







# Electro Group Training – Renewable Energy Training Facility

Kane Constructions was awarded the Design and Construct contract for a brand new large-scale training facility for Electrogroup Apprentices at Pinkenba in Brisbane.

The two-storey administration building features a glass curtain wall façade and is home to the Electrogroup executive team, staff, and trainers. It includes executive offices, open-plan office space for 40 staff members, a boardroom, meeting rooms, kitchens, and general amenities.

The two-storey training building features a pre-cast concrete panel façade and provides facilities for pretrade, apprenticeship, and post-trade courses for up to 300 students. Timber-framed and lined training bays in eight classrooms allows students to undertake practical work wiring dummy boards and equipment, while seminar and computer rooms are modern spaces for theory-based learning. The training building also features a grid-connected 43kW solar panel system on the rooftop.

External to the training and administration buildings is a training field and workshop. In this space, Electrogroup can train apprentices and assist licensed electricians to upgrade their skills to install, operate and manage solar and other renewable energy equipment safely. The field includes single and dual-axis tracking solar panels and wind turbines on 12m towers. There are two sets of each piece of equipment, one live and grid-connected which powers the facility, and the other dummy for training purposes. The workshop includes battery storage for power generated from solar equipment. A weather monitoring station, a five-bay solar carport, and a dummy electric car charger exist.

As well as the renewable energy equipment Kane installed, there is a 24m climbing tower designed to replicate the base of a large wind turbine tower and a dummy 30m communications tower. The workshop provides additional teaching space for practical learning and houses both the live and dummy invertors for the training field equipment. A battery room also contains live batteries storing energy produced by the 54kW dual-axis tracking panels. The workshop roof has been designed to include sheet metal and tiled roofing for solar panel installation training.

Kane Constructions Pty Ltd kane.com.au

#### Client

**Electro Group Apprentices** 

#### Consultants

Engine Room Venture Management WMK Architecture ADG Engineers (Aust) Pty Ltd

### Location

Queensland

## Value

\$14M

### Awards

2023 Queensland Master Builders Association Excellence in Energy Efficiency and Environmental Management