



Public Sector
Decarbonisation
Guidance



Department for
Energy Security
& Net Zero



Cabinet Office



Government
Property
Function

CATAPULT
Energy Systems

APSE Webinar

Decarbonising the public sector estate in 2024

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About Energy Systems Catapult

Mission: Accelerating Net Zero energy innovation



Turbo boosting innovators to thrive in the future energy system



Independent Collaborative Creative



Based in Birmingham
250+ experts



Established by Innovate UK.



SME support



Consumer insight and proposition design



Whole system modelling



Delivering trials and demonstrations



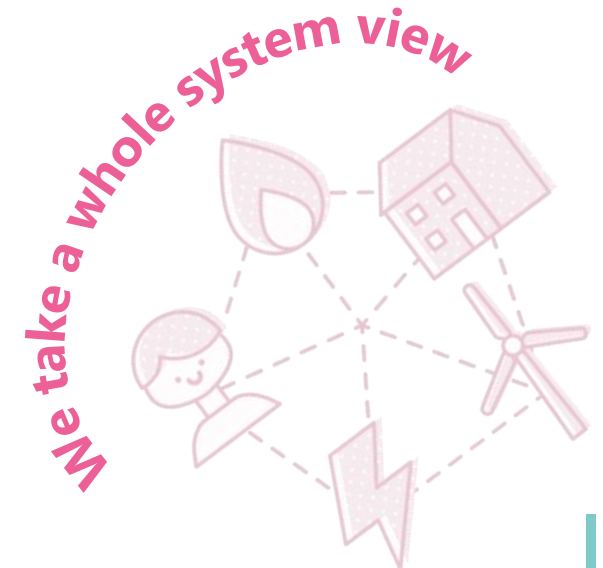
System and clean technology engineering



Digital and data expertise



Markets, policy and regulation



How does Energy Systems Catapult fit in?

Overarching orgs and decarbonisation strategy



HM Treasury



Department for
Energy Security
& Net Zero

Local Authorities,
Departments and Agencies
and NHS England

Partners supporting (scalable) implementation



Your partner for
a low carbon future



Net Zero Hubs

Enabling funds and resources



Public Sector
Decarbonisation
Scheme

Low Carbon
Skills Fund



Public Sector
Decarbonisation
Guidance



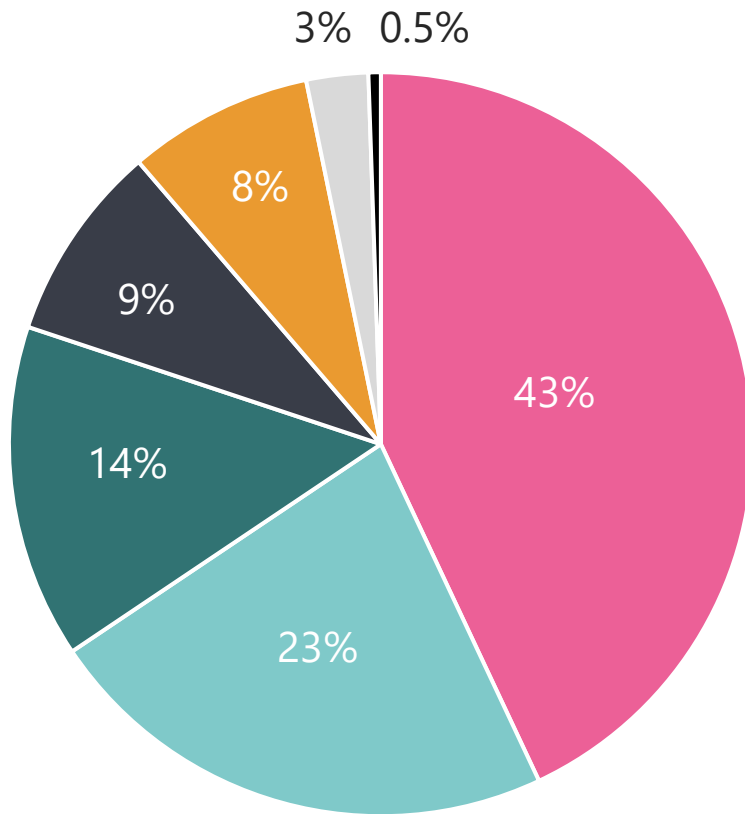
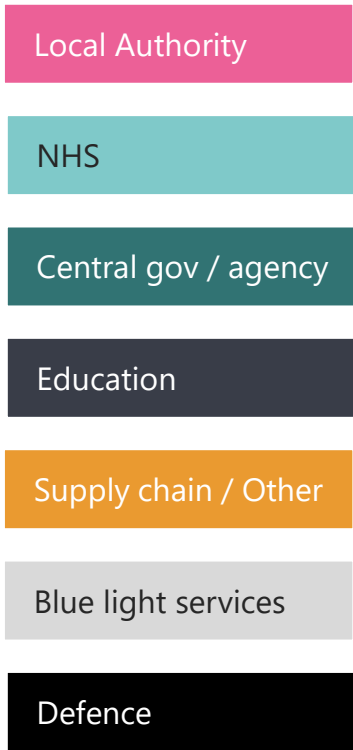
Decarbonisation survey and user group insights

