



# **Framework Document for the Northern Ireland Sustainable Energy Programme**



**October 2010**

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## 1.0 INTRODUCTION

The purpose of this Framework Document is to provide the rules and procedures for organisations wishing to participate in the Northern Ireland Authority for Utility Regulation's (the Utility Regulator) NI Sustainable Energy Programme or "NISEP" (formally the Energy Efficiency Levy).

This Framework Document will facilitate the second phase of opening NISEP to competition and will apply to the year 2011/12. The first phase for the 2010/11 year saw the NISEP open to gas supply licence holders. This second phase for the NISEP year commencing April 2011 will allow other organisations to participate and the call for schemes will take place in September 2010. The rules in place in this document are binding on participants, and shall include for the avoidance of doubt, the terms and conditions included in the Ascendancy Agreement in Appendix 8.

The Programme is administered on behalf of the Utility Regulator by an appointed Programme Administrator. The Programme Administrator role is currently fulfilled by the Energy Saving Trust and full details of this role are as detailed in Appendix 7.

### 1.1 Format of Framework Document/How to use this document

The opening section of this document sets out the background to the NISEP, how it is managed and details of how funding is allocated.

Section 2 covers the broad framework for the NISEP and discusses in detail the various factors that need to be taken into account when developing schemes for funding. Section 3 sets out the overall energy saving targets to be followed by organisations who wish to apply for NISEP funding. Section 4 sets down the procedures for scheme submission, Section 5 details the reporting of schemes and Section 6 describes the scheme monitoring and auditing.

The Appendices are:

- The Scheme Submission Form (Appendix 1);
- Examples of Customer Satisfaction Surveys (Appendix 2);
- Scheme Completion Post Implementation Form (Appendix 3);
- Scheme Variation Form (Appendix 4);
- Interim Progress Report Form (Appendix 5);
- Guidance on the use of the different energy efficiency and sustainable energy measures, and a list of legislation relevant to sustainable schemes (Appendix 6);
- Details on the role of the Programme Administrator (Appendix 7); and
- Ascendancy Agreement (Appendix 8);
- Minimum Requirements of a Fraud Policy to be Supplied by Applicants (Appendix 9).

## 1.2 Background to Northern Ireland Sustainable Energy Programme (NISEP)

A sum of money is collected from all electricity customers through a Public Service Obligation and it is used to provide funding for energy efficiency projects and heating systems to customers. Previously known as the Energy Efficiency Levy (EEL), it is now known as the Northern Ireland Sustainable Energy Programme (NISEP).

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.

However since 2002, as a result of a consultative process, the majority of the funding (80%) has been targeted at vulnerable customers in Northern Ireland. Subsequent consultations have substantiated the view that this level of funding for vulnerable customers should remain whilst fuel poverty levels in Northern Ireland remain high.

The Utility Regulator began a review of the EEL in 2008, the results of which were published in March 2009. After due consideration of all the issues the main decisions taken were as follows:

- to rename the Programme as the Northern Ireland Sustainable Energy Programme (NISEP);
- to continue with the NISEP for at least 3 years, after which time it will be reviewed;
- to permit natural gas supply licence holders to apply directly for funding;
- to invite organisations other than licensed energy suppliers to bid for funding by September 2010; and
- to widen the types of eligible schemes to include renewable energy measures.

The next planned Review is intended to commence in 2011 and be completed by 2012.

## 1.3 Organisations permitted to compete for NISEP funding

The right to bid for funding for schemes under NISEP has previously been open to only licensed electricity suppliers and licensed gas suppliers.

However from September 2010, registered organisations that meet set eligibility criteria will also be permitted to apply for funding. The registration process is set out in the next section.

## 1.4 Registration

From June (for 2010 only, due to the consultation timetable, it will be August), organisations, other than licensed energy suppliers, wishing to be included in

the call for schemes in September will be invited to register and apply to accede to the Framework Document. This will allow a period of time for the Programme Administrator to assess the eligibility of applicants to accede to the Framework Document and thus be included as Primary Bidders in the call for schemes each September.

Organisations which hold a licence issued by or regulated by the Utility Regulator have already demonstrated financial stability and an acceptable track record through the licensing process, and they will be automatically entitled to accede to the Framework Document.

In order to become a Primary Bidder, an organisation must agree to adhere to the rules within this Framework Document by signing the agreement in Appendix 8.

All Primary Bidders must either:

- 1) hold a Licence issued by or regulated by the Utility Regulator,

OR

- 2) must meet the criteria below.

If Primary Bidders do not hold a licence as defined in (1) above, then they must register using the following procedure;

- 1) Apply to the Programme Administrator for details of the Programme Registration procedure ;
- 2) Provide the following information/documentation to the Programme Administrator from the Primary Bidder:
  - a. Name and address of applicant
  - b. Legal nature of applicant, e.g. a company incorporated under the Companies (Northern Ireland) Act 2006, registered charity, public body etc. Such further information concerning the constitution of the Applicant as the Programme Administrator may request
  - c. Contact details of a designated post-holder and named individual to whom all NISEP correspondence from the Programme Administrator will be addressed including postal address, email address and telephone number, in Northern Ireland
  - d. The most recent annual accounts of the applicant in respect of which an auditor's report has been prepared, together with that report and the annual accounts of the applicant for the two financial years preceding that together with the appropriate auditor's reports. Also such interim accounts (whether audited or not) as may have been prepared in respect of a period more recent than those above. If the applicant is a wholly owned subsidiary Company, then audited group accounts should also be sent
  - e. Management Accounts for the last two quarters
  - f. Organisational structure and resources (fixed assets, staff numbers etc.)

- g. A statement of capability demonstrating evidence of ability to complete the work; e.g. evidence of qualifications of staff or contractors to be used, membership of trade associations, courses attended and previous experience. NOTE: Registration can be withdrawn or future funding refused if the bidder fails to provide information to the Programme Administrator when requested or fails to keep appropriate records
- h. At least two references, one of which should be from a Government Department or statutory organization, which has knowledge of your organisation's work and which can confirm that the applicant has been responsible for a fuel poverty, energy efficiency or renewable energy scheme which meets the criteria set out under technical soundness below.
- i. If you intend to work with partners organizations on any schemes please state how you intend to manage this relationship. Please note that it is the primary bidder's responsibility to ensure adherence to the rules within this framework document. Primary bidders will be held responsible by the Utility Regulator for adherence to the document.
- j. A copy of your organisation's fraud policy and fraud response plan, including a statement of zero tolerance to fraud. A summary statement of any frauds or attempted frauds against the primary bidder in each of the previous three financial years together with a synopsis of the types of actions taken and their outcomes should also be supplied.
- k. A copy of your organisation's complaints procedure should be supplied along with details of your quality management system/quality assurance procedures for installation of measures;
- l. A copy of your organisation's Health and Safety Policy should be supplied along with details of Risk Assessment procedures followed.

Once the submitted information has been reviewed and checked, the Programme Administrator, with the agreement of the Utility Regulator, will provide a response to the applicant with a notification of status. Details will be added to a Register of Bidders which will be held by the Programme Administrator.

If a Bidder has been refused access to the NISEP by the Programme Administrator, then the Bidder can appeal to the Utility Regulator. The Utility Regulator will reserve the right to refuse registration to any organisation which has not successfully demonstrated financial soundness or a successful track record of delivery, and/or does not meet any of the other eligibility criteria that may be required.

A primary bidder will only be accepted if it can meet the following criteria:

- 1) Is validly and properly constituted (e.g. whether by way of a limited company, registered charity, public/statutory organisation or otherwise) in its country of incorporation or origin";
- 2) Has a UK bank or building society account in the name of the primary bidder, which requires at least two unrelated signatures on each cheque or withdrawal;
- 3) Are not individuals or sole traders as these are not acceptable as registered primary bidders to the NISEP.
- 4) Can meet the requirements to provide accounts and information noted above;
- 5) Can sign the Accedence Agreement in Appendix 8 of this document;
- 6) Can agree that all measures installed using NISEP funding, will be installed in Northern Ireland;
- 7) Can demonstrate technical capability of delivering energy efficiency, fuel poverty or renewable energy related projects (see technical soundness criteria below) or previous experience of overseeing contractors to carry out such work;
- 8) Can provide evidence of having a complaints procedure in place and quality assurance procedures;
- 9) Can provide copies of their Health and Safety Policy and Risk Assessment Procedures.

If primary bidder status is withdrawn, the organisation in question will not be permitted to reapply for registration for a period of five years.

### **Technical Soundness Criteria**

The applicant must demonstrate a sufficient track record in delivering (or managing) energy efficiency, fuel poverty or renewable energy schemes. A Primary Bidder will be deemed to have a sufficient track record if it can provide proof that it has previously undertaken at least one successful energy efficiency, fuel poverty or renewable energy scheme to the value of at least £50,000 and in which it had direct responsibility for:

- Project management, including where appropriate managing subcontractors, installers or other delivery mechanisms
- Financial management of the scheme funding
- Communication with those who benefited from the scheme
- Customer satisfaction processes including the resolution of customer complaints
- Quality assurance processes including the monitoring of quality standards and rectification of any sub-standard installations
- Record keeping, reporting and providing evidence of benefits realisation and the successful completion of the scheme
- Fraud prevention and awareness.

The primary bidder must also confirm that it has knowledge of over arching legislation such as the Human Rights Act, the Data Protection and Freedom of Information Acts. It is the Primary Bidder's responsibility to ensure that all schemes comply with the standards required by this legislation.

#### 1.5 Amount which may be bid for by each Primary Bidder

The maximum total bid for the first year of participation in the NISEP as a Primary Bidder will be £500,000 or (for non-licence holders) an amount equivalent to the value of any previous single energy scheme they have delivered, **whichever is the lesser amount**. If an organisation has demonstrated successful delivery in the first year, the maximum bid cap may be removed. To demonstrate success a new Primary Bidder must prove that it has delivered its NISEP schemes as approved and its energy savings targets.

The minimum bid for individual schemes will be £50,000.

##### 1.5.1 Scheme Partnerships

It is the responsibility of the Primary Bidder to ensure that all NISEP funding is accounted for and appropriately spent on approved schemes in accordance with the conditions specified in this Framework Document and the terms agreed through the scheme submission, approval and variation process. There will be no relationship of any sort between a scheme partner who is not a Primary Bidder and the Utility Regulator. It is also the responsibility of the Primary Bidder to sufficiently vet any scheme partner it may chose to work with. Funding will only be released to the Primary Bidder. The Primary bidder will remain solely liable for the return of any NISEP funding allocated to it and not spent on approved schemes in accordance with the provisions of the Framework Document.

Partnership arrangements between Primary Bidders and scheme partners are entirely the responsibility of the parties and not the Utility Regulator. This includes ensuring that any work carried out by scheme partners conforms to best practice customer satisfaction and quality standards.

#### 1.6 Funding Allocation

An amount of funding equal to 80% of the total funding available will be ring-fenced for priority domestic customers a defined in Section 2.6.

The following activities will be eligible to qualify for funding for priority group customers:

- Full packages of energy efficiency measures and high efficiency heating or renewable energy installed in homes which have an energy performance rating of E or below, or which are without existing heating, or which have electric heating, solid fuel heating, LPG, old oil fired central heating systems (15 years old or more) or oil fired systems that are broken beyond viable repair;
- Provision of individual insulation measures and zoned heating controls;
- Provision of measures to tackle 'hard to heat' homes – that is solid walled homes without a cavity; and

- Provision of renewable technologies, specifically technologies that are covered by the Microgeneration Certification Scheme.

Half of priority group funding will be ring fenced for schemes which do not require a contribution from priority customers.

- 34% of NISEP funds will be ring-fenced for priority domestic 'whole house solutions' (at least half of which should go to schemes in which no priority customer contribution is sought)
- Leaving 46% for other schemes such as individual measures, hard to treat homes and renewables (again at least half of the funding for this category should go to schemes in which no priority customer contribution is sought). However, it should be noted that whole house type schemes can still receive funding above the level of the ring-fence, subject to the fact that these schemes would be competing with other schemes which offer partial solutions to a greater number of properties.

The remaining 20% of funds is allocated to non-priority customers, split as two equal funding groups of 10% for conventional non-priority domestic and commercial schemes and 10% for Innovative non-priority domestic and commercial schemes.

The second funding category above for innovative schemes is further subdivided as 5% innovative energy efficiency schemes and 5% renewable energy schemes. Figure 1.1 below shows how the NISEP funding will be allocated.

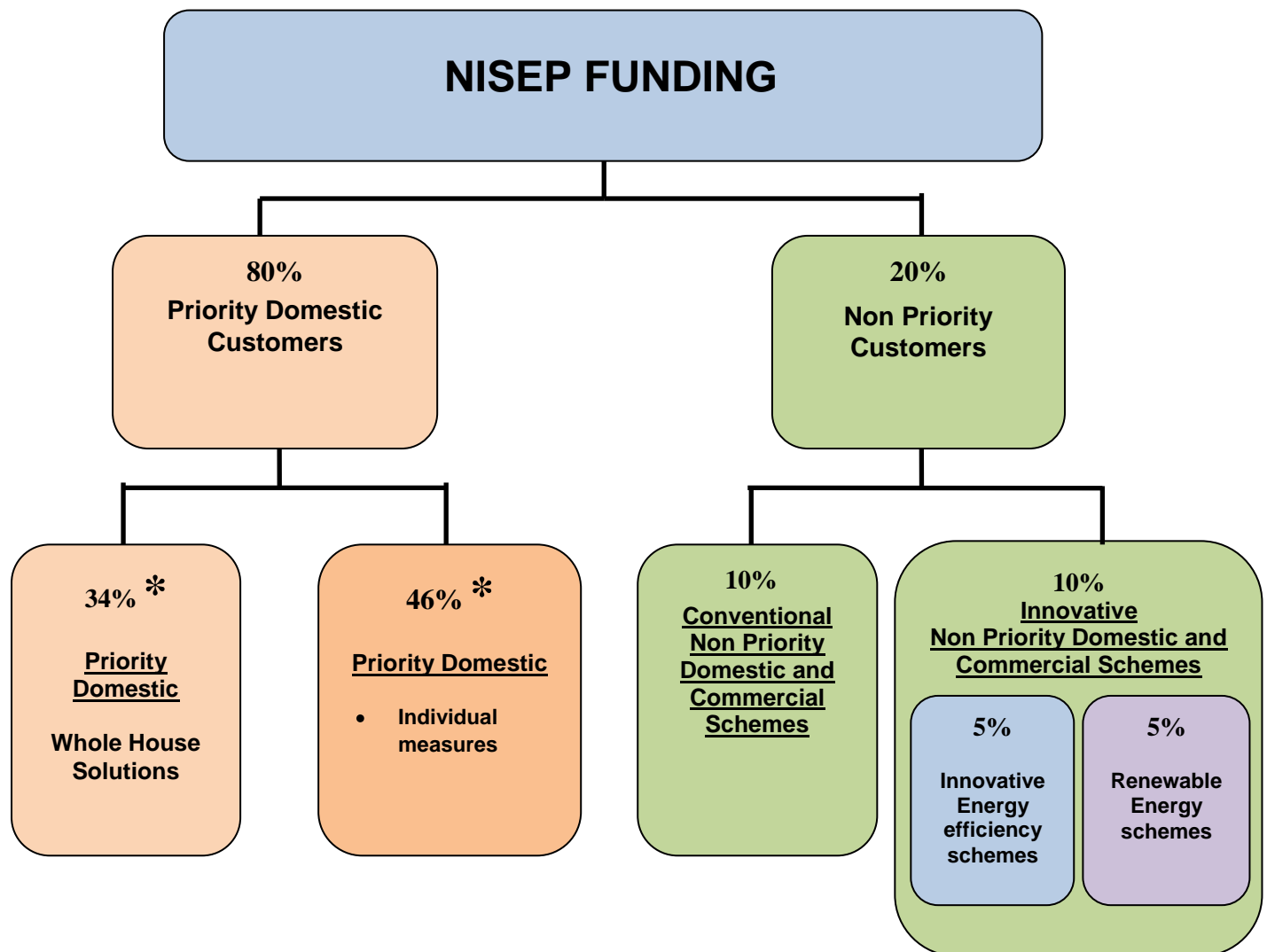
Note: if the Programme Administrator does not receive enough bids to fill a particular ring-fenced classification it is at the discretion of the Programme Administrator, with the agreement of the Utility Regulator, to reallocate funding to an oversubscribed classification. In this event any reallocated money will be directed to other schemes in the same category first (i.e. priority funding would be reallocated within the priority category before the non priority category would be considered and vice versa).

In addition at scheme submission stage the Programme Administrator will require confirmation that where a customer contribution is sought in the priority group section, the scheme bidder has had due regard for ability to pay within the target group.

All scheme bidders in the priority group segment must provide staff training and put procedures in place to ensure that where a customer contribution is sought:

- Those customers are always directed to the scheme which is best for them first; this may include Government, NISEP and other schemes. It will always be assumed that equivalent schemes which do not require a contribution or which require a lower contribution are best.
- No priority group customer is ever given the 'hard sell' or pressurised to take up a scheme which requires a contribution.

Figure 1.1 NISEP Funding Allocation



\* Note: 50% of the ring fenced funding in these categories will be allocated to schemes with no customer contribution. It is also permitted to include hard to treat homes and renewable technologies in these categories.

