

ENERGY STRATEGY E-BULLETIN

ISSUE 18: AUGUST 2022

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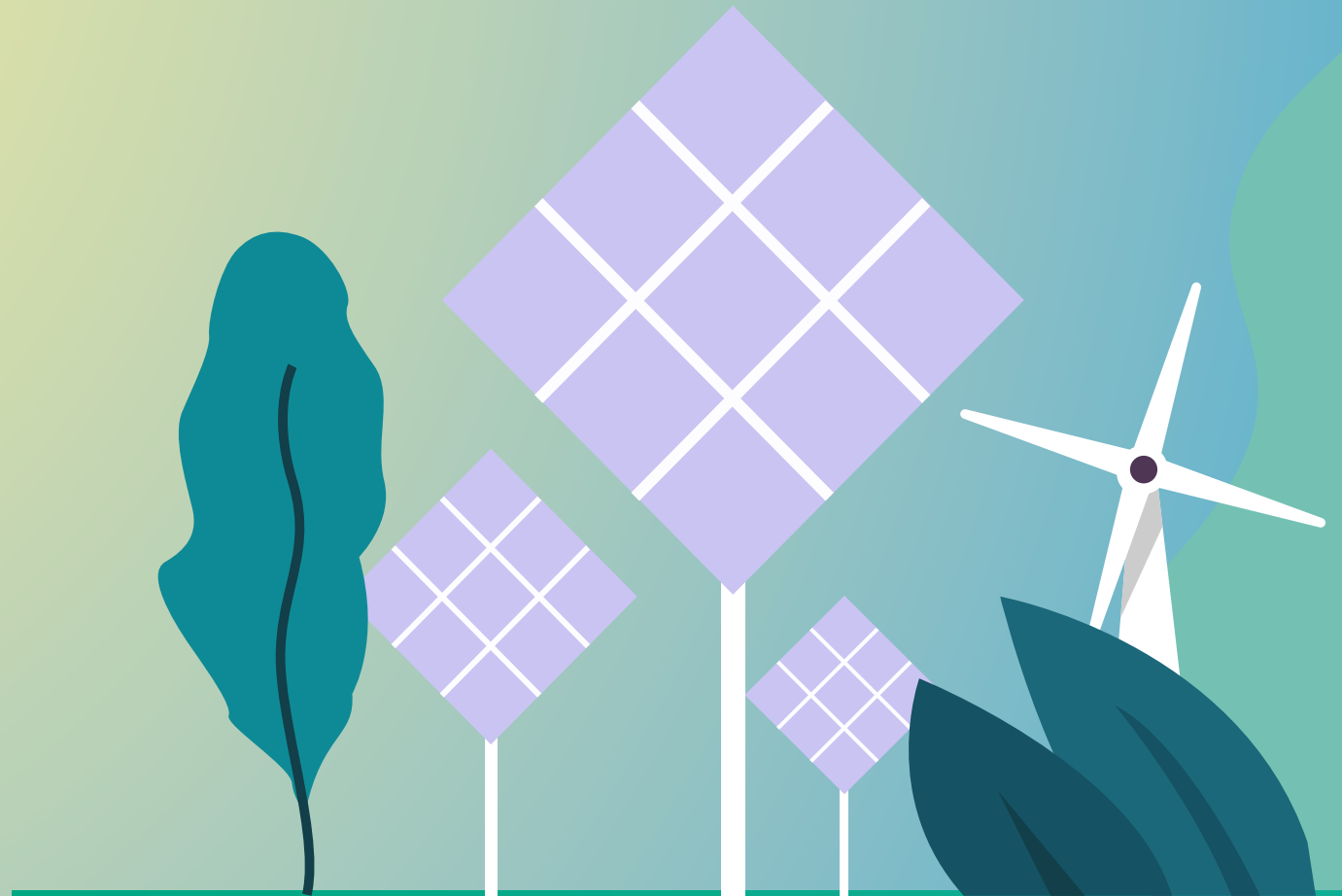


WELCOME TO THE AUGUST 2022 EDITION OF OUR PATH TO NET ZERO ENERGY STRATEGY E-BULLETIN

The Energy Strategy Action Plan launched in January and there has been a lot of work on each of the 22 Actions.

