

Purchase Specification Document for ERD1-09-02 Energy independent farm

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File Name: Purchase Specification Document for ERD1-09-02

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Project lead: Chris Mann

Sign-off:

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Peer	Katie Shanks	17/12/2020	Verbal during meeting
Peer	Tom Bradshaw	17/12/2020	Verbal during meeting
Manager	Chris Mann	07/01/2021	

Quickbook codes

Project code	ERD1-09-02
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Overview

As part of the European Regional Development Funded project, the Energy Independent Farm, Bennamann are seeking to procure a battery system. The system will help us maintain and back up the power on a microgrid. We are looking for a battery system that will act as a buffer to allow renewables to power the grid. We do not envisage running the system straight off the batteries; however, the battery system will allow us to turn the system off safely in the case of the loss of power to the microgrid. The batteries focus is to provide the power to compensate for the fluctuation of the renewables. This will be for both supplying in the lulls of power and storing the excess power generated.

Technical specification

We are looking for around 30kWh of storage capacity.

The maximum demand output/input 100kW and minimum of 35kW.

Can be interfaced to a three-phase micro grid. At 230/400V and 50Hz via an inverter.

Cycle life > 7000 cycles.

Round trip efficiency > 95%

Deliverables

Please provide a quote for the closest system to 30kWh of storage (allowed to be slightly less).

Lead times for the system.

If you have a preferred inverter, please let us know.