

Salix Finance

An Update From Salix – Making The Most Of Funding Opportunities

Tuesday 22nd January 2019

Corinne Manion – Programme Co-Ordinator

Torran McNeill – Client Support Officer



Department for
Business, Energy
& Industrial Strategy



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Our Presentation

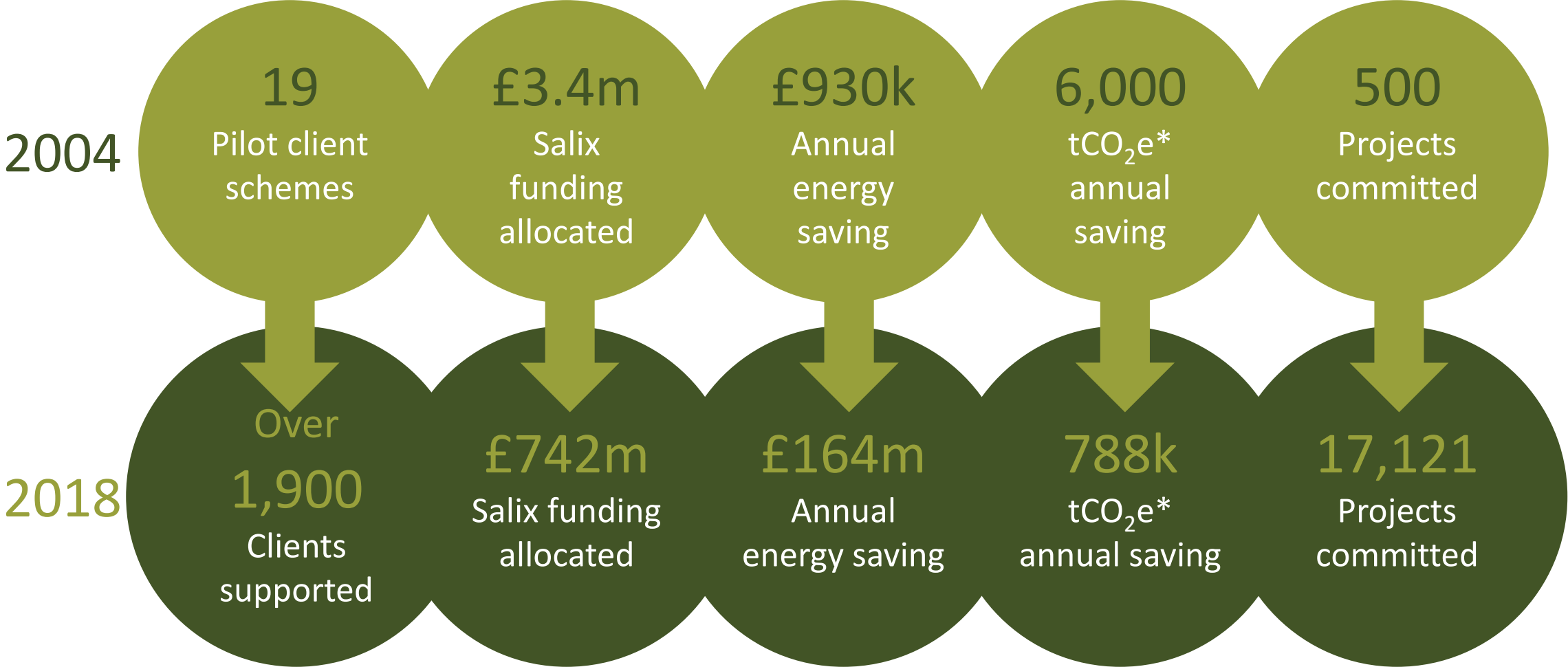
- ✓ Introduction
- ✓ Funding Opportunities
- ✓ Benefits to the Public Sector Body
- ✓ Supporting local authorities
- ✓ Case studies
- ✓ Summary and questions

Who We Are

- ✓ Worked in partnership with the Public Sector since 2004
- ✓ Our mission is to reduce public sector carbon emissions through energy efficiency investment using interest-free funding
- ✓ Funded by the Department for Business, Energy and Industrial Strategy (BEIS), the Department of Education, the Welsh Government and the Scottish Government
- ✓ National spread across England, Wales, Scotland and N. Ireland
- ✓ Wealth of knowledge and case study material to support public sector organisations



