Insights into funding and digitalisation for portfolio-wide decarbonisation

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Presenters

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Covered today

Public sector organisations face unique challenges in financing and delivering estate decarbonisation while maximising outcomes across their regions.

This session discusses some of our latest work with DESNZ, Innovate UK, and the public sector on:

1. **Funding support**
   Government scheme insights
   Latest LCSF and PSDS tools
   New cost benchmarks

2. **Digitalisation and data**
   Latest on data-driven approaches in action, helping to:
   Prioritise interventions
   Streamline and scale delivery
   Support investment decision-making

Interactive session:

- **Ask questions**
- **Share your thoughts**
- **Email us afterwards!**

1. Funding support

Latest insights on government schemes and new support for applications, planning, and procurement

Government grant funding

- **Public Sector Low Carbon Skills Fund (LCSF)**

Grant funding for public sector organisations to secure skills and expertise to develop a heat decarbonisation plan.

- Has provided over £95 million of grant funding to date.
- No future funding announced, would typically expect something announced soon.

Public Sector Decarbonisation Scheme (PSDS)

Grant funding for public sector organisations to install energy efficiency and low-carbon heating technologies.

- Has provided over £3 billion of grant funding to date.
- Government announced over £1 billion to be delivered between now and 2028.

Typical funding cycle:

Typical cycle starts =

Scheme	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
LCSF	Launched	Open / closed	Grant offers	Projects start								Projects complete
PSDS	Grant offers				Launched	Open	Closed					Projects complete

Helping you prepare for future funding

- More definitive guidance and support to develop good quality heat decarbonisation plans.
- More guidance and support to help you strategise and prioritise your building portfolio.
- Encouraging organisations to move towards identifying deliverable projects and applying for funding.
- Better guidance about how to spec robust feasibility studies, linked to RIBA stages.
- Ask for support from your Regional Net Zero Hubs.

Support from partner organisations:

- Contact us for more information
- Salix has great resources and latest announcements
- Get in touch with me or follow the Catapult on LinkedIn to be informed about latest updates

Get in touch for support in finding what resources might help your decarbonisation journey:

Matt.Caville@es.catapult.org

Heat decarbonisation planning – 5 resources to check!

If you're preparing for either the LCSF or the PSDS, here are five **FREE** resources for you to check out.

1	2	3	4	5
NEW - Heat decarbonisation strategy template for writing your own heat decarbonisation strategy, providing guidance and example text for different sections of a strategy. Organisations will soon be able to get support from their Net Zero Hubs to help guide them through the process of developing their own strategy document.	**NEW - Heat decarbonisation strategy data capture form** providing a tested format to capture information about your organisation's building portfolio, enabling you to prioritise buildings to take forward to feasibility stage, or apply to grant funding schemes for support.	**NEW – Feasibility stage checklist** which breakdown all of the data points and sections that you would expect from a typical feasibility study, linking the progression of studies to stages outlined in the RIBA Plan of Work. This will help you to specify and clearly communicate what you require from a feasibility study	**Sample specifications for technology deployment.** This tool will help you to include the right information in your specification helping you to get a comprehensive quote for the works you require, and ensure that your project is delivered on time, on budget and as you expected.	**How to treat technologies and what to ask for.** This guidance will help you understand the technology options available for site decarbonisation. It provides background information, insights, actions, and considerations when undertaking feasibility studies for technology integration.

