



FarmEnergyNews



Northern Ireland beats Renewable Energy Targets

The Department for the Economy (DfE) has released Electricity Consumption and Renewable Generation for Northern Ireland in for 2019. The latest results show that 43.7% of total electricity consumption was generated from renewable sources within Northern Ireland; an increase of 3% compared to 2018. Of the electricity produced, nearly 85% of it was from wind generation. However, it is worth noting that these figures do not include electricity that is generated and consumed on site.

In December 2019, 51% of total electricity consumption in Northern Ireland was generated from renewable sources; considerably higher than the corresponding figure for the same month one year ago (46.4% in December 2018). These figures are very encouraging and surpass the Executive's 2010-20 Strategic Energy Framework target of 40% of electricity consumption from renewable sources by 2020.

The Northern Ireland Renewable Obligation (NIRO) scheme was the main policy driver which encouraged farmers and landowners to consider renewable energy on their holding. When it was introduced in 2005, renewable electricity consumption was at 3%. Attention now turns to a new Energy Strategy for Northern Ireland in a bid to achieve net zero carbon emissions by 2050.

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2020 generation starts high

FENI Members are reporting record levels of wind and hydro generation for January and February 2020. Wind turbine owners have experienced an increase of as much as 50% compared to January 2019, with Storm Ciara and Dennis in February helping push production 25% higher than January.

While this is great news, it must be noted that Autumn 2019 was a lean period for wind turbine operators, with production well down on that in the previous year.

With record rainfall in 2020, hydro turbine operators are also delighted with their production levels. While farmers may complain about the recent wind and rain preventing slurry spreading and the like, those with renewable projects may have difficulty complaining!



NIE G99 Frequently Asked Questions

Q: Do I need to contact NIEN if I want to change my turbine?

A: Yes, under the law (ESQCR) you must do so and if you fail to notify NIEN you have broken the law!

Q: If I change the turbine tower, hub and blades but keep the original generator?

A: If the original generator is being retained then the turbine only has to meet the D Code requirements under the existing connection agreement.

If you are thinking about altering your generating station contact NIEN via email at connectiondesign@nienetworks.co.uk

G59 and G99/NI

Owners of grid connection renewable generators will be familiar with the term “G59” and the tests that surrounded the connection of their generator to the NIEN grid network. In the context of a renewable generator, the G59 is essentially a piece of equipment which monitors the quality and stability of the electricity on the NIEN grid and compares it against a predefined set of parameters (known as protection settings) which are set out by NIEN. Voltage, frequency, and RoCoF (Rate of Change of Frequency) are some of the items monitored; should any of these go outside of their limits, a circuit breaker will open automatically, disconnecting the generator from the grid network.

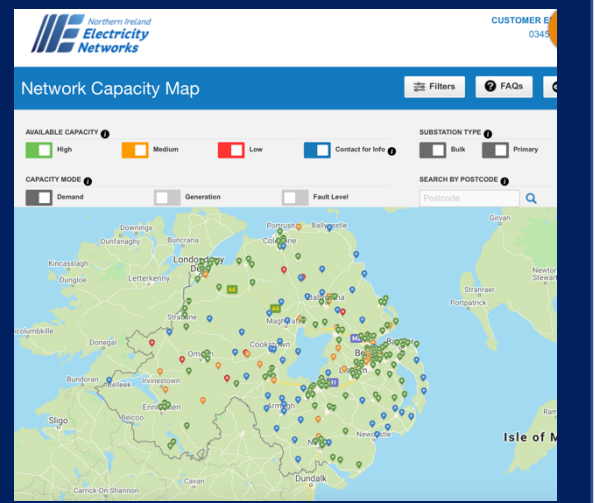
However, G59 has been replaced with G99/NI since 27th April 2019. This is an EU directive and has significant consequences for those people wishing to replace existing equipment. Many popular wind turbine models are simply not compatible with G99/NI without additional works. For example, a wind turbine with an induction generator (such as Vestas) are unable to meet requirements such as Low Voltage Ride Through (LVRT) where the retained voltage drops to 15% and a reactive power range requirement of 0.95 absorbing to 0.98 producing.

There are other active power and frequency requirements which an induction machine may need additional equipment in order to meet the requirements. It is also worth noting that G99/NI is not retrospective.

NIEN Grid Capacity Map now available

NIEN has released an interactive capacity map which allows users to explore the Northern Ireland grid network and identify areas in which there may be sufficient capacity for renewable generators to connect.

It is well known that export capacity is a highly sought after commodity, and it is no surprise that there is limited availability on the network. While not 100% accurate, the tool gives guidance as to the status of the local network. To view, please go to: www.nienetworks.co.uk/connections/capacity-map



Future Energy Strategy in Northern Ireland – Call for Evidence

The Department for the Economy (DfE) recently released a call for evidence document in relation to a new energy strategy for Northern Ireland. This is the beginning of an on-going public engagement process to inform and shape future proposals on energy strategy. It asks recipients to provide evidence, data and views on a wide range of high level issues that may assist in developing the direction of the future energy strategy, including the role of consumers, energy efficiency, heat, power and transport. DfE are keen to hear from a wide range of bodies, groups and individuals, from within the energy sector and also more generally across society.

