







Review of the Northern Ireland Sustainable Energy Programme (NISEP) & Energy Efficiency Provision

Discussion Paper August 2019









About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



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Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.

Our vision

To ensure value and sustainability in energy and water.



Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.









Abstract

The Northern Ireland Sustainable Energy Programme (NISEP), formerly the Energy Efficiency Levy, has provided funding for energy efficiency schemes on an annual basis since 1997/98. This is funded through a charge applied to every unit of electricity (known as a Public Service Obligation, PSO).

The Utility Regulator's forward work plan for the year 2018-19 contained a commitment to review NISEP. In order to make the review as comprehensive as possible, the UR worked with partners in the Department for the Economy (DfE) and The Consumer Council (CCNI) to conduct a call for evidence and a research phase which included focus groups across Northern Ireland.

Audience

This paper will be of interest to consumers, consumer groups representing both business and domestic customers, the energy industry, advice giving agencies, those with an interest in energy efficiency, carbon reduction, energy services or vulnerable customers, government and other statutory bodies.

Consumer impact

NISEP is funded by all electricity customers through electricity bills. This is based on a flat per kilowatt hour (kWh) basis, meaning that customers who use higher volumes of electricity pay more than those who use less. NISEP has a positive impact not only on those customers receiving the energy efficiency measures but on all customers, which will be further examined within this document.





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1. Executive Summary

Background

The purpose of this paper is to stimulate discussion on the Northern Ireland Sustainable Energy Programme (NISEP). In conjunction with the evidence received to date, responses to this paper will inform future provision of energy efficiency support schemes and more broadly the development of an Energy Strategy.

NISEP is an annual programme of energy efficiency schemes. It is funded by all electricity consumers through a flat per kilowatt hour (kWh) charge added to the NIE Networks Public Service Obligation (PSO). The funding is split is 80% to priority (vulnerable) domestic customers and 20% to non-priority domestic and business customers.

NISEP has its origins in the Energy Efficiency Levy (EEL) which began in the year 1997/98. It was reviewed a number of times including in 2008 when it became NISEP and the following objectives were set:

- Efficiency in the use of energy;
- Socially and environmentally sustainable long-term energy supplies; and
- The above at best value to customers whilst also having due regard to vulnerable customers.

Since then, NISEP has been extended on a number of occasions following requests from the Department for the Economy (DfE) and/or following consultation to allow DfE to consider the future of energy efficiency provision and to ensure that there was no gap in provision in Northern Ireland. We have recently announced that NISEP will be extended until March 2022.

Currently 80% of NISEP funding is ring-fenced for priority schemes (those aimed at helping vulnerable/low income customers); the remaining 20% goes to non-priority domestic or business schemes.

Process to Date

We are working with DfE and the Consumer Council for Northern Ireland (CCNI) on a review of the scheme which has so far delivered an engagement programme consisting of a Call for Evidence, structured interviews with key stakeholders, a series of focus groups across Northern Ireland and in-depth interviews with a sample of householders that have benefited from NISEP. We have also reviewed information from our new Consumer Insight Tracker (CIT), an independent survey on consumer attitudes.









This discussion paper will provide stakeholders with the opportunity to assess the evidence to date and allow them to comment on whether or not NISEP should be replaced on a long term basis and factors that could influence the design of such a replacement.

Following consideration of the evidence to date, including the Call for Evidence and with the agreement of DfE, we have decided that NISEP should be extended until March 2022. This will allow time for this review to complete and further time for DfE to consider future energy efficiency support; it will also avoid a gap in energy efficiency provision.

Some of the evidence gathered to date related to the detailed running of the current NISEP and as such may be used to inform a review of the NISEP Framework Document in advance of the NISEP call for schemes in September 2019. Other evidence gathered will also be used in conjunction with responses to this paper to help inform decisions relating to future energy efficiency provision.

Costs and Benefits of NISEP

Appendices 2 and 3 contain summary quantitative costs and benefits of NISEP. Appendix 2 shows customer savings (through reduced spend for the same work or comfort) and carbon savings; Appendix 3 shows measures installed since 2010. Since 2010 NISEP has consistently delivered high lifetime customer benefits often in excess of 10 times the funding spent and is illustrated in table i below:

Year	Funding Spent	Lifetime Energy Savings (GWH)	Lifetime Carbon Savings (tonnes)	NPV Lifetime Gross Customer Benefits
NISEP				
2010/11	£6,197,318.00	607.77	123,457	£56,345,455.00
2011/12	£7,882,252.00	707.404	135,819	£72,410,175.00
2012/13	£7,836,473.00	644.375	117,112	£84,960,832.00
2013/14	£7,931,744.00	764.268	141,116	£103,488,375.00
2014/15	£7,092,877.00	784.09	130,787	£98,898,671.00
2015/16	£8,141,995.00	643.41	111,766	£85,960,332.00
2016/17	£9,186,144.00	732.759	130,264	£108,651,912.00

Table i









In addition since 2010 NISEP has benefited homes throughout Northern Ireland by:

Some important measures since 2010		
	Homes Benefited from Heating systems/boiler	
12,320	replacement	
35,705	,705 Homes benefited from loft insulation	
20,714	Homes benefited from cavity wall insulation	
67	Homes benefited from solid wall insulation	

Table ii

Respondents to the Call for Evidence and interviewees also listed other benefits including mitigating excess winter deaths, increased comfort at home and other societal benefits.

Further, NISEP contributes to the pursuit of a number of our duties and functions in relation to protecting vulnerable customers, fuel security and the environment because:

- Using less energy means we import less, therefore improving security of supply.
- Using less energy makes it easier to meet carbon reduction targets.
- Using less electricity makes it easier for Northern Ireland to meet its renewable electricity targets; this is because the renewable electricity target is expressed as a percentage of electricity consumed.

NISEP also contributes to a range of the draft Programme for Government (PfG) objectives including:

- We live and work sustainably protecting the environment.
- We live long healthy lives.
- We care for others and help those in need.
- We prosper through a strong, competitive, regionally balanced economy.

In the domestic sector much of NISEP funding is spent on oil and gas heating systems and on cavity wall and loft insulation.









The typical impact that raising funding for NISEP has on consumer bills is shown in table iii below:

Market Sector	Customer Numbers	Average impact on electricity bill £/annum
Domestic (a domestic user using		
3.592MWh per year)	811,961	3.59
Combined Residential/Business	7,640	18.89
Small Medium Enterprises using less		
than 70kVA	60,927	18.95
Small Medium Enterprises using more		
than 70kVA	5,248	366.14
Large Energy User	206	7846.68

Table iii

The Northern Ireland Housing Executive (NIHE) has recently published a research report which presents the results of an investigation into the condition of cavity wall insulation (CWI) across a representative sample of social housing stock and private home properties. This report has the potential to demonstrate a continued need for energy efficiency schemes across both public and private sector. The research found that of the NIHE stock surveyed, 63% had cavity wall insulation which was noncompliant with current industry standards. Within private homes surveyed, 36% had cavity wall installations that were non-compliant with current industry standards. The NIHE are currently assessing the data from this report along with other research findings in order to inform the ten year energy efficiency strategy which the NIHE is currently preparing.

In addition, the NIHE NI House Condition Survey (HCS) from 2016 said that NI houses show continued progress in achieving higher levels of energy efficiency. The survey also highlighted that overall, 99% of all dwellings had central heating and that at the time of the survey oil remained the predominant fuel source in Northern Ireland (68%). However the proportion of dwellings with gas central heating continued to increase, and the proportion with fuel sources such as solid fuel, electric or dual fuel decreased. Significant improvements were noted for loft insulation. In particular, there was an increase in the use of the highest standard of loft insulation (more than 150mm in thickness) from 35% in 2011 to 54% in 2016.

Going forward, information from the NIHE Cavity Wall Insulation (CWI) Research Report and HCS will be important in informing the types of measures that NISEP or any potential replacement might wish to focus on.









Strategic and policy context

The Energy Efficiency Directive (EED) set a UK energy efficiency target of 20% by 2020. NI contributes 4% towards this UK target, which is pursued through the National Energy Efficiency Action Plan (NEEAP). Currently NISEP is the only NI scheme contributing to the targets in this UK-wide plan. A recast of the EED came into force in December 2018 and sets an updated EU target of 32.5% reduction in energy consumption by 2030. It is not expected that Brexit will impact the UK's energy efficiency policies or ambitions. Indeed the public discourse regarding energy transition would indicate that a future NISEP or any replacement should take into consideration how best consumers (and in particular vulnerable customers) can benefit from energy transition.

At the time of publishing this paper, it is unclear whether the UK Government will adopt in part or in full the European Commission Clean Energy Package, however as of June 2019, legislation has been passed that commits the UK to a legally binding target of net zero emissions by 2050.¹

The responsibility for energy efficiency in NI is split over a range of different departments and Non Departmental Public Bodies (NDPBs).

- DfE is responsible for energy policy and the economy with particular vires for promotion of energy efficiency in the voluntary sector and the industrial commercial sector (the latter via Invest NI).
- Department for Communities (DfC) is responsible for energy efficiency in the residential sector as well as fuel poverty.
- Department of Finance (DoF) is responsible for promotion of energy efficiency in the public sector plus building standards.
- Department for Infrastructure (DfI) is responsible for planning and building control.
- Department for Agriculture, Environment and Rural Affairs (DAERA) is responsible for the environment, the Climate Change Act and farming.
- Northern Ireland Housing Executive (NIHE) is the Home Energy Conservation Authority for Northern Ireland.

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¹ <u>https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law</u>









Other Energy Efficiency Support in Northern Ireland

There are a wide range of schemes and support/information initiatives. Some of the energy efficiency support currently (or recently) available in Northern Ireland is shown below:

Name	Activity
Affordable Warmth Scheme	100% targeted support for the lowest
	income households.
Boiler Replacement Scheme	Targeted grant support for low income
	households.
NISEP	80% targeted to vulnerable customers
	and the remaining 20% available to bids
	in respect of domestic or commercial
	energy efficiency schemes. In the past
	NISEP has funded up to 22 different
	energy efficiency schemes in a given
	year.
HeatSmart	NIHE tenant home visiting service.
Warmer Ways to Better Health	Public Health Agency (PHA) offers
	advice including referrals for energy
	efficiency grant programmes and
	benefit entitlement checks.
Northern Exposure Project	PHA support and energy efficiency
	advice to statutory community and
	voluntary sectors.
NI Energy Advice Line	NIEAL funded by NIHE
Schools Energy Efficiency Awareness	SEEAP funded by NIHE
Programme	
North Belfast Employment Programme	Funded by Strategic Investment Fund
	(SIF) and aimed at vulnerable
B NIII VE VE	households.
Power NI Home Visiting Programme	Energy advice and benefits checks.
Wise Oil Buys	Help with oil purchasing and budgeting.
Social Supermarkets	Energy efficiency advice.
The Environment Fund 2019-22	DAERA (currently closed to new
	applications) contributes to 4 priority
	areas 1) EU, National, International
	commitments or draft PfG, Coordinated
	Actions, outdoor recreation actions –
	not for profit organisations.









Energy and Resource Efficiency	Invest NI – offers advisory services
	such as technical consultancy support
	and resource matching through
	Industrial Symbiosis, with approval until
	March 2024. An economic appraisal is
	currently underway to determine future
	financial support.

The approach elsewhere

In Great Britain (GB), the policy department for climate change, carbon reduction and energy efficiency in all sectors is the Department for Business, Energy and Industrial Strategy (BEIS). The National Energy Efficiency Action Plan sets out how the UK complies with its commitments under the EED.

The EED required energy savings of 1.5% per year by 2020. It is flexible in that it allows Member States to choose between an Energy Efficiency Obligation (which could be placed on energy suppliers, distributors or both and which could target particular sectors) and Alternative Measures which deliver the target. The new Clean Energy Package includes a recast of the Energy Efficiency Directive which sets out an increased target of 32.5% reduction by 2030.

GB has an Energy Efficiency Obligation, known as the Energy Company Obligation (ECO) which delivers energy efficiency savings as required by the EED, as well as a range of additional schemes such as the Warm Homes Fund. The ECO applies throughout GB. It is a statutory obligation on electricity and gas suppliers, 100% of the funding goes to vulnerable and low income homes, with at least 15% targeted to rural areas.

The Warm Homes Fund is a £150m fund, funded through National Grid, which targets fuel poor households not on the gas network.

Green Deal was a loan scheme which has now closed. Some respondents to our Call for Evidence have stated that any replacement to NISEP should learn the lessons from Green Deal.

The Warm Homes Discount is not an energy efficiency scheme; it is a fuel poverty measure designed to provide discounts to certain vulnerable homes. It is paid for by participating energy suppliers who can recover the costs through customer bills.

When considering what the focus of energy efficiency effort should be, we also note the Chancellor of the Exchequer's announcement in his spring statement (13 March 2019) that the Government will be introducing a Future Homes









Standard that will apply to new dwellings from 2025, and will mandate the end of fossil fuel heating systems in all new houses from then.² The impact of this in Northern Ireland, along with the Clean Energy Package, needs to be taken into account in relation to considering where the effort should be to meet the increased energy efficiency target. Thought needs to be given to which sectors should be funded through NISEP any future energy efficiency support scheme and in what proportion (business, domestic, 'able to pay' or vulnerable households). Further thought also needs to be given to which technology and measure types we focus on.

In Scotland, the Scottish Government has set its own individual target and has set up the Home Energy Efficiency programme for Scotland (HEEPS) which seeks to coordinate all available schemes. Schemes available in Scotland include the ECO, the Scotlish Government's 'Warmer Homes Scotland' scheme and the Home Energy Scotland Loan Scheme.

Ireland has also opted for an Energy Efficiency Obligation scheme which goes beyond electricity and gas companies.

² https://www.gov.uk/government/speeches/spring-statement-2019-philip-hammonds-speech

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Engagement Programme

The engagement programme consisted of a Call for Evidence, focus groups and semi-structured interviews with NISEP beneficiaries.

