

# Energy Efficiency Measures Framework

## Energy Management

### Introduction

Network Rail has a regulated target to reduce carbon emissions by:

- 11% by the end of CP5;
- A further 25% by the end of CP6 (to be agreed with ORR).

Much of NRs estate is not energy efficient so there are many opportunities for saving energy.

Workshops around the business have identified savings of up to 23% are available.

Saving energy means saving money – estimated that implementing just 5 projects across the NR estate could potentially save £15m annually:

- LED lighting & control;
- Automatic sub-metering;
- Behaviour change;
- Ventilation in lineside buildings;
- Building Management System Optimisation;

Some of the above require capital investment to realise the savings.

To enable energy saving projects, framework contracts have been put in place with 4 suppliers which allow a number of different ways to fund the energy saving measures. Suppliers may also propose alternative supply methods, i.e. renewable generation, which may be appropriate, though the primary focus should be on energy reduction.

The suppliers are Cynergin, HBS, Matrix & Trident

Please contact the STE Energy Management Team or your Route Energy Lead for more details.

### Framework Contents

Suppliers will:

- Conduct energy audits;
- Provide costed recommendations for energy efficiency improvements;
- Demonstrate simple payback for each measure;
- Offer a range of funding options:
  - NR investment;
  - Gain-share – savings are shared between NR and the supplier for a number of years;
  - Energy Performance Contracting (EPC) – explained in Appendix A.

The commercial evaluation of the tenders showed that some suppliers were stronger for certain options, though this may be different for specific projects.

# Energy Efficiency Measures Framework

## Energy Management

### Framework Operation

It is suggested that NR Business Units select a portfolio of similar buildings (i.e. new MDU buildings or portacabin buildings) and make available 2 or 3 sites so that the framework suppliers can conduct surveys and then carry out a mini tender exercise. The Business Unit will need to make the sites available for all of the framework suppliers to visit. The Business Unit will also need to provide the following information for all of the sites in the selected portfolio:

- a. Minimum 12 months energy data, all fuel types, including recent invoices (available from EnergyLink, though it may relate to multiple assets fed from the same supply. List the assets supplied if necessary);
- b. Minimum of 12 months half-hour energy data where applicable (available from EnergyLink);
- c. Floor area details;
- d. Site plans;
- e. Site Contact details;
- f. Site operating hours, numbers of staff etc.
- g. State whether PPE is required / will be provided.
- h. Any Listed buildings?

The suppliers may not have PTS competency and will need to be advised if that is required.

The responses should then be evaluated based on the Business Unit/portfolio requirements and an award made based on the preferred responses. The selected company will then be the preferred supplier for future surveys/works within the tendered portfolio.

Recommendations from the surveys can be selected or deselected and multiple energy efficiency measures can be packaged together for more beneficial payback / Energy Performance Contracting.

The Energy Management team can guide and support you throughout this process.

The process above can be repeated for buildings/locations with different characteristics so that we get the benefit of 4 different views/ideas on the best solution(s) for each site type.

Although there is no overall cost to the business, unless up-front investment is selected, monies will still need to be paid directly to the supplier so a Purchase Order will be required. The savings will come from not paying the electricity and gas supplier (currently npower) due to the reduced energy consumption.

It is worth noting that for the EPC option, the suppliers generally guarantee the level of savings achieved, eradicating cost risk. Where gain-share arrangements are put in place, the contractor receives no payment if energy savings are not achieved

# Energy Efficiency Measures Framework

## Energy Management

### Roles and Responsibilities

The Frameworks contract management will be enacted by Route Services Procurement and STE Energy Management.

Business Units will be responsible for

- Local mini-competitions;
- Management of local winning lots;
- Arranging surveys & works;
- Setting up Purchase Orders.
- Informing the STE Energy Management Team of successful projects for Best Practice sharing

The STE Energy Management Team will support and guide Business Units to assist with selection of sites, bid evaluation, validation of savings estimates, selection of appropriate measures, assessment of funding options etc.

### Next Steps

- Business Units will need to establish a list of sites for review;
- Discuss with the central Energy Management Team if you need help prioritising sites;
- Carry out the mini-competition to select the preferred supplier;
- Work with your supplier to establish a programme for audits and arrange access;
- Set up Purchase Orders.

