

Interest-free Government funding for street lighting upgrades

APSE Sustainable Highways and Street Lighting
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Who we are

- Independent, not-for-profit, working in **partnership with the public sector**
- Our mission is to reduce carbon emissions and energy costs in the public sector
- **Interest-free funding** for energy efficient technologies
- **National profile** working in England, Scotland and Wales
- Funded by:



Department for
Business, Energy
& Industrial Strategy



Department
for Education



The Scottish
Government
Riaghaltas na h-Alba



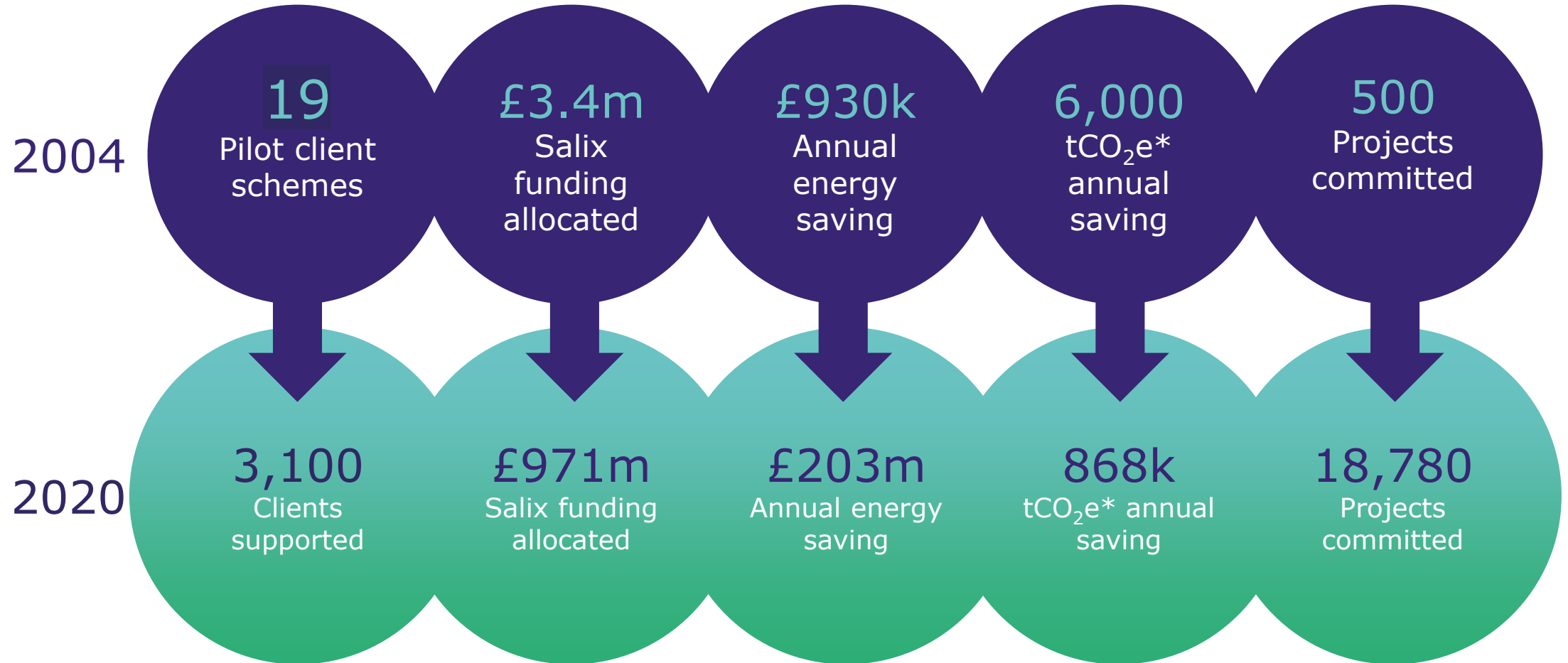
Llywodraeth Cymru
Welsh Government



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Making a difference since 2004