1	2	3	4	5	6	7
Strategic definition, planning and briefing Getting an organisational strategy to decarbonise. Feasibility. Gaining decision maker and reduction targets. Securing projects and funding.	Feasibility and design Developing a detailed feasibility study for one or a suite of investible decarbonisation measures. Securing budgets and determining project economics.	Procurement Running a procurement process and ensuring value for money is achieved through a competitive process. Accessing framework agreements and	Funding Securing external or internal funding for at scale decarbonisation projects. Writing robust business cases.	Installation Project management of installation and implementation of a decarbonisation project. Monitoring progress against programme of works and implementing quality assurance processes.	Commissioning and handover Handing over a completed decarbonisation project including staff training, correct setup and commissioning of equipment and ensuring all relevant documentation is in place.	Monitoring and evaluation Understanding the benefits being delivered by an energy efficiency and/or decarbonisation measure through testing and analysis. Ensuring benefits are realised.

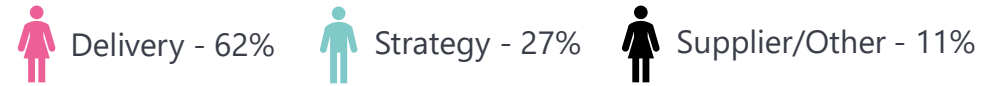
Survey responder summary

- Most responders were from a Local Authority, NHS or a central government department or agency
- Most had a delivery-level role, such as a Sustainability Officer, or Energy Manager
- 27% had more senior/strategy roles, for example, Director of Estates and Facilities, Head of Sustainability
- 11% were from the supply chain or other organisations, for example consultancies or delivery partners.

Organisation



Role



Survey results: PSDG has been well received

93%

of users surveyed would recommend the PSDG resources to their peers

86%

of users said the resources could not be improved

Users surveyed that have made strategy or project progress thanks to the PSDG:

84%

"The resources have saved me three weeks of work..."

PSDG users finding the resources most useful...

1 have a delivery-level role

4 prioritise skills and training for future resources

2 have a clear NZ strategy and applied for funding

5 favour the main 'overview' and supporting guides...

3 have most difficulties identifying and scoping projects, and applying for external funding

