Interreg

EUROPEAN UNION

2 Seas Mers Zeeën

SOLARISE

European Regional Development Fund

Low-carbon technologies

TOTAL PROJECT BUDGET:

4.35 M €

INCLUDING AN ERDF BUDGET OF:

2.61 M €

Solar innovation and solar road maps

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www.interregsolarise.eu

Solar Road Maps and Solar Innovation

- What is a solar road map?
  Driving economic growth and environmental improvements through actionable steps to increase cost-effective installation of solar systems

- Solar innovation in Brighton & Hove
  Sharing the benefits with residents on low incomes.

- Large scale innovation concepts

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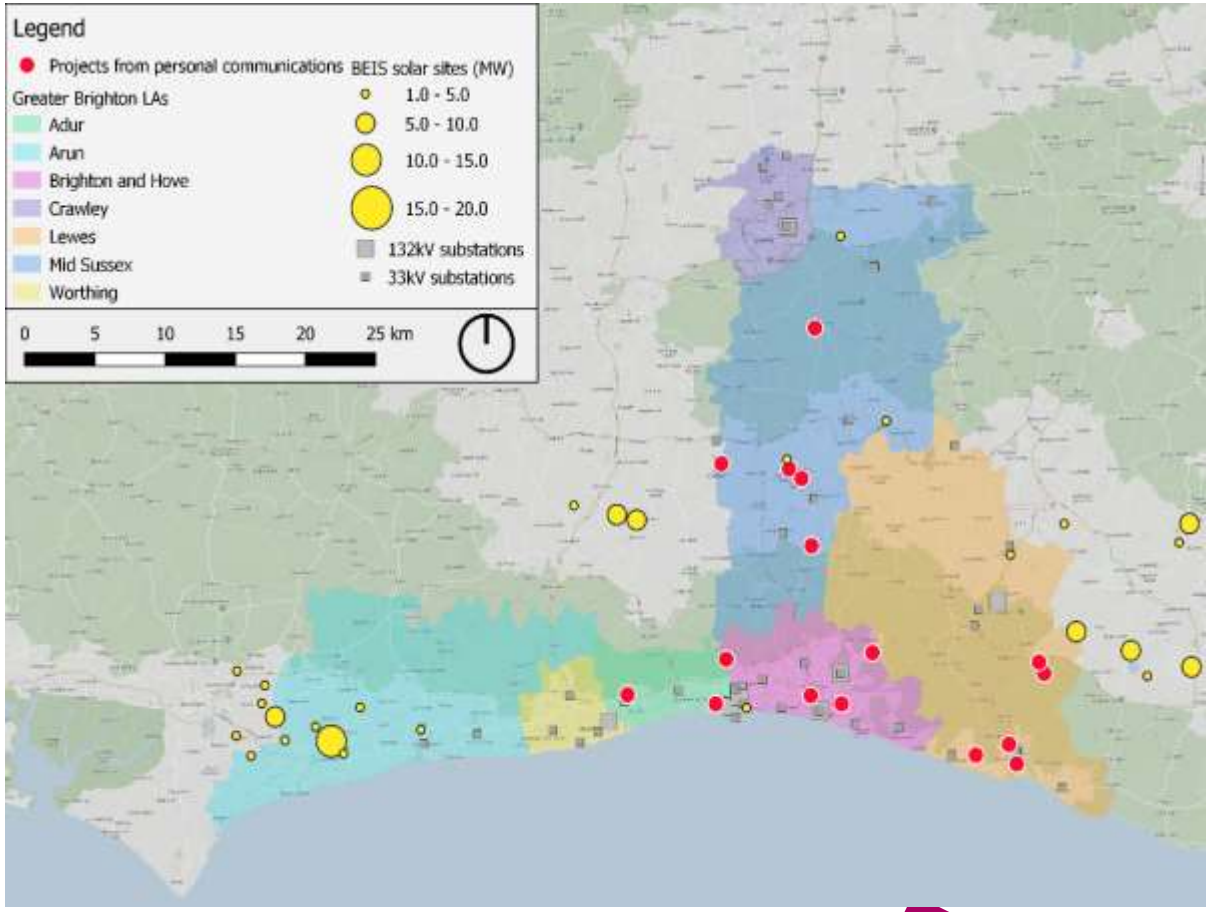
Greater Brighton Energy Plan

