

Annual Report for the Northern Ireland Energy Efficiency Levy 2008-09  
Prepared by the Energy Saving Trust

Executive Summary

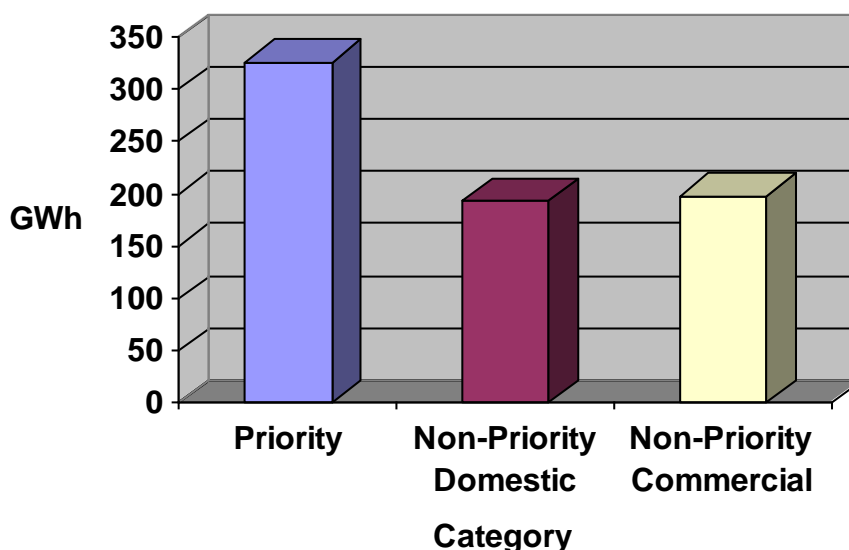
This annual report examines the performance under the Energy Efficiency Levy (EEL) Programme of suppliers who ran schemes during 2008-09, outlining the financial benefits to customers and to the environment, in terms of carbon savings.

The Energy Efficiency Levy was set at an average level of £7.175 per customer and with approximately 823,500 domestic and business customers, this equates to overall funding of £5,908,613.

Twenty one schemes were successfully submitted and run and subsequently completed, eighteen of which were managed by NIE Energy and the remaining three by Energia. Total lifetime energy savings were a substantial 717.656 GWh, with 149,037 tonnes of carbon savings and £58,501,419 gross customer benefit savings, over the lifetime of the measures. Seven schemes ran in each category.

Total incentives earned was £1,445,523 of which £580,834 (40%), will be recycled into energy efficiency and/or fuel poverty initiatives that are additional to work already planned.

**Lifetime energy savings for each scheme category:**



Of 30 initial submissions, five were not approved (based on cost effectiveness and the total funding available for each scheme type) and one subsequently did not proceed. Bids were received from NIE Energy, Energia and for the first time,

ESBIE. Of those schemes approved, two of NIE Energy's schemes were withdrawn due to lack of progression, as was the ESBIE scheme.

Priority Schemes were defined in one of four categories; Warm Homes Plus, Whole House Solutions (Fuel Poverty Proofing packages for properties with no central heating, solid fuel, or electric systems), Whole House Solutions (Fuel Poverty Proofing packages for properties with old oil or LPG systems) and Individual Measures (e.g. insulation, heating controls).

