Renewable Energy



Section one

Moving from Competence to Excellence

A closer look at two key aspects of the Renewable Energy World Occupational Standard.

Aspect:	Total number of Marks (%)
A: PV Installation	60%
B: Design & Simulation	40%

The WorldSkills Occupational Standard (WSOS) specifies the knowledge, understanding, and specific skills that underpin international best practice in technical and vocational performance. It should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business.

A: PV Installation

What does competence look like in this area?

Correctly follows installation guidelines and safety procedures.

Adequately mounts PV panels and structures.

Completes electrical connections with minimal errors.

Understands basic troubleshooting for installation issues.

Utilises tools and equipment properly.

Maintains a clean and organised workspace.

What does excellence look like in this area?

Demonstrates exceptional adherence to safety and installation guidelines.

Precisely mounts PV panels and structures with no deviations.

Completes electrical connections flawlessly and efficiently.

Proactively identifies and resolves potential installation issues.

Expertly utilises tools and equipment, ensuring optimal performance.

Maintains an impeccably clean and organised workspace, setting a standard for others.

B: Design & Simulation

What does competence look like in this area

Understands the basics of PV system design and simulation software.

Can perform basic simulations to predict system performance.

Accurately inputs data and interprets simulation results.

Identifies potential issues in design and suggests standard solutions.

Completes design tasks within the given timeframe.

What does excellence look like in this area?

Demonstrates in-depth knowledge of advanced PV system design and simulation techniques.

Performs complex simulations to optimise system performance with high accuracy.

Inputs data with precision and provides detailed interpretations of simulation results.

Identifies and resolves design issues creatively and effectively.

Completes design tasks efficiently, often exceeding expectations for quality and innovation.

