SMS Leading the smart energy revolution

sms-plc.com

A short business guide to net zero carbon emissions

Finance & Delivery

Contents

Why work with SMS as a strategic net zero partner?

- We work with you to design, procure, install, operate, and manage your transition to net zero.
- We are technology agnostic and have no affiliation to any technology providers.
- Leading partner in net zero programmes to develop products specific to an organisation's needs and ambitions.
- 25 year heritage and experience in large-scale energy and carbon reduction programmes.
- We can provide finance at zero-CAPEX, significantly reducing the risk of any project.

FUNDING & DELIVERY OF YOUR ZERO-CARBON ENERGY ASSETS

GENERATE

STORE

HEAT

CHARGE

Our journey to net zero carbon

2020

Committed to Net-Zero Carbon target

2021

Released inaugural Sustainability Report

2021

FLEET
All vehicles at the end of their lifecycle will be replaced with plug-in hybrid's or EV's where possible

2021

BUILDINGS
Commence roll-out of renewable and efficiency upgrades

2025

FLEET
All fleet will emit the lowest possible CO_2/km in their category

2030

FLEET
All fleet will be EV or emit 0g CO_2/km where possible

2030

BUILDINGS
All core sites to have renewable generation, fabric and energy efficiency upgrades completed

WE ARE COMMITTED TO NET ZERO BY 2030

Beyond 2030 Continuously working with suppliers and customers to reduce Scope 3 Emissions

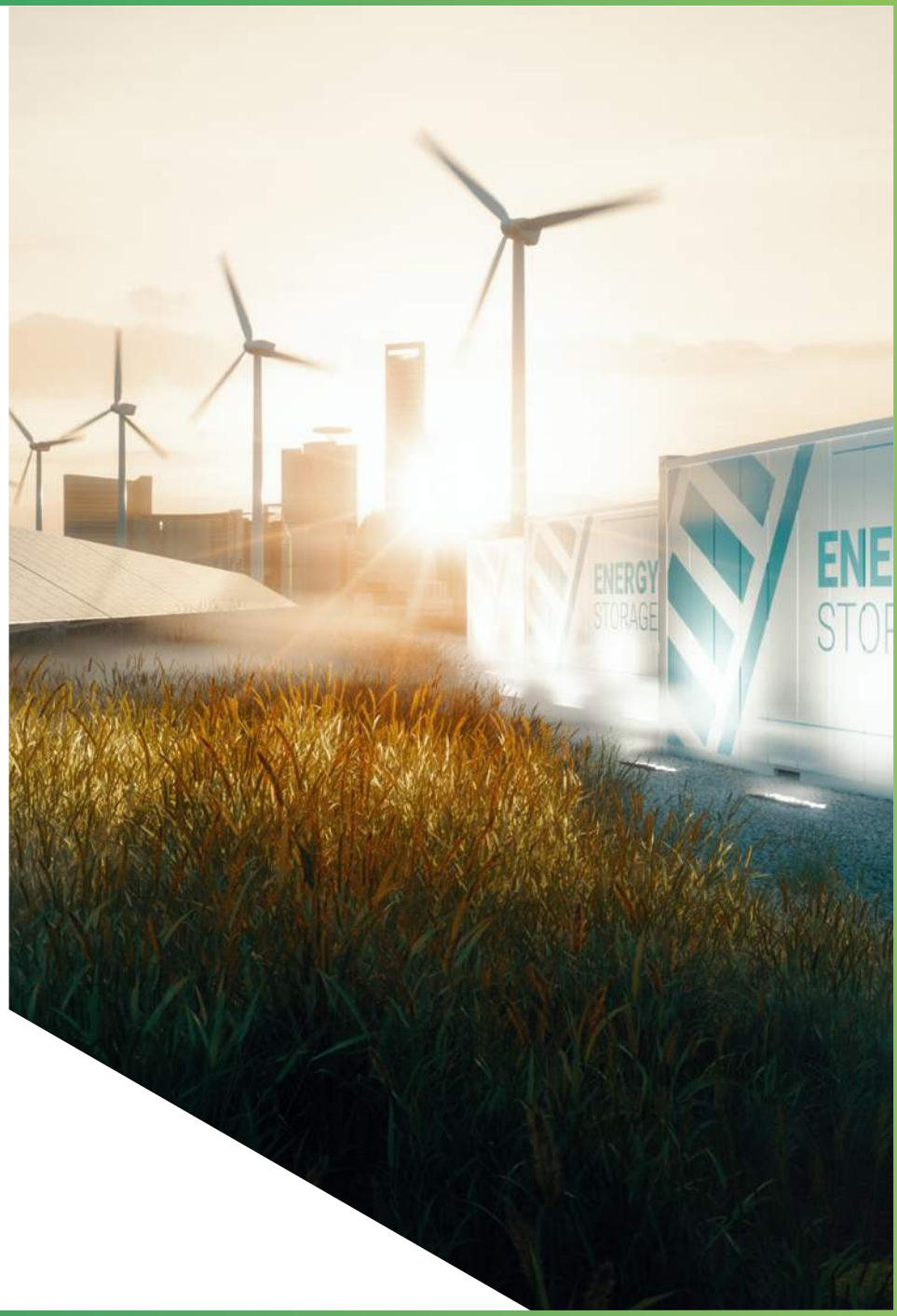
Our net zero 2030 target is two decades ahead of the Government's 2050 goal and reinforces our commitment as a business to lead the UK's sustainable energy transition. Carried out in line with the Greenhouse Gas (GHG) Protocol and Institute of Environmental Management and Assessment (IEMA) Hierarchy, our Roadmap (above) will be realised through a variety of sustainability measures and serves as an example of how similar organisations can reach net zero emissions.