Making a difference since 2004

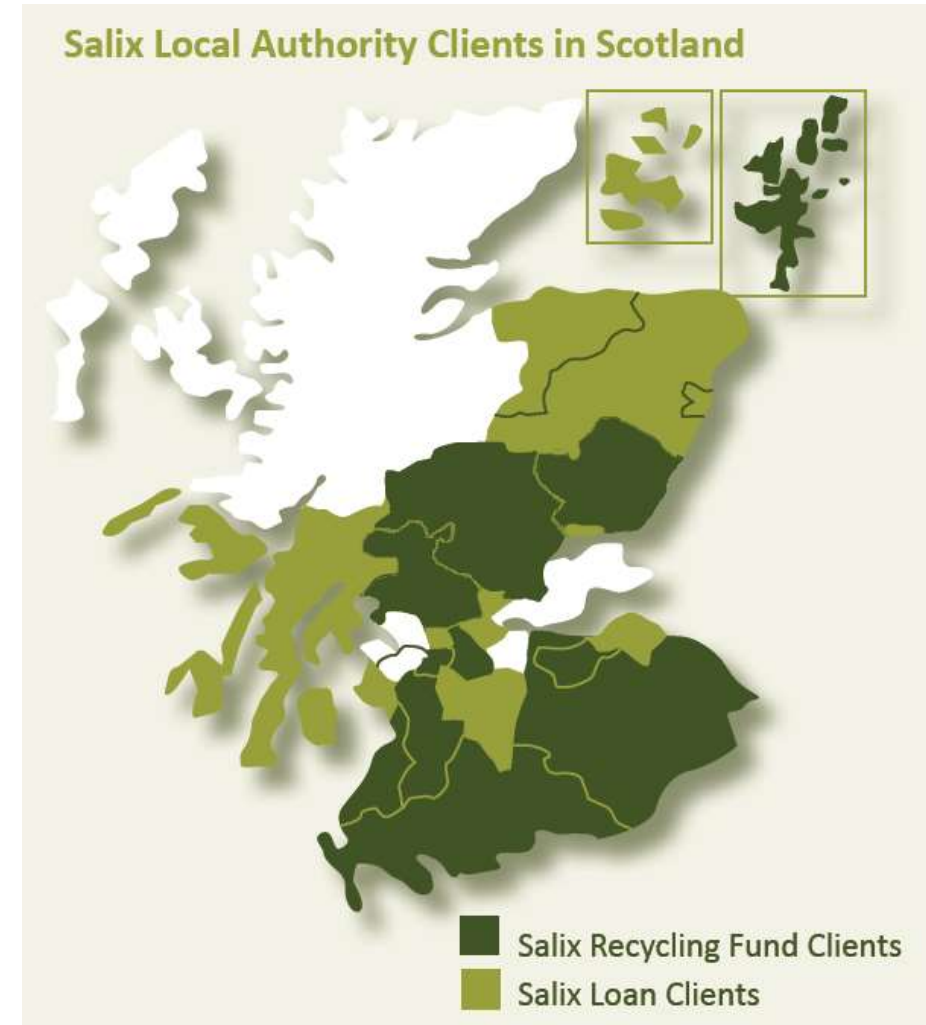


Figures accurate as of December 2018

*calculated using emissions factors published by government for carbon foot printing purposes

Salix Finance In Scotland

- ✓ Salix has worked in partnership with the Scottish Government since **2006**, when the original brief was to target higher education institutes
- ✓ Non-profit company which finances energy efficiency in the public sector
- ✓ We offer interest-free loans for projects which save carbon and public money
- ✓ Have worked with 25 local authorities overall



SALIX

SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Scotland Specific since 2007

2018



Figures accurate as of December 2018

**calculated using emissions factors published by government for carbon foot printing purposes*



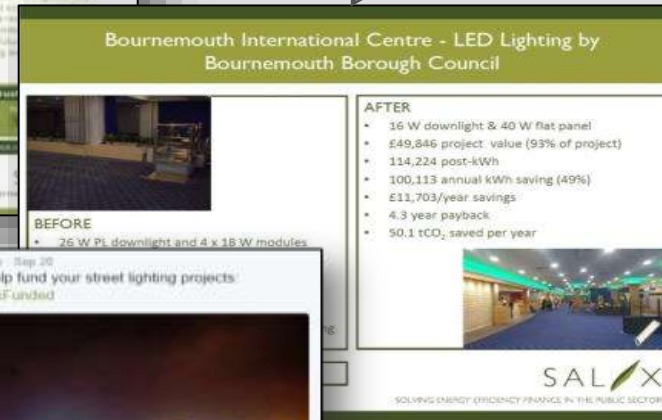
SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Knowledge Sharing

