



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

ENERGY STRATEGY FOR NORTHERN IRELAND

CONSUMER FRIENDLY SUMMARY REPORT



Introduction

This document is about the plans that are being considered for a new Northern Ireland Energy Strategy.

We want to develop an energy future for Northern Ireland that puts **you** at the very heart of our plans. We want to ensure that we provide affordable energy for everyone, whilst tackling climate change by reducing our carbon emissions, which will help improve our environment, our health and our lifestyles.

In order to help us achieve these goals, **you** will have an important part to play in how you choose to live your day-to-day life; in your home, in your workplace or business and in how you choose to travel.

We have developed an online consultation so you can tell us what you think about our plans for Northern Ireland's energy future. There are 79 questions in the consultation, we have added them to the back of this summary report, but **you only need to answer those that are most relevant and important to you.**

We would encourage all energy users, including businesses, householders, and the energy sector to get involved.

You can access the consultation by clicking from the [Northern Ireland Energy Strategy consultation home page](#). The consultation will be open until **23.59pm on 30 June 2021.**

We will use the information you share with us to help inform the direction of the new Energy Strategy which we plan to publish at the end of 2021. Your details will remain confidential.

Why the Energy Strategy is important for you



Climate Change

Most of the world, including the UK, have signed up to the Paris Agreement. This is a legally binding international treaty that aims to tackle climate change.

Climate change refers to significant changes in global temperature and weather patterns caused by increased greenhouse gas emissions, which are a direct result of human activities.

The World Meteorological Organization has reported that the five years between 2015 and 2019 have been the warmest on record, and average sea levels across the globe have increased by 3.6mm per year between 2005 and 2015.

Without action, the effects of climate change in Northern Ireland could result in:

- freshwater shortages;
- impact upon our ability to produce food;
- increased number of deaths from floods, storms and heatwaves; and
- increased threat from global pandemics similar to, or worse than, what we are experiencing with Covid19.

The goal of the Paris Agreement is to limit global warming to below 2 degrees Celsius, but preferably below 1.5 degrees Celsius compared to pre-industrial levels.

To achieve this, we must significantly reduce our greenhouse gas emissions as quickly as possible and work to achieve a 'climate neutral' world by the middle of this century. This means achieving an ongoing balance between the greenhouse gases released into our atmosphere with those that are taken back out.

Independent expert advice received from the UK Committee on Climate Change said Northern Ireland could achieve ‘net zero carbon emissions’ by 2050. The most dominant greenhouse gas in the atmosphere is carbon dioxide, so greenhouse gas emissions are sometimes referred to as “carbon emissions”. As 96% of energy related emissions in Northern Ireland are carbon, we have a real opportunity to impact climate change at a local level by ‘**decarbonising**’ all the energy we use.

Failure to do this will create significant risk to the health and wellbeing of our local and global environment, and will impact the ability of our future generations to survive and thrive on this planet, with much of Northern Ireland eventually becoming submerged by rising sea levels.

Opportunities:

We have an **opportunity** to remove carbon emissions from the energy we use. This opportunity will mean big changes for us all in how we live our day-to-day lives - impacting how we live, work and choose to travel. These changes will also create significant opportunities for all who live and work here, including:

- Low carbon jobs that can directly play a part in tackling climate change;
- New education and training routes to develop skills for our low carbon workforce;
- Significant additional local investment and access to global export markets;
- Support and advice for homeowners and businesses to help them adopt low carbon technologies;
- Investment to help increase the warmth and comfort of buildings;
- Eradication of fuel poverty; and
- Resilient and efficient energy systems that minimise costs and meet our energy needs, whilst providing opportunities to participate in energy markets.

These changes will ultimately help us develop a greener economy, as well as providing healthier lifestyle choices for us, our communities, and our environment.

There are different paths that we could take to get to **net zero carbon energy** by 2050. We have created a new interactive tool specifically designed for Northern Ireland that allows us to choose a variety of future energy scenarios based on:

- using different energy fuels;
- how much energy we might use; and
- carbon emissions associated with these choices.

We have called this the Northern Ireland [Energy Transition Model](#).

[Try out some future renewable energy scenarios yourself](#) by selecting from the menus – **Northern Ireland** and any year up to **2050**.

Topics covered within the Energy Strategy

We have developed this paper based on **five key principles** to shape our energy future.

