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Energy Systems

Modern Energy Partners Executive Summary

Testing the
practicalities of
public sector
decarbonisation

Observations and recommendations from **Modern Energy Partners**

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Foreword

Climate change is recognised by governments across the globe as an emergency which must be addressed, with far-reaching and irreversible implications for life on earth should immediate action not be taken.

In June 2019, the UK Government made a legally-binding commitment to reach net zero greenhouse gas (GHG) emissions by 2050. This commitment, combined with an interim ambition to halve direct emissions from the public sector by 2032, requires radical action now to decarbonise our buildings.

We know public sector estate accounts for 2% of all UK emissions, and overall, emissions from the built environment direct account for 34% of UK emissions. It is therefore essential that the public sector demonstrate leadership and drive down emissions by using credible and consistent approaches to decarbonise the public sector estate.

The Modern Energy Partners (MEP) programme, which was funded through BEIS's Energy Innovation Portfolio and co-sponsored by BEIS and Cabinet Office, is a clear example of this ambition.

Philip New CEO
Energy Systems Catapult



Over the last two years we have worked with some of the largest emitting government departments to develop a systematic and innovative integrated approach to decarbonising campus-style sites. Many people at sites and central offices around the country have supported the programme generously and we are very grateful for their contributions. These innovative tools and approaches can now be utilised, scaled up and applied more widely to the wider public sector estate.

The lessons learned, new ideas, and refined systems developed by the MEP programme are explained within this report. We hope this report is used to improve awareness and understanding of the opportunities and challenges which lie ahead on this journey.

We encourage Government to take the next step and exploit this learning — the successes and challenges we have encountered — and embed it across the public estate and the Property Profession. There is a great opportunity here for the public sector to lead the way and support the creation of new value chains, build new skills and support economic growth.

Meeting the commitments in the Clean Growth Strategy, the Ten-Point Plan for a green industrial revolution, and the 25-year Environmental Plan, require total focus on transforming the public estate. This report, the work of the MEP programme, is a major part of that drive.

I hope you find it useful.

A handwritten signature in blue ink, which appears to read "Philip New".

Overall conclusion and recommendations

The public sector, through the fifth Carbon Budget, has the challenge of achieving a 50% direct emissions reduction by 2032 against the 2017 baseline. Further commitments such as the Clean Growth Strategy, the Ten Point Plan, and the Energy White paper, are driving the UK's commitment to net zero by 2050.

The path to net zero is further defined through the sixth Carbon Budget which sets a national target of a 78% emissions reduction by 2035 against the 1990 baseline. The public sector estate accounts for 2%¹ of all UK emissions, and overall, emissions from the built environment direct account for 34%² of UK emissions. This demands tough and urgent action by the public sector to reduce emissions, especially those for which it is directly responsible, like emissions from heating buildings.

This executive summary report provides findings and recommendations, based on the learning from Phase 2 of the Modern Energy Partners (MEP) innovation programme. MEP is a collaborative cross-departmental programme, coordinated and delivered by the Energy Systems Catapult. Phase 2 is funded by BEIS's Energy Innovation Portfolio, overseen by BEIS and the Cabinet office, with additional match funding from pathfinder sites, and implementation from participating departments (primarily MOD, MOJ and NHS).

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957887/2019_Final_greenhouse_gas_emissions_statistical_release.pdf

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957887/2019_Final_greenhouse_gas_emissions_statistical_release.pdf

MEP focused on learning-by-doing, carrying out specific activities and generating consistent repeatable approaches for scalable delivery of decarbonisation, and taking into account whole system thinking on campus-style sites. Public sector campus-style sites, like those found on the NHS, MoD and MoJ estate are challenging to decarbonise as they use a lot of energy, have varying and unusual usage patterns, and must consider how the site use will evolve over time.

Activities included:

- Supporting retrofit improvements to energy systems at three, large campus-style, public sector “pathfinder” sites.
- Creating strategic long-term concept design decarbonisation plans at 24 sites and,
- Improved monitoring through better data collection, collation and some test installations of telemetry items such as sub-meters and sensors at 23 sites.

This was mainly to understand the challenges and benefits of such actions. Learning-by-doing underpins the recommendations made about achieving net zero targets through action programmes in the public sector. More detail is available in the main report.