To help keep our stakeholders up to date, each Energy Strategy e-bulletin will feature one of our actions. For this edition we focus on Action 20, related to Smart Energy Metering.

We also outline progress on the Draft Circular Economy Strategy for Northern Ireland, highlight the recently published 'Energy in Northern Ireland 2022' report, and explore the potential for building our local geothermal energy sector.



UPDATE ON ACTION 20 – OUR SMART ENERGY FUTURE

In the future, the energy system in Northern Ireland (NI) will be smarter. Supply from energy companies will be better integrated with demand from consumers and we will have cleaner and more affordable energy.

This will require us to develop and implement the right tools and technologies to help us make use of greater amounts of low-carbon alternatives to fossil fuels. Smart meters are one example of technology that might be used to help us achieve this.

Action 20 of our 2022 Energy Strategy Action Plan requires the delivery of a Cost Benefit Analysis (CBA) of electricity and gas smart meters and other technologies.

The CBA will look at the latest technology solutions, including smart meters, that can enable consumers and the industry to access and use real time electricity consumption data, allowing us to have a more flexible and clean energy system.



UPDATE ON ACTION 20 – OUR SMART ENERGY FUTURE (cont.)

Progress

The Department for the Economy has appointed KPMG, a consultancy with worldwide energy expertise, to produce a fully costed CBA of the implementation of smart metering in NI.

The CBA is to be completed this year, and will focus on:

- Information from key industry and regulatory stakeholders
- Insights and data from the smart meter roll-out programmes in Great Britain and the Republic of Ireland
- Social Impact Analysis (the potential effects on various NI consumer segments)

The report will contain crucial evidence for the Minister to make a fully informed decision on the potential implementation of smart metering in NI.

Importance of Data for our Smart Future

Establishing improved data is a cornerstone of the Energy Strategy. Gathering better quality data, and enabling appropriate access to it, will provide benefits for consumers, network operation and any company, individual or group selling energy. Therefore, it will also enable greater participation in the electricity system.

Timely and detailed data will allow the creation of new variable tariffs, which will help consumers to match consumption to periods when there is more affordable energy from renewable sources. This will help to shift consumer behaviour according to price.

It will take time to carefully explore options for new technologies and ways to capture data before taking forward an implementation plan. Plans will need to include proposals for rules and regulations to protect consumer personal data and any

participant data in the market, alongside protection against new potential risks in the form of cyber-attacks.

Watch out for further information in the 2023 Energy Strategy Action Plan.

For more information on the CBA contact EnergyConsumers@economy-ni.gov.uk



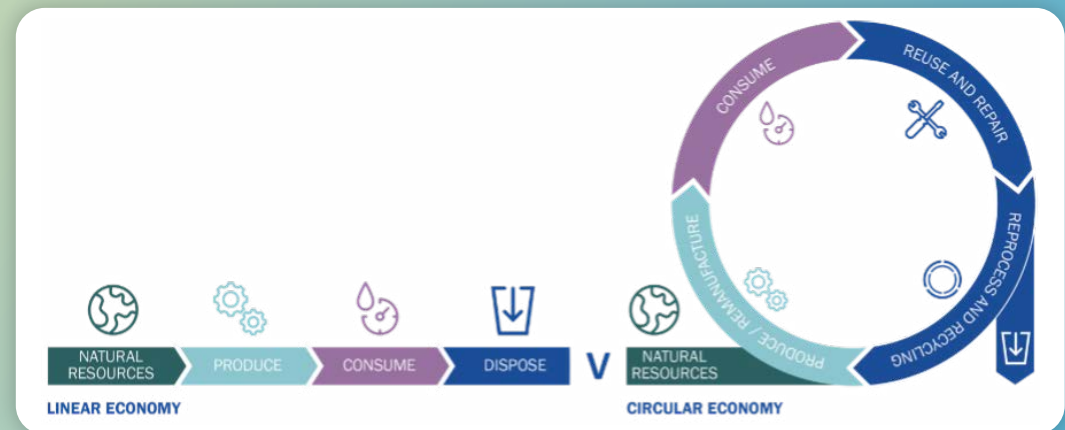
CIRCULAR ECONOMY STRATEGY FOR NORTHERN IRELAND

The Circular Economy offers an alternative model to our current linear economic model in which we rethink and reduce our use of the earth's resources, switching to regenerative resources where possible, minimising waste and maintaining the value of products and materials for as long as possible.