## **2.0 BROAD FRAMEWORK OF NISEP**

### **2.1 Eligible Initiatives**

Schemes submitted for funding must meet all of the following essential criteria:

- Schemes must be submitted by the deadline stated in the 'Call for Schemes' letter by registered primary bidders. The scheme submission form in Appendix 1 must be provided as a summary of the scheme along with any required relevant information (as determined by the Programme Administrator) about the scheme;
- Schemes must be implemented within Northern Ireland;
- Scheme submissions and the information contained within must comply with the NISEP operational rules and procedures as set out in this Framework Document;
- Funding must be targeted at activities that result in sustainable energy measures being adopted. Funding cannot be used for research, demonstration or purely educational projects;
- Schemes aimed at priority group customers must be targeted in line with the guidance provided in Section 2.6 of this document;
- Measures promoted must be in customers' financial interest. In other words, the present value of the lifetime customer benefits (energy bill savings and improved comfort) should exceed the cost of the measures;
- Measures must deliver overall economic benefits to Northern Ireland;
- Measures promoted must be proven technology which meet or exceed relevant standards (e.g. safety, quality, etc);
- Schemes must be designed and managed cost effectively. Evidence of how the bidder intends to ensure this must be supplied, including evidence that where appropriate they have (or will within a reasonable time) competitively tender any contracts with managing agents, sub contractors and suppliers. For the avoidance of doubt, the Programme Administrator will consider that all contracts with managing agents and subcontractors must be tendered at least once every three years; Schemes must meet the additionality criteria defined in Section 2.2;
- Schemes within the priority group category must ensure that where a customer contribution is sought in the priority group section, the scheme bidder has had due regard for ability to pay within the target group.
- All scheme bidders in the priority group segment must provide staff training and put procedures in place to ensure that where a customer contribution is sought:
  - those customers are always directed to the scheme which is best for them first; this may include Government, NISEP and other schemes. It will always be assumed that equivalent schemes which do not require a contribution or which require a lower contribution are best; and

- no priority group customer is ever given the ‘hard sell’ or pressurised to take up a scheme which requires a contribution.
- All publicity, PR notices or any other form of advertising or promotion of schemes must carry the branding and logo of the NISEP. Full details of the branding, NISEP logo etc can be found on the NIAUR link;  
[http://www.niaur.gov.uk/uploads/publications/2009-12-14\\_NISEP\\_Branding\\_Guidelines.pdf](http://www.niaur.gov.uk/uploads/publications/2009-12-14_NISEP_Branding_Guidelines.pdf)
- Consideration must be given to legislation relevant to each specific scheme, as well as overarching statutes that may affect the proposals, such as the Human Rights Act, or the Data Protection and Freedom of Information Acts. It is the Primary Bidder’s responsibility to ensure that all schemes are managed to standards that comply with the legislation.

In addition, schemes should be structured, where possible, to secure the maximum level of funding from third parties, e.g. equipment manufacturers, housing providers and fuel suppliers. The expected contribution from customers benefiting from both Priority and Non-Priority schemes is as follows:

Priority customers	0%
Domestic Non-priority customers	50%
Non-Domestic customers	70%

## 2.2 Additionality

In order to approve schemes submitted by organisations, the Programme Administrator must be satisfied that they deliver energy savings and that the result will be over and above that which would have been achieved without NISEP funding. This principle is known as ‘additionality’ and is central to the administration of the Programme and determination of energy savings for completed schemes.

All scheme applications must contain a statement describing how NISEP funding would ensure additionality is achieved.

The following criteria must also be met in regards to additionality:

- Schemes must be additional to any planned activity, regulatory obligation or government-funded initiatives;
- NISEP funding must form a minimum of 20% of the total project costs. In exceptional circumstances a case may be put forward by applicants as to why a project should proceed with less than 20% of NISEP funding. The Programme Administrator must be satisfied that the applicant’s action will lead to energy saving and that the total improvement is not due to other factors. Therefore, applicants must not set up any retrospective agreements to provide funding for measures already installed; and
- Schemes should be designed to minimise ‘free riders’, i.e. those who are likely to have adopted a measure without any support or encouragement.

Applicants will be required to retain evidence of the additionality of schemes and make it available for audit inspection.

### 2.2.1 Existing regulations and legal requirements

The Programme Administrator must be satisfied that any reduction in energy consumption achieved as a result of a NISEP funded scheme will be achieved in addition to that required by other regulatory requirements, such as Building Regulations Part L (Conservation of Fuel and Power), for example; action must lead to improvements in energy efficiency above the levels that would be achieved to meet the requirements of the current Building Regulations.

Measures installed in new build homes will not be counted as additional, unless a declaration can be provided from the housing developer to confirm that the house would have met current Building Regulations without the measure, and that the applicant's funding has enabled the developer to exceed Building Regulations.

The Programme Administrator is aware that Building Regulations Part L will be updated in 2010 which could impact upon qualifying schemes and their carbon emission reduction targets. Any changes to Part L will be monitored and the implications discussed with applicants.

### 2.2.2 Actions with Partners and Third Parties

Where a Primary Bidder is planning to undertake a scheme in partnership with a third party, the Programme Administrator must be satisfied that this will result in increases in energy savings additional to those that would be achieved by the scheme partner without the Primary Bidder's funding. The following criteria will be taken into account:

#### *Social Housing Providers*

When partnering with Social Housing Providers (SHP), an applicant must obtain written confirmation that its involvement has resulted in additional energy savings. This declaration must be signed before the scheme commences. If any changes occur to the scheme, the SHP must sign another declaration once the action is completed. For this purpose a change will be considered to mean a change in the type of measure installed, or a reduction in the applicant's average cost contribution of more than five percentage points.

#### *Manufacturers*

When partnering with manufacturers to improve the sustainable energy performance of a new measure, such as at the production stage of consumer electronics, the manufacturer must write to confirm that the improvement in energy savings would not result without the applicant's action.

Monitoring may be necessary to avoid double counting between different applicants' schemes. The Programme Administrator may ask the applicant to inform the other stakeholders of their partnership to help avoid double counting of energy savings.

### *Retailers*

Where additionality is being determined through the change in market share, for example some consumer electronics schemes, the market share will be determined before and after the applicant's activity through the use of Electronic Point of Sale (EPoS) data from the retailer.

When retailers or manufacturers are providing sales data to applicants, a covering letter should be provided to confirm which period the EPoS data covers and that these sales all took place in NI and exclude trade sales. The letter should also confirm that the measures and, if applicable, marketing activities were subsidised by the applicant and funding has not been received for these measures from any other party.

When delivering measures through a retailer, a marketing plan detailing the activities the retailer or manufacturer has agreed to carry out, must be provided. This will help demonstrate that the operation of the scheme will result in an improvement in sustainability or an increase in energy savings above what would have happened without the scheme. This should include when and how the measures will be promoted in the store(s). Energy savings attributed to retailer based schemes will be based on the level of increased sales rather than the total sales during the period of the promotion.

### *Other government programmes*

Applicants may be able to undertake action in conjunction with other government programmes.

A signed letter must be provided by the relevant scheme partner to confirm that the applicant's actions have exceeded those of the government programme and that the measures to be accredited to the applicant could not have been installed without the applicant's input, i.e. the applicant is not claiming measures which would have been installed through the other programme anyway.

There must be a clear, upfront agreement with scheme partner to ensure there is no potential for double counting of energy savings (or performance target) between NISEP and another government programme. If the applicant is in part funding measures in conjunction with another government programme, then the energy savings accredited to the applicant will be in proportion to the funding they have provided.

## 2.3 Eligible costs

In broad terms, any activity which satisfies the above criteria is eligible for funding. Individual schemes may include some or all of the following additional costs:

- Scheme management and other indirect costs (see section 2.9); and
- Direct subsidies for measures.

## 2.4 Funding Available

Table 2.1 below illustrates the potential increase in NISEP funding over the next 2 years.

**Table 2.1 – NISEP funding (adjusted for inflation)**

	<b>2011/12</b>	<b>2012/13*</b>	<b>2013/14*</b>
Total Fund available	7,479,775	7629370*	7781957*
Programme Administrator's fee	104,717	106,811**	108,947**
Amount available for schemes	7,375,058	7,522,559	7,673,010
Priority Pot	5,900,046	6,018,047	6,138,408
Whole house	2,507,520	2,557,670	2,608,823
Whole house – no customer contribution sought	1,253,760	1,278,835	1,304,412
Priority Domestic individual measures	3,392,527	3,460,377	3,529,585
Priority Domestic Other – no customer contribution sought	1,696,264	1,730,189	1,764,793
Non Priority Pot	1,475,012	1,504,512	1,534,602
Conventional	737,506	752,256	767,301
Innovative	737,506	752,256	767,301

*Note: While bidding for this funding will be carried out on an annual basis, bids for schemes lasting more than 1 year can be accepted, providing the Programme Administrator is satisfied that such schemes represent better value for money. However, at least 25% of the funding shown above will be made available for bids made on an annual basis.*

**\*Value shown represents increase on previous year by 2%. This will be confirmed on the basis of the RPI indexation as referred to in Section 2.4.1 below.**

**\*\* Programme administrator's Fee under Review**

The Programme Administrator's costs will be paid from the total funding available, this currently amounts to 1.4% of total funding.

In order to meet the Programme objectives, the funding is ring-fenced into a number of 'pots' to facilitate the delivery of different types of schemes. If the bids for funding do not use up all the money allocated to a particular pot, the Programme Administrator with the consent of the Utility Regulator may move the under-spend to another oversubscribed pot.

Any NISEP funding that remains unspent during a given year will be carried over to the following financial year. Suppliers must inform the Programme Administrator, by the beginning of February each year, of any potential under-spend in the schemes that they are undertaking.

In addition to the funding available shown in Table 2.1, an additional amount will be collected each year to cover the incentive payments earned by successful schemes.

#### 2.4.1 Applying Inflation to NISEP Funding

The rate of inflation to be used is the RPI (Retail Price Index) referred to as CHAZ (all Items excluding house prices) by the Office of National Statistics (ONS). The RPI average from April to April for each NISEP year is applied. The ONS website is

<http://www.statistics.gov.uk/StatBase/tsdataset.asp?vlnk=229&More=N&All=Y>

#### 2.5 Payment of NISEP Funding

Funding will be paid to primary bidders undertaking approved schemes using the following method:

Payments to be made every three months in arrears, during the relevant scheme year, upon receipt of valid and undisputed invoices and satisfactory evidence of work completed e.g. postcodes of properties and confirmation from beneficiaries that work has been completed.

Invoices and supporting evidence should be submitted to the Programme Administrator on:

1<sup>st</sup> June;

1<sup>st</sup> September;

1<sup>st</sup> December;

1<sup>st</sup> March.

The Programme Administrator will check and approve the invoices then pass the invoices to the Utility Regulator who will authorise payment from the fund.

All scheme submissions must include a proposed profile of spending. In addition, primary bidders will be responsible for informing the Programme Administrator of significant deviations from the proposed profile of spending.

**NOTE: The allocation of NISEP funding to bidders is regarded as a binding contract agreement and as such the Primary bidder has obligations to fulfil the stated aims and objectives of the agreement.**

Subject to the scheme variation approval process, schemes which fail to deliver the measures agreed will be required to return any unspent or mis-spent NISEP funding. In certain circumstances where a Primary Bidder has more than one scheme, the Programme Administrator may agree to the transfer of funding from an unsuccessful scheme to a successful scheme in the same category. It is the responsibility of the Primary bidder to ensure that NISEP funding is spent as agreed and also that they recover such NISEP monies as have not been spent on agreed measures in the event of schemes failing to complete. Allocated NISEP funding can only be spent on the approved scheme unless otherwise agreed by the Utility Regulator and the Programme Administrator.

## 2.6 Focus on Vulnerability

The strategic objectives of the NISEP will continue to be helping customers to use energy efficiently and promoting sustainable energy supplies whilst having due regard for the needs of vulnerable (priority) customers.

Due to the current high level of fuel poverty in NI and the Utility Regulator's statutory duty to have due regard for vulnerable customers, the amount of programme funding ring-fenced for priority customers remains at 80%. The level of this ring-fence for priority customers will be reassessed during the next review.

The main factor in determining financial vulnerability is low income. When assessing vulnerability all priority schemes must include an income threshold as the primary criteria.

In addition, all priority schemes may include one or more of the following criteria which will be considered as intensifying characteristics for financial vulnerability:

- Age - to include older people, young people (under 16) and children;
- Disability or chronic illness;
- Rural location; and/or
- SAP (Standard Assessment Procedure) rating of property of 54 or below.

When working on the targeting of help to the financially vulnerable, the Utility Regulator will firstly consider low income and then use the other characteristics to identify priority households. Each scheme must state how it intends to address this and how the criteria will be assessed for each individual scheme.

Two possible example criteria are illustrated below:

- Single person household with an income/pension of less than £20,000 gross, or;
- Couple or single parent family with an income/pension less than £28,000 gross.

Scheme bidders should use the overarching characteristics as defined above to develop specific eligibility criteria for schemes aimed at priority customers. The scheme-specific vulnerability criteria to be used must be included within the scheme submission at the bidding stage and will be subject to approval by the Utility Regulator. For clarity when setting criteria, scheme bidders should set out how they will attempt to ensure that priority customers are directed towards the scheme that best suits their needs (whether it is a government scheme such as the Warm Homes scheme or a separate scheme approved under the NISEP).

Where possible, if a priority customer meets the criteria for more than one scheme, steps should be taken to ensure that the customer is either given appropriate advice on the best scheme for their individual circumstances, or directed to an appropriate advice giving agency.

## 2.7 NISEP Priority Group Schemes

Under NISEP, the 80% funds set aside for schemes aimed at priority group customers will be split between 'whole house solutions' and 'individual energy efficiency measures'. Both approaches are described below and can include, if

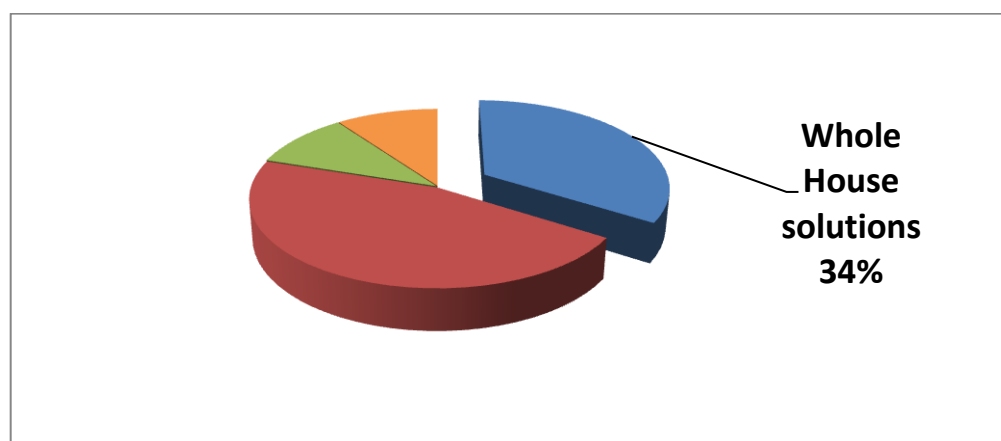
appropriate, the use of renewable technology and/or technology for hard to treat homes such as solid wall insulation.

Priority customers are not expected to contribute financially to measures being installed in their homes. However there may be instances depending on the criteria used for schemes, where it is appropriate that some priority customers can make a contribution. Where this happens, no incentives will be paid on energy savings attributed to the priority customers' contribution. That is to say that for the purpose of calculating incentives the energy savings will be apportioned between the primary bidder and the priority customer on the basis of proportion of funding supplied.

### 2.7.1 Whole House Solutions

34% of total NISEP funding is available for providing whole house solutions, (at least half of which should go to schemes which do not require a customer contribution) i.e. full packages of heating systems and insulation measures (and if appropriate renewables) (Figure 2.1).

**Figure 2.1 Proportion of funding allocated to whole house solutions**



Qualifying households will have electric or solid fuel central heating, no central heating or an old (over 15 years) or broken oil or LPG boiler. NISEP schemes must target such homes, and set appropriate vulnerability criteria to ensure that funds are used to assist those most in need by installing a package of energy efficiency measures, such as those described below:

- Cavity wall insulation (£460);
- Full loft insulation (£570);
- Tank insulation (£12);
- An efficient central heating system with controls (Average £3,700);
- If deemed necessary and appropriate renewable technologies such as solar thermal panels or biomass boilers can also be provided;
- Internal or external solid wall insulation for hard to treat homes;

- Energy efficient lighting/light bulbs may also be provided as part of a whole house solution.

The typical indicative cost (three bedroom semi-detached property, EST Feb. 2010) of these measures is shown in brackets, providing a typical package cost of approximately £4,742.

Table 2.2 below illustrates the funding available for whole house solutions in qualifying homes over this and the next three years.

**Table 2.2 - NISEP Funding for Whole House Solutions (Electric/Solid Fuel Central Heating; No Central Heating; Old Oil or Broken Oil & LPG Boilers)**

Year	Total Available Funding
2011/12	£2,507,520
2012/13	£2,557,670*
2013/14	£2,608,823*

*Note: Heating systems with oil or LPG boilers must be at least 15 years old or be broken beyond viable repair for these properties to be eligible for whole house solutions. Schemes replacing old oil or LPG boilers should ensure that the make, model type and age of the boiler are recorded. An EPC for pre and post installation measures will be required for audit purposes.*

**\*Value shown represents increase on previous year by 2%. This will be confirmed on the basis of the RPI indexation.**

Applicants must put processes in place to ensure that properties are surveyed before work commences to check that the households are eligible for whole house solutions. A survey must also be carried out, post-implementation to ensure all the work has been carried out as intended..

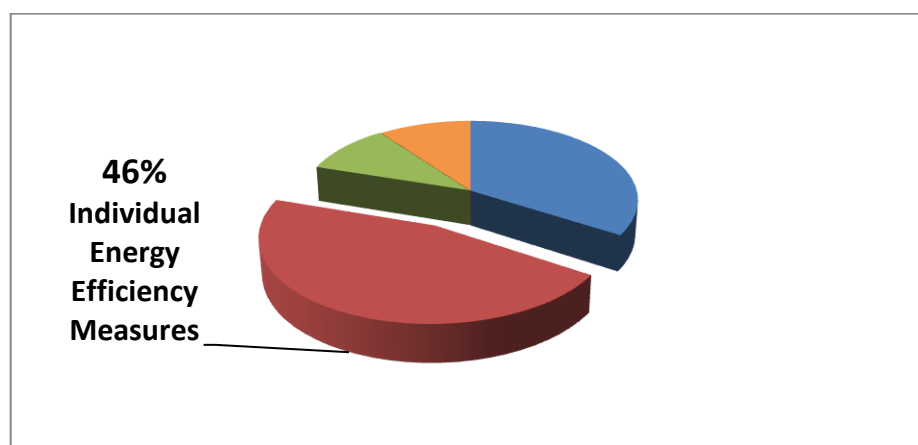
It should be noted that whole house type schemes can receive funding above the level of the ring-fence, bearing in mind they will be competing with other schemes which offer partial solutions to a greater number of properties.

The target level of cost effectiveness for priority group whole house solution schemes is presented in Table 3.5.

### 2.7.2 Individual Energy Efficiency Measures

Up to 46% of the NISEP funding is available for the provision of individual measures, again at least half of which should be for priority customers who cannot afford to make a contribution, (for example heating controls, cavity wall, solid wall and loft insulation, solar thermal panels, biomass boilers and energy efficient light bulbs) see Figure 2.2 as follows.

**Figure 2.2 Proportion of funding allocated to individual energy efficiency measures**



This is in recognition of the fact that the properties may have central heating boilers less than 15 years old that are lacking in controls, or well-controlled heating systems but inadequate levels of solid wall, cavity wall, loft, or tank insulation. Renewable energy technologies are also available in this funding category. Energy efficient light bulbs can also be provided under this section of the Framework but only when provided with other measures.