We believe that you, our energy users, are of central importance to our future strategy, which is why “placing you at the heart of our energy future” is our fundamental cross-cutting principle.

We propose that these principles will set the direction for the Energy Strategy and all resulting energy policies going forward. They are:



Placing you at the heart of our energy future: We will make energy simple for people and develop policies that enable and protect consumers through the energy transition. Affordability and fairness for all be key considerations in all our policy decisions.



Grow a green economy: We will provide economic opportunities, create new jobs and grow a low carbon skills base through innovation and by focusing on our competitive strengths.



Do more with less: We will set clear targets, standards and regulations that drive improvements in energy efficiency. Consumers will be supported to invest in buildings and make other changes that can reduce their energy use.



Replace fossil fuels with indigenous renewables: We will phase out fossil fuels by growing our indigenous renewable base and using this to decarbonise the power, heat and transport that we use at home and at work.



Create a flexible and integrated energy system: We will create a flexible, smart and digitised energy system that integrates heat, power and transport, creates value for consumers and enhances energy security.

ENERGY STRATEGY FRAMEWORK

VISION: NET ZERO CARBON AND AFFORDABLE ENERGY



DELIVERY PRIORITIES:

Security of Supply • Costs • Intelligence • Legislation • Regulation • Governance

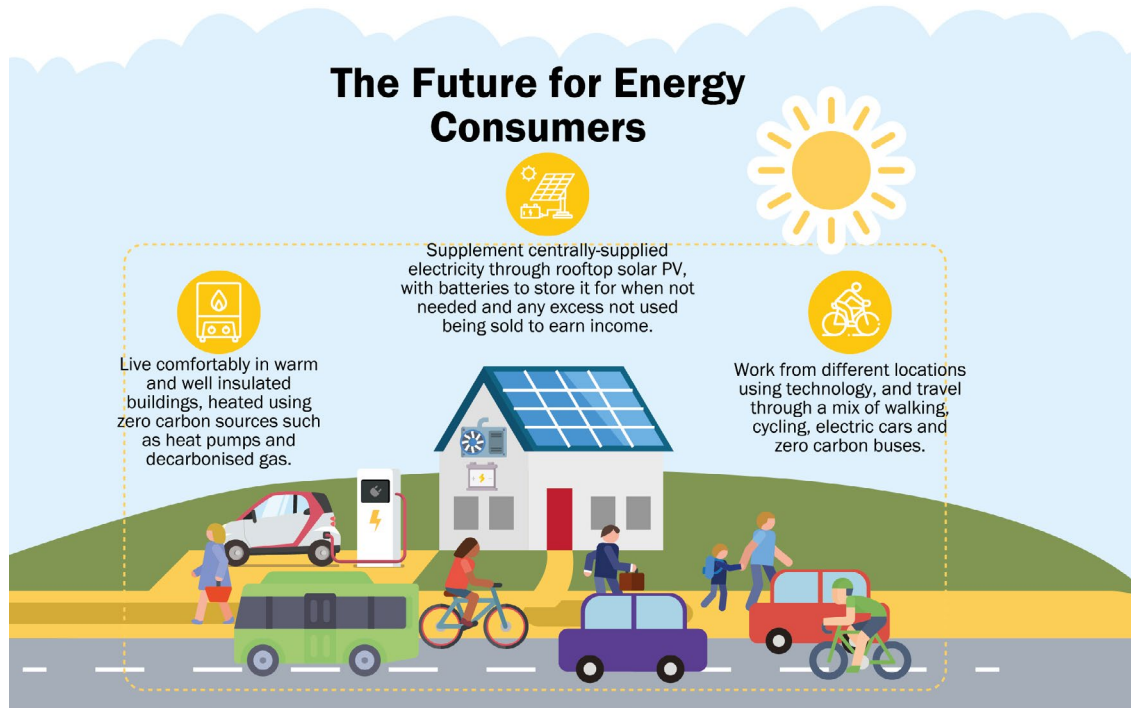
Each principle is supported by a number of potential new energy policies that we have developed over the last year using a wide evidence base. We'd like you to give us your views by **answering any questions in our consultation that are of relevance to you.**

We will use this feedback alongside our evidence base to shape the new Northern Ireland Energy Strategy. We have included a summary about each principle and what we are consulting on. However, you can find more detail on each principle in the Energy Strategy Policy Options Consultation Paper Report using this link: [Energy Strategy for Northern Ireland - Consultation on Policy Options \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/energy-strategy-for-northern-ireland-consultation-on-policy-options)

The Northern Ireland Energy Strategy Principles:

Placing you at the heart of our energy future

How we work, live, travel and interact with the energy system must change. This is referred to as the “energy transition”. This transition is focused on benefiting energy users and to ensure that this happens, we are placing **you** at the heart of our energy future.