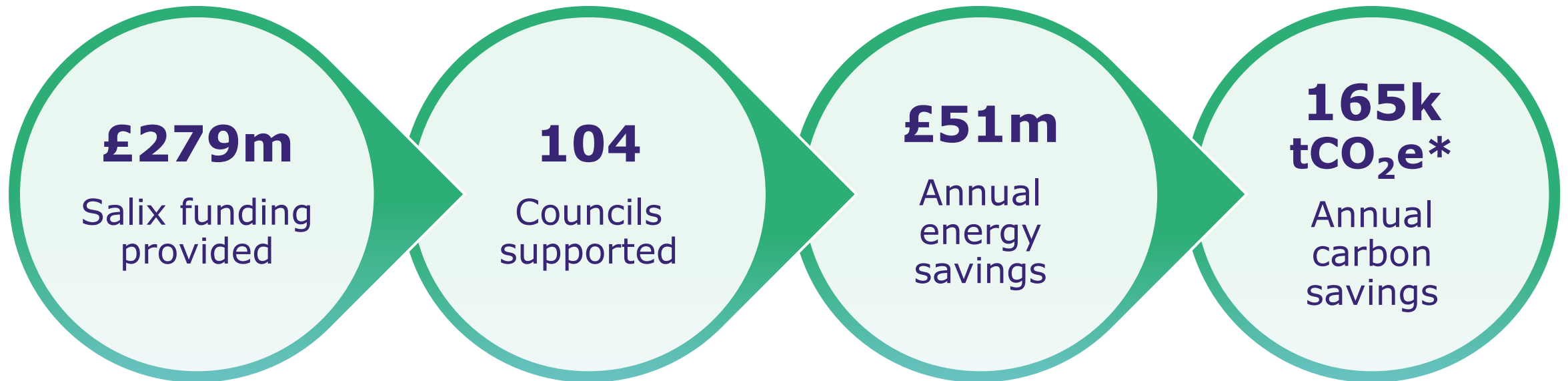
Figures accurate as of March 2020

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





Salix-funded street lighting in England



Figures accurate as of March 2020

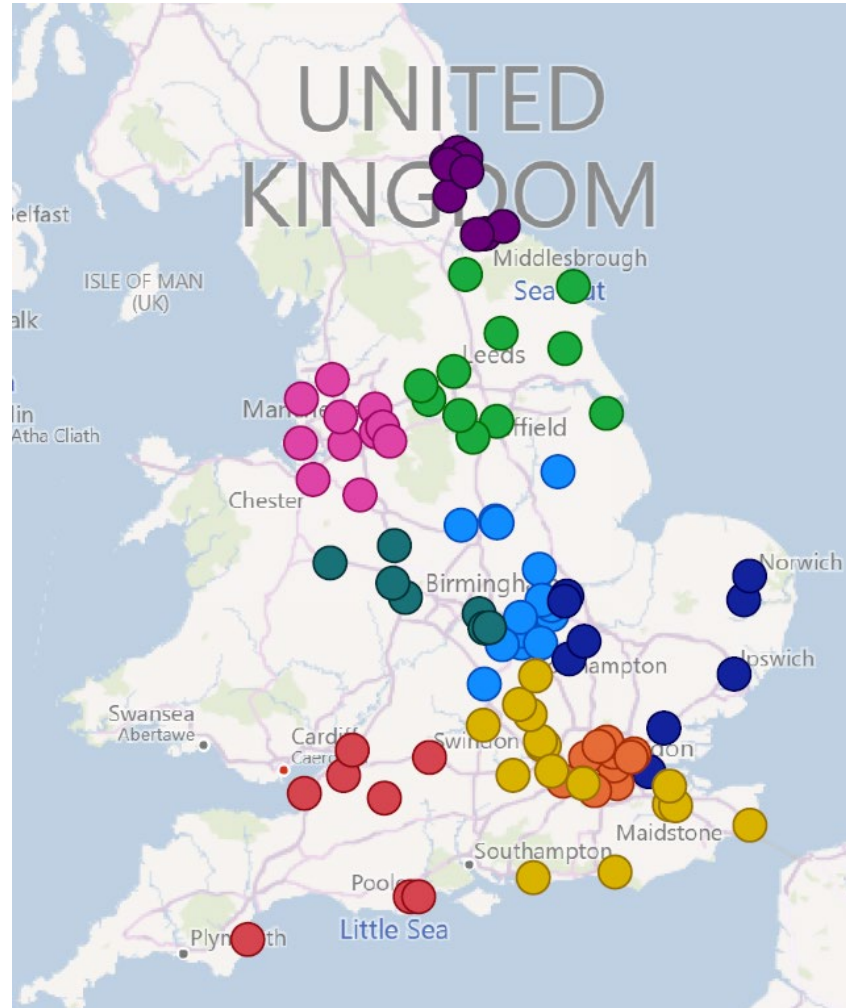
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Salix-funded street lighting in England