## 1.0 Introduction

- 1.1 The EEL continued to focus on vulnerable customers with 80% of funding directed towards the fuel poverty sector (Priority) and the remaining 20% to Non-Priority domestic and Non-Priority commercial schemes.
- 1.2 EEL funding set aside for schemes aimed at Priority group customers i.e. households at risk of fuel poverty, provided a package of measures that included; hot water cylinder and fabric (walls and roof) insulation, as well as heating system replacement (fuel switching) including controls. This was to improve the least efficient properties in the housing stock.
- 1.3 In previous years EEL funds have been directed to EAGA, to supplement the Department of Social Development (DSD) funding of the Warm Homes Scheme. Following an incremental reduction in the Warm Homes subsidy, as was approved by the Utility Regulator in 2007, this phase out resulted in a cap of £1m.
- 1.4 The remaining portion of Priority funding provided energy efficiency packages benefiting dwellings. Priority Schemes were defined in one of four categories; Warm Homes Plus, Whole House Solutions (packages for properties with no central heating, solid fuel, or electric systems), Whole House Solutions (packages for properties with old oil or LPG systems), Individual Measures (e.g. insulation, controls).
- 1.5 The portion directed to Warm Homes Plus again supplemented DSD funding (typically by meeting insulation costs and topping up heating system replacement where the DSD ceiling was insufficient), increasing the number of dwellings assisted. Corresponding targets were set.
- 1.6 Apportionment of savings is applied to schemes which receive funding from other public bodies and which the relevant supplier has not instigated themselves. Warm Homes Plus is an example of such a scheme, for which only the savings attributable to EEL funding were allowed to be claimed. For other schemes receiving public funding full savings can be claimed, provided that the scheme did not exist prior to EEL involvement, that the Supplier had been instrumental in instigating the scheme and that the scheme was unlikely to have proceeded without the EEL funding. In this case there was a

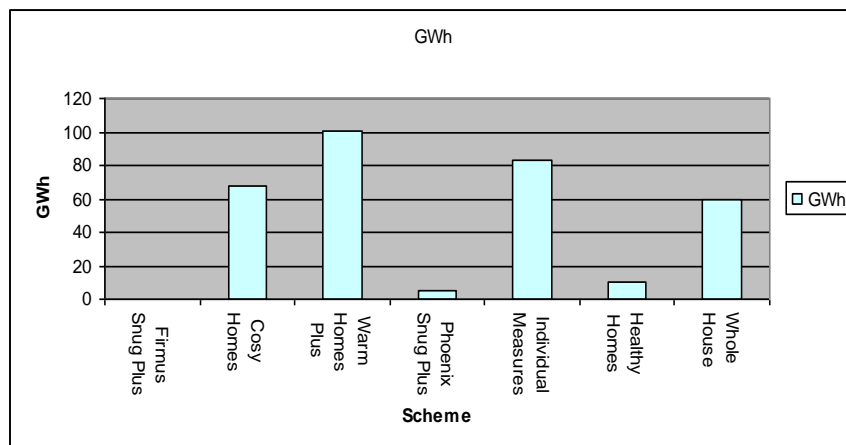
requirement for any reporting to state clearly that other publicly funded bodies may be claiming some of the savings. This was to avoid double counting by anyone using the reports in future to collate statistics on energy savings.

1.7 Twenty-one schemes were successfully submitted and subsequently completed during the year, 18 of which were managed by NIE Energy and the remaining three by Energia. The schemes ranged from Whole House Solutions, Insulation Measures and Lighting Schemes. The table below shows a summary of those schemes implemented, the EEL funding provided and lifetime savings in terms of energy, carbon and customer costs. The energy savings for each scheme are further broken down in the graphs that follow, outlining the performance of Priority, Non-Priority and Non-Priority Commercial Schemes.

