Northern Ireland Sustainable Energy Programme

Annual Report 2017-18

Prepared by the Energy Saving Trust

1. Executive Summary

This annual report reviews the performance of the 2017-18 Northern Ireland Sustainable Energy Programme (NISEP) schemes, outlining the measures installed, financial benefits to recipients and the energy (GWh) and carbon savings associated.

For 2017-18, the initial NISEP fund was £7,941,946 (as set out in the NISEP Framework Document) collected as an average of £9.13 per electricity customer across approximately 870,276 domestic and business customers. The total NISEP spend on schemes at the end of the year was £7,177,302, which was over £2m less than in the previous NISEP year, mainly as a result of the high underspend that had been allocated to 2016-17 from the 2015-16 NISEP year. There was also an underspend in 2017-18 of approximately £700k. The highest proportion of this was mainly due to a £360k underspend within the Priority category, primarily a result of the liquidation of one organisation which had an impact on the delivery of several priority schemes. However, it is important to note that 83% of available NISEP funds was spent in the Priority category overall.

The reasons for the reduction in spend in the Priority category compared to the previous year and the overall underspend is discussed in greater detail within this report.

In total, twenty-five schemes were approved, however two schemes closed during the year due to no uptake. The funds from this scheme were redistributed to other more successful schemes to try to maximise in-year spend and associated energy savings.

Table 1 – Comparative Summary of Outturn Savings

	2017-18	2016-17
Total lifetime energy savings (GWh)	602.122	732.759
Total lifetime carbon saved (tC)	107,459	130,264
Gross lifetime customer benefits (£)	78,507,635	108,651,912
Total incentives earned (£)	79,285	144,572

2. NISEP background

NISEP is funded from a sum of money collected from all electricity customers through a Public Service Obligation (PSO), and it is used to provide funding for energy efficiency schemes.

The strategic objectives of the 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.

The majority of the funding (80%) is ring-fenced for spend on vulnerable customers in Northern Ireland. Previous consultations have substantiated the view that this level of funding for vulnerable customers should remain.

In 2017-18 the NISEP continued to focus on vulnerable customers (known internally as the Priority Sector) who are domestic customers on lower incomes who may be vulnerable to fuel poverty, with £6,271,642 made available at the start of the year for this sector. The remaining £1,567,910 was split between non-priority domestic and commercial schemes and the non-priority innovative schemes category. Any additional funding from 2016-17 underspend was made available for all Primary Bidders across all categories to utilise.

NISEP funding for schemes aimed at Priority sector customers typically provided a package of measures that included;

- Fabric (cavity wall or loft) insulation
- Heating system replacement including fuel switching and heating controls
- Low energy lighting
- Hot water cylinder jackets
- Radiator panels
- Energy monitors
- Shower flow regulators

The explicit aim of NISEP funding in the Priority sector is to reduce energy consumption in the least energy efficient housing stock.

In the Non-priority domestic and commercial category measures included;

- Insulation 'cash-back' offers for cavity wall, and loft insulation in the domestic sector
- Variable speed drives and variable speed compressors
- Energy efficient and LED lighting systems
- Heating controls
- Heat exchangers for compressed air systems
- Energy Screw Air Blowers

3. Types of schemes in 2017-18

In 2017-18, twenty-five schemes were approved, and of these schemes, two had no uptake of measures and closed during the year. Scheme performance is taken into consideration when assessing future bids for NISEP funding. The following tables summarise the number of schemes per bidder and schemes per category.

Table 3.1 - Summary of approved schemes by Primary Bidder

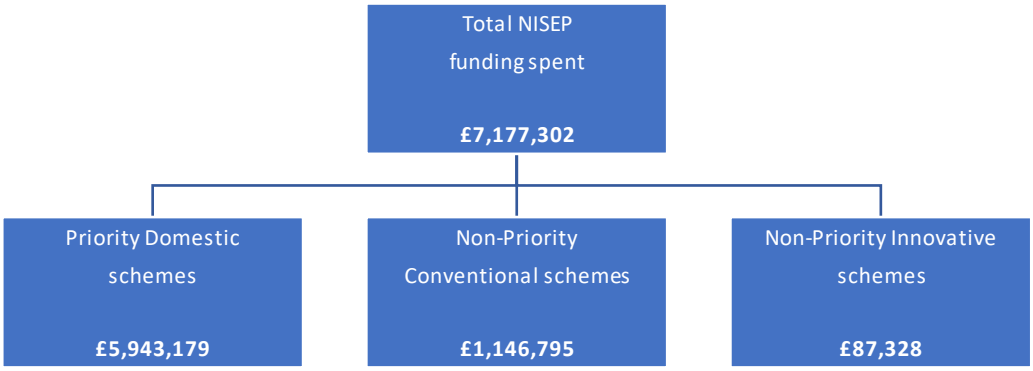
Energia	11
Energystore	2
firmus energy	2
Fusion	2
Power NI	7
Workspace	1

Table 3.2 – Breakdown of schemes by category

Priority schemes	10
Non-Priority conventional	14
Non-Priority innovative	1

Table 3.3 below shows how the NISEP funds spent were split between each funding category in 2017-18.

Table 3.3 - NISEP Breakdown of Funding Spent



4. Priority Domestic Schemes

Of the £7,177,302 spent, £5,943,179 was utilised on Priority domestic schemes (those targeted at vulnerable-lower income), representing 83% of the total funding spent. This is slightly above the 80% ring-fenced for priority schemes at the start of the year and is mainly due to lower uptake of some of the Non-Priority schemes, where funding has been transferred.

In total, Priority funding contributed to 19,507 energy efficiency interventions. This is 4,659 less measures than in the previous year, however, the main reason for this was the £2m difference in NISEP funding spent on Priority schemes, between the two years. In 2016-17 the NISEP funding available for priority measures was significantly more due to the previous year's

underspend, therefore allowing more priority measures to be installed in 2016-17. There is also an approximate £360k underspend at year-end, within the Priority category, a large proportion of which was as a result of the liquidation of one organisation, that had an impact on several priority schemes.