Findings from the Call for Evidence

- There is support for NISEP or some replacement to it. The lack of certainty around NISEP and the fact that schemes only have certainty of funding for one year at a time was criticised.
- The need for an energy efficiency target for Northern Ireland was discussed, as was a requirement for any energy efficiency scheme to be enshrined in legislation.
- There is an awareness of energy efficiency grant schemes among respondents, both of NISEP and a range of other schemes, including domestic and non-domestic.
- Due to the wide range of energy efficiency schemes available respondents felt there was a need for a "one stop shop" approach which would reduce confusion and ensure customers had the best scheme for them. Such an approach could potentially include a list of registered installers.
- Respondents suggested that consideration should also be given to amalgamating the funding available to one scheme or organisation to maximise benefits and reduce costs.

Findings from the focus groups and those who benefited from schemes

We worked with CCNI to determine customer attitudes to NISEP and energy efficiency provision in Northern Ireland in general and to explore what benefits NISEP had delivered for those who received measures. In order to do this, consultants were appointed to complete the following:

- 12 focus groups with a range of householders across NI and;
- 6 semi-structured interviews with people who have first-hand experience of the NISEP scheme.

Focus groups - There was little awareness of energy efficiency provision in Northern Ireland. Although participants were receptive to the message of promoting energy efficiency, the main driver was to save money (although some did comment on environmental benefits).









Semi structured interviews – Feedback was positive, but one of the main drawbacks discussed was the long wait time due to the length of lists of eligible customers and some confusion about the number of schemes on offer.

However, in general householders who had benefited reported good service and noticeably warmer homes.

Findings from the Consumer Insight Tracker (CIT)

In 2018, we commissioned consultants Cambridge Economic Policy Associates (CEPA) and Impact Utilities to undertake an independent domestic energy consumer survey. The first CIT has been published and it is intended to be a regular survey aimed at helping us to better understand and monitor domestic consumers' perspectives, outcomes and behaviour over time.

The quantitative nature of the survey was designed to give statistically significant insights, which can be tracked over time to see how experiences and perspectives change and provide us with better information to inform decision making. The CIT surveyed 1,503 domestic consumers (including a specific 100 consumer boost to capture vulnerable consumers).

NISEP Outcomes since 2010/11 and Next Steps

Whilst at the start of each year, 80% of NISEP funding is ring-fenced for the priority (vulnerable) sector, challenges in scheme delivery throughout the year mean that in practice more than 80% of the funding tends to be spent in the priority sector.

In the priority sector, the majority of the funding goes to heating systems (gas conversions where gas is available, oil where gas is not), cavity wall and loft insulation. In the non-priority domestic sector, the focus tends to be on cavity wall and loft insulation. However evidence suggests that it is becoming increasingly difficult to locate homes that require these measures. In addition, outside NI there has been a shift in focus away from fossil fuel type heating systems. This has implications for the types of measures that any future scheme should focus on and the level of energy savings that they can be expected to deliver per pound of funding spent. For example solid wall insulation and non-fossil fuel based heating systems are more expensive to deliver.

In the non-priority, non-domestic sector, there have also been challenges in finding commercial and business consumers who are interested in receiving a NISEP grant, can raise their own funds for the remainder of the cost, can complete the measures in the time available and can deliver on energy savings. How this can be addressed going forward will need some thought.





Format of this Discussion Paper

This paper will provide an overview of the following:

- 1) Scope of the Review
- 2) About NISEP
- 3) Strategic and Policy Background
- 4) Engagement Programme
- 5) Next Steps

Questions will be detailed throughout the document, as well as provided as a complete list after the Executive Summary.

Extension of NISEP

Given our analysis of the evidence elicited from the engagement programme and the Consumer Insight Tracker (CIT), we have agreed with DfE that NISEP will continue until March 2022. A revised framework document will be published in due course and in time for the call for schemes in September 2019.

Next Steps

Where possible, comments from the Call for Evidence will feed into the revised NISEP Framework Document. There will be a NISEP call for schemes with a revised Framework Document in September 2019 – for schemes to run in year commencing April 2020.

We intend to hold an engagement event to further inform this discussion paper. Responses to this paper will be used to help improve NISEP and/or to inform decisions the future provision of energy efficiency support.









Summary of Discussion Paper Questions

	Question	Relevant Section
Q1	Given our duties (see chapter 4), are the current objectives for NISEP still appropriate or are any changes required?	Chapter 3, About NISEP
Q2	To what extent should future support for energy efficiency continue to be focused on priority (vulnerable) customers within the context of NISEP?	Chapter 3, About NISEP
Q3	Are the existing energy efficiency measures currently supported by NISEP still appropriate?	Chapter 3, About NISEP
Q4	Please suggest measures that you think should be supported by NISEP including new and/or innovative measures. Please prioritise the measures and provide evidence to justify your view.	Chapter 3, About NISEP
Q5	How best can any future funding scheme ensure a proportionate distribution of benefits across Northern Ireland?	Chapter 3, About NISEP
Q6	What are your views on how NISEP or any future support should be funded?	Chapter 3, About NISEP
Q7	What are your views on how to best achieve cost effectiveness and value for money in the allocation of funding through NISEP or any future replacement?	Chapter 3, About NISEP
Q8	What are your views on the criteria used to determine access to priority schemes?	Chapter 3, About NISEP
Q9	Going forward, is there any overlap or gaps between NISEP and other funded schemes that needs to be addressed?	Chapter 3, About NISEP
Q10	What are your views on the main lessons learnt from elsewhere and how they should be taken into consideration in the design of any future support for energy efficiency?	Chapter 4, Strategic and Policy Context in Northern Ireland
Q11	To what extent if any, should NISEP or any replacement scheme ensure Northern Ireland is ready for energy efficiency/carbon reduction challenges in the future?	Chapter 4, Strategic and Policy Context in Northern Ireland









Q12	In your view, what should be the target customer groups of any future energy efficiency support fund?	Chapter 5, Engagement Programme
Q13	How could a 'One Stop Shop' approach to the provision of energy efficiency support (as suggested in the Call for Evidence) be organised?	Chapter 5, Engagement Programme
Q14	Have you any other comments on the existing NISEP scheme or any future support scheme that you wish to make?	Chapter 6, Next Steps
Q15	In your view, to what extent has NISEP had an impact in relation to Section 75 of the Northern Ireland Act 1998 or the promotion of equality of Opportunity?	Chapter 6, Next Steps









Glossary

Acronym	Meaning	
AWS	Affordable Warmth Scheme	
	Department for Business, Energy and Industrial	
BEIS	Strategy	
BRS	Boiler Replacement Scheme	
CCNI	Consumer Council for Northern Ireland	
CIT Consumer Insight Tracker (Survey commiss		
	UR regarding consumer perspectives and	
	behaviours)	
CRC	Carbon Reduction Commitment	
CWI	Cavity Wall Insulation	
	Department of Agriculture, Environment and Rural	
	Affairs (formerly Department of Agriculture and Rural	
DAERA	Development, DARD)	
	Department of Energy And Climate Change (now	
	Department for Business, Energy and Industrial	
DECC	Strategy – BEIS)	
	Department for Enterprise Trade and Investment	
DETI	(now DfE)	
DfC	Department for Communities (formerly DSD)	
DfE	Department for the Economy (formerly DETI)	
	Department for Infrastructure (formerly Department	
DfI	of Regional Development, DRD)	
	Department of Finance (formerly Department for	
DoF	Finance and Personnel, DFP)	
DSD	Department for Social Development (now DfC)	
ECO	Energy Company Obligation	
EED	Energy Efficiency Directive	
EEL	Energy Efficiency Levy	
EPC	Energy Performance Certificate	
EST	Energy Saving Trust	
EWD	Excess Winter Deaths	
	Framework Document (the document containing	
FD	NISEP guidelines)	
FOIA	Freedom of Information Act	
GB	Great Britain	
GDPR	General Data Protection Regulations	
	Loans based energy efficiency scheme in GB – now	
Green Deal	closed.	
	Gigawatt hour (Unit of energy equalling 1,000,000	
GWh	kWh)	









HCS	House Condition Survey
HECA	Home Energy Conservation Authority
HEEPS	Home Energy Efficiency Programmes for Scotland
	Kilowatt hour (Unit of energy commonly used for
kWh	billing)
	Light-emitting diode (LED) form of low energy
LED	lighting
NI	Northern Ireland
NIHE	Northern Ireland Housing Executive
NIRO	Northern Ireland Renewables Obligation
NISEP	Northern Ireland Sustainable Energy Programme
NISRA	Northern Ireland Statistics and Research Agency
	Schemes which help commercial, business and
Non Domestic Schemes	other customers who are not domestic households.
	NISEP funding for commercial and domestic
Non-priority Sector	customers who are not considered vulnerable
Ofgem	Electricity and Gas regulator in GB
PA	Programme Administrator (Currently EST)
	Primary Bidders (Organisations registered to bid for
PBs	funding to operate NISEP schemes)
PfG	Programme for Government
PHA	Public Health Agency
	NISEP funding directed to vulnerable customers
Priority Sector	typically defined as low income
PSO	Public Service Obligation
SAP	Standard Assessment Procedure
SEEAP	Schools Energy Efficiency Awareness Programme
SEF	Strategic Energy Framework
SIF	Strategic Investment Fund
SMEs	Small and Medium Enterprises
	Utility Regulator (Regulates the electricity, gas and
UR	water industries in NI)
WHD	Warm Homes Discount
WHO	World Health Organisation
WHS	Warmer Homes Scotland

2. Scope of the NISEP Review

- 2.1 The aims of this review are to:
 - (i) Assess and outline the success (or otherwise) of NISEP against its initial stated purpose. Has it achieved its aim?
 - (ii) Assess and provide an overview of the current strategic context.
 - (iii) Given the context, identify and assess if there is a continuing need for an energy efficiency scheme and if so, how that should be funded.
- 2.2 The full Terms of Reference for the review are in Appendix 1.
- 2.3 The remainder of this paper will provide information on the assessments noted above.
- 2.4 Once the review is complete, we will use all the evidence gathered as part of this process to work with DfE in relation to the future provision of energy efficiency support.

3. About NISEP

- 3.1 NISEP is a programme of energy efficiency schemes funded by all NI electricity customers through a per kilowatt hour (kWh) charge applied to every unit of electricity distributed in Northern Ireland. This means that customers who use higher volumes of electricity pay more than those who use less.
- 3.2 NISEP is operated on an annual cycle with schemes running from April to the following March. Eligible organisations (Primary Bidders), which include licensed energy companies and other organisations who can meet set criteria within the NISEP Framework Document, submit bids in the autumn of each year for schemes to begin the following April.
- 3.3 It is based upon the former Energy Efficiency Levy (EEL) set up in 1997/98. It currently operates as an important element of UR's response to our duty to protect consumers and, in particular vulnerable consumers, as well as our duty to carry out our functions in a way aimed at securing a diverse, viable and environmentally sustainable long-term energy supply.
- 3.4 As initially conceived, the EEL was introduced to implement energy efficiency schemes for domestic and non-domestic properties, with the aim of reducing carbon emissions. While the EEL was primarily an energy efficiency programme, in 2002, following a consultation and a request from the NI Assembly, 80% of the funding was ring-fenced for vulnerable consumers.
- 3.5 There is an annual bidding round for funding, with funding being awarded to bidders on the basis of cost effectiveness (i.e. most energy saved per pound spent).
- 3.6 Following a review in 2008/09 the following decisions were made:
 - The EEL would be replaced by NISEP;
 - The following objectives were set, based upon UR's statutory duties:-
 - Efficiency in the use of energy;
 - Socially and environmentally sustainable long-term energy supplies; and
 - The above at best value to consumers whilst also having due regard to vulnerable consumers.
 - The ring-fence of 80% funding for vulnerable consumers should be retained:
 - NISEP should run for a further 3 years, when a further review would take place; and
 - While the EEL was only open to bids from licensed electricity suppliers,

NISEP should be further opened up to bidding from other organisations who could meet the set criteria within the NISEP Framework Document, such as charities, energy services companies, and all organisations that are licensed and regulated by UR Including water and gas companies.

- 3.7 However, in 2012 a full review was not considered necessary as the then Department for Enterprise, Trade and Investment (DETI), now DfE published an intention in its Energy Bill Policy Consultation (June 2012)³ to develop an energy efficiency initiative that would potentially replace NISEP. With the agreement of UR, DfE included a question on whether NISEP should continue in its present form until a new measure could be agreed upon.
- 3.8 The majority of responses to DfE's consultation proposed that NISEP should continue. Therefore, following a request from DfE, we agreed in 2012 to keep NISEP open until March 2016, or the introduction of a replacement. This was to ensure a continuation of energy efficiency provision for consumers and to avoid a gap for supply chains within the energy services sector.
- 3.9 Since then, NISEP has been extended on a number of occasions following requests from DfE and/or following consultation. We have recently announced that NISEP will be extended until March 2022.
- 3.10 This will allow time for this review to complete and further time for DfE to consider future energy efficiency support and will also avoid a gap in energy efficiency provision.

Strategic Objectives

- 3.11 The strategic objectives of NISEP are to contribute to the achievement of;
 - Efficiency in the use of energy;
 - Socially and environmentally sustainable long-term energy supplies;
 and
 - The above at best value to customers whilst also having due regard to vulnerable customers.

³ https://www.economy-ni.gov.uk/sites/default/files/consultations/deti/energy_bill_consultation_document_-__11_june__2012___2_.pdf

- 3.12 In this context, efficiency in the use of energy is commonly taken to mean the amount of energy input required for a given level of work or comfort. Socially and environmentally sustainable long-term energy supplies means that NISEP contributes benefits both to the environment (for example through carbon savings) to our society in terms of the help it gives to vulnerable consumers, as well as to security of supply by helping to reduce overall consumption. Best value to consumers whilst having due regard for vulnerable consumers means that through the bidding process we aim to choose those submissions which deliver the highest kWh of energy savings at least cost, while at the same time ensuring that schemes aimed at vulnerable consumers can proceed.
- 3.13 NISEP objectives relate directly to our overall duties which include;
 - (i) A duty to protect all customers;
 - (ii) To have due regard for vulnerable customers;
 - (iii) To secure diverse, sustainable, long term energy supplies; and
 - (iv) To promote efficiency in the use of electricity and gas.

