# The need for onshore wind

#### National Development

We are facing a climate emergency, and at the same time seeking to enhance the security of our energy supply. Onshore wind can address both of these. This is recognised by the Scottish Government's National Planning Framework 4 (NPF4)<sup>1</sup> which was published in February 2023. NPF4 is Scotland's long-term spatial planning strategy and categorises onshore wind projects with a generating capacity in excess of 50MW as National Development. In principle, it supports all forms of renewable energy generation including onshore wind. There are national targets for reaching Net Zero by 2045 and installing 20GW of onshore wind by 2030. The new UK Government has also outlined the need to double onshore wind by 2030.

#### Low-cost electricity

Our vision is of a future where everyone has access to affordable zero carbon energy. Onshore wind projects like Clune, alongside other renewable energy technologies, are the cheapest form of new electricity generation. They can be deployed quickly and delivered at lower costs than hydro, marine technologies and nuclear.

#### Improved performance and output

Turbine technology has advanced considerably in recent years, meaning that turbines are now more efficient which enables them to generate a significantly greater amount of renewable electricity per turbine. Modern taller turbines provide more electricity, which helps address the climate emergency and security of energy supply. The 200m turbines proposed at Clune would allow for far greater benefits in terms of renewable electricity generation per turbine than smaller turbines would .

70m

850kW turbine

### **Energy security**

Wind energy is a free and inexhaustible resource that has an important role to play as part of a balanced energy mix. It increases energy security by reducing our reliance on imports and builds our resilience to sudden fossil fuel price fluctuations and the uncertainty of global markets.

This indicative infographic shows the approximate number of homes that could be powered annually<sup>2</sup> by each of these three different turbine models. Please note that turbine images are not to scale. Please note: images not to scale.

6,247

HOMES

100m





Clune (proposed)

<sup>1</sup> https://www.gov.scot/publications/national-planning-framework-4/

737

HOMES

<sup>2</sup> The indicative homes equivalent figures for the three different turbine models shown have been calculated using each turbine's capacity and the Department for Energy Security and Net Zero (DESNZ) long-term average load factor for [onshore and offshore] wind of 32.08%, and then dividing this by the annual average electricity figures from DESNZ showing that the annual GB average domestic household consumption is 3,239 kWh (January 2024). The final wind turbine model used for Clune will depend on the outcome of planning permission and the turbine type selected.

2.3MW turbine

1,995

HOMES

## **Clune Wind Farm - updated proposal** www.clune-windfarm.co.uk



200m