

# Reducing energy bills and improving college estates

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100% INTEREST FREE CAPITAL FINANCE LOANS

# Salix Finance

Reducing Energy Bills and Improving College Estates with Salix Finance

17<sup>th</sup> October 2019







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### Agenda

#### Introduction

- Our work with further education institutions
- Salix Energy Efficiency Loan Scheme (SEELS)
- Preparing for the future
- Presentation from Bob York at Northampton College
- Application process and support





#### Salix Overview

- Independent, non-profit publicly-funded company making a difference since 2004
- ✓ Our mission is to reduce public sector carbon emissions and energy costs through energy efficiency within the UK
- Salix provides interest free funding to accelerate investment in energy efficient technologies
- Other public sector clients in addition to further education institutions include:
  - ✓ Universities, schools & academies, local authorities and NHS trusts
- Funded by



Department for Business, Energy & Industrial Strategy



Llywodraeth Cymru Welsh Government

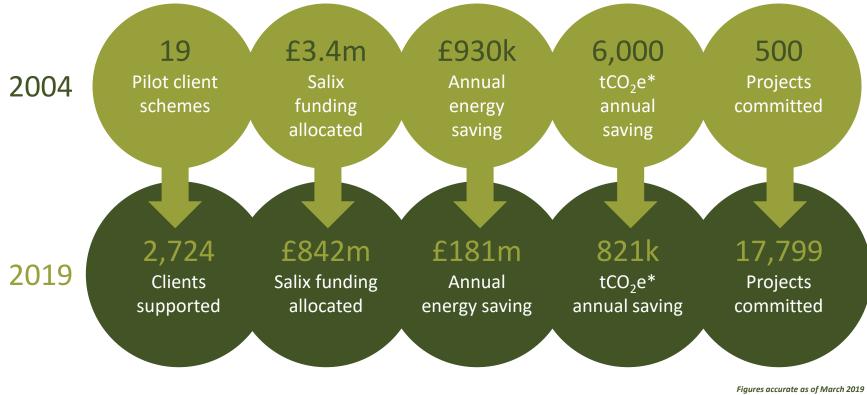


Government

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#### Making a Difference from 2004 to 2019



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

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#### Salix Work with Further Education Institutions



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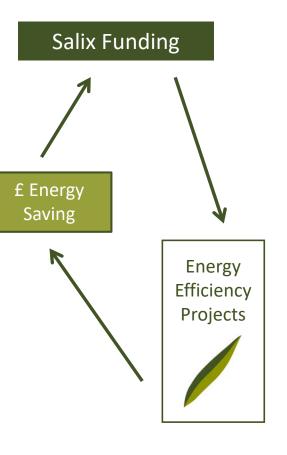
### Salix Energy Efficiency Loan (SEELs)

- Interest free loan for energy efficiency projects
- ✓ Up to 100% of project costs
- Compliance criteria:
  - ✓ £191/tCO₂eLT
  - Loan is repaid over 5 years
  - Project must be "additional"

- Additional costs that can be included in a Salix loan..
- Project capital costs
- Enabling works

Project design

- Cost of metering
- Supplier/contractor fees





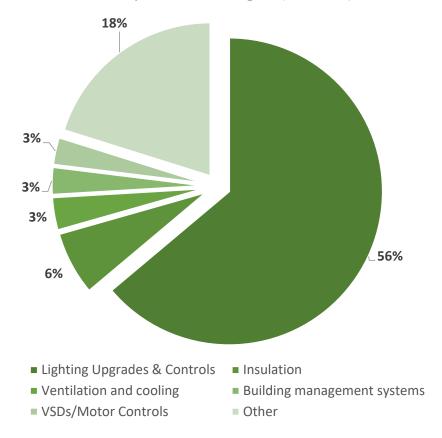


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#### Salix Funded Technologies in Further Education