Existing measures supported by NISEP

- 3.14 NISEP currently contributes in the region of £7.9m per year to both domestic and business energy efficiency. 80% of this funding is ring-fenced (protected) for vulnerable households (known as the 'priority' category) with the remaining 20% being open to bids for what is known as the 'non-priority' category: those that target domestic households who do not fall within the vulnerable category, and the non-domestic sector e.g. businesses, commercial and industrial premises, schools and hospitals.
- 3.15 In the priority category, some schemes provide fully funded energy efficiency measures whilst other schemes provide a substantial grant. Measures typically provided include:
 - Heating systems;
 - Cavity wall and/or loft insulation;
 - Low energy lighting; and
 - Hot water cylinder jackets.

- 3.16 Household eligibility criteria for priority schemes can vary between schemes but are based first and foremost on low-income thresholds. In addition, all priority schemes may include one or more of the following criteria which will be considered as supplementary criteria for financial vulnerability;
 - Age to include older people, young people (under 16) and children;
 - Disability or chronic illness;
 - Rural location; and/or
 - Standard Assessment Procedure (SAP) rating of property of 54 or below i.e. an EPC rating of E, F or G.
- 3.17 In the non-priority domestic category, schemes have typically provided cash-back offers for measures such as cavity wall insulation, loft insulation and heating systems. Non-domestic schemes typically provide a grant of around 20%, and tend to focus on one specific measure such as energy efficient lighting, heating controls or the installation of technology such as variable speed drives or variable speed compressors.
- 3.18 The 80% ring-fence for priority consumers means that even though it may be cheaper to deliver energy savings in the non-priority category than in the priority category, the priority category will continue to be awarded funding.
- 3.19 In these categories the types of measures installed by NISEP include the following:

Priority	Non-priority
Heating replacements (usually either	Loft insulation
to oil or natural gas)	
Loft insulation	Cavity wall insulation
Cavity wall insulation	Variable speed drives
Lighting	Variable speed compressors
Hot water cylinder jackets	Lighting
Radiator panels	Heat recovery
Energy monitors	Aluminium compressed air piping,
	compressed air control and
	management systems.
Heating controls	Heating controls

3.20 There are other ring-fenced amounts within NISEP. For example, priority funding is split between whole house and individual measures. There is also a ring-fenced amount for innovative measures within the non-priority sector, however NISEP has struggled to attract bids which meet the definition of

innovative.

3.21 The definition of innovative schemes in the non-priority group include schemes which help to bring forward emerging but proven domestic or commercial technologies that provide a better energy efficiency performance than 'standard' measures.

Geographical spread of NISEP delivery

- 3.22 The most recent available data for NISEP is from 2016/17 and highlights the geographical spread of uptake across NI. Figure 1 below highlights the NISEP interventions that have been completed per council area against the percentage of NI households in each council area.
- 3.23 Two council areas that in 2016/17 had a higher than average proportion of measures when compared to population size are Derry City and Strabane and Ards and North Down. However in the previous year the number of installs in these areas was in line with the population. Derry City and Strabane was in the top 3 Councils receiving most heating installs in 2016/17. In comparison to previous years, the number of heating measures is similar in this Council area; however the number of insulation measures installed has almost doubled.
- 3.24 Ards and North Down also benefited from a higher than average proportion of measures particularly in insulation, with over 70% increase in insulation measures, in comparison to 2015/16. Armagh City, Banbridge and Craigavon had the highest number of heating installs overall.
- 3.25 Causeway Coast and Glens Council, Mid Ulster and Fermanagh and Omagh Councils show a significantly lower proportion of measures when compared to population size. But it is worth noting that the proportion of heating measures installed has almost tripled in Causeway Coast and Glens, and has increased in Fermanagh and Omagh Councils, in comparison to 2015-16. Mid Ulster continues to show low uptake and we will continue to monitor this in the coming years.

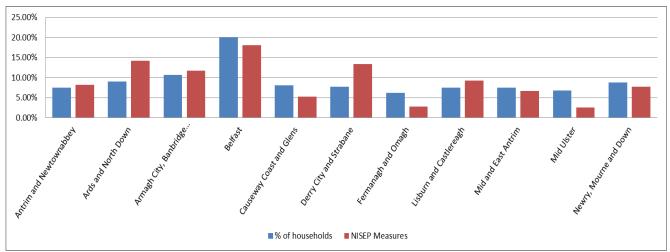


Fig 1: NISEP interventions per council area vs NI households in each council area 2016/17

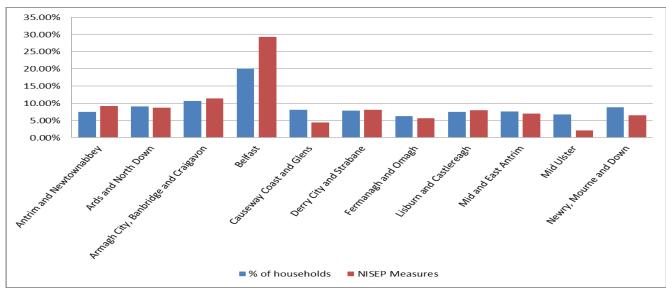


Fig 2: NISEP interventions per council area vs NI households in each council area 2015/16

Benefits of NISEP

3.26 Since 1997-98 the EEL and NISEP have made a significant contribution to energy efficiency in homes and commercial premises across NI. Appendix 3 shows the lifetime energy savings, carbon savings and gross customer financial benefits achieved each year up to 2016-17 from the measures installed. Table 1 below outlines the summary statistics from 2010 onward.

Year	Funding Spent	Lifetime Energy Savings (GWh)	Lifetime Carbon Savings (Tonnes)	NPV Lifetime Gross Customer Benefits
<u>NISEP</u>				
2010/11	£6,197,318.00	607.77	123,457	£56,345,455.00
2011/12	£7,882,252.00	707.404	135,819	£72,410,175.00
2012/13	£7,836,473.00	644.375	117,112	£84,960,832.00
2013/14	£7,931,744.00	764.268	141,116	£103,488,375.00
2014/15	£7,092,877.00	784.09	130,787	£98,898,671.00
2015/16	£8,141,995.00	643.41	111,766	£85,960,332.00
2016/17	£9,186,144.00	732.759	130,264	£108,651,912.00

Table 1: Summary of NISEP statistics from 2010/11 to 2016/17

- 3.27 Improving energy efficiency or reducing the amount of energy which would otherwise be used for a given level or work or comfort has a number of advantages to all consumer groups, not just those who receive the immediate measure. For example:-
 - Using less energy means we import less, therefore improving security of supply;
 - Using less energy makes it easier meet carbon reduction targets⁴;
 and,
 - Using less electricity makes it easier for Northern Ireland to meet its renewable electricity targets⁵; this is because the renewable electricity target is expressed as a percentage of electricity consumed.

⁴ The UK Climate Change Act 2008 contains a legally binding target to reduce GHG emissions by at least 80% below the baseline 1990 levels by 2050, interim targets 35% 2020, 50% 2025, 57% 2030. ⁵ The NI Executive's target for renewable electricity is 40% by 2020.

- 3.28 As NISEP is an energy efficiency initiative, the main performance indicators to measure the success of the programme are those listed in Appendix 3, i.e. energy and carbon savings and customer benefits.
- 3.29 A summary of the measures installed since the year commencing 2010 is also provided in Appendix 4, these include:

Important measures since 2010				
890,321	Tonnes of Carbon Saved			
12,320	Homes Benefited from Heating systems/boiler replacement			
35,705	Homes benefited from loft insulation			
20,714	Homes benefited from cavity wall insulation			
67	Homes benefited from solid wall insulation			
Other domestic measures include low energy lighting, energy monitors, radiator				
panels, shower flow regulators, heating controls.				
Commercial and business measures include low energy lighting and				
technologies such as variable speed drives, variable speed compressors and				
heating controls.				

Definition of vulnerability

- 3.30 In April 2019, we published a definition of vulnerability⁶ which covers a range of circumstances that require different levels of help in different situations;
- 3.31 "A consumer is deemed vulnerable when their personal characteristics or circumstances reduce their ability to engage effectively and achieve fair outcomes. A vulnerable consumer is significantly less able to protect or represent their interests and significantly more likely to suffer detrimental impacts on their health, wellbeing or finances."
- 3.32 For the purpose of ring-fencing priority (vulnerable) funding, it is in the first instance awarded to those on lower incomes. Primary Bidders can adopt their own criteria, e.g. age, disability, health condition, in addition to income. However, feedback suggests some standardisation of criteria may reduce confusion.

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⁶ UR Consumer Protection Programme - https://www.uregni.gov.uk/sites/uregni/files/media-files/1%20CPP%20Final%20Decisions%20April%202019%20with%20links.pdf

Benefits of NISEP for priority consumers

- 3.33 Although NISEP is not a fuel poverty scheme and does not measure fuel poverty, 80% of the funding is ring-fenced for the priority sector. In this sector, the provision of energy efficiency measures is one established way of tackling the problem of energy inefficient cold homes which are a major cause of fuel poverty, poor health and links to Excess Winter Deaths (EWD).
- 3.34 The World Health Organisation (WHO) attributes 30% of all EWD to the effects of living in a cold damp home. One study which looked at the impact of cold homes on health and EWD is the Marmont Review Team's paper "The Health Impacts of Cold Homes and Fuel Poverty".
- 3.35 Some of the relevant key points in the report are as follows:
 - Countries which have more energy efficient housing have lower EWD;
 - EWD are attributed to cardiovascular and respiratory diseases and children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems.
 - Mental health is negatively affected by fuel poverty and cold housing for any age group;
 - Cold housing increases the level of minor illnesses such as colds and flu and exacerbates existing conditions such as arthritis and rheumatism.
- 3.36 In December 2018, the 2017-18 EWD statistics for Northern Ireland were released by the Northern Ireland Statistics and Research Agency (NISRA). These show there were 1500 EWD, an increase of 130% since 2015-16. This is the highest figure since 1989 when there was a major flu epidemic. Many of these EWD are linked to respiratory or cardiovascular illnesses which have been shown to be negatively impacted by the effects of living in cold, damp conditions.

⁷ Marmot Team review -

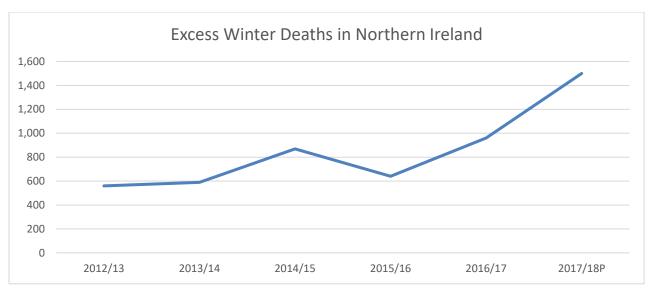


Fig 3: Excess Winder Deaths in NI

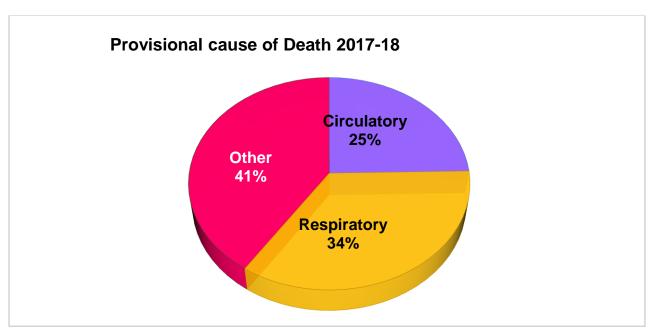


Fig 4: Provisional cause of death in 2017/18

3.37 While reducing fuel poverty and EWDs are not objectives of NISEP, by installing energy efficiency measures in properties occupied by vulnerable consumers the NISEP has helped to alleviate some of these problems which are associated with cold, damp homes.

Benefits for Non-Priority Domestic and Business Consumers

3.38 Within NISEP, 20% of the funds are open to bids for non-priority domestic and business consumers. Non-priority schemes provide part-funding towards the cost of energy efficiency measures. Non-priority domestic schemes tend to include a cashback element, for example £250 cashback

- for insulation schemes. For non-priority commercial consumers, NISEP usually offers part funding in the region of 20% toward the cost of energy efficiency measures.
- 3.39 Non-priority schemes tend to be more cost effective, in terms of energy saved per pound of NISEP funding spent, than those in the priority sector. This is because NISEP does not contribute all of the funding and because commercial energy efficiency measures yield good energy savings in comparison to NISEP spend.
- 3.40 Businesses which become more energy efficient are also improving their overall competitiveness. However for the non-priority commercial schemes, finding applicants who are interested in receiving a grant and able to raise funds and install successfully within a 12-month period, and finding projects that will yield sufficient savings is still a challenge. Primary Bidders are still finding a number of business applications not proceeding to installation.
- 3.41 Despite this there were over 3,000 more non-priority domestic and commercial measures installed in 2016/17 in comparison to 2015/16, attributed to an increased uptake of LEDs. LEDs continue to rise in popularity as they become a more established technology. There was also an increase in Variable Speed Compressors (VSC) uptake, almost double that of the previous year, and a significant increase, of over 500 non-priority domestic insulation measures, as a result of the grant amount being increased to £250.
- 3.42 Energy savings in the non-priority sector remain high:
 - In the 15-16 scheme year, energy savings from the non-priority sector totalled 288,861 GWh which represented 45% of total NISEP energy savings in that year. This equates to a lifetime customer benefit of £45,187,285.
 - In the 16-17 scheme year, energy savings from the non-priority sector totalled 409.876GWh which represents about 56% of total energy savings from NISEP. This equates to a lifetime customer benefit of £68,998,331.
- 3.43 More detailed information on the types of measures installed by NISEP, both in the Priority and Non-Priority categories can be found in Appendix 4.

Findings from NISEP to date

3.44 Within the NISEP scheme year, funding can be transferred from underperforming schemes to more successful schemes, in recent years this has meant that in practice the actual NISEP funding spent at the end of the

year does not reflect the 80/20 split. Table 2 below shows the actual split of funding spent in since 2010.