In comparing the two NISEP years, there has been a significant increase in oil to gas conversions (42% to 48%), and a reduction in electric central heating to gas (30% to 18%). There has also been an increase by 3% of oil to oil and an increase by 6% of gas to gas boiler replacements.

Three of the ten priority schemes provided a fully funded 'whole house solution' package whilst three provided a partial grant towards similar measures. Of the remaining schemes, three provided fully funded individual measures offering cavity wall and loft insulation and one provided a partial grant for individual measures to housing associations. Table 4.1 shows a breakdown of priority measures and Table 4.2 shows the breakdown of heating system installations.

To encourage the uptake of properties availing of a full package of 'whole house solution' measures, Primary Bidders have been reminded that 'whole house solution' schemes should be designed to ensure the maximum uptake of measures offered per household, i.e. unless there are exceptional circumstances, when a heating system is being installed, all insulation measures should be offered, and if required, should be installed alongside it.

We have since highlighted to Primary Bidders' that they must ensure that suitably qualified surveyors are sent to properties to check insulation requirements and the surveyor must carry out the necessary checks to ensure that there is adequate insulation (both CWI and Loft) in the property. We have also highlighted to Primary Bidders that if the installer is aware that the customer may have issues with for example, clearing their loft, that we would expect the customer be given sufficient time to clear their loft and-or be directed to organisations who may be able to assist.

The importance of the 'whole house solution' approach has been emphasised to all Primary Bidders and we would expect to see higher numbers availing of the maximum number of measures required, in future NISEP years.

Energy savings of 193.606 GWh in the priority sector represents approximately 32 per cent of the overall energy savings. This is less than in 2016-17 and can be attributed to a significant reduction in NISEP spend in this category (over £2m). The change in fuel mix, with an increase in the number of boiler replacements and oil to gas conversions and a reduction in electric central heating to gas, has also had an impact. There also continues to be a higher proportion of partial fill cavity wall insulation as opposed to full fill, and a higher requirement for ventilation, which will increase average measure cost. Measures installed equate to a lifetime customer benefit of £15,016,556 for the most vulnerable households in Northern Ireland.

Table 4.1 – Summary of Priority Measures Installed 17-18

Loft insulation (LI)	2,369
Cavity wall insulation (CWI)	2,515
CFLs	9,766
LEDs	2,392
Hot water cylinder jackets	210
Radiator panels	476
Energy monitors	351
Heating replacements	1,087
Shower flow regulators	276
Heating Controls	65
TOTAL	**19,507**

Table 4.2 – Summary of Heating Replacements 17-18

Electric to gas	191
Electric to oil	12
Oil to gas	527
Oil to oil	61
No heat (electric) to gas	138
Solid fuel to gas	92
Solid fuel to oil	4
LPG to gas	1
Gas to gas (replacement)	61
TOTAL	**1,087**

We have encouraged Primary Bidders to provide feedback from priority scheme recipients. Below is a snapshot of the kind of comments we receive. (For a full list and detailed descriptions of the NISEP schemes, see Appendix 1).

Energy Plus customers
"I want to personally show my appreciation…… for being able to avail of this generous opportunity. It is unlikely that I would have been able to afford to have gas fully installed in my flat and to be able to benefit from this opportunity has been great. It has made a huge difference to my personal comfort and my home is a more welcoming place for it. Again, thank you to all those involved in the whole process, it was and is very much appreciated."

Energy Saver Homes customers
"The gas heating is brilliant. The house is lovely and comfortable and cosy. No more problems with condensation."

Home Comfort Plus customers
"Have noticed much more energy efficient and as a result have saved money."

Keep Warm customers
"Fast efficient friendly service and tidy, very well pleased with workmanship"

Thermal Comfort customers
"Very pleased with installers, very clean and tidy. I am very happy with how easy the house is to heat and my fuel bills are appreciably lower."

5. Non-Priority schemes (commercial, domestic and innovative)

Of the £7,177,302 spent, £1,234,123 was utilised on Non-Priority schemes, representing 17% of the total funding spent. Non-Priority schemes provide part-funding, usually in the region of 20%, towards the cost of energy efficiency measures. These schemes tend to be more cost effective than those in the priority sector due to commercial energy efficiency measures yielding good energy savings in comparison to the spend. Underspend levels have increased to the previous year, with a similar underspend to the Priority Category, of approximately £340k at year end, a large proportion of which was as a result of the liquidation of one organisation, that had an impact on several schemes. Additional feedback from Primary Bidders is that for Non- Priority commercial schemes, finding applicants who can meet the required timeframe and complete works within the NISEP year is challenging. Primary Bidders are finding a number of applications not proceeding to installation, due to tight timelines.

However, despite that, it is important to note that overall there was a higher proportion of NISEP funding spent in the Non-Priority Category, up from 13% in 2016-17 to 17% in 2017-18.

LEDs are continuing to become more widely adopted by businesses year on year. It is important to highlight that even with a similar spend in the Non-Priority Category, to the previous year, (£1,239,987 and £1,234,123 respectively) there were over 5,000 more measures installed in commercial premises in 2017-18; the majority of this increase relating to LEDs. The benefits of LED lighting are becoming more widely appreciated by customers where they can be more attractive, energy efficient, cost-effective and durable than existing methods. With the various benefits they offer and their increased popularity, LEDs are becoming more cheaper to purchase, which may explain the significant increase in numbers installed in 2017-18. However, the energy savings remained similar, and this may be due to the type of projects targeted, the size of the projects and therefore level of funding received, running hours and lifetime years.

Reviewing other trends in the commercial sector, there also continues to be an increase in the uptake of Variable Speed Compressors (VSC) in NISEP. However, there has been a reduction in the uptake of Variable Speed Drives (VSDs).

The number of domestic insulation measures installed has also slightly decreased, resulting in a reduction in NISEP funding spent on insulation, i.e. a decrease by approximately £60k to the previous year.

There was one innovative non-priority scheme approved in 2017-18. This is the first innovative scheme approved in 4 years (since 2013-14). We would encourage schemes to be submitted which would help bring forward emerging but proven domestic or commercial technologies that provide a better energy efficiency performance than 'standard' measures.