"By 2050 Greater Brighton will have a resilient, zero carbon and smart energy system that enables and supports a sustainable and healthy economy, environment and society across the city region"



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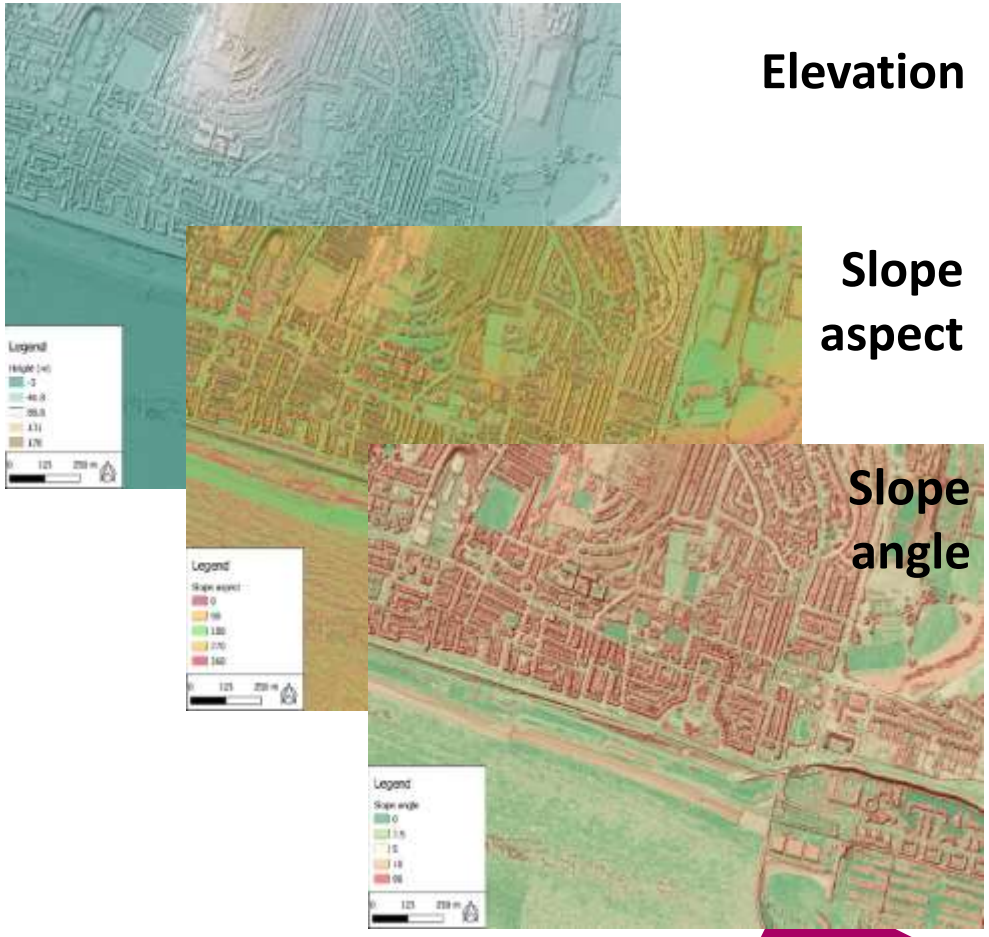
Solar Road Map

Legislative, financial, policy frameworks
Current level of solar installs
Appraisal of solar skill sector and supply chain
Solar technologies
Barriers/opportunities for solar uptake
Price and delivery models
Scenarios for maximising solar uptake
Opportunities for developing the solar project pipeline
SWOT analysis of the solar sector
Recommendations to enhance solar uptake

Solar Road Map – GIS mapping

- A centralised store of information. An effective means of collating, visualising and interpreting large volumes of data.
- Data captured includes: projects identified by stakeholders, solar resource, environmental constraints, electricity grid constraints, existing infrastructure, existing solar projects.
- Allows for initial screening of site suitability for development.
- This analysis was undertaken in QGIS utilising the UK Environment Agency LIDAR dataset