More than **80**
case studies

**Innovative
Financier of the
Year Award 2017**

More than **15**
Infographics



Over **400** **PKS**
(project
knowledge
slides)

Regional
meetings



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Funding Opportunities



Two Funding Programmes

✓ Salix has £8.5 million available for Public Sector Bodies at the start of the Financial Year. This is offered through two programmes:

- ✓ Salix Energy Efficiency Loan Scheme (SEELS)
- ✓ Salix Recycling Fund

Salix Energy Efficiency Loan Scheme (SEELS)

- ✓ A one off payment for an individual energy efficiency project.
- ✓ The loan is paid out on the completion of the project.
- ✓ Scotland – The project must be 50-50 match funded.

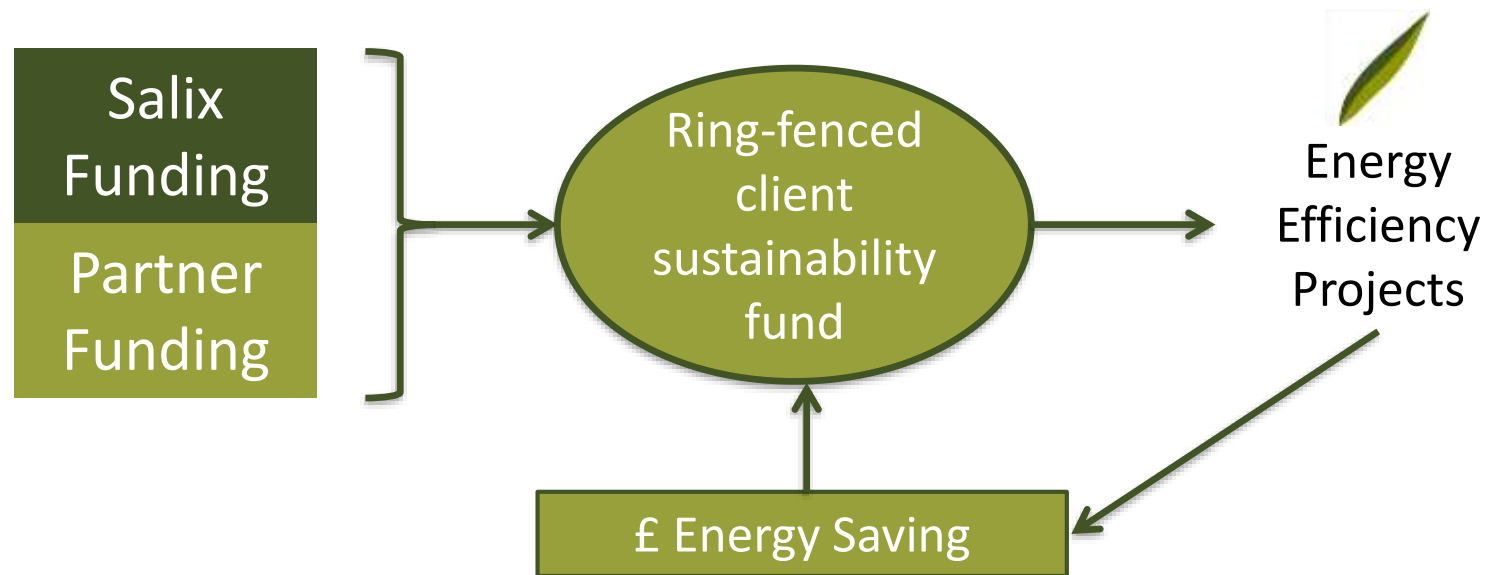
Project criteria - 8 years payback and cost of saving a tonne of carbon no more than £250/tCO₂ over lifetime of the project

How the SEELS loan works

- ✓ Easy online application process, decision typically in 2 weeks
- ✓ 'Reservation Letter' if pending procurement, PFI or approvals
- ✓ 'Commitment Letter' if project is ready to go
- ✓ Application can be revised following tender or changes during installation
- ✓ Long term projects are split into financial year phases
- ✓ Interim payments available throughout project

The Recycling Fund

- ✓ 50-50 Public Sector and Salix matched fund
- ✓ Ring fenced fund held by the Public Sector Organisation to be used on energy saving projects



