Teviot Wind Farm

Other Considerations

Solar

The south facing slopes of Binks Hill have been identified as an area which could support a co-located solar array (see **Figure 2**). It is expected that the ground-mounted solar PV panels would be supported by a light frame which will be installed into the ground to provide stability to the panels. The electricity would then be converted centrally before connecting to the wind farm substation. The co-location of solar on the site would provide an additional renewable energy source which will become increasingly important as we move towards meeting our net zero aspirations. Continued grazing below the panels is anticipated.

Aviation Lighting

We are in discussions with the Civil Aviation Authority (CAA) regarding aviation lighting requirements for our Teviot Wind Farm proposals.

We will endeavour to limit the number and intensity of lights required on the proposed turbines.

As part of the Landscape and Visual Assessment, a full lighting assessment will be carried out in consultation with relevant consultees, and where appropriate a suitable mitigation strategy will be agreed.

Homes Powered and Carbon Offset

As Scotland and the UK transition towards a more sustainable economy in the context of climate change, there is an increasing focus on electrification as a method of decarbonising the economy. This includes electric vehicles, the numbers of which are expected to grow rapidly following the decision to ban the sale of new petrol and diesel cars from 2030. Teviot Wind Farm (including solar) has the potential to produce enough electricity to power approximately 560,000[1] electric vehicles.

Based on the current proposals for Teviot Wind Farm (including solar), the scheme has the potential to power approximately

370,000 UK homes[2]

The wind farm could also offset approximately

590,000 tonnes of carbon dioxide per year[3]

Which would ordinarily be released through coal and gas electricity generation.

[1] Based on average electric car consuming 2.4MWh of electricity per year and indicative output capacity of Teviot Wind Farm (including solar) being 1,323,636 MWh. Capacity factor of 28.1% used for wind and 11.2% capacity factor used for solar.
[2] Based on Department for Business, Energy and industrial Strategy (DBEIS) Digest of UK Energy Statistics (DUKES) 2020 figures which assume average UK household electrical consumption of 3,578KWh and indicative capacity factor of 28.1% for wind and 11.2% for solar. In reality the turbines and solar-pv will have an increased capacity factor.
[3] Uses DBEIS "all fossil fuels" emissions statistic of 446 tonnes of carbon dioxide per GWh of electricity supplied in the DUKES Statistics (July 2020) p95 Table 5E