

**Briefing Note to NHSScotland Boards
on the
Carbon & Energy Fund Scotland (CEFS)**



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1. Introduction

NHSScotland Boards have an obligation to reduce energy consumption and associated greenhouse gas emissions across their estates. This is to fulfil the requirements of both the Scottish Government's commitments under the Climate Change Act 2009¹ and NHS Scotland HEAT² targets.

To date, many of the 'quick wins' have been realised and since 1990, energy consumption has reduced by circa 42% across NHS Scotland hospitals. However, it has been recognised that significant investment is now required to realise more long-term savings and to ensure that 2020 and 2050 energy and climate change targets are met.

To that end, Health Facilities Scotland (HFS) have been tasked by NHSScotland's Strategic Facilities Group (SFG) to investigate the potential for implementing energy service contracts across the NHSScotland estate, particularly where initial capital funding for projects can be made available to NHS Boards.

After exploring a number of schemes, HFS and National Procurement are now working in partnership with the Carbon and Energy Fund to set up a Carbon and Energy Fund Scotland (CEFS).

The purpose of this briefing note is to outline the mechanisms of the CEFS, with specific reference to the financial workings of the scheme.

For any further information on the CEFS, please contact Kathryn Dapr  at HFS (k.dapre@nhs.net, 0141 207 1870).

¹ The Climate Change Act 2009 has set legally binding targets for carbon dioxide (CO₂) reduction across Scotland. These targets are a 42% reduction (based on 1990 levels) by 2020 and an 80% reduction by 2050. In addition, the Act also sets targets around the use of renewable energy.

² Phase 2 of the NHS Scotland HEAT (Health, Efficiency, Access, Treatment) targets include two in relation to energy and climate change. Boards must achieve a 1% year-on-year reduction in energy consumption (based on a 2009/10 baseline) and a 3% year-on-year reduction in CO₂ emissions from fossil fuel sources at their hospital sites.



2. Background to the CEFS

The CEFS is a dedicated funding programme for energy efficiency projects within NHSScotland Boards. It has evolved from the existing Carbon and Energy Fund (CEF) that has been operating across NHS Trusts in England since July 2011. To date, 18 projects have been funded under the CEF in England, with a total capital investment of approximately £100million delivering annual savings of around £16million per annum (equating to almost 50,000 tCO₂ per annum).

A funding stream has now been made available to NHS Boards in Scotland and expressions of interest for the first tranche of funding from the new CEFS were invited in April 2012. As of August 2012, seven Boards have expressed an interest in accessing the first tranche of CEFS funding. If all these projects are realised, this would represent a capital investment of roughly £28million, with anticipated annual savings of £3million³ per annum (or 28,000 tCO₂ per annum).

2.1 Governance

The governance structure for the CEFS is shown overleaf in Figure 1.

The CEF as a whole is overseen by a Board of Trustees which includes representatives from the NHS, the Department of Health, the Carbon Trust and National Services Scotland. Project management, procurement, legal and technical support (in relation to pre-installation phases) is provided by an agreed list of organisations. For the CEFS, specific support has been identified within Scotland, including Scottish lawyers.

For NHS Boards, their initial point of contact in relation to the CEFS is HFS. Each Board that takes forward a project is then allocated a dedicated project manager and CEFS contact, and receives technical/legal support as necessary to complete contract negotiations and ensure project completion. The relationship between the CEFS and individual Boards is shown in Figure 2.

The CEFS is a not-for-profit organisation. Administration costs are covered via a levy on each project which is paid back through guaranteed savings over the lifetime of the project.

³ It should be noted that the payback on individual projects ranges from c 4 to c 15 years. Where projects are deemed to be a marginal investment, these are subject to additional sensitivity analysis to determine the risk to viability and whether the project should proceed as specified.