These resources are coming very soon! Please drop me an email to be notified as soon as they become available

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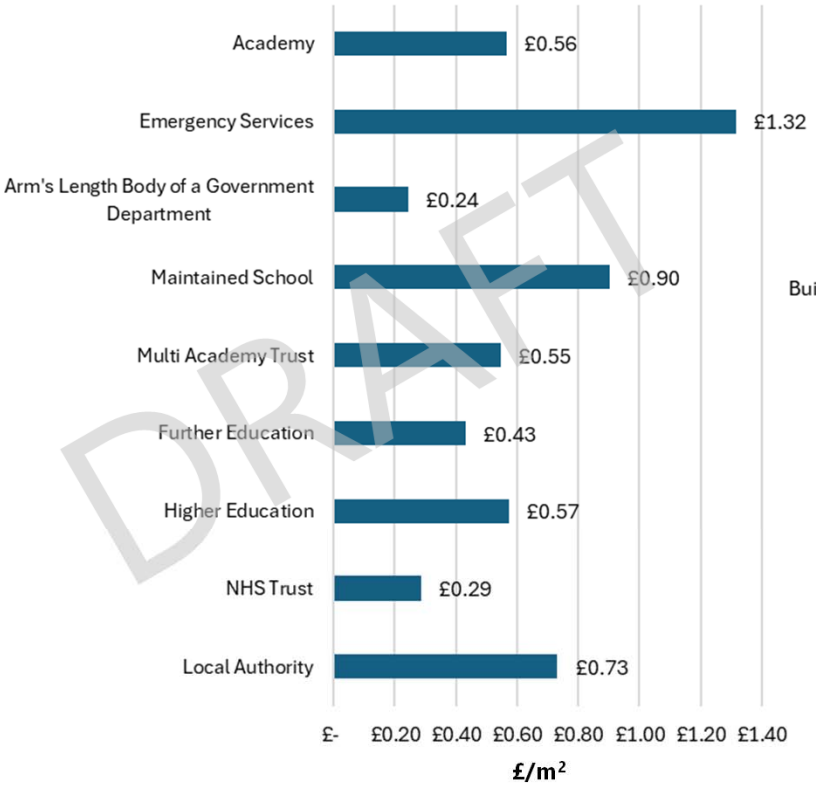
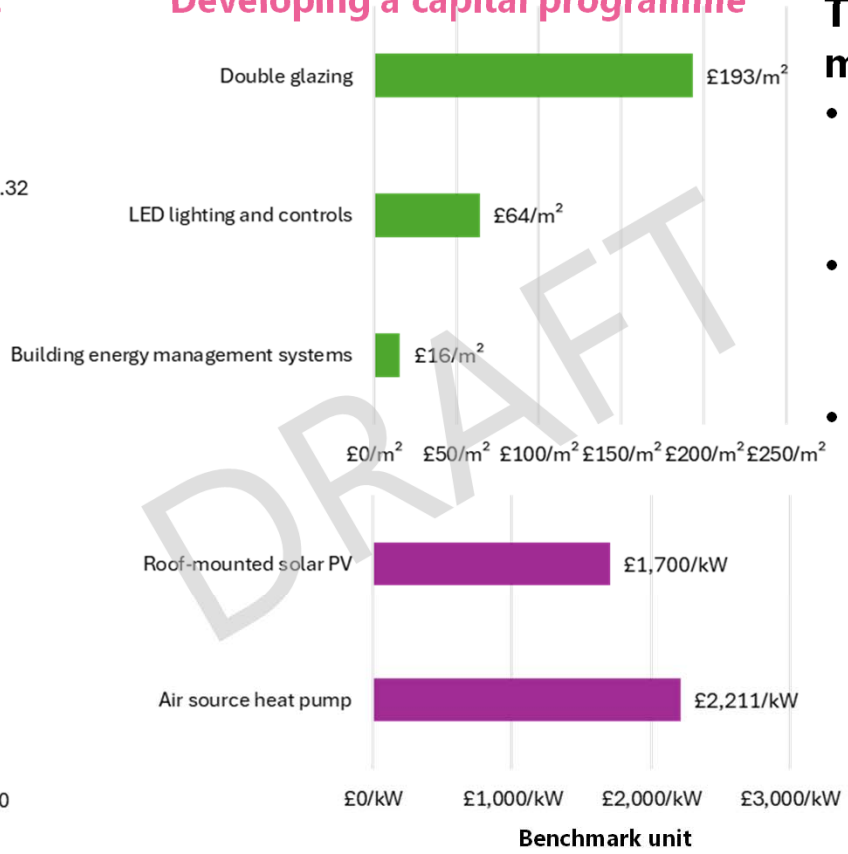
How much does decarbonisation of buildings cost?