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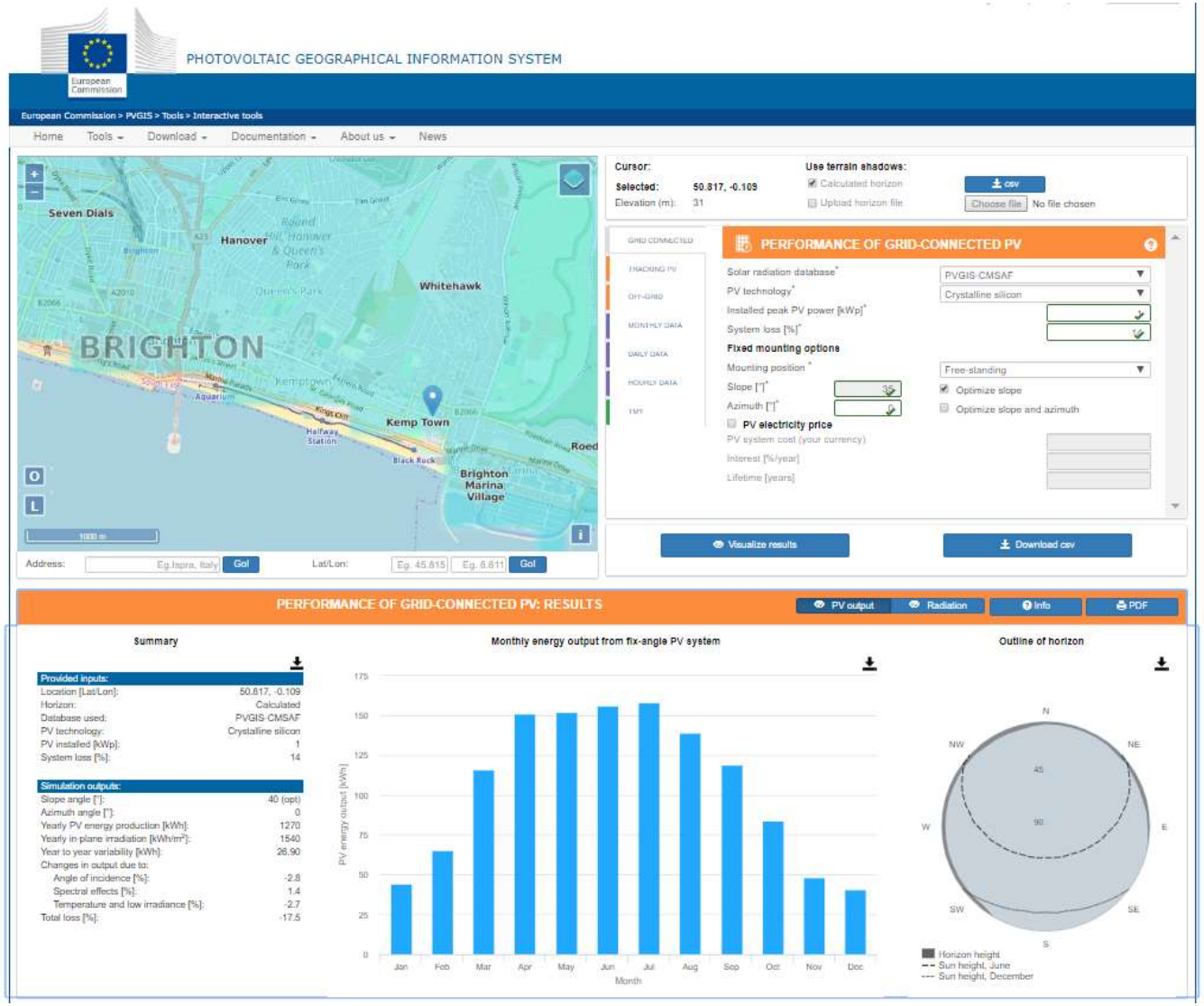
Solar Road Map – identifying sites



Solar yield estimate for a site in Brighton

EU PVGIS tool https://re.jrc.ec.europa.eu/pvg_tools/en/tools.html.