Year	Priority Funding as a % of total funding spent	Non-priority funding as a % of total funding spent
2010/11	93.43%	6.57%
2011/12	83.64%	16.36%
2012/13	84.63%	15.37%
2013/14	78.80%	21.20%
2014/15	91.07%	8.93%
2015/16	90.28%	9.72%
2016/17	86.50%	13.50%

Table 2: Split of NISEP funding spent from 2010/10 to 2016/17

- 3.45 In addition to transferring funding from unsuccessful schemes to more successful schemes, we are also able to transfer any funding returned by Primary Bidders at the end of the year to the following year's funding.
- 3.46 We have found that each year Primary Bidders gain a better understanding of NISEP and the importance of scheme delivery, in addition we can take underperformance in a previous NISEP scheme year into consideration when awarding funding. That said, we have noticed some trends and challenges which are outlined below.

Non-Priority trends and challenges

3.47 Non-Priority Non-Domestic

It can be difficult in the business and commercial sector to find applicants who are interested in receiving grants and who are also able to raise their own funds, deliver sufficient energy savings and install the measures within the 12 month period as required by NISEP. Primary Bidders also find a lot of applications in this sector not proceeding to installation. Figure 5 below shows the types of measures installed in non-priority non-domestic category (not including lighting of which there were 145,450). Other than lighting the main measures installed in the non-priority non-domestic sector since 2010/11 are Variable Speed Drives (327), Variable Speed Compressors (113) and heating controls (136).

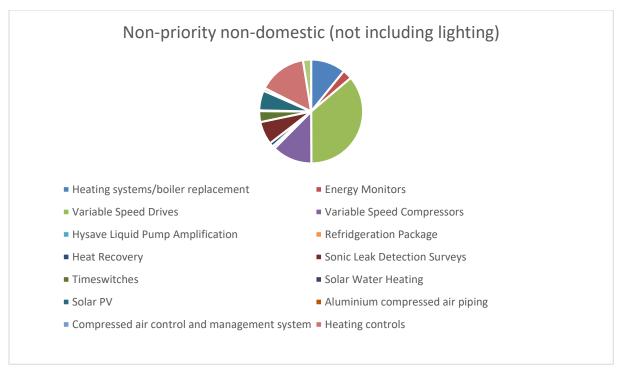


Fig 5: Non-Priority non-domestic measures since 2010/11 (not including lighting)

3.48 Non-Priority Domestic

Many of the installations in this sector tend to be in relation to cash back schemes for cavity wall or loft insulation. However, finding customers in this sector who require these measures is also proving to be a challenge. This is supported by evidence presented in this paper which shows that the majority of homes in NI already have these measures installed. In 2016/17, a review of underperforming schemes in this category resulted in an increase in the amount of cash back offered (from £150-£250). This helped to increase uptake of the measures but with an impact on energy saved per pound of NISEP funding spent.

Figure 6 below highlights the majority of measures since 2010/11 in the non-priority domestic sector are loft insulations (2560) and cavity wall insulations (5318).

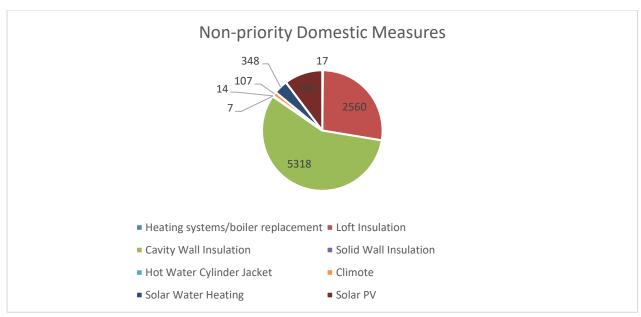


Fig 6: Non-priority Domestic Measures (since 2010/11)

Priority Trends and Challenges

- 3.50 In the priority sector, NISEP offers both whole house solutions (i.e. a full package of measures within a house) and individual measures. Feedback from Primary Bidders continues to reflect difficulty in identifying properties which require all the measures available in a whole house solution package. Either properties already have insulation or people do not desire the full package (for example they do not wish to clear their loft).
- 3.51 A lot of NISEP funding within the domestic sector is spent on oil and gas heating systems and on cavity wall and loft insulation (see fig 8, since 2010/11 NISEP has installed 12,303 heating systems, either gas or oil, 33,145 loft insulations and 15,396 cavity wall insulations).
- 3.52 If it is decided following this review process that a NISEP replacement is necessary, we will need to carefully consider whether or not these types of measure remain appropriate given;
 - What has already been achieved;
 - The reported challenges in finding properties that require these measures;
 - The information presented in chapter 4 of this paper from the NIHE HCS and the CIT regarding the number of dwellings that have already installed these measures; and
 - The information in chapter 4 regarding energy transition.

- 3.53 Consideration will also need to be given to whether or not installing fossil fuel heating systems (gas where available and oil where gas is not available) remains appropriate for an energy efficiency scheme. Consideration will also need to be given to the types of measures that NISEP has not focused on, purely because these measures have been unable to compete on the basis of cost effectiveness in the bidding rounds. For example, since 2010/11 in the priority domestic sector, NISEP has only installed 60 priority solid wall insulation measures and 7 non-priority solid wall measures.
- 3.54 Figures 7 and 8 below show the split of priority domestic measures, for ease of demonstrating the main types of measures in the priority domestic sector, we have split the charts into those which tend to be very high volume (but lower cost i.e. lighting, water widgets and shower flow regulators) and all the other measures.

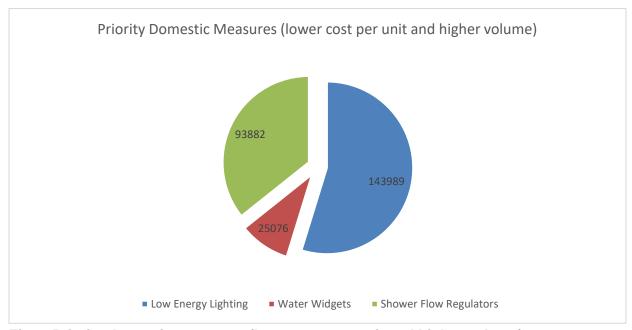


Fig 7: Priority domestic measures (lower cost per unit and higher volume)

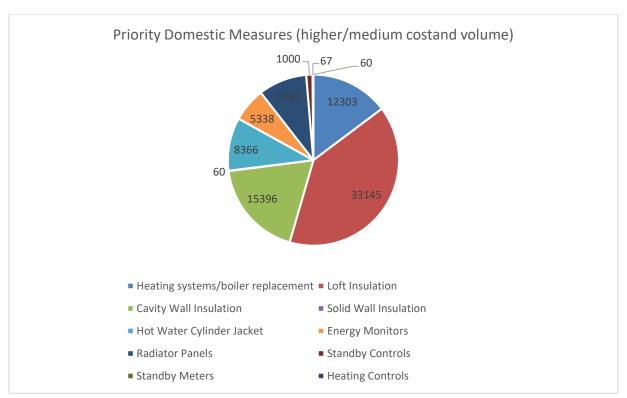


Fig 8: Priority domestic measures (higher/medium cost and volume)

- 3.55 If NISEP (or any future energy efficiency provision) was to switch its focus on the types of measure installed for example; renewable or electric heating systems (rather than gas or oil); or on hard to treat or solid wall homes, then there would be significant implications for the amount of energy saved per pound spent (e.g. solid wall insulation is significantly more expensive than cavity wall insulation, so for our budget, fewer measures and lower kWh/carbon savings).
- 3.56 An attitudinal shift may also be required, accompanied by a significant educational programme relating to the adoption of new technologies including electric heating, heat pumps and other forms of renewable heating. This is important as without it, it potentially represents a major challenge to any future replacement to NISEP.
- 3.57 This has implications for any future energy saving target as indications are that we may need to consider either;
 - Accepting lower energy savings for the same funding spent; or
 - Increasing the level of funding to achieve the same energy savings.

NISEP trends

3.58 As noted above, the majority of NISEP funding goes to the priority sector, however energy savings in the non-priority sector tend to be more cost effective (meaning that it is possible to achieve much higher energy savings per pound of NISEP funding spent). This has resulted in a much different trend when we compare the benefits of NISEP by sector as can be seen in figures 9 and 10 below:

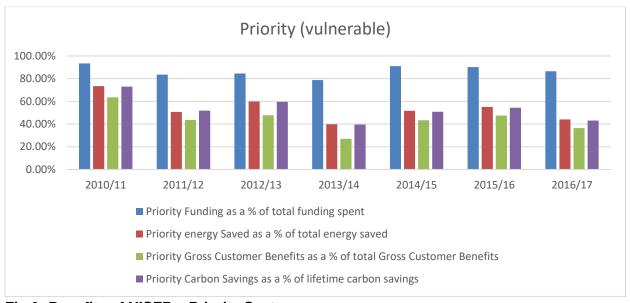


Fig 9: Benefits of NISEP - Priority Sector

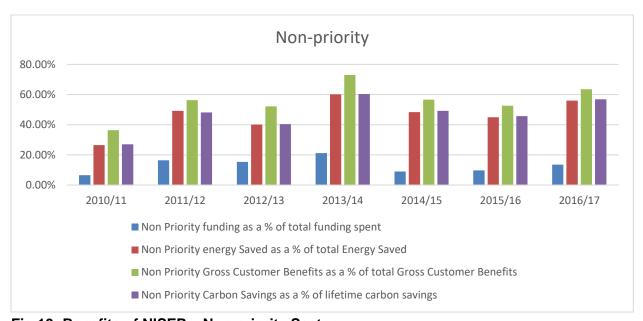


Fig 10: Benefits of NISEP – Non-priority Sector

- 3.59 As can be seen from the above charts, while in recent years more than 80% of NISEP funding tends to be spent in the priority vulnerable sector, in most in years in excess of 50% of the energy saved by the NISEP tends to come from the non-priority sector.
- 3.60 This has implications for decisions going forward relating to the priorities and objectives that NISEP or any future energy efficiency support scheme should adopt. This is particularly true when you consider that in order to continue, NISEP or any future replacement scheme will need justification in line with UR's duties and objectives and will need to help deliver on any future energy saving or carbon reduction target.

NISEP Costs

3.61 As previously explained, NISEP is funded by all electricity consumers; the average impact of this charge on different NI electricity bills across domestic and business use is shown in Table 3 below. Table 4 provides a useful comparison between the impact that similar social and environmental policies have on domestic consumers' bills in NI and GB⁸.

Market Sector	Customer Numbers	Average impact on electricity bill £/annum
Domestic (a domestic user using 3.592MWh		
per year) ⁹	811,961	3.59
Combined Residential/Business	7,640	18.89
Small Medium Enterprises using less than		
70kVA	60,927	18.95
Small Medium Enterprises using more than		
70kVA	5,248	366.14
Large Energy User	206	7846.68

Table 3: Impact on Bills

3.62 Table 4 is a comparison between GB and NI impact on domestic bills of supporting energy efficiency, social and renewables policy objectives (Note figures differ from table 3 above because they use GB usage for ease of comparison).

⁸ The GB figures are from the Default Tariff Cap – overview document at https://www.ofgem.gov.uk/system/files/docs/2018/11/appendix_5_- policy_and_network_costs.pdf, the NI figure for the same consumption is from UR's tariff review team, and NIEN

⁹ Usage reflects an average consumption of 3,592kWh per customer and will include Economy 7 as well as single rate customers.

GB Renewables Schemes	Cost per and domestic side consumer user the District Cap	ingle rate using r annum	NI Renewable s Scheme	Cost per annum for a domestic consumer if we assume usage of 3.1MWh per year, for a pot of £7.9 million ¹⁰	
				Electricit	
	Electricity	Gas		у	Gas
Renewables			Northern Ireland Renewables		
Obligation	£57.79	n/a	Obligation	£27.90	n/a
Contracts for Difference Feed In Tariffs	£8.33 £14.39	n/a			
GB Energy Efficiency and Social Schemes			NI Energy Efficiency and Social Schemes		
Energy Company Obligation	£9.43	£12.41	NISEP	£3.10	n/a
Warm Homes Discount	£6.70	£6.70			
Total	£96.64	£18.48		£31.00	

Table 4: Comparison between GB and NI renewable schemes

3.63 The table¹¹ shows that the NI domestic consumer contributes considerably less to social and environmental policy objectives through their energy bills than their counterparts in GB.

¹⁰ In order to allow direct comparison with GB figures, the calculation was based on typical single rate consumption of 3.1MW, even though the average consumption for a domestic consumer in NI (if you include Economy 7) is higher

¹¹ GB figures are from Ofgem default tariff cap Appendix 5 published September 2018 https://www.ofgem.gov.uk/system/files/docs/2018/09/appendix 5 - policy and network costs.pdf,

About NISEP Questions

- Q1 Given our duties (see chapter 4), are the current objectives for NISEP still appropriate or are any changes required?
- Q2 To what extent should future support for energy efficiency continue to be focused on priority (vulnerable) customers within the context of NISEP?
- Q3 Are the existing energy efficiency measures currently supported by NISEP still appropriate?
- Q4 Please suggest measures that you think should be supported by NISEP including new and/or innovative measures. Please prioritise the measures and provide evidence to justify your view.
- Q5 How best can any future funding scheme ensure a proportionate distribution of benefits across Northern Ireland?
- Q6 What are your views on how NISEP or any future support should be funded?
- Q7 What are your views on how to best achieve cost effectiveness and value for money in the allocation of funding through NISEP or any future replacement?
- Q8 What are your views on the criteria used to determine access to priority schemes?