What does net zero carbon mean?

Delivering an effective carbon reduction plan that realises long-term sustainability requires expert, strategic advice and access to low-cost asset finance. This guide aims to support you in establishing a net zero carbon strategy.

Net zero carbon, otherwise known as 'carbon neutral', refers to the process of balancing the amount of carbon (CO_2) emitted with the equivalent amount of CO_2 emissions cancelled from the atmosphere. For example, replacing petrol and diesel forms of transport with electric vehicles (EVs), or swapping high CO_2 emitting practices such as oil, coal and gas-fired energy generation with renewable energy technologies like solar panels, wind farms, and battery storage.

There are two types of net zero target: the first set by an entire country or region – like the UK's 2050 goal – requiring the whole economy to reduce carbon emissions. The second type of net zero target is set by progressive, individual organisations who wish to make a positive environmental impact and take a leading role in supporting wider national and global decarbonisation efforts.



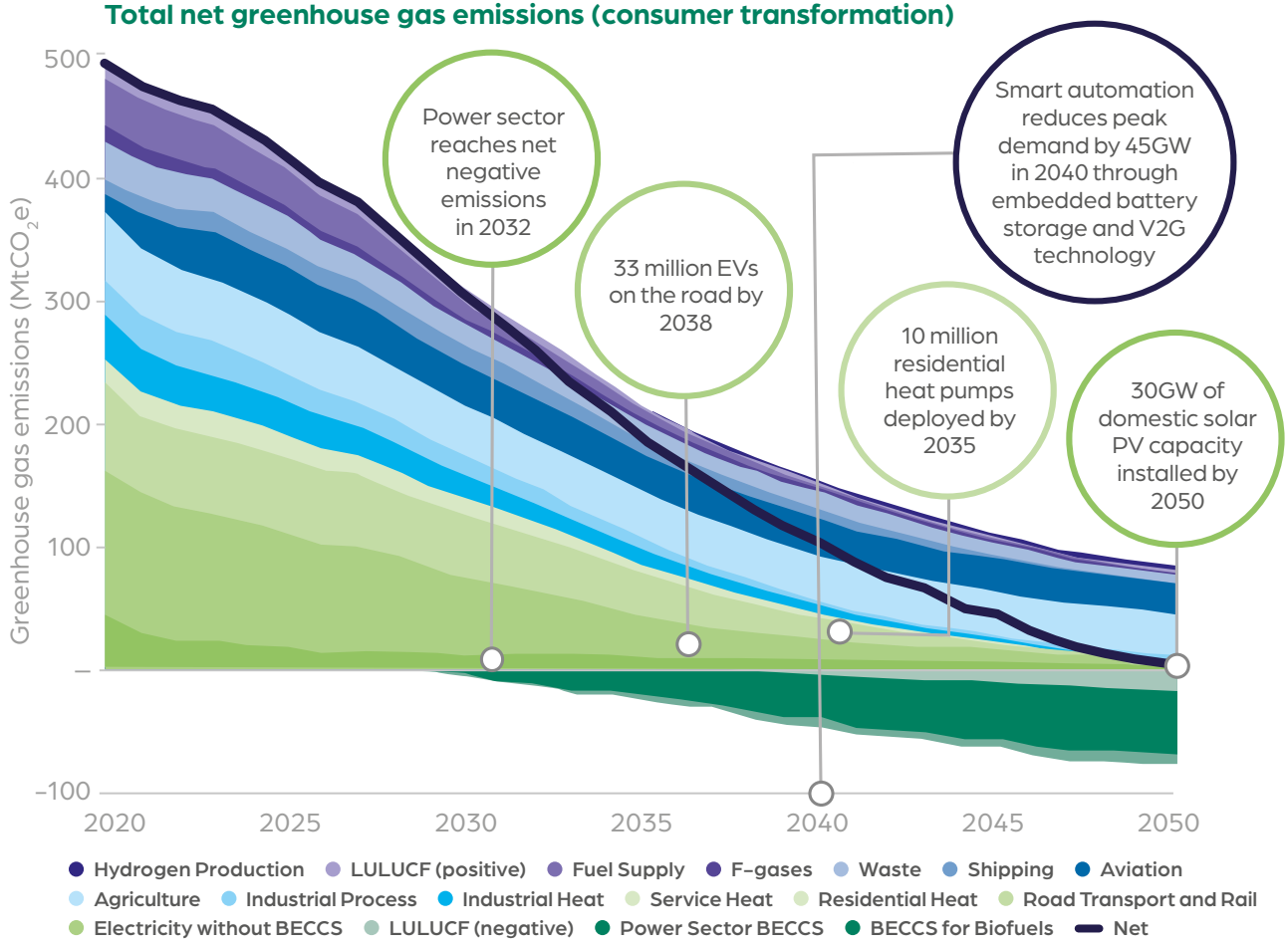
The UK's net zero challenge

In response to the United Nations' Paris Agreement on climate change, the UK Government in 2019 set out a national target to reduce carbon emissions to 'net zero' by 2050. As a result, the country's energy system is today entering a period of transformation, driven by rapid technological advancements.

Often, the tension at the heart of this low-carbon journey centres on the cost of energy, security of supply, and – of course – environmental sustainability. To address these challenges, immediate and increasing action is required, with a major onus being placed on large British organisations to drive forward essential carbon reductions over the coming years.

Increased renewable generation, electrification of heat and transport, and energy efficiencies at a significant scale across all sectors of the UK economy will be essential if net zero carbon is to be reached.

Total net greenhouse gas emissions (consumer transformation)



Source: National Grid Future Energy Scenarios 2021: Consumer transformation

The business benefits of net zero carbon...

