



Department of **Mines,  
Petroleum and Exploration**

**Spotlight**

# Environmental Rehabilitation and Decommissioning

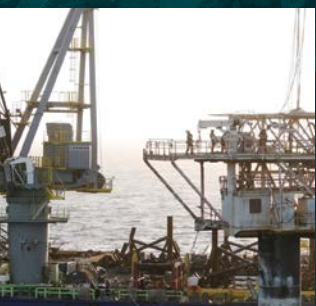
2025 Resources Sector Awards for Excellence

## Acknowledgement of Country

The Department of Mines, Petroleum and Exploration respectfully acknowledges Aboriginal peoples as being the Traditional Custodians of Western Australia.

We acknowledge the enduring connection Aboriginal people continue to share with the land, sea, and sky through both their ancestral ties and custodianship to Country.

We pay our respect to Elders both past and present, and acknowledge the value brought to our department through the collective contribution of Aboriginal and Torres Strait Islander peoples across Western Australia.



## Environmental rehabilitation and decommissioning

Effective rehabilitation and decommissioning is critical to achieving responsible resource development in WA and contributes to a sustainable future for the environment, industry and communities alike. It goes beyond infrastructure removal, reshaping land and revegetation. Depending on the accepted options for post activity land-uses, activities can involve ecosystem recovery to enhance biodiversity and ensure that water systems and soil remain healthy long after activities have ceased.

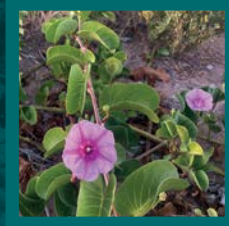
In a state as ecologically diverse as WA, rehabilitation and decommissioning is vital for protecting landscapes and native species and supporting other land users that rely on environmental stability. As a shared responsibility between government and industry and the department would like to showcase the following success stories.



After



Before



**Chevron**

## Thevenard Island Retirement Project Site Restoration

Rehabilitation of the Thevenard Island Joint Venture oil facility after more than 25 years of operation and 156 million barrels of oil produced.

Onshore decommissioning involved the plugging of 11 production wells, three water disposal wells, one exploration well and the safe dismantling and removal of three 150,000-barrel oil storage tanks, production tanks, separator vessels, flowlines, process infrastructure and accommodation facilities and utilities, as well as the controlled toppling of the 38-metre communications tower. In total, the project resulted in the removal of more than 5,000 tonnes of scrap metal from the island for recycling.

The rehabilitation approach was underpinned by more than a decade of research and studies on coastal dynamics, landform stability, climate, soil properties and revegetation.

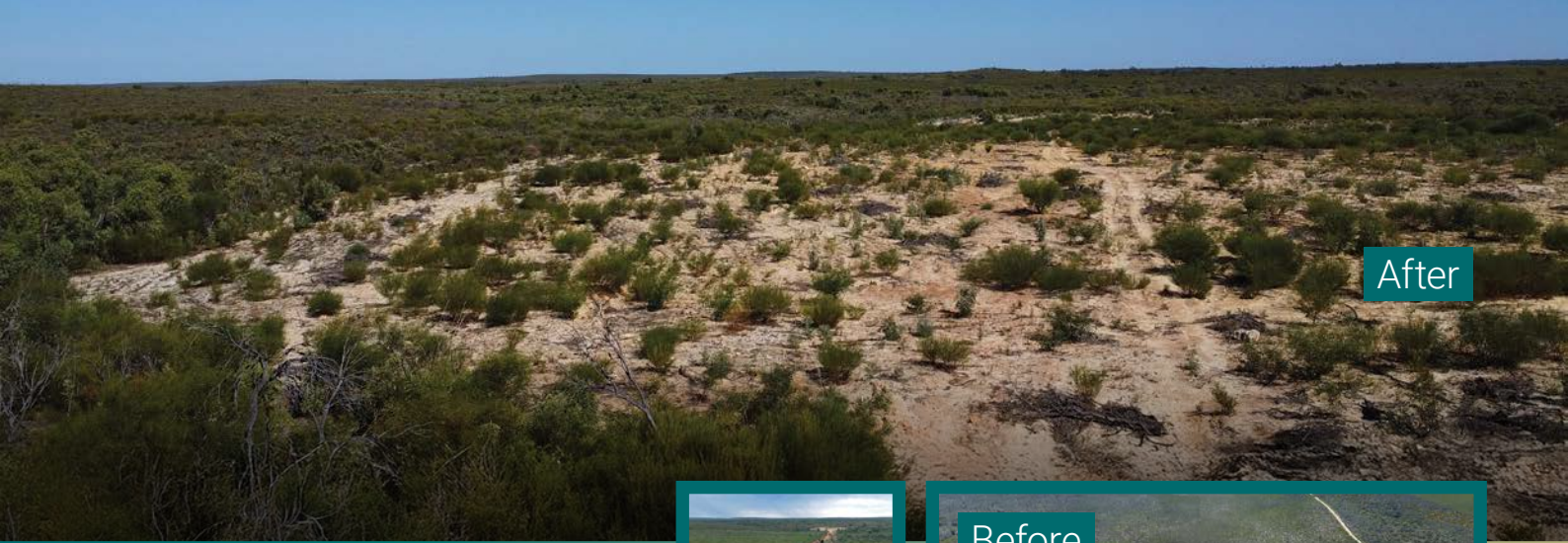
Chevron adopted a comprehensive approach to revegetation, planting 160,000 tubestock of 14 target indigenous species grown exclusively from site-sourced seed and cutting.