Energy savings of 408.515 GWh in the non-priority sector represents about 68 per cent of the overall energy savings. We saw a significant change in trend in NISEP 2016-17 and this trend

continues, where the Non-Priority category has notably the higher proportion of energy savings, compared to the Priority Category. This equates to a lifetime customer benefit of £63,491,079. As LED lighting becomes more cost effective, with the associated high energy savings and gross customer benefit, we expect this trend to continue.

In total, Non-Priority funding contributed to 40,112 energy efficiency interventions.

Table 5.1 – Summary of Non-Priority Measures Installed 17-18

Loft insulation	527
Cavity wall insulation	816
Variable speed drives	27
Variable speed compressors	25
Energy efficient lighting	38,703
Heat recovery	2
Aluminium compressed air piping	2
Compressed air control & management system	1
Heating controls	6
Energy Screw Air Blowers	3
TOTAL	**40,112**

Feedback on Non-Priority schemes is also always encouraged and below is a snapshot of the kind of comments we receive. (For a full list and detailed descriptions of the NISEP schemes, see Appendix 1).

High Bay-LED Lighting
"Good scheme and we are extremely happy with the result"

Variable Speed Compressors
"A very good scheme which supports businesses in improving their Carbon Footprint and being more efficient."

6. Utilisation of NISEP Funding 2017-18

Table 6.1 below shows a summary of the approved schemes this year along with NISEP contribution spent, GWh lifetime energy savings, lifetime carbon tonnes and the gross customer financial benefit of each scheme. The graphs provide a breakdown of GWh savings by category and the overall cost effectiveness of each scheme in pence spent per kilowatt of energy saving generated (where the lower the pence per kilowatt figure, the more cost-effective the scheme).

Table 6.1 - Scheme Summary

SCHEME REF	SCHEME TITLE	NISEP Funding Spent £	Accredited Lifetime Energy Savings GWh	Lifetime Carbon Saved Tonnes	Gross Customer Lifetime Benefit £
ENA 17 01 LNP	LED High Bay Lighting (Industrial)	212,598	82.015	15,547	13,639,157
ENA 17 02 LNP	LED Lighting (Commercial)	285,687	94.579	17,968	15,728,442
ENA 17 03 ONP	Variable Speed Drives	27,354	22.363	3,809	3,718,950
ENA 17 04 ONP	Variable Speed Compressors	118,238	82.097	13,985	13,652,656
ENA 17 05 ONP	Heat Recovery	9,352	4.816	821	531,056
ENA 17 06 HNP	Space & Water Heating Boiler Burner Controller *	0	0	0	0
ENA 17 07 ONP	Compressed Air Control & Management System	6,223	4.957	872	824,365
ENA 17 08 ONP	Modular Aluminium Compressed Air Piping	13,709	8.085	1422	1,344,527
ENA 17 09 ONP	Intelligent Heating Controls	10,830	2.543	447	225,606
ENA 17 10 ONP	Climateq Air Conditioning Attendant *	0	0	0	0
ENA 17 11 ONP	Energy Screw Air Blowers (Innovation)	87,328	9.350	1,593	1,554,923
ESL 17 01 IP	Thermal Comfort	2,391,208	83.677	14,257	6,768,602
ESL 17 03 NP	250 Insulation Grant	251,785	31.396	5,313	2,570,802
FIR 17 01 MP	Home Comfort £1500 cash back scheme	597,541	26.721	5,068	2,375,570
FIR 17 02 MP	Home Comfort Plus Scheme	325,320	7.575	1,403	685,511
FUS 17 01 MP	Energy Plus	751,392	7.748	1,393	462,844
FUS 17 03 MP	Housing Association Energy Saver	246,625	6.460	1,304	29,913
PNI 17 01 MP	Energy Saver Homes	503,118	8.053	1,487	399,232
PNI 17 03 MP	Cosy Homes	127,233	7.917	1,287	511,675
PNI 17 05 IP	Free Cavity Wall and Loft Insulation	477,399	18.549	3,114	1,477,919
PNI 17 06 IP	Cosy Homes Insulation	24,198	3.837	594	344,658
PNI 17 08 INP	Insulation Discount	104,800	14.550	2,483	1,092,268
PNI 17 10 LNP	Commercial LED Lighting	58,867	22.764	4,325	3,785,609
PNI 17 11 ONP	Variable Speed Drives	47,352	29.000	5,099	4,822,719
Work 17 01 IP	Keep Warm	499,145	23.068	3,871	1,960,633
	TOTALS**	**7,177,302**	**602.122**	**107,459**	**78,507,635**

* *funds were transferred to another scheme due to no uptake*

** *where relevant, total figures have been rounded to the nearest £*

Two schemes were allocated funding at the start of the NISEP year but had no uptake. These were Space & Water Heating Boiler Burner Controller, ENA 17 06 HNP, and Climateq Air Conditioning Attendant, ENA 17 10 ONP.

Figure 6.2 - Lifetime energy savings by category (GWh)

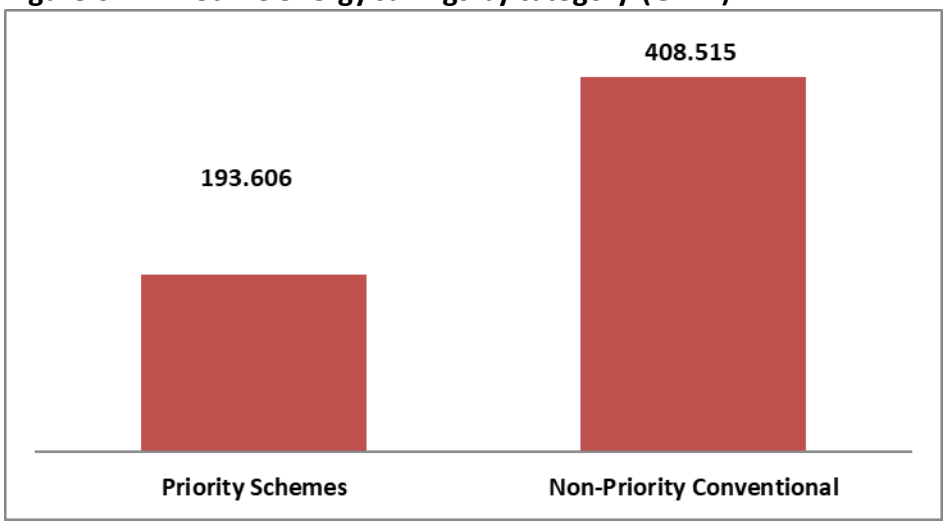


Figure 6.3 - Priority Scheme Cost Effectiveness (cost in pence per kWh of energy saved, p-kWh) (*the lower the value, the more cost effective the scheme)*

