

## ISOLATED HYBRID RENEWABLES

Each isolated hybrid renewables project is unique in the energy resources available, load profile, goals of the proponent, specifications of the power system and the logistical challenges presented by the remote location. Entura aims to provide a template to bring these factors together for a pragmatic approach to any hybrid project.

This course provides access to Entura's multi-disciplinary and unique hybrid off-grid systems experience. The course material is based on our proven capability with power systems and renewable energy developments, the extensive experience from the development and operation of King Island Renewable Energy Integration Project, Flinders Island Hybrid Energy Hub, as well as other projects across Australia and the Pacific region.

After completing this course, participants will have the capability to prepare a business case for an isolated hybrid renewable energy project that includes consideration of the project drivers, status of the existing power supply, evaluation of the proposed power supply option, alternative options, risk evaluation, project delivery model and procurement strategy.

It would be beneficial to complete the wind, small power systems and/or solar training courses offered by Entura prior to undertaking this course.

### COURSE CONTENT

#### Business case development

- Project drivers/goals of project
- Risk management
- Funding and delivery models
- Procurement strategies
- Planning, environmental and community considerations
- Feasibility study:
  - technology assessment
  - resource assessment
  - power system integration
  - energy modelling
  - uncertainty
- Design and specification
- Project schedule

#### Post-business case

- Detailed design
- Procurement management
- Contract management
- Construction and commissioning
- Operations and maintenance

#### Tailored technical modules to specific requirements

- Energy storage and enabling technologies
- Power system studies
- Wind, solar or hydro power technology specific
- Data acquisition and resource monitoring

### PARTICIPANT PROFILE

- Managers
- Owners/developers
- Isolated hybrid power system operators

### LEARNING OBJECTIVES

- To provide participants with an understanding of the unique risks associated with isolated hybrid renewables projects and how to identify, assess and manage them.
- To learn how to prepare a business case for a hybrid renewables project and how to evaluate different technologies for power supply.

### LEARNING METHODS

- Lectures
- Case studies
- Discussions
- Site visit

### COURSE PROVIDERS

Entura's lecturers include:

- Accredited training professionals
- Technical specialists and professionals with extensive experience and qualifications across a broad range of disciplines

### CUSTOMISATION

This course can be customised for specific technologies (wind, solar, hydro) or for specific development stages or system definition.

COURSE DURATION  
3 DAYS

LOCATION:  
Tasmania, Australia  
(Includes site visits)  
Client site as negotiated

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