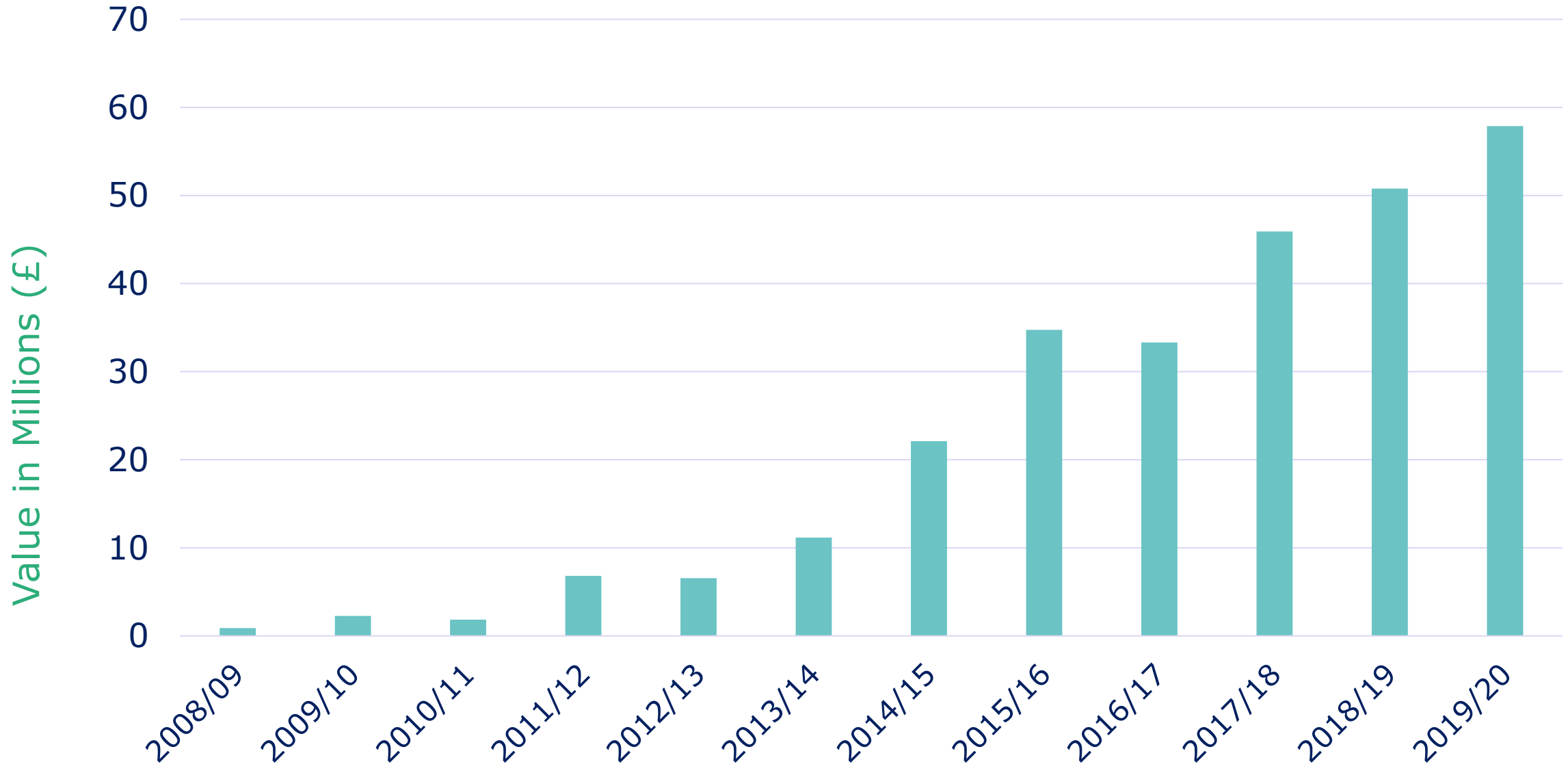
● East Midlands ● East of England ● London ● North East ● North West ● Region ● South East ● South West ● West Midlands ● Yorkshire and the Humber



