

Degnan is renowned for pioneering engineering and construction techniques, consistently delivering outstanding results. Our strong commitment to innovation drives us to develop creative solutions to complex challenges.

This dedication to advancing industry standards is exemplified by two groundbreaking Australian First innovations formally recognised by the Infrastructure Sustainability Council (ISC).

RE-DEPLOYABLE SOLAR PHOTOVOLTAIC (PV) AND BATTERY SYSTEM | AUSTRALIAN FIRST INNOVATION UNANDERRA STATION UPGRADE



Degnan, in collaboration with Makinex, developed a container-top, easily re-deployable solar photovoltaic (PV) and battery system for the TfNSW Unanderra Station Upgrade Project. This innovative solution, confirmed as an Australian-First Innovation in 2024, provided on-site renewable energy and storage while integrating with the local grid and complying with Sydney Trains' export restrictions.

Mounted on shipping containers, the system enabled rapid, cost-effective deployment, reducing reliance on grid power and simplifying approvals for construction sites. Its flexible, re-deployable design met up to 47% of the site's daily energy needs while retaining the ability to switch to the Sydney Trains network. By eliminating the need for specialised installation equipment, the system offers a scalable solution for infrastructure projects.

The achievements and lessons learned from this technology were shared across Transport for NSW networks, promoting renewable energy adoption within the industry. The system has since been commercialised and is now used by Makinex and Kennards Hire, reducing relocation costs for contractors and industry partners. It supports decarbonisation by cutting emissions and operational expenses, freeing public funds for further infrastructure improvements.

This innovation demonstrates how collaborative, re-deployable solutions can deliver both environmental and economic benefits in Australia's construction sector.



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Makinex is an Australian owned company founded in 2004, specialising in the design, development, and distribution of innovative tools and equipment for the construction, landscaping, equipment hire, and infrastructure industries.