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Solar Road Map – Stakeholder Engagement

- Identify key challenges and how to overcome them
- Discuss delivery and funding models
- Identify existing, planned and potential projects
- Help to inform the project pipeline
- Share knowledge and increase networks
- Gain buy-in from key stakeholders

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SOLARISE Pilots

- BHCC responsible for 11,500 tenanted properties
- 350 (900kWp) solar arrays installed on houses
- No Feed-in-Tariff in UK from April 2019
- Where next?

Work Package 2:	Feasibility (€10 000)
Work Package 4:	Pilot Installs (€200 000)

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SOLARISE Pilots

BRIGHTON & HOVE CITY COUNCIL

SOLARISE:
INCREASING SOLAR CAPACITY
ON HRA ASSETS

June 2019

Model	Generation	Connection to units?	Complexity	Costs
Local tariff or Export tariff	⚡	✗	🧠	£
Multi-array	⚡	✓	🧠🧠	£ £
PVT	⚡ + 🌡	✗	🧠🧠🧠	£ £ £
Batteries	⚡	✗	🧠🧠	£ £
Heating	⚡ + 🌡	✓	🧠🧠🧠	£ £ £
Sub-metering	⚡	✓	🧠	£ £

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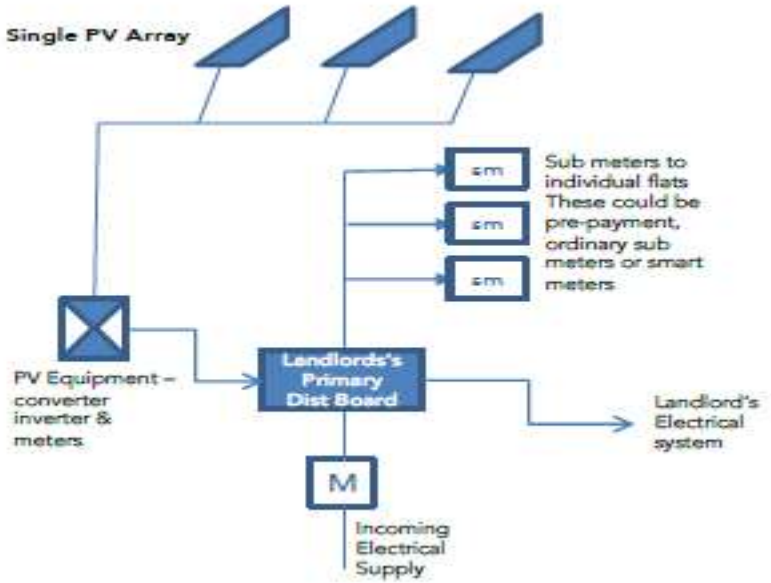
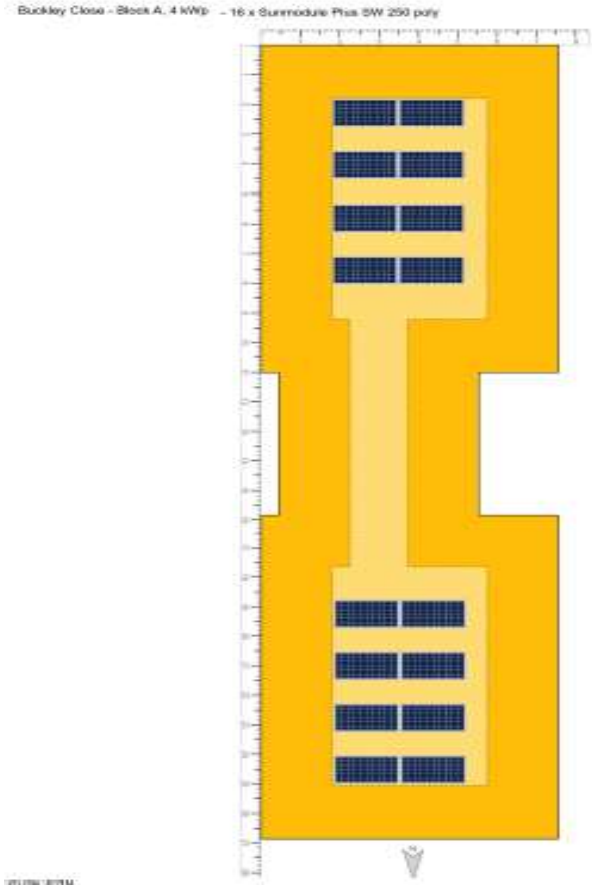
SOLARISE Pilots: Block Tariff





