



Reliable Climate Control. Zero Grid. Zero Carbon



Off-grid
Container

The solar-powered off-grid container with built-in thermal control for 24/7 cooling and humidity

Solar power freezes the PCM contained in the columns by day, it melts to provide cooling through the night and grid outages

Proven Performance

Metric	Result
Cooling Energy Source (Grid)	0%
Cooling Energy Source (Sun-Ice Energy)	100%
Night Cooling	Powered by stored solar (PCM units)
Off Grid Autonomy	24 hours
Target Conditions	24°C & 60 RH maintained
Humidity Stability	60% ±5% RH

Source: 40ft Singapore Pilot

Tangible Results



Financial

- US\$9000/year in energy costs
- Payback: 2 years compared to diesel



Operational

- 100% uptime
- 24°C & 60% RH maintained across 24h
- Low airflow speed, no direct draft on people



Environmental

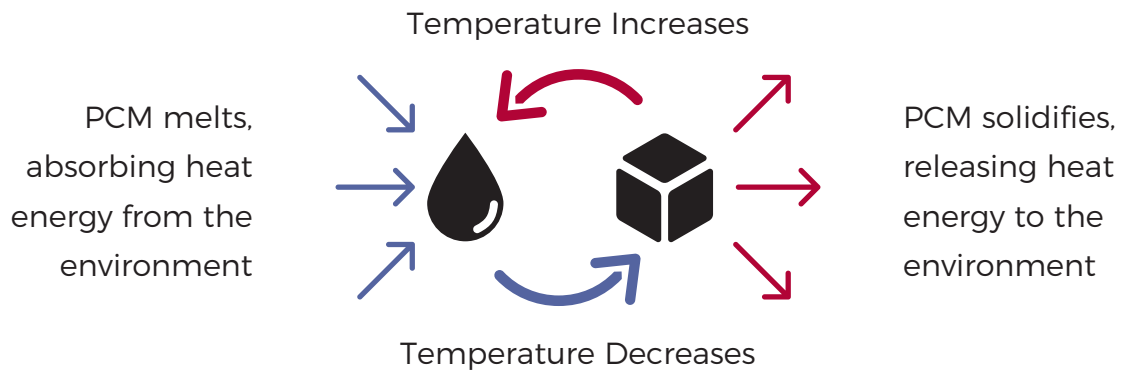
- 13 tons CO₂ avoided/year
- Like taking 3 cars off the road



ADAPTABILITY

- Suitable for a wide range of scenarios (No grid/ grid or generator support)

Our solution centers around our patented **ACTIVE PCM** technology



Using integrated technology, captured **solar or other intermittent energy is stored in PCM**



PCM is a substance that releases/absorbs large amounts of latent energy through a phase change between liquid to solid



System Schematic:

