

POLICY REVIEW

LEARNING FROM OTHERS

PURPOSE

- Briefly outline existing Bristol Smart City and project LEO
- Derive insights for the Hampshire energy strategic framework

CASE STUDIES

1. BRISTOL SMART CITY

In 2015, Bristol launched their 'Smart Energy City' including a 'Bristol Smart Energy City Collaboration' which identified five key objectives:

- A 'fine-grained' mapping of the city's energy system to enhance planning and operational capabilities.
- Curbing energy waste and peak demand
- Enhancing the value of renewable electricity generated in or near the city
- Smart energy data and interventions to tackle cold homes/fuel poverty
- Ensuring the economic & co-benefits of a smarter energy city stay in the city



Aim: Embrace opportunities & ensure decisions are guided by data.

Actions split into:

'doing'
Action now

'preparing'
Action in 1 Year

'exploring'
Impact in future

2. PROJECT LEO (LOCALISED ENERGY OXFORD)

The project is a localised **£13.8 million** project set to run over **3 years**, intending to trial a **decentralised energy system** to help meet the changing energy demand.

Energy is **generated (and stored) close to where it is used** rather than being generated in centralised power stations and distributed. This helps **reduce or balance local and regional network load** so **reducing the costs of** 'electrifying nearly everything'.



Aim: Explore use of new products & services, and identify sticking points with new technologies and business models



The aim is to test a decarbonised and decentralised system to provide a pathway to make this possible wherever the approach is appropriate but **without the need for substantial public funding**.

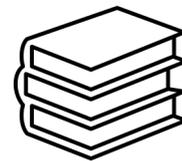
INSIGHTS & IMPLICATIONS

Bristol	LEO	Other
Increase detail when quantifying co-benefits	Focus on plans being flexible as context changes	Ensuring plans are not unconsciously biased
Mapping the entire energy system as a baseline	Realise value of local renewables in reducing system transition costs	Detailed cost plan of each proposed action
Break down long-term goals into staged 'explore' and 'prepare' phases	'The market' may not be capable of delivering an integrated local energy system	Distinct funding for resilience

NEXT STEPS

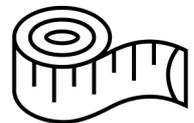


Analysis of the **effectiveness** of existing funding



Deepen **research** into delivering **resilience**

Map the Hampshire energy system and assess how best to **measure co-benefits**



Research into how to **balance** need for **stricter guidance** from the **national government** with local **flexibility** to reflect local needs

ABOUT

UNIVERSITY OF
Southampton



Hampshire
County Council

This research was undertaken by Meghan Kingsley-Walsh as part of an MSc in Sustainable Energy Technologies dissertation, Faculty of Engineering and Physical Sciences, University of Southampton, September 2021. The dissertation was supervised by Dr Ben Anderson.

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