

1. The Proposed Development

The Need for Development

The aim of the proposed wind turbine development is to allow the Southport community to make a notable contribution to mitigating climate change by providing decentralised renewable energy generation.

The turbine will be owned by a community benefit society with a share offering available to members of the public to raise sufficient share capital (c.£2.5m) for the construction of the project. A reasonable interest will be paid to investors in the project with the available surplus (>£1 million expected over the life of the project) made available to a wider community benefit fund that can be utilised for a range of projects.

The electricity generated by the turbine will provide the Dunes Splash World Leisure Centre, owned by Sefton Borough Council, with a considerable volume of cheap green electricity which is a key benefit given the ongoing energy crisis. Energy flow modelling has demonstrated that the turbine could offset c.60% of the site's current electricity demand and make a saving of ~£40,000 per annum. A proportion of the generation will be exported and sold to the grid with this additional revenue improving the business case and increasing the funds available to the local community. There is also potential that the increased availability of discounted electricity will encourage the installation of heat pumps (which would replace the existing gas boilers) and/or EV charging at the Leisure Centre. This could create further positive feedback, as this will allow additional financial savings for the Leisure Centre (through an increase in the direct use of generation from the wind turbine) and also increase the associated carbon savings.

The direct and indirect impacts of the proposed development on local residents and businesses can be separated into 4 separate areas:

1. Direct and indirect economic benefit for the community benefit society and local community benefit fund;
2. Direct operational cost benefit to the ongoing operation of the Dunes Splash World site;
3. Ancillary economic benefits from construction and operation; and
4. The potential for adverse impacts to be assessed within the scope of the planning application.



The direct benefits and wider indirect benefits to other local businesses that benefit from Splash World and/or could work on the construction is considered to be significant. Low cost, subsidy free renewable developments such as this can also ultimately help reduce future energy rises. Such developments will also improve security of supply in the local area.

Lastly, this project supports the Sefton Borough Council and wider UK Governments' targets to achieve 'Net Zero' by 2030 and 2050 respectively. The results of a public consultation survey undertaken by Southport Community Energy (2021) found many participants were deeply concerned about climate change, with 95% showing a solid interest in renewables. This project can therefore support not only local and national climate policy, but also the values of the local community.

Proposed Turbine

At just under 90m height from base to blade tip, the proposed turbine is significantly smaller than modern large-scale wind turbines which are typically 130-170m high.

A smaller model was considered, however it was concluded that the proposed EWT turbine would provide the best balance between visual considerations and generation. In addition, this choice of turbine scale means that a new modern design can be selected which is quieter and more efficient. Further information on alternative options is provided on the next board.

In order to give the community a clear indication of the visual impact of the proposed development, photomontages have been created from various key locations in the local area (these are shown in detail on board 4).



Turbine Type	EWT DW61
Rated Capacity	900-1,000 kW
Status	New
Proposed Tower Height	59 m
Rotor diameter	61 m
Distance from ground to blade tip	89.5m
Operational turbine life	25-30 years

Proposed Timescales

- Community consultation is currently being undertaken.
- A formal planning application will be submitted in **summer 2023**.
- Members of the public will be able to provide formal comments on the application through the Council's planning portal. In the meantime, we welcome informal comments which can be made directly or online (link can be provided from development team and/or volunteers, link also has copies of these boards).
- If consented, the project would likely begin construction in **summer 2024**.
- Construction would take approximately **3-4 months**.