We want to engage directly with you, as energy consumers, to better understand the opportunities and challenges ahead as we plan to move away from fossil fuels. By working together, you will help us shape new energy policies that will fit with your life – at home, work and in your leisure time. These policies will be built around measures designed to ‘enable and protect’ energy users like you, such as:

- **Delivery of information** and advice that is easy to understand and access. This will be provided by trusted experts who can give energy users, like you, confidence in new renewable products and services they may be unfamiliar;
- **‘Hands on’ support** if you need help with decision-making, to ensure the best outcomes for you or your business on your energy transition journey;
- **Financial support** to help bring about change and support for energy consumers; and
- **Development of targets**, regulations and new laws to help bring about necessary change and to promote fairness and trust.

What we want your feedback on in this section:

- **Establishing a new “one stop shop” to provide information, technical advice and relevant support for all energy consumers;**
- **Shaping energy policies that will ‘enable and protect’ consumers during the transition to decarbonise energy; and**
- **Taking forward a review of affordability and fairness in meeting the investment costs of removing energy carbon emissions.**

Grow a Green Economy



The Coronavirus pandemic has had a significant impact on our economy and the clean energy sector will be a key driver in developing a stronger and greener economy as we move forward. This will provide a wide range of opportunities for Northern Ireland such as:

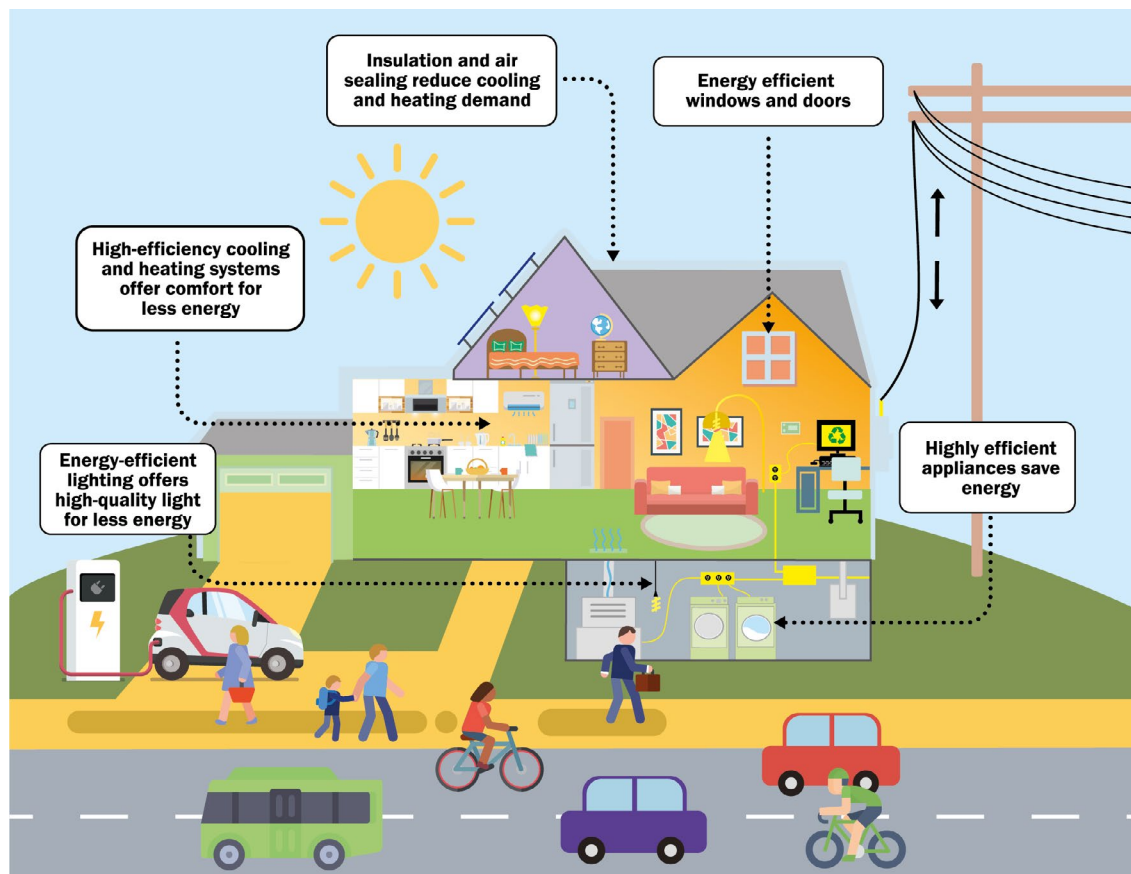
- Creating economic opportunities that lead to new jobs and provide education and training routes for low carbon sectors;
- Ensuring our economy is sustainable and aligns with global efforts to address climate change;
- Driving growth throughout our economy and across Northern Ireland; and
- Creating substantial export and investment opportunities for Northern Ireland.