The Recycling Fund

- ✦ Currently **22 Existing Recycling Funds in Scotland** with a total fund size of £22m.
- ✦ First funds set up 12 years ago - some original funds have been recycled 2.5 times over, some clients almost 3 times
- ✦ Bypasses annularity – clients can accurately forecast repayments available to reinvest in future financial years
- ✦ Classed as a “Conditional Grant” – a long term liability on the balance sheet without a fixed repayment date
- ✦ SERS system – Online Reporting System
 - ✦ Shows overview of current Fund
 - ✦ Able to produce reports on fund performance

Project criteria - 8 years payback and cost of saving a tonne of carbon no more than £250/tCO₂ over lifetime of the project



Supporting Public Sector Bodies



Popular technologies

100+ energy efficiency technologies and growing

- ✓ Boiler replacements
- ✓ Building energy management systems
- ✓ Combined heat and power
- ✓ Heat recovery
- ✓ Heat networks
- ✓ Heating and hot water upgrades
- ✓ Building fabric insulation
- ✓ Lighting upgrades
- ✓ Battery storage



Renewable technologies funded

- ✓ Biomass boiler

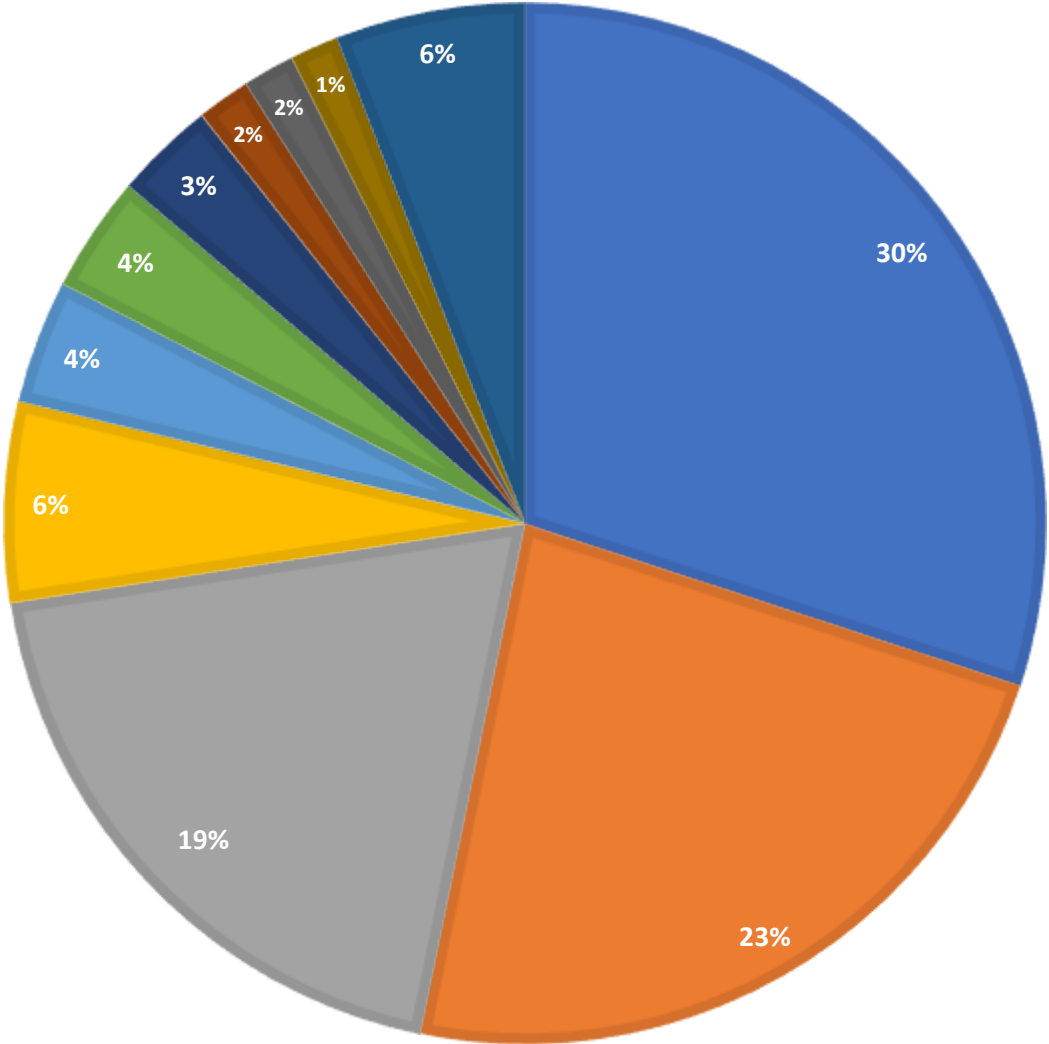
SALIX

SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR












Eligible areas of estate

- ✓ Carparks
- ✓ Communal areas of social housing
- ✓ Depots and warehouses
- ✓ External building lighting & floodlighting
- ✓ Leisure and sports centres
- ✓ Libraries
- ✓ Monument and other spotlighting
- ✓ Museums, galleries and theatres
- ✓ Parks and playgrounds
- ✓ Public transport shelter & footpath lighting
- ✓ Schools and academies
- ✓ Traffic lighting, bollards and street furniture

Loan Value By Technology



Key

Combined Measures	
LED lighting	
Street Lighting	
Computers & IT Solutions	
Lab Upgrades	
Solar PV	
Building Management Systems	
Ventilation and Cooling	
Boiler Replacement	
Heating and Hot Water	
Other	

Data for all Scotland Loans and Recycling Funds, 3 years up to Year End of 2017/18



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Benefits to the Public Sector Body



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Benefits of Recycling Fund to the Public Sector Body

- ✓ Facilitates long-term strategic aims of decreasing energy costs and greenhouse gas emissions
- ✓ Stimulates investment as funds are already available with the Public Sector Body.
- ✓ Focuses on cost-effective projects with CO₂ reduction impact
- ✓ Helps reduce estate backlog
- ✓ Flexibility with management charge and repayment options
- ✓ No maximum or minimum limits on project sizes



Flexibility and support