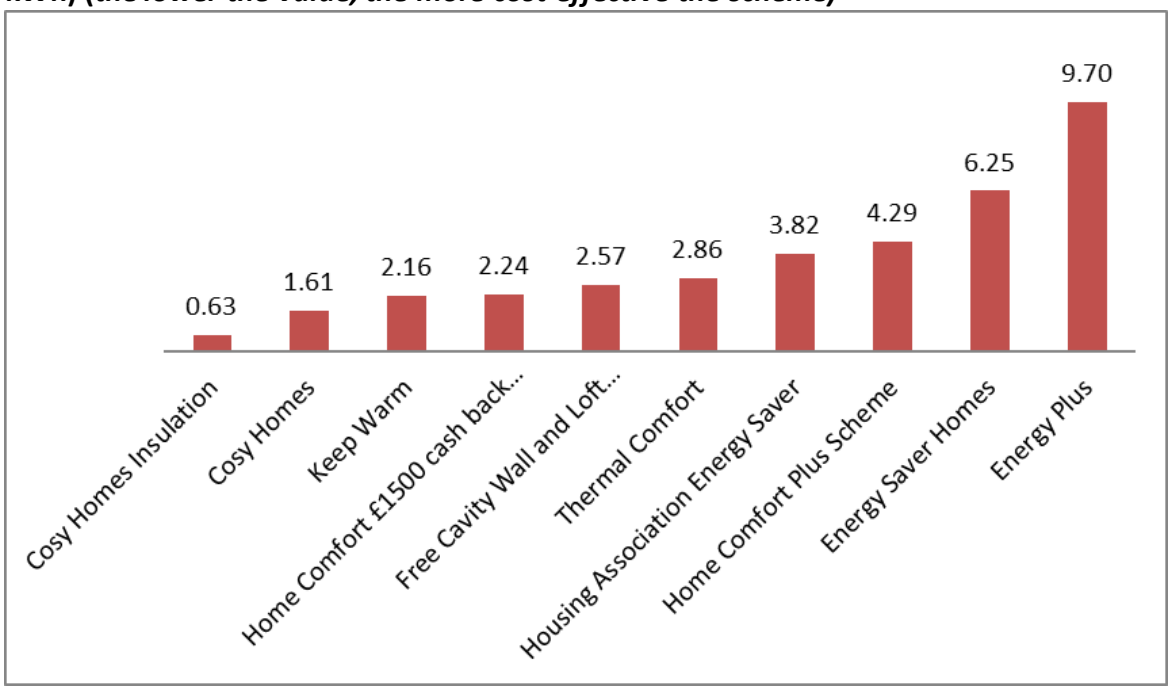
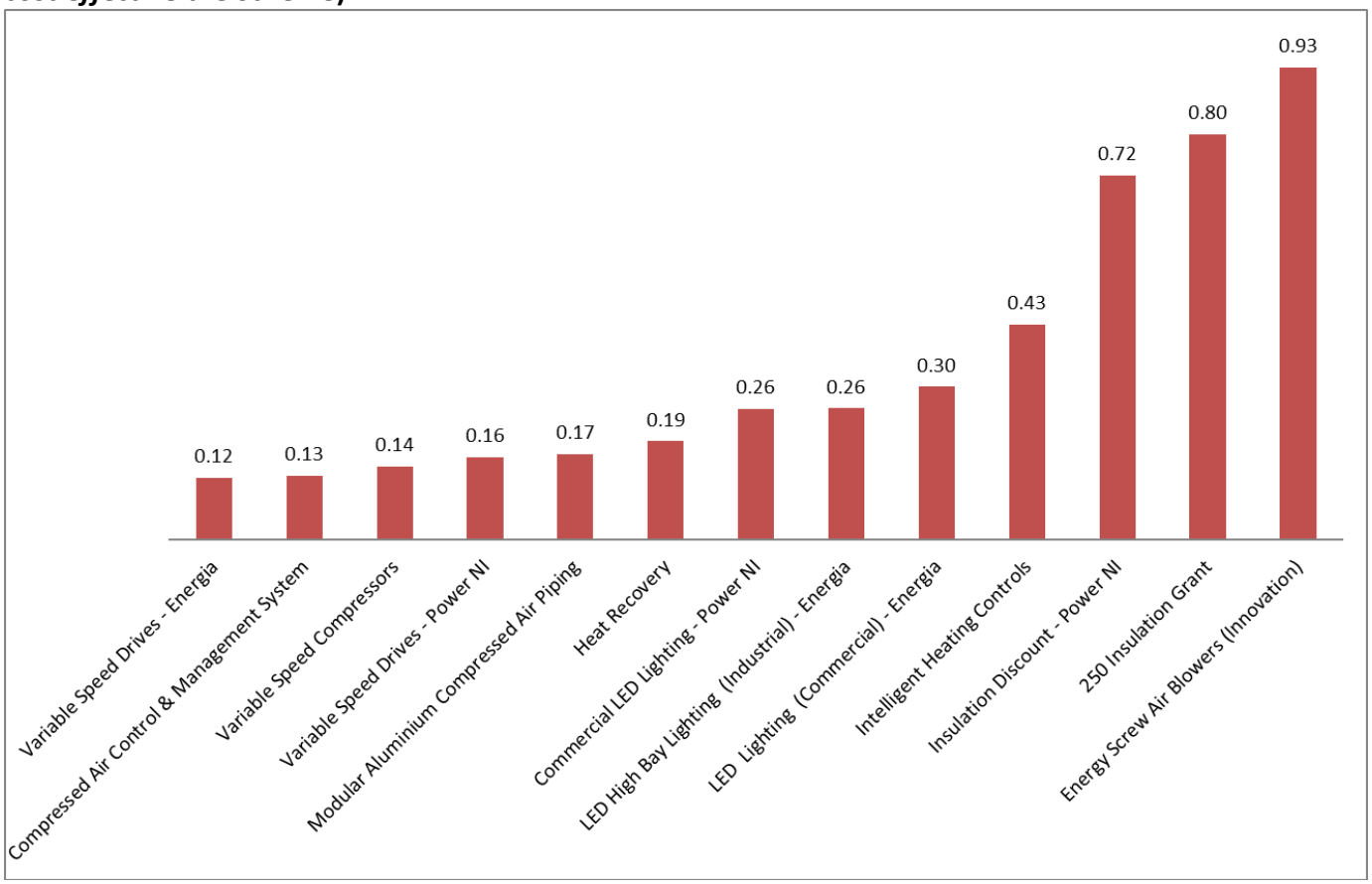