What we want your feedback on in this section:

- **Using our energy policies to maximise the economic opportunities for low carbon sectors;**
- **Supporting the growth of the emerging hydrogen economy in Northern Ireland;**
- **New support for green innovation to enable projects that can stimulate growth to build our green economy; and**
- **Establishing an energy skills forum to identify the skills we will need for a low carbon workforce.**

Do More with Less

This principle is about energy users within the home, workplace and businesses across Northern Ireland, and how government can support them to 'do more with less'. Reducing the amount of energy that we use will play a significant role in reducing emissions. As less energy is created, costs associated with investment to deliver zero-carbon energy will also reduce.



We need to serve the energy needs of a growing economy and population whilst being more efficient with our energy use in how we live, work and travel. Within the 'do more with less' principle we have developed three key objectives:

- 1 We will **set clear direction for energy efficiency** to ensure that the necessary targets, standards, and regulations are in place;
- 2 We will **support you to invest in buildings** through a range of measures tailored to individual needs and circumstances; and
- 3 We will **seek to enable change** for how we think about and use energy in our day-to-day lives.

What we want your feedback on in this section:

- **Comprehensive additional support to improve the energy efficiency of our buildings;**
- **Building your trust and confidence in energy efficiency work carried out by the energy industry;**
- **Measures aimed at supporting change in how we use less energy and travel; and**
- **Introducing an energy savings target, minimum energy efficiency standards for buildings and uplifted building regulations.**

Replace Fossil Fuels with Renewable Energy

We are a fossil fuel dominated country, with most of the energy that we use coming from petroleum products (petrol, diesel and heating oil) and natural gas. Meeting net zero means ending our dependency on fossil fuels and replacing them, as far as possible, with clean energy sources such as renewable electricity, renewable gas and renewable fuels.



We have identified 4 objectives to eventually phase out fossil fuels:

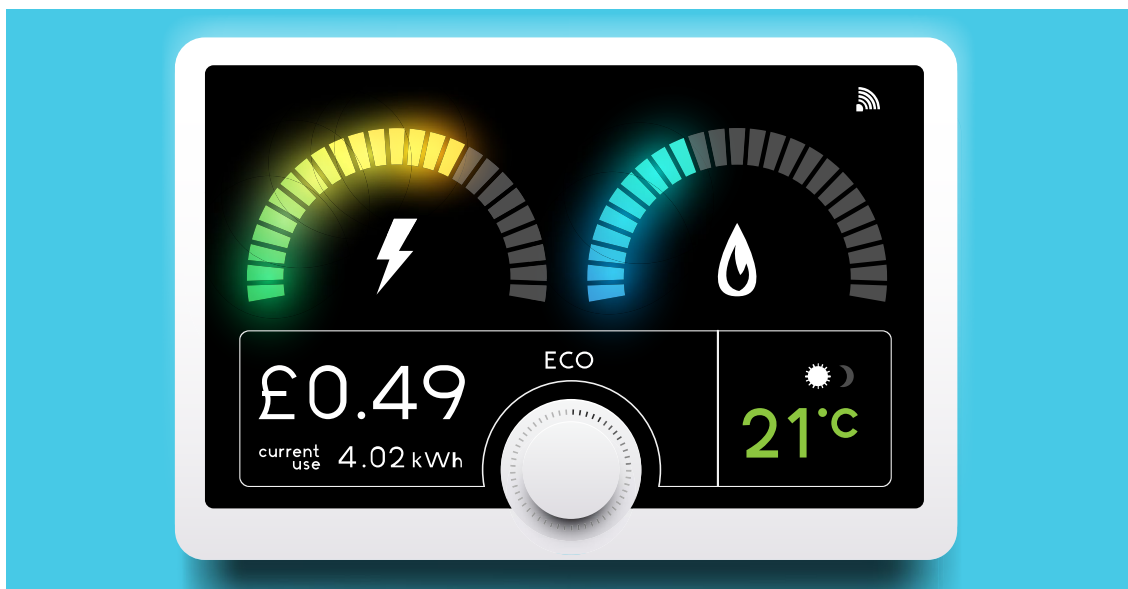
- 1 We will **decarbonise power** by continuing to replace fossil fuel generation with renewable electricity that comes from our natural resources;
- 2 We will **decarbonise heat** by removing fossil fuel heating sources and replacing them with low carbon heating solutions;
- 3 We will **decarbonise transport** through electric vehicles and alternative low carbon vehicle fuels to replace petrol and diesel vehicles; and
- 4 We will **remove residual emissions** that remain through installing new technologies and having an appropriate approach to fossil fuel exploration.