- ✓ Initial feedback on project ideas and draft application
- ✓ Meetings and presentations to Finance and Procurement colleagues
- ✓ Long term security of funding for projects
- ✓ Reservation of funding – to support decision making
- ✓ Supporting longer procurement timeframes
- ✓ Loan value can be revised following tender or change of scope



Case Studies



Salix Website: Knowledge Sharing

- 80+ Case studies
- 300 + Project Knowledge Slides (PKS)
- Webinars
- Best practice and client support material
- Regional meeting material and presentations

George Eliot Hospital NHS
Interest-free funding of £3.1 million as part of a combined heat and power unit distribution system, estimated to save the Trust over its lifetime.

Project overview
George Eliot Hospital NHS Trust announced a guaranteed energy performance contract (EPC) over a 10-year period for 100% zero carbon energy which will be saved, thereby reducing energy costs, carbon emissions and improving the resilience of the Trust's energy supply with the Trust's commitment to net zero by 2030. The Trust has utilised over £1.1 million of Salix's interest-free funding to fund its energy efficiency technologies.

The projects include a 1,000kW combined heat and power engine (CHP), three air-source heat pumps for water heating (ASHP), with one unit up standby and a new building management system (BMS) with remote access controlling the CHW system.

These projects are estimated to save the Trust over £300,000 per year and over £3,000,000 over the 10-year period. The projects included £1.1 million with the remaining balance being covered by the Trust's internal resources.

"As a Trust we have found it very difficult to undertake sustainable projects that are very accessible and accessible to energy saving in the future."
- Mrs. Sarah, Head of Energy and Facilities, GEH

Estimated savings by George Eliot Hospital NHS Trust**

Annual £ Savings	Lifetime £ Savings
£621,735	£9,221,850

Contact the Salix NHS team to find out energy efficiency at info@salixfinance.

**Figures based on 2021-22

Salix Finance
www.salixfinance.co.uk

SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Project Knowledge – Combined Heat and Power Nottingham Trent University

BEFORE

- Clifton Campus
- Boiler and reliance on National grid
- Electricity from grid – 3,825,000kWh
- Gas – 3,635,262kWh
- Pre-project emissions 1,215 tCO₂e

AFTER

- Installation of CHP unit with a connection to district heating system.
- £500,000 + £50,000 management charge
- 4.8 years technical payback
- 70% of heat generated to be used onsite
- Annual carbon reduced by 334 tCO₂e
- £100k annual savings