Again, customers who have been identified as potentially ‘financially vulnerable’ would not normally be expected to contribute to the funding for measures in this category of schemes.

Dwellings receiving measures under this category must be inhabited by priority customers. Guidance on heating controls is given in Section 3.2 of Appendix 6. Where a scheme proposes to install heating controls, a minimum of room thermostat, hot water tank thermostat, associated heating and Domestic Hot Water (DHW) circuit valves, programmer and Thermostatic Radiator Valves (TRVs) must be installed as required.

Table 2.3 illustrates the maximum funding available for individual measures in qualifying homes over this and the next three years.

**Table 2.3 - NISEP Funding for Individual/Other Measures**

Year	Total Available Funding
2011/12	£3,392,527
2012/13	£3,460,337*
2013/14	£3,529,585*

*\*Value shown represents increase on previous year by 2%. This will be confirmed on the basis of the RPI indexation.*

The target level of cost effectiveness for priority group individual measures schemes is presented in Table 3.5 of this document.

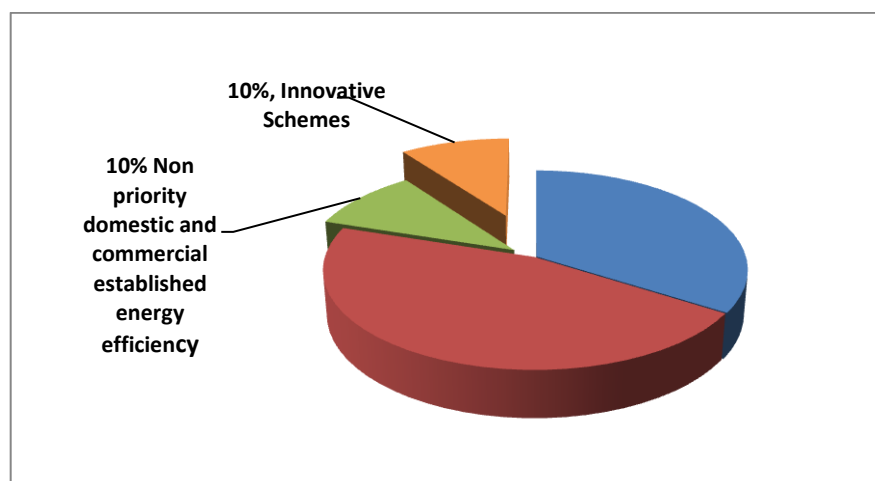
The priority customer group includes innovative schemes such as:

- a) Schemes which reach properties which are hard to treat. These are defined as properties with solid walls that require significant investment in internal or external wall insulation.
- b) Installation of renewable technologies. Analysis of cost-effectiveness has shown that funding for renewable technologies in this sector would best be directed to two technologies - Solar Thermal Hot Water and Biomass boilers but consideration will be given to other micro generation technologies.

## 2.8 NISEP Schemes for Non-Priority Customers

Outside of the main financial vulnerability focus of NISEP, 20% of the total fund is available for non-priority customer schemes (Figure 2.3).

**Figure 2.3 Proportion of funding allocated to non priority customers**



The balance of the 20% of funding allocated for non priority customers is allocated as follows:

- a) Funding for conventional non-priority schemes (both domestic and commercial using established energy efficiency technology) will amount to 10% of total funds.
- b) Total Funding for innovative schemes will amount to 10% of total funds (e.g. £737,506 in 2011/12). Within this context we consider renewable technology to be innovative and have decided that the funding for innovative schemes will be further split into renewable schemes (5% of total funding), and other innovative energy efficiency schemes (5% of total funding).

The definition of innovative schemes in the non-priority group will include schemes which help to bring forward new but proven domestic or commercial technologies that provide a better energy efficiency performance than 'standard' measures. These technologies will typically have been brought to market in the last 3 years.

*Note: the technologies permitted within non-priority group schemes will be continually reviewed by the Utility Regulator and the Programme Administrator.*

Scheme bidders should state in their application why the scheme is innovative and why, in the case of innovative energy efficiency measures, it proposes measures that are an improvement on established technologies.

Table 2.4 illustrates the total amount of funding available for Non-Priority schemes over the next 3 years.

**Table 2.4 - NISEP Funding Available for Non-Priority Customers**

Year	Total Available Funding
2011/12	£1,457,012
2012/13	£1,504,512*
2013/14	£1,534,602*

*\*Value shown represents increase on previous year by 2%. This will be confirmed on the basis of the RPI indexation.*

In order to maximise the cost effective use of NISEP funding, the level of contributions from customers and third parties that applicants should aim for when developing Non-Priority schemes is specified in Section 2.1.

The different target levels of cost effectiveness for non-priority group schemes are presented in Table 3.5.

## 2.9 Indirect Cost Assumptions

Indirect costs include all the applicant's management costs associated with implementing a scheme.

It is important that indirect spend under NISEP is clearly reported in scheme submissions. An applicant submitting a scheme will have to build the indirect costs into the overall scheme costs, breaking them down as follows:

- Scheme design and development;
- Scheme facilitation;
- Grant administration;
- Marketing;
- Monitoring;
- Evaluation and reporting;
- Surveying and Inspection; and
- Third party indirect costs.

When each submitted scheme is evaluated by the Programme Administrator, the level of NISEP funding attributed to indirect costs will be analysed to ensure that indirect costs do not constitute an undue amount of overall scheme costs and that there is no cross subsidy between indirect costs and measures costs.

Indirect costs for an individual scheme should not exceed the allowance, which will be calculated as follows:

$$(\text{£250} \times \text{individual household/commercial property cost}) / (\text{£1000} + \text{individual household/commercial property cost})$$

Examples are shown below:

**Scheme 1** is a scheme to provide insulation in 500 properties. The insulation is estimated to cost **£150** per property:

$$\text{£250} \times \text{£150} / \text{£1000} + \text{£150}$$

$$= \text{£37,500} / \text{£1150}$$

$$= \text{£32.61}$$

- The indirect cost that is allowed per measure is £32.61
- The total cost of the scheme measures is £75,000 (£150 x 500)
- Indirect costs of up to £16,305 (£32.61 x 500) will be allowed i.e. 21.74% of the measure costs for that scheme.

**Scheme 2** is a whole house scheme (heating system plus insulation) costing **£4,200** per property and will provide measures for 80 households:

$$\text{£250} \times \text{£4,200} / \text{£1000} + \text{£4200}$$

$$= \text{£1,050,000} / \text{£5,200} = \text{£201.92}$$

- The indirect cost that is allowed per measure (heating + insulation) is £201.92
- The total cost of the scheme measures is £336,000 (£4,200 x 80)
- Indirect costs of up to £16,153.60 (£201.92 x 80) will be allowed i.e. 4.81% of the measures costs for that scheme.

**Scheme 3** is a commercial scheme aimed at a single large user costing **£10,000**:

$$\text{£250} \times \text{£10,000} / \text{£1000} + \text{£10,000}$$

$$= \text{£2,500,000} / \text{£11,000}$$

$$= \text{£227.27}$$

- The total cost of the scheme measure is £10,000
- The indirect costs for the single measure are £227.27 i.e. 2.27% of the measure cost.

*Note: the limit on indirect costs is a limit on how much the NISEP funding will contribute to indirect costs. If indirect costs are higher but a partner wishes to contribute some of the costs they may do so i.e. the indirect costs may exceed the limit as long as NISEP funding is not paying for the extra amount.*

In cases where an applicant's indirect costs are unavoidably greater than the level allowed, for example in very small schemes or where it is not possible to lever-in indirect costs from other partners, representation must be made to the Utility Regulator via the Programme Administrator, for 'one-off' consideration. All relevant information must be included to justify the level of indirect costs and

evidence (e.g. letters from third parties) provided that indirect costs are not available from other sources.

This procedure must be followed at initial submission stage and at any stage in the development of a scheme, including post-implementation, when it becomes apparent that indirect costs may exceed the level allowed on the above basis.

The Utility Regulator reserves the right to deduct any unapproved overspend on indirect costs from any incentive payments earned.

## **3.0 SETTING THE OVERALL ENERGY SAVING TARGETS**

### **3.1 Energy Savings from Schemes**

Historically, schemes have had their energy savings assessed on the basis of 'ex-ante' figures. That is the savings are agreed in advance of implementation as opposed to an 'ex-post' methodology where the savings would be determined based on energy monitoring before and after the installation of the measure. This practical approach gives an agreed and consistently utilised set of data for all participants and will continue.

BREDEM<sup>3</sup> has been the main source of assessing the energy savings from insulation and heating measure schemes in the past. The model calculates the energy requirements of domestic dwellings and estimates the likely savings resulting from energy efficiency improvements. It is the best validated and most widely used energy model in the UK and when aggregated over all users, has been shown to accurately predict national domestic energy consumption.

The energy savings accredited under NISEP will be expressed in terms of gigawatt hours (GWh) and will reflect the energy benefit to the consumer in terms of reduced bills. 100 per cent of the additional energy savings arising from a scheme will be accredited to the NISEP, unless funding is secured from other sources, whereupon savings may be apportioned as described in section 3.6 of this document.

### **3.2 Savings based on 'Accredited Discounted Lifetime Energy Savings'**

In order to compare the cost of saving energy with the cost of energy supply, savings should be multiplied by the discount factor to give 'discounted lifetime energy savings'. A discount factor, as per the standard in the Treasury Green Book, of 3.5% is used.

It should be noted, however, that the real year-on-year energy savings will consequently be greater than the figures shown in this document. For example, a discounted lifetime energy saving of 100GWh could in fact represent an annual saving of 10GWh for 15 years (150GWh).

### **3.3 Types of Fuels Eligible to be Saved and 'Fuel Standardisation'**

Applicants will be able to implement schemes that save electricity, gas, oil, coal and liquid petroleum gas.

So that the savings of different fuels can be expressed in a consistent manner, the savings will be shown in 'fuel standardised' terms that reflects the fuel's carbon content. The carbon factors used are consistent (with the exception of electricity which is derived from the generation mix on the island of Ireland) with those published by the Department of Energy and Climate Change (DECC) and are consistent with the concept introduced in CERT in GB. This methodology means that the value of energy savings from gas, oil, coal and LPG will be relative to electricity savings in terms of the carbon content of each fuel. For instance, the energy savings claimed from measures installed in electrically heated homes will be higher than other fuels.

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<sup>3</sup> BREDEM - the Building Research Establishment Domestic Energy Model  
NISEP

Table 3.1 following indicates the fuel standardisation factors that are applied to each fuel.

**Table 3.1 Fuel Standardisation Factors**

<b>Fuel</b>	<b>Carbon Content of Fuel (kgC/kWh)</b>	<b>Fuel Standardisation Factor</b>
Electricity	0.136	1.00
Gas	0.052	0.38
Oil	0.068	0.50
Coal	0.082	0.60
LPG	0.058	0.43
Biomass	0.00071	0.0052

The fuel standardisation factors are derived by dividing the carbon factor of each fuel by the carbon factor for electricity. Note figures shown have been rounded to two decimal places, calculations shown in the examples uses exact figures.

Schemes involving renewable technology that generate electricity will assume that the electricity generated is carbon neutral. Similarly biomass is considered to be carbon neutral.

The example in Table 3.2 below shows how this methodology would work when comparing the installation of cavity wall insulation in an electrically heated semi-detached home against one with oil heating.

**Table 3.2 Example of Standardisation Methodology for Cavity Wall Insulation**

<b>Heating fuel of dwelling</b>	<b>BREDEM annual energy savings (kWh)</b>	<b>Fuel standardisation factor</b>	<b>Savings accredited toward targets</b>
Electricity	5,667	1.00	5,667
Oil	5,899	0.50	2947.77

#### **Example of Energy Savings from Installing a Biomass Boiler**

<b>Heating System Fuel Type</b>	<b>Delivered Energy (kWh/a)</b>	<b>Fuel Standardisation Factor</b>	<b>Fuel Standardised Delivered Energy (kWh/a)</b>
Oil (non condensing boiler)	21,860	0.50	10923.57
Biomass	18,458	0.0052	96.30
<b>Energy Saving =</b>			<b>10827.27</b>

### 3.4 Lifetime of Sustainable Energy Measures

In line with the Government's Climate Change Programme, and as has been the case with EEL projects since 2001, the energy saving benefits will be assessed over the full lifetime of the measures. The considered lifetimes of the various measures, which will be used in calculating the energy saving benefits, are shown in Table 3.3 below:

**Table 3.3 Lifetimes of Measures**

<b>Energy Efficiency Measure</b>	<b>Lifetime (years)**</b>
Loft insulation	30
Cavity Wall insulation	42
Internal/external solid wall insulation	36
Efficient boiler	15
Heating Controls	15
Hot water cylinder insulation and pipe insulation	10
Energy efficient lighting (CFLs)	10*
Domestic refrigeration and appliances	Various
<b>Renewable Measures***</b>	
Solar Thermal Hot Water	25
Biomass Central Heating	20

\* May change depending on lamp types supplied. The scheme submission spreadsheet will calculate the lifetime automatically.

\*\* Refer to Appendix 6

\*\*\*Contact Programme Administrator for information on other renewable technologies

### 3.5 Cost of Measures

Table 3.4 indicates typical indicative costs of key measures. The following factors have also been considered when setting suitable measure costs to determine whether or not any adjustment should be made:

- The impact of inflation over the period of NISEP
- The reduction of costs due to bulk purchases on installations

**Table 3.4 Typical Costs of Measures**

<b>Energy Efficiency Measure</b>	<b>Cost</b>
Loft insulation	£570
Cavity Wall insulation	£460
An efficient central heating system	£3,700
Hot water tank Insulation jacket	£12
Energy efficient lighting	£2.55
Solid Wall Insulation (External)	£10,500 - £14,500
Solid Wall Insulation (Internal)	£5,500 - £8,500
<b>Renewable Measure*</b>	<b>Cost</b>
Solar Thermal Hot Water	£3,500
Biomass Central Heating	£9,200

**\*Contact Programme Administrator for information on other renewable technologies**

### 3.6 NISEP Targets and Incentive to Exceed Targets

Levels of target cost effectiveness have been calculated following a review of schemes implemented over the last three years. Where the type of measure/scheme is new to NISEP, the Programme Administrator's assessment was based on a simulation of a typical type of scheme. These are shown in Table 3.5.

Applicants should aim to develop and submit schemes that deliver or exceed this level of cost effectiveness. Schemes that do not deliver the relevant cost effectiveness target can still be submitted, however, they will be unlikely to earn incentives unless efficiencies can be found during the implementation of the scheme and where there is competition for funds within a category they are less likely to be successful in obtaining funds.

NOTE: where a scheme submission has characteristics which significantly differ from the schemes undertaken in that category in the previous three years, the Programme Administrator reserves the right to review target cost effectiveness for that particular scheme. Where this happens the scheme bidder must be informed of the proposed review and accept the change before the scheme can proceed.

**Table 3.5 NISEP Target Cost Effectiveness**

<b>Category</b>	<b>Target Cost Effectiveness (p/kWh)</b>	<b>Incentive Payment £/GWh</b>
Priority Domestic Whole House Solutions (owner occupied)	5.00	2000
Priority Domestic Whole House Solutions (social or private rented housing part-funded by Housing Association or Landlord)	1.97	2000
Priority Domestic Individual Measures (owner occupied)	1.40	2000
Priority Domestic Individual Measures (social or private rented housing part-funded by Housing Association or Landlord)	1.19	2000
Priority Domestic Hard to Treat Homes	10.32	2000
Priority Domestic Renewable Energy - Biomass Boilers	2.243	2000
Priority Domestic Renewable Energy - Solar Thermal	9.754	2000
Non Priority Domestic Whole House Solutions	0.624	1000
Non Priority Domestic Established Individual Measures	0.35	1000
Non Priority Commercial Established Technology	0.25	1000
Non Priority Domestic Innovative Individual Measures	0.35	1000
Non Priority Commercial Innovative Technology	0.25	1000
Non Priority Domestic Hard to Treat Whole House Solutions	2.796	1000
Non Priority Domestic Hard to Treat Insulation Only (including solid or exterior wall insulation)	3.32	1000
Non Priority Domestic Renewable Energy - Biomass Boilers	2.243	1000
Non Priority Domestic Renewable Energy - Solar Thermal	9.754	1000

**Note: Contact Programme Administrator for information on cost-effectiveness targets for other renewable technologies**

It should be noted that the target cost effectiveness for non-priority schemes proposing to use either established or innovative measures is the same, on the basis that innovative technologies will cost more than established technologies but generate more savings. This assumption will be subject to ongoing review as more detail on costs and savings becomes available.

In order to encourage applicants to bring forward schemes and thereby ensure that the objectives of the NISEP are met, the Utility Regulator will award an incentive payment to applicants exceeding the energy saving targets.

The level of incentive payment for each type of scheme is based on each GWh of target exceeded, as set out below:

- Priority Group schemes = £2,000 per GWh of target exceeded
- Non Priority Group schemes = £1,000 per GWh of target exceeded

The variance in incentive payments for Priority and Non Priority Groups is to acknowledge the generally greater degree of complexity involved in undertaking schemes for priority customers, for example: the difficulty in identifying households to participate in a scheme, checking that eligibility criteria are met and ensuring that the person has been referred to the best scheme/programme for them and dealing with individual households and customers with various types of vulnerability.

No incentive is payable for simply meeting the target.

The target cost effectiveness figures, as shown in Table 3.5, are the figures that will be used for target setting purposes. Applicants will be set a target based on the amount of funding bid for and the target level of cost effectiveness for the type of scheme proposed. An example is given below. Levels of target cost effectiveness for NISEP schemes will be subject to annual review.

**Example of Target Setting for a Scheme:**

An applicant is bidding for £500,000 for a priority group individual measures scheme.

- The target cost effectiveness for this type of scheme is 1.3 p/kWh.
- The energy saving target for this applicant would therefore be:

$$\begin{aligned} & ((£500,000 \times 100) / 1.3) / 1,000,000 \\ & = 38.46 \text{ GWh} \end{aligned}$$

Participants are currently required to commit to 'recycle' any incentive earned above the threshold of 8% of total scheme funds (that is NISEP funding plus third party funds) into fuel poverty, energy efficiency and/or renewable schemes which are additional to work already planned. The Programme Administrator must be notified of the destination of these recycled incentives.