Reduce costs, improve productivity

By making a relatively short-term investment in sustainability measures, companies can experience long-term operational efficiencies, whilst reducing costs and improving profits. Don't just take our word for it, **read our case studies**.

Build resilience and risk aversion

As the COVID-19 crisis demonstrated, the most resilient, flexible, and well-prepared businesses are the ones that win the day. Besides these unpredictable events, a sustainability strategy builds resilience against the immediate and foreseeable risks too, such as stricter environmental compliance regulations and increased energy costs.

Boost brand image and competitive advantage

Consumers are 58% more likely to buy products or services from an environmentally sustainable and socially responsible business, according to a study by The Natural Marketing Institute.

Unlock investment opportunities

Global investment analysts recognise that having a sustainability strategy in place is an increasingly critical company criterion. A recent Goldman Sachs study, for instance, found that companies in six industries considered leaders in environmental, social and governance (ESG) policies far outperformed the general stock.

Support recruitment, retention, and employee satisfaction

People increasingly want to work for companies who are 'doing the right thing'. According to Adecco, an international HR company, 52% of employees feel their companies should be more environmentally aware.

...and the common challenges

Business stability in the wake of the global pandemic

After the 2008 global financial crash, 93% of CEOs believed sustainability would become a crucial part of their company's future success – according to an Adecco survey – as they grappled with the economic impact and the calls for more responsible organisations. In the wake of the COVID-19 pandemic, this sentiment resonates louder still, with governments and the public now demanding businesses to lead a green economic recovery. Finding a balance between financial stability and investment in sustainable responsibility that is increasingly expected of businesses, will therefore be critical as organisations look to the future.