## 2.0 Utilisation of EEL Funding 2008-09

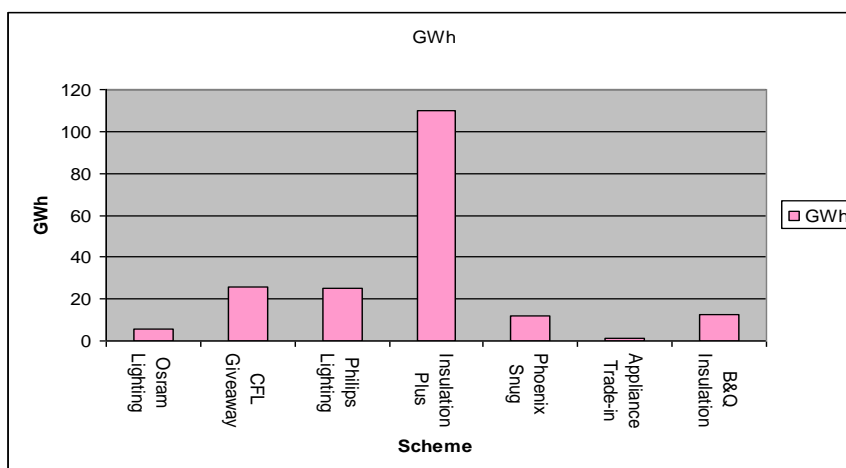
Ref	Scheme Title	EEL Funding £	Lifetime Savings		
			GWh	Carbon (Tonnes)	Gross Customer Benefits (£)
NIE0803O WHS	Firmus Snug Plus	5,377	0.394	84	16,319
NIE0801O WHS	Cosy Homes	456,300	67.536	14,074	3,349,109
NIE0807O WHS	Warm Homes Plus*	985,735	100.814	21,275	6,106,714
NIE0802O WHS	Phoenix Snug Plus	58,177	4.911	1,049	210,851
NIE0806O PIM	Individual Measures	691,992	82.759	16,680	7,468,681
NIE0804O WHS	Healthy Homes	317,440	10.696	2,299	390,198
NIE0805O WHS	Whole House	2,144,595	59.289	12,581	2,774,048
NIE08015L NPD	Osram Lighting	14,190	5.780	1,032	640,431
NIE0812L NPD	CFL Giveaway	82,082	26.065	5,590	2,887,989
NIE0811L NPD	Philips Lighting	50,529	25.215	5,213	2,793,855
NIE0808I NPD	Insulation Plus	333,077	110.039	23,541	9,233,316
NIE0809O NPD	Phoenix Snug	76,322	12.238	2,623	489,408
NIE0814A NPD	Appliance Trade-in	7,783	1.270	249	140,744
NIE0813I NPD	B&Q Insulation	39,986	12.483	2,190	1,160,503
NIE0820O NPC	Farm Agricultural	97,190	33.037	8,106	3,660,526
NIE0818O NPC	Variable Speed Drives	70,567	30.866	6,593	3,420,006
NIE0819M NPC	National Trust	6,785	2.301	371	126,659
ENA0802 VSD	Variable Speed Drives	75,938	46.496	9,931	5,151,768
ENA0801 L2	High Bay Lighting	88,569	37.670	8,046	4,173,798
ENA0804 L1	Fluorescent Lighting	18,239	5.070	1,032	558,165
NIE0822O NPC	Fuelstretcher	134,000	42.727	6,478	3,748,331
<b>TOTAL</b>		<b>5,754,873</b>	<b>717.656</b>	<b>149,037</b>	<b>58,501,419</b>

### Priority Scheme Energy Saving Performance:



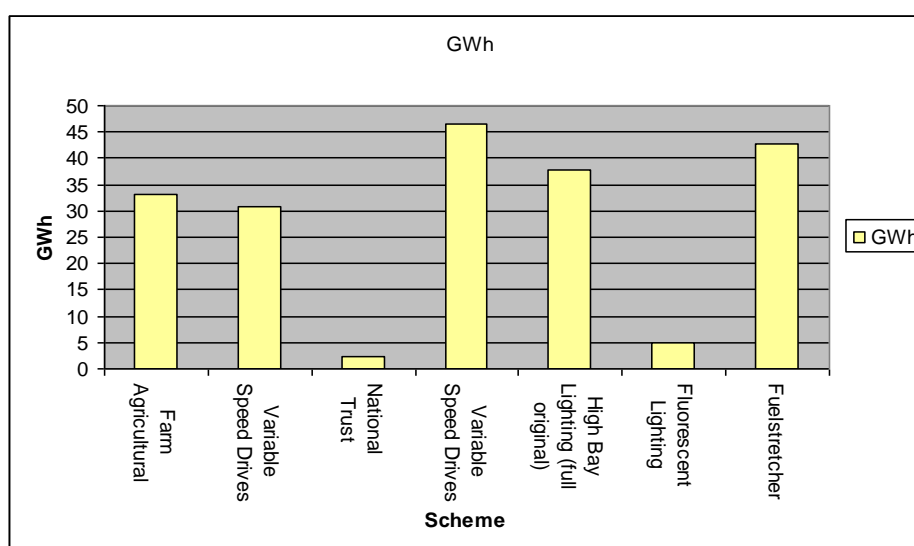
Priority (P)	GWh
Firmus Snug Plus	0.394
Cosy Homes	67.536
Warm Homes Plus*	100.814
Phoenix Snug Plus	4.911
Individual Measures	82.759
Healthy Homes	10.696
Whole House	59.289

