



Department for the
Economy
www.economy-ni.gov.uk

ENERGY STRATEGY - PATH TO NET ZERO ENERGY

2023 ACTION PLAN REPORT



FEBRUARY 2024

Introduction

The Northern Ireland Energy Strategy – The Path to Net Zero Energy was published in December 2021 after being agreed by the Northern Ireland Executive. It outlines a roadmap to 2030 aiming to deliver a 56% reduction in our energy-related emissions, on the pathway to deliver the 2050 vision of net zero carbon and affordable energy.

The Energy Strategy contained a commitment to publish annual progress reports on delivery of actions against the strategy which would monitor progress and provide an overview of strategic developments.

The Energy Strategy Action Plan 2023 was published in March 2023. It outlined the key actions that would be taken forward in 2023 by central government and partners in delivering the Energy Strategy.

The actions for 2023 supported the delivery of the five key principles of the Energy Strategy:

- Placing the consumer at the heart of the energy future;
- Growing the green economy;
- Doing more with less (energy efficiency);
- Replacing fossil fuels with renewable energy (ultimately ending the importing of fossil fuels into Northern Ireland); and
- Creating a flexible, resilient and integrated energy system to deliver our power, heat and transport needs.

This report provides a general update on each of the above principles and outlines the progress made against each of the Action Points over the last 12 months. The strategic environment that the Energy Strategy operates in, has changed considerably recently and there is more detail on the impact of this in the following chapter.

Government is collaborating closely on development and delivery of action plans to deliver the Climate Change Act, the Energy Strategy and other strategies across central government such as the Department for the Economy's 10X Delivery Plan, green skills, the Department for Communities' fuel poverty strategy and so on. There is significant oversight at both strategic and delivery levels within each Department. Cross-departmental groups facilitate the essential communication and collaboration that is required across all departments to provide leadership and to capture policies and proposals and wider inputs to the Annual Action Plans.

Context

Political Landscape

The 2023 Energy Strategy Action Plan has been delivered in a period without Ministers or an Assembly to agree new policies and proposals. Therefore, the policies and actions outlined in this report were as ambitious as departments considered achievable and which continued to make progress towards the Energy Strategy's goals.

Security of Supply

Maintaining security of electricity supply throughout the journey to net zero is a key priority for the Department for the Economy. Since 2021, there have been significant increases in global energy prices, resulting in increased costs to heat homes, power businesses and deliver public services. Global geopolitical instability has caused global price shocks, reinforcing the importance of security of supply and the economic and social consequences of relying on external sources of energy.

The Department for the Economy works collaboratively with the System Operator for Northern Ireland (SONI) and the Utility Regulator (UR) to review and monitor the security and resilience of the changing energy system.

The Department for the Economy also engages with colleagues in the Department for Energy Security and Net Zero (DESNZ) in Great Britain, as well as Department for Energy and Climate Change (DECC) in the Republic of Ireland, to provide mutual support on energy security.

Climate Change Act

The Climate Change Act (Northern Ireland) 2022 sets out Northern Ireland's legislative framework for tackling climate change and reducing emissions, by setting (among other things) challenging targets for departments to deliver net zero emissions in Northern Ireland by the year 2050.

Led by the Department for Agriculture, Environment and Rural Affairs (DAERA), departments are progressing work on the implementation of the Climate Change Act including the development of the first Climate Action Plan to meet the first carbon budget period (2023-2027).

Delivery of the Energy Strategy aligns with the statutory targets in this new legislation and therefore, some targets have been strengthened. For example, while the target of net zero carbon emissions in energy by 2050 is unchanged, the Energy Strategy target to meet at least 70% of electricity consumption from a diverse mix of renewable sources by 2030 is now 80% to match the statutory target in the Climate Change Act.



Placing Consumers at the Heart of the Energy Future

Objectives

- People are informed, empowered, supported and protected to enable them to transition to decarbonised solutions for all their energy needs; and
- Households and businesses have access to essential and affordable energy to help enable a decent standard of living, health and competitiveness.

Outcome of the specific actions in the 2023 Action Plan:

	Action	Detail
1	Launch the Energy Decarbonisation Information, Advice & Support Service to Consumers.	This will initiate delivery of a core energy decarbonisation advice service for consumers subject to funding. In addition, we will finalise a multi-year Implementation Plan for the service reflecting the outcome of the One Stop Shop (OSS) consultation.