The financial barrier

Many businesses continue to cite cost as the biggest barrier to transitioning to net zero. Whilst installing sustainable technologies – particularly when rolled out at scale – require substantial initial investment, taking such measures can over time result in long-term profit through the substantial cost savings realised and new revenue streams created. What's more, with green financing now available to businesses to install these technologies at zero upfront cost, the biggest barrier to sustainability no longer needs to stand in the way of your long-term, low-carbon objectives.

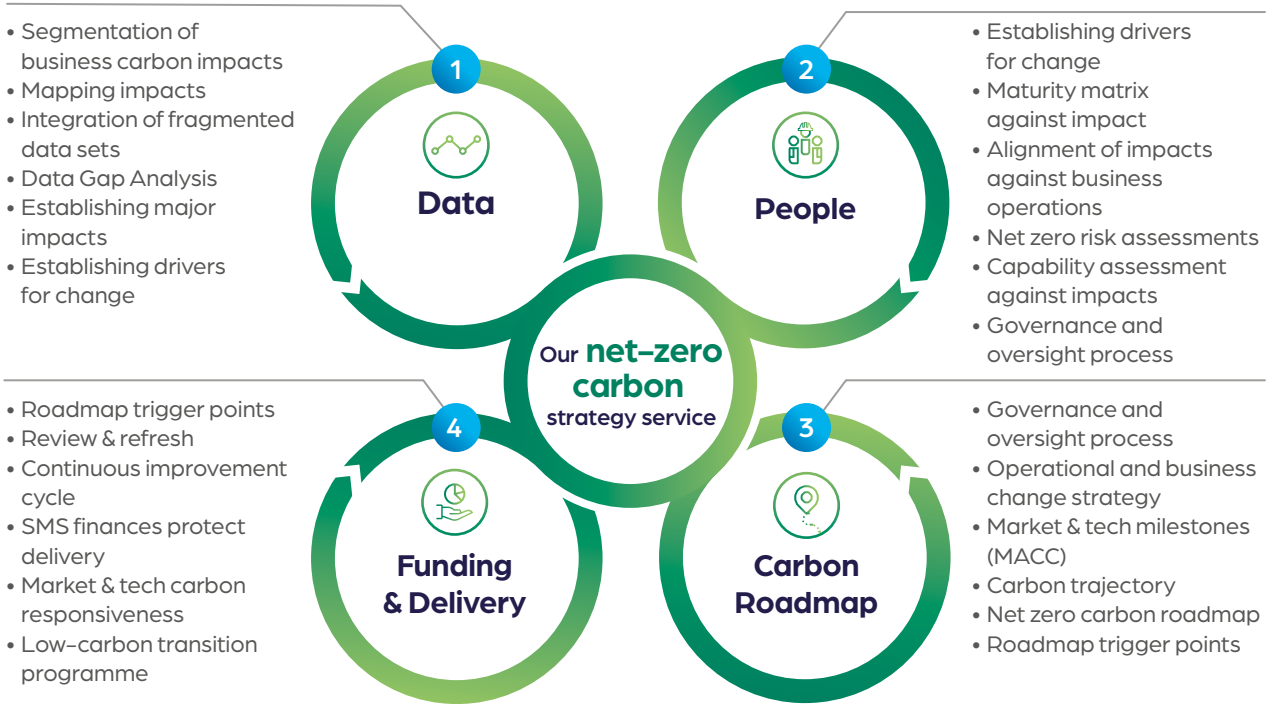
What does a net zero carbon strategy look like?

Reaching net zero emissions may mean very different things for different organisations, depending upon their size and capacity for energy and carbon reduction, or the specific sectors which they operate in. For energy-intensive industries, realising lower carbon emissions might mean being heavily reliant upon grid decarbonisation or sourcing energy consumption through renewable self-generation. Equally, for organisations with large and complex supply chains, or those with substantial fleets, becoming a net zero business may see you working much more closely with suppliers to address 'Scope Three' emissions.

Whilst there are many different paths to net zero, SMS aims to make the potential journey as clear and transparent as possible for our customers. For that reason, we have developed a turnkey Net Zero Framework. Our framework is designed to support any type of large business throughout the planning, implementation and review of long-term energy and carbon reduction programmes, making it easier and more cost effective to realise net zero goals.

