

Wind Energy in Ireland

Current Situation

Wind energy is currently the largest contributing resource of renewable energy in Ireland. It is both Ireland's largest and cheapest renewable electricity resource. At present the Republic of Ireland has over 300 operational onshore wind farms consisting of 2,500 turbines and a combined capacity of c.4,300MW. In Q1 2019, wind energy provided 37% of the state's electricity demand and had a total installed capacity of 3,700 MW (IWEA 2019). This is enough to power 2.2 million Irish homes and accounts for the second largest source of electricity generation in Ireland after natural gas. Ireland is one of the leading countries in the deployment of wind energy and 3rd place worldwide in 2018, after Denmark and Uruguay.

3.7 GW

Enough power for 2.2 million Irish homes in 2019



National Goals

In June 2019, the government published the Climate Action Plan 2019, which sets out Ireland's proposed pathway to 2030. This Plan is also consistent with a net zero carbon emissions target by 2050. The Plan commits to increasing Ireland's renewable share in electricity from 32% in 2018 to 80% by 2030, which will involve the addition of 12 GW of renewable electricity generation. In the (SEAI) techno-economic analysis referred to in the Climate Action Plan, onshore wind is identified as the most cost-effective energy source, accounting for 8.2 GW, or two thirds of additional renewable generation being targeted by the government for 2030.

32%

2018
Renewable
Electricity Share



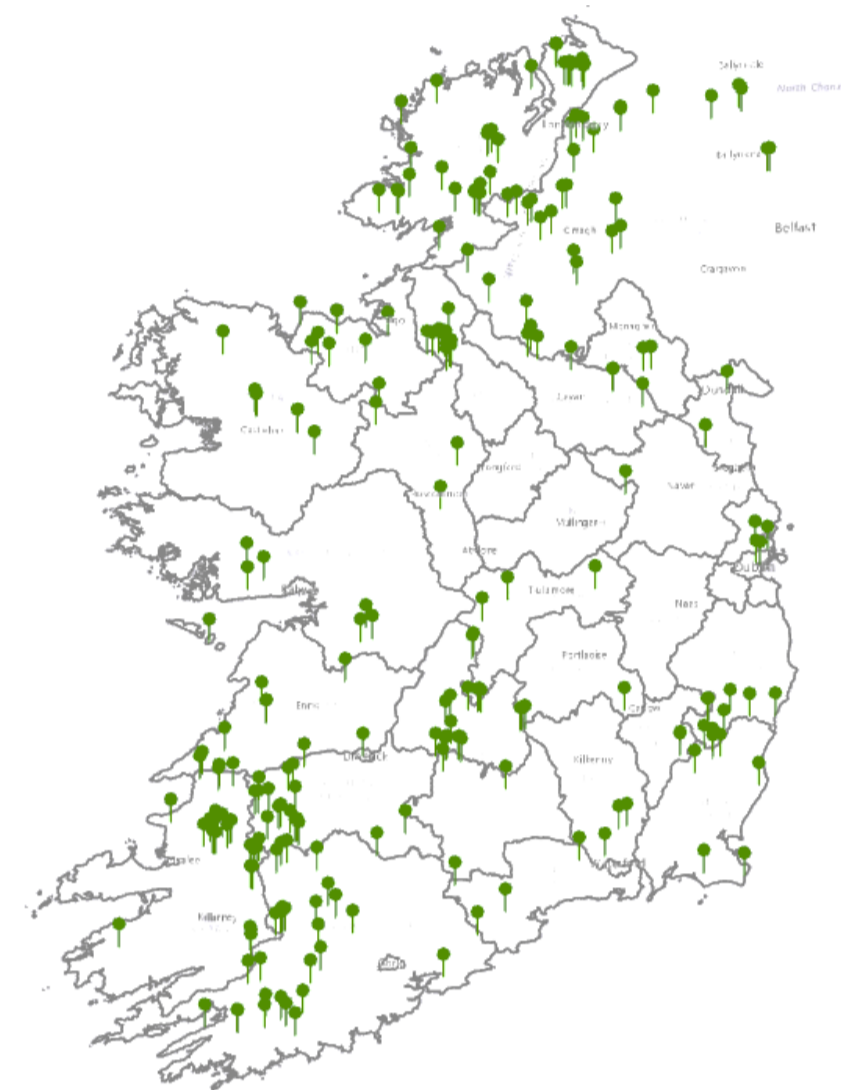
80%

2030
Renewable
Electricity Share

RESS Auction

The new Renewable Electricity Support Scheme (RESS), announced in July 2018, will help deliver Ireland's contribution to our national and EU-wide binding renewable energy targets. The scheme is based on competitive, technology neutral auctions in which renewable energy projects compete with one and other for contracts. This ensures minimum cost to the consumer. One of RESS' key objectives is to increase community participation, as well as community benefits, some of which are highlighted below. The first RESS auction began in late 2019 with subsequent auctions scheduled over the coming years.

