

ZIA Values Case Study

Iluka: Environmental rehabilitation

In this series of case studies, we highlight the work of our members and how it aligns with the ZIA values. In this case study, Neil Foster, Group Environment & Communities Manager at Iluka shares information about the organisation's focus on environmental rehabilitation.



ILUKA

About

Iluka is an Australian based critical minerals company with expertise in exploration, development, mining, processing, marketing and rehabilitation. Iluka's goal is to be a safe, responsible and sustainable supplier of critical minerals.

To achieve this, their board-approved sustainability strategy is structured around three pillars:

- Trusted by our people and communities.
- Responsible for our environment.
- Operate in and provide products for a low carbon world.

Our values and vision

Underpinning this approach is Iluka's commitment to transparency, behaving ethically and conducting business in accordance with high standards of corporate governance through management systems and processes.

Iluka assesses their ongoing sustainability performance against recognised principles, standards and reporting frameworks, as well as external ratings and benchmarking initiatives.

“

Iluka's presence in the Dow Jones Sustainability Indices for the fifth year is a reflection of the continued hard work of our teams across the entire business to generate outcomes that support delivering sustainable value.



ZIA Value

Sustainable by going above and beyond to protect:
ENVIRONMENT

Iluka has a strong focus on the rehabilitation of their mining assets with an integrated approach to planning, rehabilitation and closure that begins at the feasibility phase and continues throughout the life of the asset.

Guided by the Iluka's internal management standards, every site must have a closure plan detailing the closure objectives and potential rehabilitation research or engineering opportunities. However, rehabilitation is not left until the end of the asset's life. Iluka focuses on progressive rehabilitation during the operational phase of a mine where areas are no longer required for mining. For example, in 2021, 742 hectares were rehabilitated across Iluka sites, while significant earth works are ongoing at the Jacinth-Ambrosia and Cataby operations in preparation for rehabilitation.

Investing in rehabilitation research for the future

Iluka is strengthening its understanding and application of revegetation science across the resources industry. In 2019, Iluka sponsored the position of Chair in Vegetation Science and Biogeography, at the Harry Butler Institute, Murdoch University in Western Australia for a five-year term. This research is expected to improve future rehabilitation outcomes across Iluka sites and the mining industry as a whole.

Iluka also supports research at other institutions including the University of Western Australia, University of Adelaide and the Botanic Gardens and Parks Authority, resulting in the publishing of peer-reviewed scientific research articles.

“

How Iluka rehabilitates and closes its mines and facilities is just as important as how the company builds and operates them.

Tutunup South mine case study

At the Tutunup South mine, Iluka restored a wetland to its original location after being preserved in a nursery during the mining of the area. The wetlands contain many individuals of the Priority 3 sedge species *Cyathochaeta teretifolia* which has been successfully maintained in Iluka's nursery for over 10 years.





ZIA Value

Sustainable by going above and beyond to protect:
ENVIRONMENT

South Capel Remediation Project

Iluka is proactive in tackling legacy environmental issues at its sites. The South Capel Remediation Project for example represents extensive collaboration, community engagement, investigation, engineering design and innovation. Completed in 2020, Iluka relocated the equivalent of 176 Olympic-sized swimming pools (440,000 cubic metres) of residue from the old storage dams at Capel dry plant and South Capel into a new, purpose-built facility at the South Capel site. Iluka consulted with the community prior to and throughout the project.

Fauna was relocated in order to clear vegetation and gain access to the old storage dams. Iluka engaged experts in fauna relocation to carefully move marsupials and reptiles, - including the endangered Western ringtail possum, known as 'gnuraren' in the local Noongar language - to nearby and adjacent natural areas. Relocating the gnuraren was done with great care and successfully completed in 2019.

Iluka will continue to monitor the groundwater and rehabilitated areas for approximately 10 years to ensure the rehabilitation is successful. The project, that involved community collaboration throughout, was the finalist in the Australasian Land and Groundwater Association Industry Excellence Awards 2021 in the categories of: Best Remedial Project (Regional) and Best Remedial Project (greater than \$1m).



“

Iluka is a very collaborative organisation, working across teams and across sites all the time. This is where our greatest success is achieved. We have diversity of thought, insight and technical knowledge. We encourage healthy and respectful discussion and debate to get to the right outcome.



ZIA Value

Sustainable by going above and beyond to protect:
ENVIRONMENT

Innovation increases rehabilitation

Iluka encourages innovation by collaborative working, discussion and debate across teams and sites. Their investment in innovation is focused on strengthening operational, sustainability, processing and product outcomes.

A novel tractor-drawn machine made the finals in the 2021 Golden Gecko Awards of Environmental Excellent, presented by the Western Australian Department of Mines, Industry and Regulation.

The bespoke 'Flora Restorer' tractor-drawn machine is Iluka's innovative rehabilitation equipment design that dramatically improved the revegetation of Eneabba's diverse kwongan ecosystem post-mining. Flora Restorer scarifies the sandy soil surface, air-seeds diverse seeds, buries them by land imprinting, and sprays a crust of dilute bitumen emulsion to prevent wind and water erosion.

Flora Restorer has more than doubled the annual area rehabilitated.

“

We are proud that we don't leave legacy environmental issues. We will make sure that we address them and protect the environment and the communities we work within. We see this as part of being a responsible miner.

More information on Iluka's rehabilitation activities can be found on their **website** and in their **annual report**.



Zircon Industry Association
24 Old Bond Street
Mayfair
London
W1S 4AP, UK

www.zircon-association.org

ZIA operates a strict antitrust policy and Code of Conduct for all member communications and activities. Our members commit to ZIA values, which serve to encourage the industry to operate sustainably and with integrity.