The Department for the Economy is leading the development of a Circular Economy Strategy to support sustainable economic growth in Northern Ireland while also protecting our environment.

Circular Economy and Net Zero

Moving away from fossil fuels and increasing energy efficiency gains will address many, but not all emissions. According to one study¹, these efforts would address 55% of our global emissions, the remaining 45% relates to how we produce and consume things – this makes the circular economy transition an essential tool in tackling climate change and helping us meet our net zero targets.



¹ Completing the picture: How the circular economy tackles climate change (ellenmacarthurfoundation.org)

CIRCULAR ECONOMY STRATEGY FOR NORTHERN IRELAND (cont.)

Circularity Gap Report

Working with the Strategic Investment Board, the Department for the Economy commissioned a Circularity Gap Report specific to Northern Ireland. The report, produced by Circle Economy - a world renown consultancy in this area, baselines the national level of circularity in the NI economy highlighting that our economy is 7.9% circular, meaning that 92% of it is dependent on materials from virgin resources. The full Gap Report can be found [Circularity Gap Report - DfE website.](#)

The Circularity Gap Report, together with the findings from a Call for Evidence (issued to the Circular Economy Coalition of stakeholders) and a cross departmental policy review, have been used as key sources of evidence to help shape and inform the draft Circular Economy Strategy (CES).

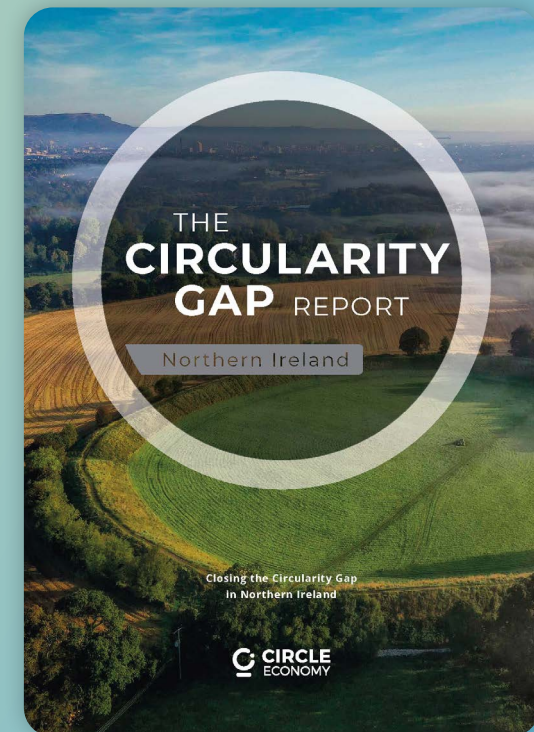
Public Consultation

The department intends to launch a public consultation on the draft CES in due course following a period of pre - consultation engagement with all departments and with our Cross Departmental Steering Group and CE Coalition.

The draft strategy will set the vision and ambition for circularity in Northern Ireland, it will outline proposed policy goals and ambitious, cross-cutting proposals for change. It will also consider three key next step actions in transitioning towards a circular economy in Northern Ireland:

- Promoting the circular economy as an essential and complementary part of creating a 10X economy, helping to reach net zero targets
- In partnership with DAERA, exploring possible options for resourcing a delivery vehicle to coordinate and jointly lead a whole system approach to Circular Economy

- Promoting the inclusion of CE principles in the development of the sectoral action plans required by the Climate Change Act 2022