Figure 6.4 - Non-Priority Scheme Cost Effectiveness (p-kWh) (*the lower the value, the more cost effective the scheme*)



7. Target Achievement and Incentive Payments

In order to encourage Primary Bidders to bring forward cost-effective schemes and ensure that the objectives of the NISEP are met, the Utility Regulator awards an incentive payment to Primary Bidders that exceed the energy saving target set for each scheme. There is no incentive paid for simply meeting the target.

As a result of exceeding the GWh targets, incentive payments were awarded to each of the Primary Bidders. The total incentive payments were £79,285, as summarised in table 7.1 below.

7.1 - Summary of Incentive Payments 2017-18

Primary Bidder	Amount NISEP spent (£)	Savings achieved (GWh)	Incentive earned (£)
Energia	771,319	310.805	46,210
Firmus Energy	922,861	34.297	20,058
Power NI	1,342,966	104.671	13,017
		TOTAL	**79,285**

8. Geographical Spread of Measures

Bar Chart 8.1 below shows the percentage of NISEP interventions per council area in red, and the percentage of NI households within each council area in blue. For NISEP to demonstrate good geographical spread across all council areas, the blue and the red columns should be of similar height. Both columns illustrate the data as a percentage of the national total.

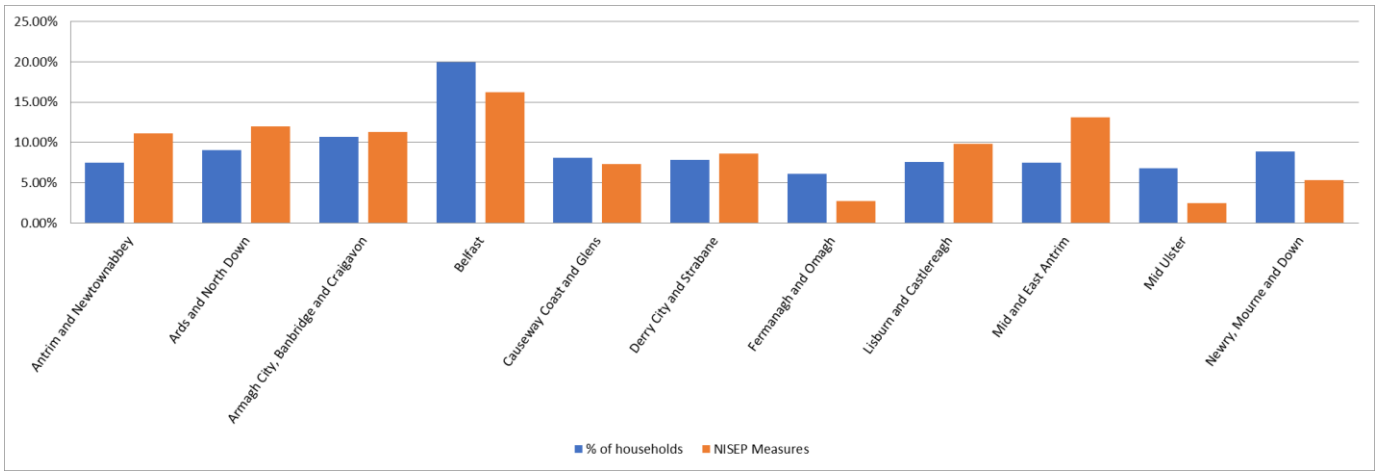
Overall there is a reasonable spread of measures across all council areas in 2017-18. Although the Belfast Council area has the highest proportion of measures installed, in terms of measures as a % of households, the figures are lower for Belfast than in previous years. The % installs in this council area have reduced by approximately 2%. The most notable reduction however is in Derry City and Strabane, which has reduced by approximately 5%, however this council is still showing a higher than average proportion of measures when compared to population size. In terms of increases, there has been a notable increase in measures installed in Mid and East Antrim, up by approximately 6%. There has also been an increase of 1-3% in Lisburn and Castlereagh, Causeway Coast and Glens, and Antrim and Newtownabbey Council Areas.

There are four councils that did show a significantly higher than average proportion of measures when compared to population size; Mid and East Antrim, Antrim and Newtownabbey, Ards and North Down and Lisburn and Castlereagh.

Armagh City, Banbridge and Craigavon received the highest proportion of NISEP heating installs and had the highest increase in % heating installs to the previous year. There was also a notable increase in % heating installs in Newry, Mourne and Down. In reference to Insulation, Belfast Council area, had the highest proportion of NISEP insulation installs, however this proportion has reduced from 16-17, and most notably there has been an increase in insulation installs in the Mid and East Antrim Council area, in comparison to the previous year.

Mid Ulster and Fermanagh and Omagh, continues to show low uptake in measures.

8.1 – Geographic Spread of Measures by Council Area



9. Comparison with previous year

The table below provides a comparison with last year's NISEP.