### Non Priority Scheme Energy Saving Performance:



<b>Non-Priority Domestic (NPD)</b>	<b>GWh</b>
Osram Lighting	5.780
CFL Giveaway	26.065
Philips Lighting	25.215
Insulation Plus	110.039
Phoenix Snug	12.238
Appliance Trade-in	1.270
B&Q Insulation	12.483

### Non Priority Commercial Scheme Energy Saving Performance:



<b>Non-Priority Commercial (NPC)</b>	<b>GWh</b>
Farm Agricultural	33.037
Variable Speed Drives	30.866
National Trust	2.301
Variable Speed Drives	46.496
High Bay Lighting (full original)	37.670
Fluorescent Lighting	5.070
Fuelstretcher	42.727

### **3.0 Target Achievement and Incentive Payments**

3.1 The overall energy saving target was 431.741GWh. The actual savings achieved was 717.656GWh, 166% of what was envisaged. It is always anticipated that suppliers will exceed the target and thus earn incentive payments.

- 3.2 The extent of over-achievement on targets was therefore 285.915GWh. However, £21,380 unspent EEL funding from 07-08 was carried over to 2008-09 and, as stated in the Framework Document, targets were adjusted upwards accordingly. Therefore for the purposes of calculating incentives this resulted in an overachievement of 282.336GWh. At a level of £4,995 x inflation (2.5%) per GWh as given in the Framework Document, this yielded incentive payments of £1,257,507 for NIE Energy and £188,016 for Energia.
- 3.3 Incentive payments greatly exceeded expected levels. Reasons identified for this were: there was a considerable difference in the fuels displaced in certain schemes relative to the model assumptions, which had the effect of increasing cost savings beyond those anticipated in the model; secondly, the model assumed that certain Priority schemes would not be able to lever-in third-party funding whereas in practice a considerable amount of third party funds were levered-in for these schemes from government departments and gas companies; thirdly, additional funding was transferred to the more cost effective schemes from other schemes in the Non-priority 'pot' for which a higher target is set in the model, resulting in higher savings relative to targets. Funds were transferred due to the slow uptake on a number of schemes, or under-achievement was envisaged early on and the reallocation of funding to those more cost effective schemes was seen as a viable alternative.
- 3.4 Income generated from incentive payments is limited by seeking voluntary agreement from suppliers that any incentive payments earned in excess of 8% of total project costs will be recycled into energy efficiency and/or fuel poverty initiatives in addition to work already planned.

Total incentives earned were £1,445,523. NIE Energy and Energia will be required to recycle £464,638 and £116,196, respectively.

#### **4.0 Extent of Priority Funding**

- 4.1 Of the total of £5,754,873 spent on schemes, £4,659,616 was accounted for by Priority schemes, representing 79.98% of funding. This figure is fractionally below the 80% target due to some under-spend in the Priority schemes. Energy savings of 326.399GWh represents 45.5% of the total energy savings. Thus it may be seen that energy savings were not commensurate with spend for this sector. This is expected since heating measures, required for whole house solutions, are not as cost-effective as certain other measures such as insulation and lighting.