Segmented into four targeted workstreams, our approach identifies the drivers and critical levers existing within an organisation that influence energy and carbon performance, as well as the opportunities to align the strategy delivery across your business and its wider stakeholders.

Our net zero carbon strategy service



1

Data

Uncovering and analysing your business data to set the opportunities and boundaries for net zero carbon.

2

People

Working with your people to identify roles, responsibilities, and risk areas, and the capacity and coverage to consolidate approach across the business.

3

Carbon Roadmap

Establish long-term trajectory and milestones to provide clarity and transparency, and identify suitable projects to deliver carbon reduction.

4

Funding & Delivery

We design, fund, deliver and manage your carbon reduction projects, then review and refresh your strategy to ensure continuous improvement.

OUR PHILOSOPHY AT SMS IS TO HELP OUR CLIENTS PRIORITISE A STRATEGY OF TRUE DECARBONISATION. WE DO THIS BY ENABLING OUR CUSTOMERS TO INVEST IN CARBON REDUCTION (CaRe) TECHNOLOGY ASSETS THROUGH OUR FINANCING AND PROJECT DELIVERY SOLUTIONS."

CARBON REDUCTION OR CARBON REMOVAL?

An organisation's net zero emission journey can be broadly categorised into two pathways: **carbon reduction** and **carbon removal**. Carbon reduction, or decarbonisation, refers to reducing emissions on an absolute basis, for example, by swapping fossil fuel sources of energy consumption and transport for renewable alternatives. On the other hand, carbon removal – which is often referred to as 'offsetting' or 'sequestration' – is to do with other measures that can be taken to mitigate CO_2 from the atmosphere, such as planting trees, in order to balance an organisation's overall environmental impact.

Whilst these pathways can be delivered in parallel and can be complementary of each other in the journey to net zero emissions, our philosophy at SMS is to help our clients prioritise a strategy of true decarbonisation. We do this by enabling our customers to invest in **Carbon Reduction (CaRe) technology assets** through our financing and project delivery solutions, which maximise business sustainability and long-term value.

Carbon Reduction (CaRe) Assets

Green energy technologies for your net zero strategy

Adopting green energy technologies across your business is an essential part of reaching net zero emissions. Below is a glance at the foremost carbon reduction (CaRe) assets on the market today, which SMS can finance, design, procure, install, operate, and manage as part of a completely integrated delivery service.

On-site renewable generation

Generating electricity on the same site where it is consumed could reduce grid supplied energy costs by up to 80%. This requires investment in suitable on-site renewable technologies for your organisation.

See page **10**

Battery energy storage

The transition to green energy means greater reliance on intermittent renewable generation. Battery storage has therefore become recognised as an integral part of a low-carbon energy strategy for any large energy user.

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Electric vehicle (EV) charging

With transport being the largest source of emissions in the UK, investing in clean transport is an area where organisations can make a very practical and impactful contribution to addressing climate change.

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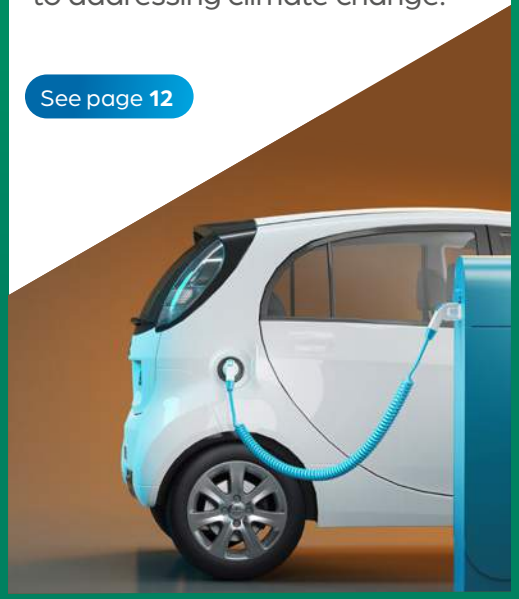

Low-carbon heating

As the UK's electricity grid decarbonises, how we heat our homes and businesses will undergo massive transformation through new low-carbon heating solutions.

