



Report of the Cabinet Member for Housing, Energy and Building Services

Cabinet - 19 October 2017

FPR7 Report – Capital Investment in Energy Efficiency Measures within Council Assets

Purpose:	<p>To confirm approval of using the Welsh Government's Re:fit Cymru Programme and funding from the Welsh Government's Wales Funding Programme (managed by Salix Finance) and the benefits of such an approach.</p> <p>To comply with Financial Procedure Rule No. 7 (Capital Programming and Appraisals) to commit and authorise schemes to the Capital programme.</p>
Policy Framework:	Corporate Energy Strategy
Consultation:	Finance, Legal, Access to Services, Education
Recommendation:	that Cabinet
1)	Approve to proceed with further detailed feasibility into the proposed capital investment.
2)	Approve to carry out schemes that meet the criteria for investment from the Wales Funding Programme (WFP) provided they meet the appropriate business cases and at no cost to the council
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1.0 Introduction

The City and County of Swansea has been working with Welsh Government, via their Re:fit Cymru Programme Implementation Unit (PIU), to consider a range of energy efficiency investment opportunities within Swansea owned building assets. The Welsh Government's Green Growth Wales programme, managed by Local Partnerships, has provided parallel support during this process.

The Re:fit Framework was initially developed by the Mayor of London in 2008 to overcome three key barriers that were preventing the retrofit of non-domestic public sector buildings from happening at the required rate/scale:

- A lack of capacity and expertise within public sector organisations to identify and implement projects, and access finance;
- Long and complex procurement processes;
- Risks associated with investing money with long-term paybacks and no savings guarantees

In January 2016, the Welsh Government received funding from Intelligent Energy Europe Programme of the European Union's ELENA to set up a Programme Implementation Unit to provide support to Welsh public sector organisations to identify, develop and implement Re:fit projects, using Re:fit's Energy Performance Contracting model.

In 2016, Local Partnerships (backed by Department for Business, Energy & Industrial Strategy) and the GLA, supported by Crown Commercial Service, procured a new, 3rd Re:fit Framework, valued at £1.5bn and comprising 16 providers.

2.0 Why undertake a Re:fit or energy generation project?

Organisations are under increasing pressure to reduce their carbon emissions, due to rising costs and growing concerns over environmental impact. Public sector organisations throughout the UK can achieve financial, risk-management and reputational benefit from reducing their carbon emissions.

Public buildings are a significant contributor to the UK's carbon emissions and therefore, improving their performance is key to reducing the UK's CO₂ emissions and operating costs.

The current economic and austerity environment has led to pressure to make existing buildings work harder by retrofitting energy-saving measures, rather than simply rebuilding. In addition, the cost of complying with the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme will continue to rise unless steps are taken to reduce emissions.

Renewable energy generation has many benefits. As well as reducing energy consumption and carbon emissions, it protects the owner against fluctuating energy costs, and can generate income through feed-in tariff (FIT) and Renewable Heat Incentive (RHI) schemes.

The specific investment within the assets will be determined following the development of the feasibility.

The following energy conservations measures (ECMs) can all be considered*:

- Lighting and lighting controls
- Heating/zone controls,
- Building Management Systems [BMS],
- Optimisation strategies,
- Replacement boilers or burners (if the existing are over 15 years old)
- Renewable Energy systems
- Building Fabric insulation improvements

** Re:fit is unrestricted in the types of energy conservation measures or services that can be delivered through the Framework but can't fund items which do not directly impact on energy reduction, such as builders work.*

3.0 How to fund your Re:fit project?

The Re:fit savings guarantee creates a strong basis for a 'spend-to-save project', where the savings generated are used to cover the initial investment.

The framework is flexible enough to cover various funding approaches and the approach chosen will depend on the circumstances within each organisation.

Projects range from service-oriented building efficiency measures to capital-intensive CHP (combined heat and power). Schemes such as PV (solar photovoltaic power generation) have two-fold financial benefits; they generate income from the sale of energy, and from incentive regimes such as feed-in tariffs (FIT) and Renewable Heat Incentive (RHI) schemes.

Financing options could include:

- Contracting authority's own budget
- Service provider finance
- Third-party finance*
- Income sources (such as income from energy sales)
- Structured finance (i.e: Domestic/European loans or private investment)

** From initial consideration and discussions with Local Partnerships, the preferred funding option will be via a Salix interest free loan for the term of the payback period.*

3.1 Salix Finance Ltd

Salix enables Public Sector organisations across England, Scotland, Wales and Northern Ireland to take a lead in tackling climate change by increasing their energy efficiency. Salix provides 100% interest-free capital for the public sector to reduce their energy costs by enabling the installation of modern, energy efficient technologies and replacing dated, inefficient technologies. Energy efficient technology cuts carbon emissions and reduces energy bills. However, upfront capital is a common barrier for public sector organisations seeking solutions that cut their energy consumption.

The Council borrows from the Welsh Funding Programme (Welsh Government Repayable Invest-to-Save Green Growth grant and where eligible 0% Loan Funding, managed by Salix Finance). Salix Finance Ltd is an independent, not for profit company funded by The Department for Business, Energy and Industrial Strategy, Welsh Government and The Scottish Government, removes this barrier by making this capital accessible to the public sector.

The WFP and Salix are aligned and work in partnership with the Re:fit Cymru Programme and the Re:fit process makes the application for the funds. The funding programme supports Re:fit project capital investment and can also support associated programme fees along with any additional internal resource requirements which Welsh public sector organisations may require to facilitate and execute a Re:fit programme.