A consultation on the policy options for the Energy One Stop Shop Implementation Plan closed in the early part of 2023. During the consultation we identified a range of provision in a number of areas including the Northern Ireland Housing Executive running NI Energy Advice, providing free comprehensive advice and support on how to save energy in the home; Consumer Council NI who provide advice and information, investigate and resolve complaints and advocate on energy (and other) consumers' behalf; The Northern Ireland Sustainable Energy Programme (NISEP) which provides funding for energy efficiency schemes such as boiler upgrades, LED light bulbs, draft proofing and many more.

Respondents to the consultation indicated the need for the OSS to be linked to a financial support mechanism related to the advice given. We have therefore decided that progress on the OSS should be deferred and linked to the delivery of domestic energy efficiency, low carbon heat and other support schemes. Therefore, we will continue to work with organisations who already provide information and advice to consumers and who seek to enhance the advice currently available.

	Action	Detail
2	Complete first phase of consultation and engagement on a new Fuel Poverty Strategy.	Engage and consult on key issues for the alleviation of fuel poverty while contributing to positive health outcomes and carbon reduction. This will include identifying and targeting priority population groups and the most effective tools to support their move out of fuel poverty.

This work is being led by the Department for the Communities (DfC). It held a policy workshop in January 2023, bringing together key departments and other government delivery partners to discuss design principles, agree the relevant policy areas and potential future tools for fuel poverty alleviation.



A rapid review of evidence on the relationship between fuel poverty and mental or physical well-being was also commissioned. This provided additional information on the links between health outcomes and fuel poverty.

DfC also carried out one-to-one engagement sessions with key stakeholders, culminating in the formation of a Fuel Poverty and Just Transition reference panel with academic, third sector and consumer representation. This is acting as a reference source and providing a constructive challenge function to ensure the new Fuel Poverty Strategy meets the needs of the fuel poor.

In recognition of the complex and cross cutting nature of Fuel Poverty and to ensure collaboration across government, DfC established a Fuel Poverty and Just Transition Project Board to govern the development of a Fuel Poverty Strategy and Action Plan. This Project Board has representatives from the Departments for Communities, the Department for Agriculture, Environment & Rural Affairs, the Department for the Economy and the Executive Office, as well as statutory partners including the Northern Ireland Housing Executive and the Utility Regulator.

Given the significant links across other policy areas there has been ongoing participation in policy development relating to fuel poverty including the Department for the Economy's Low Carbon Heat Support Scheme, Residential Sector Decarbonisation and for a Multi-Year Energy Efficiency Flagship Programme.

Funding of £35.7 million has been approved **to extend the Affordable Warmth Scheme** for a further two years to March 2026. This scheme is aimed at lower income homeowners and private renters most likely to be experiencing severe to extreme fuel poverty and offers a grant of up to £7,500 (£10,000 for solid wall measures) to improve the thermal efficiency of their homes through a range of insulation and heating measures.



Grow the Green Economy

Objectives

- Double the size of our low carbon and renewable energy economy to more than £2bn turnover by 2030; and
- Northern Ireland to become a leading energy decarbonisation innovation hub.

The Energy Strategy contributes directly to the green economy by recognising the imperative of building an energy system and economy that is sustainable for future generations. As we progress delivery of the Energy Strategy, our focus has been and continues to be, on energy innovation, inclusive growth and sustainability.

Specifically, the targets in the Energy Strategy and, more recently, the Climate Change Act, have required us to focus on generating local and export market opportunities, ensuring that our companies can compete for UK and global opportunities in low/zero carbon energy and technologies. This requires the delivery of significant funding for innovation at UK-government level, creation of a support framework of policy direction, decision-making powers and regulation, as well as identification of the skills needed to speed up inclusive economic growth, realise these economic opportunities and support people into secure, well-paid jobs.

	Action	Detail
3	Commence delivery of the plan based on the findings of the Energy Skills Audit.	The Energy Skills Audit will identify gaps and the skills needed from the education and training sectors for energy decarbonisation by the end of April 2023. We will commence implementation of a plan based on the findings of the audit from June 2023.