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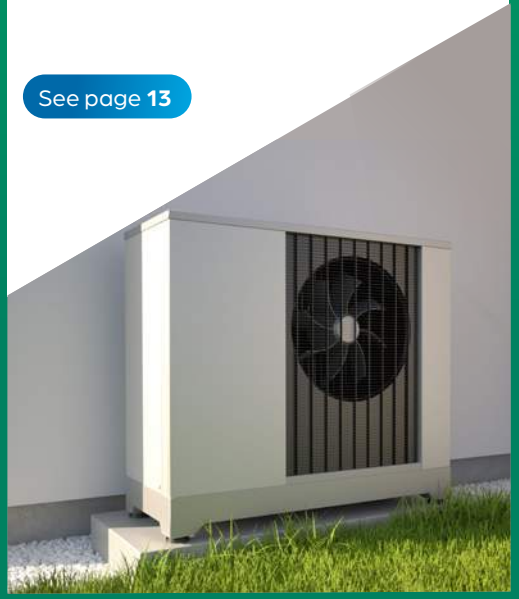


On-site renewable generation

Generating electricity on the same site where it is consumed could reduce grid supplied energy costs by up to 80%, but this requires investment in suitable onsite renewable technologies for your organisation, typically making use of 'free' resources such as solar and wind. And with the rise in non-commodity costs and pressures for greater Corporate Social Responsibility (CSR), the business case for onsite renewables has never been more attractive. The key is to layer a renewable energy technology with battery storage to meet the energy demand across your site(s).

- **Lower electricity costs.**
- **Reduce reliance on grid energy.**
- **Gain budget stability through more predictable electricity costs.**
- **Generate revenue by selling excess power to the grid.**
- **Improve reliability, resilience, and risk aversion.**

18,864

SOLAR PANELS INSTALLED ON AN 11 HECTARE SITE

CASE STUDY

INRG Solar Ltd – November 2017

With our first-class engineering skills and energy system design expertise, supported by our electricity connection, metering, and data services, we manage the end-to-end installation and delivery of distributed renewable generation solutions for clients around the UK.

SMS WORKED CLOSELY WITH INRG THROUGHOUT THE DESIGN AND BUILD PHASE TO ENSURE THAT THE SOLUTIONS PROPOSED WERE COST-EFFECTIVE, AND MORE IMPORTANTLY, DELIVERABLE WITHIN THE SHORT TIMELINE AVAILABLE."

Read about our work with INRG Solar to deliver a 5MW solar farm

Battery energy storage

As the UK's energy demand rises, businesses today face the prospect of an increasingly unstable grid, whilst the transition to green energy means greater reliance on intermittent renewable generation. Battery storage has therefore become recognised as an integral part of a low-carbon energy strategy for any large energy user. Besides facilitating and improving utilisation of on-site renewable generation through more flexible energy usage, investing in a battery energy storage system is also an attractive option for developers and investors to enhance risk-free, sustainable revenue opportunities that support grid stability.

- **Unlock greater energy savings by maximising use of your on-site renewables – either behind-the-meter or at grid-scale.**
- **Remove complexity: an integrated battery solution comprising finance, design, insxa single partner.**
- **Optimise investment by creating revenue streams through our DSR and grid flexibility services.**

DELIVERING
470MW
OF ENERGY STORAGE BY 2025

CASE STUDY

Leveraging our pioneering FlexiGrid™ solution, SMS is driving battery storage market growth in the UK, having developed numerous behind-the-meter battery demonstration projects with our commercial and local authority partners. SMS is also developing its own grid-scale Battery Energy Storage Systems (BESS), with 470MW of capacity set to be delivered by 2025.

Find out more here about SMS's BESS projects.

Read about our work on the pioneering ReFLEX Orkney project.

Behind-the-meter or Grid-scale?

Any gas or electricity user – whether they are big or small, a domestic user, or a commercial or industrial organisation – will have meters on their premises that calculate how much energy has been taken from the grid and consequently how much is owed to the utility provider. In simple terms, behind the meter refers to anything that happens onsite, on the energy user's side of the meter. Conversely, anything that happens on the grid side, such as large-scale energy generation or storage system that feed directly into the National Grid, is deemed to be in front of the meter. SMS specialises in the delivery of both behind-the-meter and grid-scale battery projects.

Electric vehicle (EV) charging

With transport being the largest source of emissions in the UK – making up a quarter of the country's carbon emissions – investing in clean transport is an area where organisations can make a very practical and impactful contribution to addressing climate change.