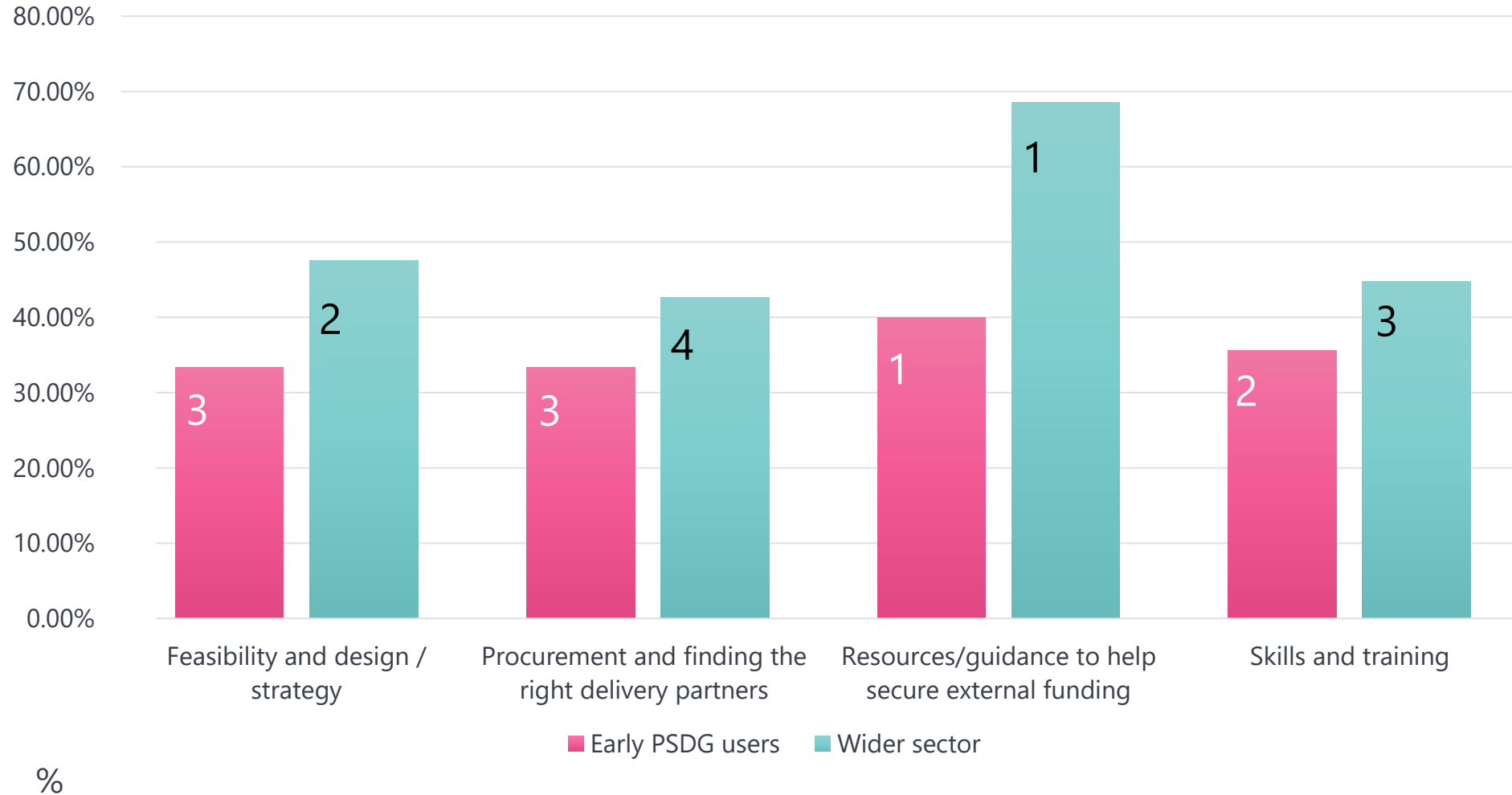
6 and content that sets up their organisation for programme delivery.



Overall most useful content:

1. Main guides and actionable insights (61%)
2. Supporting guides and in-depth details (52%)
3. Downloadable Excel tools (32%)

Survey results: All prioritise funding, skills, procurement, feasibility and design for future resources



Early PSDG users: Which three areas would you like us to prioritise for future resources? (n=45)
Wider sector: Which areas of support would be most beneficial to help your organisation? (n=143)

Funding – the (almost) universal issue

Lack of/applying for external funding is...	Local gov	NHS	Central gov / agencies	Education	Delivery roles	Strategy roles	Supply chain
A stage at which we're encountering the most difficulties <i>Percentage (rank)</i> <i>(no. of respondents – downloaders)</i>	83% (1) (n=12)	86% (1) (n=7)	86% (1) (n=7)	57.4% (1) (n=7)	68% (1) (n=25)	57% (=1) (n=7)	36.6% (=1) (n=11)
A main challenge our organisation faces in cutting emissions across our sites... <i>(no. of respondents – wider sector)</i>	92% (1) (n=73)	89% (1) (n=35)	40% (4) (n=20)	78% (=1) (n=9)	83% (1) (n=89)	86% (=1) (n=43)	50% (=1) (n=4)

Main barriers by organisation type

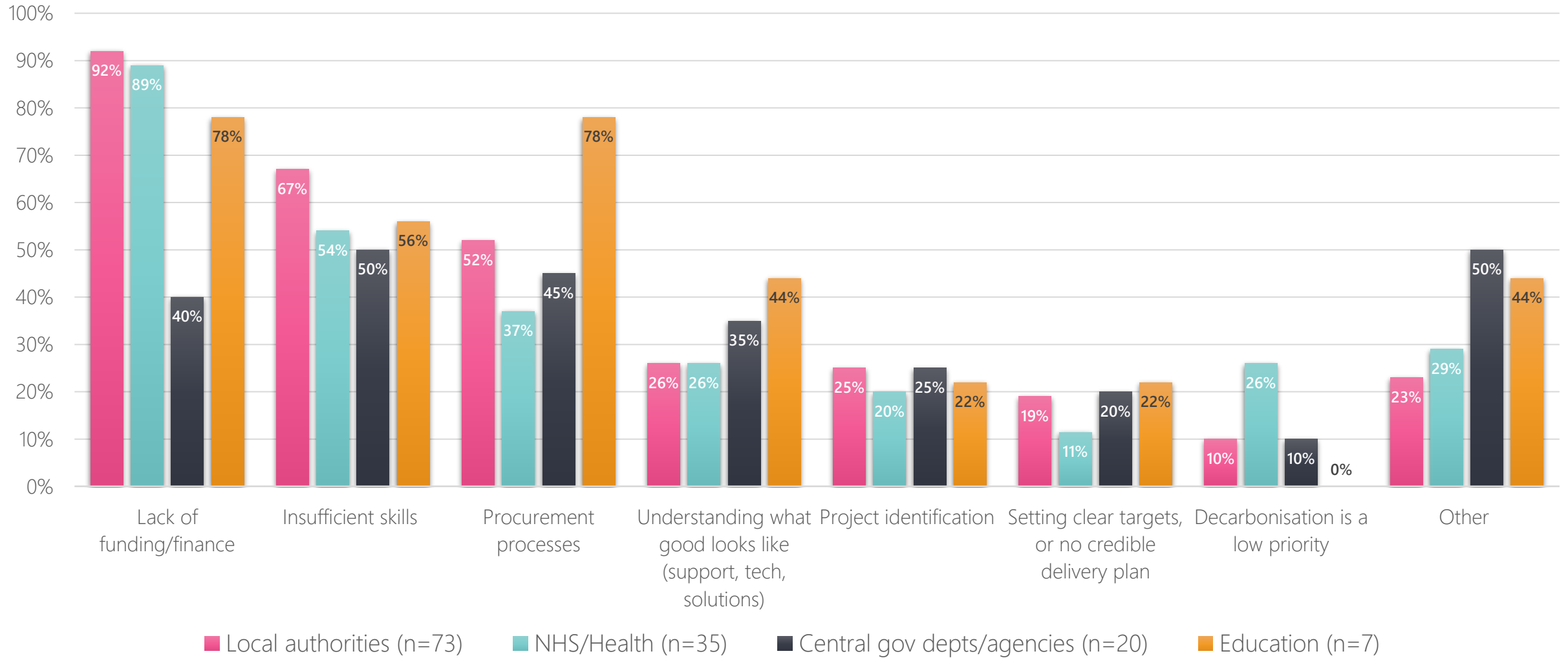


Fig 8. Comparative graph showing support preferences according to Survey 2 respondents segmented by organisation type

User groups: summary of the top challenges raised by respondents interviewed (excluding funding)

- Relatively short-term targets for decarbonisation combined with a lack of long-term policy and funding certainty, make progress and decision making difficult.
- Tension of climate change being a top priority for the organisation but the 'day to day' getting in the way.
- Fragmentated response across the whole public sector.
- A need for upskilling.
- Complexity of building stock and stakeholder arrangements.
- Difficulties working with the supply chain – both in engaging them effectively via the right procurement routes, and ensuring they deliver quality project outcomes.