**IMPORTANT NOTE: Instances Where Incentives May not be Paid:**

- 1. If schemes are not delivered in accordance with the requirements in the Framework Document, accedence document and/or the terms on which they were approved/varied.**
- 2. Some schemes may involve funding from other energy suppliers or Government Departments/Organisations such as DSD or NIHE. Energy savings must be split pro-rata to the funding unless it can be confirmed in writing that Government Departments/Organisations such as DSD or NIHE would not have undertaken the relevant scheme without NISEP funding and that they (DSD/NIHE) will not be counting the energy savings or measures for the purposes of fulfilling performance targets, then the applicant can be credited with all the savings.**
- 3. If third party funding is sought from a gas/water/electricity license holder, subject to a price control, the energy savings from the scheme must be split between the two license holders pro-rata on the basis of funding provided by NISEP. This is to ensure that there is no double counting between energy savings attributed to another license holder's price control and NISEP.**
- 4. Where significant quality issues are discovered, the Utility Regulator reserves the right to withhold the payment of incentives or payment of further funding until such issues are resolved. For clarity, significant quality issues are taken to mean installations which do not meet safety or energy saving standards or quality of installation standards.**
- 5. Where customer satisfaction rates are low and/or customer complaints remain outstanding, the Utility Regulator reserves the right to withhold the payment of incentives or payment of further funding until a satisfactory resolution has been achieved.**
- 6. Where a priority group scheme requires a customer contribution for the purpose of calculating incentives – the energy savings will be divided pro-rata on the basis of the level of customer contribution. Those savings which result from the customer contribution will not attract an incentive payment.**

If appropriate, apportionment of savings will be discussed with applicants when they are submitting schemes for the following financial year.

Participants should also note that where overall incentive payments to any individual participant (calculated using the above methodology) exceed 8% of total funding under management (that includes NISEP funding and partner funding) participants will be required to sign an agreement to recycle any incentives in excess of 8% of total funding into fuel poverty/ energy efficiency or renewable energy schemes which are additional to work planned and which have been agreed with the Utility Regulator. No incentives above this level will be paid until this agreement has been signed.

### 3.7 Customer Financial Savings

Customers who benefit directly from sustainable energy measures do so in two principal ways:

- Reduced energy consumption leading to lower bills
- Improved comfort

The total benefits to customers should therefore consider both the direct cost savings on electricity and fuel bills and the value of the savings taken up in improved comfort levels. These should be valued at the same rate as the energy savings. Thus, the total benefit to customers is simply the potential energy saving before comfort is accounted for, multiplied by the appropriate unit price.

When calculating the benefits that result from NISEP schemes, the fuel prices illustrated in table 3.6 should be used:

**Table 3.6 Cost of Fuels (Source EST, January 2010)**

<b>Fuel type</b>	<b>Cost per kWh</b>
Electricity peak rate (for lighting and appliances)	15.03 p/kWh
Electricity (heating or insulation measures)	8.12 p/kWh
Gas	3.50 p/kWh
Oil	3.39 p/kWh
Coal	3.82 p/kWh
LPG	5.84 p/kWh
Biomass	2.88 p/kWh

The Programme Administrator will review these prices on an annual basis, and update if necessary, so that an accurate picture of the financial benefits realised by customers benefiting from NISEP can be derived.

The customer financial savings of schemes, on an aggregate basis, will be used as a performance indicator in assessing the overall success of the NISEP for a particular year and the benefits it has produced for society. At an individual level, the customer financial savings of a particular scheme will be used in analysing the success of that scheme and assessing whether similar schemes should be approved in the future.

### 3.8 Carbon Savings

The Energy Saving Trust recommends that the carbon emission factors for the different types of fuels detailed in Table 3.1 are used when reporting the carbon savings resulting from NISEP schemes. These are consistent, with the exception of electricity, with those used in the CERT programme in Great Britain.

The financial and carbon savings resulting from schemes will be calculated automatically by the scheme submission software developed by the Programme Administrator – the Energy Saving Trust.

The carbon savings of schemes, on an aggregate basis, will be used as a performance indicator in assessing the overall success of the NISEP for a particular year and the benefits it has produced for society and the environment. At an individual level, the energy savings of a particular scheme will be used in analysing the success of that scheme and assessing whether similar schemes should be approved in the future.

## 4.0 PROCEDURES FOR SCHEME SUBMISSION

### 4.1 Submitting A Bid

Bids for funding must take the form of a formal detailed scheme submission as discussed in this section and use the pro-forma submission form in Appendix 1. Applicants are required to complete and send to the Programme Administrator a signed, hard copy of each submission. Schemes must also be submitted electronically to the Programme Administrator using the software that will be provided.

Note: Any false declaration made on the scheme submission form will be treated as fraud and dealt with accordingly.

A call for schemes is sent out in September each year to all registered primary bidders. Schemes proposed for a given financial year must be submitted between the call for schemes going out and 30 November (i.e. schemes proposed for the 2011/12 financial year must be submitted between September 2010 and 30 November 2010). Bidders who are unsure of the process or unclear of what needs to be submitted may contact the Programme Administrator for guidance on submitting their scheme and if appropriate submit a draft bid. However, the final and complete scheme submission must be submitted to the Programme Administrator by 30 November at the latest.

Any bids received after 30 November may not be considered for funding. Bids received within the appropriate time period but which are incomplete or of insufficient quality may also be rejected.

**There will be no opportunity to resubmit bids for approval after 30 November.**

Primary bidders for funding will be required to name any scheme partners who will be working with them on scheme delivery, and state any management arrangements in place. (e.g. in past schemes there have been partnerships with retailers, voluntary organisations etc. In the future we would encourage such partnerships to continue). Primary bidders will have sole responsibility for any contractual arrangements or agreements in relation to the scheme submitted.

Following the bidding period, applicants should be informed by the end of February if their bids have been successful or otherwise.

All bids for funding must be sent to the Programme Administrator at the following address:

NISEP Programme Administrator  
Energy Saving Trust (NI)  
Enterprise House  
55/59 Adelaide Street,  
Belfast  
BT2 8FE

Tel: 028 9072 6005

Fax: 028 9023 9907

Electronic copies of bids must also be sent to the following e-mail address:

[nisep@est.org.uk](mailto:nisep@est.org.uk)

#### 4.2 Scheme Referencing

Each NISEP scheme submitted must have a specific reference number.

The format of this number shall be made up as follows:

#### **Applicant ID / Year / Scheme Number / Scheme Measure Type / Customer Type**

The Applicant ID should consist of 3 or 4 letters that clearly identify the applicant, for example NIE Energy's ID would be 'NIEE'.

The year should be shown as the last two digits of the financial year in which the scheme is to be implemented.

The scheme number should consist of two digits. Should an applicant submit more than one scheme in a given financial year, the scheme number should increase sequentially for each scheme, e.g. 01, 02 etc.

The scheme measure type should be shown as follows:

**A** = Appliances only

**H** = Heating (Including boilers and controls) only

**I** = Insulation only

**L** = Lighting only

**M** = Mix (e.g. a lighting & insulation scheme or a heating and appliance scheme)

**R** = Renewable Energy

**O** = Other measures not covered by the above

The customer type should be shown as follows:

**P** = Priority group customers

**NP** = Non-Priority group customers

To illustrate an example, if NIE Energy submitted one scheme to be undertaken in the 2011/12 financial year, and that scheme was an insulation scheme aimed at non-priority customers, the scheme reference number would be: **'NIEE 11 01 I NP'**.

#### 4.3 Statement of Method

Applicants must submit a Statement of Method for each scheme which must consist of the following:

1. Written description of the scheme
2. Technical details of the scheme










Guidelines on the main areas that applicants must cover are contained in the following paragraphs. This is not intended to be an exhaustive list of requirements but should provide a useful template for applicants to use when preparing their scheme submissions. A scheme submission form for recording the main details is provided in Appendix 1 but supplementary information may also be submitted, as necessary, to ensure that the Programme Administrator receives full details of the scheme.

#### 4.3.1 Written description of the scheme







The intention of the written description is to provide the Programme Administrator and the Utility Regulator with sufficient information to be able to effectively evaluate submissions. Where schemes are particularly large, complex or innovative, additional information may be required.

The written description **must** contain:






- The scheme reference number;
- The scheme title – must not contain Applicant's name;
- The scheme description must include the following 15 areas of detail:

-  A detailed description of the scheme, including the measures involved. This must clearly indicate whether or not the scheme is aimed at vulnerable (priority) customers or is aimed at non-priority customers
-  A description of the properties targeted by tenure type (Owner Occupier/Private Rented/NIHE/Housing Association), if applicable to the scheme
-  A statement providing evidence of the additionality of the scheme, as per section 2.2 of the Framework Document
-  A description of the scheme partners involved and their role including financial contribution if any
-  An indication of any links with other programmes
-  The time-scale of the scheme and the intended time plan for implementing the scheme, i.e. start and finish dates
-  An indication of who will carry out the scheme, and how they were selected (e.g. where contractors have been appointed - has a competitive tender process been undertaken?)
-  Where the scheme is to take place, geographically
-  A summary of the costs (by applicant, customers and other parties) of the scheme. This must also include a breakdown of indirect costs, and where applicable, costs per survey/inspection. Supporting documentation

of costs must be provided<sup>1</sup>. A profile of forecast spending for the scheme broken down to monthly forecast spend should also be provided.

-  The forecast energy savings. Calculations must be included to support energy savings.
-  Technical specification for products submitted (website/brochure).
-  A statement of how the scheme will address the customer satisfaction monitoring requirements specified in section 5. The questionnaire to be used should be included with the scheme submission. Examples of customer satisfaction questionnaires are set out in Appendix 2.
-  A statement of how the applicant will quality assure the work to be carried out and what standards will apply.
-  A statement of how and when the applicant will carry out risk assessments and how they will monitor the Health and Safety aspects of the work to be carried out.
-  A statement of how the scheme will target the most vulnerable homes, as per section 2.6 of the Framework Document.

A description of how the scheme is to be marketed and targeted – this must include:

-  Which type of customer groups are being targeted
-  An estimate of the proportion and type of priority customers targeted, and on what grounds they are deemed to be vulnerable (vulnerability criteria)
-  An indication of how the scheme is to be promoted and marketed (include sample of marketing material/application form to be submitted for review)
-  A description of the terms on which the scheme is being offered to customers, including the level of financial contribution
-  An indication of what commitments, if any, are required of customers covered by the scheme

**Note:** Applicants are required to provide evidence of their ability to effectively manage the cost of such schemes.







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<sup>1</sup> If it is not possible to confirm actual costs of measures at the time of scheme submission, estimated costs will be acceptable but the scheme must be resubmitted when costs have been confirmed before full approval can be granted for the scheme to go-ahead

#### 4.3.2 Technical Details of the Scheme

Applicants must submit the technical details of the scheme using the submission software, which will be provided by the Programme Administrator.

The main technical details which require input are:

-  Scheme reference number
-  The total number of different types of measures targeted by the scheme. This must be broken down by property type, property heating fuel type and customer grouping (this applies to building fabric measures only)
-  Details of the direct cost of each measure per property type and customer grouping (non-priority / priority)
-  Details of the amount of applicant, customer & third party financial contribution per measure
-  A forecast of the total level of indirect (management and administration) costs
-  Fuel Switching Costs and Carbon Savings for relevant fuel switching scenarios

#### 4.4 Scheme Approval

Scheme submissions must be developed in compliance with the operational rules and procedures of the NISEP as set out in this Framework document. If a scheme is approved on the basis of inaccurate or inappropriately compiled information, the Utility Regulator reserves the right to take remedial action.

Once the Programme Administrator has reviewed the scheme submissions and is satisfied that the relevant criteria have been met, and that the schemes fulfil the objectives of the NISEP, it will recommend the schemes to the Utility Regulator for approval.

In the case of bids in a particular category exceeding the level of funding available, the more cost-effective schemes will be approved. However, to ensure the best use of funds and also equality of opportunity considerations, the Utility Regulator reserves the right to accept less cost effective schemes, e.g. where they provide good additionality or where geographic spread or specific target groups are relevant.

Applicants will be notified of final approval in writing from the Utility Regulator. Schemes **must not** commence until final approval has been granted and confirmed by the Utility Regulator.

Applicants should note that the Utility Regulator's written approval for a scheme acts as an agreement between the applicant and the Utility Regulator to undertake the scheme in accordance with the rules of the framework document and their submission.

To ensure programme participants are informed that funding has been obtained from the NISEP, the scheme must incorporate the NISEP logo in accordance with branding guidelines, in conjunction with the scheme participant's logo if required, on scheme documentation, publications and any other publicity material. (See branding guidelines on Utility Regulator web site [http://www.niaur.gov.uk/uploads/publications/2009-12-14\\_NISEP\\_Branding\\_guidelines.pdf](http://www.niaur.gov.uk/uploads/publications/2009-12-14_NISEP_Branding_guidelines.pdf).)

#### 4.5 Scheme Variation

The Programme Administrator must be informed of any significant change or variation to the approved scheme via a Scheme Variation Form (see Appendix 4). Applicants will be notified by writing if the change/variation has been approved. If the variation regards the reallocation of funding from an underperforming scheme to a successful scheme, clear evidence of underperformance must be provided.

In the event that scheme variations exceed the accepted tolerance levels, and approval has not been granted by the Utility Regulator, any relevant costs may be required to be borne by the applicant.

Under-spend from an underperforming scheme must not be transferred to another scheme without prior endorsement from the Programme Administrator and approval from the Utility Regulator. Overspend on a successful scheme will be at the scheme manager's own expense, unless approval has been given to transfer funds from an underperforming scheme.

#### 4.6 The NISEP Programme Timetable

The NISEP timetable is set out in Figure 4.1. The cycle for the programme runs over a number of calendar years with the NISEP programme year running from April to March.

- Registration for organisations interested in participating in the NISEP, the following year, will commence in June.
- In September a request for submissions for schemes to commence the following April is made to all registered Primary Bidders.
- All bids for the coming year are received by the Programme Administrator by 30 November.
- Applicants will be informed before the end of February of the outcome of their application (please note that this will be subject to the timely provision of any further information requested on scheme submissions).
- In April, at the start of the programme year, schemes commence.
- At the end of June (after 3 months) the PA should be notified on progress and whether or not the scheme will run as planned.
- By March at the end of the programme year the schemes will have finished, bar those which are designed to run over a number of years.
- Progress reports are submitted throughout each implementation year after six months (in October) and nine months (in January). Potential under-spends are to be flagged in mid-February.

- Once schemes are completed, a Post-Implementation Report must be submitted by 30<sup>th</sup> June.
- Incentive payments, where earned will be paid in the following September (subject to the timely provision of any further information requested and the approval of the Post-Implementation Reports).

The Programme Administrator will complete audits of each of the schemes and will complete an Annual Report detailing overall performance of the NISEP.

**FIGURE 4.1 NISEP Operational Timetable**

<b>Month</b>	<b>Action</b>	<b>Target Date</b>	<b>Responsibility</b>
April	Commencement of approved schemes	1 <sup>st</sup> April	Primary Bidder
June	Registration commences for new participants for next year	1 <sup>st</sup> June	Primary Bidder (new)
	Post-implementation reports submitted for previous year's schemes	30 <sup>th</sup> June	Primary Bidder
	3-month update confirming current schemes will go ahead	30 <sup>th</sup> June	Primary Bidder
August	Audit of previous year's schemes	31 <sup>st</sup> August	Programme Administrator
	Incentive payments calculated for previous year	31 <sup>st</sup> August	Programme Administrator
	Framework targets for next year reviewed	31 <sup>st</sup> August	Programme Administrator
September	Revised Framework Document for next year published	14 <sup>th</sup> September	Utility Regulator
	Letter sent to registered Primary Bidders inviting submissions for next year	14 <sup>th</sup> September	Utility Regulator
	Seminar held for registered Primary Bidders and Scheme Partners	30 <sup>th</sup> September	Programme Administrator
	Audit report completed for previous year	30 <sup>th</sup> September	Programme Administrator
	Payment notices sent to NIE T&D for incentives earned in previous year	30 <sup>th</sup> September	Utility Regulator
October	6-month interim report for current schemes submitted	7 <sup>th</sup> October	Primary Bidder
	Annual report on performance in previous year completed	31 <sup>st</sup> October	Programme Administrator
November	Scheme submissions for next year sent to Programme Administrator	30th November	Primary Bidder
January	9-month interim report for current schemes submitted	14 <sup>th</sup> January	Primary Bidder
February	Schemes submissions for next year evaluated and endorsed	7 <sup>th</sup> February	Programme Administrator
	Under-spend on current schemes reported	7 <sup>th</sup> February	Primary Bidder
	Letters sent to Primary Bidders re. approval of next year's schemes	28th February	Utility Regulator
March	Completion of current schemes	31 <sup>st</sup> March	Primary Bidder
	Payment notices sent to NIE T&D for new scheme funding	31 <sup>st</sup> March	Utility Regulator

## 5.0 SCHEME REPORTING

### 5.1 Interim Progress Reporting

Applicants who have schemes approved must notify the Programme Administrator and the Utility Regulator after three months (i.e. in July) whether or not the scheme will proceed in a timely manner and as originally submitted. If this notification is not received the scheme approval may be cancelled.

Applicants undertaking NISEP schemes must submit an interim report (see Appendix 5) to the Programme Administrator after six months (i.e. October) and nine months (i.e. January) of each financial year they implement NISEP schemes. This report must provide details, on a scheme by scheme basis, of the current NISEP spend to date and the forecast final NISEP spend. Applicants are encouraged to provide additional detail of any issues they think may be of interest to the Programme Administrator and the Utility Regulator such as details of any corrective action to be taken to ensure the approved scheme is delivered as planned.

In addition, applicants must inform the Programme Administrator of any forecast under spend in their schemes by mid February.

The Programme Administrator will forward these interim reports to the Utility Regulator. Scheme variations should be reported, at the time they occur, in accordance with Section 4.5.

### 5.2 Scheme Completion Reporting

Once a scheme is completed, applicants are required to complete a post-implementation form (see Appendix 3) which must be submitted together with other documentation to the Programme Administrator by 1 July.

The documentation submitted must include:

- Submission spreadsheets containing final outturn data. All information to be quoted on the post-implementation form can be derived from these sheets.
- Results of customer satisfaction or quality monitoring activities. If it is not possible to submit the customer satisfaction information at the time of completion, it may be supplied subsequently. It should always be possible to submit quality monitoring feedback on installed measures prior to final reporting.
- Completed Post-Implementation Form:
  - All sections must be completed.
  - Within the additional information section, it is important to explain any discrepancies between original scheme submission and completion.
- In the case of costs and savings figures, this may be due to more or less uptake than was initially envisaged (in which case any known factors should be cited), or something more specific such as extra fulfilment costs.
- In the case of scheme methodology, it may be an alteration of delivery

mechanism, or a change in terms of the measures offered.