4. Strategic and Policy Context in Northern Ireland

Relevant Legislation

- 4.1 The duties and objectives that underpin the work of our office are set out in the Energy (Northern Ireland) Order 2003 (the Energy Order)¹². Our principle objective under the Energy Order is the protection of consumers including, but not limited to, the protection of vulnerable consumers as well as the need to secure diverse, viable and environmentally sustainable long term energy supplies and efficiency in the use of electricity and gas. We also contribute towards UK wide and European targets in relation to energy efficiency, renewable energy and carbon reduction, including those in the 2012 Energy Efficiency Directive (EED) and the Climate Change Act 2008.
- 4.2 Article 7 of the EED¹³ requires Member States to introduce an energy efficiency obligation scheme and/or other policy measures to achieve 1.5% year on year energy efficiency savings. The NI contribution to the EED target is set out in the UK's National Energy Efficiency Action Plan¹⁴, and currently equates to energy savings of 200 GWh per year. DfE is the NI government department charged with implementation of the EED and ensuring the Article 7 energy efficiency requirements are met. A recast of the EED came into force in December 2018 and sets an increased EU target of a 32.5% in energy consumption by 2030.
- 4.3 Currently, NISEP is the only NI policy measure contributing to the UK's overall energy saving targets as required by the EED and set out in the NEEAP. To date, NISEP has already achieved the energy savings that Northern Ireland committed to contribute to the UK's overall EED target, however the target may be revised (in an upward direction) to facilitate the 2030 target. To date the UK Government has indicated that its position on energy policy will not change as a result of the vote to leave the European Union. Therefore it is likely that NI will continue to play a part in efforts to deliver energy savings in line with future UK wide plans.

¹² http://www.legislation.gov.uk/nisi/2003/419/contents/made

¹³ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0027&from=EN

¹⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0027&from=EN

Energy Transition/Efficiency

- 4.4 Energy transition is the term given to the long term structural change in the way energy is organised. Discussions on the topic of energy transition currently focus on what is known as the 4Ds (decarbonisation, digitisation, decentralisation and democratisation). What energy transition means for NISEP and the future provision of energy efficiency is that the energy efficiency technologies available and the way consumers interact with energy suppliers and the way consumers use energy is likely to change.
- 4.5 Therefore we need to consider how any future energy efficiency provision can ensure that, given these changes, customers get the maximum benefit in terms of energy and carbon savings at best value. In line with the principles of a just energy transition, any future NISEP or replacement will also need to consider the need to ensure that vulnerable customers benefit from energy transition and are not disadvantaged.
- 4.6 Energy efficiency is a vital element of the energy transition, will put consumers at the centre of it and continues to be an effective way of connecting the reduction of emissions and consumers' energy bills. According to the EU Clean Energy Package, energy efficiency is the cheapest and cleanest source of energy as it is the energy that does not need to be produced.
- 4.7 When considering what the focus of energy efficiency support should be, we also note the Chancellor of the Exchequer's announcement in his spring statement (13 March 2019)¹⁵ that the government will be introducing a Future Homes Standard that will apply to new dwellings from 2025, and will mandate the end of fossil fuel heating systems in all new houses from then. The impact of this in Northern Ireland, along with the Clean Energy Package, needs to be taken into account in relation to considering where the effort should be to meet the increased energy efficiency target. Thought needs to be given to which sectors should be funded through NISEP or any future energy efficiency scheme and in what proportion (business, domestic, 'able to pay' or vulnerable households). Which technology and measure types we focus on also needs some thought.
- 4.8 To date, we have considered that the provision of energy efficiency measures through NISEP is an appropriate response to the achievement of our principle objective and duties as it contributes to the protection of all consumers (as outlined previously) not just those who benefit directly from

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 $^{^{\}rm 15}$ https://hansard.parliament.uk/commons/2019-03-13/debates/5B9C772E-1769-437A-A4F0-06DEAC55D676/SpringStatement

the NISEP measures.

4.9 As no specific requirement for an energy efficiency programme is detailed within the Energy Order, nor indeed a requirement for an energy efficiency programme which targets the vulnerable, any future energy efficiency scheme funded by consumers as well as its size, aims and duration, will be required to continue to demonstrate that it is an appropriate response to our duties.

Energy Efficiency context in Northern Ireland

- 4.10 In Northern Ireland responsibility for energy efficiency related issues is split across a number of government departments and public bodies, depending upon whether it relates to the domestic, business or other sectors and circumstances.
- 4.11 DfE has overall responsibility for energy policy and for the economy, while DfC has responsibility for fuel poverty and the domestic housing stock. DoF is responsible for building standards, and promotion of energy efficiency in the public sector. Dfl is responsible for planning, while DAERA is responsible for the environment, energy efficiency in farming and climate change.
- 4.12 Government departments in NI take direction for their priorities from the Northern Ireland Executive's draft Programme for Government (PfG). The previous NI Executive adopted a new Outcomes Based Accountability approach which resulted in the draft PfG Outcomes Framework. In the absence of an Executive, the NICS Outcomes Delivery Plan for 18/19, which is based on the draft PfG, was published in June 2018.
- 4.13 As a public authority in Northern Ireland we also play our part in relation to the draft PfG. NISEP contributes to a range of its objectives including:
 - We live and work sustainably protecting the environment;
 - We live long healthy lives;
 - We care for others and help those in need; and
 - We prosper through a strong, competitive, regionally balanced economy.
- 4.14 Policy initiatives and energy efficiency schemes in Northern Ireland should have at their core the ability to demonstrate how they help to contribute towards the outcomes of the draft PfG. Appendix 2 provides an overview of how NISEP's objectives contribute towards draft PfG outcomes.

- 4.15 DfE's current strategic direction for energy is set out in the Strategic Energy Framework (SEF), which continues until 2020. A new Energy Strategy is currently under development, a key focus of which will be energy efficiency. Consideration will need to be given to ensure any future energy efficiency support provision is aligned with the new Energy Strategy.
- 4.16 As previously stated, DfC is responsible for the domestic housing stock, and with this comes a remit that covers both domestic energy efficiency and fuel poverty. While the factors of energy prices and incomes have been shown to contribute to the high number of households in NI in fuel poverty, DfC's Fuel Poverty Strategy¹⁶ recognises the important role that domestic energy efficiency has to play in tackling fuel poverty.
- 4.17 Although NISEP is not a fuel poverty initiative, the energy efficiency measures provided by its schemes contribute to tackling the problem of energy inefficient cold homes, a major factor in the cause of fuel poverty. At a recent launch of an energy efficiency project¹⁷, the Chief Medical Officer for Northern Ireland, Dr Michael McBride, recently stated:
- 4.18 "Fuel poverty is a long-standing health issue, recognised for many years by researchers, medical professionals and policy makers alike. The link between living in cold, damp conditions and a number of illnesses, including poor mental health, respiratory disease and premature mortality has long been accepted".
- 4.19 NIHE is Northern Ireland's Home Energy Conservation Authority and as such, is required to develop a strategy to significantly improve the energy efficiency of the entire Northern Ireland housing stock and to compile reports on its energy efficiency. Their current energy strategy is aimed at delivering substantial progress towards an overall improvement in energy efficiency of 34 within a 10 year period. The overall aim is to reduce domestic energy consumption in NI, without compromising on comfort levels.
- 4.20 Progress is reported to DfC via the Northern Ireland House Condition Survey (HCS)¹⁸. This survey provides a full picture of the condition of housing in Northern Ireland, with all tenures and types of housing included. The HCS provides the only reliable, consistent source of data for measuring energy efficiency, homes that meet the Decent Homes standard and fuel poverty levels across NI.

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¹⁶ https://www.communities-ni.gov.uk/sites/default/files/publications/dsd/warmer-healthier-homes.pdf

¹⁷ Northern Ireland Housing Executive's launch of their 'Handi-Heat' project in Belfast Castle

¹⁸ https://www.nihe.gov.uk/house condition survey main report 2016.pdf

Findings from the NIHE House Condition Survey

- 4.21 The most recent HCS report (2016) found that fuel poverty figures for Northern Ireland had decreased from 42% in 2011 to 22% in 2016. After the NIHE published 'Estimates of Fuel Poverty in Northern Ireland for 2017 and 2018' they noted;
- 4.22 'Compared to 2016, the combined effect of the estimated 2017 fuel prices and household income led to a large decrease of 28,000 fuel poor households, falling from 160,000 to 132,000.......For the 2018 estimate, the level of fuel poverty falls by an additional 9,000 households following energy efficiency measures. This reduces the level of fuel poverty to approximately 131,000 households.'which equates to 18%.¹⁹
- 4.23 Other relevant key findings within the HCS are as follows:
 - Northern Ireland homes are now, on average, slightly more energy efficient than those in GB, where previously they were less so (measured through the SAP);
 - NIHE homes are now more energy efficient than owner occupied and private rented property;
 - 99% of all dwellings had central heating, with oil being the main fuel source, in 70% of homes (a change from the traditional reliance of NI homes on solid fuel);
 - Of the 84% of housing stock suitable for loft insulation, 98% had this form of insulation;
 - The least energy efficient houses were in the private rented and others tenure (43%);
 - Only 35% of dwellings in rural areas were within the higher bands (A-C) for energy efficiency;
 - 55% of households in fuel poverty had an incoming of up to £10,399;
 - 52% of households living in fuel poverty were in older dwelling pre 1919;
 - 38% of households headed by a person aged 75 + were in fuel poverty.

 $^{^{19}\} https://www.nihe.gov.uk/getmedia/1f9e55a1-66c2-46b7-bf92-9ee192ce355f/estimates-of-fuel-poverty-northern-ireland-2017-and-2018-revised.pdf.aspx?ext=.pdf$

Other Energy Efficiency Schemes/Services in Northern Ireland

- 4.24 The NISEP Framework Document makes it clear that NISEP funding should only be used where the energy efficiency measure would not be installed in the property without assistance from the particular NISEP scheme.
- 4.25 NISEP aims to target properties that do not qualify for grant assistance for energy efficiency measures from any other government source. This comes with its challenges as criteria for existing energy efficiency/fuel poverty schemes change and new initiatives are introduced.
- 4.26 Other schemes that cover similar energy efficiency measures to NISEP include Affordable Warmth Scheme (AWS) and Boiler Replacement Scheme (BRS), both delivered by DfC. An overview of both schemes is outlined below.

Affordable Warmth Scheme

- 4.27 DfC's Affordable Warmth Scheme addresses fuel poverty in the private sector (i.e. those who own their own home, or rent from a private landlord). It is delivered across NI by NIHE and local councils on behalf of DfC.
- 4.28 The scheme takes an area-based approach where DfC provides targeted addresses to local councils who then contact those households in most need of energy efficiency measures. Council staff will contact householders in the area and ask them to complete a short survey, the survey will be sent to the NIHE who will then carry out a technical survey to judge what measures are required to be installed in the property. The scheme also allows a limited number of self-referrals. The maximum grant offered is £7,500 per property or, if solid wall insulation is to be installed the grant limit will increase to £10,000.
- 4.29 The current income threshold for access to the scheme is a gross annual household income of less than £20,000. For private tenants, the landlord must give consent for the work to be carried out and contribute 50% to the cost of the work. Measures considered include fabric insulation (cavity, loft and solid wall), new heating/replacement (for LPG, solid fuel or Economy 7) system, draft proofing and replacement windows.
- 4.30 Bryson Energy are currently contracted by NIHE to provide an energy efficiency advice helpline which signposts consumers to appropriate grants. Although NISEP does not contribute any funding to the service, in the best interests of consumers, the helpline includes advice on NISEP schemes.

4.31 DfC consulted in autumn 2017 regarding proposals and the eligibility criteria for the Affordable Warmth Scheme may change.

Boiler Replacement Scheme

- 4.32 The scheme is open to owner occupiers whose household income is less than £40,000 and who have an inefficient boiler of at least 15 years old. Owner occupiers will only be eligible to replace existing gas boilers if the gas connection to the property was made at least 15 years ago. The allowance does not apply to Economy 7 heating, stoves used only for cooking, back boilers or room heaters.
- 4.33 The grant of up to £1,000 is available to help with replacing an inefficient boiler with a more energy efficient condensing oil or gas boiler; switching from oil to gas; or switching to a wood pellet boiler. The amount of grant payable will depend on total gross income. For those earning less than £20,000, the grant is £700 to replace the boiler but will rise to £1,000 if controls are also being installed. For those earning over £20,000 but less than £40,000, the grant is £400 for the boiler but will rise to £500 if controls are installed. Written approval from the Housing Executive must be sought before a consumer replaces their old boiler.

Energy and Resource Efficiency Programme

4.34 Invest NI delivers the Energy and Resource Efficiency Programme and this includes both advisory and financial support to help businesses achieve cost savings and increase productivity. The advisory services have approval until March 2024 and include technical consultancy support and resource matching through Industrial Symbiosis. The financial support is currently undergoing economic appraisal.

4.35 The following is an overview of the range of energy efficiency and fuel poverty initiatives that were identified through the Call for Evidence (some of the below may now have closed);

Name	Activity
Affordable Warmth Scheme	Targeted 100% support for the lowest
	income households (presently <£20k).
Boiler Replacement Scheme	Targeted grant support (of up to 50%)
	for lower income households.
NISEP	80% targeted to priority (vulnerable)
	consumers and the remaining 20%
	available to bids in respect of domestic
	or commercial energy efficiency
	schemes. In the past, NISEP has
	funded up to 22 different energy
	efficiency schemes in a given year.
HeatSmart	NIHE tenant home visiting service.
Warmer Ways to Better Health	Public Health Agency (PHA) offers
	advice including referrals for energy
	efficiency grant programmes and
	benefit entitlement checks.
Northern Exposure Project	PHA support and energy efficiency
	advice to statutory community and
	voluntary sectors.
NI Energy Advice Line	NIEAL funded by NIHE.
Schools Energy Efficiency	SEEAP funded by NIHE.
Awareness Programme	
North Belfast Employment	Funded by SIF and aimed at vulnerable
Programme	households. Through creating
	employment opportunities through
	renewable energy initiatives.
Power NI Home Visiting Programme	Energy advice and benefits checks.
Wise Oil Buys	Help with oil purchasing and budgeting.
Social Supermarkets	Energy efficiency advice.
The Environment Fund 2019-22	DAERA (currently closed to new
	applications) contributes to 4 priority
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	areas 1) EU, National, International commitments or draft PfG, Coordinated Actions, outdoor recreation actions – not for profit organization.
Energy and Resource Efficiency	Invest NI – offers advisory services such as technical consultancy support and resource matching through Industrial Symbiosis, with approval until March 2024. An economic appraisal is currently underway to determine future financial support.