An Energy Skills Audit was conducted in 2023 and a copy of the report, which is titled “Transitioning to a greener economy – a skills perspective”, is available in the publications section of the Department for the Economy’s website¹.

The results of the Audit identified that long term planning and collaboration across the UK is required. Courses should be available to students in the curriculum from year 8 as they are going to be the people who will be going into the workforce in 2030.

Additionally, the findings show that the skills needed for energy transition are, generally, an upgrading/expansion of the currently skills. The existing workforce will require appropriate upskilling to keep up to date as new technologies are developed and deployed. 90% of the 2030 workforce are currently in employment therefore it is imperative that consideration for reskilling is needed.

1 [Transitioning to a greener economy: a skills perspective - Department for the Economy Website](#)



Following the publication of the Audit, the Department for the Economy reconvened the Green Energy Skills Industry Reference Group (GESIRG). The Group has developed an Action Plan to help coordinate the implementation of the recommendations and has commenced its delivery.



Do More with Less (Energy Efficiency)

Objectives

- Deliver energy savings of 25% from buildings and industry by 2030;
- Ensure all new buildings are net zero ready by 2027 (or earlier); and
- Reduce the distance people travel in private vehicles.

The Department for the Economy continues to deliver the **Energy Management Strategy and Action Plan to 2030** for Central Government in Northern Ireland, which was approved by the Civil Service Board in January 2019. As part of this ongoing delivery, the Department has invested **almost £45m over the past three years across 97 energy projects** in 18 separate government organisations, saving over £5m annually in energy bills. Further investment across the government estate is planned for the coming year, representing public sector leadership on the pathway to net zero energy.



NI Water's investment in solar PV with battery storage at Dunore Point water treatment plant



While new energy efficiency support policy is in development, **£1m of additional funding was provided to the Northern Ireland Sustainable Energy Programme (NISEP)** which assisted over 500 homes to improve their energy efficiency.



This additional funding:

- Is focused on lower income and vulnerable households and helps tackle fuel poverty with positive health outcomes.
- Reduces household carbon emissions assisting in delivering against carbon budget targets.
- Reduces overall energy demand helping towards energy security.
- Improves the condition and helps extend the lifespan of homes.
- Supports the energy efficiency supply chain, directing money into the local economy and sustaining green jobs.

As part of the vision contained within the Energy Strategy to decarbonise heat and to create a flexible, smart and digitised energy system there has been continued policy progress to set up a regulation framework for heat networks.

Heat networks offer the potential to offer significant carbon savings compared to conventional heating systems as, by supplying heat from a central source to consumers, they avoid the need for individual boilers or electric heaters in every building.

The Department for the Economy is working with the Utility Regulator to help prepare for the **regulation of heat networks**. The approach was set out in the government response to the 2022 consultation on [Heat Networks: Building a Market Framework Department for the Economy Response \(economy-ni.gov.uk\)](#). Following the enactment of the Energy Bill at Westminster during 2023, the Department for the Economy set up a **Heat Network Stakeholder Group** to assist in policy development to support the growth in heat networks across the region.

	Action	Detail
4	Statement of Intent and Cross-Departmental Consultation on energy efficiency.	<p>This consultation will seek feedback on a range of evidence-based options presented on a multi-year Energy Efficiency Programme.</p> <p>This will follow a period of engagement with a range of stakeholders and will set a statement of intent to local industry.</p>

A series of meetings with industry stakeholders took place during October and November to inform the upcoming consultation.

Research regarding economic impacts and opportunities for energy efficiency interventions is ongoing in collaboration with Strathclyde University. As well as signaling commitment and intent to deliver an energy efficiency programme, the meetings with industry were an opportunity to provide updates and discuss the development of the new energy efficiency programme whilst discussing their needs.



A cross-departmental consultation on energy efficiency will be published in Quarter 1 of 2024.

	Action	Detail
5	Deliver a programme to include tailored information, advice and technical consultancy to support energy efficiency and decarbonisation, along with financial support open to eligible businesses.	This will deliver a new Energy Efficiency Support Scheme for Northern Ireland businesses. The scheme will deliver energy efficiency interventions including low carbon and renewable technologies and is aimed at helping businesses decarbonise their energy use and lower energy demand.