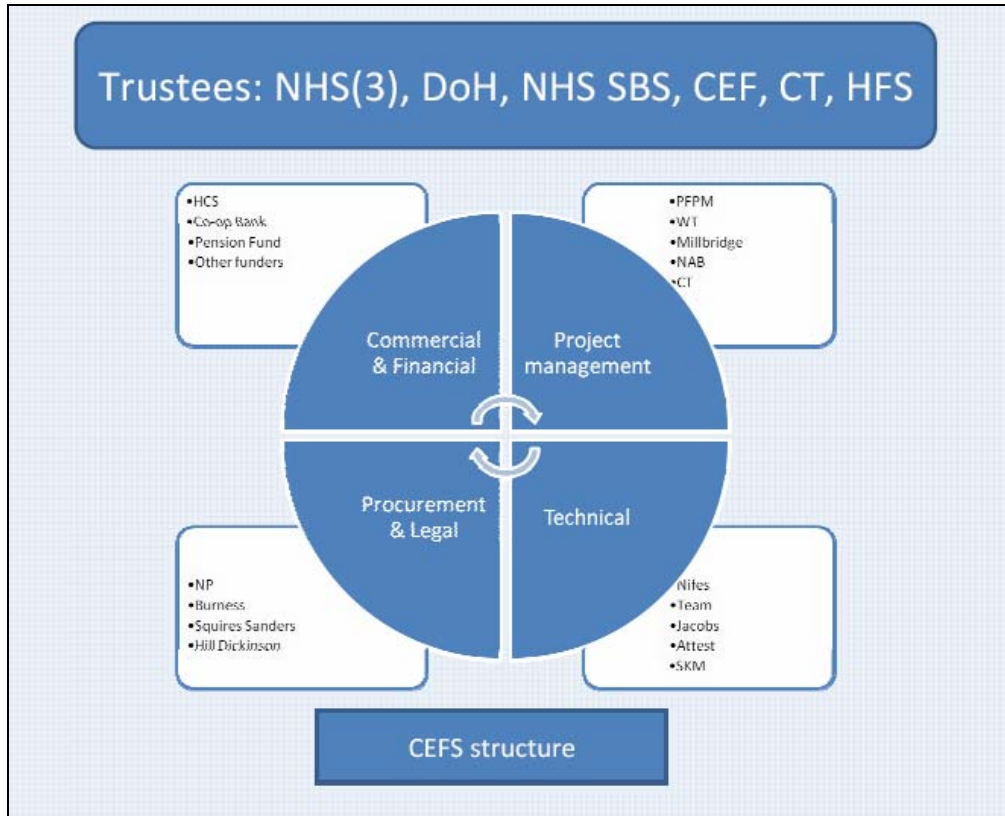


Figure 1: CEFS Governance Structure

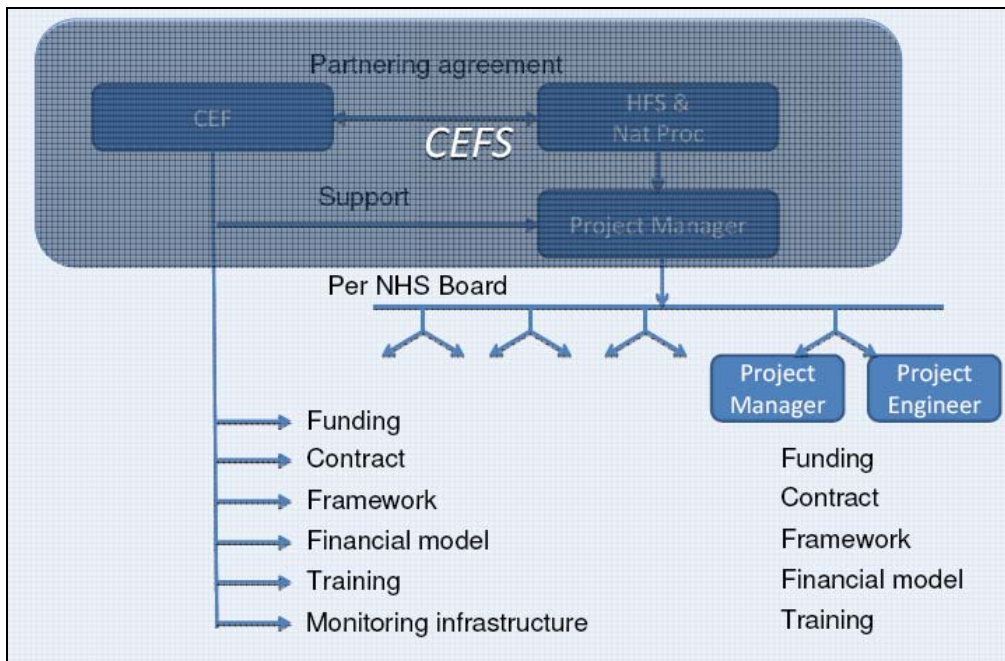


Figure 2: CEFS Relationship to Boards

3. The CEFS Process

The CEFS process can be broken down into five phases:

- Preparation;
- Pre-procurement;
- Procurement;
- Installation;
- Operation.

3.1 Preparation

Boards express an interest in using the CEFS to procure an energy efficiency project. Note that contracts must be at least £750,000 in value, although this can be made up of multiple smaller projects procured as a single contract.

HFS will conduct an initial review of the proposed project and make recommendations to the CEFS as to whether it should be progressed.