What we want your feedback on in this section:

- **Phasing out fossil fuel heating sources over time with tailored options depending on whether you have access to the gas grid;**
- **Providing new support for low carbon technologies to replace fossil fuel heating, alongside trials of new heat pump technologies and renewable gas and fuels;**
- **Supporting you to replace petrol and diesel vehicles by developing an Electric Vehicle infrastructure plan and trialling new alternative vehicle fuels; and**
- **Ensuring that you are supportive of the new infrastructure needed to increase the amount of renewable electricity we generate.**

Create a flexible and integrated energy system

In 2005, just 3% of Northern Ireland's electricity was generated from renewable sources. Now, we are proud to report that almost 50% of our electricity is generated from integrating wind and solar technologies onto what was previously a 'centralised' fossil fuel power system. This is only the beginning of developing a truly integrated and flexible clean energy system of the future within Northern Ireland.



As we replace fossil fuels with renewables, the energy system will become increasingly dominated by renewable energy. This will present significant challenges and opportunities for our network operators to increase the levels of renewable electricity generation that we require on our electricity grid.

We need to prioritise investment on increasing flexible, renewable, energy systems in a way that minimises costs for consumers whilst strengthening the resilience of our energy supply. To achieve this, we have identified three objectives:

1. We will ensure flexible markets and infrastructure integrate more renewables into an energy system, based around our power sector;
2. We will develop a smart and digitised energy system that uses data and technology to minimise system costs and reduce your bills; and
3. We will facilitate a less centralised energy system that provides more scope for you as energy consumers to be in control of the energy you use.

What we want your feedback on in this section:

- Ensuring our power infrastructure and markets deliver the best outcomes for you as electricity consumers;
- Adopting smart technologies in our homes and workplaces that gathers energy data for your own use and to run the energy system more efficiently;
- Enabling you, individually or through your communities, to generate and sell your own energy, with the potential for financial support in starting up; and
- Trials of new networks that could provide heating from geothermal, waste and biomass sources.

Next steps:



We are asking you to give us your views via our online consultation.

Your feedback is really important in helping shape a fair, affordable and healthy energy future for all who live and work in Northern Ireland, both now and in the future.

You must complete your response by 23:59pm 30 June 2021 when the consultation will close.

You can access and save your progress as you go and submit your views at any stage before this date.

We will use the information received to inform the NI Executive's new Energy Strategy, we plan to launch by the end of 2021.

