



EAUC Annual Conference University of Leeds 23 – 25 March 2015

# CHALLENGING CONNECTIONS

Incorporating the Student Sustainability Summit, Further Education Sustainability Summit and Transformational Leadership Summit

## Exchange A3: Salix and EAUC College Energy Fund

*Claire Banham-Godfrey, Client Support Officer, Salix Finance, Qasim Akhtar, Technical Support Officer, Salix Finance Ltd and Alannah Powell, PR & Marketing Executive, Salix Finance Ltd*



@TheEAUC  
#EAUCConf15



Conference Sponsor

**Carbon**Credentials





# Further Education SUSTAINABILITY SUMMIT

24 March  
University of Leeds

## Salix Finance: Further Education Colleges Fund

**Claire Banham-Godfrey**

Client Support Officer

**Qasim Akhtar**

Technical Support Officer

**Alannah Powell**

PR & Marketing Executive

Conference Sponsor



**Carbon**Credentials

Summit Sponsor

**LUCID**≡ON

A partnership between



Association  
of Colleges  
Partnering. Empowering. Supporting.



# Agenda

---



- Background to Salix
- Knowledge Sharing and Case Studies
- The Success of the Salix College Energy Fund
- Case Study: City College Plymouth
- Further Funding
- How to Apply
- Q&A



# Background to Salix

---



CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR



# Who We Are

---



- Established in 2004
- Independent, publicly funded, not-for-profit company
- 100% interest-free capital finance for the public sector
- Funded by DECC, DfE, Scottish Govt, Welsh Govt



# Salix Sectors Include...



- Academies
- Emergency services
- Further education
- Higher education
- Local authorities
- NHS trusts and Foundation trusts
- Schools





# Growth from 2004- 2015



2004

19  
client pilot  
schemes

£3.4m  
funding  
allocated

£932,029  
energy  
savings

5,865  
annual  
tCO<sub>2</sub>

503  
projects

2015

1,0740  
clients  
supported

£342m  
funding  
allocated

£90m  
energy  
savings

500,000  
annual  
tCO<sub>2</sub>

12,729  
projects

Data as January 2015

SALIX



# How We Can Help

---



- Engage and visit clients
- Offer technical support
  - Help put together applications and business cases
  - Adds extra assurance as projects are tested by Salix and Atkins
- Workshops and Networking
- On going client support through process







CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR

## Case Studies & Website Resources



# Website Resources for Colleges



- Specific page dedicated to colleges for support and learning
  - Application notes
  - Compliance criteria
  - Webinar
- Project knowledge slides
- Case studies

**100%  
INTEREST  
FREE  
CAPITAL  
FINANCE  
LOANS**

**An Introduction  
to Salix Finance:  
Further Education  
Colleges Fund**

**Claire Banham-Godfrey**  
Client Support Officer

**Craig Mellis**  
Technical Services Manager

**eauc**

**SALIX**  
SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

*[www.salixfinance.co.uk/loans/Salix-College-Energy-Fund](http://www.salixfinance.co.uk/loans/Salix-College-Energy-Fund)*





# Knowledge Sharing



Search This Area

Knowledge Share

- Technologies
- Case Studies
- Project Knowledge Slides
- Compliance Tools
- Best Practice Calculations
- Client Support Material
- Regional Meeting Material

SALIX  
SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR

email: info@salixfinance.co.uk  
tel: 020 7406 7620

Home Loans Recycling Fund Knowledge Share News About Us

Knowledge Sharing and Support

Continually updated with best practice calculations, case studies and project knowledge slides.

Client Name Client Type Building Type

- Any - - Any - - Any -

Project Type Work Type

- Any - - Any -

Clear selection

Social Media

News & Blog

Case Studies

Project Knowledge Slides



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR



# Salix Project Case Studies



Kings College Hospital, London used a £96,327, 100% interest free, capital finance loan to upgrade to LED lighting. They saved £20,170 on their annual energy costs. This is how they did it with Salix.

## Project overview

Kings College Hospital, used a Salix 100% interest free, capital finance SEELS loan of £96,327 to install a new state-of-the-art, cost effective, LED lighting solution.



