

# Policy statement

## Wind turbines in Ireland

### What is Good Energies Alliance Ireland?

Good Energies Alliance Ireland (GEAI) is an environmental NGO, founded in 2011, situated in County Leitrim in Northwest of Ireland, that aims to ensure the wellbeing of people and communities on the island of Ireland and elsewhere through the protection and sustainable development of our environment, natural resources and our communities.

Renewable energies, such as wind and solar, play a central role in this transition to sustainable lifestyles and we believe in their transformative and community cohesion potential. For that matter, GEAI works towards doing renewable energies in a way that benefits everyone at the same time respects the environment.

Our main objectives are:

- To carry out the activity of promotion of environmental and climate protection and monitoring of energy production and use on the island of Ireland and its territorial waters and elsewhere and any other related activities.
- To establish, promote and operate programmes and services with a view to fostering the economic, personal, cultural, recreational, and social well-being of the communities of Ballinaglera and wider areas and develop Ballinaglera Community Hall as an environmental and community resource centre.

### Background

In Ireland, wind energy is the dominant renewable energy source. It is one of the most exploited and efficient alternatives amongst renewables. In Ireland (2020), 86 % of renewable energy generated came from wind turbines, equalling 36 % of all energy consumed, compared to 51 % from gas and 8 % from other, higher polluting fossil fuels (coal and oil).

Currently 400 wind farms are in operation island-wide with 318 in the Republic, a total installed capacity of 4,309 MW. County Leitrim currently has 10 farms (3% national number) with a capacity of 92.9 MW (approx. 2.2%<sup>1</sup> of national capacity) with plans for further installations. This raises some concerns regarding community inclusion, a factor GEAI believes vital for social acceptability and fair transition.

At national level, the Government of Ireland (*Rialtas na hÉireann*) published in 2021 the Climate Action Plan (CAP 21) setting the target for renewable, wind and solar, electricity at 80% by 2030. At a local level, County Leitrim is currently developing its Development Plan 2023-2029, which includes a strategy for climate action and renewable energy. It emphasises wind as a key player "in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions".

### Benefits of wind energy

- Given Ireland's geographical characteristics, wind energy is the most effective energy source to contribute to the net zero target by 2050 and the progressive decarbonisation of the economy.

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<sup>1</sup> Comparing data from 2019. Extracted from: Leitrim County Development Plan 2023 – 2029 – Appendix IX. Part A - Draft County Leitrim Renewable Energy Strategy.

- The wind industry has the potential to reduce prices (through its competitiveness and on-the-spot sale necessity), to create manufacturing and high-skilled jobs; to maintain a stable income for families; and to contribute extensively to national GDP<sup>2</sup>.
- Offshore wind energy will also be of vital importance in the transition to a sustainable economy. Not only has it proven to be even more efficient than onshore energy, with careful pre-planning and efforts to implement complementary marine preservation actions, offshore wind farms can become major players in the conservation of the marine ecosystem<sup>3</sup>.
- Wind energy typically has a carbon payback of 6 months to a year, making it a key factor in the reduction of greenhouse gas emissions. To achieve net reduction in carbon emissions, the carbon payback period of a wind farm must be significantly shorter than the intended lifetime (typically 20 years)<sup>4</sup>. Therefore, their operating time without emissions make up for the emissions produced during their creation and generate energy in a cleaner and more sustainable way.
- Engaging communities in the whole lifecycle of a wind farm project, as well as the implementation of community ownership models, provide socio-economic benefits in addition to low-cost renewable energy for the local community<sup>5</sup>. These also improve the community's perception of wind turbines and other renewable energy projects, thus generating empowerment and cohesion around sustainability issues.
- Our geographically dispersed housing in windy areas, i.e., West of Ireland, gives potential for siting of smaller turbines in local communities, owned by and powering those communities.

#### **GEAI's concerns**

- Peatlands and carbon payback: Peatlands account for 17% of the area of the Republic of Ireland, 1.17 million hectares in total. Their importance lies in the carbon they store, making their preservation and restoration a vital factor in the fight against climate change. Studies show that onshore wind farms built on peatlands will not achieve net carbon payback if they are built after mid-2020<sup>6</sup>, because they counteract the CO<sub>2</sub> that the peatland could have absorbed had it not been disturbed.

Not only that, but peatlands have also shown to be greater players at preserving biodiversity, minimising flood risk, and ensuring safe drinking water.

- Wind turbines and landslides: According to the Geological Survey Ireland (Department of the Environment, Climate and Communication) some planned new wind farms (such as the one in Dough Mountain) are located in areas with a high susceptibility to result in landslides of the land near their construction. This raises concerns about the prospective environmental and human risks caused by the potential instability of turbines; such landslides commonly occur in Ireland (i.e., Derrybrien and Derrysallagh farms), therefore prior geological surveys are required. Not playing in good favour also, to Ireland's reputation on the field of wind projects.
- Community engagement and ownership: Despite the efforts of RESS II and Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement, GEAI considers that community

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<sup>2</sup> KPMG (2021) Economic impact of onshore wind in Ireland; & Connolly, Kevin (2020). The regional economic impacts of offshore wind energy developments in Scotland. *Renewable Energy*, 160(), 148–159.

<sup>3</sup> Hammar, L., Perry, D. and Gullström, M. (2016) Offshore Wind Power for Marine Conservation. *Open Journal of Marine Science*, 6,66-78. Doi: 10.4236/ojms.2016.61007; & Skopljak, M. (2020) UK Launches Offshore Wind Growth and Marine Protection Programme. [Link](#).