[Log onto the Northern Ireland Energy Strategy consultation home page.](#)

#OurEnergyFuture

#RaceToNetZero

For more information:

Email: energystrategy@economy-ni.gov.uk

Consultation Questions

- Q1: Do you agree with the overall goal of achieving net zero carbon energy no later than 2050?
- Q2: Do you agree with the proposed vision of “net zero carbon and affordable energy” for the Energy Strategy?
- Q3: Do the five principles identified provide clear direction around the approach that we want to take with the Energy Strategy?
- Q4: Are there any key delivery priorities for the Energy Strategy not captured? If so, please outline what you believe should be included.
- Q5: Do our proposed indicators adequately allow us to measure success at achieving the proposed Energy Strategy outcome? If not, please advise on what alternative metrics should be used.
- a. Carbon emissions from energy-related sectors
 - b. Jobs and turnover in the low carbon and renewable energy economy
 - c. Domestic energy costs relative to household income
 - d. Business energy purchases relative to business turnover
 - e. Households in fuel poverty
 - f. Relative electricity & gas prices
- Q6: Do you think there are significantly different illustrative scenarios which should be developed? If so, please provide further information.



Placing You at the Heart of our Energy Future

- Q7: Do you agree with the four consumer population groups we have identified? Please advise on key considerations within each.
- a) Domestic vulnerable consumers
 - b) Other domestic consumers
 - c) Small businesses
 - d) Larger businesses
- Q8: Do you agree with the five measures identified to “enable and protect” consumers? If not, please outline what else should be included?
- a) Making available information and advice
 - b) Offering proactive “wrap-around” support
 - c) Providing financial support measures
 - d) Driving change
 - e) Reviewing statutory protections

Q9: Do you agree with the proposed scope of the “one stop shop”? Please advise on any different activities you think should be included.

Q10: Which approach do you think should be taken to create this organisation? Please outline your rationale.

Q11: Do you believe that additional financial assistance to protect certain groups of consumers should be introduced? If so, please identify what consumers should be targeted and what support would be needed.



Grow a Green Economy

Q12: Do you agree with the four identified priority clean energy sectors:

- a) Energy efficiency
- b) Renewable energy
- c) Hydrogen economy
- d) Circular economy

Please advise on any additional areas that you believe should be prioritised and your reasons for this.

Q13: Do you agree with the economic growth opportunities identified within energy efficiency? What supporting policies do you believe are needed to take advantage of these?

Q14: Do you agree with the economic growth opportunities identified within renewable energy? What supporting policies do you believe are needed to take advantage of these?

Q15: Do you agree with the economic growth opportunities identified for hydrogen production, demand and manufacturing within the hydrogen economy? What supporting policies do you believe are needed to take advantage of these?

Q16: Do you agree with underpinning principles identified within the circular economy? What supporting policies do you believe are needed to take advantage of the potential economic opportunities?

Q17: Do you agree that we should develop a green innovation challenge fund? If so, what scale and type of innovative projects should this support?

Q18: Do you believe that we should work with the Utility Regulator to review how energy regulation can facilitate a green recovery and green innovation? If so, how can this be done in a way which protects consumers from the higher risks associated with innovation projects?

Q19: Do you agree with a focus on research mapping, research funding, business linkages and UK opportunity scanning to maximise the impact of the local research base with clean energy specialisms? Please identify specific opportunities in the local research base that could be progressed.

Q20: Do you believe that utilising and tailoring existing education and training routes can meet the short-term skills needs of the clean energy sector? How can activities within these routes be shaped to meet the needs of the sector?

Q21: Do you agree with the proposal to establish an Energy Skills Forum to shape the future skills needs of clean energy sector? If so, what do you believe the role, remit and membership of such a group should be?

Q22: Do you believe that there is a need for specific measures aimed at ensuring a just transition in Northern Ireland? If so, please advise on what the focus of these should be in addition to the education and training routes already proposed for a low carbon workforce.



