

The Royal Hotel Meandarra Commercial Solar System

Meandarra, Western Downs, Queensland - SEBSS Case Study

1. Executive Summary & Energy Audit

Operating a classic Australian country hotel and hospitality venue entails substantial 24/7 power draw. With commercial electricity expenses exceeding \$52 per day due to continuous draught beer refrigeration, walk-in cold rooms, commercial kitchen fryers, and hotel air conditioning, owner Jason engaged SEBSS to design a high-capacity solar system.

2. Dual-Inverter System Design

SEBSS performed detailed 15-minute interval energy logging and designed a dual-inverter system: a 20 kW inverter dedicated to North-facing solar panels alongside a 5 kW inverter connected to East/West panels, matching the venue's daytime load curve with 90 premium solar panels (31.5 kW total output).

3. Verified Financial Impact

Daily power bill savings immediately averaged between \$21.50 and \$24.00 per day. Annual electricity bill reductions totaled ~\$8,000 per year, achieving full capital payback in less than 4 years while insulating the venue against rising retail electricity prices.