



Northern Powergrid

Rural Electrification 2.0

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Rural Electrification 2.0

“ The ease of agricultural and rural transition to Net Zero will be influenced by how easily rural businesses can reconcile business, operational and technology constraints. ”

Project partners

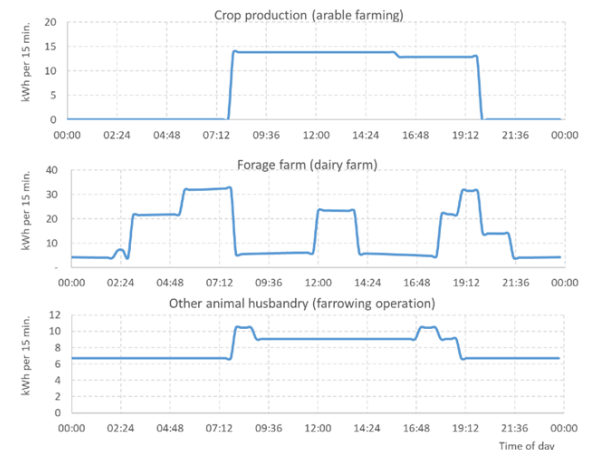


University of Leeds (setting the scene)

- Agriculture is responsible for 10% of total UK GHG emissions.
- Sector is energy intensive – heating and operations.
- Farm type determines energy demand, e.g., seasonal or low but continuous with two peaks.
- Many farms are off-grid.
- Most operate on constrained budgets.
- Farmers are individuals and not often clustered geographically.
- Want to be self-sufficient.

Future needs:

- Reducing scope 3 emissions is key for agri-food value chains.
- More vulnerable to outages than their urban counterparts.



Drivers for the project



Better understanding of the challenges associated with the deployment of agricultural electricity flexibility



Improved network planning assumptions for rural and agricultural daily and seasonal load cycles



Developing novel ways to increase rural resilience and symbiosis with rural customers



Identifying opportunities to engineer reduction in connection or capacity network costs through technologies as well as social, economic, business and policy considerations

EA Technology

Driving Questions for Modelling and Analysis

How will policy influence customer habits?

What do rural customers want?

What is the present energy demand?

What LCTs should be modelled for this project?

Will all vehicles be electrified?

What other energy sources are suitable?

What is the cost to the network and to customers?

Does the future of rural electrification include grid connections?

When will these changes take place?

Which pathways seem most feasible?
Which seem most attractive to customers?
How can Northern Powergrid influence customer choices?

Questions & Answers

For further information please contact me:

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