Do More With Less

- Q23: Do you agree that an energy savings target should be set for Northern Ireland?
- Q24: Do you agree that Minimum Energy Efficiency Standards should be set to drive improvements in energy efficiency? If so, what buildings should be the early priorities for introducing minimum standards?
- Q25: Do you agree with the general scale and proposed pace of change outlined in DoF's five phase plan for building regulations? If not, please outline what achievable timescale or programme should be implemented and your rationale for this.
- Q26: Do you think that we should seek to explore how the rates system can be used to encourage energy efficiency? If so, please outline key issues that would need to be considered.
- Q27: Do you agree that we should introduce a pilot domestic retrofit scheme by spring 2022, followed by a substantive scheme as part of a "one stop shop" approach? If so, what changes are needed to the wider energy efficiency support landscape to ensure a joined-up approach?
- Q28: Do you agree that we should ring-fence the PSO funding for vulnerable consumers including the fuel poor? Please advise on changes you believe should be made to the level and scope of the PSO for energy efficiency.
- Q29: Do you believe that green private finance solutions have a role to play in supporting domestic consumers to invest in energy efficiency? If so, what specific green finance solutions should be explored?
- Q30: Do you agree that Invest NI should deliver a pilot energy efficiency support scheme for businesses, to be followed by a substantive scheme delivered through the proposed "one stop shop" organisation? If so, what type of support do you believe is most appropriate for different groups of business consumers?
- Q31: Do you believe that green private finance solutions have a role to play in supporting non-domestic consumers to invest in energy efficiency? If so, what specific green finance solutions should be explored?
- Q32: Do you agree that we should seek to develop skills and capability, enhance quality assurance and standards, and use an accreditation body to provide guarantees on work undertaken by the energy services for retrofit sector? If so, how can we help to prepare the sector for these changes?
- Q33: Do you agree that information, awareness and behavioural change should be a key strand of future energy efficiency support? If so, what are the key behaviours that should be targeted?
- Q34: What measures do you think can have the most impact to support people to reduce the miles they travel in private vehicles? Please explain your rationale.



Replace Fossil Fuels With Indigenous Renewables

- Q35: Do you agree with setting a 70% renewable electricity target by 2030, whilst retaining the flexibility to increase this to 80%?
- Q36: Do you agree with the criteria identified that would allow in order to consider any future increases in the renewable electricity target?
- Projects can be delivered in a cost-effective manner.
 - Offshore wind can be delivered by 2030.
 - Storage technologies can minimise system curtailment of renewables.
 - Greater clarity on electricity demand for heating and transport.
 - Consumers' bills are not disproportionately impacted.
- If not, what alternative criteria might be used?
- Q37: Do you agree that we should explore with BEIS the possibility of extending the Contracts for Difference scheme to Northern Ireland? If so, what terms would be needed to ensure generation in the region whilst protecting consumers?
- Q38: Do you believe it is possible that an offshore wind project in Northern Ireland could be operational before 2030? If so, please outline what targeted actions could be taken to deliver this.
- Q39: Do you believe that a fixed platform offshore wind project should be targeted to be part of the renewable generation mix? If so, how would you propose some of the challenges associated could be overcome?
- Q40: Do you believe that floating platform offshore wind offers the best long-term opportunities for offshore wind in Northern Ireland's waters? If so, what additional steps could be taken to encourage these projects?
- Q41: Do you believe that other marine renewables can play a key role in our renewable generation mix? If so, please identify what technologies offer the greatest potential and what steps can be taken to support these.
- Q42: Do you agree that a strategic approach to planning the location of renewable projects should be taken? If so, please outline practical steps that could be taken to deliver this.
- Q43: Do you believe that there should be a requirement for renewable developers to share some of the financial benefits of developments with local communities? If so, what share do you think would be reasonable? If not, please provide your rationale.
- Q44: Do you agree with taking separate approaches to on-gas grid and off-gas grid consumers? If not, what approach should be taken?
- Q45: Do you agree that we should not rule out potential low and zero carbon heat solutions at this stage? If not, please outline your rationale.
- Q46: What low and zero carbon heat solutions do you believe we should prioritise for trials? Please identify where such trials should be focused and what key issues should be tested within each.
- Q47: Do you believe that the role of heat pumps will be different depending on whether consumers are on or off the gas grid? Please outline what you think the specific roles should be.