<sup>4</sup> Carbon payback is the period of time for which a wind turbine needs to be in operation before it has, by displacing generation from fossil-fuelled power stations, avoided as much carbon dioxide as was released in its lifecycle. (Thomson and Harrison, 2015).

<sup>5</sup> IRENA (2020), Innovation landscape brief: Community-ownership models, International Renewable Energy Agency, Abu Dhabi.

<sup>6</sup> Thomson, R.C. and Harrison, G.P (2015) Life Cycle Costs and Carbon Emissions of Wind Power. A ClimateXChange report, Scotland, [Link](#).

engagement has been relegated to a mere process of transparency and management of queries or complaints from the local population. In advocating a more participatory model, we currently see a lack of public and/or private mechanisms to ensure real participation of people throughout the project cycle.

- Economic local redistribution: Wind turbines are proven to be an important factor for national and regional economic growth, but we worry that the local population could remain largely excluded in allied employment pools. Every project under the RESS 2 counts with a Community Benefit Fund, to which every generator will contribute with €2 per MWh to such fund for the benefit of the community, but we fear that other forms of engagement to give voice to the demands of communities have not been better explored.
- Benefits: On Onshore Wind RESS 2 Projects, a minimum of €1,000 shall be paid to each household located within 1 kilometre distance, measured from the base of the nearest turbine to the nearest part of the structure of the household, (being 500 metres the minimum distance allowed)<sup>7</sup>. We are concerned that both the distance and the benefits provided are not sufficient, compared with the possible effects of visual and noise pollution, shadow flicker and other negative impacts.

No direct evidence for the impact of those elements has been reported by the HSE in their 2017 position paper “Wind Turbines and Public Health”<sup>8</sup>, but this doesn’t mean lack of possibility for occurrence. In the face of doubt, the Precautionary Principle<sup>9</sup> must apply.

#### **Actions GEAI believes must be considered**

- Balance wind energy generation between onshore and offshore in favour of the latter since the impact at grassroots level is lower and it has proven to have a higher efficiency.
- Any degradation of undisturbed peatlands must be avoided since they are vital in the fight against climate change. We advocate for no siting of wind turbines on these peatlands.
- Windfarms on harvested or damaged peatlands may be acceptable if renaturation and subsequent reseedling is ensured in the area impacted. To this end, it is important that the impact of the turbines, their foundations and access roads on carbon emissions in the area be determined and adequate mitigation measures put in place, including investment in the regeneration of nearby peatlands and restoration after construction.
- Following the same line, also no siting of turbines in areas with high susceptibility to landslides or where landslides have occurred in the past, to avoid every possible damage to biodiversity and communities. Further geological surveys and risk assessments must be taken.
- Increase on-going payments or other benefits to nearby families.
- Regulated distance of turbines to dwellings must be increased.
- Further research into the impact on the local economy and on ownership models that contribute to permanent benefits to the community is needed. Building community, including households, in the planning of wind farms and allowing them to lead this transition must be a priority. The third pillar of sustainability – social – must not be forgotten.

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<sup>7</sup> Renewable Electricity Support Scheme 2 (RESS 2). Government of Ireland.

<sup>8</sup> HSE Public Health Medicine Environment and Health Group (2017) Position Paper on Wind Turbines and Public Health.

<sup>9</sup> “The precautionary principle: Definitions, applications and governance – Think Tank”. [Link](#)

### **Strategies to create community engagement could include the following**

Community ownership models are shown to benefit increased grid's flexibility and resilience, increase deployment of distributed renewable generation, improve energy access and lower its cost for the community; as well as create unity within the communities to overcome energy and socio-economic challenges<sup>10</sup>.

Most common community-ownership models are co-operatives and partnerships of approximately 50kW to 10MW<sup>8</sup>, but other complementarian actions could be:

- ✓ A 'gift' of shares of turbines, i.e., the promoter will offer shares to residents or to local NGOs with the capacity to distribute them to local initiatives (ownership model)<sup>11</sup>.
- ✓ Local communities get energy from the turbines at a lower price.
- ✓ Prioritisation and incentivisation of such community-owned wind projects.
- ✓ Local maintenance technicians and monitoring personnel to be trained and employed for further local economic benefit and buy-in.
- ✓ More active promotion of and support for residential wind turbines as an option for people in rural areas. As a way to make clean energy accessible to everyone, especially to farmers.
- ✓ Formation of focus groups before any implementation, to ask communities what their thoughts are on energy farms as a local income generator, where they should be located, how they should be owned / managed and other questions that might arise.

Those are just a few examples, among others, that could be considered when thinking about community engagement.

### **Final conclusion**

GEAI believe "The development of wind energy is an essential part of the decarbonisation of energy production in Ireland, but such development must have genuine benefits for and buy-in from the Irish people." Wind energy is vital, and we fully agree with the creation of such farms, as long as the issues mentioned are tackled. We must remember that there are three sustainability pillars: environmental, economic, and social. There will be no real transition to green models without a genuine inclusion of people and solving of problems identified by involved communities.

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<sup>10</sup> IRENA (2020), Innovation landscape brief: Community-ownership models, International Renewable Energy Agency, Abu Dhabi.

<sup>11</sup> Delivering community benefits from wind energy development: A Toolkit. Centre for Sustainable Energy with Garrad Hassan & Partners Ltd, Peter Capener & Bond Pearce LLP. [Link](#).