85% of the EEL Priority funding allocation (excluding Warm Homes) was used to provide whole house solutions to dwellings with occupants that met the relevant vulnerability criteria. A significant 1,296 whole house solution packages were completed, not including the 897 whole house solution packages from the Warm Homes Plus scheme.

15% of EEL Priority funding allocation (excluding Warm Homes) was also available for the provision of individual measures and a significant figure of 1,448 insulation measures were installed.

## **5.0 Case Studies**

### **5.1 Healthy Homes**

This was a Priority scheme developed jointly by NIE Energy and the Northern Ireland Energy Agency (NIEA) to provide whole house solution packages to vulnerable customers, particularly those with a health issue. Many referrals came through Gordon's chemists, where leaflets promoting the scheme were included with prescriptions. The scheme met its target of 100 efficient central heating system installations with NIEA as scheme manager. No customer contribution was required, EEL funding provided 100% of insulation and CFL costs and 84% of heating system installation costs, with the balance being met by the DSD's Partnership Fund and gas companies.

Suppliers are required to undertake and report on the monitoring of customer's satisfaction. A selection of comments from customers that received measures through the Healthy Homes scheme ranged from:

***"The workmanship was excellent."***

***"So far we are saving around £10 per week."***

***"It has saved me buying a lot of coal."***

***"My bill has been cut in half."***

***"Without the Healthy Homes scheme I could not have afforded to have the gas installed. So thank you!"***

## 5.2 Firmus Energy Warm Homes Plus:



*Pictured outside Gordons Chemist in Castle Mall in Antrim 'switching on' the free gas central heating system offer for householders in the Firmus Energy area are (L-R) Claire Carson from NIE Energy, Gordons Castle Mall Pharmacy Manager, Laurence Nicholson, Jennifer Lynott from Firmus Energy and Dayna McCreadie of NIEA.*

## **6.0 Conclusions**

6.2 For the fourth year running, submissions were received from a supplier other than NIE Energy i.e. Energia. Three Energia schemes progressed to completion, achieving impressive savings over those estimated and yielding an incentive payment for savings over their portion of the target. NIE Energy also achieved significant savings over those estimated.

6.3 The fact that suppliers were aware of the cost-effectiveness criterion may also have contributed to savings being higher than expected, as more third party funding would have been levered in.



## Appendix 1

### **Summary of participating EEL schemes:**

#### Energia High Bay Lighting ENA0801 L NPC

This commercial scheme aimed to promote the replacement of existing light fittings (mainly metal halide) with new energy efficient types high frequency CFLs with daylight dimming and presence detection in industrial/warehouse premises. Partners involved were Energia, Patina (equipment suppliers) and AJ Hurst (distribution, installation) etc. 13 companies in NI met the criteria set and a total of 1,250 fittings were installed, availing of a grant of £65 per fitting towards the installation of their new lights.

#### Energia Variable Speed Drives ENA0802 O NPC

This commercial scheme aimed to promote the use of energy efficient variable speed drives (VSDs) in industrial/commercial premises in NI. Partners involved were Energia, Ashdale Engineering (installers) and Mitsubishi (equipment supplier). 16 companies applied and met the criteria set.

#### Energia Fluorescent Lighting Enhancement ENA0804 L NPC

This commercial scheme aimed to promote the replacement of existing 100W T12 light fittings with new energy efficient 54W Linear CFLs with daylight dimming and presence detection in industrial/commercial business premises. Partners involved were Energia, Patina (equipment suppliers) and AJ Hurst (distribution, installation) etc. 13 companies met the criteria set and a total of 462 lamps/fittings were installed, availing of a grant of £33 per fitting towards the installation of new lights.

#### NIE Energy Cosy Homes NIE0801O WHS

This Priority scheme is a long running scheme that was developed by NIE Energy and the NIEA to encourage Housing Associations to upgrade the heating and insulation in their housing stock. A grant is offered towards the cost of both heating and insulation. The scheme led to 600 heating upgrades (including tank insulation), 500 loft insulation upgrades and provided low energy light bulbs. 77% of installations replaced Economy 7 heating. NIEA managed the scheme, with additional funding secured from Housing Associations, DSD's Partnership Fund and gas companies, totalling £260,838.