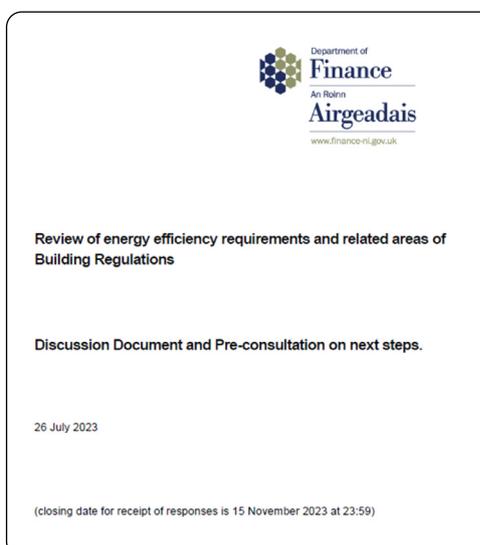
The Department for the Economy worked with its delivery partner, Invest NI, to develop and gain approval for a new Energy Efficiency Support Scheme for businesses. This scheme will provide businesses with bespoke energy efficiency advice and financial support to implement tangible energy efficiency improvements. This assistance will help encourage and promote energy efficiency within business, reducing carbon emissions and energy costs.

This scheme has an intended launch date of the first quarter of 2024.

	Action	Detail
6	Energy efficiency of new buildings - publish and review phase 2 discussion document.	Publish discussion document and liaise on feedback and outcomes with NIBRAC, Minister, Finance Committee and Executive. Dependent on the outcome of this, prepare draft regulations and initial draft technical booklet guidance for Phase 3 uplift for review with the Building Regulations Advisory Committee (NIBRAC).

The Phase 2 discussion document was published in July 2023 and, at the request of stakeholders, the consultation was extended until December. It can be viewed at [Review of energy efficiency building regulations consultation - Department of Finance Website](#)

The proposed measures include detailed ‘next step’ options for a Phase 3 uplift to standards for energy efficiency, ventilation, overheating and electric vehicle infrastructure. It also outlines direction of travel for subsequent uplifts and underlying considerations in assessment methodologies.





The Department of Finance led in seven online awareness sessions with an average of over 100 attendees at each session². Other engagement activity included explanatory sessions with the Climate Change All-Party Group and meetings with district council building control teams.

All of this engagement and the responses to the discussion document, are informing the development of a response document for 2024 and subsequent draft building regulations and technical guidance for the Phase 3 uplift.

² Recordings of the sessions can be accessed via the consultation weblink.



Replace Fossil Fuels with Renewable Energy

Objectives

- Meet at least 80% of electricity consumption from a diverse mix of renewable sources (original 70% target superseded by the Climate Change Act).
- Replace high carbon heating sources with lower and zero carbon sources in households and businesses.
- Support the transition to low and zero carbon fuels for vehicles.

A **Heat Pump Stakeholder Group** is helping to provide industry feedback on themes related to low carbon heating, in particular heat pumps.

The department has been engaging with DESNZ officials in London on the **Clean Heat Market Mechanism** which is a developing UK Government policy that creates a market incentive and credit trading scheme to support establishing low carbon heating. It will place an obligation on manufacturers of fossil fuel boilers to obtain a percentage of their sales from heat pumps or face financial penalties and is intended to be applied UK wide. The UK Government plans to launch the scheme in 2024.

The 2022 Energy Strategy Action Plan committed **to developing and commencing a geothermal demonstrator project**. In February 2023, following a public procurement process, Tetra Tech was appointed as the lead contractor of a consortium of specialists, to deliver this project.

The key objectives of the project are to:

- Showcase and demystify geothermal as a source of heating and cooling.
- Deliver more understanding of the local geology.
- Inform the development of a policy and regulatory framework that supports and promotes geothermal opportunities.
- Gain public support and social acceptance for geothermal energy.
- Encourage and de-risk private investment.
- Help build the sector.

The **GeoEnergyNI project was officially launched** in June 2023. It is focused on unearthing the heat beneath your feet. The GeoEnergyNI website³ provides the public with detailed information about the project, Northern Ireland's geothermal potential and geothermal energy as well as an easy-to-understand animation explaining the project. Examples of successful geothermal systems show that geothermal energy can be used in real life.