MEP’s overall conclusion is that for the public sector to meet commitments it must rapidly scale up its decarbonisation activities. MEP observed that although expensive, difficult and time consuming, it was possible to put individual sites on track to hit the 50% direct emissions target through a sustained effort by people with a mix of skill sets. However, the team concluded that whilst some action is already being taken, it is not at the scale necessary, nor at a sufficiently rapid pace, to be confident that organisation-wide targets will be met.

Only by cutting timelines through the simplification of processes and decision-making, by being able to access finance, and by immediately increasing scale and pace can changes happen in time to meet the national net zero commitments.

MEP’s overall conclusion is that for the public sector to meet commitments it must rapidly scale up its decarbonisation activities.

MEP at a glance

Innovation programme
from BEIS

£12.4m

Months duration

24

Covering a test bed
of 42 sites and
over 294,000 tCO₂e
carbon emissions42
sites

Testing out implementation

- ✓ 3 pathfinder sites (Sheppey prison cluster, HMS Collingwood and Goole and District Hospital)
- ✓ 3 programmes of works under way or complete, match funded by BEIS and the participating organisation
- ✓ Over 9 GWh saved annually, over 2,400 tCO₂e saved in 2032 and £970k saved next year and then onwards

LEDs replaced
at pathfinder sites

20,000

Controlled with BMS

177,000m²

Equating to the following public sector estate coverage

	NHS England*	MOJ	MOD
Sub-metering only	2%	4%	3%
Sub-metering plus concept design	4%	13%	5%
Total coverage	6%	17%	8%

* In addition to coverage of NHS in Scotland, Wales and Northern Ireland

Developing a consistent scalable approach to appraising net zero potential

- ✓ Systematic approach developed and refined through doing
- ✓ Tools, templates, and assumptions recorded building a repository of information

Sites with consistent decarbonisation plans

24

Average emissions reduction by 2032

70%

At a total capital expenditure cost of £303.1m

£12.6m
Typical per site

Getting better data

- ✓ Rapid deployment approach developed

Fiscal meters connected

442

Sub-meters installed

951

Meter data monitored each week

50 GWh

Half hourly benchmarks developed on building use and activity



What does decarbonisation look like?

To decarbonise, MEP targeted a whole systems approach both on campus and for the surrounding area, looking to achieve maximum benefits for both.

The objective being to:

- Find the most financially and economically viable pathway;
- Develop a plan that accounted for end of asset life;
- Avoid the occurrence of stranded assets in the future; and
- Identify and manage network constraints as they arise with an electric transition.

At a technical level on site the approach was to reduce demand as much as possible through building fabric improvements, energy efficiency measures (including LEDs) and better controls. These measures enable a revaluation of the heating system size requirement. Lastly, a renewable solution to support additional heat and Electric Vehicle (EV) demand may be added. This sequence is shown in the whole system diagram opposite.

To make implementation scalable, multiple institutional challenges must be understood and overcome.

Whole system flow:

Consider appropriate sequencing dependent on site (items 2 to 5 are often interdependent); consider age of asset and likely replacement timeline

	What	Why
1 Implement no regrets measures	Energy efficiency including LEDs, better control through BMS, and Building Fabric improvements all to cut demand	Demand reduction of any energy scope (1 or 2) will support managing network constraints
2 Remove fossil fuels in heat and assess EVs	Resize heat solution to match amended demand, capture future EV charge point demand	Shifting away from fossil fuels is where future site decarbonisation will be achieved as the electricity grid decarbonises
3 Amend heat distribution system	If needed, improve heat network to match circulation temperature changes required for new heat source	The heat distribution system must have the ability to deliver heat even with a lower heat temperature from heat pumps
4 Review potential network constraints	Consider impact of additional heat demand through vector transition and increased EV charging demand	Additional capacity to support EVs and heat pump load may not be available without upgrade
5 Supplement electricity demand	Consider onsite or local renewable generation, electricity storage, and demand management to manage peak times	Solution will help reduce network capacity issues, and financially support overall system



To make implementation scalable, multiple institutional challenges must be understood and overcome. To enable this, the key recommendations from the MEP programme are grouped into themes and presented in the table opposite.

Each theme is further expanded upon in the following sections.

