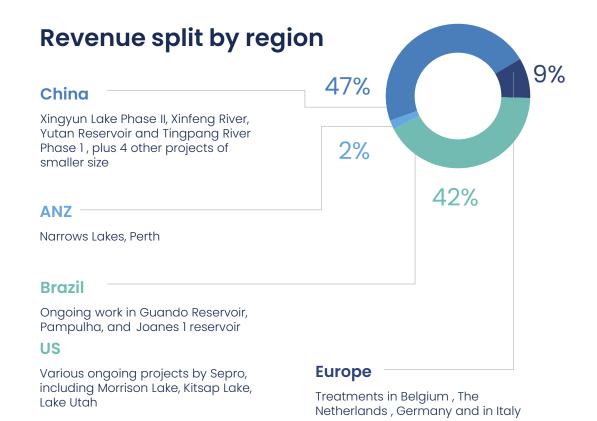
Additional legal, forensic accounting and business advisory/support resources retained

Restructure of China operations, with new appointees in key leadership roles

Independent market review

Board renewal process

Business Review FY20





Projects completed or commenced in Brazil; Europe and Nth America

COVID delays particularly impacted European projects with several deferrals

New opportunities in Nordic Region, with potential projects identified in Finland and Norway Successful trial work completed in Morrison Lake (Michigan) and Kitsap Lake (Washington State)

China: Multiple projects ongoing; trial work continues in Lake Dianchi

New distributors appointed and resources put in place

Morrison Lake - Michigan

Average Summer Total Phosphorus (10 meters)
June – September Samples
Error Bars = 1 SD









Ongoing uncertainty due to COVID impacts, but expect those headwinds to ease over course of the year and some delayed projects to commence



Additional trial work planned in USA (Florida, Utah, Texas)



High level of confidence that we will return to profitability in FY21 as we continue to execute on a sustainable growth plan



Projects expected to commence in Brazil, Europe, Australia/New Zealand

Mix of existing contracts; re-treatments and new work



Regulatory changes in Canada being closely managed



Restructured China team to rebuild local business – a number of projects confirmed for FY21











About Phoslock Environmental Technologies







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

High phosphorous levels often result in eutrophication and are one of the major contributors to water pollution around the world, driven by increased urbanisation, agricultural run-off and global warming.

Phoslock is a proprietary product - originally developed by the CSIRO - which binds phosphorous and enables it to settle in an environmentally benign state. It has been extensively assessed by independent experts as having distinct advantages over competitive treatments.

The Phoslock technology is now being expanded into international markets, with additional technical and sales resources and a focused marketing strategy. A revised R&D program will generate product extensions that allow further diversification into new market segments.

The addressable market for our products and services is substantial and growing and we are putting in place the strategies, resources and systems that will enable us to capitalise on that opportunity.

Key Investment Highlights





Proprietary water remediation technology with important environmental benefits



Extensive scientific and independent validation of efficacy



Portfolio expansion supported by a more focused R&D investment



Successful applications water bodies in more than 20 countries



Budgeting to return to operating profit (positive FY21 - Positioned for over next 2-5 years



Experienced and motivated management team



Established in key global regions including Europe, The Americas, China and Asia/Pacific

- China restructure and reset well advanced
- Geographic expansion opportunities focused & targeted







Canada

Subsidiary

USA

Subsidiary

Fulltime commercial Lead

Distribution partner – SePRO

Global Operating Presence

Europe

Head of International Sales (UK)

R&D (Germany & Scotland)

Brazil

Distribution licensee -Hydroscience

Total Staff 48

China

Manufacturing and R&D (Changxing)

Sales Office (Beijing)

Australia

Corporate Office (Melbourne)

R&D pilot testing





Focused expansion into targeted markets

Key in-market distribution partnerships, supported by local Phoslock resources, with a strong sales orientation, to access and grow targeted geographies



Segmenting our markets to identify new and additional opportunities

Water body type; commercial and government segments; treatment and preventative applications; and multi-year retreatments



Securing partnerships that meet shared objectives

Capitalising on environmental focus; working with adjacent space industries; identifying third party funding opportunities



Investing in technology improvements and new products

R&D program restructured to be more focused on targeted product line extension and portfolio expansion



Optimising our manufacturing processes and costs

Driving down costs and optimising supply chain efficiencies and reliability



Structure, processes and Governance

A more disciplined approach with improved systems to support growth and geographic expansion



geographies and

products

PET is building a

platform of sustainable and profitable growth

by expanding market

access across multiple



Addressing a growing environmental, economic and human health challenge



Impacts are



Environmental



Economic



Recreational



Humanitarian

Deteriorating water quality is a major global problem, driven by climate change, population growth and increasing levels of pollution

Excess nutrient levels result in eutrophication

Harmful toxins a threat to marine habitats, animals and humans

Generates high levels of carbon dioxide Significant economic costs

"At current rates of population **growth** and climate change **eutrophication** in lakes will **increase** by 25 to 200 percent by 2050 and double or quadruple by 2100."