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Salix-funded street lighting in England



Street lighting in Scotland and Wales

- **Wales:** funded street lighting with 19 out of 22 councils, total funding allocated over £45.8m
- **Scotland:** funded street lighting with 24 out of 32 councils, total funding allocated over £12.8m
- Different funding criteria
- Dedicated teams for Scotland and Wales funding programmes
- Contact:
- scotland@salixfinance.co.uk
- wales-team@salixfinance.co.uk



Eligibility



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Eligible areas of local authority estate

Carparks

Communal areas of social housing

Council offices and operational buildings

Depots and warehouses

External lighting & floodlighting

Leisure and sports centres

Libraries

Monument and other spotlighting

Museums, galleries and theatres

Schools and academies

Public transport shelter & footpaths

Parks and playgrounds

Street lighting

Traffic lights, ornate lighting, bollards, controls and central management systems



Eligible technologies

- **100+ technologies**
- Boiler replacements
- Energy management systems
- Combined heat and power
- Heat recovery
- Heat networks
- Heating and hot water upgrades
- Insulation
- Lighting upgrades
- Street lighting
- Solar PV



How the funding works



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Funding criteria for street lighting in England

- Typically able to fund **up to 100%** of LED street lighting projects
- Updated funding criteria, no 5 year payback limit
- % Salix funding is dependent on project cost and savings
- Loan value capped by carbon cost effectiveness measure
- Early feedback on potential loan value
- Funding awarded for total programme, including variety of lantern wattages and paybacks

The Salix application process

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

2. Salix technical assessment

3. Funds reserved prior to tender/cabinet/DoV

4. Funds committed

5. Installation starts and payments available



Staggered repayment schedule

Date	Phase 1	Phase 2	Phase 3	Total
Oct-21	£250,000			£250,000
Apr-22	£250,000			£250,000
Oct-22	£250,000	£250,000		£500,000
Apr-23	£250,000	£250,000		£500,000
Oct-23	£250,000	£250,000	£250,000	£750,000
Apr-24	£250,000	£250,000	£250,000	£750,000
Oct-24	£250,000	£250,000	£250,000	£750,000
Apr-25	£250,000	£250,000	£250,000	£750,000
Oct-25	£250,000	£250,000	£250,000	£750,000
Apr-26	£250,000	£250,000	£250,000	£750,000
Oct-26		£250,000	£250,000	£500,000
Apr-27		£250,000	£250,000	£500,000
Oct-27			£250,000	£250,000
Apr-28			£250,000	£250,000
Total	£2,500,000	£2,500,000	£2,500,000	£7,500,000

- Multi-year projects have phased repayment schedules
- Each financial year phase has a loan agreement with a repayment schedule
- Repayments for phase 1 typically start 6 months after phase 1 completion
- Repayments are made bi-annually (April/October) over 5 years
- Repayments are made via Direct Debit