### Salix will help you:

Learn how you can benefit from Salix energy efficiency technical knowledge

Take advantage of our tried and tested business case tool

Learn about ways to start making long-term energy cost savings

Start to use our straightforward loan application process

### The strong Salix business case

Kings College Hospital, had a well defined corporate objective to deliver a financially strong and carbon effective hospital lighting upgrade.

Salix worked quickly to help Kings College Hospital to assess their project and to share technical knowledge.

### Six Salix indicators

Total loan value

£96,327

Annual £ savings

£20,170

Annual savings tonnes of CO<sub>2</sub>

157

Lifetime £ savings

£262,210

Lifetime savings tonnes of CO<sub>2</sub>

2,042

Project payback

4.8 years

Adur and Worthing used a £297,202, 100% interest free, capital finance loan to deliver a range of energy efficiency projects across different sites. This is how they did it with Salix.

## Project overview

Salix helped Adur and Worthing implement energy efficient LED lighting, air conditioning and heating upgrades, which saved them over £90,000 on their annual energy costs.



### Salix will help you:

Learn how you can benefit from Salix energy efficiency technical knowledge

Use our range of case studies to help you write a strong business case

Find out about ways to start making long-term energy cost savings

Start to use our straightforward loan application process

### The strong Salix business case

Adur and Worthing Council had a clearly defined corporate objective to reduce their annual energy costs across all of their sites.

Adur and Worthing had five different projects through which to improve energy efficiency in their leisure centre and other community buildings.

The Salix client support team worked with Adur and Worthing staff who presented a solid business case which illustrated the immediate and long-term savings potential of the projects.

### Six Salix indicators

Total loan value

£297,202

Annual £ savings

£90,478

Annual savings tonnes of CO<sub>2</sub>

525

Lifetime £ savings

£1,469,954

Lifetime savings tonnes of CO<sub>2</sub>

8,541

Project payback

3.5 years

Stafford Further Education College used a £320,829, 100% interest free, capital finance SEELS loan to implement a new energy efficient boiler and lighting projects. This is how they did it with Salix.

## Project overview

Stafford Further Education College used a Salix 100% interest free capital finance loan of £320,829 to replace their oil fired heating with a new energy efficient gas boiler and also install new energy efficient lighting.



### Salix will help you:

Learn how you can benefit from Salix energy efficiency technical knowledge

Use our range of case studies to help you write a strong business case

Learn how to significantly reduce annual energy costs

Start to use our straightforward loan application process

### The strong Salix business case

Stafford Further Education College faced tough medium-term financial cuts, so they needed to find an effective way to help manage rising energy costs.

The Salix compliance tool highlighted annual energy cost savings of over £81,300 and significant annual carbon emission savings of 394 tonnes of CO<sub>2</sub>.

### Six Salix indicators

Total loan value

£320,829

Annual £ savings

£81,276

Annual savings tonnes of CO<sub>2</sub>

394

Lifetime £ savings

£1,056,347

Lifetime savings tonnes of CO<sub>2</sub>

5,297

Project payback

3.5 years

- Salix are always looking to celebrate exemplar projects by producing case studies for knowledge share



# Salix Previous Work With Colleges

---



CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR



# Salix and Further Education



## Work in the FE sector since 2004

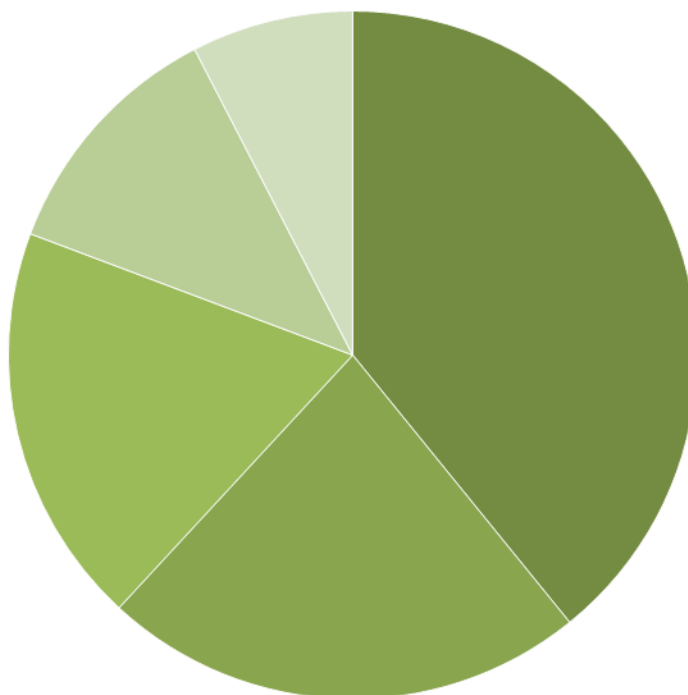
- Worked with **201** Colleges in England, Scotland and Wales
- Funded **1,482** projects worth **£31 million**
- Lifetime savings predicted at:
  - **£81 million**
  - **527,873 tonnes of CO<sub>2</sub>**





# Salix and Further Education

## Top 5 Technologies Funded



- LED Lighting  
£568,844
- Lighting Upgrades  
£330,055
- Air Source Heat Pump  
£274,000
- Heating and Hot Water  
£169,676
- Building Management Systems  
£110,295

*\*for financial years 2012/2013 to end of Quarter 2 2014/2015*



# Salix College Energy Fund

---



CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR



# Salix College Energy Fund



- In partnership with the **EAUC** and supported by the **AoC**
- **£5million** of funding made available for FE Colleges
- Funding intended to help **reduce carbon emissions** and **create financial savings**
- Project Compliance Criteria
  - Up to a 5 year payback
  - Up to £100/tCO<sub>2</sub> over the life time of the project





# Salix College Energy Fund

---



- **30** colleges applied
- Currently awarded **£3,487,114** for **55** projects
- Largest submission valued at **£336,036**
- Smallest submission valued at **£12,000**
- Lifetime savings predicted at:
  - **£15,254,729**
  - **77,033** tonnes of CO<sub>2</sub>





# Split by Region

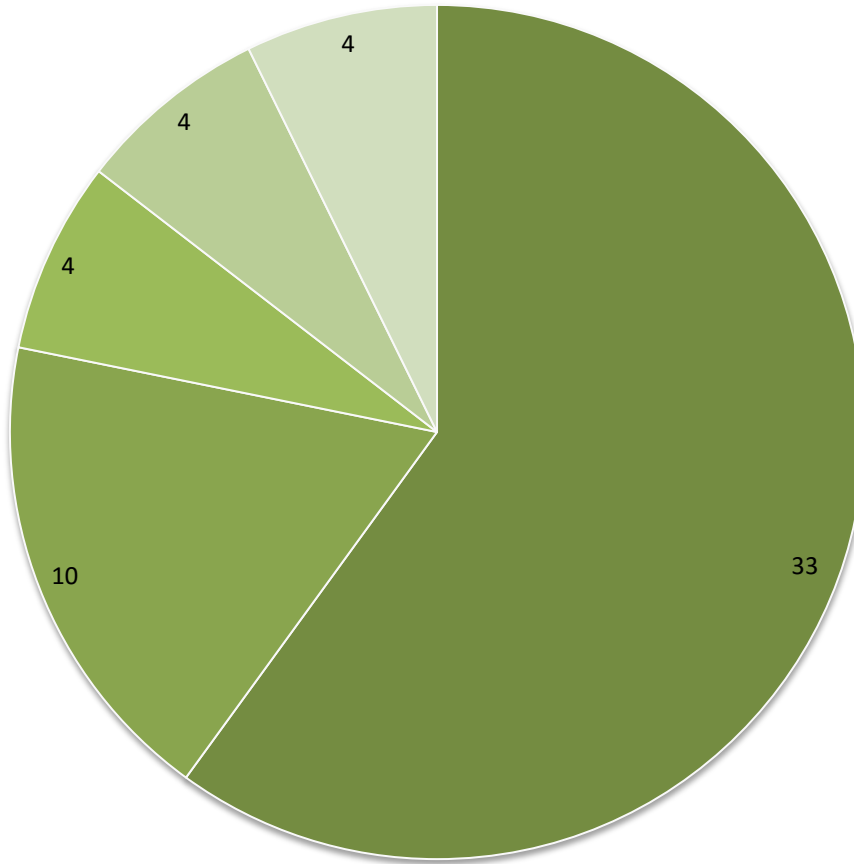


Region	No. of Colleges
South East	4
London	3
South West	5
North West	1
East of England	4
West Midlands	4
Yorkshire	4
East Midlands	4
North East	1
Total	30



