



Fieldstown Energy Storage Project

Why is this project important?

Energy storage will play an important role in the transition to a greener and more secure energy future. Grid-scale battery energy storage systems, or BESS, help balance the intermittent supply of renewable energy sources with fluctuating consumer demand. By storing surplus renewable electricity generated during periods of low electricity demand, batteries provide a dependable backup energy source to relieve pressure on the grid during peak hours, while increasing grid reliability. Reducing our reliance on fossil fuels can also help drive down electricity prices.

How does a battery storage facility work?

The BESS is made up of a series of containers or cubes, each housing

rechargeable battery units. Most grid-scale energy storage systems use proven lithium-ion battery technology. Power conversion equipment and auxiliary systems include cooling, fans, inverters and transformers. The facility is directly connected to a substation and the electricity network. It will have capacity to dispatch up to 75 MW to the network – enough power to meet the needs of up to 150,000 homes.

Why was this site selected?

The Fieldstown BESS project is designed to utilise existing electricity infrastructure by connecting into the electricity grid via the proposed Fieldstown 110 kV Substation, which is still in development.

How will the facility be secured and screened?

The battery storage facility will be enclosed by fencing. CTV cameras will be strategically positioned to monitor the compound, while ensuring they do not breach residents' privacy.

BESS use purpose-built containers that can be painted, positioned and screened effectively for minimal visual impact. The project planting plan will enhance existing natural screening and field boundaries by increasing vegetation to minimise visual impact.

What about noise?

Like other utility-scale facilities, energy storage systems generate some sound. The main sources of noise within a BESS development come from cooling fans, inverters, air conditioning units and transformers. The facilities are designed to operate quietly and efficiently. Detailed noise studies are undertaken by specialist consultants to measure noise levels during project development. BESS facilities are required to meet strict noise requirements which remain in place throughout operation.

What about safety precautions?

Safety is our number one priority. All our renewable energy and battery storage sites meet the highest safety standards.

Prevention and detection measures are key to the safety design of BESS units. The facility will be protected by constant monitoring, battery management, heat detection and fire suppression systems to prevent fire risk. In addition, a fire management plan is developed in conjunction with fire and rescue services.

How long will the facility take to construct?

Construction is scheduled to last up to 30 months. Before works begin, our community engagement team will liaise with local residents and businesses. We will post construction updates on our project web page.

Will there be an increase in traffic?

During construction, a traffic management plan will be in place. Our construction and community engagement team will liaise with local residents and businesses to minimise disruption. Once constructed, battery storage facilities require limited maintenance access.

What are the next steps?

Once submitted, planning application documents will be available to view at the following locations:

- Fingal Planning Office, County Hall, Swords
- Fingal Planning Portal website
- Project website: www.energiagroup.com/renewables