Expected saving: £75/year

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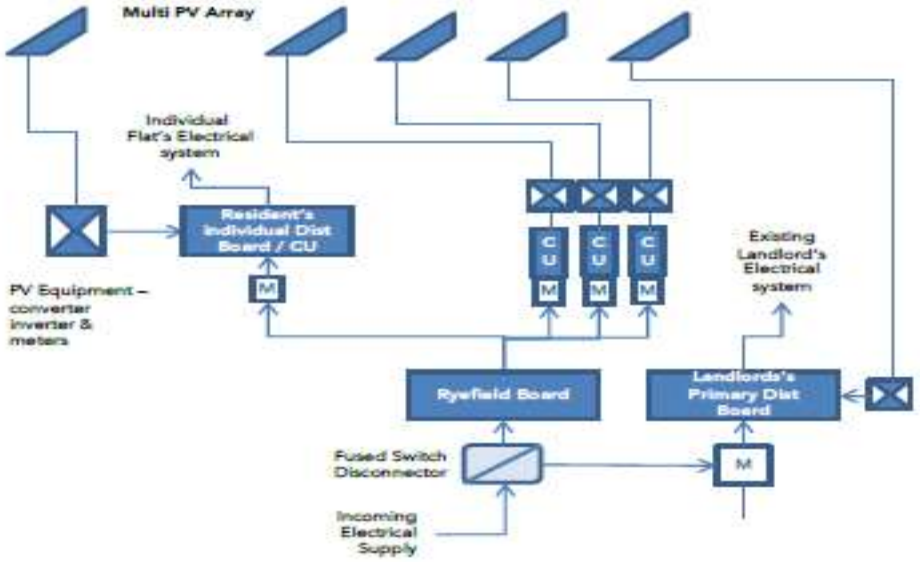
SOLARISE Pilots: Multi-array



Expected saving: £80/year

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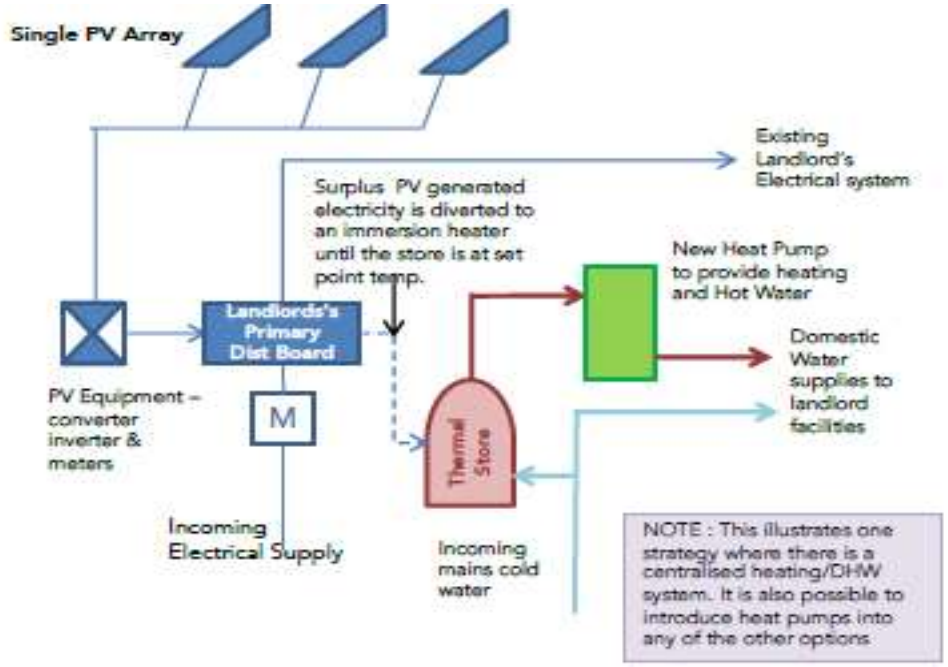
SOLARISE Pilots: PV+GSHP



