Clayworks Community Wind Farm

RCEF: Stage 1

The Story

Devon Energy Collective CIC conducted a feasibility assessment to determine the viability of developing a community-owned wind farm, up to 65MW in size, in and around the worked mining landscape of Lee Moor to the south of Dartmoor National Park. It included constraints mapping, a planning and policy assessment, a technical analysis of the grid, preliminary noise assessments, wind resource mapping and a transport access study. It also ran an economic analysis of a wind project to understand what the surplus income for community benefit might look like depending on the scale of the project. With the help of the local energy group South Dartmoor Community Energy, the communities living in the nearby three parishes of Sparkwell, Shaugh Prior and Cornwood were engaged with the concept of a wind farm via a series of online events. The findings showed that a community-owned wind farm at the Clayworks could be both technically and financially viable. If built, a wind farm at the Clayworks would be a flagship project for community renewable energy, generating a substantial surplus income that could have a transformative impact on the local and Devon-wide communities by providing finance and leverage to fund the deep green retrofit of the 2,600 houses in the surrounding parishes.

Challenges & Risks

Under the current planning policy framework, community support is fundamental to the success of an onshore wind project in England. Within the community, there is a good deal of support for a community-owned wind farm on the Clayworks but there is also some scepticism of community energy and concern over visual and noise impact. A local steering committee has since been set up to lead the project, tasked with designing the scale and layout of a wind farm. However, in recent months activity has diminished. There is also a substantial planning risk to the project and the next step would be to undertake an EIA Screening & Scoping exercise. Other challenges include securing a favourable grid connection and working through the land rights on the common land where many of the wind turbines are likely to be sited.

Lessons Learned

The project concept was taken to the local community rather than being born at grassroots by local people which understandably has been met with both enthusiasm and resistance. Ideally more time would have been spent in advance of the technical work, engaging with local people and messaging the benefits of community owned generation. However, this feasibility study has shown the viability of a wind farm at the Clayworks which could provide substantial local benefits.

Key Figures	
Tech type	Onshore wind, up to 65MW.
Project Size	Ranging from a maximum of 13 x 5MW turbines at 65MW to 7 x 3MW turbines at 21MW depending on layout and design.
Energy Generation	55 - 260GWh of clean, green electricity per year.
Surplus Income	£11 to £170 million to support the retrofit of 2,600 houses in the local parishes.
Climate Impact	Potential to increase Devon's renewable energy generation by 20% and make a significant contribution to Devon's transition to net zero.
RCEF grant	£36,484

Further Notes

LEP area: Heart of the South West

Link for further info: Clayworks Wind https://devonenergycic.co.uk/our-projects/clayworks-frequently-asked-questions/