RURAL ENERGY HUB NETWORK

Looking to develop a rural energy hub?

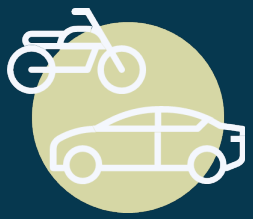
The Rural Energy Hubs (REH) concept is an ambitious initiative designed to accelerate the transition to a low-carbon future in rural communities across the UK and globally. Imagine a central, accessible point within a community where individuals, businesses, and local authorities can access and learn about affordable clean energy solutions from local, friendly advisors – this is the core concept of the Rural Energy Hub.

Building upon decades of experience in delivering innovative low-carbon projects, particularly through collaborative efforts in Orkney and Shetland, UK, the REH project 2023-2026, funded by Innovate UK, developed the Rural Energy Hub concept as a 'place based' demonstration approach. This means it focuses on understanding the opportunities and overcoming the unique challenges that hinder decarbonisation within specific rural settings.

These challenges extend beyond technology and encompass areas such as finance, regulation, grid capacity, resource availability, behavioural change, and data accessibility.

The REH itself will serve as a physical hub, potentially incorporating shared workspaces, community meeting areas, electric vehicle (EV) rapid charging facilities, renewable energy generation, car-sharing schemes, and electric bike rentals. Importantly, the project extends beyond the physical hub, exploring how to integrate sustainable services into the wider community. This could includes trials of electric buses and heavy goods vehicles (HGVs) that can utilise the hub for recharging, enabling longer, greener journeys, and the development of conceptual designs for localised district heating systems and energy generation.

The REH project covers all aspects of the energy system which include:



Transport

Exploring innovative electric solutions for individuals and for local authority fleets, integrating community-managed services, , deploying distributed charging infrastructure, integrating a car club model into the hub, trialling maritime and aviation decarbonisation, and developing holistic transport decarbonisation plans.



Heat

Utilising smart monitoring to drive behavioural change, developing a Building Renovation Passport programme to support home and office decarbonisation; and undertaking feasibility of district heating options.

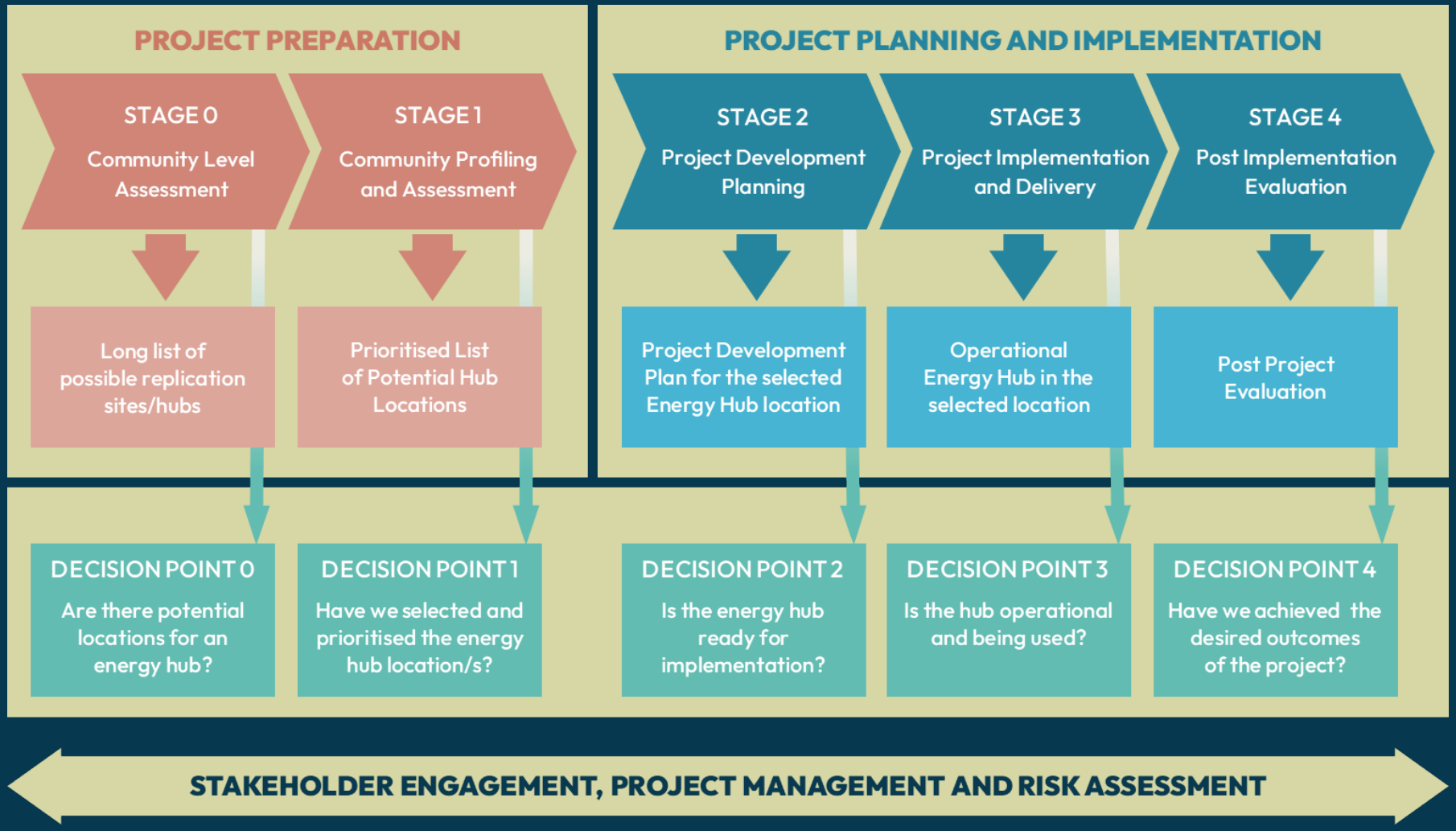


Power

Developing affordable models for renewable generation and battery solutions, including integration into the REH.

The REH project prioritises replicability as a critical component for wider application in other communities. Replicating the energy hub model is intended to standardise the development and implementation process, thereby enabling the creation of a procedural framework.

Overview Framework for REH Replication



Why have a Replication Framework ?

A Replication Framework is a structured process designed to guide project teams in establishing successful Rural Energy Hubs in diverse communities. The framework provides a staged approach, addressing key considerations and facilitating effective stakeholder engagement.

It is intended as a flexible guide. Recognising that each community and project context is unique, certain data requirements, activities, or even entire stages outlined in the framework may not be applicable in every situation. In the absence of such a framework, project development and implementation are susceptible to increased risk, particularly in areas such as procurement, timeline alignment across preparation and development phases, and the establishment of coherent stakeholder engagement.



Key Features

- **Staged Approach: Breaks down the complex process of energy hub implementation into manageable phases.**
- **Comprehensive Considerations: Addresses technical and non-technical, social, governance, and financial aspects.**
- **Stakeholder Focus: Clarifies roles, responsibilities, and engagement strategies for all involved parties.**
- **Flowchart Tool: Provides a visual aid for assessing project feasibility in different locations.**
- **Adaptable Design: Allows for flexibility and customisation based on specific project needs.**

Learn more about the
pilot Brae Rural Energy Hub at:

Braeruralenergyhub.com

If you're interested in setting a new REH visit:

www.aquatera.co.uk