In addition, MEP found other wider systemic barriers that are likely to slow progress towards net zero targets.

MEP focused on demonstrating that it is possible for the public sector to meet its 5th Carbon Budget target of 50% direct emissions reduction by 2032 against a 2017 baseline.

To speed-up the action, it recommends:

<p>Enabling access to funding</p>	<ul style="list-style-type: none"> ○ Access to funding is not always obvious. It must be recognised that reaching net zero is going to require significant financial investment despite the long-term financial and resilience benefits that will ultimately be realised. Alternative thinking may be required such as blending funding options. This can be achieved by ensuring that direct dedicated funding is available or that all public sector organisations can access funding through other finance routes. Many organisations, particularly central government departments, currently have limited funding routes and are unable to access private finance yet there is a demand to decarbonise while maintaining outputs
<p>Incentivising adoption and making the case for decarbonisation more appetising by valuing carbon appropriately</p>	<ul style="list-style-type: none"> ○ Updating carbon values to reflect the changing net zero targets. This will incentivise earlier adoption. Current values indicate adoption later in the decade to be more beneficial ○ Requiring the benefits of decarbonisation to be considered in project business case sign off. Currently, the lowest priced option is often accepted, and the Green Book valuation not always considered ○ Adjusting the imbalance in energy prices, currently gas is much cheaper than electricity due to the green tariffs applied to electricity which discourages decarbonisation ○ Continuing and extending the incentivisation of some technologies, such as the adoption of heat pumps through a mixture of policy mechanisms
<p>Developing and implementing a clear public sector wide reporting framework</p>	<ul style="list-style-type: none"> ○ The GGC provides a high level reporting framework for central government however expanding and applying a clear reporting framework for all public sector organisations and within organisations will enable better transparent, consistent reporting thus capturing progress against net zero targets and verifying that large-scale action is in hand. This will expose and remove a risk that different parts of the public sector may report in different ways, against different baselines, with different emissions factors

Theme 1	Theme 2	Theme 3	Theme 4
Having an agreed organisation estate wide decarbonisation strategy	Understanding costs and cash flow in-line with funding and finance	Build the right capacity and capability to deliver	Use the practical knowledge from MEP to decarbonise in practice
Senior engagement and commitment are needed for effective prioritisation and governance	Plan budget expenditure and track progress to help manage expectations and support funding bid applications	At scale decarbonisation requires individuals and teams with a range of capabilities spanning the delivery lifecycle, embedded throughout the organisation	Systematic consistent repeatable approach to decarbonisation can save time, cost, and aid comparison
Think at scale for the long-term view on costs, delivery timeline and funding	Speed up net zero business case sign off by assessing the whole system solution and if the lowest cost option is the best option solution	Driving delivery effectively is easier when those involved have knowledge of energy issues	Common patterns and themes emerged for the most financially and economically viable pathway
Think at scale for delivery routes required to decarbonise	Selecting the best value delivery route for the technology or activity, considering scale	Seeking the right skills from others will help. However, the drive must be managed by the organisation	Better data will improve robustness of designs and enable tracking of progress
Think at scale for resources, skills capability and fluency should be expanded	Synchronising with maintenance programmes will support best value and help with delivery	Capability must be built to provide competent challenge of delivery	Portfolio management could speed up delivery. Use MEP outputs as guidance to prevent repetition

Theme 1: Having an agreed organisation estate-wide decarbonisation strategy

MEP observed that challenges are often not around technology gaps, but wider issues that relate to the need for net zero efforts to be embedded in organisation-wide strategies.

The starting point must be a central organisational deliverable strategy, which captures the scale and pace of decarbonisation required to contribute to the UK's legally enshrined net zero commitment. This must cover estates and other emitting sources. Faced with the challenge of decarbonising the estate, MEP experienced multiple barriers which prevent delivery and must be unlocked for the delivery of decarbonisation.

In addition to understanding the technical solution and how progress is going to be monitored (Theme 4) to develop a net zero strategy, MEP suggests that the following four elements are considered:

For scalable decarbonisation, the responsibility for delivery needs to be owned at a senior level with the whole organisation understanding their role.

