

WEST DUNBARTONSHIRE COUNCIL**Report by Strategic Lead of Regeneration****Infrastructure, Regeneration and Economic Development Committee:****21 August 2019**

Subject: Pappert Windfarm**1. Purpose**

- 1.1** The purpose of this report is to advise the Committee of progress made with this project and agree to further explore options available to West Dunbartonshire Council to enter into a commercial partnership/part ownership agreement with a private sector partner.

2. Recommendations

- 2.1** It is recommended that the Committee:
- (i) note the content of this report;
 - (ii) agree to continue engagement with private sector developers to assess options for a commercial partnership/part ownership.
 - (iii) agree to continue engagement with Statutory Consultees;
 - (iv) agree to receive an update report following the completion of detailed proposals and options from private developer.

3. Background

- 3.1** The Council carried out a high level evaluation of its estate for the purpose of locating a site that would be suitable for developing a wind energy project. Pappert Community Woodland was deemed to be a realistic prospect with potential for a technically and environmentally feasible 5 Mega Watt (MW) wind project.
- 3.2** The option to develop, construct and operate a new wind farm was recommended and accepted as a project contained within the 10 year Capital Programme.
- 3.3** Initially, the plan was to site 3 turbines (79m height to tip) along the edge of Nobleston Wood. After the neighbouring Merkins project was denied planning permission in October of 2013, due to visual impacts on the National Park raised by the National Park Authority and Scottish Natural Heritage (SNH), the Council took the tactical decision to delay any application until such time as Merkins finalised its plan going forward. In the meantime, the Council has been in regular contact with Lomond Energy in relation to making efficiencies for both projects by sharing things such as access rights, wind data, and grid connection fees, should both projects go ahead at the same time.

3.4 On the back of significant legislative changes in Scotland, the Council decided to maximise the capacity of the site, so early in 2017, the Council procured Land Use Consultants Limited (LUC) to carry out a Landscape and Visual Impact Assessment (LVIA) and to develop a new layout. LUC determined that a maximum of 4 turbines at a height to tip of approximately 79m was feasible on the site. A high level business case was produced which determined that, depending which type of financial model is used, the 4 turbine layout would pay itself back in between 11 and 20 years, and generate approximately 7,000MWh of electricity per year. The Council consumed 26,000MWh in 2016/17 so this layout could produce approximately 27% of the Council's total electricity demand.

4. Main Issues

- 4.1** Since the last update Lomond Energy has withdrawn proposals to develop on the site adjacent to WDC land and council officers have had discussions with a new developer who is considering a similar but potentially greater scale scheme utilising much larger turbines.
- 4.2** It has become clear through these discussions that the option for WDC to develop its own smaller scale wind energy project would now be extremely challenging from a cost and return perspective.
- 4.3** The Scottish Government have stated that they will be working with stakeholders to find solutions to onshore wind deployment barriers, and to help support commercially viable projects across Scotland.
- 4.4** In the absence of subsidy support for onshore wind, all Megawatt hours produced from onshore wind in the future will need to be as cheap as other forms of renewable generation and be contracted through some form of long term Power Purchase Agreement to enable delivery of a windfarm project.
- 4.5** Windfarms that are the windiest and the cheapest to build – utilising economies of scale from multi MW turbines with tip heights much larger than those deployed to date will be able to produce the energy at the lowest cost. Currently there are 7,800MW of installed onshore wind in Scotland with a further 3,900MW consented and ready to go and a further 1,900MW in planning. The majority of the 3,900MW of consented projects are sub 150m to tip with sub 120m rotor diameters. Due to reductions in the wholesale electricity price per MWhr for the purchase of energy these projects may struggle to become financially viable. Already there are developers submitting variations to consented projects to increase tip heights to over 175m for this reason.
- 4.6** Looking further afield into Central Europe, Asia, Australia, China and the Americas the onshore wind market has matured to a point where the market sits with tip heights at 225m or higher becoming standard. This leaves turbine manufacturers with a difficult decision for the UK.

Continue to produce smaller machines for a seemingly stagnant market or, discontinue production of smaller machines and wait for the market to change because it will have to. The latter is becoming a reality with suppliers indicating that for tips up to 115m the end of 2019 will see the end of availability for machines and by 2025 availability for tips up to 150m will be seriously limited.

4.7 With a requirement for a quadrupling of renewable generation and a doubling of grid capacity by 2045 to meet Scottish Governments ambitious net zero targets onshore wind will have a critical role to play into the future. However, in the current post subsidy world where wind projects compete against ever more competitive energy markets, small wind projects with low tip heights such as that originally proposed by WDC at Pappert Hill will not be viable.

4.8 The proposed options to be explored with the new developer are;

- Commercial partnership/shared ownership arrangement with the developer.
- A shared ownership scheme may also be offered into the local community groups, in addition to a wider Community Benefits Scheme.
- A form of long term supply agreement or power purchase agreement with the developer. This would benefit WDC in (a) potentially reduced energy costs across the portfolio and (b) demonstrating involvement in renewable energy project of scale.

5. People Implications

5.1 There are no personnel issues at this time.

6. Financial and Procurement Implications

6.1 Detailed business cases will need to be produced for all options, should Council wish to pursue them.

7. Risk Analysis

7.1 Given the sensitive nature of wind farm developments there is always risk associated with planning approval and community buy-in. The project team will continue to engage with all statutory consultees through the next phase of the project to minimise the risk where possible.

7.2 It should be noted that WDC has spent £22k on this project over the last 3 financial years.

8. Equalities Impact Assessment (EIA)

8.1 An Equalities Impact Assessment Screening was carried out as part of the original business case. A further screening assessment will be undertaken once a preferred scheme has been identified for the site.

9. Consultation

- 9.1** Discussions have taken place with statutory consultees and will continue to do so. The project team has also been involved in discussions with developers regarding a potential partnership.

10. Strategic Assessment

- 10.1** This proposal will contribute to improving economic growth and employability; and improving local housing and environmentally sustainable infrastructure.

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Appendices: None.

Background Papers: None.

Wards Affected: 2, Leven.