- The model of measures delivered must be specified where relevant. CFL models should be specified so as to allow cross-checking with the Energy Saving Trust approved list, and cold appliances and boilers, where the savings are related to the manufacturer's energy label, should be included.

### 5.3 Geographical and Sectoral Information

Along with the post-implementation report, information must be supplied on the geographical distribution of both Priority and Non-Priority schemes. This information must include the number and types of measures installed and the NISEP spend for each District Council area covered. For Priority Schemes, information should also be supplied for the NISED (see below) and, as far as possible, sectoral information on the vulnerability characteristics of the customers benefiting from measures.

#### *NI Sustainable Energy Database (NISED)*

NISED is an Energy Saving Trust database that provides a repository for recording the physical characteristics of individual NI domestic properties and the status of the specific heating and building fabric energy efficiency measures in those dwellings. There is also reference to measures and initiatives that reduce the energy consumption of lighting and domestic appliances. As a result NISED provides a means to collect a detailed picture of the state of sustainable energy of the NI housing stock. Currently 38% of NI domestic stock is in NISED.

The data required must consist of the address of the property together with details of measures installed and other supporting information such as property type, number of bedrooms, heating fuel and installation date. The recording of this data in the database will allow a quick and easy way for the Programme Administrator to verify what sustainable energy solutions have been installed in individual dwellings and where they have been installed.

Applicants undertaking schemes under NISEP **must** submit data for inclusion in NISED.

The Energy Saving Trust will accept data in electronic format from applicants carrying out NISEP schemes and will also make software available to record this information if necessary.

It is the primary bidders responsibility to ensure that they are compliant with data protection legislation in relation to data given to the Programme Administrator.

## **6.0 SCHEME MONITORING AND AUDITING**

### **6.1. Customer Satisfaction Monitoring**

Applicants are required to undertake and report on the monitoring of customers' satisfaction with the scheme and the measures installed. The applicant should target a minimum of 10 per cent of all homes receiving individual measures and 100% of homes receiving whole house solutions, with the exception of retailer offers.

For further guidance, Appendix 2 of this document contains examples of customer satisfaction surveys. An example is given for lighting schemes, heating/insulation schemes and renewable energy schemes.

### **6.2 Quality of Installation Monitoring**

It is important that high standards are maintained and form part of a 'quality culture' adopted by all applicants. We therefore require applicants to include within the written description of the scheme the quality assurance (QA) procedures they intend to adopt when undertaking the scheme.

The QA procedure must address issues such as the quality of materials used and products installed. However for appliance schemes, assuming that all products used have relevant CE marking, and have an energy performance rating of A, there is no additional quality monitoring requirements.

Additionally, applicants must quality assure (QA) working practices. There is a requirement to survey and report on the quality of installation in a minimum of 10 per cent of homes receiving insulation and controls measures. Where heating measures are installed, applicants must survey and report on the quality of installation in 100 per cent of homes receiving measures.

Quality monitoring should be carried out by a suitably qualified person, who should check whether or not the measures have been installed in line with approved British Standards, etc. Any deficiencies identified in the quality of installation in all completed work must be rectified. Some of the more frequently referred to Standards are listed in Appendix 6 of this document. Quality monitoring is the responsibility of the Primary Bidder.

Should bidders undertake schemes in conjunction with other organisations, such as the Northern Ireland Housing Executive (NIHE), then it may be the case that these organisations will undertake quality monitoring. Should this be the case, partnership applicants must provide an outline of the QA procedure adopted by the partner organisation for the scheme. Likewise, QA procedures adopted by other nominated scheme partners may be used if suitable and agreed.

Where schemes are undertaken in the industrial and commercial sector, quality monitoring should be undertaken for at least 10% of installations where installations are in the price range of £1,000 - £50,000 and for at least 50% of installations where the price is from £50,000 to £100,000, and for 100% of installations where the installation cost exceeds £100,000.

### **6.3 Scheme Auditing**

All schemes, once completed will be subject to a random audit by the Programme Administrator. The purpose of the audit will be to check that the

scheme has been implemented in the manner approved by the Utility Regulator, and that the funding has been utilised as reported by the applicant. Applicants will be required to retain all paperwork relating to the scheme operation, additionality, performance and monitoring and make it available for audit inspection. This information should be retained by the applicant for at least six years after the scheme has been completed.

The following information is likely to be reviewed during Programme Administrator's audit:

- **Financial Information:**

The scheme costs and the customer/third party/applicant contributions to the scheme will be established, and checked against those claimed in the schemes completion report. Purchase orders, invoices etc., which must be retained by the applicant, will be viewed to verify this.

The key aim will be to establish the amount of NISEP funds spent by the applicant on the approved scheme.

- **Tendering:**

The audit will check that the selection of scheme installers, managing agents and key product providers has been subject, where necessary, to competitive tender. If affiliated organisations have been used, the justification for doing so will be explored – in such cases the Applicant must retain evidence e.g. benchmarked costs, to demonstrate that value for money has been obtained.

- **Installation of Measures:**

The audit will check that the types of measures installed are consistent with the approved scheme submission/variation.. With regard to completed schemes, it will be necessary for the applicant to provide evidence that the numbers and types (including property types) of measures claimed to be installed in the completion report are correct.

Some specific areas may include:

- That cold appliance schemes have made appropriate arrangements for the disposal of old appliances.
- That CFLs delivered are on the Energy Saving Trust's approved list.
- That appropriately trained/accredited installers and accredited products have been used.

- **Delivery Mechanisms:**

The audit will check that the delivery mechanisms and terms under which a scheme is offered to customers is in line with that described in the approved scheme submission/variation (as set down in section 4), including the involvement of any retailers or contractors.

- **Energy Savings:**

The audit will check that the scheme delivered the required energy savings. Energy Savings will be calculated in accordance with the methodology used by the Programme Administrator .

- **Additionality:**

The audit will check that there is evidence to support the statement of additionality of the scheme made in the scheme submission. Evidence of additionality will be inspected and therefore should be retained for audit purposes.

- **Scheme Variations:**

The audit will check that appropriate approval was obtained for any variations to the scheme submission.

- **Monitoring:**

The audit will check the methodology the applicant had in place for:

- QA, with regard to the installation of measures (including how failures are rectified, what per cent of installations checked, who carries out these checks, whether or not measures, in particular CFLs, are of a correct specification).
- Customer satisfaction (including the per cent of customers questioned and how dissatisfied customers are dealt with).

## GLOSSARY

**Energy efficiency** – Energy efficiency is using less energy to provide the same level of energy service. For example, insulating a home allows a building to use less heating and cooling energy to achieve and maintain a comfortable temperature. Another example would be installing energy saving light bulbs instead of incandescent lights to attain the same level of illumination. Efficient energy use is achieved primarily by means of a more efficient technology or process rather than by changes in individual behaviour.

**Energy saving light bulbs** – also known as compact fluorescent lamps (CFLs) these are miniature fluorescent tubes which can be inserted into any lamp holder (assuming the bayonet/fitting is appropriate). A CFL will emit higher degrees of light for a given power rating.

**Carbon/Carbon dioxide emissions** – fossil fuelled power stations generate electricity by burning large amounts of fossil fuels to turn water into steam. These fuels contain carbon and during combustion this combines with oxygen to form carbon dioxide which is a greenhouse gas. Greenhouse gases are accepted as contributing to climate change.

**Carbon neutral** – a fuel source which captures carbon as it grows to release it during combustion may be regarded as carbon neutral since there is no net increase in carbon release.

**Trade Association** – a body which represents the constituent member organizations or individual members associated with a particular trade or activity.

**Fuel poverty** – a customer is said to be in fuel poverty, or is deemed as 'fuel poor' if they spend more than 10% of their weekly income on energy.

**'Hard to heat' or 'hard to treat' homes** – These are homes which are constructed with solid walls, generally without a cavity between the outer external wall and the inner wall surfaces.

**Renewable technologies** – generally, technologies which produce energy without consuming or depleting a fuel and which are driven from sources which can be replenished. Examples appropriate to buildings would be wind turbines, heat pumps, hydro electric plants, biomass boilers or solar panels for heat or electricity (PV). In the case of biomass the fuel is regarded as close to carbon neutral because the carbon dioxide locked up in the wood is released when it is burned. Transporting the wood fuel introduces higher carbon content into the balance.

**Sustainable Energy Measures** – The materials and technologies which are used within homes to provide an improvement in energy efficiency. A measure

could be the installation of insulation in a loft or cavity wall or a complete heating system.

**Public Service Obligation** – A Public Service Obligation (PSO) Levy is a charge relating to the costs to electricity customers to pay for energy efficiency or sustainable energy services for customers. A PSO must be enacted through appropriate legislation.

**Statutory Organisation** – an organisation which exists due to a legal or government requirement.

**Priority domestic customers** – this is an identified domestic customer group within the energy consumer sector. They are deemed as priority because they will benefit most from targeted energy efficiency, renewable energy and heating system measures. They are vulnerable on the basis of income and their ability to pay for energy particularly during cold periods.

**Non-priority domestic customers** – an identified domestic customer group who are not deemed as priority generally because they have the means to pay for the energy saving measures from within their own budget.

**Scheme Partner** – refers to some other party who is a contributor to the scheme e.g. through providing additional funding, providing access to the scheme participants or carrying out some of the work.

**Managing Agent** – someone or an organisation who is contracted to oversee the installations or programme of work.

**SAP Rating** – The SAP is the Government's recommended system for energy rating of dwellings. The Standard Assessment Procedure is used for:

- calculating the SAP rating, on a scale from 1 to 120, based on the annual energy costs for space and water heating
- calculating the Carbon Index, on a scale of 0.0 to 10.0, based on the annual CO<sub>2</sub> emissions associated with space and water heating.

The SAP rating is used to fulfil requirements of the Building Regulations to notify and display an energy rating in new dwellings.

## **ACRONYMS**

NISEP – Northern Ireland Sustainable Energy Programme

NIAUR – Northern Ireland Authority for Utility Regulation, also Utility Regulator

NIE – Northern Ireland Electricity

NIEE – NIE Energy

EEL – Energy Efficiency Levy

PNG – Phoenix Natural Gas

EU – European Union

LPG – Liquid Propane Gas

RPI – Retail Price Index

DETI – Department of Enterprise, Trade and Investment

DSD – Department of Social Development

# Appendices

# **Appendix 1**

## **Scheme Submission Form**

## APPENDIX 1 – SCHEME SUBMISSION FORM

### Northern Ireland Sustainable Energy Programme Scheme Submission Form 20xx – 20xx

<b>Scheme name</b>	
<b>Scheme reference number</b>	
<b>Detailed Scheme description</b>	
<b>Scheme category</b>	
<b>Properties to be targeted</b>	
<b>Vulnerability criteria (if priority scheme)</b>	
<b>Statement of Additionality</b>	
<b>No of households/commercial premises benefiting</b>	
<b>Scheme linked with other programmes?</b>	
<b>Timescale</b>	
<b>Geographic location</b>	
<b>Marketing</b>	
<b>Quality monitoring</b>	
<b>Customer Satisfaction</b>	
<b>Applicant's role</b>	
<b>Scheme Partners selection process</b>	

<b>Managing agent</b>				
<b>Other partners role</b>				
<b>Energy Savings</b>	<b>Total Fuel Standardised Energy Savings (GWh)</b>	<b>Cost Effectiveness (p/kWh)</b>	<b>Total Annual Carbon Saving (tC/a)</b>	<b>Total Lifetime Carbon Saving (t/C)</b>
<b>Funds to be made available from NISEP (£) (&gt;20%)</b>				
<b>Total Measures Subsidies (£)</b>				
<b>Applicant Indirect Costs (£) Detailed Breakdown i.e. £ Marketing, £ Grant Admin, £ Per Survey</b>			<b>% of NISEP Funding</b>	
<b>Total Scheme Cost (£)</b>				
<b>Forecast Profile of Spend. E.G. 25% by June, 50% by Sept, 75% by Dec</b>				
<p><b>Have you submitted this or a similar scheme in previous years Yes___ No___</b></p> <p><b>If yes was the scheme successful Yes___ No___</b></p> <p><b>If no please give reasons</b></p>				
<p>Will this scheme be reported to DETI, by the Applicant or any Scheme Partners, with respect to compliance with the Directive 2006/32/EC on Energy End Use, Efficiency and Energy Services? Yes_____ No_____</p>				
<b>Additional Comments</b>				
<b>Submitted by</b>				
<p><b>I agree that the information contained in this submission is to the best of my knowledge true, accurate and in accordance with the NISEP Framework Document. I accept the rules contained within the Framework Document.</b></p> <p><b>I am aware that supplying any deliberately false information or making a deliberately false statement may result in prosecution.</b></p> <p><b>I agree to supply information to the Programme Administrator as requested within the terms of</b></p>				

**the Framework Document. I agree to cooperate fully with all audits, including the provision of access to premises and records, and where necessary the physical inspection of installations.**

**Signature:** \_\_\_\_\_

<b>Date</b>	
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## **Appendix 2**

# **Customer Satisfaction Survey Examples**

## APPENDIX 2 – CUSTOMER SATISFACTION SURVEY EXAMPLES

### Northern Ireland Sustainable Energy Programme Customer Satisfaction Survey - Lighting Scheme

You have recently been a recipient of some low energy lighting through the Northern Ireland Sustainable Energy Programme. In order to evaluate the success of the programme, it would be useful for us if you could take just a couple of minutes to complete this short questionnaire.

Name						
Address						

Q1	Where have you installed the new lamp(s)?	Hall/landing	<input type="checkbox"/>
		Kitchen	<input type="checkbox"/>
		Living Room	<input type="checkbox"/>
		Bathroom	<input type="checkbox"/>
		Bedroom	<input type="checkbox"/>
		Other (please specify)	<input type="text"/>

Q2	Were you already using energy saving lamps before installing the new ones? (Please circle how many you already had fitted)	1	2	3	4	5	6	6+

Q3	Would you buy energy saving lamps anyway, without this offer being made available?	Yes	<input type="checkbox"/>
		No	<input type="checkbox"/>
		Don't know	<input type="checkbox"/>

Q4	Do you use your lighting more or less than before installing low energy lamps?	Much less	<input type="checkbox"/>
		A bit less	<input type="checkbox"/>
		About the same	<input type="checkbox"/>
		A bit more	<input type="checkbox"/>
		Much more	<input type="checkbox"/>

Q5	Are you likely to fit another energy saving bulb when the current one(s) fail?	Yes	<input type="checkbox"/>
		No	<input type="checkbox"/>
		Don't know	<input type="checkbox"/>

Q6	What do you think are the main advantages of energy saving lamps? (Tick all that apply)	Save energy	<input type="checkbox"/>
		Better for the environment	<input type="checkbox"/>
		Save money	<input type="checkbox"/>
		They last longer	<input type="checkbox"/>

Q7	What do you think are the main disadvantages? (Tick all that apply)	Different tone of light	<input type="checkbox"/>
		They are ugly	<input type="checkbox"/>
		Take time to brighten up	<input type="checkbox"/>

Other (please specify)

Q8	What is your overall level of satisfaction with the lamps you have received?	Very satisfied	<input type="checkbox"/>
		Quite satisfied	<input type="checkbox"/>
		Neither satisfied nor dissatisfied	<input type="checkbox"/>
		Not very satisfied	<input type="checkbox"/>
		Not at all satisfied	<input type="checkbox"/>

Q9 If you answered 'Not very satisfied' or 'Not at all satisfied' in Q8, please explain

*Thank you for taking time to complete the questionnaire, this information is very useful to us to ensure we get the best out of future Northern Ireland Sustainable Energy Programme schemes.*

*Please return the completed form to: (Insert Scheme Developer's address)*

## Northern Ireland Sustainable Energy Programme Customer Satisfaction Survey – Heating/Insulation Measures

You have recently been a recipient of heating and/or insulation measures through the Northern Ireland Sustainable Energy Programme. In order to evaluate the success of the programme, it would be useful for us if you could take just a couple of minutes to complete this short questionnaire.

Name			
Address			

Q1	What measures did you have installed? (tick all that apply)	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Loft insulation  Cavity wall insulation  New heating system  New heating controls  Thermostatic radiator valves </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div>
Q2	How satisfied were you with the quality of work undertaken by the installers?	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Very satisfied  Quite satisfied  Neither satisfied nor dissatisfied  Not very satisfied  Not at all satisfied </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div>
Q3	Is your home warmer than before the energy saving measure(s) were installed?	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Yes  No    Don't know </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>    <input type="checkbox"/> </div> </div>
Q4	Are your fuel bills lower since the energy saving measures(s) installed? (May not be applicable if no fuel bill has been received since installation).	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Yes  No    If yes, please comment </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>    <div style="border: 1px solid black; height: 25px; width: 100%;"></div> </div> </div>
Q5	Were you given energy saving advice at the same time as the work was carried out?	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Yes  No </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/> </div> </div>
Q6	How would you rate this energy advice?	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Excellent  Good  Satisfactory  Poor  Very Poor </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div>
Q7	Overall, how would you rate the energy saving scheme?	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Excellent  Good  Satisfactory </div> <div style="width: 15%;"> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div>

Poor ☐  
Very Poor ☐

If you have any additional comments about any aspect of the work carried out, please use the space below.

--

*Thank you for taking time to complete the questionnaire, this information is very useful to us to ensure we get the best out of future Northern Ireland Sustainable Energy Programme schemes.*

*Please return the completed form to: (Insert scheme Developer's address).*

## Northern Ireland Sustainable Energy Programme Customer Satisfaction Survey – Renewable Energy Measures

You have recently been a recipient of renewable energy measures through the Northern Ireland Sustainable Energy Programme. In order to evaluate the success of the programme, it would be useful for us if you could take just a couple of minutes to complete this short questionnaire.

