

COMPRESSED AIR RENEWABLE ENERGY STORAGE

The former MMBW Western Regional Complex will be transformed into a thriving Community Centre within the new LUMA mixed-use development; energised by Australia's first community scale Compressed Air Renewable Energy Storage (CARES) system.

The 1 Megawatt CARES system will take surplus solar energy generated from LUMA's collective rooftop solar installations and convert that energy into compressed air held in a battery (on-site steel receiver tanks). This air is then expanded to drive a turbine and generate electricity when the sun isn't shining. CARES will be able to extend the

clean energy supply for up to six hours into the evening to facilitate evening programmes in the CARES Community Centre and throughout the LUMA community. The CARES Centre will include an indoor vertical community farm with 14 hours of daily LED light for optimised leafy greens production, a late night GYM, evening use of flexible studio spaces, a dinner service at the café, a commercial bread oven, a night school for up-skilling tradespeople in electric and heat-pump appliances, induction cooking classes, EV charging spaces and outdoor projected digital art spaces.