#### NIE Energy Phoenix Boiler and Insulation NIE0802O WHS

This Priority scheme targeted vulnerable households with Economy 7, solid fuel or no heating and offered householders the opportunity to install a highly efficient fully controlled natural gas central heating system and free insulation. Initially the scheme offered a discount of £1,000 towards a heating system and £650 towards

insulation (for 136 homes) but as uptake was low, funding levels were changed. 40 installations were completed and 39 insulation measures installed. EAGA managed the surveying, insulation and quality inspection elements of the scheme.

#### [NIE Energy Firmus Snug Plus NIE0803O WHS](#)

This Priority scheme targeted vulnerable households with Economy 7, solid fuel or no heating in the firmus energy area and offered householders the opportunity to install a highly efficient fully controlled natural gas central heating system. Initially the scheme offered a discount of £1,000 towards a heating system and £650 towards insulation but as uptake was low these funding levels were increased to £1,500 towards heating and £800 towards insulation. firmus energy was chiefly responsible for obtaining referrals for the scheme and EAGA carried out quality monitoring for the installations.

#### [NIE Energy Healthy Homes NIE0804O WHS](#)

This Priority scheme was developed jointly by NIE Energy and NIEA to provide whole house packages to vulnerable customers, particularly those with a health issue. Many referrals came through a link with Gordon's chemists who included leaflets promoting the scheme with prescriptions. The scheme met its target of 100 installations. NIEA carried out the scheme manager role. Additional funding came from DSD's Partnership Fund and a minimal amount from gas companies.

#### [NIE Energy Whole House Solution/Energy Saver Homes NIE0805O WHS](#)

This Priority scheme provided whole house packages for vulnerable customers meeting agreed criteria. It provided a package of heating, insulation and lighting to 552 customers with Economy 7, solid fuel or no heating. EAGA was the scheme manager. Additional funding was secured from Councils and DSD's Partnership Fund. Referrals came from a range of organisations including National Energy Action (NEA), Investing for Health Partnership, Health Action Zones and the Energy Saving Trust advice centre (ESTac).

#### [NIE Energy Individual Measures/Free Insulation NIE0806O WHS](#)

This Priority scheme, a free insulation programme, provided 100% funding to install cavity wall and loft insulation for vulnerable customers. The scheme resulted in 2,044 insulation measures and 5,780 Energy Saving Trust approved energy saving bulbs being installed. EAGA acted as scheme manager. Referrals came from a range of partner organisations including ESTac, Investing for Health partnership, NEA etc.

#### [NIE Energy Warm Homes Plus NIE0807O WHS](#)

The EEL Framework Document required that £1m was directed to supplement the Warm Homes Plus scheme. EEL funds provided support for insulation,

heating replacement and lighting for customers (i.e. those requiring whole house packages). 2,165 heating and insulation measures were provided with support from the EEL. EAGA managed the Warm Homes scheme on behalf of the DSD.

#### [NIE Energy Insulation Plus NIE0808 I NPD](#)

This Non-Priority scheme has been running successfully for several years. With the significant increase in oil prices, the scheme saw unprecedented demand which created issues for scheme management. Whilst these created challenges for all concerned, the result is significant uptake of insulation. EAGA was scheme manager, NIE Energy issued cash backs to customers and the ESTac took customer referrals. 2,205 insulation cash backs were issued.

#### [NIE Energy Phoenix Snug NIE0809O NPD](#)

This Non-Priority Domestic scheme was aimed at the able to pay market and offered a £700 incentive for homeowners to convert from Economy 7, solid fuel or no heating. Cavity wall and loft insulation up to the value of £800 was also offered. It was intended that the scheme would provide assistance to 100 householders. 97 households received assistance. The scheme was managed by Phoenix and EAGA with Phoenix providing part funding towards each heating system installation.

