

# CONCEPT PACK

from the 2022 Accenture Venture Studio a part of WWF Australia's Innovate 2 Regenerate Challenge

## **HOW IT WORKS**

# Our Process

We use a novel combination of established chemical processes and existing equipment from the mining and chemical industries to empty coal-ash dams across Australia and manufacture environmentally safe products.



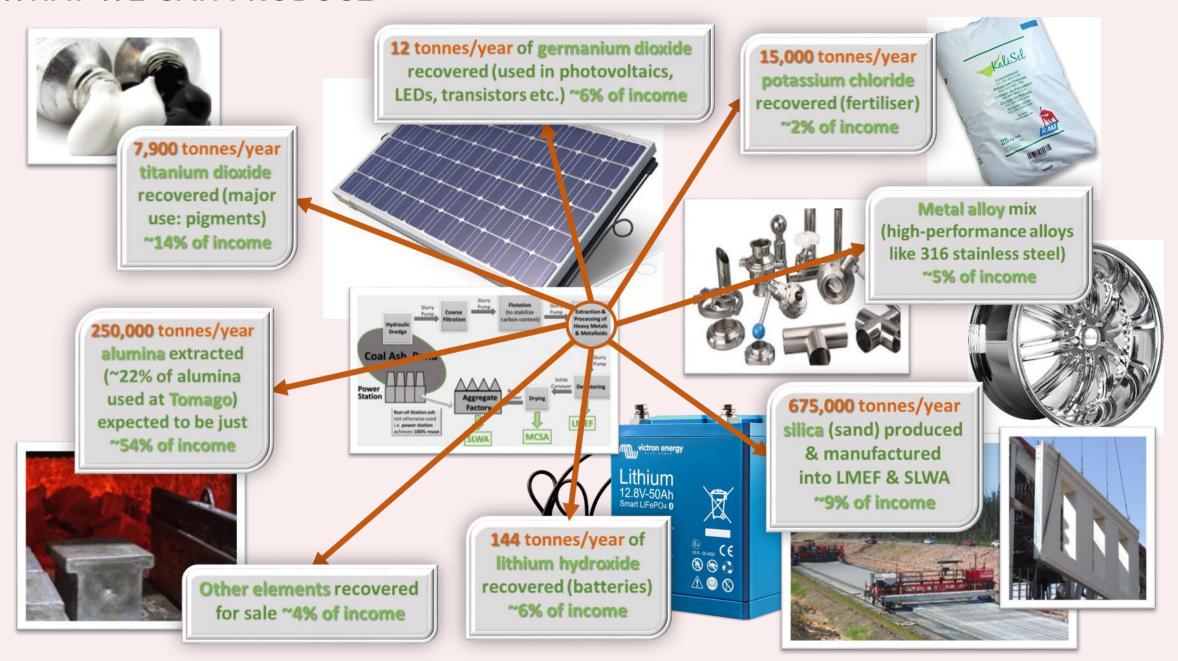


We work with coal-fired power stations to build advanced chemical manufacturing plants and structural lightweight aggregate factories.



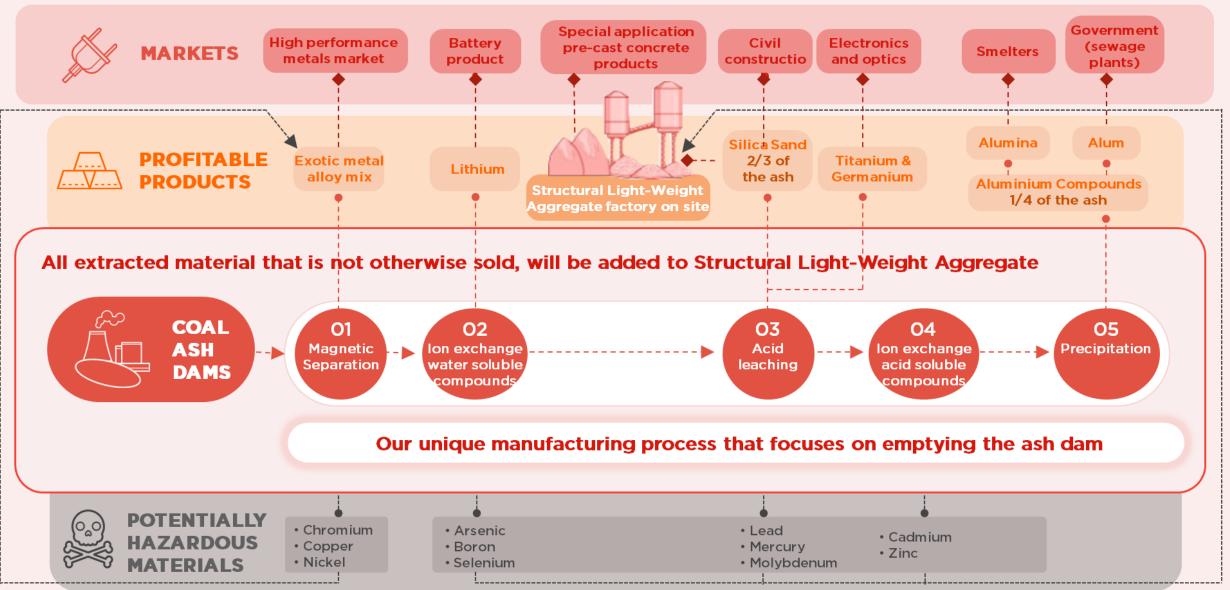
The sale of valuable minerals will fund the processing of potentially hazardous elements into environmentally safe products, serving well-established markets with large growth potential.