Table 9.1 – Comparison with previous year's figures

	2017-18	2016-17
NISEP funding spent	**£7,177,302**	**£9,186,144**
Total lifetime energy savings	**602.122 GWh**	**732.759 GWh**
Carbon savings	**107,459 t**	**130,264 t**
Gross customer benefit	**£78,507,635**	**£108,651,912**
Total incentives earned	**£79,285**	**£144,572**

Overall, spend was significantly less than in the previous year, 2016-17. This was due to a combination of factors; less underspend reallocated to 2017-18 from the previous year and there being approximately £700k underspend at year end, the majority of which related to the liquidation of one subcontractor. With £360k underspend falling within the Priority category, a consequence of fewer measures being carried out, had a significant impact overall on the total carbon savings and gross customer benefit for the 2017-18 NISEP year. The Non-Priority category continues to have the higher proportion of overall energy savings and has increased further to 68% compared to 2016-17 at 56%. Higher uptake of LED lighting is the main reason for this increase in the Non-Priority Category, with their significantly higher associated energy savings.

10. Conclusions

In 2017-18 there were twenty-five schemes approved, of which two did not receive uptake and closed during the NISEP year. This funding was then reallocated to other successfully running schemes. The overall NISEP spend was £7,177,302 which was over £2m less than in 2016-17, mainly as a result of the high underspend that had been allocated to the previous year.

The Programme Administrator periodically reviews spent and committed funds via the 5- and 8-month reporting process. This process facilitates the opportunity for funds to be reallocated between schemes if deemed appropriate. Due to several varying factors, including the liquidation of one organisation, funding being returned and projects not going ahead, there was a higher underspend of £700k at year end, significantly more than in previous years. This has been reallocated to 2018-19 schemes.

Priority funding contributed to 19,507 energy efficiency interventions. This amounts to a total of 4,659 less measures than in the previous year. The main reason for this was the notable £2m difference in NISEP funding spent on Priority Schemes between the two years due to the high underspend allocated to the 2016-17 FY. There was also an approximate £360k underspend at year-end. With fewer measures installed, this had an overall impact on energy savings and gross customer benefit. There was a notable increase in oil to gas fuel switches and oil and gas boiler replacements, with a reduction in electric central heating to gas. There continues to be a higher proportion of partial fill cavity wall insulation installs as opposed to full fill.

To encourage the uptake of properties availing of a full package of 'whole house solution' measures, Primary Bidders should design their 'whole house solution' scheme and consider

ways of encouraging the maximum uptake of measures offered per household. Unless there are exceptional circumstances, when a heating system is being installed, all insulation measures being offered, should be installed, if required. Primary Bidders have been reminded of the importance of the 'whole house solution' approach. It can achieve much greater efficiency, addressing many elements of a home's energy system at once. Completing some measures at an earlier date can increase the payback time of installing other measures later on. To maximise thermal comfort and customer satisfaction, to offer best value for money, to ensure maximum energy savings and to reduce bills for the householder, we will continue to highlight the importance of the whole house solution approach to Primary Bidders. As a result, we would expect to see higher numbers of properties availing of the maximum number of measures in future NISEP years.

The Non-Priority Category had a similar spend and gross customer benefit to the previous year. There were 5,085 more measures installed in 2017-18, the majority of this increase relating to LEDs. LEDs are continuing to become more widely adopted by businesses year on year. Although the number of measures has increased, the energy savings remained similar, and this will depend on a number of factors such as; the type of projects targeted, the size of projects and level of grant awarded, running hours and lifetime years. The Non-Priority Category continues to account for the higher proportion of energy savings at 68%, a significant increase to 2016-17 (56%).

As expected, measure costs continue to increase, particularly for insulation, with an increase in the requirements for ventilation.

Overall there were 59,619 measures installed, which is 426 more measures in comparison to the previous year. There was a significant reduction in measures in the Priority Category, mainly as a result of less available funding, compared to the previous year; the previous year availed of a higher underspend than what was available for 17-18., but a significant increase in measures in the Non-Priority Category, mainly as a result of the increased popularity of LEDs.

The geographical spread of measures indicates that, like previous years, Belfast Council is not showing as disproportionate in terms of measures and that other councils are proportionately benefiting from NISEP. There are four councils that did show a significantly higher than average proportion of measures when compared to population size; Mid and East Antrim, Antrim and Newtownabbey, Ards and North Down and Lisburn and Castlereagh.

Armagh City, Banbridge and Craigavon continue to benefit from the highest proportion of NISEP heating installs. They have the greatest increase in % heating installs in comparison to the previous year and continue to have a higher than average proportion of measures when compared to population size.

In reference to Insulation, the Belfast Council area continues to have the highest proportion of NISEP insulation installs however, this proportion has reduced from 2016-17. Notably there has been an increase in insulation installs in the Mid and East Antrim Council area, in comparison to the previous year.

The gross customer benefit total translates as one pound of NISEP funding provided this year, providing £10.94 of Net Present Value lifetime benefits.

Appendix 1: Summary of participating NISEP schemes

PRIORITY SCHEMES

FUS 17 01 MP Energy Plus

This was a whole house solution priority scheme aimed at households which met set vulnerability criteria. The scheme provided a new energy efficient heating system plus loft and-or cavity wall insulation measures to households whose properties had no heating (i.e. no heating system in place or a heating system which upon survey, with documented evidence, was deemed to be beyond viable economic repair), Economy 7 heating or solid fuel heating. Eligible customers were offered a new gas energy efficient heating system if on the natural gas network, or an oil energy efficient heating system where gas was not available. A fully funded grant was available for a heating system upgrade-replacement, cavity wall insulation and-or loft insulation. Each customer was offered up to 4 CFLs, a water widget and a climote (smart heating control).

In total 172 properties received measures through this scheme. Of these 172 properties, there were 3 properties that availed of a 'whole house solution' package and received: replacement heating, loft insulation and cavity wall insulation.

Measures Summary	
Loft insulation	41
Cavity wall insulation	4
Replacement heating	172
CFLs	540
Shower flow regulator	133
Smart Heating Control	49

FUS 17 03 MP Housing Association Energy Saver

This was a priority whole house solution scheme that installed energy efficient heating and insulation measures in Housing Association (HA) properties with Economy 7 or, upon survey with documented evidence, with an old and inefficient heating system (15 years or older). This scheme also improved the thermal quality of homes in the Housing Association stock by upgrading or installing insulation where necessary. A maximum grant of £1,000 was offered for heating and £150 towards both cavity wall and loft insulation. The HA met the remaining costs in excess of the grant value for each installation. Each customer was offered up to 4 CFLs, a water widget and a climote (smart heating control). In total 210 properties received measures through this scheme. Of these 210 properties, there were 66 properties that received: replacement heating and loft insulation. No properties received cavity wall insulation.