³ [Geoenergyni.org website](https://geoenergyni.org)



In July, Polish project partner Geofizica completed a **detailed geophysics survey** at the College of Agriculture, Food and Rural Enterprise at Greenmount, the results of which will help us identify a suitable location for a deep geothermal borehole.

In August, an **application for drilling at Stormont, along with detailed noise, ecology and environmental reports**, was made to Belfast City Council planners. The drilling of the four 250m borewells and a single 500m cored borewell will take around 6 months to complete and will result in a report recommending the optimum geothermal heating system for the estate.

In October 2023, the **GeoEnergy Discovery Centre (GDC) was launched**. It is packed with interactive geothermal displays as well as virtual reality headsets that explain our transition away from fossil fuels and how geothermal energy can be used to heat and cool our homes and buildings. The GDC, which is open to the public on the Stormont Estate, forms the basis of planned outreach that will include roadshows and schools' engagement.





The Electric Vehicle (EV) Action Plan, which was published in November 2022⁴, contained six key actions to be delivered to improve our EV Charging Infrastructure. Two of these have now been completed: **an EV Infrastructure Co-Ordination Group** has been established led by the Department for Infrastructure and **ESB has introduced payment for charging on its network**. The other four actions are being progressed and further actions are being considered in the areas of behavioural change and charging for those without access to a driveway.

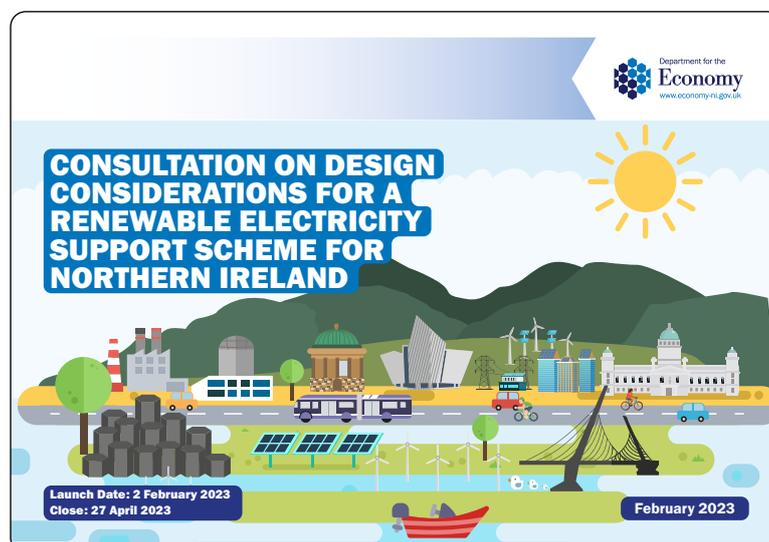
Additional work to replace fossil fuels with renewable energy has been progressed this year in relation to offshore wind. In late 2022 the department published **a draft Offshore Renewable Energy Action Plan (OREAP)** to deliver at least 1GW of offshore wind from 2030. This draft was completed with the support of an offshore wind Steering Group which included the Crown Estate. Responses to the draft were largely positive. This has informed the development of the OREAP during 2023 and we plan to publish an update in early 2024.

The Department commissioned RPS Ireland to undertake an update to the 2012 **Strategic Environmental Assessment and Habitats Regulations Assessment (SEA/HRA) of offshore renewable energy** in the Northern Ireland Marine Area. These will complete in 2024 and will help ensure that the delivery of the OREAP maximises the potential of the seabed whilst focusing on development in areas that will cause the least disruption ecologically, as well as to other users of the marine area.

A **Memorandum of Understanding was established** between the Departments for the Economy, Agriculture, Environment & Rural Affairs and Infrastructure, to ensure that offshore renewable energy projects are prioritised and where possible, departments coordinate and communicate to progress applications in a timely and effective way.

	Action	Detail
7	Launch the design of a renewable electricity support scheme.	Publish the final design of renewable electricity support, along with a pathway and timeline for the support being in place.

In February 2023 the Department published a consultation on [Design Considerations for a Renewable Electricity Support Scheme](#) for Northern Ireland. The consultation closed in late April with the 54 responses from key stakeholders providing valuable input to the development process for the scheme design.