Assuming the project is to be progressed. Board representatives will be obliged to attend several meetings with CEFS to determine project details, routes to Board approval, etc. These meetings are normally organised and hosted by HFS.

CEFS then commissions initial feasibility studies; at present this is being done in collaboration with Carbon Trust (Scotland) on the project to determine financial viability. The feasibility studies form the basis of the initial tender. If the feasibility study shows financial viability, CEFS seeks approval for funds from their funding partners (if this option has been requested by the Board).

At this stage, Boards are asked to sign a Membership Agreement with the CEFS. This does not commit the Board to any financial arrangement with the CEFS: rather, the agreement sets out resources requirements, data requirements, confidentiality issues, etc. Upon completion, Boards are allocated a dedicated area on the CEF website to upload data, view documentation, etc.

This phase ends with an agreement to take the project to mini-competitive tender.

3.2 Pre-procurement

A mini-competitive tender is prepared and issued to the CEF framework contractors. At present, there are ten companies/consortia on the framework this was procured through an Official Journal of the European Community (OJEU) tender in early 2011. The contractors on the framework are:

- Balfour Beatty Workplace;



- Cofely;
- Cynergin;
- Dalkia;
- EnerG;
- Interserve;
- MCW/Breathe Energy;
- Mitie;
- Total Gas and Power;
- Vital Energi.

Bidders who express an interest are invited to an interview to present their initial response to the tender.

NHS Boards are fully supported throughout this process by CEFS, with the objective of selecting around four preferred bidders for a more detailed competitive tender, commonly referred to by CEFS as the mini competition.

3.3 Procurement

The selected bidders are invited to open days at the relevant site(s). These days are used as information gathering sessions for developing potential solutions. Combined with data collated during earlier phases of the process, this helps the bidders come up with a comprehensive feasibility study.

CEFS fully assist and help NHS Boards when entering into detailed discussions with the prospective bidders with the outcome being a selection of a preferred business case. This is then presented to Senior Management Teams within each Board for formal approval.

At this stage, should the NHS Board not approve the project, the process will stop and there will be no cost incurred by the NHS Board.

Should the NHS Board approve the business case, then that bidder will be given 3 months to complete its design and the contract technical schedules, ready for the Board to sign. Should the contract be for the same (or better) price and guaranteed savings, then the Board is expected to sign the contract. If it does not, then it will be expected to cover the bidder and CEFS costs associated with those 3 months.

CEFS provides support at this stage to review contracts before the NHS Board enters into a contract with the successful bidder.

3.4 Installation

The installation phase starts with contract award and lasts until any equipment is fully installed and commissioned. CEFS will chair monthly technical and project management meetings to help the NHS Board manage the installation,

CEFS will work closely with the NHS Board to oversee the commissioning tests for practical completion. Only when the installation is proven to meet the required performance standards technically, will practical completion be approved.

3.5 Operation

When the installation has passed practical completion, then the NHS Board starts its payments and the guaranteed savings start. Every month the project’s energy performance will be monitored by the CEFS (monitoring costs are built into the overall financial model). Every quarter this will be reviewed more thoroughly and action taken if the contract is underperforming. At the end of the year, the CEFS will review the project over the whole year and certify the level of savings generated. If the savings equal, or exceed the guaranteed savings, then no further action is taken. Should the savings fall below the guaranteed level, then the contractor will be required to refund the shortfall to the NHS Board.

Most operational contracts are around 15 to 20 years, albeit shorter and longer terms can also be arranged, provided there is a financial case to support it.

Should there be any contractual or performance issues at any time with the contract, then the CEFS will support the Board in dealing with them at no extra cost.

The full process is illustrated in Figure 3.

