



Earraghail Renewable Energy Development

A proposed Renewable Energy Development comprising of up to 13 wind turbines up to 180 m in height, ground mounted solar arrays of around 5 MW and a 25 MW capacity Battery Energy Storage System, giving a total rated output of around 83 MW.

About ScottishPower Renewables

ScottishPower Renewables (SPR) is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world's largest integrated utility companies and a world leader in wind energy.

SPR now only produces 100% green electricity – focusing on wind energy, smart grids and driving the change to a cleaner, electric future.

ScottishPower Renewables is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world's largest integrated utility companies and a world leader in wind energy. ScottishPower, the first integrated energy utility in the UK to generate 100% green energy, is already investing a total of £10 bn over five years - £6 million every working day, to power a greener future for everyone living and working in the UK.

Site Summary - key facts



generating potential
of around
83 MW



5 MW
ground mounted
solar arrays

**13 wind turbines: 180m
in height to blade tip**



**Earraghail Renewable
Energy Development**

**25 MW battery energy storage
system (BESS) to provide ancillary
services to the National Grid**



Generating around **230-280 GWh**
energy annually, enough energy to
power **45,307** average households in
Scotland per year⁽⁴⁾.

Economic Benefits

Community Benefit Fund

£13.78 million spent in the local economy and approximately £43 million spent in Scotland as a whole.



Opportunity for the community to invest in the operational site.

In net terms, 53 person-years of employment benefiting local residents and approximately 215.4 person-years of employment for Scotland as a whole during the construction phase.



a lifetime GVA contribution of some £26.4 million to the local economy through direct, indirect and multiplier effects, and around £35.6 million to the economy of Scotland as a whole.



Benefits to the Community

SPR has been working alongside communities across the UK for nearly two decades and has, to date, contributed more than £45 million in benefit funds to support initiatives and projects for those communities local to its renewable energy development sites.

Since becoming operational in 2001 and 2014 respectively, SPR's Beinn an Tuirc and Beinn an Tuirc 2 Windfarms on the Kintyre Peninsula have together contributed more than £2 million to the local communities. The recently constructed Beinn an Tuirc 3 windfarm will now provide a further £225,000 funding each year. As a result, these communities have funded a variety of initiatives including:

Over £90,000 towards energy efficiency, general maintenance and equipment for local village halls.



Almost £11,000 to support The Kintyre Way route and Kintyre Way Ultra events.



£2,400 to provide defibrillators in Carradale.

£25,000 to Carradale Activity Play Park to replace the existing equipment and almost £4,000 towards swimming & kayaking lessons for local primary school children.

£12,000 towards the refurbishment and running costs of the Campbeltown Picture House.



£7,500 towards the Kintyre Community Dialysis Unit.



Earraghail RED Economic Impact

SPR is keen to create employment opportunities during the construction and operation of their developments that can benefit those who live near its sites. During its lifetime, Earraghail Renewable Energy Development (RED) is expected to create opportunities for employment related to:

- felling;
- haulage and transport services;
- site clearance;
- access road and other civil engineering services;
- site and ground investigation services;
- building construction, electrical, plumbing, roofing, flooring, plastering, decorating and joinery services;
- crane companies to provide lifting services;
- plant and equipment hire;
- fencing, road furniture and signage installation;
- supply of building and electrical materials (e.g. aggregates, concrete, cabling, equipment, culvert tubes etc.);
- mechanical, electrical, project management and supervisory services;
- provision and servicing of temporary welfare facilities; and
- supply of fuel and other consumables.



Construction & Operation

The Earraghail RED could provide:

Construction Phase

- an estimated capital expenditure of approximately £117.1 million (including solar), with approximately £13.78 million spent in the local economy and approximately £43 million spent in Scotland as a whole;
- in net terms, 53 person-years of employment benefiting local residents and approximately 215.4 person-years of employment for Scotland as a whole;
- an estimated boost to the local economy by a total of £4.2 million of net Gross Value Added (GVA) during the construction period. The Scottish economy would benefit by an estimated £17.4 million net GVA.

Operational phase (based on a nominal 40-year period)

- in net terms, 9 permanent person-years of employment benefiting local residents, and 12 permanent person-years of employment for Scotland as a whole;
- a lifetime GVA contribution of some £26.4 million to the local economy through direct, indirect and multiplier effects, and around £35.6 million to the economy of Scotland as a whole.

Climate Change & Carbon Reduction

The Earraghail RED is considered to be an important and strategic opportunity to help Argyll and Bute Council, and the UK and Scottish Governments, address the Climate Emergency and make a valuable contribution to meeting 'Net Zero' carbon emissions targets.

Key climate change and carbon reduction benefits of Earraghail RED include:

- total CO₂ emissions savings over the assumed 40 years lifetime (excluding the contribution made by the ground mounted solar arrays) is expected to be circa 3,976,365 tonnes of CO₂ equivalent. This would positively contribute to meeting Scotland's targets for reducing greenhouse gas emissions.
- repayment of the carbon emissions related to its construction in around 1.8 years⁽¹⁾.
- BESS to store electricity, providing stability to the electricity supply network, meeting energy demands and providing improved energy security.
- employment opportunities for the local area.



Environment

The Earraghail RED would incorporate environmental enhancements to increase the overall ecological, environmental and social benefits accruing from the Earraghail RED.

These are as follows:

- **Ecological and environmental:** peatland restoration covering 222.6ha; habitat improvement; native woodland planting.
- **Social:** proposed new walking bothy and stone seating on the Kintyre Way; circular walking route and viewpoint near Tarbert.

Powering the Future

Onshore wind is one of the lowest cost forms of new power generation available⁽²⁾.

The Public Attitudes Tracker, published by the Department for Business in 2021, Energy and Industrial Strategy (BEIS⁽³⁾) showed a record 87% of people support the development of onshore wind compared to a previous 76% from the start of 2018.





References

- (1) The latest version (V1.6.1) of the Scottish Government's Carbon Calculator Tool.
- (2) BEIS; Electricity Generation Costs, 2020
- (3) BEIS; Department for Business, Energy & Industrial Strategy
- (4) Calculations from the Scottish Government Renewable electricity output and energy conversion calculator's website. [accessed 20 December 2021]
- <https://www.gov.scot/publications/renewable-and-conversion-calculators>.

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Better future, quicker



Cover image: Visualisation of the proposed Earraghail RED, turbine tip heights 180m.
Other images: Beinn An Tuirc, turbine tip heights 64m; Beinn An Tuirc Phase 3, turbine tip heights 126m and Whitelee Windfarm, turbine tip heights 110m.