Measures Summary	
Loft insulation	66
Replacement heating	210
CFLs	560
Shower flow regulator	143
Smart Heating Control	16

FIR 17 01 MP Home Comfort £1500 Cashback

This was a Priority whole house solution scheme that provided a package of heating, insulation and energy saving measures to private tenants and owner occupiers within the firmus energy natural gas license network area. Qualifying applicants would be deemed as "vulnerable" due to income level, living in a property with Economy 7 heating, solid fuel heating, LPG heating (15 years old) or no functional heating system installed, including oil boilers broken beyond viable repair.

A cash-back of £1,500 was available (£1,350 through NISEP and firmus energy providing a £150 contribution) towards a new natural gas heating system and up to £800 for insulation measures, for loft and-or cavity wall insulation. In addition, an electricity energy monitor and four CFLs were offered to each household.

This year, 348 households received a new energy efficient natural gas heating system in addition to insulation and other smaller measures. Of these 348 properties, there were 2 properties that availed of a 'whole house solution' package and received: replacement heating, loft insulation and cavity wall insulation.

Measures Summary	
Loft insulation	181
Cavity wall insulation	4
Replacement heating	348
CFLs	1,080
Energy monitors	270

FIR 17 02 MP Home Comfort Plus - Free Heating

This was a fully funded Priority whole-house solution scheme providing a package of measures to private tenants and owner occupiers within the firmus energy natural gas licence network area. Qualifying applicants were deemed as "vulnerable" based on income level, living in a property with oil fired heating (15 years old or more), Economy 7 heating, solid fuel heating, LPG heating (15 years old) or no functional heating system installed, including oil boilers broken beyond viable repair. There was no financial contribution required from the householder.

The scheme included the free installation of a new, fully controlled, natural gas heating system and loft and-or cavity wall insulation. In addition, an electricity energy monitor and four low energy light bulbs were offered to each household.

firmus energy provided a £150 contribution towards each heating installation. There was no customer contribution on Home Comfort Plus.

This year's scheme installed 99 new heating systems. Of these 99 properties, there were 56 properties that received: replacement heating and loft insulation. No properties received cavity wall insulation.

Measures Summary	
Loft insulation	56
Replacement heating	99
CFLs	324
Energy monitors	81

PNI 17_01 MP_Energy Saver Homes

This Priority scheme provided a whole house solution package to vulnerable customers who met the agreed criteria. The scheme targeted vulnerable householders with no heating, or broken oil systems, Economy 7 or solid fuel heating. Eligible customers were provided with an energy efficient gas heating system, if on the gas network, or an oil system where gas was not available.

This scheme also offered cavity wall insulation and-or loft insulation up to the value of £800. Each property was offered a package of up to 4 CFLs, radiator foils, and a cylinder jacket, if required. Referrals were generated via a range of referral partners.

In total 144 properties received measures through this scheme. Of these 144 properties, there were 2 properties that availed of a 'whole house solution' package and received: replacement heating, loft insulation and cavity wall insulation.

Measures Summary	
Loft insulation	30
Cavity wall insulation	3
Replacement heating	144
CFLs	168
Radiator Foils	38
Hot Water Cylinder Jackets	3

PNI 17_03 MP_Cosy Homes

The aim of this Priority scheme was to install energy efficient heating and insulation measures in housing association (HA) properties to raise the standard of heating systems and the thermal quality of homes in the HA stock. A grant of up to £1,000 was offered for heating and £100 towards insulation with housing associations paying the remainder. Each property received up to four CFLs, with each tenant also receiving in-home energy saving advice.

In total, six housing associations signed up to the scheme and they were responsible for identifying suitable properties, in total 114. Of these 114 properties, there were 19 properties that received: replacement heating and loft insulation. No properties received cavity wall insulation.

Measures Summary	
Loft insulation	19
Replacement heating	114
CFLs	228

PNI 17 05 IP Free Loft and Cavity Wall Insulation

This was a priority scheme that provided 100% funding for loft and cavity wall insulation for vulnerable customers across Northern Ireland, who met agreed income criteria. CFLs, radiator foils and hot water cylinder jackets were also funded through NISEP.

Referrals were generated through the network of referral partners including Age NI, NEA, local councils as well as the Power NI Freephone number and customers could also register their interest on the Power NI website.

In total 259 cavity wall and 336 loft insulation installs were supported by the scheme.

Measures Summary	
Cavity wall insulation	259
Loft insulation	336
CFLs	1,719
Hot Water Cylinder jackets	74
Radiator panels	438

PNI 17 06 IP Cosy Homes Insulation

This Priority scheme was developed to encourage Housing Associations to improve the insulation levels of their housing stock. A grant of £105 towards the cost of loft or cavity wall insulation was available. Each property received two CFLs, where required, and each tenant was given energy saving advice.

All the housing associations who registered for the scheme were responsible for identifying properties suitable for the grant and contributing the remaining costs of the measures.

In total there were 184 grants issued.

Measures Summary	
Loft insulation	180
Cavity wall insulation	4
CFLs	368

ESL 17 01 IP Thermal Comfort

This was a Priority individual measures scheme, designed to give grant assistance to insulate the cavity walls and the loft. It targeted the private tenants or owner-occupied households that met the scheme criteria.

A fully funded package of measures was available including cavity wall and-or loft insulation measures, a hot water cylinder jacket and CFLs.

Overall 968 loft insulation and 2,059 cavity wall insulation measures were installed.

Measures Summary	
Loft insulation	968
Cavity wall insulation	2,059

CFLs	4,779
Hot Water Cylinder jackets	56

Work 17 01 I P Keep Warm Scheme

This was a priority Individual Measures scheme, where applicants were required to meet set eligibility criteria. The overall aim of the scheme was to provide loft or cavity insulation to those households which qualified for the scheme. Up to 4 LEDs and a hot water cylinder jacket were also offered to every customer. The scheme was aimed at priority customers; no customer contribution was sought from customers.