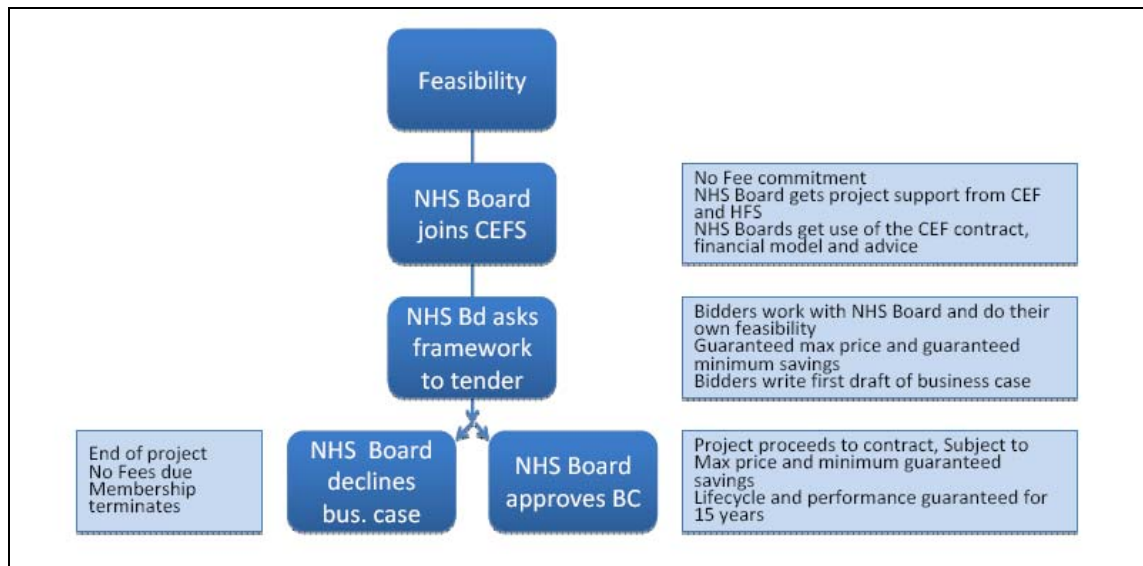


Figure 3: CEFS Process

4. Funding Options

There are three funding options open to Boards under the CEFS.

Option 1: Board Funding

NHS Boards can fund projects themselves and use the CEFS purely as a procurement route.

In this case, savings are not guaranteed as they are under the control of the Board. The project is on balance sheet, and so capital charges apply. However, all savings go straight to the NHS Board.

Option 2: Contractor Funding

Under this option, capital funding for the project is provided by the successful contractor. The project is off balance sheet. Savings are guaranteed, with any shortfall refunded to the NHS Board. Exact financial models will vary from contractor to contractor.

Option 3: CEFS Funding

Under this option, capital funding is provided by the CEFS's financial partners. At present, these include the Cooperative Bank and a couple of pension funds. The project is off balance sheet. Savings are guaranteed, with any shortfall refunded to the NHS Board.

Table 1 gives a financial illustration of how the different options would work. The figures here are based on a typical Combined Heat and Power (CHP) scheme.

	Option 1	Options 2 and 3
Board Capital Required	£5,848,921	N/A
Capital charges (ex depreciation) p.a.	£204,712	N/A
Maintenance costs p.a.	£272,276	Included in contractor fee
Payment to contractor p.a.*	N/A	£1,000,445
Annual guaranteed savings	£1,180,522**	£1,513,480***
NPV cash release over 15 years****	£4,102,282	£6,853,016

Table 1: Lifetime Cost Comparison of Funding Options

Note: *Includes contractor and CEF costs (i.e. capital deployed, fees, management, profit, operation, maintenance and life cycle costs)

**These savings are not guaranteed. They are shown as less than the CEF option as the risk lies with the Board. The actual savings realised is based on collated evidence from CHP schemes installed across NHS estates in England.

*** Guaranteed savings. The risk lies with the contractor and any shortfall is refunded to the Board.

**** Based on discount rate of 3.5% and CPI of 2.5% over 15 years.



Part-funding

There is also the option for a Board to part-fund a project, using Board funds or other sources (e.g. the Carbon Reduction Programme). Financial arrangements for this would be on a case-by-case basis as guaranteed savings would need to be clearly identified at the outset and carefully monitored. Also, unless specific project elements can be isolated, the final project may not be off balance sheet.



5. Financial Frequently Asked Questions (FAQs)

This section lists some FAQs in relation to the financial operation of the CEFS. Any further queries should be addressed to Kathryn Dapr  at Health Facilities Scotland (k.dapre@nhs.net, 0141 207 1870).

Q. Does use of the CEF constitute a finance lease or an operating lease?

A: The CEF commissioned KPMG to investigate their procedures against the NHS Financial Model guidance on the treatment of services and assets under IFRS. KPMG concluded that CEF projects constituted an operating lease in accordance with IAS 17.

However, the scheme has not been formally reviewed under the Scottish Government Capital Accounting Manual. Other contracts of a similar nature operating within NHS Scotland (e.g. PFI contracts, managed equipment service contracts) have been deemed to be operating leases (and therefore off balance sheet), but this is down to the drafting of individual contracts.

HFS is discussing the matter with both Scottish Government and Audit Scotland to provide a more definitive answer.

Q: Does the current CEF framework of contractors apply in Scotland (i.e. would we be breaking Public Sector Procurement rules by using this rather than going through a full OJEU procedure)?

