

Container Top Re-deployable Solar PV System

Degnan, in collaboration with Makinex, developed the Container-Top Re-Deployable Solar PV system to generate renewable energy on construction sites. The system uses shipping containers as a base for mounting solar panels, offering a mobile, space-efficient solution that reduces emissions in urban projects.



ISC Verified Australian First Innovation



Objectives

To meet growing demands for carbon reduction, Degnan sought a reusable and flexible system for on-site renewable energy. Further, Degnan required a solution that could be easily deployed on site establishments with small footprints. The aim was to develop a system that reduced reliance on diesel generators, lowering costs, noise, and carbon emissions.

Results & Impact

At the Unanderra Station Upgrade, where this was first used, the system provided 24% of the site's energy needs. This innovation was shared across the industry, showcasing its potential to decarbonise construction.

This system supports climate action by reducing greenhouse gas emissions and promoting sustainable energy use in construction. Its success positions Degnan as a leader in low-carbon infrastructure solutions.

Features

- On-site renewable energy generation and storage
- Easy installation on shipping containers (20ft or 40ft)
- Transportable and adaptable for space-restricted sites
- Reduced noise and carbon emissions
- Integration with local power grid
- 5kW PV system offering plug-and-play connectivity into any AC bus
- Scalable system can support multiple units on a single circuit