

Off grid example

### **Scenario 3- Off-grid Hydrogen production facility**

Scenarios to test certification thinking against:

#### Scenario 1:

A new 30MW electrolyser facility is built at Geraldton in Western Australia to produce gaseous hydrogen that will be trucked to customers. A new solar farm will support all the electricity needs of the processing plant at 60% capacity. The oxygen produced from electrolysis process will be discharged to the atmosphere.

Our site will be 3ha in size and we will be 4km from our water source. Water will be pump via diesel pumps and be sourced from a small desalination plant. Desalination and water treatment will be undertaken using electricity from the onsite solar farm.

#### Scenario 2:

A new 30MW electrolyser facility is built at Geraldton in Western Australia to produce gaseous hydrogen that will be used to make ammonia at a connected facility. A new solar farm will support all the electricity needs of the processing plant at 60% capacity. The oxygen produced from electrolysis process will be discharged to atmosphere.

Our site will be 3ha is size and we will be 4km from our water source. Water will be pumped via diesel pumps and be sourced from a wastewater treatment plant owned by a local utility provider.

Assumptions:

- Construction of the facility would not be included in product emission calculations.
- 'Well to gate' boundaries apply