Overall 492 loft insulation and 182 cavity wall insulation measures were installed.

Measures Summary	
Loft insulation	492
Cavity wall insulation	182
Hot Water Cylinder jackets	77
LEDs	2,392

NON-PRIORITY SCHEMES

ENA 17 01 LNP LED High Bay Lighting (Industrial)

This was a Non-Priority commercial scheme that offered up to a twenty per cent grant for replacing the original metal halide installation. This was replaced with high bay-LED luminaries which resulted in a reduction of the connected lighting load. Each fitting had a dimming and movement detection option, which was individually controlled, improving the lighting environment and maximising savings.

In total 9,784 measures were installed.

Measures Summary	
Fluorescents Lighting	145
LEDs	9,639

ENA 17 02 LNP LED Lighting (Commercial)

This was a Non-Priority commercial lighting scheme that offered a grant of up to twenty per cent, replacing T12-T8 fluorescent light fittings with low energy linear compact fluorescent-T5 luminaires-LEDs plus an integrated daylight-occupancy sensor or LED tubes in industrial-commercial business premises.

In total 25,582 measures were installed.

Measures Summary	
LEDs	25,582

ENA 17 03 ONP Variable Speed Drives

This was a Non-Priority commercial scheme and offered a thirty per cent grant for the installation of inverter technology on electric motors, saving energy, through reduced motor speed.

There were five participants, with a total of 12 VSDs installed.

Measures Summary

Variable speed drives	12

ENA 17 04 ONP Variable Speed Compressors

This was a Non-Priority commercial scheme that offered a grant of up to twenty per cent and achieved energy savings by replacing single speed compressors with a new 'variable speed model' complete with air leak detection and repair surveys, reducing motor speed and minimising leaks.

In total 25 VSCs were installed.

Measures Summary

Variable speed compressors	25

ENA 17 05 O NP Heat Recovery on Compressed Air Systems

This was a Non-Priority commercial scheme that offered a grant of up to fifty per cent to install heat exchangers to existing compressed air systems and by recycling the heat, reduced energy costs.

In total 2 heat exchangers were installed.

Measures Summary

Heat recovery	2

ENA 17 06 H NP Space & Water Heating Boiler Burner Controls

This was a Non-Priority commercial scheme which offered a grant of up to twenty per cent for retrofitting a new boiler burner control, designed to efficiently manage the use of the inefficient second-stage fire of commercial heating boilers.

There was no uptake with this scheme, so it was closed and funds reallocated to other schemes.

ENA 17 07 O NP Compressed Air Control & Management System

This was a Non-Priority commercial scheme which offered a grant of up to twenty-five per cent for the installation of control and management systems for compressed air generation and vacuum installations.

In total 1 system was installed.

Measures Summary	
Compressed Air Control & Management System	1

ENA 17 08 ONP Modular Aluminium Compressed Air Piping Replacement

This was a Non-Priority commercial scheme and involved the replacement of compressed air line pipework, fittings and joints and offered a grant of up to fifty per cent. Using a patented joint clamping and sealing system to replace existing pipework reduces air leaks while improving efficiency.

In total 2 measures were installed.

Measures Summary	
Replacement of compressed air line pipework	2

ENA 17 09 O NP Intelligent Heating Controls

This was a Non-Priority scheme that offered a twenty per cent grant for the design and installation of an intuitive heating management system, retrofitted in an existing building heated by radiators.

It provided individual control of the heating times and temperatures within each room enabling significant savings.

In total 6 measures were installed.

Measures Summary	
Intelligent heating controls	6

ENA 17 10 O NP Climateq Air Conditioning Attendant

This was a non-priority commercial scheme that offered the installation of an air conditioning optimisation device which optimises the use of existing air conditioning systems on a room occupancy basis. A grant of twenty per cent was offered.

There was no uptake with this scheme, so it was closed, and funds were reallocated to other schemes.

ENA 17 11 O NP Energy Screw Air Blowers (Innovation)

This was a Non-Priority commercial scheme that replaced rotary lobe blowers with new screw blowers which combine a screw compressor, a permanent magnetic motor, and an integrated frequency converter, to enable them to perform at high efficiency even when operating at lower speeds. Grants of thirty per cent were offered.

Measures Summary

Robox Screw Air Compressor	3

ESL 17 03 NP £250 Insulation Grant

This Non-Priority domestic scheme was designed to give grant assistance to insulate the cavity wall and the loft of a home. Homeowners were offered an up-front discount on both cavity wall and loft insulation. A minimum installation value of £300 applied for either loft or cavity wall installation work to qualify for the grant. The customer received a maximum cashback of £250 on the installed costs for each type of insulation. The maximum grant available, where both loft and cavity wall insulation were installed, was £500.

There were 943 cashbacks provided.

Measures Summary

Loft insulation	344
Cavity wall insulation	599

PNI 17 08 I NP Insulation Discount

This was a Non-Priority domestic scheme with an aim to encourage the 'able to pay' market to install cavity wall and-or loft insulation. A discount of £250 off the cost of cavity wall and-or loft insulation was available for owner occupiers and private rented tenants who reached a minimum spend of £350 per measure. The scheme was promoted on the Power NI website and through Power NI's Energy Services retail team.

There were 400 cashbacks provided.

Measures Summary

Loft insulation	183
Cavity wall insulation	217

PNI 17 10 L NP Commercial LED Lighting

This was a Non-Priority commercial scheme that offered a twenty percent grant off LEDs. The scheme targeted premises where lighting contributed to a significant proportion of energy costs, therefore targeting businesses that had a significant lighting load.

Measures Summary

LEDs	3,337

PNI 17 11 ONP Variable Speed Drives

This Non-Priority commercial scheme provided customers with a grant towards a range of variable speed drive options. In total 15 grants were offered to a range of local businesses. Customers received a minimum of twenty per cent up to a maximum of £10,000 or thirty-five per cent, whichever was the lesser amount.

The scheme was promoted via the Power NI website, through local VSD installers as well as through the Business Energy marketing team.

Measures Summary	
Variable speed drives	15