- LED Lighting
- Insulation pipework
- Ventilation and cooling
- Building Management Systems (BEMS)
- Lighting controls
- VSDs/motor controls
- Others (fabric insulation, ICT upgrades, lab upgrades)

Most Popular Technologies (2015-18)



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#### Salix & Further Education in the Future

#### 15 HE & FE institutions have declared a Climate Emergency

- Funding available to support estates masterplans in achieving carbon reduction targets
- Salix technology list to expand driven by interest in the public sector, potentially...
  - Lab upgrades
  - Electric vehicles
  - Control optimisation
- Currently funding Solar PV
  - Including projects where part of the energy may be exported





#### A Model College

#### **Advancing Net Zero**

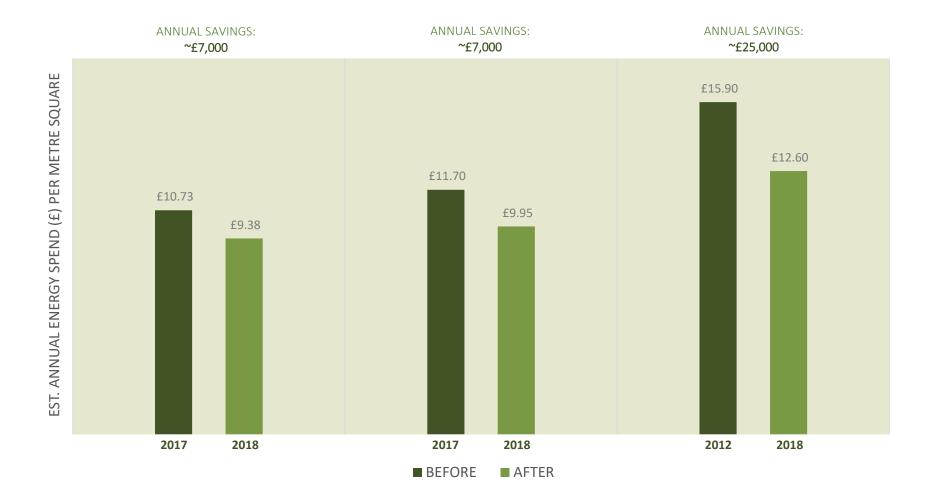
"A building that is highly energy efficient and fully powered from on-site and/or off-site renewable energy sources."

COLLEGE ESTIMATED ANNUAL ENERGY SPEND (£) PER METRE SQUARE 13.98 Example 11.25 Client C 5.70 Client B 4.31 Client A 0 2 4 6 8 10 12 14 16 EST. ANNUAL ENERGY SPEND (£) PER METRE SQUARE \*based on the average variable electricity price for 2018 (BEIS) typical electricity energy use per m<sup>2</sup> per annum (MHCLG, 2019)

(WorldGBC, 2018)



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#### DIFFERENCE IN ANNUAL ENERGY SPEND (£) PER METRE SQUARE BY PROJECT

\*based on the average variable electricity price for 2018 (BEIS)





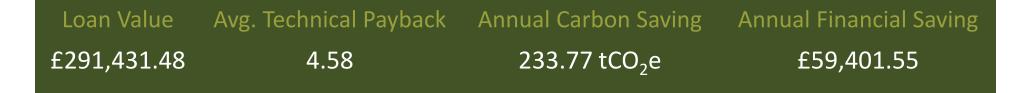
## Northampton College







#### Northampton College – LED Lighting









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Loan Value	Avg. Technical Payback	Annual Carbon Saving	Annual Financial Saving
£142,130.28	7.17 years	55.50 tCO <sub>2</sub> e	£19,819

Large LED lighting replacement across the college's corridors, stairwells and thoroughfare

Reduced their electricity consumption by replacing existing 1,318 fluorescent lighting with LED across the campus.