We are currently collating cost data to develop benchmarks for capital and non-capital measures. So far, we've collated data from over 250 heat decarbonisation plans, our Modern Energy Partners programme, and recent phases of the LCSF and PSDS.

Average cost to undertake a building audit



Developing a capital programme



These are DRAFT with more to follow soon:

- Analysis of costs from across the sector to identify trends.
- Help you understand magnitude of investment.
- Enable you to develop informed strategies and business cases.

To think about...

What benchmarks would support you the most with your decarbonisation journey?

2. Delivering digitalisation

Prioritising interventions, streamlining and scaling delivery, supporting investment decision-making

Current projects with NHS England, schools, and GMCA

Why digitalisation? The public sector data challenge

Reliable information on sites and buildings is critical for planning, prioritisation, and decision-making. Major data blind spots and a lack of reliable evidence are delaying progress:

Non-domestic data challenges

Scattered and siloed data sources

Lack of real data and access

Inconsistent datasets. Rarely at building level

Complex estate ownership

No reliable evidence base

- **No national picture of public sector estate at building level**
- **Lack of evidence base** – progress tracking, benchmarks, proven pathways, technologies, ROI
- Innovative tech held back by lack of data

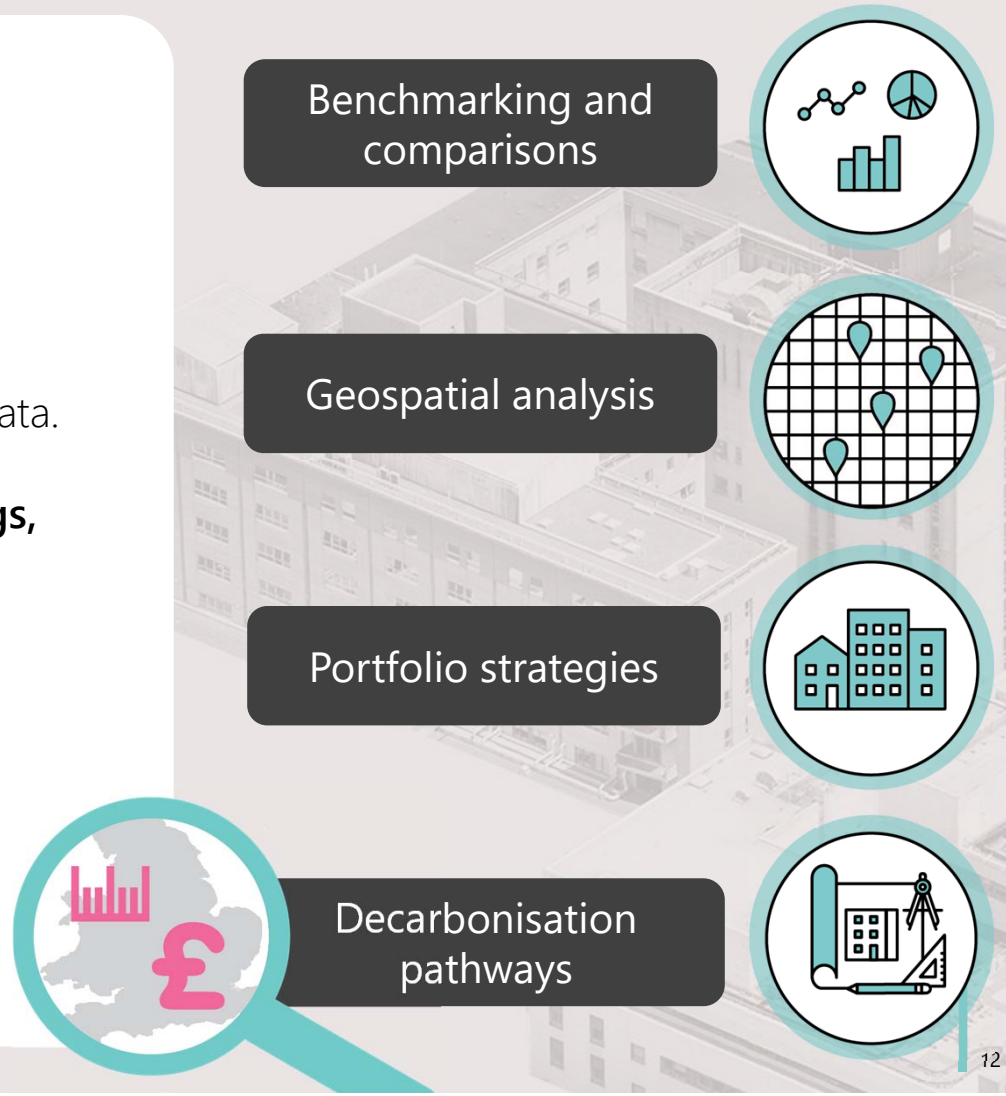
Preventing at-scale action

- **Piecemeal projects vs portfolio-wide strategy**
- **Unsuccessful business cases / lack of funding and finance**
- Non-domestic Net Zero falling short

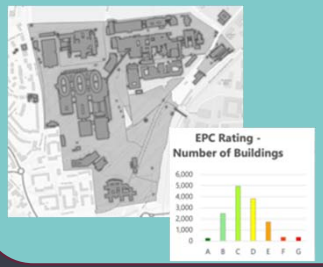
	Residential	Non-Residential
2021-2022	-15.4%	-8.4%
2022-2023	-7.2%	-3.5%

Major national innovation development: InSite

- **New national Net Zero solution for built environment, backed by Innovate UK.**
- **Clear evidence** to drive non-domestic decarbonisation and investment decision-making.
- **New insights** from previously unintegrated, hard-to-reach data.
- **Reliable portfolio-level picture of non-domestic buildings, their energy use, and interventions.**
- Enables new analysis, outputs and tools that unlock:
  - **smarter national-scale planning**
  - **delivery models**
  - **faster funding, finance, and procurement strategies at scale** – not piecemeal projects
  - **evidence for innovation**