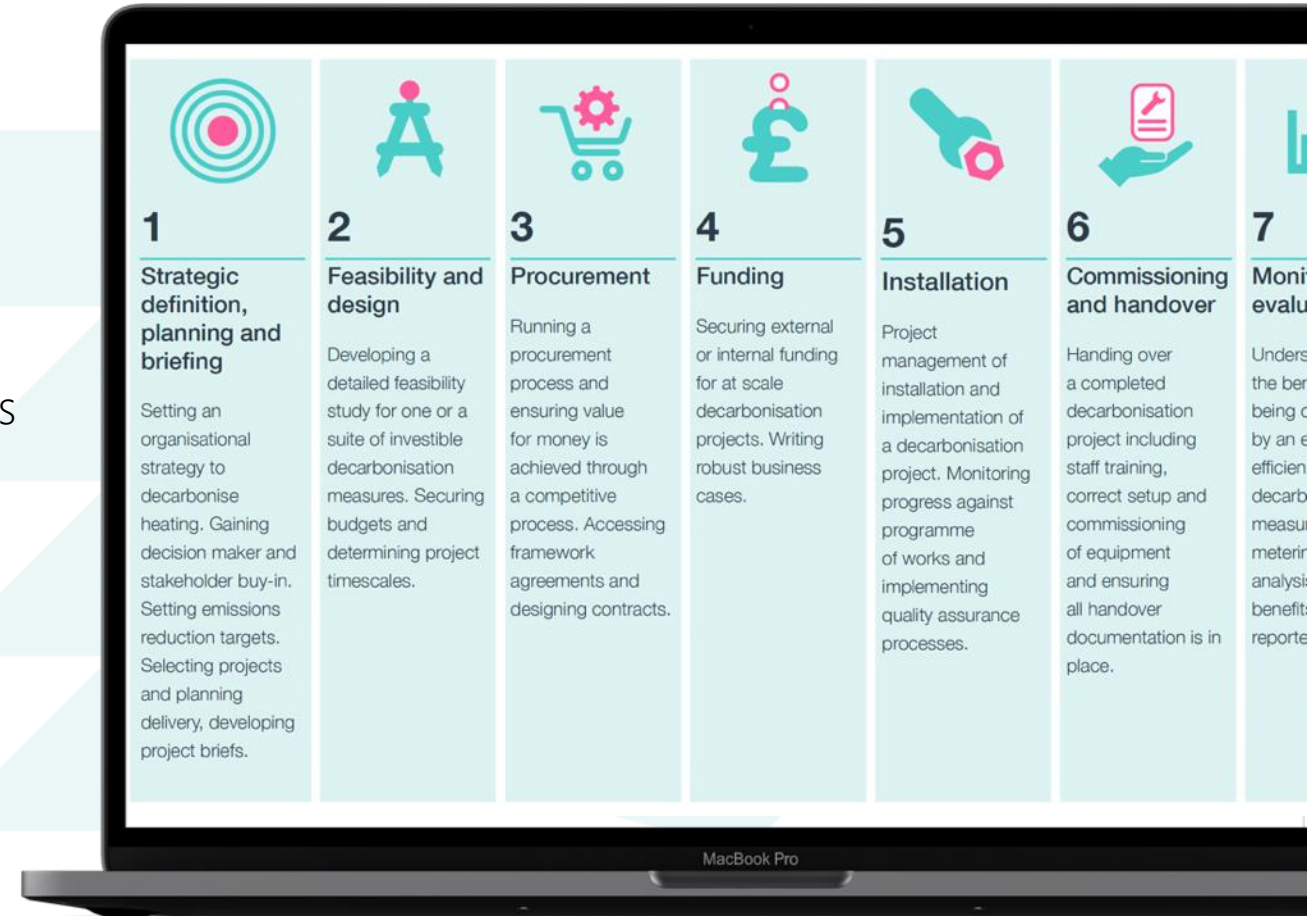


Almost one year on!