1. Senior engagement is needed for effective governance	<ul style="list-style-type: none"> ○ MEP observed that decarbonisation work is being led by small sustainability teams that have a limited budget on annual cycle. For scalable decarbonisation, the responsibility for delivery needs to be owned at a senior level with the whole organisation understanding their role
2. Plan the long-term view on costs, delivery timeline and funding	<ul style="list-style-type: none"> ○ Estimating the realistic cost of decarbonisation and planning the delivery timeline is essential ○ MEP has net zero technical solution patterns and information on how long project delivery takes. Using these resources will provide an evidence-based understanding of the action required ○ Funding streams should be identified and planned in
3. Plan delivery routes required to decarbonise	<ul style="list-style-type: none"> ○ It is likely that multiple delivery routes will be required to cover ongoing operation and maintenance; asset replacement or larger renewal programmes. The strategy should consider what must be done to enable procurement to happen quickly and to offer best value for money ○ The benefits of scale can only be recognised if approached this way
4. Resources, skills capability, and fluency should be expanded	<ul style="list-style-type: none"> ○ For scaled delivery carbon fluency must be prevalent throughout the organisation and not just limited to the sustainability team. Ensuring that everyone is fluent and understands their responsibility will lead to organisational decisions passing through processes and sign off more smoothly. It will promote competence that will improve quality of delivery too

Theme 2: Understanding costs and cash flow in line with funding and finance

MEP found that the cost of decarbonisation was a key barrier. To make decarbonisation scalable, funding must be available and deployed efficiently within a department. In more detail MEP found cost and funding needed to be managed in three areas within an organisation and at a wider level across the whole net zero landscape.

1. Plan budget expenditure and track progress to help manage expectations and support funding bid applications

MEP found the Net Zero Trajectory Tool³ supports organisations to do an initial appraisal of their budget's expectations. To improve accuracy and tailoring to the organisation's needs, MEP recommends that in addition prices are drawn from examples of successful decarbonisation projects. MEP developed a repository of cost data which can provide some of this information.

A way of tracking and updating/refining costs should be incorporated as MEP observed price variations of up to 100% dependent on the stage of design, and the type of working conditions such security, safety, or hygiene. MEP looked at how to track changes at a portfolio level.

Budgets for planning should consider the cost of delivery at all levels, including staffing, feasibility studies and implementation. This is not covered in the Net Zero Trajectory Tool.

The selection of the delivery route for technology or project will impact price, value for money and delivery time.

³ Office of Government Property (OGP) 'Government Property Online' portal

2. Speed up and support net zero decision-making and business case sign off

MEP found that business case sign-off processes were complex and time consuming.

<p>The lowest cost option may not deliver best carbon value</p>	<ul style="list-style-type: none"> MEP observed the lowest tender being selected only to establish subsequently it might not deliver the same level of savings. Using other metrics in line with the Green Book, will provide an understanding of carbon value
<p>Ensure that the whole system or bundle of measures are captured as part of the business case</p>	<ul style="list-style-type: none"> Initial no regret measures including energy efficiency and BMS have shorter paybacks than other elements. If taken forward first this leaves more expensive higher abatement elements to be dealt with separately, making the more important measures harder to get agreed

3. Managing budgets to their optimum throughout delivery

<p>Selecting the right delivery route to get the best price</p>	<ul style="list-style-type: none"> MEP found that there was a variation in the price dependent upon the delivery route. The selection of the delivery route for technology or project will impact price, value for money and delivery time. Risk should also be considered
<p>Synchronising with maintenance programmes for efficiency</p>	<ul style="list-style-type: none"> MEP found that in an ageing estate, the implementation of decarbonisation should always be synchronised with asset replacement programmes, and therefore be incorporated into existing operations and future plans for estate retention Using increased sustainability budgets to supplement existing maintenance programmes offers a way to understand the cost of decarbonisation

Theme 3: Build the right capacity and capability to deliver

Overall MEP found that capability is limited to the centrally based carbon and estates focused sustainability teams and not embedded in all roles. Under the current conditions, delivery is time-consuming and relies on these small teams. This is not scalable.

1. Building capacity throughout the organisation will enable rapid scale-up

Using the MEP programme team resource and skills as a basis, MEP observed that the following roles are likely to be required for decarbonisation at scale.