## WHAT WE CAN PRODUCE



#### **OUR PATENTED PROCESS**

How we turn industrial waste into a palette of valuable & safe products, emptying the entire dam.



## **HOW IT WORKS**

# **Our Impact**

A facility that processes one million tonnes of coal-ash and employs some 330 people - in jobs that have comparable occupational and remuneration characteristics to the jobs in coal-fired power stations.





With 5% of the commercial profits we will fund a not-for-profit organisation that will enable local communities to develop, manage and own projects with a focus on First Nations, youth and women-led projects.

### OUR REGENERATION PLATFORM

5%

# OUR COMPANY AND PROCESS

Our focus on supporting the regeneration of communities and their environments

# OUR NOT-FOR-PROFIT ORGANISATION

A replicable model for mainstream businesses to be part of the circularity of wealth with limited risks and fully community controlled projects.

# Environment

A novel manufacturing process that empties the whole ash dam and re-uses all components of the ash, setting the highest standards for modern chemical manufacturing.

WHERE WE PROVIDE IMPACT



# re. source

Powered by Wilco Envirotech CAPCITY BUILDING

PROJECT SUBMISSION

**FUNDING** 

5% of profits given back to enable communities around us to regenerate themselves and their environments

#### **Communities**

Enable First Nations, youth and women groups to identify, develop, manage and own their projects, so that they can regenerate themselves and their environments.







Youth & their organisations

Women & their organisations

First Nations
People & their
organisations

### **Keeping a Skilled Workforce**

Creating local jobs that make use of the skilled workforce at power stations, invest in apprenticeships and research & development, collaborate with the local university and TAFE colleges - be the place where people want to work.



# **DISTINGUISHING FEATURES**





We give back more than we take – through a model that empowers communities to be in control, without putting undue risks on our business.

We <u>re.source</u> a not-for-profit organisation that enables communities to formulate their priorities, develop their projects, and successfully manage and own them.



We care about our environment

We developed a novel process to extract all of the potentially hazardous material and all the material that can become a <u>re.source</u> for others – until all the coalash has been safely used up and the local communities can regenerate their environments.



We create good jobs for our communities

Half of a power station's workforce used to be local trades people. We <u>re.source</u> our workforce from here, locally – slightly shifting together from electrical to chemical engineering, but with the same high-quality and high-remuneration jobs.



We are building circular economies

We use power station waste as our key <u>re.source</u>, together with their workforce.

We support modern manufacturing industries, from local lithium battery production to greener aluminium smelting, from solar panel production to specialist precast concrete products.

And we circulate the wealth created, together with our local communities.

#### **NEXT STEPS**

- ☐ Awaiting result of grant application (BCSD Fund, Regional NSW):
  - Testing of ash in dams, independent lab testing of patented process
  - Detailed market analysis for products to be manufactured
  - Business case according to NSW Government guidelines
- □ Planning for small-scale operating plant (FY 2023-24, ~\$2m)
  - Design work for the small-scale factory, including all necessary approvals
  - Building an Alliance of businesses behind re.source & its Regeneration Platform
- ☐ Building the small-scale operating plant (2<sup>nd</sup> half 2024, \$10-20m)
  - Demonstrate scalability & mitigate process risk
  - Fine-tune processes & equipment, address issues as they arise
- ☐ Operating the small-scale operating plant (calendar 2025)
  - Iron out operational & process issues, confirm redundancies needed
  - Confirm & expand off-take arrangements for products produced
  - Finalise commercial arrangements within Alliance, raise funding through IPO
- ☐ Full-scale operating plant (from 2026, \$500m \$1b)