The Public Sector Decarbonisation Guidance (PSDG)

Making it simpler to...

- **Plan:** Step-by-step framework
- **Fund:** Clear, Salix-vetted approaches and guidance
- **Deliver:** Practical tools, guides, calculators; free outputs
- **Access:** Open resource (no login needed)
- **Scale:** Consistent, cost-effective, proven approaches based on the award-winning MEP programme.
- **Upskill:** Ultimate resource hub for estates decarbonisation. All-in one place.
- Developed with Government and industry.



Tackling the funding challenge

In your buildings

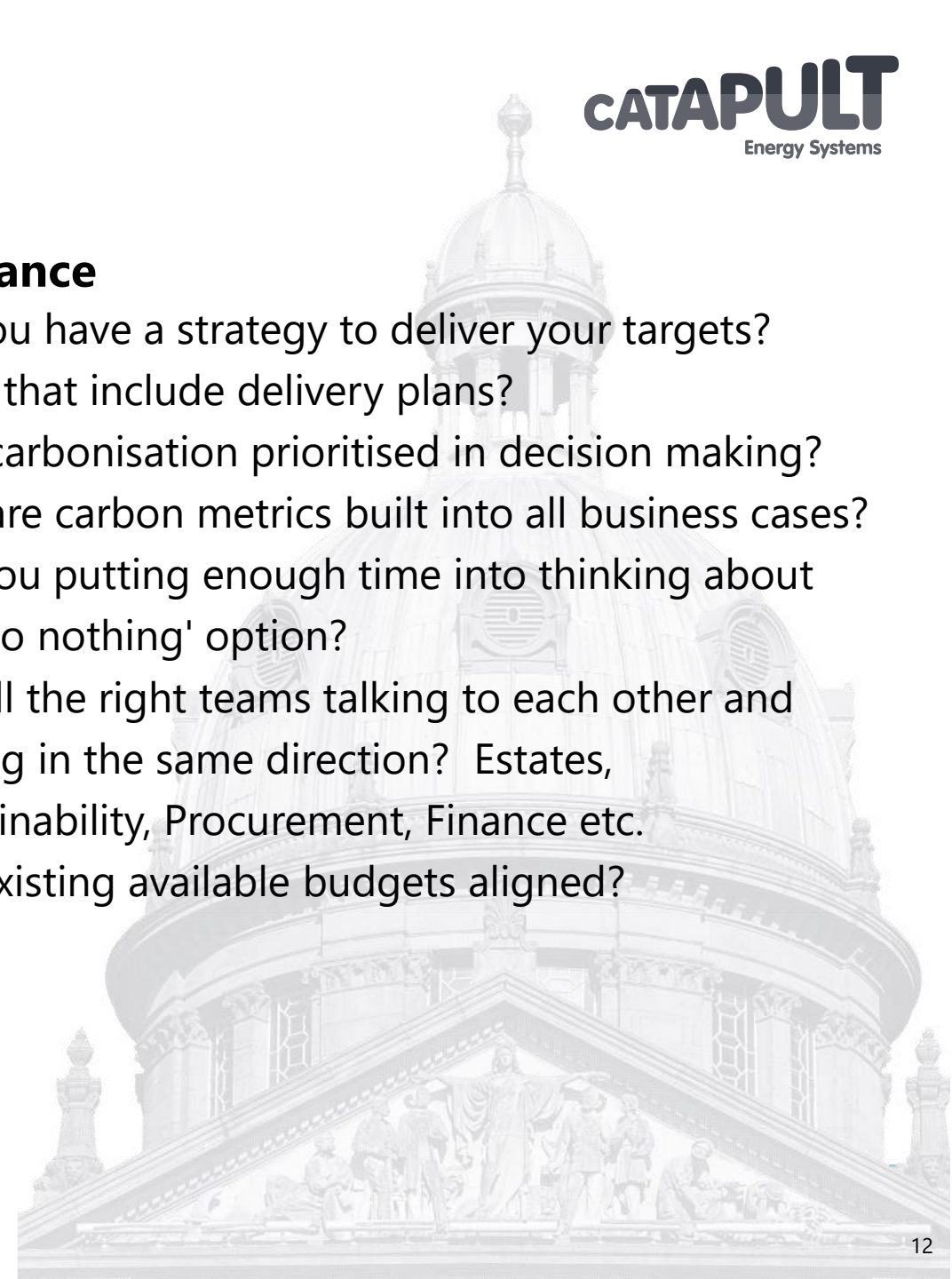
- Data – Do you have smart metering? Are you collecting your energy data and understanding what it means?
- Good energy management including controls and maintenance
- Projects with shorter paybacks like lighting
- Plans for end-of-life assets, avoiding locking in further fossil fuel systems