Expected saving: ~£45 (on solar PV only – heat pump savings much larger)

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Project concept 1

Barcombe Net Zero Carbon Rural Community

- 80% of village uses kerosene heating – move everyone to air source heat pumps
- Hydro project at Barcombe Mills
- 2 Rural District Heat studies
- 5MW solar farm feasibility
- Anaerobic Digestion project report
- Wind project report
- Offset energy usage of village MW PV (Barcombe Reservoir)
- Electric Vehicle transition plan
- Free Community rural electric bus
- Plan to transition to bikes

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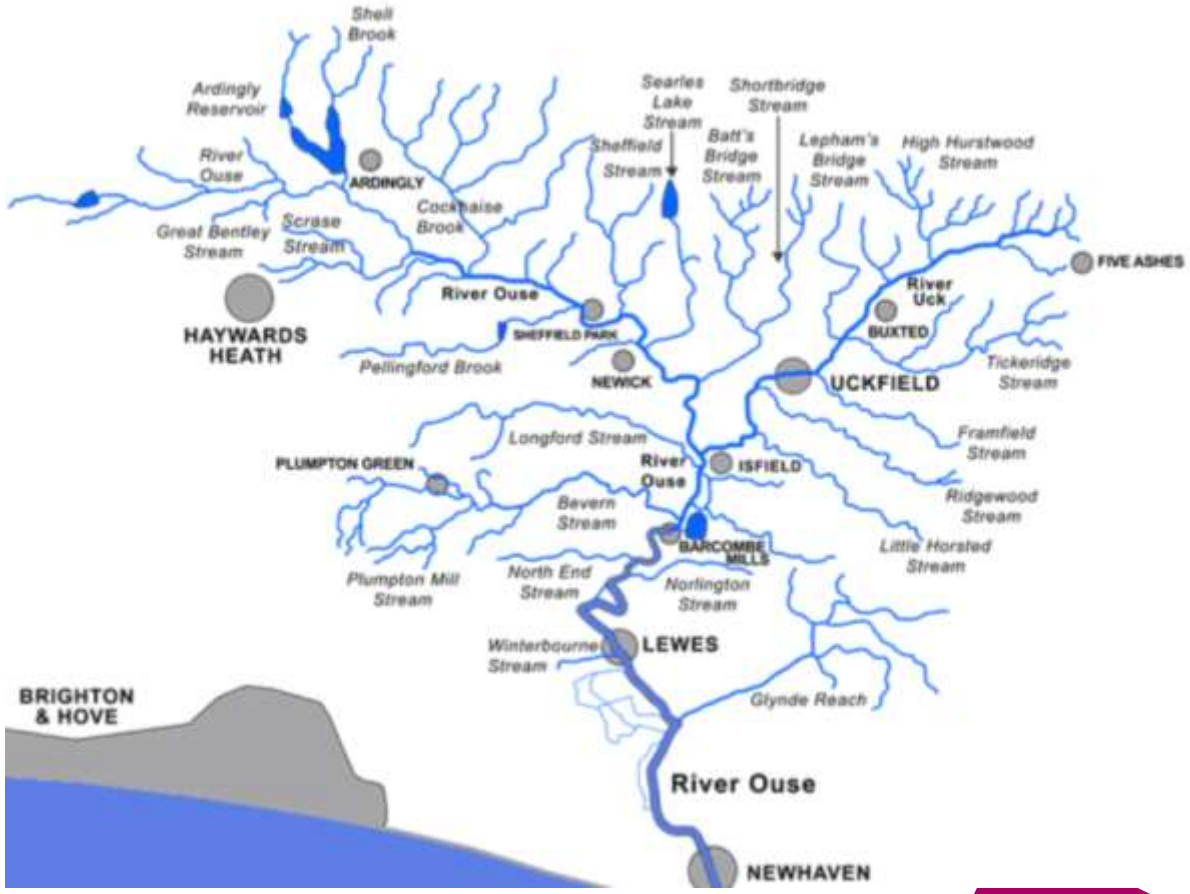
Project concept 2