A: Yes, the framework applies to Scotland, so no, we would not be breaking procurement rules. The terms of the original procurement were reviewed by National Procurement. The original OJEU notice was worded such that the framework covers the whole of the UK.

Q: Can NHS Boards suggest the use of particular contractors, technical advisors or project managers?

A: Contractors must be on the pre-existing CEF framework, and are subject to rules of mini-competition. Specific technical advisors and project managers may be used, subject to approval by the CEF.

Q: Are planning and warrant fees included in the financial models?

A: If the contractor is required to bear these costs, then they will be built into the overall financial package. If funded directly by the NHS Board, then no – the NHS Board would have to pay.

Q: Can the NHS Board carry out its own maintenance on installed equipment?



A: Yes. However, this would be dealt with on a case-by-case basis. There would need to be agreements in place around maintenance procedures so that guaranteed savings would not be jeopardised.

Q: What happens if the installed project generates more savings than the guarantee?

A: In most CEF contracts, the NHS Board pays all utility costs direct. Therefore, any additional savings would go straight to the NHS Board.

Q: If applicable, who would take Renewable Heat Incentive (RHI) or Feed-in Tariff (FiT) revenue?

A: The NHS Board takes the revenue as they are paying the utility costs.

Q: Are the capital cost repayments index linked?

A: Yes, using the Consumer Price Index (CPI) at present.

Q: Are capital costs subject to open accounting?

A: Yes, NHS Boards have access to all accounts.

Q: What happens to installed equipment at the end of the repayment period?

A: The contracts are usually structured such that the equipment would be due for renewal anyway at the end of the projects lifespan. No disposal costs are built into the contractors' payments, so it may be that contractors choose to leave the equipment or sell to NHS Boards for a minimal fee. However, this would be on a case-by-case basis.

Q: What happens if a contractor goes bust?

A: This is mitigated by financial and commercial due diligence checks on companies before they are allowed onto the CEF framework. If a contractor went bust, due to the CEF partnership in place, the NHS Board would continue to repay capital costs to the CEF (assuming they had provided funding), but no service costs. This would continue until CEF appointed a new contractor from the Framework (in full collaboration with the NHS Board).

Q: What if CEF goes bust?

A: CEF administration and monitoring fees are built into the model. These would no longer be paid and would be available to the NHS Board to fund an independent reviewer. HFS would continue to support NHS Boards regardless.

Q: What if a NHS Board identifies additional potential projects whilst under contract with CEF?



A: You can go back to the CEF for more funding, but each new scheme should have a minimum value of £750k. There is also an option to fund one big scheme and then have 'add-ons'.

Q: Is there an upper funding limit?

A: Theoretically no. The largest scheme commissioned to date has been for £8M. However, a new project being developed at Addenbrookes Hospital is likely to be in the region of £32M.

Q: Could the CEF fund a project that could be rolled out across all Boards, or a joint project across more than one Board?

A: Theoretically yes, but there must be a single legal entity for contractual purposes. If Boards can agree this (or agree a way of one Board having the contract and others paying that Board), this could be an option.

Q: What are the costs associated with the CEF scheme (as opposed to Board funding)?

A: Monitoring costs are circa 1% of capital costs per annum. The typical underlying interest rate (assuming CEF funds are used) is in the region of 3.5%. CEF administrative costs (to cover technical feasibility, project management and legal costs etc), is normally around 4%.

Q: Are NHS Boards guaranteed a specific net income per year (regardless of % savings)?

A: Most contractors base guaranteed savings on percentage savings and do not index-link fuel costs. Therefore, there is risk as the project goes on that a shortfall in savings would have a higher monetary value in year 1 than, say, year 10. One contractor on the CEF framework does pay savings shortfalls at current energy prices.

Q: Are avoided CRC costs included in calculations?

A: Typically, yes. However, this would depend on the nature of the project and is on a case-by-case basis.

Q. If an NHS Board has part-funding agreed through the Carbon Reduction Programme (CRP), could CEF support the rest?

A: Yes, providing the element of the project funded under the CRP can be isolated. Guaranteed savings would need careful evaluation, and the whole project would not be off balance sheet.

Q. How are savings measured?

A: Savings are determined via direct metering where possible (the costs of additional metering are built into the financial models). For systems such as lighting, a representative sample of fittings are taken for testing to determine the impact of replacements, and the individual savings are extrapolated for the



whole system. A full savings methodology paper would be provided, so that NHS Boards could evaluate this as part of the decision making process.

Q. Do contracts include service credit regimes?

A: Typically yes. The exact nature of these would vary from contractor to contractor. However, these could be set by NHS Boards as part of contract negotiations.