Reporting

- Energy, cost and carbon reporting underpinned by good data – looking at all three can help with prioritisation

Governance

- Do you have a strategy to deliver your targets? Does that include delivery plans?
- Is decarbonisation prioritised in decision making? And are carbon metrics built into all business cases?
- Are you putting enough time into thinking about the 'do nothing' option?
- Are all the right teams talking to each other and pulling in the same direction? Estates, Sustainability, Procurement, Finance etc.
- Are existing available budgets aligned?





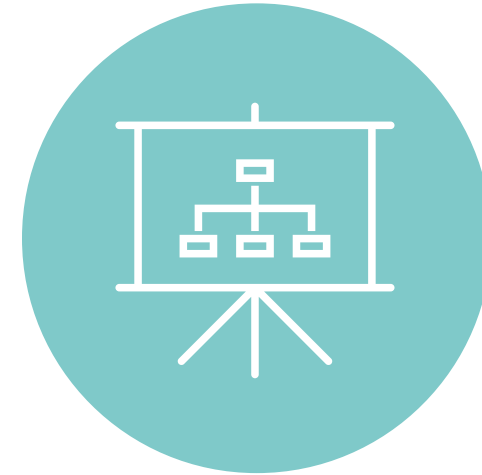
Power Purchase Agreement Guide

Covers the types of PPAs, roles, benefits, risks and basic process for implementation



Greenhouse Gas Reporting Guide

An introduction to a complicated topic, helping you decide which approach might be best.



Net Zero Considerations for Public Sector Bodies

A report about the attributes organisations require to be able to decarbonise.



Flexibility and Storage Guide

Covers the different technologies and how they might be applicable to your site.



Working with Senior Decision Makers Guide

Designed to help you make the case for decarbonisation projects to senior decision makers



Heat Pump Guide

Explains the types of heat pumps, where they might be appropriate and information on complimentary technologies

Moving forward...

We would still love
your feedback!
What else we can do
to support you?

psdecarbguidance@es.catapult.org.uk

- Content creation and dissemination, and bespoke support for public sector organisations to help address identified challenges