4.36 While it is not possible to detail the operation of each scheme the information does demonstrate the wide range of schemes available and the challenges that this presents in relation to ensuring that there is no overlap between other government schemes and NISEP schemes.

Approach to Energy Efficiency elsewhere

- 4.37 The key UK Government statutory driver for greenhouse gas reduction is the 2008 Climate Change Act which covers NI and sets legally binding carbon budgets up to 2050, with a number of interim targets. The 2008 Climate Change Act sets out the UK's commitment to reduce carbon emissions by 80% by 2050 relative to 1990 levels.
- 4.38 In addition, the NEEAP sets out how the UK complies with the EED. As noted a recast of the EED came into force in December 2018 and sets an updated EU target of 32.5% reduction in energy by 2030. The UK Government has made it clear that its position on energy policy will not change as a result of the vote to leave the European Union, indicating that the UK Government remains committed to climate change objectives set in the UK Climate Change Act 2008²⁰ and energy efficiency targets set through the EED. (As noted Northern Ireland also plays its part in delivering these targets).
- 4.39 In GB, the policy department responsible for climate change, carbon reduction, and energy efficiency in all sectors is the Department for Business, Energy and Industrial Strategy (BEIS).

²⁰Amber Rudd speech to the Business & Climate Summit, June 2016: https://www.gov.uk/government/speeches/amber-rudd-speech-to-the-business-climate-summit

- 4.40 The main GB programmes are:
 - a) **Energy Company Obligation Scheme** (ECO) applies throughout GB (although the targets for Scotland can be reduced on a pro-rata basis to reflect the Scottish Government's own schemes).
 - (i) This policy aims to deliver energy efficiency and reduced carbon whilst providing support to low income, and vulnerable households. The ECO was launched in January 2013, ECO3 (the third iteration of the scheme following review) will run until March 2022. The main features of ECO3 are as follows:
 - It is a statutory obligation set out in the Electricity and Gas (Energy Company Obligation) Order 2018. It applies to electricity and gas suppliers with more than 150,000 consumers.
 - 100% of the funding goes to vulnerable and low income homes, with at least 15% targeted to rural areas and an uplift for EPC F and G rated homes. A minimum of 17000 solid wall homes per year must be targeted with either solid wall insulation or other measures which deliver equivalent savings. There is restricted access to landlords.
 - It contains a target of £8.253bn lifetime bill savings, equivalent to 35,000 replacement heating systems.
 - The role of Ofgem (the GB regulator with similar duties to UR) in the scheme is to apportion the targets among obligated suppliers, monitor and report progress against the targets and ensure compliance.
 - b) The Warm Homes Discount is not an energy efficiency scheme. It is included in this paper for completeness as it is a fuel poverty measure provided for by legislation in GB which is funded via consumer bills. Obligated energy suppliers provide £140 discount to eligible consumers which can either be applied to their electricity or gas bill (or if they are a dual fuel consumer to the dual fuel bill). It applies to those on pension credit and some low income consumers.
 - c) The Warm Homes Fund is a £150m fund which is funded through National Grid and administered by Affordable Warmth Solutions. Its stated aim is to provide affordable heating in fuel poor households not on the gas network. It is open to bids from local authorities and social

landlords and bids are split into 3 categories:

- Urban homes and communities;
- Rural homes and communities;
- Specific energy efficiency and health related solutions.
- d) **The Green Deal** is no longer available in GB, however some of the respondents to our call for evidence urged us to learn the lessons from Green Deal therefore it is worth noting some of the features and lessons from the scheme.
 - (i) The Green Deal was a loans-based scheme offered to homeowners and businesses to help them to implement energy efficiency at little or no upfront cost. It was intended to deliver a step change in energy savings while reducing costs to the taxpayer and the consumer. The loans in question were described as a "new kind of loan, to the property and not to you", they were to be repaid through electricity bills and the new type of loan i.e. to the property, was intended to alleviate any fears that homeowners would have regarding increased personal debt.
 - (ii) A National Audit Office (NAO) report on Green Deal however found that "The Department of Energy And Climate Change's ambitions aim to encourage households to pay for measures looked good on paper, as it would have reduced the financial burden of improvements to all energy consumers. But in practice, its Green Deal design not only failed to deliver any meaningful benefit, it increased suppliers' costs and therefore energy bills". The NAO found that the Green Deal did not provide value for money and that DECC should be "more realistic about consumers' and suppliers' motivations when designing schemes in future".

Scotland

- 4.41 The Scottish Government has set its own individual target of 12% reduction in energy consumption by 2020 and in addition to the ECO it has introduced a number of bespoke measures in this context.
- 4.42 As noted above, the ECO scheme applies throughout GB. In addition, Scotland has the Home Energy Efficiency Programmes for Scotland (HEEPS) which seeks to coordinate available schemes.

- 4.43 The HEEPS offers advice on energy efficiency, benefits and signposts to schemes such as the ECO and the Scottish Government's Warmer Homes Scotland; which is an area based scheme funded by the Scottish Government and delivered in conjunction with Local Authorities. In addition the Home Energy Scotland Loan scheme offered interest free loans to owner occupiers and private sector landlords.
- 4.44 On 17 April 2019, the Scottish Government announced an award of more than £38m to the managing agent Warmworks²¹, which it stated would enable Warmworks to continue supporting the Scottish government's fuel poverty scheme to 2022.

Strategic and Policy Context in NI Questions

- Going forward, is there any overlap or gaps between NISEP and other funded schemes that needs to be addressed?
- Q10 What are your views on how the main lessons learnt from elsewhere and how should they be taken into consideration in the design of any future support for energy efficiency?
- Q10 In your view, how does Northern Ireland ensure it is ready for energy efficiency/carbon reduction challenges in the future?

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²¹ https://www.gov.scot/news/reducing-fuel-poverty/

5. Engagement Programme

Summary of Engagement Programme to date

- 5.1 In order to ensure the views of stakeholders and consumers are taken into consideration, the review of NISEP included consumer engagement and a Call for Evidence.
- We worked with CCNI to complete a consumer engagement exercise in the summer and autumn of 2018. In addition to this, we issued a Call for Evidence in October 2018. The purpose of which was to complement the data gathered by CCNI.
- 5.3 We also completed an independent survey on consumer attitudes, the Consumer Insight Tracker (CIT), which we intend to repeat every two years. (In 2019 we completed a survey of domestic consumers and in 2020 we intend to complete a survey of business consumers).
- 5.4 It is intended that together, these separate pieces of work will provide a comprehensive and robust evidence base for any future proposals.

Findings from consumer engagement

- 5.5 The consumer engagement process managed by CCNI consisted of twelve focus groups with a range of NI householders to assess attitude and sentiments towards energy efficiency and the various schemes on offer across NI. Six semi-structured interviews were also conducted with individuals who had benefitted from a NISEP scheme.
- 5.6 Discussion within the focus groups revealed that participants were receptive to the message of promoting energy efficiency, and many had taken steps/continued to take steps to reduce energy consumption within their home. The main driver of these actions was to save money, although a few commented on the positive environmental effects. A few also confirmed that they were deterred from making their home more energy efficient due to the outlay costs, which they could not afford in their current circumstances.
- 5.7 Most participants were unfamiliar with any energy efficiency scheme provisions available in NI, including NISEP and its individually named schemes. Where there was awareness, it tended to be vague. These findings extend to programme beneficiaries themselves, who explained that they had come across the energy scheme they had applied to by chance. No programme beneficiaries were aware that the scheme they availed of is connected to NISEP.

- There was little awareness of the nature of the funding model for NISEP. However, the amount contributed by the average household was on the whole felt to be fair and participants were generally in favour of the fact that the scheme is tailored to those most in need. Some participants would like to have seen a widening of the criteria and indicated that they may be willing to pay more depending on the criteria, while other participants held the opinion that 'all contribute, therefore all should be able to benefit'.
- 5.9 Focus groups established that participants had a perception that the application process may be lengthy, and there was a degree of questioning from participants about whether the scheme providers might inflate their prices simply because there were grants available. Those in private rented accommodation commented that they would be reluctant to apply to a scheme that might cost them money as they would not want to put money into a home that they did not own. There was concern expressed that those individuals living in the rented accommodation were at a disadvantage when it came to being able to obtain help from energy efficiency schemes in general.
- 5.10 Feedback from the semi-structured interviews was largely positive with the main drawbacks cited as being the perceived long delay due to waiting lists of eligible consumers, and some confusion about the number of schemes on offer. In general householders who had benefited reported good service and noticeably warmer homes.

Findings from Call for Evidence

- 5.11 We received 17 responses to the Call for Evidence from organisations with varying levels of interaction and involvement with energy efficiency schemes. Respondents included Primary Bidders, installers and organisations that support recipients. There were no responses from those who received support directly via NISEP, neither domestic nor non-domestic.
- 5.12 A range of views were expressed on how energy efficiency schemes should be funded, including:
 - Via taxation;
 - Paid for by those who benefit;
 - Views were mixed on customer/business split; some mention of "polluter pays principle" as a reason for business to contribute; however, also mention of taxes businesses already pay e.g. Climate Change Levy;
 - All fuels should pay including gas, oil and coal.

- 5.13 There was also strong support for prioritising fuel poverty, however there was also support for reviewing the definition of vulnerability (i.e. low income).
- 5.14 Views expressed on the benefits of NISEP or any energy efficiency support included:
 - That it is an accessible scheme;
 - That it delivers environmental benefits;
 - It delivers economic benefits e.g. opportunities for local installers;
 - It delivers health benefits (e.g. excess winter death caused by cold, damp homes);
 - It delivers societal benefits (alleviating fuel poverty).
- 5.15 Awareness of, and interaction with energy efficiency schemes in Northern Ireland:
 - (i) Respondents to the call for evidence demonstrated an awareness of energy efficiency grant schemes (both domestic and non-domestic) such as NISEP, Boiler Replacement Scheme and Affordable Warmth Scheme.
- 5.16 Delivery, funding and benefits of NISEP;
 - (i) There was support for the need for NISEP or some replacement to it. The lack of certainty around NISEP and the fact that schemes only have certainty of funding for one year at a time was criticised.
- 5.17 Views were mixed regarding what the purpose of NISEP is i.e. whether it is to address fuel poverty or energy efficiency;
 - (i) Due to the wide range of energy efficiency schemes available, respondents felt there was a need for a "one stop shop" approach. It was felt that this would reduce confusion and ensure consumers were placed on the best scheme for them. Such an approach could potentially include a list of registered installers.
- 5.18 Respondents suggested that consideration should also be given to amalgamating all the funding available for energy efficiency/fuel poverty in order to maximise benefits and reduce costs.

- 5.19 Regarding the funding of NISEP, views were mixed. While a few respondents stated it should be raised through taxation, the majority agreed the PSO was a suitable funding mechanism. Some respondents stated that the current level of funding was adequate, while other respondents stated that any changes to the PSO should be based on detailed analysis of what the needs of the fuel poor are and what the consumer can bear.
- 5.20 Respondents also felt consideration should be given to the following factors;
 - The business/domestic split 'Polluter pays' principle was raised in the context of business contributions, but equally, it was also raised from a business perspective that consideration be taken of other business energy taxes such as Climate Change Levy;
 - The potential for all who contribute to benefit (including SMEs and higher income households);
 - NISEP funding should come from other fuel sources as well as electricity consumers.
- 5.21 Responses further highlighted that there was a need for central government policies around fuel poverty and energy efficiency in order to provide focus (and that NISEP should be incorporated into these). The need for an energy efficiency target for Northern Ireland was mentioned, as was the need for a requirement for any future energy efficiency support to be enshrined in legislation.
- 5.22 A range of NISEP benefits were highlighted by respondents including its accessibility, speed of turnover and ease of consumer journey. The environmental benefits were also highlighted, along with the economic, health and social impact, such as contributing to tackling fuel poverty, reducing excess winter deaths, and improved working environments.

Criteria for vulnerable consumers

- 5.23 Strong support was provided for continuing to prioritise those in fuel poverty. Some respondents did suggest that the definition of vulnerable should be revisited to ensure that support is targeted at those most in need, by considering for example:-
 - House size;
 - Family size;
 - Location; and
 - Disposable income.

- 5.24 The counter view was also expressed, that the focus should be solely on energy savings. There was a suggestion that further analysis was required in order to determine the appropriateness of the current 80% allocation to vulnerable consumers.
- 5.25 Given that NISEP is at capacity, it was suggested that an increase in funding may be appropriate, with a particular call for increased funding for Whole House Solutions.
- 5.26 It was also highlighted that NISEP is the only available scheme providing fully funded grants to the private rented sector. Although others also queried whether landlords should contribute going forward.
- 5.27 The requirement for further clarity on all levies in bills was also raised.

Need for NISEP

- 5.28 The majority of respondents believed that householders or businesses would not carry out the work without NISEP, as capital costs and access to finance could prove difficult. It was felt that in the current economic climate, households and businesses are more likely to take a short term view of this long-term issue, particularly given that benefits and savings associated with energy efficiency measures are not as widely publicized in NI as elsewhere in the UK.
- 5.29 There was general support for the need to continue with NISEP, in particular to target the fuel poor. It was felt that NISEP works well alongside the Affordable Warmth Scheme and Boiler Replacement Scheme due to its non-geographical approach, higher income thresholds and fully funded support for private rented tenants. Respondents highlighted a need for greater clarity between energy efficiency and fuel poverty schemes, perhaps through the Framework Documents and additional analysis.
- 5.30 Suggested improvements included an increased focus on Whole House Solutions, and establishing a Steering Committee of key stakeholders to discuss strategy, objectives and monitor performance.
- 5.31 Negative views expressed included:
 - Confusion caused by the wide range of schemes available (both within NISEP and non NISEP);
 - Need for improved standardisation of documentation and branding;
 - Need for improved quality monitoring and auditing;
 - Need for more encouragement of innovation;

- There should be better feedback to unsuccessful bidders to NISEP;
- Potential duplication with Affordable Warmth/Boiler Replacement Scheme;
- Need for a review of criteria for commercial schemes:
- Appropriateness of the cost effectiveness formula; and
- Consideration required of the availability of the gas network.
- 5.32 The above points raised by respondents, give rise to further considerations and questions outlined below.