Name:

Address:

--

Renewable Energy Scheme

Q1	What Renewable Technology was installed?	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%; background-color: #d3d3d3;">Combined Heat and Power</td><td style="width: 20%;"></td></tr> <tr><td style="background-color: #d3d3d3;">Solar Water Heating</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Ground Source Heat Pumps</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Biomass Heating</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Wind Turbines</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Photovoltaic</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Micro Hydro</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Other (please state)</td><td></td></tr> </table>	Combined Heat and Power		Solar Water Heating		Ground Source Heat Pumps		Biomass Heating		Wind Turbines		Photovoltaic		Micro Hydro		Other (please state)	
Combined Heat and Power																		
Solar Water Heating																		
Ground Source Heat Pumps																		
Biomass Heating																		
Wind Turbines																		
Photovoltaic																		
Micro Hydro																		
Other (please state)																		
Q2	What prompted you to buy a renewable energy system?	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%; background-color: #d3d3d3;">To save money on your energy bills</td><td style="width: 20%;"></td></tr> <tr><td style="background-color: #d3d3d3;">Good for the environment</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Both</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Other (please state)</td><td></td></tr> </table>	To save money on your energy bills		Good for the environment		Both		Other (please state)									
To save money on your energy bills																		
Good for the environment																		
Both																		
Other (please state)																		
Q3	Have you recommended buying a renewable energy system to anyone else?	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%; background-color: #d3d3d3;">Yes</td><td style="width: 20%;"></td></tr> <tr><td style="background-color: #d3d3d3;">No</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Don't Know</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">If no, please state why</td><td></td></tr> </table>	Yes		No		Don't Know		If no, please state why									
Yes																		
No																		
Don't Know																		
If no, please state why																		
Q4	How satisfied were you with the quality of the work undertaken by the installers?	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%; background-color: #d3d3d3;">Very satisfied</td><td style="width: 20%;"></td></tr> <tr><td style="background-color: #d3d3d3;">Quite satisfied</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Neither</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Not very satisfied</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Not at all satisfied</td><td></td></tr> </table>	Very satisfied		Quite satisfied		Neither		Not very satisfied		Not at all satisfied							
Very satisfied																		
Quite satisfied																		
Neither																		
Not very satisfied																		
Not at all satisfied																		
Q5	How satisfied were you with the instructions the installer has given you to operate the system?	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%; background-color: #d3d3d3;">Very satisfied</td><td style="width: 20%;"></td></tr> <tr><td style="background-color: #d3d3d3;">Quite satisfied</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Neither</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Not very satisfied</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">Not at all satisfied</td><td></td></tr> </table>	Very satisfied		Quite satisfied		Neither		Not very satisfied		Not at all satisfied							
Very satisfied																		
Quite satisfied																		
Neither																		
Not very satisfied																		
Not at all satisfied																		

Q6	Would you consider other renewable sources for your home in the future?	If yes, please state what	
		If No, please state why	
		Don't Know	
Q7	How did you find out about the grant scheme?	Please specify	
Q8	Are your fuel bills lower since the measure was installed? (May not be applicable if no bill received since installation).		
		Yes	
		No	
		If yes, please comment	
Q9	Were you given energy saving advice at the same time as the work was carried out?		
		Yes	
		No	
		If yes, have you taken action on advice?	
Q10	How would you rate this energy advice?		
		Excellent	
		Good	
		Satisfactory	
		Poor	
		Very Poor	
Q11	Overall, how would you rate this energy saving scheme?		
		Excellent	
		Good	
		Satisfactory	
		Poor	
		Very Poor	

*Thank you for taking time to complete the questionnaire, this information is very useful to us to ensure we get the best out of future Northern Ireland Sustainable Energy Programme schemes.*

*Please return the completed form to: (Insert Scheme Developer Address)*

## **Appendix 3**

### **Scheme Post Implementation Proforma**

## APPENDIX 3 – SCHEME POST IMPLEMENTATION PROFORMA

### Northern Ireland Sustainable Energy Programme Scheme Completion Post-Implementation Form

Applicant		Scheme Reference No	
Scheme Name			

*Principal Costs & Savings:*

	Approved	Actual	% Difference
Supplier Accredited Savings (GWh)			
Total Carbon Savings (tC)			
Total Applicant Direct Costs (£)			
Total Applicant Indirect Costs (£)			
Total Scheme Costs (£)			
Supplier Cost Effectiveness (p/kWh)			
No of homes fuel poverty proofed			

Additional information from applicant to confirm whether there was any discrepancy between the approved scheme design and actuality and if so to explain in terms of scheme delivery mechanism, savings and costs, and to specify the model of measures installed where appropriate (e.g. CFLs / Refrigerators / Boilers):

--

	Date	Signature
Scheme completed as stated above, and savings calculated, and scheme delivered in accordance with approved scheme submission		

## **Appendix 4**

# **Scheme Variation Form**

## APPENDIX 4 - SCHEME VARIATION FORM

### Northern Ireland Sustainable Energy Programme

Year:	Scheme Reference:	
Scheme Name:		
Approved and Endorsed by: EST/NIAUR		Date:
	Current	Revised
NISEP Funding		
Total Scheme Cost		
Other Party Funding		
Cost Effectiveness		
Energy Savings		
Indirect Cost (%)		
Applicant Contribution (>20%)		
Submitted By:		Date:
Variation approved by EST:		Date:
Variation endorsed by NIAUR:		Date:

#### ADDITIONAL INFORMATION

(Please clearly outline any changes to original submission, giving an explanation where required)

##### EST NOTE:

Variations to the revised figures up to 5% of NISEP funding no notification action is required, variations of 5-10% of NISEP funding EST is to be notified and above 10%, prior endorsement must be sought from EST for final approval by the Utility Regulator.

Any other significant changes to the delivery of the scheme will require a Scheme Variation Form to be completed by the applicant.

## **Appendix 5**

### **Interim Report to be submitted to EST NI after 6 and 9 months**

# APPENDIX 5 – INTERIM REPORT TO BE SUBMITTED TO EST (NI) AFTER 6 AND 9 MONTHS

## Northern Ireland Sustainable Energy Programme

Interim Progress 6-month Report for 10/11 Schemes - Submitted to EST(NI) by 4 Oct 10															
Submission									Interim Progress Report						
Ref No	Scheme Title	Total Scheme Cost (£)	NISEP Funding (£)	% NISEP Contribution (>20%)	Energy Savings (GWh) *	Indirect Costs (%) **	Measures spend (£)	Applicant Cost Effectiveness	To Date NISEP Funding Spend (£)	% NISEP Contribution (>20%)	To Date Energy Savings (GWh) *	Indirect Costs (%) **	% Variance	To Date Applicant Cost Effectiveness	Referrals to Date
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
									0						
KEY									0.00		0.000				
% Variance highlighting UNDERSPEND (Negative Value)															
* Estimate should be provided based on the assumptions on the measure mix and type as specified in the scheme submission spreadsheet. The actual out-turn should be reported in the post-implementation report.															
** Indirect costs calculation .....															
*** Apportionment Applied															
Indirect Costs (Management Costs etc) must not exceed : (£250 x Measure cost) / (£1000 + Measure cost)															
on target (as authorised)															
NIAUR must be notified of increased spending for management costs															
Need Permission from NIAUR for this level of spending															
% NISEP funds must contribute at least 20% of total scheme costs															
20% -															
21-25% -															

## **Appendix 6**

# **Guidance on the use of Energy Efficiency and Sustainable Energy Measures**

## APPENDIX 6 – GUIDANCE ON THE USE OF ENERGY EFFICIENCY AND SUSTAINABLE ENERGY MEASURES

The following provides guidance on the installation of sustainable energy measures. Where appropriate, reference is made to relevant British Standards or guidance notes. An overview of British Standards is available at the BSI website at the following address. Copies of the Standards can also be ordered through this site <http://bsonline.techindex.co.uk/>

### 1.0 INSULATION MEASURES

#### 1.1 Loft Insulation

Loft insulation provided under NISEP schemes should ideally be installed to a depth of 270mm. Depths of less than 270mm will only be considered for the accreditation of energy savings where it is physically impossible or unsafe to install 270mm.

The lifetime of loft insulation is assumed to be 30 years.

Loft insulation products must be compliant with the following British or European Standards:

**BS EN 13162:2001** – ‘Thermal insulation products for buildings. Factory made mineral wool (MW) products: Specification.’ This document details the standards loft insulation materials must meet to be eligible as a qualifying action under the Order.

**BS EN 5803 Part 5:1985** – ‘Thermal insulation for use in pitched roof spaces in dwellings. Specification for installation of man-made mineral fibre and cellulose fibre insulation.’ This standard specifies the requirements when installing loft insulation in pitched roof dwellings.

All lofts insulated by a NISEP scheme must include, where appropriate, loft boarding in order to provide safe access to the cold water tank. When insulating lofts, the loft hatches must be insulated and draught sealed.

In addition to these requirements, good practice when insulating roof spaces requires the insulation of the cold water tank and associated pipe work. The relevant British Standard is:

**BS 5422: 2001** – ‘Method for specifying thermal insulation materials for pipes, tanks, vessels, ductwork and equipment operating within the temperature range -40°C to +700°C.’

Cases of condensation in newly insulated lofts have been identified in previous programmes. There are several factors that can lead to condensation in lofts, such as failing to draught seal the loft hatch or the blocking of loft vents with insulation. Scheme managers must ensure that their installers take care to minimise the risk of condensation when installing loft insulation.

Insulation installed to 270mm ensures that the loft has a U-value of 0.16W/m<sup>2</sup>K, based on the product installed having a lambda of 0.044W/mK. Suppliers can be accredited for installing other insulates, although the lambda will need to be verified and the thickness recorded to ensure that the loft has the U-value of 0.16W/m<sup>2</sup>K.

There are two guides relating to best practice when installing loft insulation:  
Energy-efficient refurbishment of existing housing (GPG155/CE83, November 2007); and

Practical refurbishment of solid-walled houses (CE184, March 2006)

Both publications state that insulation above the height of the joists should be laid across the joists where appropriate.

## 1.2 Cavity Wall Insulation

The energy savings associated with cavity wall insulation are displayed in the Scheme Submission Spreadsheet. The energy savings differ considerably between homes constructed pre 1976 and those constructed post 1976. Installers must therefore provide the age of the property insulated when reporting to energy suppliers, to enable applicants to accurately report on their completed schemes.

The lifetime of cavity wall insulation is assumed to be 40 years.

Insulation materials used must be certified by an appropriate UKAS accredited certification body and must conform the following British Standards:

**BS EN 13162: 2001** – ‘Thermal insulation products for buildings. Factory made mineral wool (MW) products. Specification.’ This standard replaces the current BS6232;

**BS 5617:1985** - For UF foam insulation, –‘specification for urea-formaldehyde (UF) foam systems suitable for thermal insulation of cavity walls with masonry or concrete inner and outer leaves’; and

**BS 5618:1985** - ‘Code of practice for thermal insulation of cavity walls (with masonry or concrete inner and outer leaves) by filling with UF foam systems.’

A 25-year guarantee must be provided to the customer when the insulation work has been completed as the reduction in carbon emissions calculated are based on installation to the technical requirements of such a guarantee.

### **Best Practice Guidelines**

The technical requirements are outlined in the following documents published by Cavity Insulation Guarantee Agency (CIGA):

*Assessor's Guide: Suitability of external walls for filling with cavity wall insulation. Part 1 existing buildings, Version 1.0, December 2003*

*Technician's Guide to Best Practice – Installing cavity wall insulation, Version 2, July 2002*

*Technician's Guide to Best Practice – Flues, chimneys and combustion air ventilators, Version 3.0, May 2006*

*Conservatories, Technical Guidance Note, Version 1.0, July 2007*

*Ventilators, Technical Guidance Note, Version 1.0, September 2007.*

### 1.3 Draught Proofing

When calculating the draught proofing energy savings, BRE has assumed that only buildings with 'high ventilation rates' should be insulated to merit the accreditation of the energy savings listed in the Submission Spreadsheet. Scheme managers should therefore attempt to target homes with 'high ventilation rates' when undertaking draught proofing schemes. Typically, this type of home will be in an exposed position, or have ill fitting or sash style windows.

The lifetime for draught proofing measures is assumed to be 10 years.

The British Standard relevant to the materials used for draught proofing is:

**BS 7386: 1997** – 'Specification for draught strips for the draught control of existing doors and windows in housing.' This Standard specifies the requirements for products to fit the common types of installed doors and windows in housing not originally designed to incorporate draught stripping.

**BS 7880: 1997** – 'Code of practice for draught control of existing doors and windows in housing using draught strips.' This standard specifies the requirements when installing draught-proofing.

### 1.4 Hot Water Tank Insulation

Details of the assumptions behind the energy savings for tank insulation are provided in the BRE report, contained in Appendix 1 of this document.

A lifetime for tank insulation is assumed to be 10 years.

The relevant British Standard for tank insulation is:

**BS 5615: 1985** – 'Specification for insulating jackets for domestic hot water storage cylinders.' This Standard specifies the performance, in terms of the maximum permitted heat loss, the materials, design and marking of jackets for cylinders to BS699 and BS1566.

### 1.5 High Efficiency Cylinders

Comparisons were made between the energy required to heat 3 different types of hot water cylinders, namely the 'stock average' cylinder, the British Standard cylinder and the 'high performance' cylinder.

The stock average cylinder was defined by a combination of survey data on insulation and expert opinion on the mixture of tank (i.e. heat exchanger) types in the stock. The British Standard and high performance types are described in 'Central Heating System Specifications', CHeSS (Energy Efficiency Best Practice programme General Information Leaflet 59).

For dwellings where the water is heated from a gas fired boiler the findings were:

- In a property with no primary pipework insulation, the energy saved by replacing a stock average cylinder with a high performance cylinder is 994 kWh/annum.

- In a property with insulated primary pipework, the saving from replacing a stock average cylinder with a high performance cylinder is 533 kWh/annum.
- In a new house, the energy saved by installing a high performance cylinder rather than a British Standard cylinder is 153 kWh/annum.

For dwellings with water heated by electric immersion heater the savings are:

- 181 kWh/annum for replacing a stock average with a high performance cylinder.
- 39 kWh/annum for installing a high performance rather than a British Standard cylinder.

These energy savings values should be entered into the 'other insulation' section of the Scheme Submission Spreadsheet. The cylinders are classed as insulation measures, because the vast majority of the energy savings result from the high levels of insulation in their design.

A lifetime of 20 years should be assumed for this measure.

Installations of hot water cylinders should meet the best practice guidance set out in CHeSS. This document has been distributed by the Energy Saving Trust to applicants previously.

## 1.6 Radiator Panels

The energy savings shown below are attributable to radiator panels constructed in a 'louvered' or 'saw toothed' fashion (with raised ridges) and incorporating a reflective surface, which is by far the most common method of design.

The energy savings on a 'per square metre installed basis' are 93kWh/annum for both gas and oil heated homes. These savings are attributable to panels installed behind radiators on external walls.

The above data is based on measurements on a panel with a reflective surface. Panels are available which do not have a reflective surface, in which case its effect on energy saving should be taken as one half of the above value.

Radiator panel energy savings should be calculated on a 'per panel' basis. This calculation requires the assessment of the area of the radiator panel, which should then be applied to the data shown above. For example, a panel with a surface area of 0.3 square metres would achieve energy savings of 30kWh when installed.

In submitting such schemes, applicants should indicate the numbers of panels forecast to be installed, therefore allowing the overall scheme savings to be calculated. Applicants should include a breakdown of their calculations in their Statement of Method for the scheme. The energy savings values and total area of panel installed should be entered into the 'other insulation' section of the Scheme Submission Spreadsheet.

A measure lifetime of 10 years should be assumed for radiator panels.

### 1.7 Solid Wall Insulation

Energy saving figures are available from the Energy Saving Trust for a variety of different solid wall insulation products and for a range of target U-values.

Solid wall installation (internal or external) is typically installed to achieve U-values of 0.35W/m<sup>2</sup>K, 0.37W/m<sup>2</sup>K and 0.45W/m<sup>2</sup>K when installed on a wall with a U-value of 2.1W/m<sup>2</sup>K or higher (e.g. 220mm solid brick wall).

The lifetime of solid wall insulation is 30 years.

The following technical standards and specific requirements apply and solid wall insulation materials must conform to the following British or European Standards:

**BS EN 13914-1:2005** – ‘Design, preparation and application of external rendering and internal plastering – Part 1: External rendering.’ This standard specifies the materials, aspects of design, mixes and methods of application of cement-based renderings to all common types of new and old backgrounds. It also includes advice on the inspection and repair of defective renderings.

**BS 8212:1995** – ‘Code of practice for dry lining and partitioning using gypsum plasterboard.’ This standard contains recommendations for materials, design backgrounds and insulation of dry lining to walls, ceilings and partitioning.

When solid wall insulation is composed of material for which no British or European Standard exists, the material must be certified by the British Board of Agrément (BBA), or another UKAS Accredited Technical Approval Body for their thermal performance.

#### **Best Practice guidelines**

Best Practice guidelines for solid wall insulation recommend an improvement to the U-value of 0.35W/m<sup>2</sup>K. The Energy Saving Trust strongly encourages applicants to install to this level, where practical.

Further details on products that can be used to attain the Best Practice improvement are provided in the following publications:

*Energy-efficient refurbishment of existing housing (GPG155/CE83, November 2007).*

*External insulation systems for walls of dwellings (GPG293/CE118, March 2006).*

The following guides provide advice on solid wall installations:

*Practical refurbishment of solid-walled houses (CE184, March 2006).*

*Internal wall insulation in existing housing – a guide for specifiers and contractors (GPG138/CE17, January 2008).*

## **2.0 LIGHTING MEASURES**

New legislation, in the form of the Energy Using Products Directive, will come into force in the UK as of September 2009. The legislation is yet to be finalised but will have a significant impact on lighting. The Programme Administrator will monitor the development of this legislation and the impact on

the UK lighting market, and advise suppliers accordingly if NISEP requirements change.

## 2.1 Compact Fluorescent Lamps (CFLs)

For the purposes of accrediting ex-ante energy savings, all lamps used in NISEP schemes must be included on the Energy Saving Trust's list of approved CFLs, and have achieved Energy Saving Recommended (ESR) status, awarded by the Energy Saving Trust's ESR Programme. These lamps have been tested in accordance with the requirements of the Energy Saving Trust's lamp specification. The approved CFL list is circulated on an ongoing basis, as and when revisions are necessary. For confirmation of the current version, contact Energy Saving Trust (NI). All the lamps currently listed on the Energy Saving Trust's approved list have also successfully achieved ESR status.

Applicants are required to enter the numbers and types of lamps installed by their lighting schemes into the relevant place in the Scheme Submission Spreadsheet. The lifetimes of the lamps (in hours) is also required to be entered into the spreadsheet. The lifetime entered should be as displayed on the approved list. Where the life status is shown as 'ongoing' the manufacturer's claimed lifetime (i.e. as shown on the packaging) should be entered into the spreadsheet.

**NOTE:** Please see guidance below for the submission of CFL schemes.

**Free distribution** - applicants can send up to four CFLs free to each household. Applicants need to provide a freepost address so people can post them back if they don't want them. They also need to track the names/addresses of where they are sent. In situations where four CFLs are provided free at events, the addresses/names also need to be logged to enable cross checking to be carried out. Although, if CFL's are given out free of charge by scheme partners, such as charities, it may not always be possible to collect names and addresses to cross check. In such situations, no more than two CFLs can be provided per household.

