

## CASE STUDY

# IGA Morphett Vale Embraces Energy Independence with GoodWe and Solaring

### Summary

IGA Morphett Vale, a local supermarket in South Australia, has successfully reduced its energy dependence and operational costs with the installation of a high-performance solar and battery storage system. Powered by GoodWe technology and installed by Solaring, this project ensures uninterrupted operations, safeguards perishable goods during power outages, and significantly cuts electricity bills. The system features the GoodWe GW29.9k-ET Hybrid Inverter and a 102.4kWh Lynx F G2 battery, enabling maximised self-consumption and energy savings.

### Challenge

IGA Morphett Vale aimed to reduce its reliance on the grid, lower electricity costs, and maintain energy resilience, particularly during power outages. The store uses cold storage for perishable goods, which requires a constant and uninterrupted power supply. Therefore, IGA needed a robust solution that could optimise solar energy production, provide seamless energy storage, and ensure reliable backup power to prevent spoilage. Additionally, the system had to support future expansion plans.

## Solution

Solaring, a South Australia-based commercial solar specialist, installed a comprehensive energy storage system featuring:

- **Inverter:** GoodWe GW29.9k-ET Hybrid Inverter, allowing up to 200% oversizing for enhanced efficiency.
- **Battery:** 4 × GoodWe LX F25.6-H-20|25.6kWh for reliable energy storage and backup power.
- **Solar Panels:** 109 × 550W Risen Energy Solar Panel supporting and maximising energy generation and cost savings.
- **System Expansion:** To accommodate the project owner's future energy needs, additional GW29.9k-ET hybrid inverters and battery storage can be integrated to enhance energy autonomy.

The installation was completed with minimal disruption, ensuring the supermarket could continue operations seamlessly.



### Installation details

**Location:** Morphett Vale, South Australia  
**System Owner:** IGA Morphett Vale  
**System Capacity:** 59.95kW solar + 102.4kWh battery storage  
**Installation Date:** January 2024  
**Module:** 1 × GW29.9kW-ET Hybrid  
**Inverter:** 4 × GoodWe LX F25.6-H-20|25.6kWh  
**System efficiency:** 87%

## Benefit

- **Maximised Solar Utilisation & Cost Savings:** With the ET Series Hybrid Inverter's 200% oversizing capability, the store optimises its solar production, reducing reliance on the grid.
- **Reliable Energy Backup:** The Lynx F G2 battery ensures uninterrupted operations, preventing food spoilage and losses during outages.
- **Scalability for Future Growth:** The system is designed for future expansion, with additional battery storage and another hybrid inverter planned.

- **Environmental Effect**

**Estimated Annual Production:** 74,952 kWh

**Carbon reduction:** 20,000 kg of coal prevented from being burned annually

**Savings:** \$0.45 per kWh for stored energy, compared to \$0.05 per kWh if exported to the grid

## On-site Feedback

Rajan Kumar Katkam, from Solaring, highlighted the project's impact:

*The system is saving approximately 68 megawatt-hours of power annually—equivalent to preventing 20,000 kilograms of coal from being burned. We are proud to help businesses become more sustainable and contribute to Australia's net-zero mission. This installation not only reduces energy costs but also makes a real difference to the environment and the local community.*

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Dean Williamson, Country Manager at GoodWe Australia, emphasised the value of this innovative solution:

“ *This project showcases how businesses can harness the power of solar and storage to drive long-term sustainability and financial benefits. The ET Series Hybrid Inverter's oversizing capability, combined with the Lynx F G2 battery, ensures businesses can maximise self-consumption and reduce their reliance on the grid. By integrating high-performance solar and storage, IGA Morphett Vale is future-proofing its operations and reinforcing its commitment to sustainability.*

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**For more information on GoodWe's commercial range, visit:** *GoodWe Commercial Solutions*

**For High Quality photos:**

[https://www.dropbox.com/scl/fo/duu3rasa8tdni84qagmqj/APjCNC6DK\\_XTG5tvSv4lis4?rlkey=8e3cyh69zcxwax3d4yikydwgy&st=vtczqyko&dl=0](https://www.dropbox.com/scl/fo/duu3rasa8tdni84qagmqj/APjCNC6DK_XTG5tvSv4lis4?rlkey=8e3cyh69zcxwax3d4yikydwgy&st=vtczqyko&dl=0)