- 300 Operational Wind Farms in Ireland.
- 2,500 Wind Turbines.
- 4,300MW of Installed Capacity.
- Displaced 2.7 million tonnes of CO₂ emissions in 2017



Community Benefit

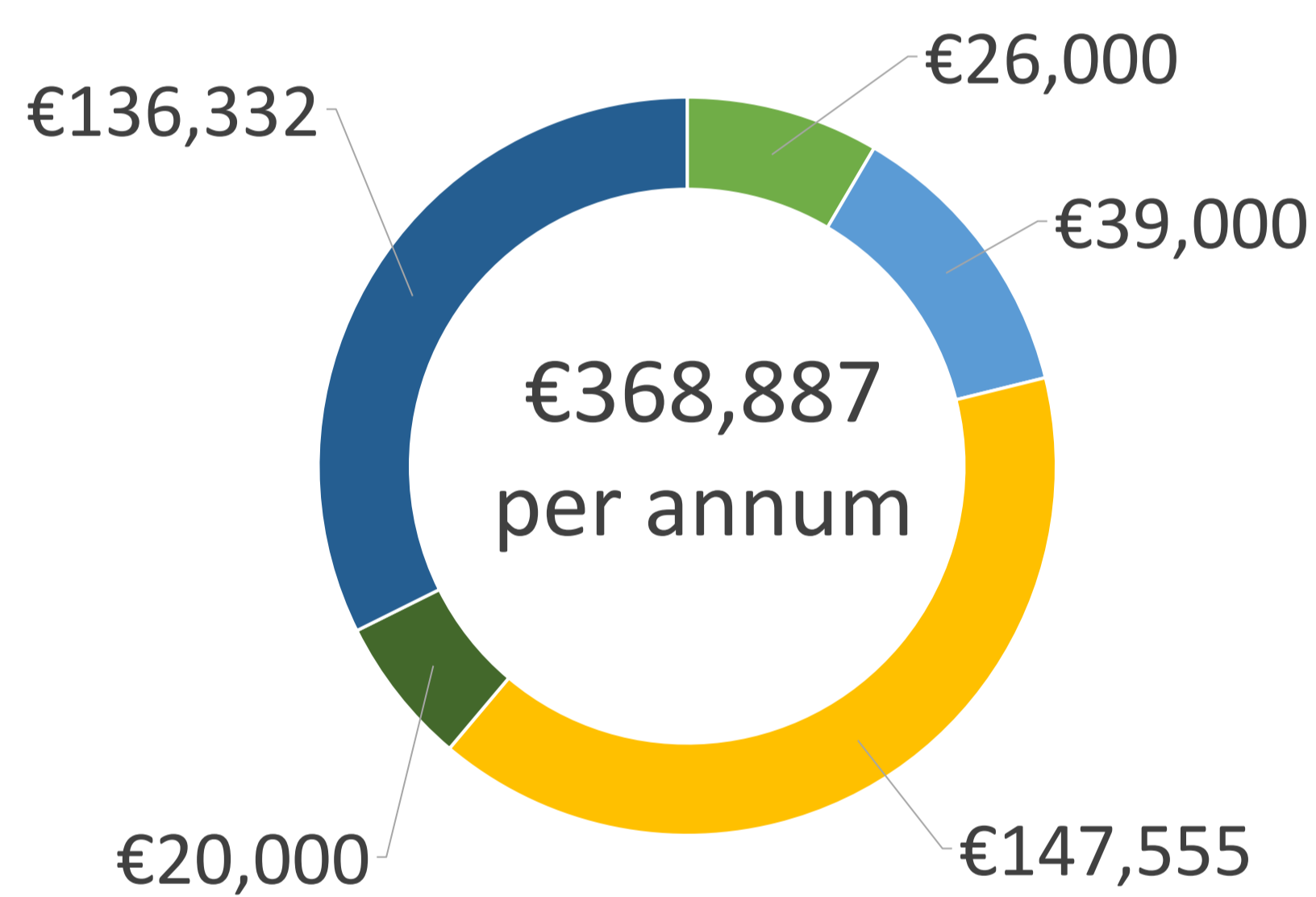
The proposed Dyrick Hill Wind Farm will require an approximate €105 million investment and will provide sustainable, low carbon energy generation infrastructure to meet Ireland's growing demands. The benefits to the local community would include significant investment in local infrastructure such as roads and electrical systems, local job creation, and an estimated contribution of €23.8 million in county council rates over the project lifetime.

The proposed Dyrick Hill Wind Farm will also provide a community fund made available to the local community for the duration of the Renewable Electricity Support Scheme (15 years). The total fund is calculated as €2 per every Mega Watt Hour (MWh) of electricity which is produced by the project once commissioned. The average capacity factor of wind energy projects in Ireland is 28.3% (SEAI, 2019). Using this efficiency figure as an example and assuming a capacity of 74.4 MW, the community benefit fund would amount to approximately €368,887 per annum. The eventual fund may vary slightly depending on the final permitted project capacity and generation performance of the project each year.

A minimum of 40% of the fund, amounting to approximately €147,555 per year, will be allocated to not-for-profit community enterprises, with an emphasis on low-carbon initiatives. An annual minimum payment of €1,000 will also be provided to each household within 1km of any constructed wind turbine which forms part of the Dyrick Hill Wind Farm project. An annual minimum payment of €500 will be provided to each household located between 1km and 2km of a constructed Dyrick Hill wind turbine. The balance of the fund is proposed to be allocated to clubs, societies and other worthy local causes successful in the annual application process. We welcome any suggestions from the community on suitable local projects that could be supported under this initiative.

As well as these direct financial benefits, The proposed Dyrick Hill Wind Farm will provide local job creation, expected to total 126 direct jobs, as well as 30 operations and maintenance jobs which would endure throughout the project's lifetime.

Dyrick Hill Community Fund Allocation Example



- Combined Fund for Households <1km distance
- Combined Fund for Households >1km, <2km distance
- Not-for-profit community enterprises
- Fund administration
- Local initiatives, clubs and societies

€ 105 million
Infrastructure Investment

156
Direct jobs in construction and operational phases

€ 5.5 million¹
Community Fund

126
Direct jobs in construction phase

€ 23.8 million²
County Council Rates Contribution

30
Highly skilled jobs over proposed 40 year operations

1 – Over 15 year RESS contract
2 – Estimated €8,000 per mega watt installed for 40 year project lifespan

