# The need for onshore wind

We are in a climate emergency, a cost-of-living crisis and we seek to enhance the security of our energy supply. Onshore wind can address all of these.

#### **Climate Emergency**

Whilst Northern Ireland has been successful at utilising its natural resources, to meet its electricity needs, around 50% of electricity consumption still comes from fossil fuels. To support net zero delivery across all sectors, including heat, transport and industrial processes, which are currently heavily reliant on fossil fuels, it is expected that there will be a substantial increase in demand for electricity in the coming decades. Renewable electricity will become not only more important within the power sector but increasingly central to supplying Northern Ireland's other energy needs.

## **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.

# Low-cost electricity

Onshore wind projects like Dunbeg South Extension, 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. With the rising cost of living and climate change emergency, it is imperative that we deliver electricity efficiently and at the lowest cost to the consumer.

Northern Ireland's Climate Bill has a target to meet at least 80% of electricity consumption from renewable sources by 2030 and it is expected 65% of this will need to come from onshore wind.

Based on our initial studies, the wind farm would comprise of 4 turbines capable of generating up to 16.8MW, enough to power around 17,000<sup>1</sup> homes with clean, low-cost electricity.

## 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 turbines provide more electricity, which helps address the climate emergency, cost of living crisis, and security of energy supply. The 149.9m turbines proposed at Dunbeg South Extension would allow for far greater benefits in terms of renewable electricity generation per turbine than smaller turbines would.

that the annual UK average domestic household consumption is 3,239 kWh (Jan 2024).

# Dunbeg South Extension Wind Farm Proposal www.dunbegsouthextension-windfarm.co.uk



<sup>&</sup>lt;sup>1</sup>The homes figure has been calculated by taking the predicted annual electricity generation of the site (based on RES assessments Dunbeg South Extension has a predicted capacity factor of 38.3%) and dividing this by the annual average electricity figures from the Department of Business, Energy and Industrial Strategy (BEIS) showing