

The need for solar and energy storage

There is widespread recognition that Northern Ireland, and the rest of the world, is in a climate emergency. To help address climate change, NI's Climate Bill has a target to meet at least 80% of electricity consumption from renewable sources by 2030, with solar having an important part to play in meeting this target.

Solar energy also enables more electricity to be generated domestically without reliance on imports and is not subject to sudden price fluctuations or the uncertainty of global markets. It can therefore play an important role in improving the security and diversification of NI's energy supply.

Solar, alongside other renewable technologies, is the cheapest form of new electricity generation. It can be deployed quickly and delivered at lower costs than hydro, marine technologies, and nuclear. If consented, the Glenhead scheme would be capable of generating enough clean, low-cost renewable electricity for around 24,000 homes¹ each year, based on the preliminary design presented at this exhibition. With the rising cost of living and climate change emergency, it is imperative that we deliver electricity efficiently and at the lowest cost to the consumer.

Renewable energy technologies are needed to replace electricity generation from fossil fuels, however, they can generate electricity intermittently depending on weather conditions, which can cause imbalances in the electricity network.

Our energy system is in a transitional period. Ageing infrastructure is being replaced and greater flexibility introduced into our networks via technological advances, such as energy storage, to manage the increasingly complex supply and demand needs of the 21st Century.

Energy storage is crucial in enabling the rollout of zero carbon energy and supporting NI's net-zero emissions target.

Energy storage works by storing energy at times when generation exceeds demand and then releases electricity back to the electricity network when demand exceeds generation.

Energy storage is also considered the fastest technology for responding to a sudden spike in demand or an abrupt loss of supply.



Image for illustrative purposes only



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¹ The homes figure has been calculated by taking the predicted annual electricity generation of the site (using an average solar capacity factor of 11.2%) and dividing this by the annual average electricity figures from DESNZ showing that the annual GB average domestic household consumption is 3,239 kWh (January 2024).

Glenhead Solar Farm Proposal

glenhead-solarfarm.co.uk