The optimised planting design enabled faster vegetation establishment and the development of a more stable, self-sustaining ecosystem.

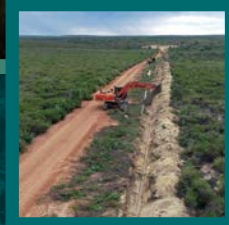
Additional research supported the reuse of cement-containing materials as fill for landform reconstruction, diverting 54,000 tonnes of material from landfill, and reducing environmental emissions associated with landfill disposal.

The use of technology has contributed to environmental outcomes, with LiDAR data used to create digital elevation models and dGPS-enabled machinery supporting accurate reconstruction of dunes for coastal stability.

Rehabilitated areas are now thriving, with a return of fauna including active nesting. Ongoing monitoring using novel remote sensing techniques will reduce future human impact on the area.



After



Before

## Mitsui E&P Australia

### Woodada Gas Field Decommissioning and Rehabilitation

Woodada Gas Field, located in Production Licences L4 and L5, was discovered in May 1980 and produced commercially between 1982 and 2010. It was disconnected from the Parmelia Gas Pipeline in 2015.

In 1987, the area surrounding the gas field was designated as the Lake Logue Nature Reserve (Class C). The Nature Reserve is recognised for significant wetlands for birds and diversity of flora and fauna including threatened flora.

With the takeover of AWE Limited in 2018, Mitsui E&P Australia (MEPAU) acquired the gas field and actively started decommissioning. In recent years, MEPAU has:

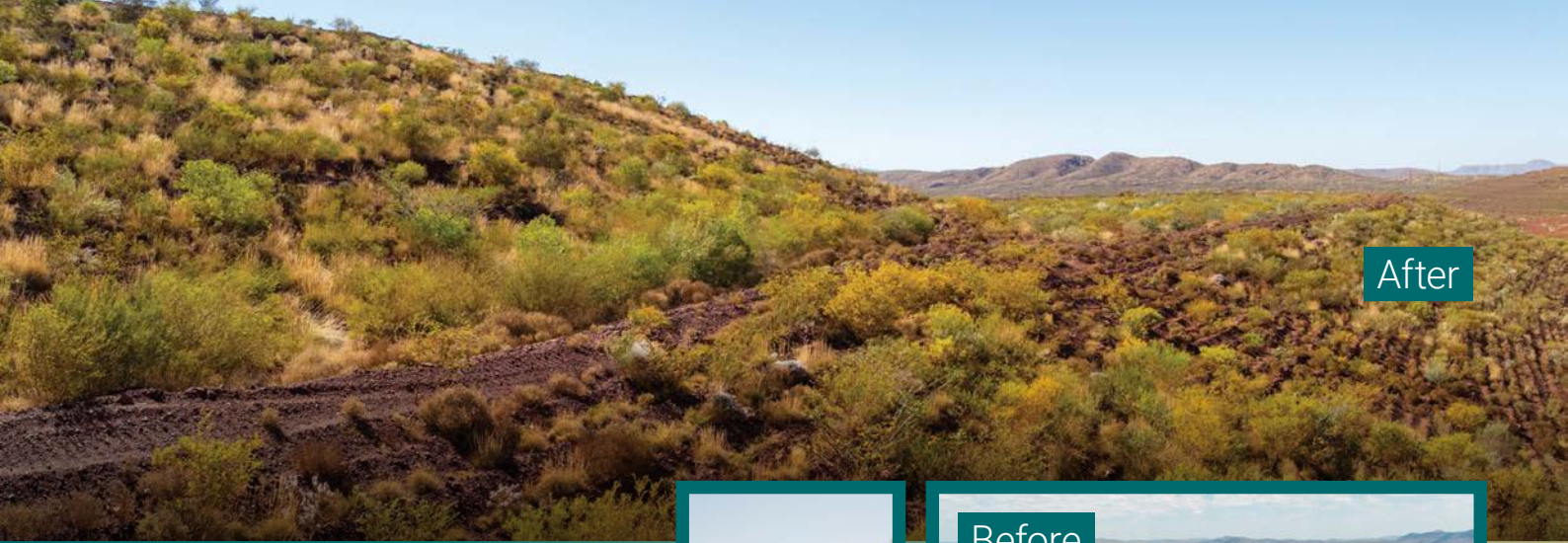
- Plug and abandoned (P&A) eight onshore wells (2018–2025).
- Removed all surface facility infrastructure (2020).
- Removed facility ponds and anode beds (2021).
- Removed PL 6 pipeline, gas gathering line (GGL) and flowlines (2023 and 2025).