ENERGY IN NORTHERN IRELAND REPORT

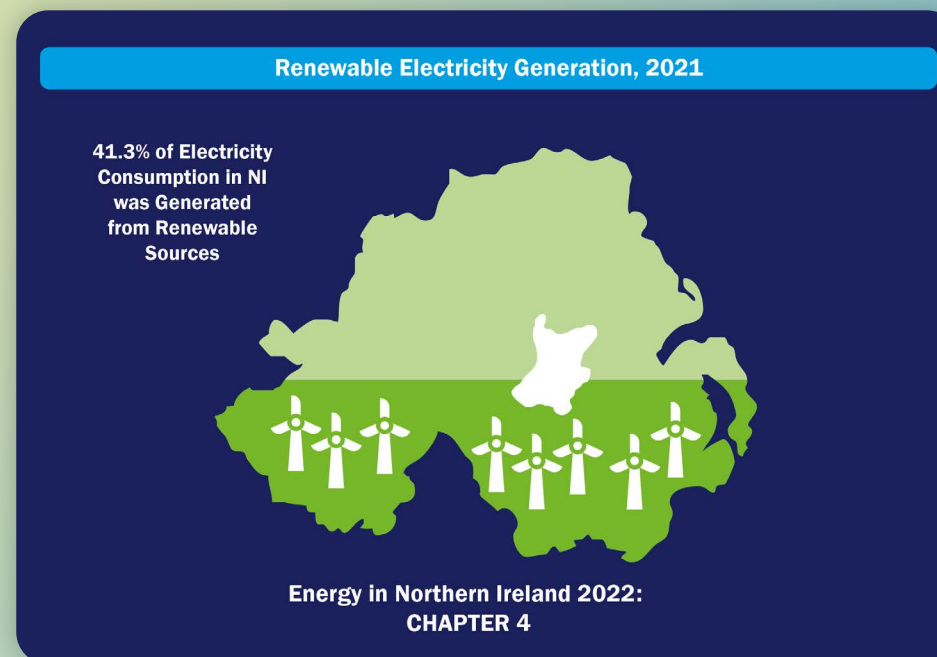
The 2022 edition of the 'Energy in Northern Ireland' report has been published. This bi-annual report aims to provide a comprehensive and accessible overview of key statistics and information relating to energy in Northern Ireland.

'Energy in Northern Ireland' is published by Northern Ireland Statistics and Research Agency statisticians within the Department for the Economy's Analytical Services Division (ASD) and is structured around six chapters:

1. Key socio-demographic statistics for Northern Ireland to provide a broad context
2. The economic contribution of energy to the local economy
3. Electricity generation, transmission, distribution and supply
4. Renewable electricity generation
5. Total energy consumption
6. Energy and the consumer

Key Findings

The annual proportion of electricity consumption from renewable sources in Northern Ireland has risen considerably in recent years, from 9.7% in 2009 to 41.3% in 2021.