Whilst a central team was seen as essential (to provide guidance) the vast proportion of effort was from the project managers overseeing delivery.

2. Driving delivery effectively is easier when those involved have knowledge of energy issues

MEP observed that whilst central knowledge is held within the sustainability team, carbon fluency needs to be imparted to the teams who will be involved in the delivery. MEP found that where people were unsure, approvals stalled.

Providing carbon fluency will lead to expediting internal sign offs and improved competency to challenge contractors with intelligent questions.

3. Seeking the right skills from others will help, but the drive must be managed by the organisation

MEP observed that the private sector has some capacity to support these skills needs, for example, the delivery of the technical assessments. However, their inputs can be very varied in quality and consistency of outputs (often based on varying assumptions for example differing emissions factors). This means therefore that those overseeing the work must have the time, confidence, and competency to scrutinise and challenge and push back on outputs. MEP found that this lack of knowledge led to overcharging and varied quality of outputs.

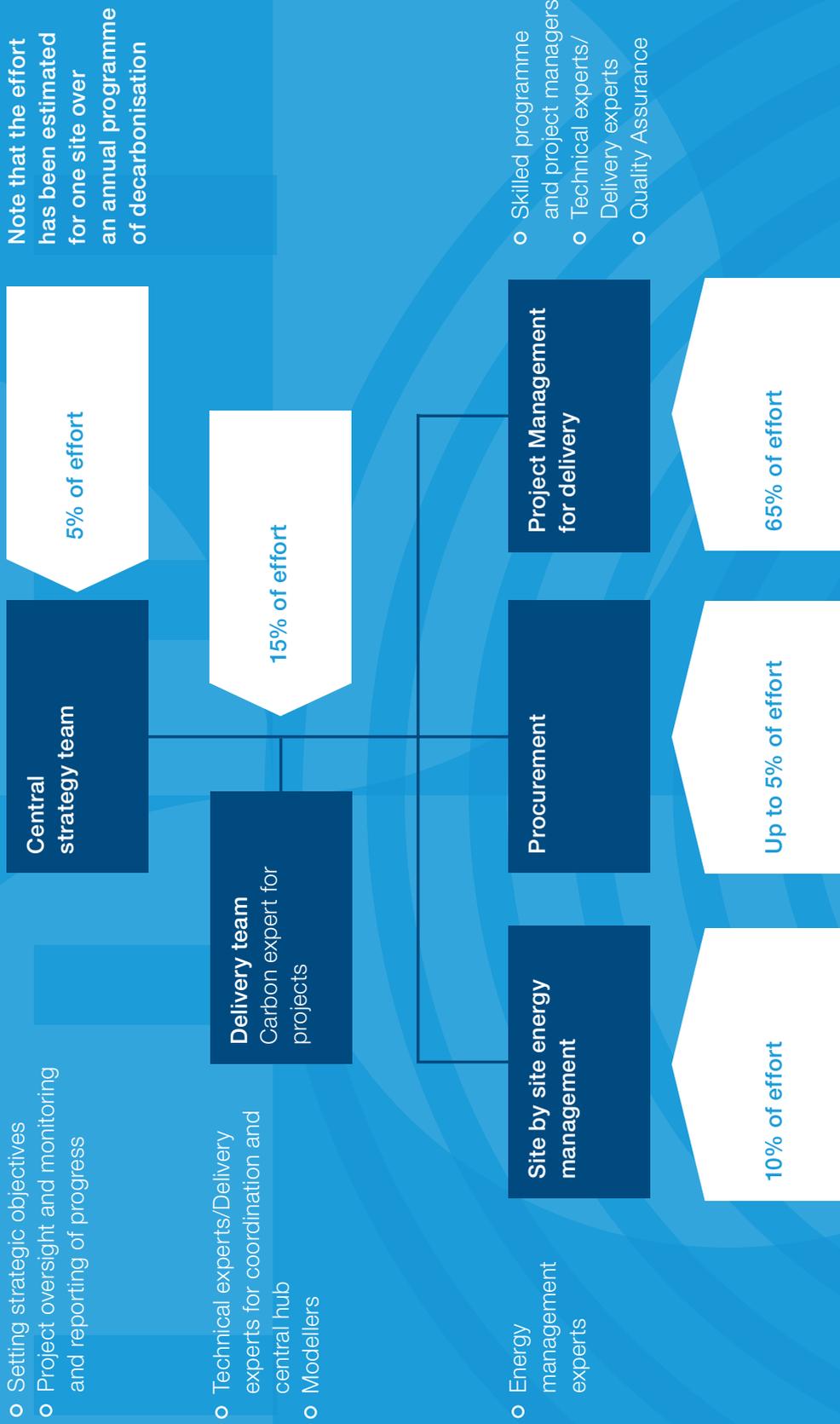


Figure 1: Ratios of effort, skills and roles



Theme 4: Use the practical knowledge from MEP to decarbonise in practice

Overall MEP found that decarbonisation of a campus-style site was possible and could be delivered at scale and pace using a standard consistent approach. MEP found there were patterns in similar use campuses. MEP also uncovered significant variation in approaches adopted by industry and a lack of understanding of the whole system approach.

1. Systematic consistent repeatable approach to decarbonisation can save time, cost, and aid comparison

MEP found that it was possible to develop decarbonisation plans in a repeatable way, which was less expensive and faster than a bespoke plan. Working with a small proportion of the supply chain, it has been possible to deliver plans for decarbonisation across 24 sites in less than 13 months. This included testing the process and documenting the approach.

The approach was understood by the supply chain who were guided with tools, models, and templates for each step of the process including taking engineering outputs, modelling against Green Book requirements, and providing business case ready analysis. This was not considered something that was normally incorporated into a decarbonisation plan by the supply chain. All 24 plans were comparable and consistent in their underlying assumptions so investment could be considered at a portfolio level.

2. Common patterns and themes emerged

In searching for the most financially and economically viable decarbonisation route MEP observed standard patterns for specific types of activity and site characteristics.

MEP often found the payback for the whole system's decarbonisation was over twenty years, based on a combination of building fabric improvements, energy efficiency, control improvements, electrification of heat, renewable generation, and energy storage. Generally, a typical whole system pathway followed the sequence opposite.