Simultaneously, making the transition to EVs now can also help substantially cut costs in the long term, as well as creating new revenue streams. Besides the cost and tax savings of switching your petrol/diesel fleet to an electric one, EV charging as a solution in its own right brings with it a plethora of commercial advantages, including the potential to bring in new customers requiring charging facilities and related retail opportunities.

- **Integrate with on-site renewable generation and battery storage to further reduce energy and fuel spend.**
- **Unlock flexible energy value by using your EV batteries for Demand Side Response.**
- **Get ahead as the UK outlaws new petrol/diesel car sales in 2030.**

CASE STUDY

Through our OLEV-approved EV charging services, we are supporting the UK market to establish the national network of EV charging infrastru ut our partnership in the Virgin Media Park & Charge (VPACH) project, which aims to demonstrate a fully integrated, scalable EV charging network. Public sector organisations can also procure our end-to-end charging infrastructure solution, including funding, installation, and project delivery, through the Crown Commercial Service's Vehicle Charging Infrastructure Solutions (VCIS) framework.

Read about our partnership in the Virgin Media Park & Charge (VPACH) project

Vehicle Charging Infrastructure Solutions (VCIS) framework

Low-carbon heating

As the UK's electricity grid continues to decarbonise, how we heat our homes and businesses will undergo massive transformation through new low-carbon heating solutions. Despite being a market in its relative infancy, there are already a number of proven solutions available for businesses to benefit from. For example, heat pumps utilise a range of heat sources including air, ground, water and waste heat and can be fully powered by your on-site renewable generation, providing significant carbon emission reductions compared to alternative to 'conventional' gas fuelled heating systems.

- **Sustainable heat generation for your business to replace natural gas.**
- **Couple with renewables and battery storage to make heating carbon neutral.**
- **Achieve substantial cost savings.**

CASE STUDY

SMS can utilise several low-carbon technologies as sources of heat across your portfolio and offer the option of using your electrified heat sources for grid balancing services, which can improve the business case without impacting comfort. Public sector organisations can procure SMS's low-carbon heat solutions through the Heat Networks and Electricity Generation Assets (HELGA) agreement.

Crown Commercial Service *Supplier*

Read about our work with Aberdeen City Council to deliver heat pumps for its social housing portfolio

Read about Heat Networks and Electricity Generation Assets (HELGA) agreement

CaRe asset finance

The carbon reduction (CaRe) technology assets required to realise your sustainable, net zero business journey are now more accessible than ever thanks to SMS's flexible funding and financing, which offer installation, operation and maintenance (O&M) at zero upfront cost. Our CaRe asset finance options include:

Energy Services Company (ESCO) Agreement

Finances the installation of multiple CaRe asset technology solutions, funded by either SMS or 3rd party finance, including O&M.

Power Purchase Agreement (PPA)

Our PPA option finances on-site renewable generation assets for up to 25 years, with a single agreement to cover the asset, financing, and ongoing operation.

Capital Expenditure (CAPEX)

For organisations who want to part-finance the installation of assets, the CAPEX option enables you to reap the commercial benefits from day one and engage our other energy services such as O&M, through a single agreement.

THE BENEFITS OF WORKING WITH SMS

- Choose a finance agreement tailored to your specific needs.
- One single partner for finance and project delivery.
- Remove the need for CAPEX – assets delivered at no upfront cost.
- Ensure cost predictability and manage commercial risk.

GAINING GOVERNMENTS GRANTS

As a partner on numerous Government-funded energy innovation schemes, SMS has the knowledge and expertise to partner with you to build innovative project proposals and access to government grants to support your individual sustainable actions. Including:

- Industrial Energy Transformation Fund.
- £1bn Energy Fund.
- Heat Networks Investment Project.
- Social Housing Net Zero Heat Fund.

Complete project delivery

We don't just provide the finance, our experienced consultants and engineers advise on the most suitable CaRe assets to deploy at your sites and take your energy projects from concept to completion – helping you secure board-level buy-in, establish a project delivery model, and install, operate, and manage your assets.

Strategy Design & Development

Our team of experienced advisors provide impartial energy surveys and use energy system modelling to form the basis of your carbon reduction strategy.

See our net zero strategy roadmap on **page 4.**

Asset Finance

SMS provides the finance to roll out your Carbon Reduction (CaRe) assets at scale and set your strategy in motion.