4 [Electric Vehicle \(EV\) Infrastructure Action Plan - Department for Infrastructure Website](#)



In October 2023, the Department contracted Aurora Energy Research to support the drafting of a high-level scheme design. Aurora has conducted analysis of potential design options to define the optimal scheme structure for here, one capable of encouraging sufficient investment in renewable electricity generation at the right price to meet the Climate Change Act target of 80% renewable electricity by 2030.

Following Industry and key partner engagement on the proposed design, in December the Department will publish the high-level scheme design in early 2024 alongside the Departmental response to the consultation.

The Department has also initiated engagement with Department Solicitors’ Office (DSO) and Office of the Legislative Counsel (OLC) on the most appropriate pathway for establishing the legal framework for a renewable electricity support scheme during the 2022-2027 Assembly Mandate. This aims to ensure that the required legal frameworks are in place to deliver on the timeline as published in the high-level design.

The Department is also engaging with the Subsidy Control Advice Unit on the State aid compliance requirements for the support scheme. A timeline for adhering to EU/UK subsidy regulations in line with delivery as per the high-level design publication is also in place as part of the wider project delivery programme.

	Action	Detail
8	Issue a consultation on a low carbon heat support scheme.	<p>Develop proposals for a support scheme for low carbon heating, to assist the transition from fossil fuels to decarbonised forms of heating, that will be required to meet CO₂ reduction targets as set out in the Climate Change Act.</p> <p>This will also help inform the rules and guidance of a future low carbon heat scheme.</p>

A Heat Scheme (Consultation) Working Group (HSWG) was established in February 2023 with meetings held from April to September to discuss key themes within the consultation. Research, external stakeholder and intergovernmental engagement was undertaken to present the Working Group with papers for review, giving background and opinion for each theme together with draft questions to ask within the public consultation.

The consultation will reference ongoing workstreams anticipated to be progressed by the department related to heat and buildings decarbonisation including the multi-year energy efficiency programme, the call for evidence on biomethane, the geothermal demonstrator project and the call for evidence on biofuels for heat.

Feedback from the HSWG has been taken on board and the relevant impact assessments have now been completed, with publication of the Consultation planned for early 2024.



	Action	Detail
9	Issue a call for evidence on the options for supporting biomethane production in Northern Ireland.	<p>This will seek to establish the costs for producing biomethane and present potential options to develop the industry in Northern Ireland. We will collaborate with DAERA to optimise feedstocks for biomethane production.</p> <p>We will work with UR to monitor developer interest in injection of biomethane into the gas network and to assess the treatment of network costs.</p>

Drawing on information provided by key stakeholders, including anaerobic digestion (AD) producers, gas network companies, the Utility Regulator and the Department for Agriculture, Environment & Rural Affairs over the past year, initial work has now been completed on modelling the costs of producing biomethane for injection into the gas network.

This analysis has been incorporated into a draft of the Call for Evidence paper which will be finalised for issue early in 2024. The Call for Evidence will seek responses to questions on the economics of biomethane production, management of feedstocks, treatment of the costs for connecting to the gas network and the role of biomethane on the path to Net Zero. Answers received will help to shape policy aimed at developing the biomethane industry in Northern Ireland.

Research has already indicated that we have the feedstocks, mainly from agricultural sources, to produce biomethane to meet a proportion of gas distribution network demand. This could become a key economic driver for the development of a sustainable agricultural sector and success story for the circular economy.

Biomethane is an established technology in a number of European countries but tends to be heavily subsidised. Our challenge is to develop a policy framework and additional added value streams which support the biomethane sector to become economically viable without long-term subsidies.



AD Plant

	Action	Detail
10	Develop a plan for the decarbonisation of Rathlin Island.	<p>By December 2023 we will develop a cohesive plan to decarbonise Rathlin Island (across power, heat and transport).</p> <p>We will work closely with the Rathlin Development Community Association (RDCA) to ensure any plans align with the residents’ decarbonisation ambitions.</p>

Work is nearing completion with the Rathlin Development Community Association (RDCA) to produce a Rathlin Island Climate Action Plan and is expected to be finalised in early 2024. The plan will build on the findings of the recent Rathlin Carbon Audit report.

Two consultation events on the draft plan were held with the island community and other key stakeholders on 29th November and 12th December to identify and prioritise community actions for decarbonising the island.