A typical whole system pathway

<p>No regrets measures pave the way with some early savings</p>	<ul style="list-style-type: none"> ○ MEP showed that typically no regret measures such as LEDs and BMS control will offer 15-20% savings, though cost 5–10% of the total budget. LEDs, whilst not contributing to the decarbonisation of direct emissions is seen to support the whole system of the site, providing financial returns and reducing overall electricity demand from a local network that could be constrained
<p>Building fabric improvements cut the heat demand and reduce the need to replace heat distribution networks</p>	<ul style="list-style-type: none"> ○ Investment in building fabric was seen as essential to unlock heat load reduction and any change in distribution of heat temperatures, with steam or higher temperature heat networks common. A pattern for investment for building fabric improvements was hard to establish and these measures are likely to require bespoke assessment
<p>Moving heat away from fossil fuels makes a step change</p>	<ul style="list-style-type: none"> ○ Moving heat generation away from fossil fuels (assuming by 2050 electricity consumption will be net zero) is where decarbonisation of direct emissions happens. Ageing plants are common so synchronising with asset replacement is logical. In most instances, this was linked to a move to heat pumps, a reduction in heat circulation temperature and additional electrical load. Hydrogen and other sources were also considered in instances where applicable
<p>Electric vehicles will place a higher demand on electricity supply</p>	<ul style="list-style-type: none"> ○ The transition over to electric vehicles will demand additional power. This, with any additional heat loading, needs to be considered when looking at sizing renewable energy generation on site, and network constraints requiring upgrades
<p>Renewable generation on site supports the financial case and resilience</p>	<ul style="list-style-type: none"> ○ Onsite renewable generation (primarily wind and PhotoVoltaics (PV)), sized to match the additional loads, was found to offer better site power supply resilience (when coupled with storage) and improved the financial business case for the whole system. Wind was more financially viable and matching demand profiles better, despite being more challenging to implement. Renewable generation offered multiple benefits to the whole system solution for the site including supporting localised network constraints, generating zero carbon power at low cost, and building resilience against any local power outages
<p>Energy storage manages demand profiles</p>	<ul style="list-style-type: none"> ○ Energy storage and the management of heat and power use were seen as essential to balancing the whole system over a daily, weekly, and annual cycle

Importantly, the decarbonisation pathway may be perceived as a series of discrete steps in financial investment but the environmental and economic benefits may only be fully realised (and optimised) once all steps have been completed. Each step effects change to a system as a whole, and that change can only be planned and delivered optimally where a collection of component steps are considered together.