#### [NIE Energy Philips Lighting NIE0811L NPD](#)

This Non-Priority successful bulb/retail scheme led to the sales of 38,714 Energy Saving Trust approved bulbs through a number of outlets, including Euronics Stores and a website. EEL funding provided a discount off the normal price. Bulbs ranged from 15,000 hour stick types to new generation bulbs (e.g. Soft Tone, Tornado, Mini Lustre and Candle). A range of fittings and wattages were also offered enabling customers to have access to bulbs which are not always readily available through retail outlets.

#### [NIE Energy CFL Giveaway NIE0812 L NPD](#)

This Non-Priority scheme provided 42,546 energy saving bulbs to customers, primarily through community groups to reach lower income customers. The scheme was promoted through a range of channels with St Vincent de Paul distributing around one third of the bulbs. Two bulb types were used, both Energy Saving Trust approved (Osram 20watt and Phillips 11watt).

#### [NIE Energy B&Q Insulation NIE0813 I WHS](#)

This Non-Priority scheme was aimed at promoting loft insulation and hot water tank jackets for the DIY market. This was the third year the scheme offered discount on insulation. The scheme provided special offers on Knauf space blanket and tank jacket insulation in all B&Q stores with EEL funds contributing 25% of the cost.

#### [NIE Energy Appliance Trade-in NIE0814 A NPD](#)

This Non-Priority scheme aimed to promote sales of 'A' and 'A+' labelled energy efficient refrigeration and dishwashers by offering a discount for trading in old appliances. Originally, it was proposed to run the scheme with Currys, however following their withdrawal from the scheme, NIE Energy worked in partnership with two manufacturers, Glen Dimplex and Indesit. In total 633 appliances received subsidies through the Trade-In scheme through a range of independent retailers.

#### [NIE Energy Osram Lighting NIE0815L NPD](#)

This Non-Priority scheme involved a 'buy one get one free' offer which ran with Spar convenience stores. The promotion retailed at £1.99 and offered 11w and 14w Dulux Star energy saving light bulbs. In total 28,380 bulbs were sold through the offer. Spar included the offer in one of their regular mail drops to households in Northern Ireland.

#### [NIE Energy VSD Scheme NIE0818 O NPC](#)

This commercial scheme provided customers with a grant towards a range of variable speed drive (VSD) options including motors for ventilation, water circulation and air compressors. 31 grants were offered in total to a range of farms and businesses including NI Water, Lisburn Glass Ltd and Quinn Building products. The scheme was managed by Low Carbon Solutions. Grant support levels were calibrated according to the predicted energy savings for the size and running hours of the VSD to ensure the scheme achieved its forecast cost effectiveness.

#### [NIE Energy National Trust NIE0819 M NPC](#)

This commercial scheme aimed to provide insulation to a range of National Trust properties. Many of these properties are difficult to treat and have access problems or other special requirements. EEL funding contributed 33% to the total cost of the loft insulation while the remainder was funded by the National Trust. The scheme was managed by EAGA.

#### [NIE Energy Efficiency in NI Agriculture Sector NIE0820 O NPC](#)

This commercial scheme was aimed at the agricultural sector. Customers were able to avail of a range of low energy lighting and dairy farm plate cooling equipment. The scheme was promoted through the Ulster Farmers Union, local events including Balmoral Show and PR in local press. The scheme was managed by Low Carbon Solutions. The lighting elements of the scheme continue to be popular with farm customers.

### NIE Energy Fuelstretcher NIE0822 O NPC

This commercial scheme aimed to install Fuelstretcher intelligent boiler controls in small businesses and other non domestic premises. The Fuelstretcher product is based on efficient and sequencing of gas or oil fired boilers through the prediction of heating demand of the building they serve. In total 67 installations took place across a range of schools and local businesses. The scheme was managed by Fuelstretcher and marketed through their installer group.



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