

## Community update

Welcome to the second newsletter for the proposed Ballynahone Energy Storage project, which provides a comprehensive update on development activity.

This project is being developed by FuturEnergy Ireland, a joint venture between Coillte and ESB. The company's ambition is to develop more than 1GW of renewable energy capacity along with supportive energy storage facilities by 2030.

Since our first newsletter and information hub in February, we have received a list of queries from the community. The project team has answered these questions to the extent possible at this stage of development and delivered a hard copy of the Q&As to local residents. We will update responses as and when additional information becomes available.

This Q&A list has also been added to the Fact File on the project's dedicated website [www.ballynahoneenergystorage.ie](http://www.ballynahoneenergystorage.ie) for you to view.

## Meet the team



**Fionn McDonagh**  
Project UC M Manager

Civil engineer Fionn worked in infrastructure design before completing a Masters degree in energy engineering and joining the FuturEnergy Ireland team. He finds renewables a fast-paced and exciting sector, and he enjoys helping to make a difference to improve Ireland's energy system.



**Shane Lowry**  
Community Engagement Manager

Shane is your point of contact for this project. As an experienced Community Engagement Manager, he feels strongly that individuals and communities should be continually kept up to date on a local project and have ease of access in contacting the team.

## Contact Us

We welcome your feedback and engagement.

You can email, call or text our Community Liaison Officer (CLO) Shane Lowry to obtain information, ask questions and request to be kept up to date.

**Call**  
087 210 5889

**Email**  
[ballynahone@futureenergyireland.ie](mailto:ballynahone@futureenergyireland.ie)

Alternatively, you can send us a message via the Contact Us section of the website

**Website**  
[www.ballynahoneenergystorage.ie](http://www.ballynahoneenergystorage.ie)

**Postal Address**  
Shane Lowry, Ballynahone Energy Storage, c/o, FuturEnergy Ireland,  
27/28 Herbert Place, Dublin 2, D02 DC97



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**Newsletter 2**  
April 2024



## Project summary

The proposed location for this battery energy storage facility is beside Trillick Substation on the Gransha Road, southwest of Buncrana town, in Co. Donegal.

A battery energy storage system (BESS) is a set of rechargeable batteries that works with renewable energy sources such as solar and wind, which are housed in large containers.

The batteries at Ballynahone will provide flexibility to the grid and significant capacity, for example a project of 40MW would be able to provide 4,000MWh of renewable energy. This means that when fully charged, this system can discharge power for up to 100 hours at a time to power homes, industries, transport, devices and critical services when we need it most.



## Why do we need battery energy storage?

Battery energy storage systems are a positive step towards a more sustainable, resilient and prosperous energy future for us all.



### Maximising renewable energy

The ability to store excess renewable energy and not waste it.



### Energy security

Increases energy independence.



### Financial savings

Lower electricity costs by reducing fossil fuel reliance.



### Grid reliability

A more consistent, reliable power supply.



### Environmental responsibility

Reduces greenhouse gas emissions.

## Planning & Environmental Report

The consultancy Fehily Timoney is preparing a comprehensive Planning & Environmental Report in support of the planning application and an Appropriate Assessment Screening or Natura Impact Statement, if deemed necessary. The Planning & Environmental Report will include the following studies, which examine any potential impacts of the proposed development:

- Planning Policy
- EIA Screening
- Land, Soils, Geology and Hydrogeology
- Hydrology / Water Quality and Drainage
- Biodiversity
- Traffic and Transportation

The Planning & Environmental Report will be available for you to view as part of the planning application.



- Construction and Environmental Management Plan
- Population and Human Health
- Noise and Vibration
- Cultural Heritage
- Landscape and Visual Impacts

## The technology

This project is proposing to use an iron-air battery capable of storing energy for up to 100 hours compared with existing technologies, which are limited to two to six hours. This new form of multi-day storage is made from the safest, cheapest and most abundant materials on the planet: low-cost iron, water and air.

The principle is reversible rusting: while discharging, the battery breathes in oxygen from the air and converts iron metal to rust; while charging, the application of an electrical current converts the rust back to iron and the battery breathes out oxygen.

## How does it work?



### Renewable Energy

Windy or sunny days can generate more energy than we need or more than the grid can accommodate



### Energy in

Excess green energy charges 40MW capacity batteries



### Energy Storage

Batteries store excess renewable energy for up to 100 hours



### Energy out

Batteries release the stored renewable energy when it is needed



### More Green Power

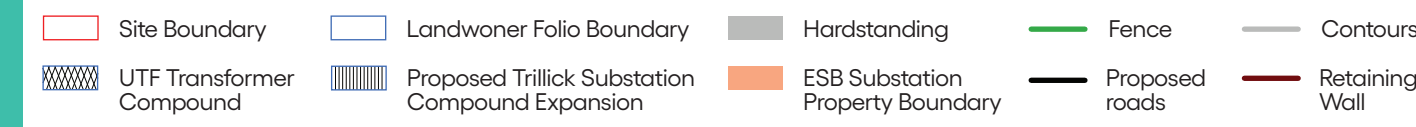
Released energy powers our homes, businesses and transport

## What would the Ballynahone facility look like?

A design layout is now available for the Ballynahone project (see Figure 1). The iron-air batteries will be housed in weatherised containers and installed on level concrete foundations on the 12 hectare site.

As part of the planning design, the site would be surrounded by enclosed fencing, and where necessary and appropriate, will include landscaping and planting along site boundaries. A 5 to 10 metre biodiversity corridor around the perimeter of the site is included. A biodiversity plan to include screen planting will be designed specifically for the proposed Ballynahone Energy Storage project.

Photomontages of the proposed project from different locations will be available for you to view at the community clinic. They will also be included as part of any planning application documents being submitted.



## Next steps

### Community clinic

April 25, 1pm-8pm, Inishowen Hotel, Railway Road, Buncrana, Co Donegal, F93 PPH9.

We are offering a community clinic, which gives you the opportunity to meet the project team and discuss the proposed project. A full set of photo-montages, the biodiversity plan and project layout will also be available.

### The planning application submission

We intend to submit Ballynahone Energy Storage to the planning authorities in Q2 2024.

You will receive advance notice of this. An advert will be placed in the local newspaper and notifications will be uploaded on to the dedicated project website. We also place site notices around the project area and inform everyone who has shared their contact details with us.

When a planning application is submitted and validated by the relevant planning authority the planning documents, including all environmental surveys, will be uploaded on to the project website [www.ballynahoneenergystorage.ie](http://www.ballynahoneenergystorage.ie).

The planning application documents will also be available to view on the relevant planning authority's website and a hard copy will be in the offices of Donegal County Council. Anyone may make a submission on a planning application.