- Q48: Do you agree that Northern Ireland should develop a pilot grant scheme to support low carbon heat technologies for domestic and small non-domestic consumers? If so, please identify key issues that need to be considered in designing and delivering such a scheme.
- Q49: Do you agree that legislative and regulatory steps should be taken to facilitate biomethane injection into the gas network?
- Q50: Do you believe that support should be provided to encourage biomethane production for injection into the gas network? If not, please outline what alternative approach should be taken to decarbonising the gas network.
- Q51: Do you agree that the local Gas Network Operators should develop and publish a plan to decarbonise gas out to 2050? If so, what key issues must be considered within it?
- Q52: Do you agree that the sale and installation of new oil boilers should not be allowed for consumers on the gas grid? Please outline your rationale and, if you agree, what a viable timeline for introducing this might be?
- Q53: Do you believe that off-gas grid consumers should have the option to retain oil boilers for use with biofuels? If not, what is a viable timeline for introducing a ban on the use of all oil boilers?
- Q54: Do you agree that the local Oil Industry should develop and publish a plan on how biofuels could play a role in decarbonising heat out to 2050? If so, what key issues must be considered within it?
- Q55: Do you believe that support should be introduced to promote the uptake of biomass for off-grid consumers? If so, please advise on what support is needed and where it should be focused.
- Q56: Do you agree that the sale of coal and wet wood should be banned in Northern Ireland? If so, do you believe this should be extended to include other solid fuels with the exception of kiln dried wood?
- Q57: Do you agree that we should develop a Northern Ireland specific strategy that sets an overarching, long-term plan for cleaner, greener transport and shows how we will meet net zero emissions within the transport sector? If so, what Northern Ireland specific issues need to be factored into this in order to accelerate the uptake of Zero Emissions Vehicles?
- Q58: Do you agree that an EV communication campaign should be run in Northern Ireland? If so, what key messages would be most impactful for consumers as part of this?
- Q59: Do you agree that the private sector and local government have a key role to play in developing EV infrastructure? If so, what barriers can government address to ensure that such projects are commercially viable?
- Q60: Do you agree that we should develop an EV Charging Infrastructure Plan in collaboration with public and private partners? If so, what should the key priorities of the plan be?
- Q61: Do you agree that public sector contracts can be a key driver for developing technologies and markets for alternative fuel vehicles? If so, what specific opportunities are there that could be progressed?
- Q62: Do you agree that collaborative research will be important to demonstrate alternative fuels? If so, what are the best routes to identify and progress potential projects?

- Q63: Do you believe that Compressed Natural Gas, Liquid Natural Gas and/or synthetic fuels can play a role as an interim measure to decarbonising transport? If so, how can government help to encourage the private sector to trial and use these fuels?
- Q64: Do you believe that CCUS can play a role in Northern Ireland? If so, what potential applications could be the initial focus for demonstration projects?
- Q65: Do you believe that our approach to petroleum licensing should change in line with our commitment to decarbonise energy?



Create a Flexible and Integrated Energy System

- Q66: Do you agree that the Electricity Network and System Operators should produce a pathway to creating a flexible and integrated energy system? If so, please provide evidence to demonstrate what the initial priorities of such a plan be?
- Q67: Do you agree that conventional power generation can play an important role in the pathway to decarbonised energy? If so, what opportunities and barriers exist for such plants?
- Q68: Do you believe that further interconnection will be needed in the future? If so, is a new revenue mechanism needed to bring forward this investment?
- Q69: Do you agree that our power system should be based around flexible solutions to align demand and supply? If so, please advise on what key decisions are needed to achieve this.
- Q70: Do you believe that the SEM and DS3 offer sufficient market routes to support the deployment of flexible technologies for generators of all sizes? If not, please provide evidence to demonstrate what additional market routes may be needed.
- Q71: Do you agree that a policy framework should be put in place to enhance access to and use of consumer data? If so, please outline key considerations that need to be factored into this framework.
- Q72: Do you believe that we should take forward the Energy Data Taskforce recommendations in Northern Ireland? If so, please advise on key differences with Great Britain that need to be factored in.
- Q73: Do you agree that a Cost Benefit Analysis of smart meters should take into account the broader benefits they can bring to consumers as an enabler of energy data and a smart system? If the CBA for smart meters is not positive, what alternative approaches can be taken to deliver these benefits for consumers?
- Q74: Do you believe that financial support should be provided for micro-generation to increase the number of active consumers in Northern Ireland? If so, what should this support look like? If not, what are the alternatives?
- Q75: Do you agree that network charging in a decentralised energy system will need to change? If so, what are the principles that should be adopted in distributing future network costs across consumers?
- Q76: Do you believe that a new regulatory framework is needed to protect consumers who engage in decentralised arrangements? If so, what consumer protection measures should be part of this?

- Q77: Do you believe that energy communities have a role to play as part of the energy transition? If so, what support is needed to progress these? If not, what are the alternatives?
- Q78: Do you agree that the potential of geothermal energy should be further explored, supported by a legislative and regulatory framework? If so, what applications do you believe there are for geothermal energy in Northern Ireland?
- Q79: Do you agree that further trials of heat networks should be carried out? If so, what key issues do you think should be tested through these?