**Mail order schemes** - a choice of wattages should be offered, and an individual can purchase no more than ten lamps.

**Retailer CFL schemes** - When retailers are providing sales data to applicants (to confirm number of qualifying products sold), a covering letter should be provided to confirm which period the electronic point of sale (EPoS) data covers, that the sales took place and that they exclude trade sales. The letter should also confirm that the measures and/or marketing campaign was subsidised by the applicants and funding has not been received for the measures from any other applicant. For retail CFL schemes, the applicant should provide a marketing plan to demonstrate their proposed actions, but will not be required to increase sales by a specified percentage.

**NOTE:** Energy savings attributed to the scheme should be attributed to the increased sales only rather than the total sales during the period of the offer.

## 2.2 Luminaries

Schemes involving the installation of luminaries must only use CFLs that are displayed on Energy Saving Trust's approved CFL list. These lamps have been tested in accordance with the requirements of the Energy Saving Trust's lamp specification.

The ballast used in conjunction with the approved CFL must meet the requirements of Energy Saving Trust's luminaire Specification. Energy efficient luminaires meeting the requirements of this specification are eligible for use of the ESR logo. For details of endorsed luminaires please contact the Energy Saving Trust (NI).

The Scheme Submission Spreadsheet enables the calculation of energy savings arising from the installation of luminaries. The relevant part of the CFL worksheet should be used to input the number, type and hours of use of luminaries to be delivered by the scheme.

## 2.3 Halogen Lamps

A wide range of energy saving versions of halogen lamps is now available in the UK. Halogen lamps that have achieved ESR status would be eligible for installation in NISEP schemes. A list of eligible products is available upon request from the Energy Saving Trust (NI).

## 2.4 LED Lighting

LED lighting that is suitable for domestic applications is being developed by a wide range of manufacturers. The most common LED products available are replacements for existing halogen reflector lamps (spotlights). The benefits are low power consumption and an extremely long lifetime.

The Energy Saving Trust has recently extended the scope of the ESR scheme to include LEDs. As of May 2009 there are no LED products endorsed but this is expected to change in the coming months.

LED products installed in NISEP schemes will need to have achieved ESR status. Suppliers considering using LED products should contact the Programme Administrator to discuss the proposed scheme and availability of appropriate products.

# **3.0 HEATING MEASURES**

## 3.1 Boilers

Any new boiler provided by a NISEP scheme should be gas fired wherever gas is available to fuel it.

Schemes replacing old oil boilers should ensure that the make, model type and age of the boiler is recorded.

Boilers installed in schemes must be a SEDBUK 'A' rated model. The SEDBUK database can be viewed at <http://www.sedbuk.com/>. It indicates the energy efficiency of all currently available boilers.

A spreadsheet containing energy, carbon and financial savings for all the different heating replacement scenarios (e.g. electric heating to new oil

condensing boiler/solid fuel heating to new gas condensing boiler) is available from the Programme Administrator upon request.

The lifetime assumed for boilers is 15 years.

Installations of boilers must meet the best practice guidance set out in CHeSS (Energy Efficiency Best Practice programme General Information Leaflet 59).

Several British Standards also apply:

**BS 5440 Part 1: 2000** – ‘Installation and maintenance of flues and ventilation for gas appliances of rated input not exceeding 70kW net (1st, 2nd and 3rd family gases). Specification for installation and maintenance of flues.’

**BS 5440 Part 2: 2000** – ‘Installation and maintenance of flues and ventilation for gas appliances of rated input not exceeding 70kW net (1st, 2nd and 3rd family gases). Specification for installation and maintenance of ventilation for gas appliances.’

**BS 6798: 2000** – ‘Specification for installation of gas-fired boilers of rated input not exceeding 70kW net.’

**BS 5449: 1990** – ‘Specification for forced circulation hot water central heating systems for domestic premises.’

**BS 7671: 2001** – ‘Requirements for electrical installations, IEE wiring regulations, 16th Edition.’

### **Best Practice Guidelines**

*Energy Efficiency Best Practice in Housing Domestic heating by oil: boiler systems (CE29, January 2008).*

*Energy Efficiency Best Practice in Housing Domestic heating by gas: boiler systems (CE30, January 2008).*

*Energy Efficiency Best Practice in Housing Domestic heating: solid fuel systems (CE47, March 2005).*

### **3.2 Heating Controls**

In general, heating controls must be installed in line with the best practice guidance provided in CHeSS (Energy Efficiency Best Practice programme General Information Leaflet 59).

The Submission Spreadsheet enables the calculation of energy savings from heating controls. The savings are calculated by entering the existing controls scenario before installation, and then entering the type of heating controls installed by the scheme.

The spreadsheet assumes different 'packages' of controls, as follows:

Package A: No controls or hot water tank thermostat.

Package B: Room thermostat\*.

Package C: Roomstat and Thermostatic Radiator Valves (TRVs)\*.

Package D: TRVs without a Roomstat\*.

Package E: Delayed start Roomstat and TRVs\*.

Package F: Intelligent heating controls and TRVs\*.

\*These control options include a hot water tank thermostat. For packages C – F, TRVs are assumed to be fitted on each radiator in the property.

Installations of heating controls must meet the basic level, which is set out in Central Heating System Specifications – CHeSS (CE51, June 2008). Such installations will meet the standards outlined in the guidelines to the Building Regulations 2000 (Scotland 2004) as amended. The guidance note can be obtained by calling the Energy Saving Trust's Energy Efficiency Publication Hotline on 0845 120 7799 by visiting [www.energysavingtrust.org.uk/housingbuildings](http://www.energysavingtrust.org.uk/housingbuildings)

In addition, heating controls must all be installed in line with:

**BS 7671:2008** – 'Requirements for electrical installations, IEE wiring regulations, 17th Edition' and BS 5449:1990 – 'Specification for forced circulation hot water central heating systems for domestic purposes.'

### **Best Practice guidelines**

The Energy Saving Trust refers applicants to the following guides for information on the different types of controls available, including descriptions of advanced functions:

*Energy Efficiency Best Practice in Housing Domestic heating by oil: boiler systems (CE29, January 2008).*

*Energy Efficiency Best Practice in Housing Domestic heating by gas: boiler systems (CE30, January 2008).*

*Energy Efficiency Best Practice in Housing Domestic heating: solid fuel systems (CE47, March 2005).*

A lifetime of 15 years is assumed for heating controls.

The Scheme Submission Spreadsheet should be used to calculate the energy savings from heating controls. The spreadsheet contains savings options for either installing heating controls in tandem with a new boiler or installing controls only. The numbers of each type of control package to be installed should be entered into the relevant worksheet. The results are linked automatically to the main spreadsheet.

The best practice guidance set out in the CheSS document states that TRVs should be fitted on all radiators in a dwelling except in rooms where there is a room thermostat. The number of TRVs that can be fitted in a dwelling is dependent on a number of factors such as the number of rooms and the number of radiators present. To allow flexibility when reporting on heating projects involving TRVs, the Scheme Submission Spreadsheet has a section where the total number of TRVs installed under a scheme can be inputted. The spreadsheet calculates the energy savings by multiplying the number of TRVs installed by the savings attributable to a single TRV.

## 4.0 ENERGY EFFICIENT APPLIANCES

### 4.1 Introduction

As a general rule, efficient cold and wet appliances provided by NISEP schemes must have achieved ESR status. A list of ESR products can be viewed on the Energy Saving Trust's website, at the following link:

[www.est.org.uk/myhome/efficientproducts/recommended](http://www.est.org.uk/myhome/efficientproducts/recommended)

Applicants should contact the Programme Administrator if further details of the Endorsement Programme are required or if an appliance they wish to use in a scheme does not appear on the Energy Saving Trust's website. The ESR application process for new appliances is straightforward, and manufacturers of qualifying products who have not yet applied can quickly and easily do so.

### 4.2 Energy Saving Data for Cold Appliance Schemes

This section explains the methodology for calculating savings for appliance schemes. The two most common scenarios for delivering appliance projects are:

- An incentive to purchase a more efficient appliance.
- A trade-in of a working appliance.

The lifetime for freezers or fridge-freezers is 15 years. For refrigerators/larders it is 12 years, however, when refrigerators/larders are provided to customers classed as falling within the priority group, a lifetime of 15 years (rather than 12) should be assumed. This is based on the assumption that these customer groups will retain the appliance for a longer time period prior to replacement.

For 'Trade-in' schemes, the lifetime of the appliance must be reduced by 1/3.

The matrix below lists the average annual consumption of different refrigeration appliances by label for products currently on sale in the UK, the sales weighted average (this means the average consumption based on the different numbers rated appliances that are sold in the marketplace) and the consumption of existing appliances.

### Energy consumption data for cold appliances

#### Energy Efficiency Levy Appliance Savings

Non Fuel Standardised kWh/yr	A Rated	Sales Wte Ave	Existing Appliances	Incentive saving (kWh/yr)	Trade-in saving (kWh/yr)
Dishwasher (Compact/Tabletop)	113	167	-	54	-
Dishwasher (Slimline)	157	183	-	26	-
Dishwasher (Full Size)	214	249	377	35	163
Washing Machine	163	182	243	19	80

Non Fuel Standardised kWh/yr	Annual Electricity Consumption (kWh/yr)					Incentive savings from Sales Wte Ave (kWh/yr)			Trade-in savings from Existing Average (kWh/yr)		
	A++	A+	A	Sales Wte Ave	Existing Appliances	To A++	To A+	To A	To A++	To A+	To A
Fridge Freezer (Frost Free)	149	223	301	379	852	231	156	79	703	628	551
Fridge Freezer (Standard)	136	204	275	357	572	221	153	82	435	367	296
US Style (Side by Side)	220	330	445	531	-	311	201	86	-	-	-
US Style (Top/Bottom)	177	265	358	504	-	327	238	146	-	-	-
Chest Freezer	77	115	155	266	442	189	150	110	365	326	286
Upright Freezer (Frost Free)	113	170	228	331	641	218	162	103	528	471	413
Upright Freezer (Standard)	98	146	197	290	425	193	144	93	327	278	228
Refrigerator (Icebox)	74	112	151	216	295	142	104	66	221	184	145
Refrigerator (Larder)	68	101	137	176	277	109	75	40	209	175	140

Source: GfK Q4 2001 sales data for the average 'A' rating and sales weighted average; DEFRA (now DECC) Market Transformation Programme website 2002.

When calculating energy savings for cold appliance schemes, applicants should follow the following guidelines.

#### 4.2.1 Incentive Schemes

Customers in the market for a new appliance, normally buy the average product currently sold within the range of energy labels. In this scenario they are incentivised to purchase a more efficient appliance. The savings will be the difference between the sales weighted average consumption and the consumption of the promoted product.

For example:

'A' Rated frost free fridge freezer = 295 kWh/annum consumption.

Sales weighted average for frost free fridge freezer = 516 kWh/annum.

Energy Saving =  $516 - 295 = 221$  kWh/annum over a 15 year lifetime.

#### 4.2.2 'Trade-in' Schemes

Under trade-in schemes, customers are able to trade in a working appliance for a more efficient appliance. To qualify, the appliance is assumed to be working at the time of trade in and then be destroyed (in an environmentally acceptable manner) to avoid entry into the second hand market. The savings will be the difference between the average consumption of the existing population of that particular product and the more efficient product.

There is a two-fold saving; firstly, by removing the existing, inefficient appliance from the market, the consumption over the remainder of the product life is avoided; and secondly, a more efficient appliance is purchased than would normally be the case. Estimating the remaining lifetime of the existing appliance is subject to considerable uncertainty. On the one hand, it could be argued that only very old appliances will be traded-in, so the lifetime will be relatively short. On the other hand, once an appliance enters the second hand market, its lifetime will tend to be longer than the normal average lifetime.

The Energy Saving Trust has analysed a number of scenarios taking account of the two elements of savings. The conclusion is that a simple basis for estimating the total savings from trade-in schemes is to apply the savings from existing appliance to the promoted product for two thirds of the appliance life.

For example:

An 'A' rated frost-free fridge freezer is provided by the scheme = 295kWh/annum consumption.

Existing frost-free fridge freezer = 785 kWh/a consumption.

Energy saving =  $785 - 295 = 490$  kWh/annum over a 10 year (15 year lifetime for a fridge freezer discounted by 1/3) lifetime.

#### 4.2.3 Cold Appliance Disposal

Councils have a responsibility to remove old domestic appliances from customer's homes, although a cost may be levied.

Applicants undertaking appliance schemes should provide the customer with the relevant contact details and appropriate guidance as to appliance disposal.

#### 4.3 Wet Appliances

The following energy consumption figures should be used when considering a scheme that will provide a washing machine or dishwasher. Data is provided that illustrates the average energy consumption of 'A' rated washing machines and dishwashers, and the typical energy consumption of the existing appliances that they will replace in a trade-in scenario. A sales weighted average value is also provided. If the energy consumption of the appliance provided by the scheme is known, this figure can be used in place of the average 'A' rated consumption. The lifetime for these types of appliance is assumed to be 15 years. In a trade in scenario, as with cold appliances, this would be reduced by 1/3.

##### **Washing Machines:**

Average 'A' rated energy consumption:	165kWh/annum.
Energy consumption of existing appliances:	237kWh/annum.
Sales weighted average:	201kWh/annum.

##### **Dishwashers:**

Average 'A' rated energy consumption:	228kWh/annum.
Energy consumption of existing appliances:	415kWh/annum.
Sales weighted average:	297kWh/annum.

Source: GfK home audit; ECI Oxford.

## **5.0 RENEWABLE ENERGY SCHEMES**

This section provides information on factors taken into account when quantifying the benefits of installing micro generation measures. It also sets out technical standards to be met when delivering these measures and includes specific Best Practice guidelines.

This section will not provide energy saving data for all micro generation measures. The Energy Saving Trust is undertaking a number of different field trials of micro generation measures and is continually updating energy saving assumptions based on the results. Applicants wishing to undertake a scheme involving micro generation measures should contact the Programme Administrator to discuss their proposal.

The Micro generation Certification Scheme (MCS) has been set up to ensure that the quality of micro generation products and their installation is of an appropriate standard.

Micro generation products installed in NISEP schemes must be accredited by the MCS and they must be installed by a MCS accredited installer.

Further details on the MCS can be found at the following web link:

<http://www.microgenerationcertification.org>

### 5.1 Solar Thermal Hot Water

Solar panels, used for the purposes of domestic hot water heating are an eligible measure for use in NISEP schemes.

The tables that follow illustrate the energy savings attributable to installations of the two different types of solar panel, namely the 'flat plate' and 'evacuated tube' variants. The savings are presented in two formats. Energy savings for a typical installation are given

FLAT PLATE COLLECTORS		Water Heating Fuel				
		Gas	Electricity	Oil	LPG	Solid
Average kWh/yr saving per square metre of panel		454	304	400	441	553
Typical dwelling types, average occupancy levels and typical daily hot water requirements	l/day	Energy Saving (kWh/yr)				
FLAT 2.1	90.5	1791	1200	1579	1739	2182
MID-TERRACED 2.6	103	1824	1222	1608	1771	2222
END-TERRACED 2.6	103	1824	1222	1608	1771	2222
SEMI-DETACHED BUNGALOW 2.2	93	1791	1200	1579	1739	2182
DETACHED BUNGALOW 2.3	95.5	1824	1222	1608	1771	2222
SEMI-DETACHED HOUSE 2.9	110.5	1824	1222	1608	1771	2222
DETACHED HOUSE 3.3	120.5	1824	1222	1608	1771	2222

EVACUATED TUBE COLLECTORS		Water Heating Fuel				
		Gas	Electricity	Oil	LPG	Solid
Average kWh/yr saving per square metre of panel		582	390	513	565	709
Typical dwelling types, average occupancy levels and typical daily hot water requirements	l/day	Energy Saving (kWh/yr)				
FLAT 2.1	90.5	2214	1483	1952	2150	2697
MID-TERRACED 2.6	103	2284	1530	2013	2217	2782
END-TERRACED 2.6	103	2284	1530	2013	2217	2782
SEMI-DETACHED BUNGALOW 2.2	93	2214	1483	1952	2150	2697
DETACHED BUNGALOW 2.3	95.5	2284	1530	2013	2217	2782
SEMI-DETACHED HOUSE 2.9	110.5	2343	1570	2066	2275	2855
DETACHED HOUSE 3.3	120.5	2378	1593	2096	2309	2897

For the different property types, and the different heating fuels. The savings are also shown on a 'per square metre installed' basis, again for the different heating fuels. Applicants can enter measures in either format into the Scheme Submission Spreadsheet, using the 'Other Heating' sections of the worksheets.

Applicants may find it easier to submit new schemes using the savings estimates for the different property types. Once a scheme has been completed it should be possible to calculate the total area of solar panels installed, in which case the 'per square metre installed' data should be used in the completion report. However, if this information is not accurately available, applicants can also use the property type data when submitting completion reports.

The lifetime of solar water heating is 25 years. **Technical standards or specific requirements**

Solar water heating must be compliant with the following British or European Standards, as specified by MCS:

**EN 12975-1:2006** - Thermal solar system and components. Solar collectors. General requirements.

**EN 12976-1:2006** - Thermal solar systems and components. Factory made systems.

**BS 5918:1989** - Code of practice for solar heating systems for domestic hot water; these standards contain recommendations for the design, construction, installation and commissioning of components and systems for domestic hot water preheating for single family dwellings.

'Solar water heating systems – guidance for professionals, conventional indirect systems' (CE131, 2006) provides advice on installing solar thermal systems that transfer heat to an indirect cylinder.

## 5.2 Biomass Heating

Domestic biomass heating must comply with the guidance to The Building (Amendment) Regulations (Northern Ireland) 2006) and The Building (Amendment No 2) Regulations (Northern Ireland) 2006, including the minimum efficiencies specified.

The reduction in energy use (as with heat pumps based on a comparison of the carbon content of the new and replaced fuel) is available in a spreadsheet supplied by the Energy Saving Trust.

The lifetime of domestic biomass boilers is 20 years.

### **Technical standards and specific requirements**

Installations of biomass appliances must meet the standards outlined in the guidance to The Building (Amendment) Regulations (Northern Ireland) 2006 and The Building (Amendment No2) Regulations (Northern Ireland) 2006.

Biomass boilers must be compliant with the following standards:

**BS EN 303-5:1999** - Heating boilers. Heating boilers with forced draught burners. Heating boilers for solid fuels; hand and automatically fired, nominal heat output of up to 300 kW. Terminology, requirements, testing and marking.

**BS EN 13240:2001** - Room heaters fired by solid fuel. Requirements and test methods.

## **6.0 OTHER RELEVANT LEGISLATION**

The following legislation (not an exhaustive list) may or may not apply to works carried out during a NISEP scheme.