Image – Visual minute of Consultation

The Climate Action Plan will assist the Rathlin community in achieving their carbon neutral ambitions according to their own decarbonisation priorities, at a pace they are comfortable with and will deliver wider benefits in terms of upscaling and replicability.

	Action	Detail
11	Issue a consultation on the draft regional strategic planning policy for renewable and low carbon energy.	This consultation will seek views on the future planning policy for renewable and low carbon energy to ensure it is fit for purpose for plan-making and decision-taking in the context of the Energy Strategy and the Climate Change Act.

Public consultation on draft revised regional strategic planning policy for renewable and low carbon energy⁵ closed on 30th June 2023.

When published in its final form, the revised policy is expected to ensure that the planning system makes an improved contribution (through the planning for and management of development) in supporting the wider efforts of government in addressing climate change in the long-term public interest.

Publication of the policy will be considered in light of the decision-making legislation in place at that time, should there be an absence of Ministers.

5 [Review of Regional Strategic Planning Policy on Renewable and Low Carbon Energy - Public Consultation - Department for Infrastructure Website](#)



Create a Flexible, Resilient & Integrated Energy System

Objectives

- Develop an energy system that delivers energy decarbonisation in a secure and cost-effective way; and
- Support the development and delivery of solutions that enable people and communities to be active participants in the energy decarbonisation.

Work continued on the preparation of a **Northern Ireland Smart System and Flexibility Plan** (SSFP) to set an approach for developing Northern Ireland's energy systems to meet the needs of a decentralised, renewable energy system. A public consultation on 'Design considerations for a Northern Ireland Smart Systems and Flexibility Plan'⁶ launched on 17th January 2024. This public consultation sets out and seeks input on, the design considerations on which DfE will base the development of a Smart System and Flexibility Plan for Northern Ireland. This includes policy options which may be taken forward by DfE and other bodies, as they develop more granular aspects of the policy areas which the SSFP identifies as necessary for delivering the Energy Strategy.

	Action	Detail
12	Develop and commence delivery of a roll-out plan for electricity smart meters.	We will work with stakeholders to develop and initiate a roll-out plan for smart meters.

The Department for the Economy completed a cost benefit analysis of smart meters (CBA) in early 2023. The CBA report concluded that the case for the implementation of electricity smart meters had produced a significant level of benefit for consumers. A copy of the report was published on DfE's website⁷ in June 2023.

As a result of the outcome of the CBA, the department commenced planning the implementation of electricity smart meters. A Smart Meters Working Group (SMWG) was established with the Utility Regulator and a three-phased approach which is detailed below has been agreed.

⁶ [Design considerations for a Northern Ireland Smart Systems and Flexibility Plan - Department for the Economy Website](#)

⁷ [Smart Meters Update - Department for the Economy Website](#)



Phase 1 – Develop High-Level Design

Phase one has commenced with the commissioning of expert advice to provide a report which will detail:

1. Lessons learned from smart meter rollouts in other jurisdictions.
2. High Level Design principles suitable for Northern Ireland’s market and Northern Ireland consumers’ needs.
3. Stakeholder engagement.

Following the completion of the report the Department for the Economy will consult on High Level Design principles.

Phase 2 – Produce a Detailed Design

This follows the public consultation and includes detail on legislation and regulatory powers, detailed design of the system and engagement with consumers using co-design methodology.

Phase 3 – Implementation and Roll-out to Consumers

Implementation and Roll-out to Consumers will follow the plan set out in Phase 2.

The Department also engaged with NIE Networks and electricity suppliers to learn about the local small-scale semi-smart meter pilot and their experience with the rollouts in Great Britain and the Republic of Ireland.

Smart metering has the potential to be an enabler for a wide range of other policies necessary for the achievement of net zero. For example, electricity smart meters will contribute to the delivery of the Smart Systems Flexibility Plan that the department is developing. Also, it will support energy affordability policies by providing consumers with the information they need to save energy, carbon and money and give them access to flexible tariffs.