The Consumer Insight Tracker

- In 2018, we commissioned consultants CEPA and Impact Utilities to undertake an independent domestic energy consumer survey, the Consumer Insight Tracker (CIT). We have now published the first CIT which is intended to be a regular survey aimed at helping us to better understand and monitor domestic consumers' perspectives, outcomes and behaviour over time. The quantitative nature of the survey was designed to give statistically significant insights, which can be tracked over time, to see how experiences and perspectives change and provide UR with better information to inform decision making. The CIT surveyed 1503 domestic consumers (including a specific 100 consumer boost to capture vulnerable consumers).
- 5.34 The CIT found that the majority of consumers asked have not installed any energy efficiency measures in their home in the last three years (59%). The survey asked these consumers to provide the main reasons why they had not installed any measures in the last three years (respondents were allowed to choose more than one option).
- 5.35 The most common reason for not putting energy efficiency measures in place was that they were already present (either as they were already in place or because the individual added them more than three years ago)²².
- 5.36 Other individuals had not installed them for reasons of cost (14%), lack of information (10%) or disruption (6%). In addition, 12% considered that they were not needed.
- 5.37 The CIT also asked about consumer appetite for wider energy initiatives which they would like to see their supplier offer. Respondents were asked to rank the top three initiatives. The range of options for answer, although hypothetical, is useful in highlighting wider energy initiatives of importance to

²² Note that as respondents could select more than one option, these percentages are not cumulative.

domestic consumers. The top three initiatives consumers would like to see are:

- Investing in projects to protect the environment;
- Supporting other vulnerable customers (not only those over the age of 60);
- Supporting customers over the age of 60.
- 5.38 However, 40% of consumers would not be willing to pay anything on top of their existing monthly bill for the additional services they selected and a further 15% would only be willing to pay £1. The mean willingness to pay is £1.69 per month (or £20.28 per year). Nevertheless, 12% of consumers would be willing to pay £5 more per month and 4% would be willing to pay even more than this.

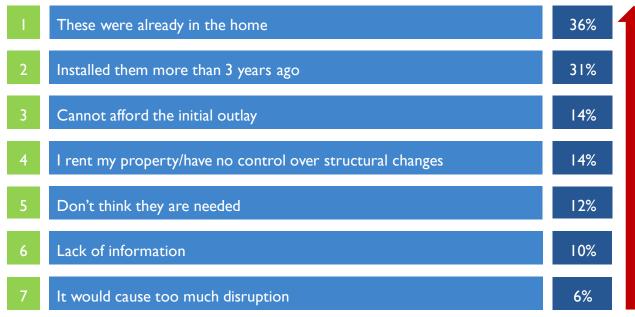


Fig 9: Reasons for not installing energy efficiency measures in the last three years (Respondents could select more than one option)

- 5.39 In relation to NISEP, it is important to note that it is likely to become more difficult for NISEP or any future energy efficiency scheme to identify households in need of energy efficiency measures, given that such a high proportion of respondents note that they already have them installed or feel they do not need them.
- 5.40 Any future energy efficiency scheme will need to concentrate efforts on those consumers who listed other reasons for not installing energy efficiency measures, as shown in fig 9 above, such as cost, difficulties for those in the private rental sector and lack of information available.

Engagement Programme Questions

- Q12 In your view, what should be the target customer groups of any future energy efficiency support fund?
- Q13 How could a 'One Stop Shop' approach to the provision of energy efficiency support (as suggested in the Call for Evidence) be organised?

6. Next Steps

- 6.1 We intend to hold a consumer engagement event to further inform this discussion paper. Responses to this paper will be used to help improve NISEP and inform decisions in relation to future provision of energy efficiency support.
- There will be a NISEP call for schemes, with a revised Framework
 Document in September 2019 for schemes to run in the year commencing
 April 2020. Where possible, comments from the Call for Evidence will feed
 into the revised NISEP processes and NISEP Framework Document,
 including additional auditing and monitoring.
- All responses to this discussion paper should be sent to us by 11 October 2019 to patricia.stewart@uregni.gov.uk.

Next Steps/Equality Questions

- Q13 Have you any other comments on the existing NISEP scheme or any future support scheme that you wish to make?
- In your view, to what extent has NISEP had an impact in relation to Section 75 of the Northern Ireland Act 1998 or the promotion of equality of Opportunity?

8. Appendices

Appendix 1 - Review of Energy Efficiency Scheme Provision

Terms of Reference

1. Background

1.1 NISEP is currently the only NI policy measure contributing to the UK's overall energy saving targets as required by the 2012 EU Energy Efficiency Directive (EED). To date the NISEP has already achieved the energy savings that NI committed to contribute to the UK's overall EED target; however the target is likely to be revised (in an upward direction) under the new EU clean energy package.

2. Purpose

- 2.1 Given this context, the UR and the Department propose to:
 - (i) Review the current provision of energy efficiency support within NI and the need for an ongoing programme,
 - (ii) Review the need for energy efficiency to be supported by electricity consumers should a need for an ongoing programme be established at (i) above
 - (iii) Depending on the outcomes of the evaluation at (i) and (ii), develop options for an appropriate vehicle for the delivery of energy savings should such a need be established. The design, associated governance, operational arrangements and scheme aims and objectives, would also be considered in that context.

3. Context

3.1 Article 7 of the 2012 EU Energy Efficiency Directive (EED) requires Member States to introduce an energy efficiency obligation scheme and/or other policy measures to achieve 1.5% year on year energy savings. The expected NI contribution is set out in the UK's Energy Efficiency Action Plan and equates to energy savings of 200 GWh per year. Department for the Economy (DfE) is the NI Department charged with implementation of the EED and ensuring the Article 7 energy efficiency requirements are met. A recast of the Energy

- Efficiency Directive is currently under negotiation and includes revised targets up to 2030.
- 3.2 Currently, the Northern Ireland Sustainable Energy Programme (NISEP), administered by the Utility Regulator, is the only NI policy measure which has contributed energy savings to the UK under the EED.
- 3.3 The NISEP is funded by a sum of money collected from all electricity customers through a Public Service Obligation (PSO) used to provide funding for energy efficiency schemes. It was previously known as the Energy Efficiency Levy (EEL) and has been in operation since 1997.
- 3.4 The NISEP (previously EEL), was introduced by the Utility Regulator in order to implement energy efficiency schemes for domestic and non-domestic properties with the aim of reducing carbon emissions. An overview of the NISEP programme is at Annex 1.

4. Scope of the Review

- 4.1 Assess and provide an overview of the current strategic context to include:
 - European context: targets and requirements,
 - UK context: National energy efficiency targets,
 - Northern Ireland policy context to include:
 - o legislation,
 - Programme for Government,
 - NI position regards energy efficiency.
 - Existing energy efficiency provision,
 - Housing conditions survey,
 - Uncertainty regarding future energy prices
 - Context of DfE's energy strategy or goals in relation to energy efficiency,
 - Context of UR's and DfE's role and corporate strategy,
 - The interests of the consumer.
- 4.2 Assess and outline the success (or otherwise) of NISEP against its initial stated purpose. Has it done what it was supposed to do? If so, how well?

How much did we do? How well did we do it? Is anyone better off?

4.3 Given the context outlined at 4.1, identify and assess if there is a continuing need for an energy efficiency scheme and, if so, how that should be funded.

4.4 In the context of the outcome of points (i) to (ii) of paragraph 2.1, evaluate and identify if further phased work is required. The purpose of such further phases would be to develop options for an appropriate vehicle for the delivery of energy savings should such a need be established.

5. Engagement

5.1 It is envisaged key stakeholders will be included in this process, including relevant Government Departments and statutory bodies, relevant voluntary and community sector bodies, commercial and residential customers, and the current Programme Administrator and Primary Bidders of NISEP.

6. Output

6.1 The Consumer Council for NI will be invited to facilitate consumer discussion sessions and contribute to a report which will include the information set-out in section 4 above. The report would then inform any future consultation document on the approach to meeting the statutory requirements for energy efficiency.

Appendix 2 - How NISEP contributes to the delivery of draft Programme for Government

Outcome 1: We prosper through a strong, competitive regionally balanced economy

While 80% of NISEP funding is ring-fenced for vulnerable consumers the remaining 20% is open to bids from schemes which target both domestic and business consumers. Businesses which become more energy efficient are also improving their overall competitiveness. In the past NISEP has struggled to attract and deliver energy efficiency schemes aimed at business consumers. Despite this, energy savings from commercial schemes is high.

That said NISEP benefits all consumers, not just those who receive the direct energy efficiency measures. This is because by improving overall energy efficiency we can help to deliver on the following:

- Making it easier to meet Northern Ireland's renewable energy and carbon reduction targets. We do this by reducing the amount of energy produced, consumed and imported for a given amount of work or comfort. Thus making targets based on total energy consumed easier to meet.
- Improving Northern Ireland's energy security.

NISEP has also contributed to the development of the energy services sector in Northern Ireland.

In the event that a need for NISEP or a replacement energy efficiency programme is shown, any future replacement to NISEP will need to carefully consider how to balance the needs of business and vulnerable consumers in terms of energy efficiency and the price they pay for their electricity.

Outcome 2: We live and work sustainably - protecting the environment

Socially and environmentally sustainable long-term energy supplies are one of the key objectives of NISEP. Any future programme which replaces NISEP will also need to consider this important objective. The benefits of energy efficiency in relation to living and working sustainably are clear. The most sustainable unit of energy is the one we no longer need to use due to due to the steps we have taken to become more energy efficient. In this context energy efficiency is taken to mean achieving the same level of work or comfort for a lower input of energy.

The carbon and energy savings associated with NISEP are shown in Appendix 3 of this paper.

Outcome 4: We enjoy long, healthy, active lives

While NISEP is not a fuel poverty scheme and does not measure fuel poverty, health or Excess Winter Deaths (EWDs). The provision of energy efficiency measures is one established a way of tackling the problem of energy inefficient cold homes which are a major cause of fuel poverty and which is linked to EWDs. The impact of living in cold damp homes has been shown to have adverse impacts on the health and lives of those affected.

Outcome 8: We care for others and we help those in need

While NISEP is not a fuel poverty scheme its objective in relation to socially and environmentally sustainable energy supplies is demonstrated through the 80% ringfence (protection) in funding for vulnerable consumers. As can be seen from the figures in Appendix 4 of this paper, from 2010 12,303 heating systems where installed in the homes of vulnerable consumers through NISEP and in total priority vulnerable consumers benefited from over 300,000 energy saving measures.

Appendix 3 - Costs and Benefits of NISEP

Year	Funding Spent	Lifetime Energy Savings (GWh)	Lifetime Carbon Savings (tonnes)	NPV Lifetime Gross Customer Benefits
<u>EEL</u>				
1997/98	£664,351.00	54.04	13,417	£3,675,450.00
1998/99	£669,491.00	78.19	20,755	£4,892,333.00
1999/00	£1,003,068.00	122.98	31,080	£7,480,531.00
2000/01	£1,365,227.00	187.86	57,272	£11,437,024.00
2001/02	£1,433,495.00	188.9	57,335	£13,264,634.00
2002/03	£3,037,186.00	450.78	92,228	£25,433,246.00
2003/04	£3,938,905.00	449.11	84,614	£17,221,109.00
2004/05	£3,771,339.00	382.44	98,557	£20,999,203.00
2005/06	£4,802,853.00	481.03	132,010	£30,109,726.00
2006/07	£5,006,756.00	615.36	132,087	£38,811,902.00
2007/08	£5,629,739.00	576.65	122,368	£55,222,786.00
2008/09	£5,754,873.00	717.66	149,037	£58,501,419.00
2009/10	£5,589,748.00	708.92	142,855	£61,760,474.00
NISEP				
2010/11	£6,197,318.00	607.77	123,457	£56,345,455.00
2011/12	£7,882,252.00	707.4	135,819	£72,410,175.00
2012/13	£7,836,472.00	644.38	117,112	£84,472,229.00
2013/14	£7,931,744.00	764.27	141,116	£103,488,375.00
2014/15	£7,092,877.00	784.09	130,787	£98,898,671.00
2015/16	£8,141,995.00	643.41	111,766	£85,960,332.00
2016/17	£9,186,144.00	732.759	130,264	£108,651,912.00

Appendix 4 - Measures installed by NISEP since 2010

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Total 2010-2017
Priority Domestic								
<u>Schemes</u>								
Heating systems/boiler replacement	1,389	1,704	2,246	1,656	1,764	1,846	1,698	12,303
Loft Insulation	7,383	5,734	5,343	4,594	3,457	3,606	3,028	33,145
Cavity Wall Insulation	2,654	1,534	1,187	1,212	1,960	2,965	3,884	15,396
Solid Wall Insulation		60						60
Hot Water Cylinder Jacket	2,135	1,625	1,419	984	1,346	534	323	8,366
Low Energy Lighting	22,928	23,643	23,908	19,396	23,708	17,391	13,015	143,989
Energy Monitors		665	1,061	598	1,614	661	739	5,338
Radiator Panels				4,322	1,000	930	1,417	7,669
Standby Controls	1,000							1,000
Standby Meters		67						67
Water Widgets	76		25,000					25,076
Shower Flow Regulators					92,906	974	2	93,882
Heating Controls							60	60
Total Priority Domestic								
Measures	37,565	35,032	60,164	32,762	127,755	28,907	24,166	346,351

Table 1: Priority Domestic Measures

Non-priority Domestic Schemes	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Totals
Heating systems/boiler replacement		17		0				17
Loft Insulation	129	565	199	289	442	272	664	2,560
Cavity Wall Insulation	317	1,243	516	742	1,047	641	812	5,318
Solid Wall Insulation		7						7
Hot Water Cylinder Jacket		2				4	8	14
Climote				107				107
Solar Water Heating		348						348
Solar PV		265	328	368				961
Total Non-Priority Domestic Measures Installed	446	2447	1043	1506	1489	917	1484	9,332

Table 2: Non-Priority Domestic Measures

Non-priority Business and								
<u>Commercial</u>	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Totals
Heating systems/boiler	50	48						
replacement	30	70						98
Loft Insulation								
Cavity Wall Insulation								
Energy Monitors			4	19	4			27
Variable Speed Drives	34	47	37	77	53	42	37	327
Variable Speed Compressors	9	20	18	18	16	11	21	113
Energy Efficient Lighting	9,524	17,747	17,951	20,565	15,673	30,644	33,346	145450
Hysave Liquid Pump Amplification	1	4		2				7
Refridgeration Package		1						1
Heat Recovery			2	4	1	2	2	11
Sonic Leak Detection Surveys	65							65
Timeswitches			8	19	4			31
Solar Water Heating			2					2
Solar PV				56				56
Aluminium compressed air piping				2		3	2	7
Compressed air control and								
management system							1	1
Heating controls						2	134	136
Sava Socket				19	4			23
Total Commercial and Business								
Measures Installed	9683	17867	18022	20781	15755	30704	33543	146355

Table 3: Business and Commercial Measures

Appendix 5 - Information from Consumer Insight Tracker (CIT)

The UR contracted an independent survey company to complete the CIT which is intended to be a regular survey aimed at helping us to better understand and monitor domestic consumers' perspectives, outcomes and behaviour over time. The quantitative nature of the survey was designed to give statistically significant insights into consumer perspectives.