Support available

- Early feedback on potential funding available to support council decision-making
- No-cost business case support
- Modelling repayments and cashflow to support decision-making
- Largescale projects are split into phases
- Accelerating installations to achieve savings faster



Case studies and knowledge sharing



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Sunderland City Council – Street Lighting

Loan value
£12.2m

Annual carbon saving
7,700 tCO₂e

Annual financial saving
£2.4m

- The Salix interest-free loan has funded 82% of the total project
- Working with Salix funding across the corporate estate since 2007
- Main installation started in 2017 and due to complete early 2020
- Variable Light Levels when traffic and pedestrian levels lowest
- Expecting 72% kWh saving

“Salix funding has been instrumental in the success of this programme.”

Andrew Atkinson, Energy Services Manager,
Sunderland City Council





Connect Roads won International Green Apple Award for Environmental Best Practice in 2018



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Sunderland City Council:
before and after



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Newcastle City Council – Street Lighting

Loan value
£7.9m

Annual carbon saving
4,200 tCO₂e

Annual financial saving
£1.2m

- The Salix interest-free loan has funded 100% of the total project
- 24 month programme
- Converting 34,000 streetlights to LED
- Average 1,438 conversions per month
- Installation started in July 2019 and due to complete in 2021
- Technical payback 6.39 years
- Expecting 70% kWhr savings



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Newcastle
City Council 

salix 

Lancashire County Council – Street Lighting

Loan value
£8.9m

Annual carbon saving
3,400 tCO₂e

Annual financial saving
£1.8m

- The Salix interest-free loan has funded 100% of the total project
- 24 month programme
- Converting 38,000 streetlights to LED
- Average 1,600 conversions per month
- Installation started in March 2019 and due to complete in 2021
- Technical payback 5 years
- Expecting 76% kWhr savings



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Swindon Borough Council – Street Lighting upgrade

- Salix loan of £6.97m (96%)
- 28,000 street lights
- High pressure and low pressure sodium
- LED and CMS
- Aiming for 61% kWhr reduction
- Installation started July 2020
- 16 month installation period
- 1,800t carbon saved annually
- £1.2m saved annually



"This project is just one of many ways we are working towards achieving Swindon's low carbon and climate change ambitions."

Councillor Maureen Penny, Cabinet Member for Highways, Maintenance and Waste Services



Doncaster Council: before and after





Nottinghamshire County Council: before



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Nottinghamshire County Council: after



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Facilitating knowledge sharing

- Regional meetings for public sector
- Private sector workshops
- Conferences, meetings and presentations
- Engaging with industry networks
- Case studies on Knowledge Share Area of the website
- Kent County Council – short case study video [on Youtube](#)

Project development considerations

- Accuracy of inventory/surveys prior to starting LED upgrade
- Parish council street lighting inclusion?
- Heritage/ornates cost and timescales, retrofit vs full replacement
- Burning hours – maintain or introduce dimming/trimming through pre-set lanterns or a central management system (CMS)
- Business case for white light/Cosmopolis to LED

Project development considerations

- Column upgrade requirements
- Lighting levels and safety standards
- Monthly inventory updates during delivery to immediately benefit from reduced energy bill
- Competitive lantern costs through bulk procurement
- Accelerating adhoc maintenance plans to largescale LED upgrade to achieve savings faster

Decarbonisation beyond street lighting

- Large focus on decarbonisation of heating and gas
- Looking to engage with council teams responsible for
 - corporate buildings
 - schools buildings
 - energy/carbon management and
 - sustainability
- Strategic planning about decarbonisation across the estate in support on net zero carbon targets

Summary

- Great progress made on LED conversions across the UK
- Significant opportunity for further carbon and financial savings
- Acceleration of maintenance programmes
- Updated compliancy criteria
- Early feedback on potential loan value and repayment
- Supporting timescales for tender, cabinet and PFI contract
- Dedicated support throughout
- Facilitating knowledge sharing
- Accepting applications and EOI

Thank you

Any questions?

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