Oswestry

Energy Local Opportunities in Powys

The Green Valleys CIC

CRiC, Beaufort Street, Crickhowell, NP8 1BN

www.thegreenvalleys.org

The Oswestry Energy Zone

1. Description

The Oswestry Energy Zone is a complex of four substation areas on the northern border of Powys. The central area extends from Lake Vyrnwy in the west to Llansantffraid-ym-Mechain and includes extensive and sparsely populated upland areas.

The eastern area is relatively small and includes Llanymyech and Four Crosses extending to the Welsh border. An even smaller area is formed between Llanymyech and the Welsh border directly north.

The fourth area forms the northern most extent of Powys including the Afon Tanet valley and catchment of upland areas between the river and border.

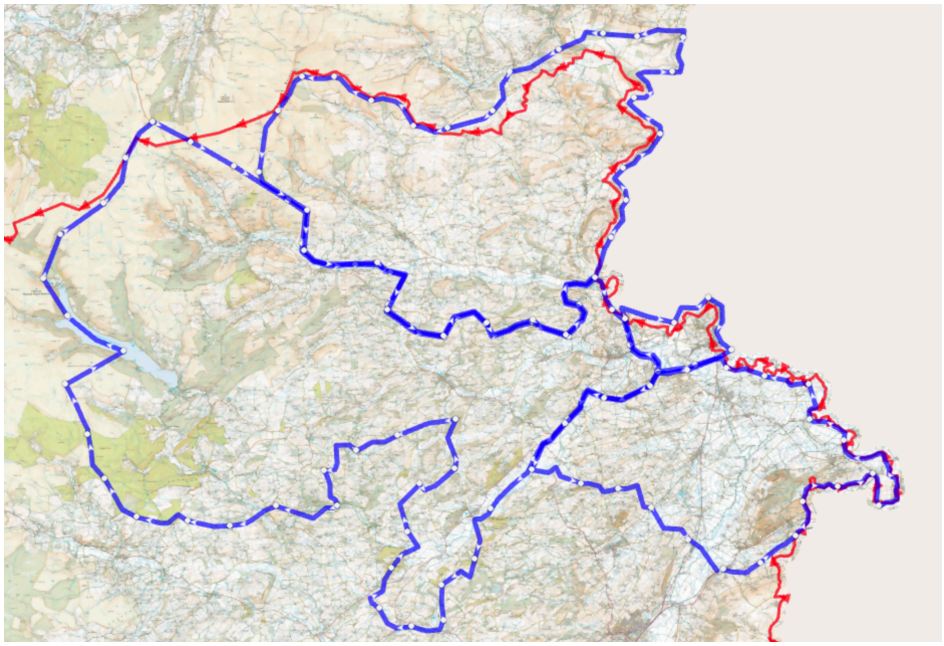

Figure 1 – Oswestry energy zone map

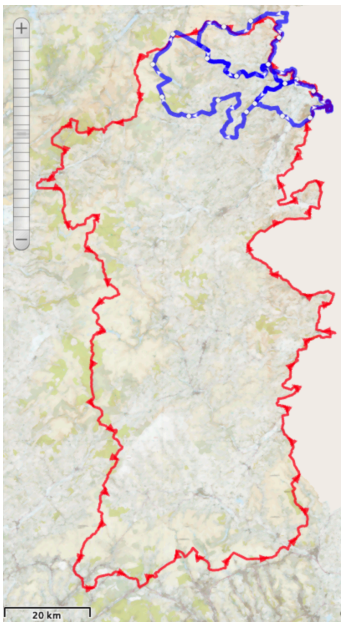

Figure 2 - Powys map

2. Potential viability of an Energy Local Club

There are twelve hydro generators located within the zone but it is expected that most if not all of these are in the eastern area taking water from the uplands around Lake Vrynwy. While this is a large area it is sparsely populated, which would cause some challenges for recruitment of consumer members.

The northern area might also have some hydro schemes, but these are expected to be the smaller ones identified from data searches and so might not have sufficient export for a viable club.

Potential for the remaining two small areas is only likely to be possible if there are generators connected to the Oswestry substation located in England that could supply these areas.

Summary of renewable generation in this energy zone

Table 1 - Summary of larger renewable generators in the Oswestry Zone

	Number of Registered Schemes	Total Installed Capacity	Average Capacity (kW)	Estimated kWh Produced p.a	Approx Number of Homes p.a Equivalent
Hydro	12	356.4	29.7	1,425,760	356
Wind	0	0.0	0.0	0	0
PV >4kW	10	200.4	20.0	160,352	40
TOTAL	22	556.9	25.3	1,586,112	397

3. Actions to create a successful Energy Local Club

- Approach hydro generators in the eastern, upland areas of this energy zone
- If a generator can be found, fit would be essential to mobilise existing local networks in the small settlements to aid recruitment of at least 30 Club members

4. Overall assessment

The hydro generation would be suitable for an Energy Local Club if a suitable generator can be found. However, most of these generators are relatively large and as such would require a large number of club members to create a viable club. Recruitment of a lot of members can be challenging in such a sparsely populated area.

This would not be an area to target for particular effort creating an Energy Local Club. However, if a generator can be found and there are existing community networks that could assist in reaching such a dispersed population then a Club would be viable. If it were possible, the club could be of large enough size to have a relatively greater impact due to the smaller number of consumers in the local area.

While there may be some potential in the northern area of this zone, it is unlikely that the two smaller areas to the east could support an Energy Local Club. However, installed generation located in England has not been assessed and this might create a potential option for Powys residents in these areas to become engaged in Energy Local.