# Energy Efficiency Measures Framework

## Energy Management

### Appendix A – Supplier Contacts

#### **Cynergin**

Contract Reference: 272/56281/01

Contract Purchasing Agreement (CPA): 3243263

Supplier No.: 56281

Key Contacts:

Name	Position	Phone Number	Email Address
Prashanth Kidiyoor	Energy Consultant	07740 101901	pk@cynergin.com
Simon Tilleard	Head of Consulting	07799 690166	Simon.Tilleard@cynergin.com

#### **HBS**

Contract Reference: 272/56264/01

Contract Purchasing Agreement (CPA): 3243276

Supplier No.: 56264

Key Contacts:

Name	Position	Phone Number	Email Address
Stuart Gentry	Framework Director	07535 701007	StuartG@hbsgroupsouthern.co.uk
Chris Burrell	Technical Manager	07557 279814	Chris.Burrell@hbsgroupsouthern.co.uk

#### **Matrix**

Contract Reference: 272/56292/01

Contract Purchasing Agreement (CPA): 3243282

Supplier No.: 56292

Key Contacts:

Name	Position	Phone Number	Email Address
Richard Lewis	Strategic Accounts	07912 045367	Richard.Lewis@eonenergy.com

#### **Trident**

Contract Reference: 272/56263/01

Contract Purchasing Agreement (CPA): 3243286

Supplier No.: 56263

Key Contacts:

Name	Position	Phone Number	Email Address
Claire Markham	Sustainability Manager	07572 902198	Claire.Markham@tridentutilities.co.uk

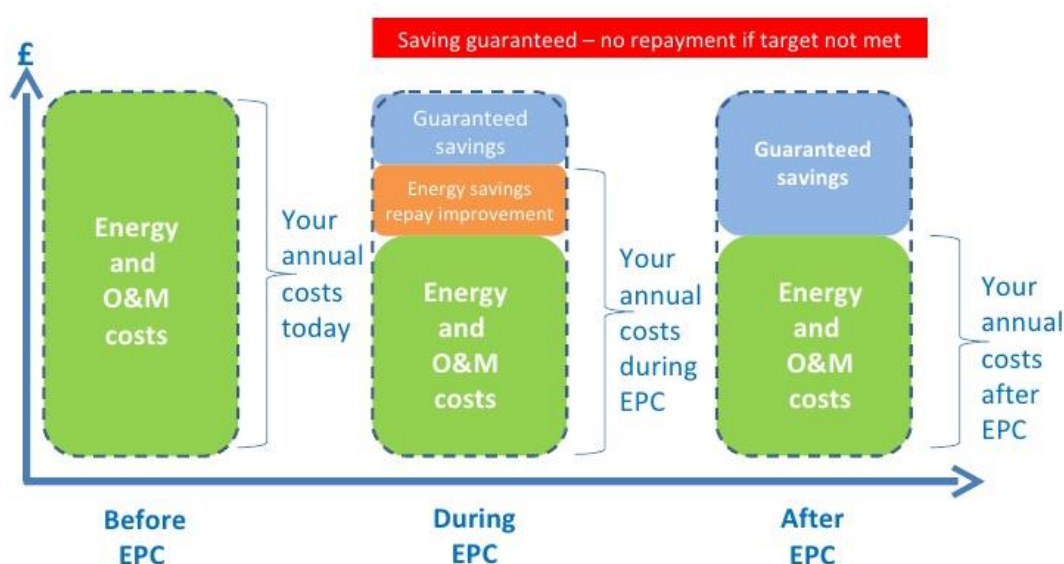
# Energy Efficiency Measures Framework

## Energy Management

### Appendix B – Energy Performance Contracts

An Energy Performance Contract is a financing mechanism designed to accelerate investment in cost effective energy efficiency measures. It is a partnership between customer and supplier. The supplier will survey a site and determine the level of savings that can be guaranteed. The supplier will then propose some options on the term of the EPC and the amount to be paid, e.g. pay a higher rate for a short time or a lower rate for a longer period, though neither will be greater than the pre EPC amount (see diagram below). The supplier will need to charge a mark-up on the cost of the works carried out for the risk they bear.

The supplier will then implement the measures without any upfront capital costs by the customer. The energy and cost savings are guaranteed at start of the contract and if they aren't met then the customer does not have to make any repayments to the supplier.



Care has to be taken about how the savings are measured and taking into account weather effects on base and future consumption. Contract periods can be long: 5 – 15 years.