How it works: New synthesis of actual data and innovative modelling



1. Building and site data

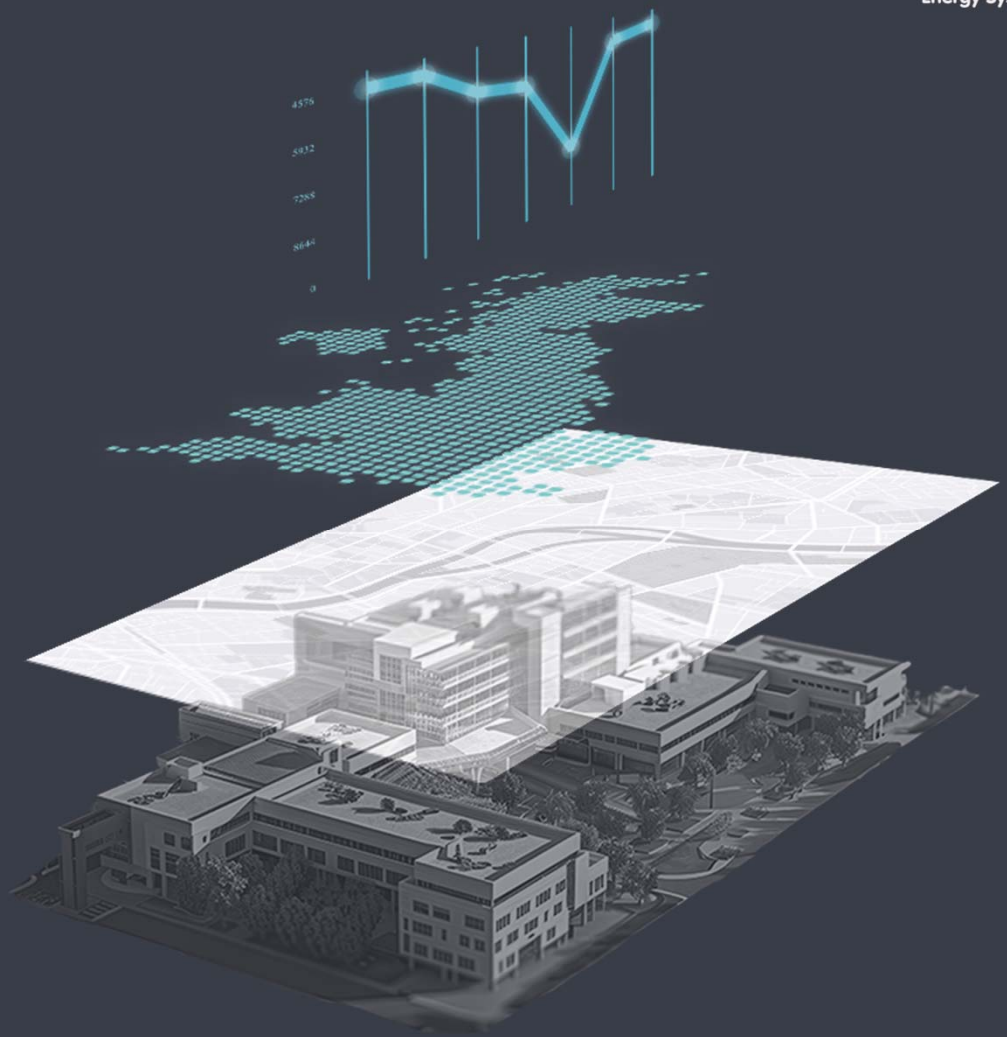
Innovative approaches to identify and map entire estates.

2. Energy data and other data systems

Connections to large and live consumption data sources, and from systems such as BEMS.

3. Project data

From implemented and planned project sources, e.g. innovator installations, decarbonisation programmes and HDPs.



InSite in action: Portfolio-wide planning and funding deployment

CATAPULT Energy Systems

Pilot 1 - NHS England's biggest ever smart data collection, unlocking national estates strategy

69 trusts

(~1/3 of all NHS trusts in England)

+90,000

Individual building elements identified and mapped, capturing

+14,000 EPC
+5,000 DEC

Pilot 2 – Regional identification of estate to unlock data driven decarbonisation

Using novel building identification and modelling techniques

>5,000

Public sector buildings identified across Greater Manchester

Pilot 3 – Archetyping schools to better target interventions

Partnership with Church of England and support from DfE.

Heat Decarbonisation Data for

>700 schools

4% of all schools in England

(circa 700 CofE 200 DfE)

NHSE: New analysis and visualisation of energy data at a national level, enabling:

At-scale analysis of energy consumption
Granularity not previously possible
New ways to look at performance and benchmarks

Energy data visualisations

- Consumption intensities
- Day and week profiles
- Seasonal energy intensities

New analysis in March:

- **Generating comparison visualisations** with varying parameters and categories
- **New benchmarks** and **typical consumption profiles** for different site types

GMCA: New building-level picture for better regional decision-making

Filling data gaps with new regional and national datasets
Identifying buildings at-scale with new modelling