# Top 5 Technologies

EAUC/SALIX Colleges Programme 14/15 FY



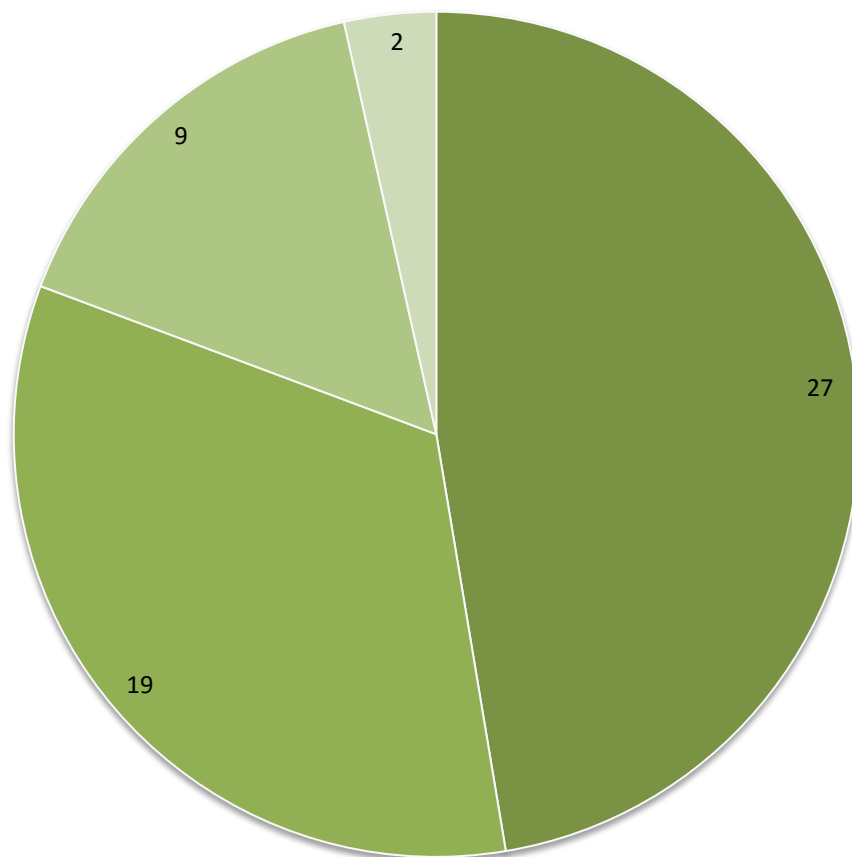
1. LED lighting – **33**
2. Boiler Replacements – **10**
3. Building Management Systems – **4**
4. Insulation Building Fabric – **4**
5. Pipework Insulation – **3**





# Value of Projects

EAUC/SALIX Colleges Programme 14/15 FY



1. £12,500 - £100,000 – **27 projects**
2. £100,001 - £200,000 – **19 projects**
3. £200,001 - £300,000 – **9 projects**
4. £300,001 - £350,000 – **2 projects**



# Hull College

## Project Example

### Project overview

Salix awarded Hull College £336,036 to fund lighting and cooling measures at the Queens Garden Campus. The project is set to save the college £69,489 of their annual energy bill.

### Pre Project Conditions –

- Lighting in 1950's tower block predominantly T12/T8 fluorescents
- Some areas not covered by lighting controls – lights left on longer than required
- Refrigerant cooling system in data centre
- Running costs of £96,968 per year





# Hull College Project Example

## Project overview

Salix awarded Hull College £336,036 to fund lighting and cooling measures at the Queens Garden Campus. The project is set to save the college £69,489 of their annual energy bill.