The legislation can be reviewed at the following website:

<http://www.hmsso.gov.uk>

It is the responsibility of each applicant to ensure that they have carried out their schemes in accordance with appropriate legislation.

### **Construction (Health Safety & Welfare) Regulations 1996**

These regulations are aimed at protecting the health, safety and welfare of everyone who carries out construction work. They also give protection to other people who may be affected by the work.

### **Health and Safety at Work Act 1974**

(HASAWA) provides a wide, embracing, enabling framework for health, safety and welfare in the UK.

### **Construction Design and Management (CDM) Regulations 1994**

These regulations have been produced to ensure that Health, Safety and Environmental issues are addressed during the life-cycle of a building or plant.

### **Control of Substances Hazardous to Health 1994 (COSHH)**

This legislation prohibits work involving exposure to hazardous materials (chemicals, micro-organisms, gases, etc.) unless a 'suitable and sufficient' assessment of these exposures has been carried out.

### **Noise at Work Regulations 1989**

These regulations aim to protect workers from the risk of hearing damage due to excessive noise.

### **Electricity at Work Regulations 1989**

The purpose of these regulations is to ensure precautions are taken against the risk of death or personal injury from electricity in work activities.

### **Environmental Protection Act 1990**

The aim of this Act is to ensure that any potential polluting process has an authorisation from either the Environment Agency or Local Authority and that control measures are in place to prevent, minimise or render harmless emissions into the surrounding environment.

### **Ozone depleting substances (ODS) regulation 2000**

This regulation affects users, producers, applicants, maintenance and servicing engineers, and those involved in the disposal of all ODS. These include chlorofluorocarbons (CFCs), hydro chlorofluorocarbons (HCFCs), halons, 1,1,1 trichloroethane, carbon tetrachloride and bromochloromethane (CBM). These substances are mainly used in refrigeration, air-conditioning, foam blowing, as solvents and in fire fighting.

## **Appendix 7**

# **Role of the Programme Administrator and Relationship with the Utility Regulator**

## **APPENDIX 7 - ROLE OF THE PROGRAMME ADMINISTRATOR AND RELATIONSHIP WITH THE UTILITY REGULATOR**

### 7.1 Appointment of the Programme Administrator

Under the terms of the Northern Ireland Electricity (NIE) plc Licence the Northern Ireland Authority for Utility Regulation (the Utility Regulator) may appoint a Programme Administrator to oversee the detailed operation of the Northern Ireland Sustainable Energy Programme (NISEP). The role of Programme Administrator is defined by Condition 43 of the NIE plc licence.

The Utility Regulator has appointed the Energy Saving Trust to act as Programme Administrator for the NISEP.. References to the Programme Administrator in this document relate to the Energy Saving Trust.

### 7.2 Role of the Programme Administrator

The role of the Programme Administrator and the relationship with the Utility Regulator is currently formalised by a 'Heads of Agreement' contract. The Programme Administrator must carry out the role defined in the Heads of Agreement covering the broad areas as set out below:

- Assist the Utility Regulator in developing the NISEP programme with associated proposals, energy saving targets, incentive mechanism etc. This will include an annual review of the operation and performance of the scheme;
- Maintain and review on an annual basis the Programme Framework Document and the terms of the NISEP scheme. The Framework Document sets down the background, funding available, scheme eligibility details, energy saving targets, incentives and scheme administrative procedures. This includes re-evaluation of the incentive mechanism where necessary and recalculation of cost effectiveness targets. Updating figures in Tables as appropriate and any other updates deemed necessary to the Framework Document;
- Develop and maintain appropriate and detailed administrative procedures for NISEP;
- Assessment and management of NISEP scheme proposals with reference to the Framework Document, to include verification and validation of scheme proposals, energy savings, targets and incentives;
- Ongoing assessment of submissions with reference to the Framework Document – endorsing schemes for proposal, and overseeing the scheme variation process including endorsing proposed variations that are consistent with the Framework Document;
- Complete scheme audits on an annual basis (to include random physical checks on installations) and prepare scheme audit reports.  
Note: other members of staff or departments should be used for auditing the completed schemes. Members of staff who recommend schemes for approval must not be involved in auditing the same schemes;

- As and when required must engage an independent qualified auditor, approved by the Utility Regulator, to provide assurance on:
  - The standard and completeness of the scheme audits; and
  - The financial and administrative processes operated by the Programme Administrator.
- Carry out registration of primary bidders and keep a record of their applications;
- Keep and maintain adequate records of all approved and unapproved schemes and maintain a satisfactory database of schemes and variations, with at least three years records readily available (i.e. data will not be archived before three years). Scheme records should be kept for a minimum of ten years. The database should be maintained and updated on a regular basis. For the avoidance of doubt this must include financial details of forecast scheme costs, scheme variations and end of year outturn scheme costs;
- Evaluate and recalculate as necessary the cost effectiveness targets on a rolling average basis, every year based on the cost-effectiveness achieved on the previous three years schemes;
- Complete annual reports on scheme performance;
- Provide the Utility Regulator with monitoring information on the geographical and sectoral spread of households benefiting from the NISEP on an annual basis, to include the numbers and types of measures installed and the amount of NISEP spend in each District Council area;
- Follow up issues from audit reports and make recommendations for improvements to audit reports;
- Present an annual plan to the Utility Regulator for ensuring the availability of sufficient trained staff and appropriate administrative arrangements to deliver the service as detailed above;
- Undertake related activities as required by the Utility Regulator; and
- Assess and endorse submissions of invoices and proof of work done as outlined in section 2.5 of the Framework Document;
- Must be compliant with the Data Protection Act and registered with the Information Commission as a Data Controller; and

On behalf of the Utility Regulator, the Programme Administrator evaluates all schemes submitted under NISEP against the relevant criteria, and provides technical advice to assist in scheme development. The Programme Administrator carries out audits of completed schemes to verify that they have been delivered in line with the approved statement of method.

Note: the Utility Regulator and the Programme Administrator will operate a zero tolerance policy in relation to fraud.

## **Appendix 8**

### **NISEP Accedence Document**

## **APPENDIX 8 – NISEP ACCEDENCE DOCUMENT (THE AGREEMENT)**

Must be signed by all Primary Bidders and returned to the Programme Administrator.

**Name and address of organisation:**

**Name and contact details of NISEP contact within organisation:**

**Email:**

**Phone:**

We hereby agree:

- a) to ensure that all information provided within scheme applications will be accurate and within the rules set out in the NISEP Framework Document.
- b) to comply with the terms of the NISEP Framework Document (including, without limitation, the terms and conditions appended hereto).
- c) to deliver the schemes approved under the NISEP Framework Document in accordance with the NISEP Framework Document and in accordance with the scheme application or allowed scheme variation process.
- d) to provide the Programme Administrator with all reasonably requested information in relation to the delivery of approved schemes to include, without limitation, information relating to:
  - a. Costs
  - b. Financial controls including tendering processes.
  - c. Energy saved
  - d. Measures installed
  - e. Geographical Spread of measures installed
  - f. Customer Satisfaction/Customer Complaints
  - g. Quality Control
  - h. Health and Safety and Risk Assessment
  - i. The role of Scheme Partners
- e) To return to the NISEP any funding received from NISEP which is unspent or misspent or deemed ineligible.

**Signature**

**Print name**

**Role in Organisation**

## **GENERAL CONDITIONS**

The Primary Bidder covenants with the Programme Administrator and the Utility Regulator that it shall:

### **The Project**

- 1.1 use best endeavours to implement and complete the Scheme as per the approved scheme submission or any subsequent scheme variation;

### **Accountancy System**

- 1.2 at all times accurately maintain all books, accounts and records required by law (whether in the United Kingdom or otherwise) to be maintained by it;

### **Financial and other information**

- 1.3 provide the Programme Administrator with:
- 1.3.1 written progress reports of the Scheme as and when requested by the Programme Administrator, such reports to be satisfactory to the Programme Administrator;
  - 1.3.2 technical progress reports on the Scheme as and when requested by the Programme Administrator, such reports to be satisfactory to the Programme Administrator; and
  - 1.3.3 such other information as may be required by the Utility Regulator or Programme Administrator in respect of the scheme;

### **Change in Scheme**

- 1.4 obtain the Utility Regulator's consent in writing to any proposed change in the Scheme in accordance with the provisions of Appendix 4, any consent required not to be unreasonably withheld or delayed;

### **Inspection**

- 1.5 permit the Programme Administrator from time to time to enter the business premises and any other premises of the Primary Bidder during normal working hours (unless a statutory or regulatory obligation requires entry outside of these hours) to inspect any asset and any accounting or other record in respect of any funding which has been paid or may become payable in connection with the Scheme and to review and, if applicable, copy same. Such inspection, for the avoidance of doubt, to be limited to the purpose described in this paragraph 1.5;

### **Assignment**

- 1.6 not without the prior written consent of the Utility Regulator, assign or in any way encumber any right to receive funding or other benefit or entitlement in connection with the Scheme;

No term of this agreement shall be enforceable by a third party (being any person other than the parties hereto) under the Contracts (Rights of Third Parties) Act 1999;

#### Insurance

- 1.7 at its own expense insure with a reputable firm of insurers, all its property, assets and effects of an insurable nature, including (without limitation) its buildings, plant, machinery and equipment against all and any loss, damage, risk, contingency or public liability as may from time to time be requested by the Utility Regulator (or, if no such request is made, against such loss, damage, risk, contingency or public liability as a prudent company or firm in the same business as the Primary Bidder would insure against) to the full replacement value thereof and shall produce the policy or policies of insurance together with proof of payment of the necessary premiums to the Programme Administrator on request;

#### Participation

- 1.8 ensure that no other person or company (other than the scheme partners or intended beneficiaries who have been notified to either the Programme Administrator and/or the Utility Regulator via the scheme submission or subsequent scheme variation) shall participate in the financial assistance under this agreement and that no commission, profit sharing or other arrangements under which any other person or company shall benefit from funding made pursuant to this Agreement shall be permitted, except with the prior written consent of the Utility Regulator;

#### Forecasts

- 1.9 provide an explanation to the satisfaction of the Utility Regulator if actual claimed expenditure on a Scheme varies significantly from the previously submitted forecasts in accordance with the terms of the Framework Document.

#### Legislation

- 1.10 ensure that Schemes are implemented in a manner that is compliant with overarching legislation such as the Human Rights Act, the Data Protection Act and the Freedom of Information Act.

#### Responsibility

- 1.11 The Utility Regulator accepts no responsibility, financial or otherwise, for expenditure or liability arising out of the Scheme, including that arising as a result of the purchase of equipment and/or consumable items;

### **DISCLOSURE, PUBLICITY, CONFIDENTIALITY**

- 2.1 The Utility Regulator shall be entitled to publish details of the amounts and types of funding made available to the Scheme at such times and in such manner as the Utility Regulator may decide.
- 2.2 The Primary Bidder shall render the Utility Regulator such assistance as

the Utility Regulator may reasonably request in connection with any publicity which the Utility Regulator may deem appropriate in respect of the Scheme.

- 2.3 This Agreement and the terms and conditions contained herein shall be treated by the Primary Bidder as confidential and accordingly shall not be disclosed to any other person or entity other than to its professional advisors who are subject to obligations of confidence, for the purpose of negotiating funding for the Primary Bidder or as required by law, without the prior written consent of the Utility Regulator, such consent not to be unreasonably withheld or delayed.

## **DEFAULT**

- 3.1 An event of default shall occur if:

- 3.1.1 in the reasonable opinion of the Utility Regulator, the Scheme has been abandoned;
- 3.1.2 the Primary Bidder ceases to carry on its business or substantially the whole of its business otherwise than in the reasonable opinion of the Utility Regulator by way of temporary cessation of business;
- 3.1.3 the Primary Bidder, in the reasonable opinion of the Utility Regulator, has permanently discontinued the Scheme or has spent funding for purposes other than as approved by the Utility Regulator and/or the Programme Administrator;
- 3.1.4 any information provided by the Primary Bidder or any officer of the Primary Bidder to the Utility Regulator or Programme Administrator in support of the Primary Bidder's application for funding is misleading, incomplete or incorrect in any respect;
- 3.1.5 the Primary Bidder fails to pay or repay to the NISEP Fund any sum due to the NISEP Fund under this Agreement or otherwise;
- 3.1.6 the independent audit of the Primary Bidder's administration of the NISEP fails to provide adequate assurance in respect of the administration of the Scheme;
- 3.1.7 an order is made or a resolution is passed or a petition is presented for the winding up of the Primary Bidder or circumstances arise which entitle a court of competent jurisdiction to make a winding-up order of the Primary Bidder;
- 3.1.8 an order is made for the appointment of an administrator to manage the affairs, business and property of the Primary Bidder or documents are filed with a court of competent jurisdiction for the appointment of an administrator of the Primary Bidder or notice of intention to appoint an administrator is given by the Primary Bidder or its directors or by a qualifying floating charge holder (as defined in paragraph

15 of Schedule B1 to the Insolvency (Northern Ireland) Order 1989);

- 3.1.9 a receiver is appointed of any of the Primary Bidder's assets or undertaking or if circumstances arise which entitle a court of competent jurisdiction or a creditor to appoint a receiver or manager of the Primary Bidder or if any other person takes possession of or sells the Primary Bidder's assets;
- 3.1.10 the Primary Bidder makes any arrangement or composition with its creditors or makes an application to a court of competent jurisdiction for the protection of its creditors in any way;
- 3.1.11 the Primary Bidder becomes bankrupt or where the Primary Bidder is a partnership any partner in the business becomes bankrupt and/or the Primary Bidder is unable to pay its debts within the meaning of Article 103 of the Insolvency (Northern Ireland) Order 1989 or any statutory modification or re-enactment thereof;
- 3.1.12 the Primary Bidder enters a voluntary arrangement or composition with its creditors and/or distress or execution order is levied or Enforcement of Judgement Office proceedings are commenced against any of the property of the Primary Bidder or any similar proceedings are commenced in any other jurisdiction; or
- 3.1.13 the Primary Bidder is in breach of any of its obligations under this agreement and such breach is incapable of remedy or, if capable of remedy, remains unremedied for a period of 30 days after written notice by the Utility Regulator.

## **STOPPING OF PAYMENTS OF FUNDING**

- 4.1 Without prejudice to any other rights of the Utility Regulator under this Agreement, the Utility Regulator shall be under no obligation to Authorise payments or any further payment(s) of the funding to the Primary Bidder if:
  - 4.1.1. an event of default has occurred; or
  - 4.1.2 the Primary Bidder is in breach of any of its obligations under this Agreement (whether or not constituting an event of default); or
  - 4.1.3 in the opinion of the Utility Regulator there has been material and adverse change in the project which has not been approved in accordance with Section 4.5 of the Framework Document.

4.2 In any case where:

- 4.2.1 a breach by the Primary Bidder of its obligations under this Framework Document is capable of remedy without giving rise to concern over the future management of the Scheme and is remedied within 30 days of written notice by the Utility Regulator; and
- 4.2.2 such breach is the sole reason for the exercise of the Utility Regulator's right to cease making payments of the funding to a Project;

the Utility Regulator shall reinstate the making of payment of the funding.

### **REPAYMENT OF FUNDING**

- 5.1 If an event of default occurs the Primary Bidder shall on demand by the Utility Regulator repay to the NISEP Fund the aggregate of all payments of funding made to the Primary Bidder ("the aggregate sum") in the [one] year period prior to such event, less any part of the aggregate sum which may have been repaid under any other provision of this agreement, or such lesser amount as the Utility Regulator at its discretion may determine.
- 5.2 Where any sums are repayable to the NISEP Fund under the provisions of this **Clause 5**, the Utility Regulator shall be entitled to recover from the Primary Bidder the reasonably incurred costs of the Utility Regulator in establishing the Primary Bidder's repayment liability and in recovering the sums due.

Neither failure to exercise nor any delay in exercising any right, power, privilege, or remedy under this agreement shall in any way impair or affect the exercise thereof or operate as a waiver in whole or in part.

No single or partial exercise of any right, power, privilege or remedy under this agreement shall prevent any further or other exercise thereof or the exercise of any other right, power, privilege or remedy.

### **DOCUMENTATION**

- 6.1 The Primary Bidder shall retain all documentation relating to the Project until the Primary Bidder ceases to be under any financial or contractual obligation to the Utility Regulator (including any contingent financial obligation) under the provisions of this Agreement or for a period of six years following completion of the Project (whichever is the later), and in the event of default, acknowledges that the Utility Regulator has the right to request and receive all the relevant documentation associated with the Project.

## **SERVICE OF NOTICES**

- 7.1 Any written notice to be served by the Utility Regulator on the Primary Bidder under the terms and conditions of this Agreement may be served by ordinary first class post, or facsimile transmission. The Primary Bidder will be deemed to have been duly served with the notice on the day it is sent if sent by facsimile transmission or on the following day if sent by first class post.

## **DURATION**

- 8.1 This Agreement shall remain in force until the date of the last payment of financial assistance under this agreement ("**the termination date**") but without prejudice to any claim or right arising out of any breach of any obligation under this Agreement occurring before the termination date.

## **GOVERNING LAW**

- 9.1 This agreement shall be governed in all respects by the laws of Northern Ireland and the Primary Bidder hereby irrevocably submits to the exclusive jurisdiction of the Northern Ireland Courts for all purposes in connection with this Agreement.

## **LEGAL COMPLIANCE**

- 10.1 The Primary Bidder shall ensure that its business is operated in compliance with all applicable laws or regulations for the time being and shall not do or omit or suffer to be done anything whereby any Act, Order or Regulation from time to time affecting its business is infringed.

## **FAILURE TO INITIATE THE PROJECT**

- 11.1 If by the end of the period of twelve months from the date of this Agreement the Primary Bidder has not initiated the Project then the Utility Regulator shall cease to have any obligations under this Agreement.

## **Appendix 9**

# **Minimum Requirements of a Fraud Policy**

## **APPENDIX 9 – MINIMUM REQUIREMENTS OF A FRAUD POLICY**

### **Fraud Policy**

The statement of internal procedures and zero tolerance policy towards fraud to be supplied by Applicants as part of the registration process must include the following:

- 1) Accountable Officer. Must be a named senior person within the organization who will have responsibility for fraud policy and procedures.
- 2) Internal delegations. May include responsibility for prevention/detection/reporting of fraud at all staff levels.
- 3) Identification of fraud procedures.
- 4) Internal audit procedures and roles.
- 5) Compliance procedures.

Internal fraud response plan to include

- 1) Internal reporting and investigating procedures.
- 2) Disciplinary/prosecution policy and procedure for recovery of losses.
- 3) Reporting requirements.