In June 2019, the UK became the first major economy to commit to a 100% reduction in greenhouse gas emissions by 2050 from 1990 levels. This 'net zero' target represents a significant step change in the commitment to addressing climate change.

Any new strategic direction for energy in Northern Ireland must consider the existing energy mix and how it will be reshaped. It must also consider energy demand reduction. This means whole systems thinking, from energy source to end consumer, incorporating heat, power and transport. The impact on society, as a whole, and consumers, individually, will be of fundamental importance.

The strategy will consider whether there is merit for any kind of intensification scheme to encourage the public to help work towards the net zero target. In the renewable energy sector, a classic example of this could be a replacement scheme for the NIRO which closed in 2017 or perhaps an incentive for installing battery storage to help with energy supply security.

There are undoubtedly challenges ahead with formulating and delivering a new strategic direction for energy. It will only be achieved through collaboration and joined-up delivery across government departments, the energy sector, and other key stakeholders such as local government, consumer representation bodies and academics. In addition, the transition to lower carbon energy also represents an opportunity to educate the public on some of the adverse human health and environmental implications of energy usage, as well as an opportunity to transition Northern Ireland's energy use in a co-ordinated, optimal and efficient way.

The new economy minister is keen to hear your views, so that we can get this policy right. When we have good policy, that much-needed investment will follow.

To view the strategy, please go to the following link:

<https://www.economy-ni.gov.uk/news/dfe-announces-next-step-plan-reach-target-net-zero-emissions>

Responses should be emailed to energystategy@economy-ni.gov.uk or posted to:

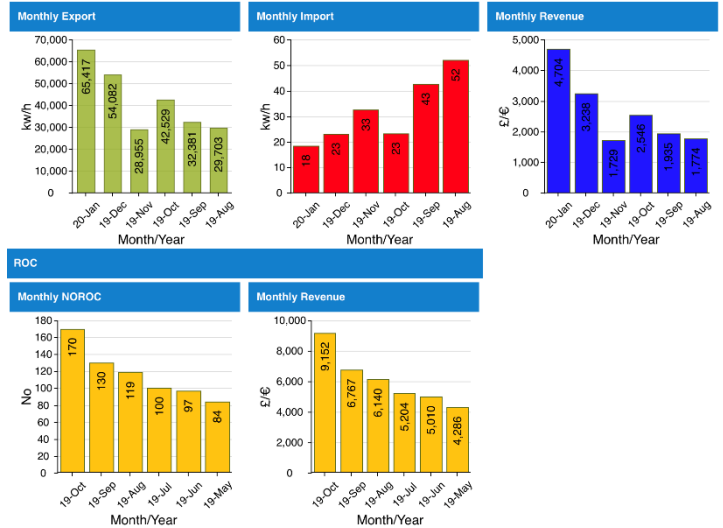
Energy Strategy Team, Department for the Economy, Netherleigh, Massey Avenue, Belfast, BT4 2JP

The closing date for responses is 20 March 2020.

Member News

Farm Energy Portal now live

Our new online portal for accessing invoices and energy production information was launched as part of a complete website relaunch late last year. To access the portal, log onto www.farmenergyni.co.uk and click on "Members Login" at the top right of the screen. Members will have received log in information for the portal via email, along with a tutorial for accessing the new system.



New members

Farm Energy NI were delighted to welcome a group of hydro generators in November 2019. This creates diversity to our mainly wind based generation portfolio. Given the quantity of rainfall that we receive in Northern Ireland, their production provides a steady base load to our generation base.

ROCs Trading Update

The buy-out price for the 2020-21 obligation period will be £50.05 per Renewables Obligation Certificate (ROC); an increase from the current buy-out price of £48.78. This is the amount electricity suppliers will need to pay for each ROC they do not present towards compliance with their 2020-21 obligation.

The buy-out price is updated annually to reflect the average monthly percentage change in the Retail Prices Index (RPI) during the previous calendar year. The average RPI percentage change during the 2019 calendar year was 2.6%.

ROCs trading has been buoyant on the Auction market with prices surpassing £55.50. The table [right] shows how ROCs prices have been increasing steadily over the last 10 years, with FENI members commenting that the returns they are achieving now, surpasses those that they budgeted for in their feasibility studies and cashflow analysis.

As recent fluctuations in the stock market demonstrate, it is still always best to err on the side of caution when taking a long term view of a project.

Obligation period (1st April - 31st March)	Buy-out price (per ROC)
2009-2010	£37.19
2010-2011	£36.99
2011-2012	£38.69
2012-2013	£40.71
2013-2014	£42.02
2014-2015	£43.30
2015-2016	£44.33
2016-2017	£44.77
2017-2018	£45.58
2018-2019	£47.22
2019-2020	£48.78
2020-2021	£50.05



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