Supply & Installation

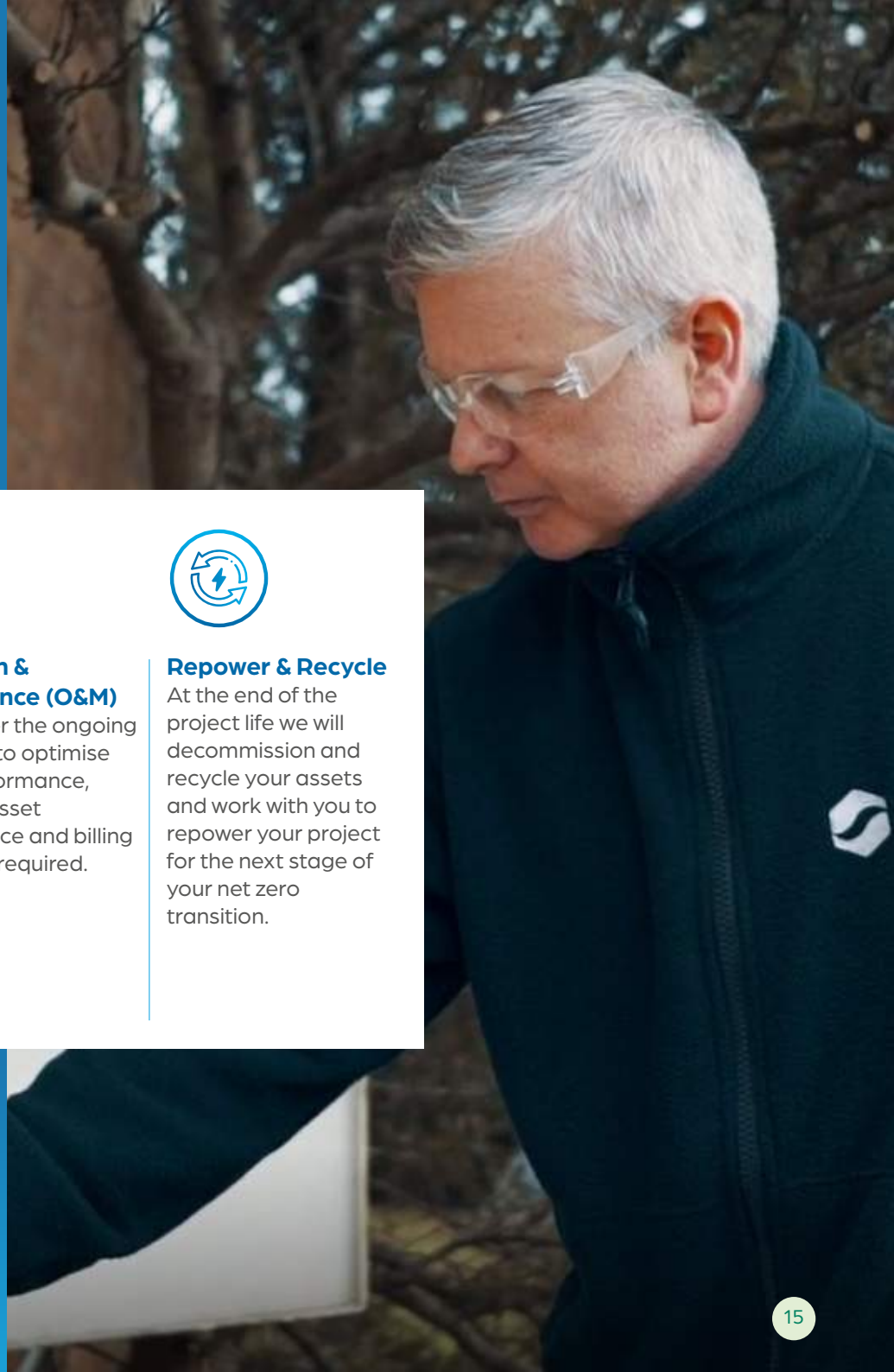
We supply and install all your assets, with no upfront cost.

Operation & Maintenance (O&M)

SMS deliver the ongoing operation to optimise asset performance, including asset maintenance and billing support, if required.

Repower & Recycle

At the end of the project life we will decommission and recycle your assets and work with you to repower your project for the next stage of your net zero transition.



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Read our case studies here

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