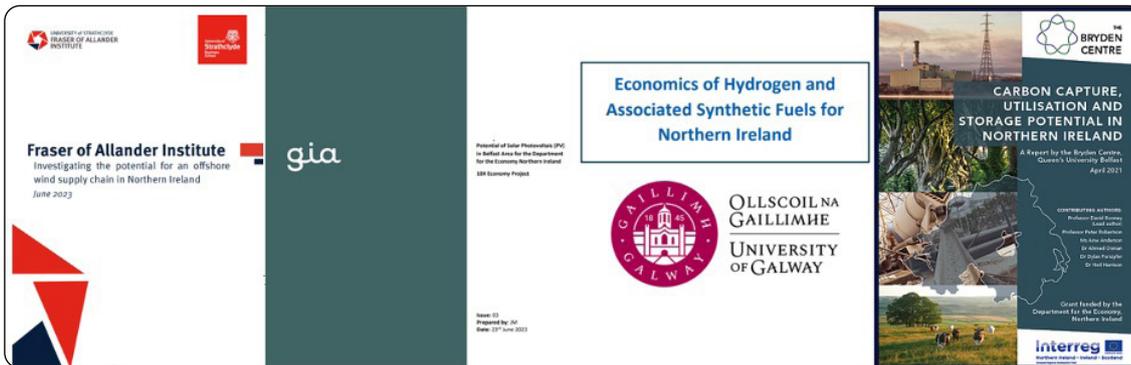
Delivering the Strategy

Research

One of the commitments within the Energy Strategy was to produce a comprehensive energy evidence programme to inform policy decisions. This evidence programme ensures that we support the delivery of our vision with evidence-based policymaking.

The Department for the Economy commissions research to provide further information on energy policy issues. Some of the published research projects taken forward in support of the Energy Strategy are across themes such as renewable generation, hydrogen, carbon capture, utilisation and storage. For example:

- Investigating the potential for an offshore wind supply chain in Northern Ireland.
- Potential of Solar Photovoltaic (PV) in Belfast Area – Pilot.
- Economics of Hydrogen and Associated Synthetic Fuels for Northern Ireland.
- Carbon Capture, Utilisation and Storage Potential in Northern Ireland.

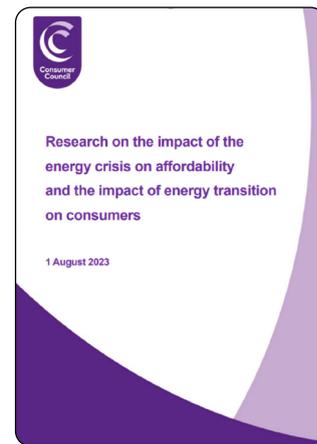
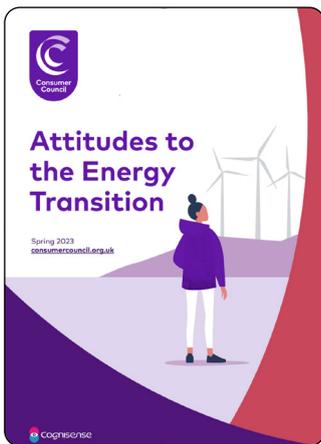


There are a number of research areas that are either being progressed, or we aim to progress in the near future including:

- Investigating the potential economic impacts of offshore wind developments in Northern Ireland.
- Potential of Solar Photovoltaic (PV) in Belfast Area – Phase 2.
- Potential Rooftop Generation of PV in Northern Ireland.
- Potential of Offshore Wind Energy in NI.
- The potential to produce biomass-derived Sustainable Aviation Fuel (SAF) on the island of Ireland.

The Consumer Council for Northern Ireland has also published a number of pieces of research relating to the Energy Strategy including:

- Attitudes to the Energy Transition⁸
- Consumer attitudes to protection during the energy decarbonisation in Northern Ireland⁹
- The impact of the energy crisis on affordability and the impact of energy transition on consumers¹⁰



8 [Attitudes to the Energy Transition - Consumer Council Website](#)

9 [Consumer attitudes to protection during energy decarbonisation in Northern Ireland - Consumer Council Website](#)

10 [The impact of the energy crisis on affordability and the impact of energy transition on consumers - Consumer Council Website](#)

Legislation

Enabling actions may require additional legislation to ensure smooth implementation. While the extent of the legislative requirement will not be known until these enabling actions have been developed into policy, it is likely that primary legislation will be required to facilitate delivery of a range of policy objectives including offshore renewable energy solutions.

The Department for the Economy is progressing a plan for primary legislation and considering what other priority areas might be included in any future NI Energy Bill(s) for consideration by a future Minister.