- 100% of project cost financed through Salix
- LED lighting project will use the College main incoming electric meter and BMS meters to monitor its post completion data/programme





- / Get support of Senior Management
- Communicate project information to students and staff
- Use College website to publish details to wider community
- Rely on your Salix advisor
- Manage your own projects





#### **COLLEGE ENVIRONMENTAL / ENERGY MANAGEMENT PLAN**

#### Commitment

- / To deliver where practicable the College Sustainability Policy
- To fully comply with all applicable environment protection legislation, guidelines and requirements.
- To promote bio diversity in the environment
- / To reduce the waste to landfill of the college by 50% by April 2020
- / To reduce energy usage and carbon dioxide generation by 15% by October 2020
- To maximise renewable technology
- To manage site flooding
- To minimise noise from site
- To manage emissions from site
- To promote healthy living for students, visitors and staff







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#### **PROJECTS SUMMARY**

Date	Lighting Project	Cost	CO <sub>2</sub> Annual Saving	kWh Annual Saving	Annual Cost Saving	Payback
Apr-15	Booth Lane Cherry Building	£20,000.00	22.75	42,332	£4,457.00	4.49
Aug-15	Lower Mounts 1	£50,000.00	61.48	114,389	£12,045.00	4.15
Apr-18	Lower Mounts 2	£57,367.20	38.48	100,085	£10,979.00	3.96
Apr-18	Booth Lane Oak Building Top Floor	£11,934.00	24.01	62,451	£6,539.00	3.96
Aug-18	Booth Lane Sports Hall	£10,000.00	7.77	20,218	£2,020.20	4.95
Sep-19	Booth Lane Main Building Corridors, Stairwells and Circulation Areas	£142,130.28	55.50	180,664	£19,819.00	7.17
		£291,431.48	209.99	520,139	£55,859.20	4.78



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- / LED is a "win win" scenario
- Considerable savings in maintenance labour (particularly high level)
- Considerable light fitting replacement savings
- Make sure you get a 7 year guarantee!!





## **Application Process**







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### Salix Application

1. Apply online www.salixfinance.co.uk/loans

2. Salix's Technical Assessment

3. Funds Reserved

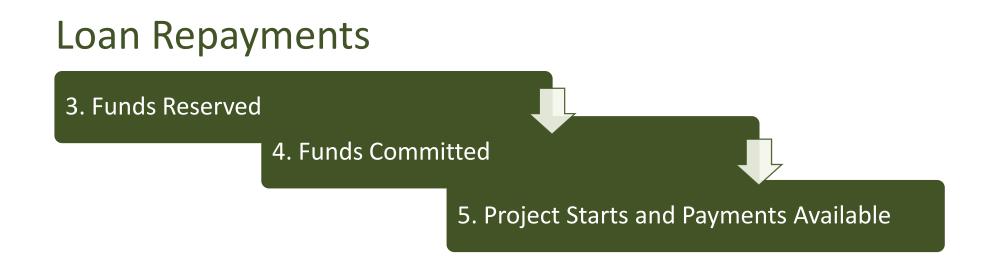
4. Funds Committed

5. Project starts and payments available



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Loan Agreement and Direct Debit Mandate are signed before first payment

Interim payments available, and final payment upon completion of project

Evidence of costs required

 Repayments made bi-annually over 5 years, starting 6 months after project completion

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## Salix Support



- ✓ Dedicated contact from the Universities & Colleges team
- Access to Knowledge Sharing area on website
- Internal and external technical support available throughout entire process
- Support available during delivery and completion
- Opportunities for case studies, articles and other press





#### Public Sector Network

- Online network exclusively for UK public sector professionals
- Peer & expert knowledge sharing
- Users can share knowledge & questions surrounding energy & environmental management
- Relaunched with new user-friendly design
- Events listings
- Optional weekly digest

Register here:

http://publicsector.carbontrust.com





#### **Colleges Workshops**

South	North
<u>London</u> Capital City Colleges Group	<u>Manchester</u> Department for Education
Friday 29 <sup>th</sup> November	Friday 6 <sup>th</sup> December





## Any questions?









## Special thank you to the EAUC & Bob York from Northampton College



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