3. Better data will improve robustness of designs and enable tracking of progress

MEP developed a rapid assessment method for developing sub-metering strategies and installed 827 sub-meters. These sub-meters will provide better data for those sites, and enable half hourly benchmarks to be generated for use where data is not available.

4. Portfolio management could speed up delivery

By collating multiple site's outputs together MEP's systematic process is enabling participating organisations to compare sites and begin to plan investment decisions across their portfolio for scalable implementation. This feeds back into financial budget planning and delivery.

This also assists organisations when judging site investment on whole system costs using the financial and economic modelling outputs provided.

5. Use MEP outputs as guidance to prevent repetition

MEP developed and tested methods for parts of the decarbonisation process and recommends that these methods are used widely as the basis for any strategy on areas around:

- Profiling sites and understanding a portfolio;
- Considering where investment decisions are made;
- Planning implementation approaches;
- Assessing the needs and procurement routes for delivery; and
- Developing a realistic timeline for delivery.

The MEP process takes less time and costs less than many consultants would quote. MEP continue to streamline the cost and duration of the process based on further work with the MOD.

The decarbonisation pathway may be perceived as a series of discrete steps in financial investment but the environmental and economic benefits may only be fully realised (and optimised) once all steps have been completed.

What next for MEP?

This executive summary and the supporting main report record the main findings and learning from the programme to date. To support on-the-ground delivery, the standardised site planning approach refined at MEP sites is also being shared through tools, templates, and associated benchmarks so more sites can apply it.

These outputs deliver on the MEP phase 2 aims of learning by doing and developing practical support to help the public sector rapidly scale up decarbonisation.

MEP is continuing in a new form, with a shift in emphasis from innovating in process terms to sharing the tools and refining them, as well as providing advice to public sector bodies reflecting the team's engineering and project management expertise and phase 2 experiences. The next phase is being guided by BEIS and OGP (Office of Government Property, in the Cabinet Office family) and is likely to be an interim step to be built on after the usability of the tools and the need for bespoke advice is better understood.

By collating multiple site's outputs together MEP's systematic process is enabling participating organisations to compare sites and begin to plan investment decisions across their portfolio for scalable implementation.

Modern Energy Partners

In detail

What is Modern Energy Partners?

The Modern Energy Partners (MEP) programme is a ground-breaking collaboration within Government. Since the programmes' inception in 2019, its aim as an innovation programme has been to develop a replicable and scalable method to decarbonising campus-style sites, demonstrating that it is possible for the public estate to deliver at least 50% direct carbon emission reduction by 2032.

Who supported Modern Energy Partners?

The programme, whilst cross government collaborative, has been overseen by the Department for Business, Energy and Industrial Strategy (BEIS) and funded by BEIS under the £505m Energy Innovation Portfolio. Collaborative support was provided by the Cabinet Office's Office for Government Property (OGP), Treasury and the BEIS Public Sector Decarbonisation Team. The NHS, MOD and MOJ primarily offered-up testbed sites and participated in steering the programme.

What did MEP do?

Over two years, the programme tested out the practicalities of decarbonisation through getting better data, understanding what the most cost-effective route was to achieve decarbonisation on a site and testing out the ease of taking the first few actions.

Overall MEP worked with forty-two testbed sites split across NHS, MOD, MOJ, HMRC and HEI and in doing so evolved a standardised rapid process to assess:

- Sub-metering needs and deployment of meters (including testing out Crown Commercial Services Helga Framework to deploy sub-meters).
- The decarbonisation potential of a site, including a pathway to enable the next steps and associated costs to be recorded, planned for, secured and actioned.

In addition, it developed a repository of:

- Tools, templates, and methods for use which apply consistent thinking to allow comparability across different sites
- Benchmarks and data on energy consumption for different activities and costs for all parts of the decarbonisation process.

It also saw MEP observing the current:

- Condition and management of the estate
- Levels of capacity and capability
- Decision-making and governance processes
- Delivery and procurement routes.

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