US EPA Paper published in Nature Communications Journal, March 2019 Freshwater eutrophication has been estimated to cost the U.S. economy US\$2.2 billion annually (Dodds et al, 2009) while in the U.K. these costs have been estimated at between US\$105-160 million (Pretty et al, 2003). A survey of the state of the world's lakes by the International Lake Environment Committee (ILEC) in 1993 found that 54% of the lakes in Asia were eutrophic, while in Europe and North America, the percentages were estimated at 53% and 48% respectively.







Our Technology Platform



Phoslock® is a CSIRO developed formulation of Bentonite Lanthanum

Locks up phosphorous safely and permanently

Environmentally friendly - non toxic to humans, animals, fish and aquatic plants

Internationally certified for use in drinking water reservoirs

And includes proprietary know-how relating to the manufacture and application of **Phoslock** and the development of a pipeline of products and systems designed to assist in the management of water quality

Beijing Canal











More than 100 peerreviewed scientific papers have reported on the efficacy and excellent environmental impact profile of **Phoslock** treatment



Strong independent and scientific validation is a key requirement for government regulatory authorities assessing options for management of water quality

Phoslock was able to rapidly (<2 weeks) and significantly (p < 0.0005) decrease total (>80 %) and free reactive (>95 %) phosphorus in the water column and shift potentially releasable sediment phosphorus fractions to residual forms after treatment.

Bishop, W.M., McNabb, T., Cormican, I., Willis, B.E., Hyde, S., 2014. Operational evaluation of phoslock phosphorus locking technology in Laguna Niguel Lake, California. Water, Air, Soil Pollut. 225 (7), 1-11

The results showed a sharp reduction (more than 80 %) of the P concentrations along the water column after the lanthanum-modified bentonite clay application and, from January onwards, the settled clay controlled the P release from the sediments, preventing a sharp increase in total P concentrations to values exceeding 0.28 mg P I-1 that took place from August until October in untreated conditions.

Crosa, G., Yasseri, S., Nowak, K.E., Canziani, A., Roella, V., Zaccara, S., 2013. Recovery of Lake Varese: reducing trophic status through internal P load capping. Fundam. Appl. Limnol. 183 (1), 49-61.

Successful Case Studies







Lake Bromont Canada 2017









Dolors Planas, a researcher and Professor Emeritus at the Université du Québec à Montréal: "Total phosphorus concentrations at the deepest point in Lac Bromont have decreased by more than 70% compared to the pre-Phoslock concentrations, despite the duration and extent of the oxygen deficit during these periods."

Serpentine Lake London 2012 & 2019







Phoslock is being used to manage phosphorus levels in London's Serpentine Lake. The iconic lake attracts more than 10 million visitors each year and has already been treated with Phoslock twice – once prior to the Olympic Games in 2012 and a second time in 2019. Both applications have resulted in reductions of up to 88.5% total phosphorus in the lake.



Phoslock is currently the only product on the market which binds phosphorus and keeps phosphorus bound across the entire pH range found in natural water bodies. Unlike products like aluminium salts, which are commonly used in the U.S., the introduction of Phoslock into an aquatic system will not cause a drop in pH or an increase in conductivity and the product can be used safely without any adverse effects on aquatic life or buffering agents.

Technology protection via issued and pending patents across multiple geographies and with extensive IP know how.

Our Competitive Position



Go-To-Market Strategy

PET utilises its own in-market presence and/or locally appointed distributors to promote **Phoslock** product and services to authorities responsible for the maintenance of water reservoirs, waterways and

aquatic environments.

Each remediation project is unique



Requires significant testing and analysis to demonstrate efficacy of treatment and expected outcomes



Strong referral system capitalises on successful treatments elsewhere, with clear cost/benefit analysis



Sophisticated marketing campaign employs social media platforms to create both a ground up and top down awareness of Phoslock solutions



Promotion of treatment benefits to environmental groups, other 'influencers' and organisations with a shared interest in addressing water quality challenges





Expanding Opportunities As We Diversify Into Global Markets



Three-year objective to achieve balanced geographic presence in Europe, The Americas, Asia Pacific and China Strong platform to work from, with successful projects, resources and structure already in place. Work undertaken or underway in:

Europe

Germany, UK, Netherlands, Finland, Belgium

The Americas

USA, Canada, Brazil

Asia Pacific

Australia/NZ, Malaysia, Singapore, Thailand, China

Additional resources in place to support international expansion

New registered offices – USA, Canada New Commercial Lead USA Recruiting Canadian Commercial Lead

Recruiting European Commercial Lead to support European team Retained Marketing / Social Media resources

Continued patent filing globally

Distribution agreement for Thailand Restructured China sales team, with new leadership