4.0 Benefits of such an approach

There are a number of compelling reasons for retrofitting energy-saving and generation measures using the Re:fit Programme. The Department for Business, Energy & Industrial Strategy and Cabinet Office backing and support promote confidence in the programme.

4.1 Financial Benefits

- Reducing energy use and energy bills
- Using guaranteed energy savings to fund capital investment in equipment e.g. replacing failing boilers or poor-quality lighting while achieving a positive business case
- Protecting against fluctuating energy costs
- Generating income from renewable electricity through feed-in tariff (FIT) and Renewable Heat Incentive (RHI) schemes
- Reducing CRC energy efficiency scheme liabilities
- Reducing maintenance backlog and lifecycle costs by upgrading plant and machinery
- Reducing the cost of energy supply through on-site generation

4.2 Secondary Financial Benefits

- Realise specific targets/objectives within the CCoS Energy Strategy and associated action plan
- Reducing absenteeism by improving the working environment and air quality
- Improving asset values through better energy-efficiency ratings
- Minimising the need for urgent and unplanned repair costs as a result of upgrading equipment and improving building controls
- Potential to capture economies of scale through collaborative procurement
- Guaranteed return on investment
- Improved BREEAM ratings/Display Energy Certificates across estates
- Demonstrating commitment to environmental leadership and fulfilment of CSR goals

- Creating a safer environment with improved lighting, fewer equipment failures and improved building management systems that can quickly identify issues.

It should be noted that the Service Provider, via the Re:fit Framework Terms and Conditions, provides a guaranteed 100% of the energy saving or generation (kWh) via a contractual agreement for the payback period of the project, this key feature is helping to remove risk of failure with new developments, plus protecting the client and their investment.

5.0 How and when will benefits be realised?

Energy savings guaranteed by the Re:fit scheme will begin once installation of the energy conservation measures (ECM) is complete, will be measured and verified (M&V) throughout the payback period by the service provider.

Measured & Verified reports detail the energy and carbon savings being realised. If savings fall below the guaranteed levels, the service provider can install additional Energy Conservation Measures or provide financial compensation. Either way, the predicted savings are guaranteed.

Table 1 below represents the feasibility carried out to date and what the payback would be for the £1.34 Million investment, with a payback under 8 years.

Table 1

Estimated capital investment (£)	Estimated annual cost saving (£)	Maximum payback (yrs)	Total annual energy savings (kWh)	Total annual energy savings (%)	Estimated annual CO2 saving (tCO2e)
£1,270,758	£173,432	7.3	2,684,267	15.3%	820
5% Contingency *					
£1,334,296	£173,432	7.7	2,684,267	15.3%	820

* 5% contingency is for client contingency/unforeseen costs and as such would only affect the Estimated Capital Investment figure which, in turn would increase the payback period. The estimated level of savings would remain the same.

A list of premises included in Phase 1 of the spend can be found in **Appendix A**. Schools have not been included in Phase 1 as further discussions are required with Education on how to best finance the process via devolved budgets. However, they will be included in the second phase of the process.

6.0 Financial Implications

6.1 Capital

The total capital cost of the schemes in Phase 1 amounts to circa £1.34 million capital investment funded against a Wales Funding Programme (managed by Salix Finance) interest free loan. The loan would be repaid from the guaranteed savings on capital investment with the Council commitment being to pay the loan back over the payback period with the option to extend the pay pack period by x 1.25 (to a maximum of 10 years' loan payback term).

This means that Swansea Council could essentially extend the period of their loan from 7.7 years (7.7 x 1.25) to 9.6 years to allow some of the revenue savings to be invested into other energy efficiency projects at no additional cost to the authority and without affecting the loan conditions.

6.2 Revenue

The Capital investment would be serviced from guaranteed savings against the corporate revenue budgets [utility budgets].

The savings are underwritten by the Re:fit Service Provider and not the Council, so any underachievement of savings is reimbursed financially by the Service Provider, in the year of underachievement. The Council WILL NOT have to make up any difference.

The Council will have energy conservation measures fitted (or energy services/maintenance if required) across the estate by the Re:fit Service Provider, who will Measure & Verify the savings (using an internationally recognised standard, which can also be independently verified) and they commercially guarantee the kWh energy savings. The Service Provider is under contract to reimburse any annual shortfall of guaranteed savings (payable within 10 working days from the relevant Annual Reconciliation Report) with any excess savings kept entirely by the Council.

The Council will avoid cost, programme and mitigate savings risk, as long as the obligations under the contract are met. Operational and building change can be considered through a documented Change Management Process.

7.0 Staffing Implications

A project manager would be assigned to the project, with funding supported from the Capital Maintenance Energy Budget.

8.0 Equality and Engagement Implications

The Capital investment within building assets in Swansea will help to realise a more sustainable asset portfolio for the City and County of Swansea. An Equality and Impact Assessment screening form was completed (**Appendix B**) which indicated there was no need to complete a full Equality Impact Assessment. Where relevant, each specific project for which funding is agreed will be screened for an Equality Impact Assessment.

9.0 Procurement

The National Re:fit Framework is fully OJEU compliant and accessible to all Welsh local public body organisations. The framework allows access to 16 pre-qualified specialist framework service providers. All future call-offs will be via suitable mini-competition. The Council will facilitate where permissible, engagement with local supply chains.

9.0 Legal Implications

As indicated in the Report, the Council must comply with various statutory requirements as well as general obligations under the Occupiers Liability Acts in respect of its public buildings.

In relation to the use of the Re:fit Framework the Council will need to ensure that it complies with the framework's terms and conditions and enters into call-off contracts as appropriate to protect the Council's interests.

Background Papers: None

Appendices:

Appendix A: List of Premises

Appendix B: EIA Screening Form