Community Energy catchment area approach with Southern Water

- Use Community Energy to power Southern Water waste water treatment works with renewable energy
- Each water treatment works needs power to pump
- Agree a Power Purchase Agreement price with Southern Water
- Community Invest
  Create social impact fund
- 20 year relationship



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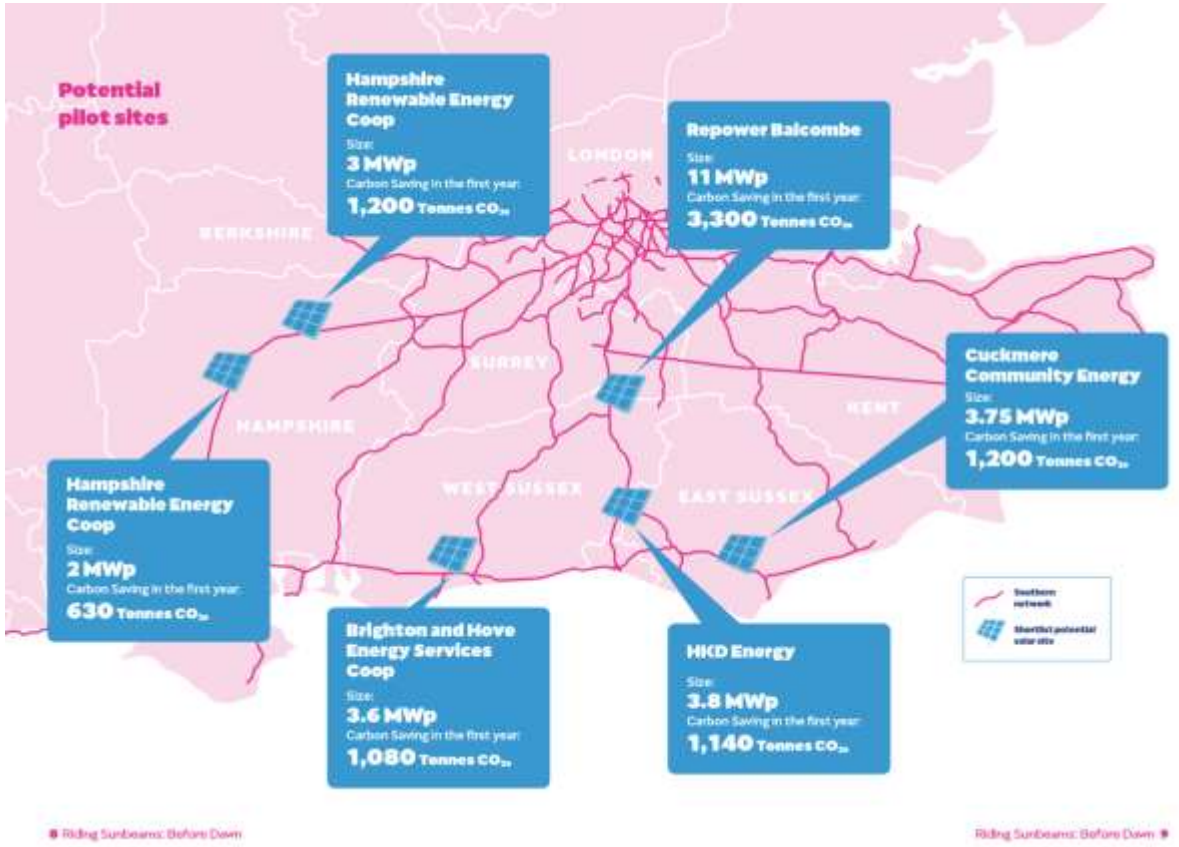
Project concept 3

Powering our railway with renewables – world first

Riding Sunbeams is a tech start-up based in Lewes. Its First Light project with Department for Transport and Innovate UK is delivering the technology with Network Rail to power the UK's largest energy user.

Opportunity for first two MW size solar PV projects to be located in Greater Brighton region:

- Balcombe (10MW)
- Hassocks (3.8MW)



RIDING SUNBEAMS

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SOLARISE at Brighton & Hove CC

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