And Expand Into Additional Market Segments

Water Bodies

Segments

Customers

Purpose

Applications

Phosphorous

Current Focus & Positioning Target Expansion Freshwater lakes, reservoirs, canals Rivers, inflow sources Recreational, environmental, drinking water Recreational, environmental, drinking water Corporate/Private Government Ongoing, repeat remedial applications; use Used as a remedial treatment as a preventative treatment Other pollutants, Nitrates, photosynthesis

inhibitors

The China Reset

Water quality remains

a key strategic focus

Government; current

five-year plan identifies

~ \$550 billion for water

improvement projects

for Chinese

China remains an important growth opportunity for PET



Water remediation solution





Contracting Company

Contracts with suppliers of different inputs/services



Successful tender



Local organisation has been restructured, with new leadership

Corporate governance, processes and systems reviewed, with additional head office oversight

Ability to leverage extensive experience in China and numerous successful projects Highly focused and targeted approach to likely successful tenderers

Working with reputable third parties operating within the water management industry Greater transparency and decision-making control

All contracts reviewed

New business model informed by independent market review

to undertake project

China market is controlled by a Government tender process.

PET-China's customers for Phoslock are the winning bidders for water quality projects

Our objective is to ensure a winning bid (tender) has Phoslock included as part of the proposal or an allowance for 'P' treatment that could be applied to a Phoslock purchase.







Independent market review informs restructure of China business

New management; new sales structure; improved systems and greater oversight/accountability



Investment in new systems (global) to provide greater visibility and improved internal communications



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New financial reporting procedures, delegated authority policies and general risk management framework (global)

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Commitment to Board renewal process, with focus on financial, legal and governance skills

Protecting The Business

Positive steps taken to ensure no recurrence of 'China' issues



Manufacturing



Production efficiency program underway to identify cost savings



Phoslock is manufactured in an ISO compliant factory in Changxing, China





Previous plan to construct 2nd manufacturing facility in China reviewed. Plant to be located elsewhere to optimise supply chain flexibility and meet considerations relating to tariffs , raw material supplies and other costs

Investing in new growth opportunities Moving to a more focused R&D program





New research collaboration in place with The Water Research Foundation, and Western Sydney University New research collaboration with CSIRO 'Water for the Environment Program'

Assessment criteria

- Removal of nutrients, organics, metals – ideally multifunctional
- Fast acting 2 hours to 2 weeks
- Low energy requirements
- Cost effective and safe
- Remove or leave in place
- No residuals or secondary pollutants
- Reduction of bacteria and viruses
- Ability for fast track to commercialisation

Lead R&D project: 'Zeep' reusable and recyclable filter cartridge

ZEEP installed in rivers/canals





Other projects include



Zeep modified Zeolite P filtration



Bacteria brick



Phoslock brick



Nitrate removal media



High efficiency aerators



Mixed metal oxides nanocomposites

A Clear Path To Growth And Increased Value











A more balanced geographic exposure as the Company expands into international markets A focused R&D investment that delivers new product/service opportunities and facilitates entry into new market segments

A restructured China business that can capitalise on significant local market opportunities





Key Priorities For The Next 12 Months



Reset stable business platform in China

Accelerated commercialization Board renewal process







Resume trading on ASX

Manufacturing review and decision on new plant location

Appoint commercial leads in Europe, Canada & Asia/Pac







registration review

R&D review

Deliver revenue growth and return company to sustainable profitability







Strong Funding Position





Cash / cash equivalents (as at 31 December 2020): \$30.5M

Lower working capital and increased margins due to inventory writedown

Debt free

Abnormal costs associated with China investigations and audit reducing in FY21

Lower fixed cost base following review of overheads



Positive Growth Outlook



Successful trial work now being reviewed by prospective customers

Consistent & strong leads on new projects

Business structure in place or in process to capitalise on the opportunity

Focused expansion into existing and new target geographies

Additional trial work scheduled to commence over coming months

Increased opportunities as COVID-19 impacts recede – Governments reprioritise environmental responsibilities

Addressable market continues to grow due to increasing challenge of addressing water quality issues



Board & Management





Laurence Freedman AM
Chairman
(retiring AGM, May 2021)



Non-executive Director (effective 5 April)

& Incoming Chairman (effective AGM, May 2021)



Lachlan McKinnon

Managing Director &
Chief Executive Officer



Matthew Parker

Company Secretary &

Chief Financial Officer



Nigel Traill

General Manager International



Bob ProsserNon-executive Director
(effective 5 April)



Brenda Shanahan AO Non-executive Director



Barry George Sechos

Non-executive Director



Andrew Winks

General Manager Operations



Liu (Del) DuoxiangGeneral Manger China



Harry Knight

Commercial Lead USA

Summary







Phoslock technology has a clear competitive advantage and a successful track record of remediation treatments around the world



The target market for Phoslock technology is substantial and continues to grow



The Company is pursuing a strategy of focused geographic and market segment diversification



Decisive steps taken to address China fraud issues and improve systems and governance at a global level



PET is positioned for sustainable and profitable growth over coming years





More than 300 successful applications.....it works!





Lake Lorene, Washington State, USA