### Salix Funded Solution –

- Evaporative cooling, LED lighting and lighting controls proposed.
- £69,489 annual financial saving
- Saving 373.49 tCO<sub>2</sub> per year
- Project to pay back within 4.84 years





# Stratford upon Avon College Project Example

## Project overview

Stratford have been awarded £67,554 to deliver an LED lighting and upgrade their BMS system.

## Salix Funded Solution –

- BEMS to offer enhanced control of heating and air conditioning plants
- £19,059 annual cost saving
- Project payback of 3.54 years
- Saving 114 tCO<sub>2</sub> per year



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR



# Stratford upon Avon College Project Example

## Project overview

Stratford have been awarded £67,554 to deliver an LED lighting and upgrade their BMS system.

## Salix Funded Solution –

- BEMS to offer enhanced control of heating and air conditioning plants
- £19,059 annual cost saving
- Project payback of 3.54 years
- Saving 114 tCO<sub>2</sub> per year



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR



# Feedback on Submissions

---



- Overall applications have been of a high standard
- The most effective projects had clear and concise savings calculations
- Common points we queried as part of our checks:
  - Using the multiple project site tool to group projects
  - Checking figures on compliance tools matched with supporting information
  - Energy prices and using an average over the payback of a project





# Feedback on Submissions

---



- **For lighting projects –**
  - How the operational hours for projects were estimated
  - Whether operation would vary between rooms and buildings
  - If lighting controls were included some information around the processes used to estimate savings
  - Understanding whether lighting controls were integrated or separate from new light fittings





# Feedback on Submissions

---



- **For Boiler replacement projects –**
  - How efficiencies for boiler system had been estimated
- **For fuel switch projects –**
  - Checking conversion factors used to convert quantities of fuel to kWh consumptions (e.g. converting litres of oil to kWhrs)
- **For BEMS and heating control projects –**
  - How percentage savings had been shaped around site specific factors/ surveys







**City College  
Plymouth ...  
an enterprising  
college**

**Salix Workshop**





## Gilbert Snook, Head of Estates





# City College Plymouth



- 2 x main sites (Kings Road & Goschen)
- 2 x small satellite sites
- Kings Road the largest at approx. 25,000m<sup>2</sup>
- Energy use across whole Estate
  - Electricity: 2,500,000 kWh
  - Gas: 2,600,000 kWh





# Previous Projects



- Boiler Replacement (£177k) – 2 x old oil fired and 1 x gas fired replaced with 4 x condensing boilers
- Upgrade and additional BMS controls to some buildings (£33k) – provided modern, more flexible and more extensive control of heating & ventilation
- Cavity wall insulation (£12.5k) – reduce heat losses



# Application Process



- Identifying suitable projects – robust energy management is key
- Preparation of information for compliance tools – takes time and will involve calculations
- Compliance tools are easy to use and uploading documents to Salix website is straightforward
- Post application – Salix will assess the technical merits of the application so prepared to provide more information