- Active site reinstatement of line corridors, access tracks and four facility areas including hand seeding using locally chosen and collected seed (2023).
- Abandonment of PL6 beneath the Railway and GGL beneath the Coolimba Road (2023).

Rehabilitation monitoring success commenced in 2024 and is regularly monitored and measured against completion criteria set in consultation with DMPE and the Department of Biodiversity, Conservation and Attraction.

The last seven wells are scheduled for P&A in 2027, and all remaining sites will be fully reinstated by 2028.

Monitoring and management of the field will continue until completion criteria are reached and the area reflects the environmental values of the surrounding nature reserve.



After



Before

## Rio Tinto Iron Ore

### North-East Box Cut

The North-East Box Cut (NEBC) landform at Rio Tinto Iron Ore's Tom Price mine contained approximately 2.6 Mt of potentially acid forming (PAF) material, posing environmental risk if not responsibly managed.

Despite being constructed in the 1990s, with limited PAF controls, rehabilitation of the 72 hectare area was successfully completed in January 2022 through partnerships with Pilbara Aboriginal Businesses.

Years of planning, with detailed analysis of PAF behaviour informed the final landform and store-and-release cover designs. Over 25 months more than three million cubic metres of material were moved to create the final landform.

Seed from native species, including flamed spinifex, was applied to the landform, with timely summer rainfall supporting plant germination and establishment. Two and a half years on, 30 perennial species have been recorded with a range of different plant strata levels present suggesting long-term rehabilitation success. The area now provides habitat for local fauna, including a resident dingo family. Monitoring of the rehabilitation and store and release cover is ongoing to inform performance.

Learnings from NEBC have influenced progressive rehabilitation strategies, including mine plan integration, enabling more waste rock back-fill into mine pit voids to significantly reduce future waste landform requirements. Since completion, an additional waste dump at Tom Price using a 'tip-to-close' design has yielded observed desirable rehabilitation outcomes.

This project demonstrates the value of integrating rehabilitation planning with operational waste management, even in legacy areas. It highlights how thoughtful planning and design, and effective stakeholder collaboration can deliver meaningful environmental outcomes and proves that successful rehabilitation of legacy and geochemically challenging landforms is possible.



## Santos

### Campbell Platform Removal Project

Following a period of careful planning and culminating in safe execution, the Campbell Platform has now been decommissioned with 99.5 per cent of recovered materials recycled.

Production on the Campbell Platform offshore WA ceased a number of years ago – the Santos team, in partnership with contractors, devised a way to remove the structure in three sections.

For removal of the first platform section, rope access technicians worked safely to prepare the site and cut the topsides from the caisson. Using remotely operated underwater vehicles, subsea diamond wire cutting then separated the upper caisson section from the lower substructure.

For the third and final section, the three platform legs were cut above the seabed, allowing for the lower section to be removed. Platform sections were recovered using a crane on a large offshore construction vessel, then a barge holding the materials was towed 1,500 km via tug to Henderson.

As part of Santos' commitment to sustainability and zero waste to landfill by 2050, 99.5 per cent of the recovered platform was recycled – 930 tonnes of material – through local WA facilities, a great outcome for the environment and local content.

Santos' staged approach to decommissioning of assets improves safety, increases local supply chain capability and participation, and allows for greater learning opportunities across the organisation.





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