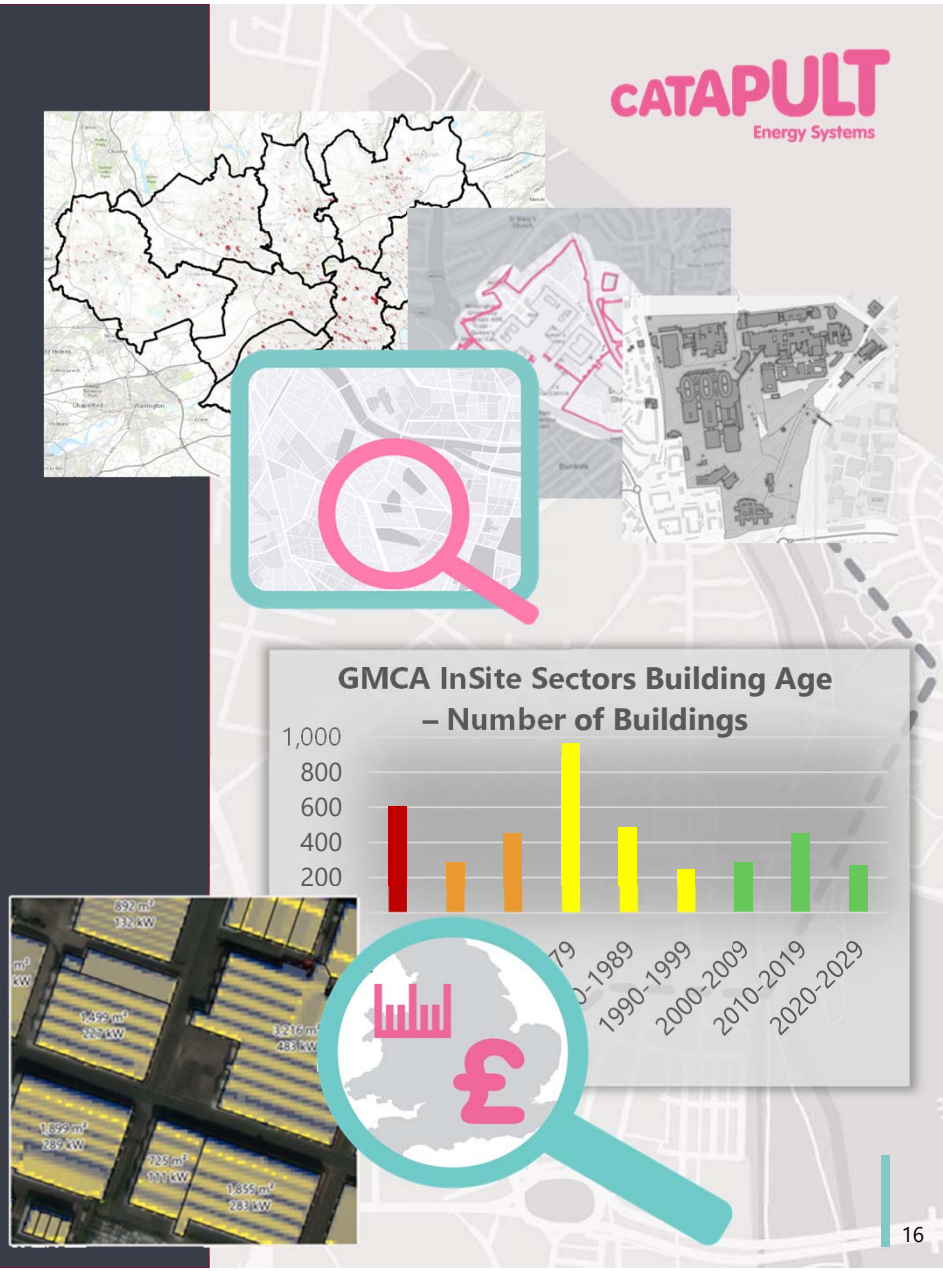
Archetyping buildings across Greater Manchester

- **~5.5k** elements across **+2.3k** sites
- Grouping sectors: NHS, Education, Fire and Rescue, offices

Linking data for smarter insights

New evidence for decision-making, utilising building and location details

- **Linking buildings** to ~600 EPCs and ~1.1k DECs and over 400 MW of potential rooftop solar generation
- **Linking location specific data** on DNO capacity data and heat network zones



Questions?

We'd love to hear from you!

Funding support:
Get our funding updates
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InSite:
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Thank you

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