The CIT asked domestic consumers a number of questions including in relation to affordability, fuel usage, attitudes to energy efficiency, and willingness to contribute towards social or environmental initiatives through their energy bill. The CIT completed in 2019 related to domestic customers, it is our intention next year to carry out a similar survey into the attitudes and behaviours of non-domestic, business and commercial customers.

In relation to affordability the CIT found that;

- 6% of all consumers say that they struggle or always struggle to pay their energy bills in NI. A further 37% say they 'sometimes struggle'.
- The following consumers / households are significantly more likely to say that they struggle or always struggle to pay their energy bills²³:
 - o Those who earn less than £15,500 per annum (12% versus 6%).
 - Those who pay for their energy via a pre-payment meter (11% versus 6%).

The CIT also revealed some interesting information in relation to monthly spend on heating.

Monthly spend to heat home	Gas heating	Oil	Other fuel supply e.g. gas canisters / coal / solid fuel
Up to £30	18%	2%	33%
£30-59	42%	26%	24%
£60-99	28%	34%	10%
£100 or more	8%	23%	23%
Don't know	4%	16%	10%

²³ We note that these two demographics are likely to overlap to some degree

-

Overall, those who use oil to heat their home appear to spend more per month than those who use gas or other fuel sources (e.g. gas canisters, coal or solid fuel). The majority of oil users spend more than £60 per month on oil. Whereas, 60% of mains gas users spend less than £60 per month.

The main reason stated by consumers for why they have not switched to gas to heat their home is cost (34% of consumers) this may reflect the upfront capital cost of switching fuel sources.

Results in relation to monthly spend on electricity revealed the following:

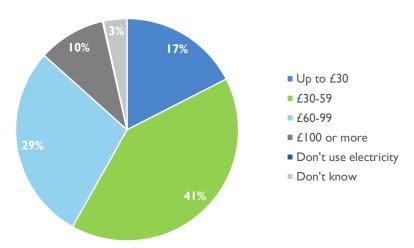


Fig 1: Monthly spend on electricity

In relation to fuel usage the survey found that the majority of domestic consumers in NI heat their home using an oil boiler. 64% of domestic consumers surveyed heat their home using oil compared with only 25% of consumers using mains gas (to note the NIHE's HCS published in 2016 showed 68% of households using oil). This is in sharp contrast to GB where only 5% of consumers heat their home using oil and 85% use mains gas.²⁴

The proportion of consumers using oil is also significantly higher than in the ROI, where only 41% of consumers use oil. The difference in the level of mains gas usage between NI and these other markets is in part, because the coverage of gas infrastructure is relatively low in NI due to the infancy of the domestic gas market. For example, 41% of respondents claimed that mains gas is not available at their home. It is expected that 60% of NI households and businesses will have access to natural gas by 2022.²⁵

70% of rural consumers surveyed who have not switched to gas do not have mains gas available at their home. In comparison, only 37% of urban consumers, and 45% of sub-urban consumers, who have not switched to gas do not have mains gas

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²⁴ Department for the Economy. Energy in Northern Ireland 2018.

²⁵ https://www.uregni.gov.uk/market-overview-1

available at their home. The results also showed that those in urban areas and those below the age of 44 where more likely to heat their homes with electricity or gas: The results are shown if figures X and X below:

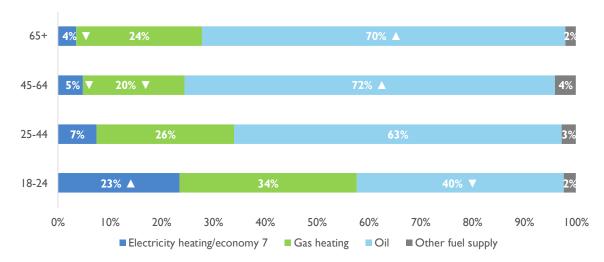


Fig 2: Which type of energy do you use to heat your home? (results by age group)

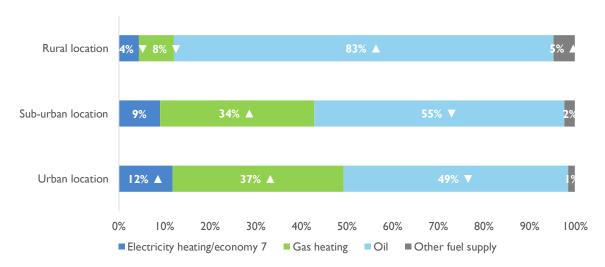


Fig 3: Which fuel type do you use to heat your home? (results by location)

Attitudes to Energy Efficiency:

We asked consumers whether they had installed any energy efficiency measures in their home. Figure 13 below presents the percentage of consumers who have or have not put any energy efficiency measures (not including minor additions such as energy saving lightbulbs) in place in their home in the last three years.

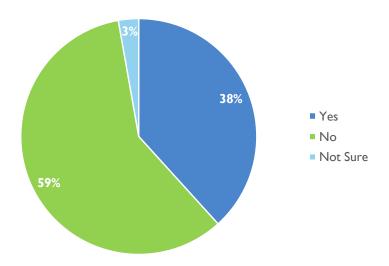


Fig 4: Have you put any energy efficiency measures in place in your home in the last three years?

The majority of consumers have not installed any energy efficiency measures in their home in the last three years (59%). The survey asked these consumers to provide the main reasons why they had not installed any measures in the last three years.

ı	These were already in the home	36%
2	Installed them more than 3 years ago	31%
3	Cannot afford the initial outlay	14%
4	I rent my property/have no control over structural changes	14%
5	Don't think they are needed	12%
6	Lack of information	10%
7	It would cause too much disruption	6%

Fig 5: Reasons for not installing energy efficiency measures in the last three years (Respondents could select more than one option)

The most common reason for not putting energy efficiency measures in place was that they were already present (either as they were already in place or because the individual added them more than three years ago)²⁶.

Other individuals had not installed them for cost (14%), information (10%) or disruption reasons (6%). In addition, 12% considered that they were not needed. We find some significant differences in responses between consumer groups as presented below:

- A higher proportion of younger consumers (19% of <44 years old), households with children (22%), and lower income households (22% of households with incomes of up to £15,499) claim they cannot afford the initial outlay of energy efficiency measures.
- A higher proportion of older consumers (53% of those aged 65+) installed energy efficiency measures in their home more than three years ago.
- A higher proportion of younger consumers (19% of <44 years old) and low-income households (24% of households with incomes of up to £15,499) claim they are unable to install energy efficiency measures because they rent their home or are otherwise unable to make structural changes to their property.

In combination, these results suggest that where it is relatively easy and affordable to do so, a number of consumers have installed energy efficiency measures in the past. Going forward if NISEP or any successor scheme aims to increase the uptake of energy efficiency measures, it will continue to be important to continue to seek to overcome the obstacles of affordability of the initial cost outlay. It is also interesting to note that 10% of respondents gave lack of information as their reason for not installing energy efficiency measures in their home.

This ties into the focus group results which showed low awareness of energy efficiency initiatives and also to the call for evidence results where respondents indicated that they felt a "one stop shop" approach to the provision of energy efficiency information would be useful.

Consumer appetite for wider energy initiatives

The CIT also explored the level of consumer appetite for a number of hypothetical wider energy initiatives. Consumers were asked to select the three initiatives they would want to see most from their energy supplier (in order) out of the following list of options:

- Investing in projects to protect the environment;
- Supporting customers over the age of 60;
- Supporting other vulnerable customers (not only those over the age of 60);
- Supporting customers who are less able to pay their bills;

²⁶ Note that as respondents could select more than one option, these percentages are not cumulative.

- Improving reliability to reduce risk of supply loss;
- Connecting those not already on mains gas;
- Improving customer service.

Consumers were asked to provide their first, second and third choice of wider energy initiatives amongst the options listed above.

The tables below show how consumers responded, with a rank of 1 indicating the initiative was the most popular among consumers and a rank of 7 indicating it was the least popular (for that choice).

Initiative	Total	%
Investing in projects to protect the environment	1	18.7%
Supporting other vulnerable customers (not only those over the age of 60)	2	18.7%
Supporting customers over the age of 60	3	18.1%
Supporting customers who are less able to pay their bills	4	16.9%
Improving customer service	5	10.0%
Connecting those not already on mains gas	6	9.7%
Improving reliability to reduce risk of supply loss	7	7.9%

Table 1: Consumer first choice initiative (% and ranking)

Initiative	Total	%
Supporting other vulnerable customers (not only those over the age of 60)	1	20.5%
Supporting customers who are less able to pay their bills	2	15.6%
Supporting customers over the age of 60	3	14.4%
Nothing else	4	13.3%
Investing in projects to protect the environment	5	13.0%
Improving reliability to reduce risk of supply loss	6	9.2%
Improving customer service	7	8.5%
Connecting those not already on mains gas	8	5.6%

Table 2: Consumer second choice initiative (% and ranking)

Initiative	Total	%
Supporting customers who are less able to pay their bills	1	16.3%
Supporting other vulnerable customers (not only those over the age of 60)	2	15.2%

Investing in projects to protect the environment	3	13.9%
Supporting customers over the age of 60	4	13.4%
Nothing else	5	12.9%
Improving customer service	6	11.3%
Improving reliability to reduce risk of supply loss	7	9.5%
Connecting those not already on mains gas	8	7.5%

Table 3: Consumer third choice initiative (% and ranking)

At a total level, the CIT found minimal difference in responses between the top three choices among consumers, each of which was selected as the most desired initiative by around 18 - 19% of consumers. The following three initiatives were the first-choice initiative most frequently:

- Investing in projects to protect the environment
- Supporting other vulnerable customers (not only those over the age of 60)
- Supporting customers over the age of 60

Overall, supporting vulnerable customers (not only those over the age of 60) is a popular choice amongst consumers and appears in the top two most popular initiatives whether selected as the consumer's first, second or third most important initiative.

It is also interesting to examine differences in responses between consumers of different age groups. Table 4 below shows the most to least popular 'first choice' initiatives for different age groups.

Initiative	Total	18- 24	25- 44	45- 64	65 +
Investing in projects to protect the environment	1	3	3	2	2
Supporting other vulnerable customers	2	2	2	3	3
Supporting customers over the age of 60	3	7	5	1	1
Supporting customers who are less able to pay their bills	4	1▼	1▼	4▲	4
Improving customer service	5	4	6	5	5
Connecting those not already on mains gas	6	5	4	6	7 ▼
Improving reliability to reduce risk of supply loss	7	6	7	7	6

Table 4: Consumer ranking of different initiatives²⁷

Note: Arrows denote whether the sub-group is significantly higher or lower than the average.

In particular, younger consumers are much less keen to support initiatives that support consumers over the age of 60 (this ranked lowest for the 18-24 age group

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²⁷ Most and least popular 'first choice' initiatives for different age groups.

for example) but are more supportive of initiatives that support customers who are less able to pay their bills in general (which may include some elderly customers). Conversely, older consumers strongly support initiatives that help customers over the age of 60 but are not as supportive of initiatives that help customers who are less able to pay their bills.

While 'investing in projects to protect the environment' featured the most often in respondents' rankings, it was not the most popular option for any age group. Consumer willingness to pay for wider energy initiatives.

The CIT also asked consumers how much they would be willing to pay in addition to their current monthly energy bill to make the initiatives that they had selected happen²⁸.

WTP	% of responses
Nothing	40%
£1	15%
£2	15%
£3	10%
£4	4%
£5	12%
More than £5	4%
Mean £	1.69

Table 5: Amount that individuals would be willing to pay per month for the services they selected (up to three)

40% of consumers would not be willing to pay anything on top of their monthly bill for the additional services they selected and a further 15% would only be willing to pay £1. The mean willingness to pay is £1.69 per month (or £20.28 per year). Nevertheless, 12% of consumers would be willing to pay £5 more per month and 4% would be willing to pay even more than this.

This information is important to note in informing the future of NISEP as it is funded by consumer bills and which could be classified as both a social initiative which benefits vulnerable customers and as an initiative which helps to protect the environment. To note that in Northern Ireland domestic consumers using 3.5 MWh per year (i.e. the NI average) currently contribute £3.59 and £28.80 per year for NISEP and NIRO respectively, these are the two social and environmental policy

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²⁸ It is important to note that a full 'willingness to pay' study was beyond the scope of this survey. Respondents were simply asked how much they would be willing to pay for all (between zero and three) of the additional services they had selected.

initiatives funded through customer bills. (The figures for a NI customer consuming 3.1MWh per year i.e. the GB typical domestic consumption values are £3.10 and £27.90 per year for the NISEP and NIRO respectively i.e. a total of £31 per year which compares to a GB customer who for the same consumption level will contribute a £96.64 through their electricity bill and £18.48 through their gas bill to similar social and environmental initiatives.)