Project completion date – November 16

www.salixfinance.co.uk

SALIX
SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

Salix Finance @SalixFinance · Feb 16

Salix, in partnership with the Department for Education, provides funding for maintained schools to improve their energy efficiency, lower energy bills and create a more comfortable learning environment. Find out more here tinyurl.com/yc2xcyqj #schoolfunding #SalixFunded



SALIX 
Department for Business, Energy & Industrial Strategy

SALIX 

SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

High Performance Computing and Data Centre Cooling Upgrades at the University of Strathclyde



BEFORE

- 105 kW High Performance Computing (HPC) cluster with rear door water cooling.
- 25kW decentralised departmental HPC
- 150kW non ICT load (cooling, lighting, UPS)
- PUE 1.95
- Operating cost of £300,000 p.a.

PROJECT:

- 40kW HPC replacement; decommission existing.
- Decommission 25kW of departmental HPC.
- Increase chilled water temp from 8°C to 16°C.
- Install EC fans on CRAC units + void ΔP control.
- Rebalance of primary / secondary flow rates.
- Reconciliation of air distribution.
- Capital cost £886,700

OUTCOME:

- Electrical savings of 1,000,000 kWh p.a. (48%)
- Operating cost saving of £159,000 p.a.
- Payback of 5.55 years; £185/tCO₂
- 448 tCO₂ saved per year
- Funded 50% from Science & Engineering faculty.

[Project completion date – March 2018](#)

Project Knowledge – Air Handling Unit by Glasgow Life



BEFORE

- Scotstoun Swimming Pool used a 20 year old AHU. This was not specifically designed for swimming pools, and highly inefficient
- Annual energy consumption:
 - 178,200 kWh electricity
 - 1,658,880 kWh gas
- £79,445/year energy cost
- Ongoing maintenance problems

AFTER

- Installed a Menerga ThermoCond 38 – purpose built for swimming pools
- Total project cost: £366,074
- Salix funding: 194,651
- New Energy Consumption:
 - 129,600 kWh electricity
 - 74,650 kWh gas
- £55,448/year savings
- 292 tCO2 saved per year
- 3.5 year payback



[Project completion date – July 2017](#)

Project Knowledge – NDEE Schools Project by East Renfrewshire Council



BEFORE

- 8 primary schools
- T12/T8 lighting, electric storage heaters, halogen flood lights and inefficient heating controls.
- Used the Scottish Government's Non-Domestic Energy Efficiency (NDEE) framework.

AFTER

- LED lighting, air source heat pump, remotely managed BEMS system.
- £362,100 technical cost (£181k funded by Salix) plus the use of a scheme management charge
- 486,830kWh saving annually
- £48,199/year savings
- 7.5 year payback period
- 200tCO₂ saved per yr



[Project completion date – March 2017](#)

Project Knowledge – Heat Pumps at John Honey Building by University of St. Andrews



University
of
St Andrews



BEFORE

- Boiler heating and air conditioning
- 579,027 kWh Annual pre project consumption
- £44,739 per year running cost
- Poor controls with the heating & cooling clashing

AFTER

- Air Sourced Heat Pumps
- £35,492 Project Cost not inc. 15% management
- 252,604 kWh Annual savings
- 43% kWh saving
- £11,435 Annual savings
- 3.1 Year Payback
- 56.6 tCO₂ saved per year



[Project completion date – July 2016](#)

Project Knowledge - Student Accommodation LED Upgrade (Phase 1) by Edinburgh Napier University



BEFORE

- Almost no LED lighting in use
- Predominantly compact fluorescents and 2D
- 61,287 kWh estimated lighting consumption
- £7,233 year running cost
- Lamps near to end of life

AFTER

- LED lamps and boards through out
- £20,465 project costs
- 38,272 annual kWh saving
- 62% kWh saving
- £4,393 year savings
- 4.66 year payback
- 17 tCO₂ saved per year



[Project completion date – August 2016](#)

Discussion questions

- ✦ Main barriers/challenges to investment
- ✦ Future opportunities
- ✦ How the savings are realised

Summary

- ✓ Updates on the funding available and progress achieved
- ✓ Funding Opportunities
- ✓ Supporting Public Sector Bodies
- ✓ Benefits, Support and flexibility
- ✓ Case studies from other Public Sector Bodies
- ✓ **Funding available until March 2019**



Thank you – Any Questions?

Corinne.Manion@salixfinance.co.uk

Torran.McNeill@salixfinance.co.uk

www.salixfinance.co.uk

 *@SalixFunded*