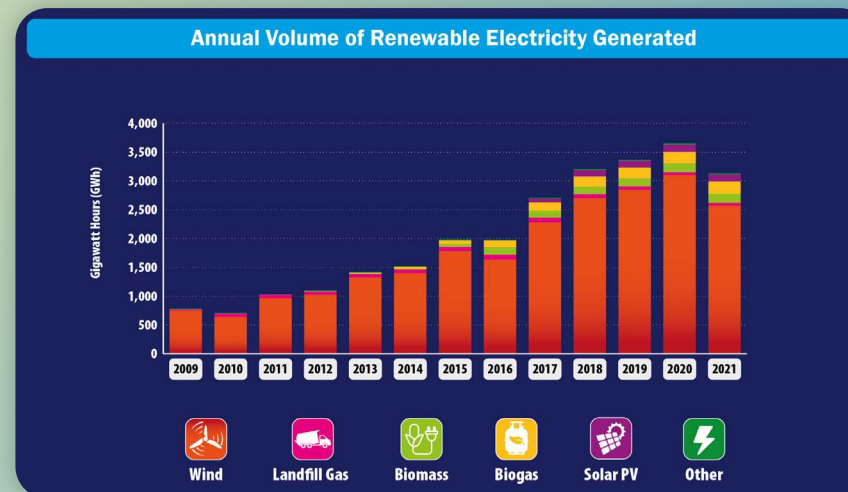
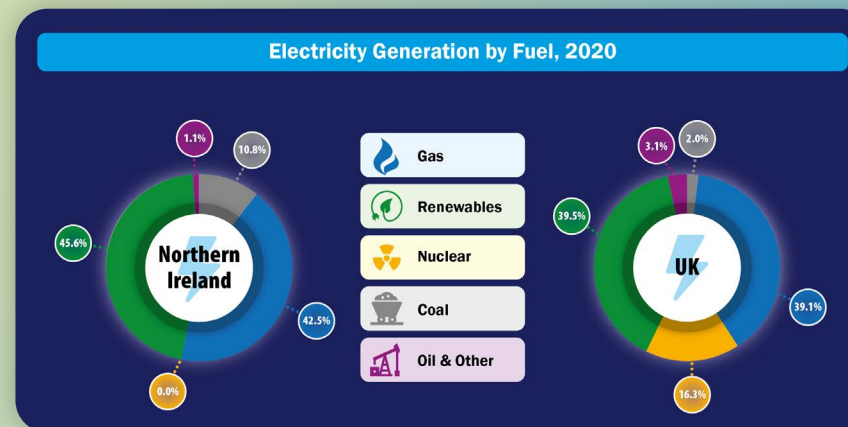


ENERGY IN NORTHERN IRELAND REPORT (cont.)

In terms of the fuel type used for electricity generation, in Northern Ireland in 2020 renewables (45.6%) accounted for a higher share than gas (42.5%). Northern Ireland's proportion of electricity generated from gas was similar to England (39.1%), significantly lower than Wales (55.7%) but significantly higher than in Scotland (10.4%).

Whilst there was a fall in renewable generation between 2020 and 2021 (wind generation fell due to lower wind speeds in 2021), in recent years there have been often large increases in the volume of renewable electricity generated in Northern Ireland and in the number of sites and installed capacity at sites generating electricity from renewable sources. The volume of renewable electricity generated in 2021 (3,131 GWh) was three times the volume generated in 2011 (1,033 GWh).

The latest publication can be accessed at the link below:
[Energy in Northern Ireland 2022](#)



GEOTHERMAL ENERGY

The subsurface of Planet Earth could be the answer to decarbonising the heating and cooling of domestic homes and industrial businesses across Northern Ireland. This proven technology, currently in use in many countries across the world, refers to heat which is obtained from the ground from depths of a few metres to multiple kilometres beneath the Earth's surface.

Building the geothermal sector will help contribute to the net zero target and transition Northern Ireland towards a just energy future by providing an alternative to current fossil fuel use. DfE (Heat Policy Team) recently commissioned a research report on the geothermal energy sector, which was carried out by Professor Mark Palmer and colleagues at Queen's University of Belfast. This report focused on the confidence building actions needed to build the geothermal market and was consulted on widely to accurately reflect the experiences of those leading out on, or working with, geothermal projects.

Several salient points were identified including the importance of market behavioural breakthrough and technological activities, confidence building and

establishing the link between geothermal potential and the actual working of geothermal projects on the ground.

The report is available at:
[Net zero pathways - building the geothermal energy sector in Northern Ireland | Department for the Economy \(economy-ni.gov.uk\)](#)

Most recently, Queen's University of Belfast, Geological Survey of Northern Ireland and DfE co-hosted a series of events during Northern Ireland's inaugural Geothermal Energy Week from 13-17th June 2022. A geothermal conference and stakeholder consultation roundtable event took place, with keynote speakers and panellists in attendance, who have an interest in shaping the geothermal sector in NI.

The aim of the event was to build upon the current momentum of civic interest in geothermal energy, to propose a draft geothermal vision for Northern Ireland and to invite and capture stakeholders' comments.

Delegates welcomed the draft geothermal vision with a view to the development of a future government roadmap publication.