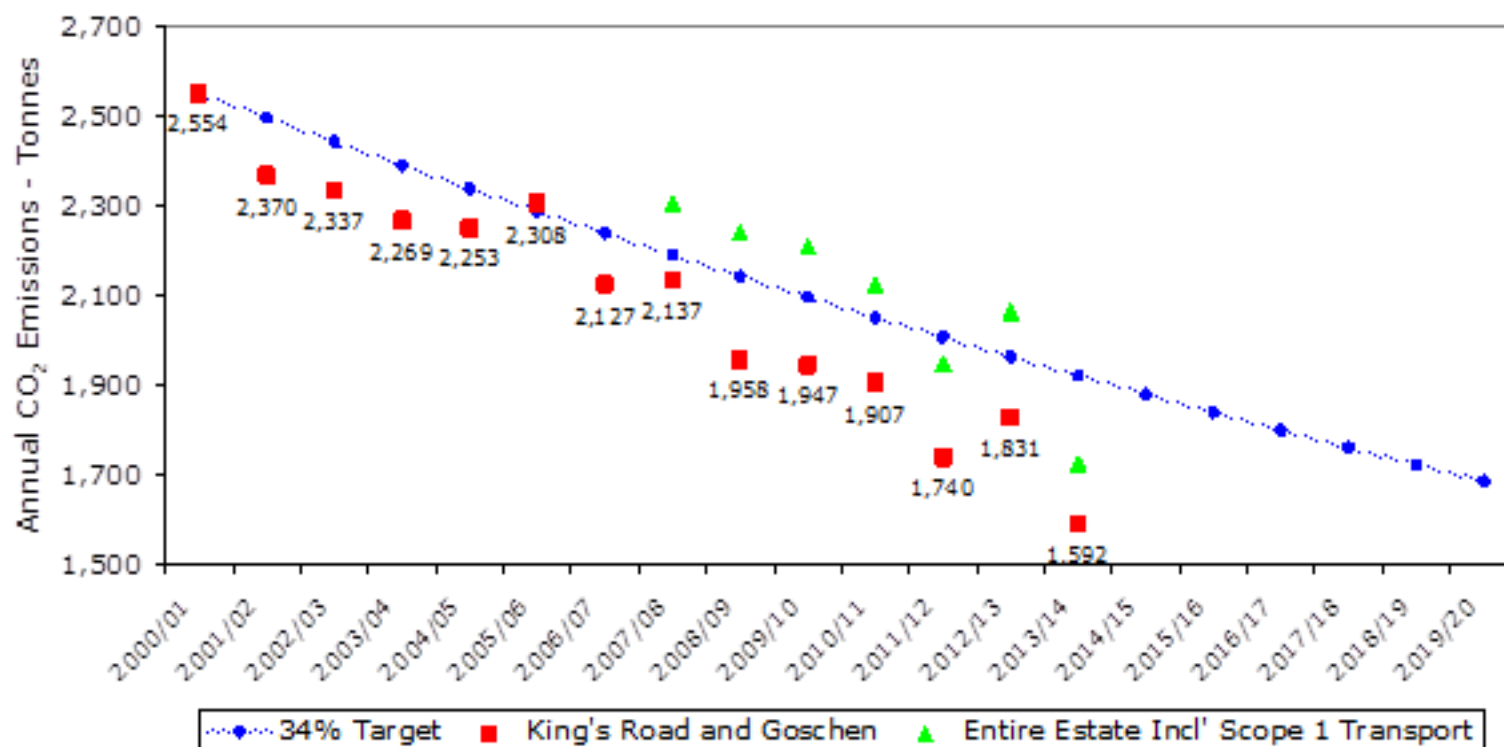




# Why We Do It



Overall Estate -  
Carbon Performance vs Target





# Further Funding

---



CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR



# New Funding for Colleges In England

---



- In partnership with the **EAUC** and supported by the **AoC**
- Promote energy efficiency in the further education sector
- **£5 million** of funding for Further Education Colleges
- Funding round closes **Tuesday 30<sup>th</sup> June**
- **Early applications welcome** and projects will be assessed on submission
- **Funding will be awarded as projects are passed**





# Eligibility and Compliance Criteria

---



- Any FE College who receives a majority of their income directly from the public sector
- 6th Form Colleges eligible
- Project Compliance Criteria
  - Less than a 5 year payback
  - Less than £100/tCO<sub>2</sub> over the life time of the project