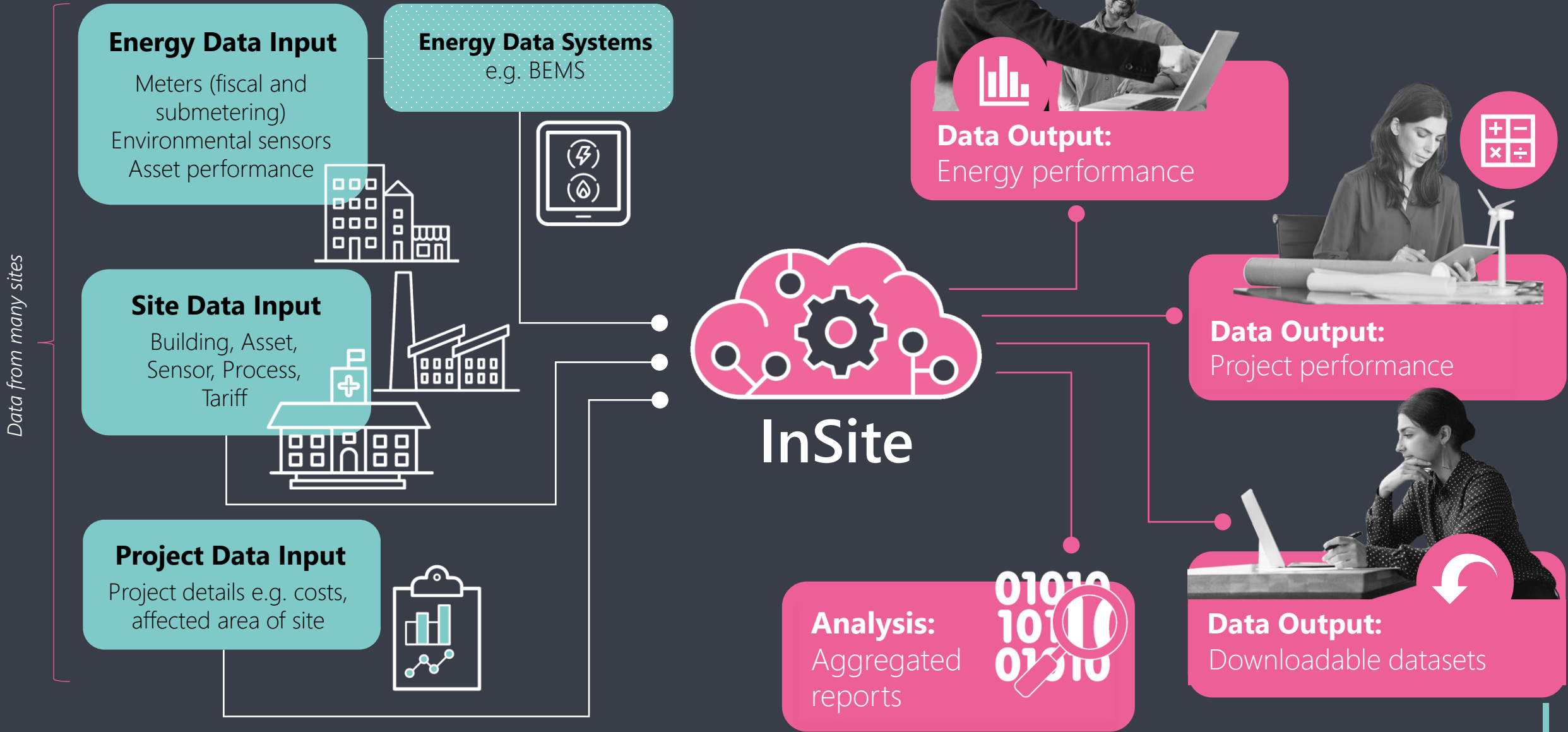


- Engagement and collaboration with the supply chain, professional bodies and other support organisations like the Net Zero Hubs and Salix

- Continued research into the challenges and barriers, feeding that back to decision makers in Government



InSite: How it works



Thank you!

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[@energyscat](https://twitter.com/energyscat)

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Developing a detailed feasibility study for one or a suite of investible decarbonisation measures. Securing buy-in and organisational strategy to decarbonise. Reviewing design and technical business cases. Setting emissions reduction targets. Selecting projects and planning delivery, developing project briefs.	Developing a detailed feasibility study for one or a suite of investible decarbonisation measures. Securing buy-in and organisational strategy to decarbonise. Reviewing design and technical business cases. Setting emissions reduction targets. Selecting projects and planning delivery, developing project briefs.	Running a procurement process and ensuring value for money is achieved through a competitive process. Accessing project finance and designing contracts.	Securing internal or external funding for at scale decarbonisation projects. Writing robust business cases.	Project management of installation and implementation of a decarbonisation project. Monitoring progress against programme of works and implementing quality assurance processes.	Handing over a completed decarbonisation project including staff training, correct setup and commissioning of equipment and ensuring all handover documentation is in place.	Understanding the benefits being delivered by an energy efficiency and/or decarbonisation measure through testing and analysis. Ensuring benefits are realised.