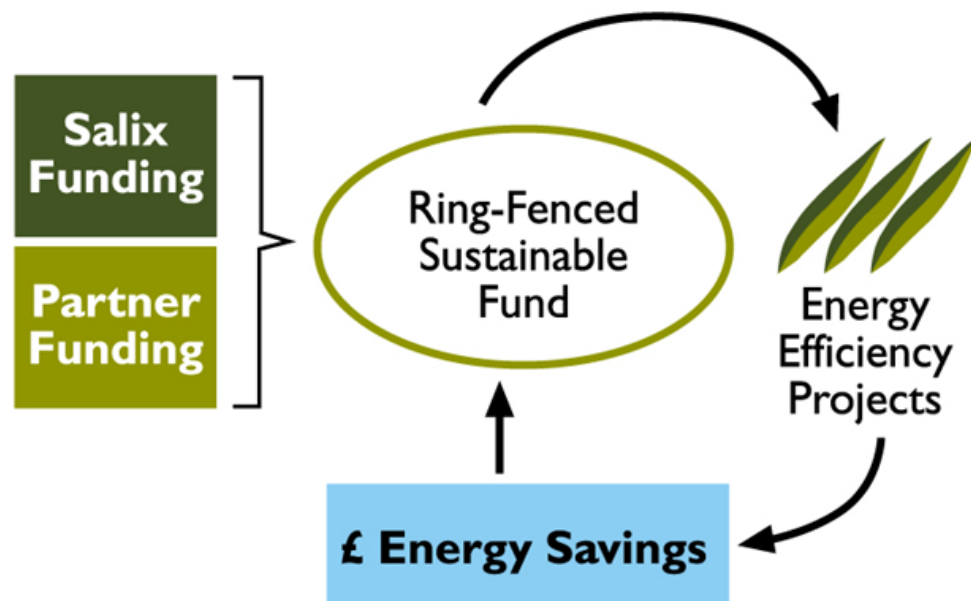




# New Funding for Colleges In Scotland



- We are taking expressions of interest for Revolving Funds
- Project Compliance Criteria
  - Up to an 8 year payback
  - Up to £200/tCO<sub>2</sub> over the life time of the project





# How to Apply

---



CELEBRATING 10 YEARS  
WORKING WITH THE PUBLIC SECTOR



# Five Steps for a Salix FE College Application

---




1. Go to the Salix website [www.salixfinance.co.uk](http://www.salixfinance.co.uk) and select the Salix College Energy Fund
2. Complete an online application form
3. Complete our simple Compliance Tool with project details (and Salix business case for projects over £100k)
4. Submit your application online
5. Salix will do a technical assessment






# Completing the Compliance Tool



<div> <div> <b>Compliance Criteria :</b> <table border="1"> <tr> <td>Payback</td> <td>5 years</td> </tr> <tr> <td>£/tCO<sub>2</sub> LT</td> <td>£100</td> </tr> </table> </div> <div>  <p>SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR</p> </div> </div>										Payback	5 years	£/tCO <sub>2</sub> LT	£100
Payback	5 years												
£/tCO <sub>2</sub> LT	£100												
	Annual kWhrs Post-Project	Annual kWh savings	% kWh savings	Financial savings	Payback in years	1	2	3	4	Compliance			
						tCO <sub>2</sub> pa	PF	tCO <sub>2</sub> LT	£/tCO <sub>2</sub> LT				
20	60,000	140,000	70.0%	£13,300	4.51	75.25	25.00	1,881.18	31.89	Compliant			

<div> <div> <b>Salix Finance:</b>  <b>Single Fuel Compliance Tool Version 29</b>  <small>© Salix Finance 2014</small> </div> <div>  <p>SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR</p> </div> </div>													
<div> <div> <b>Compliance Criteria :</b> <table border="1"> <tr> <td>Payback</td> <td></td> </tr> <tr> <td>£/tCO<sub>2</sub> LT</td> <td></td> </tr> </table> </div> </div>										Payback		£/tCO <sub>2</sub> LT	
Payback													
£/tCO <sub>2</sub> LT													



# Loan Management

---



- A Commitment Letter will be issued once project has passed
- Loan Agreement and Direct Debit Mandate to be signed
- Loan paid at completion of project
- Interim payments possible if required by supplier
- Loan repaid over 4 years (direct debit April & October)
- Salix take an active approach in visiting clients and can engage with finance departments





# Summary



- **Early applications welcome** and will be tested on submission
- Applications will be accepted up to **30<sup>th</sup> June 15**
- Projects are to be completed by **March 2016**
- Taking expressions of interest for Scottish colleges **Revolving Funds**
- Salix take an active approach in **visiting clients** and can engage with finance departments and directors





# Thank you

---



Please contact the Further Education  
Colleges Team for further information

**E-mail:** [fecolleges@salixfinance.co.uk](mailto:fecolleges@salixfinance.co.uk)

**Phone:** 0207 406 7620





# Challenging Connections

---

