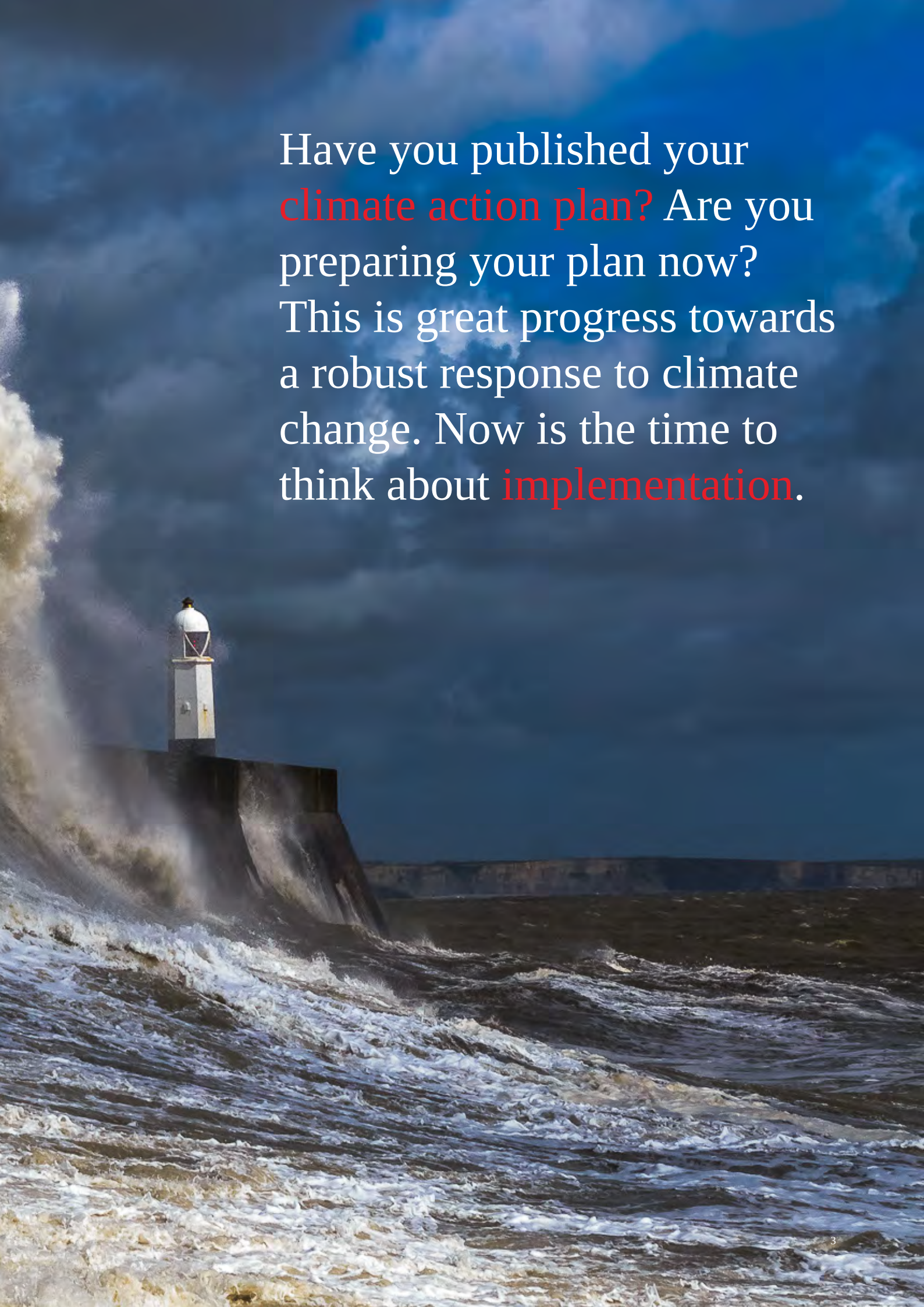
ARUP

You've made a Climate Action Plan... what next?

Guidance for local governments



Have you published your climate action plan? Are you preparing your plan now? This is great progress towards a robust response to climate change. Now is the time to think about implementation.

You've made a Climate Action Plan... what next?

In 2019, Arup published You've declared a Climate Emergency... what next?, which offered guidance for local governments to support the development of effective climate action plans. Since then, we have worked with local governments in the UK and around the world to plan and implement climate action. This guide builds on our previous publication and aims to help you move from planning to implementing the actions set out in your Climate Action Plan (CAP).

As of March 2023, more than 330 UK Councils[1] and Combined Authorities had declared a Climate Emergency and pledged commitments to mitigate climate risks and reduce greenhouse gas emissions. At the time of writing, over 200 authorities have set ambitious targets for 2030 – a target earlier than the UK's 2050 net zero target. In preparation to meet their targets, many authorities have created a CAP.

What is a Climate Action Plan (CAP)?
A CAP establishes agreed targets and a programme of actions – underpinned by comprehensive emissions modelling and climate risk assessment - that will be delivered by named actors to address the Climate Emergency.

While local governments have a responsibility and unique opportunity to lead the climate change response in their areas, challenges remain in ensuring meaningful climate action will be delivered on the ground.

At Arup, we have worked side by side with over 30 local government clients to develop various aspects of their climate change response - some of which are mentioned through this report. We have learned about the challenges that governments face in accessing, analysing and interpreting data, securing cooperation with key stakeholders, and delivering within limited powers.

We have seen that climate action needs to be delivered along with a whole range of other local challenges - the cost of living crisis and rising inflation, health and other social inequalities, economic growth, air quality and nature restoration, among others - and that systemic action on climate change can bring benefits in all of these areas.

We have observed barriers to implementation ranging from single-objective decision-making within government departments, lack of funding, difficulty in accessing finance, inflexible procurement practices, shortage of human resources and limitations around technical experience. None of these challenges are insurmountable, but they do require a shift in normal ways of working, and these shifts are both urgent and critical to ensure momentum is not lost following publication of a CAP.

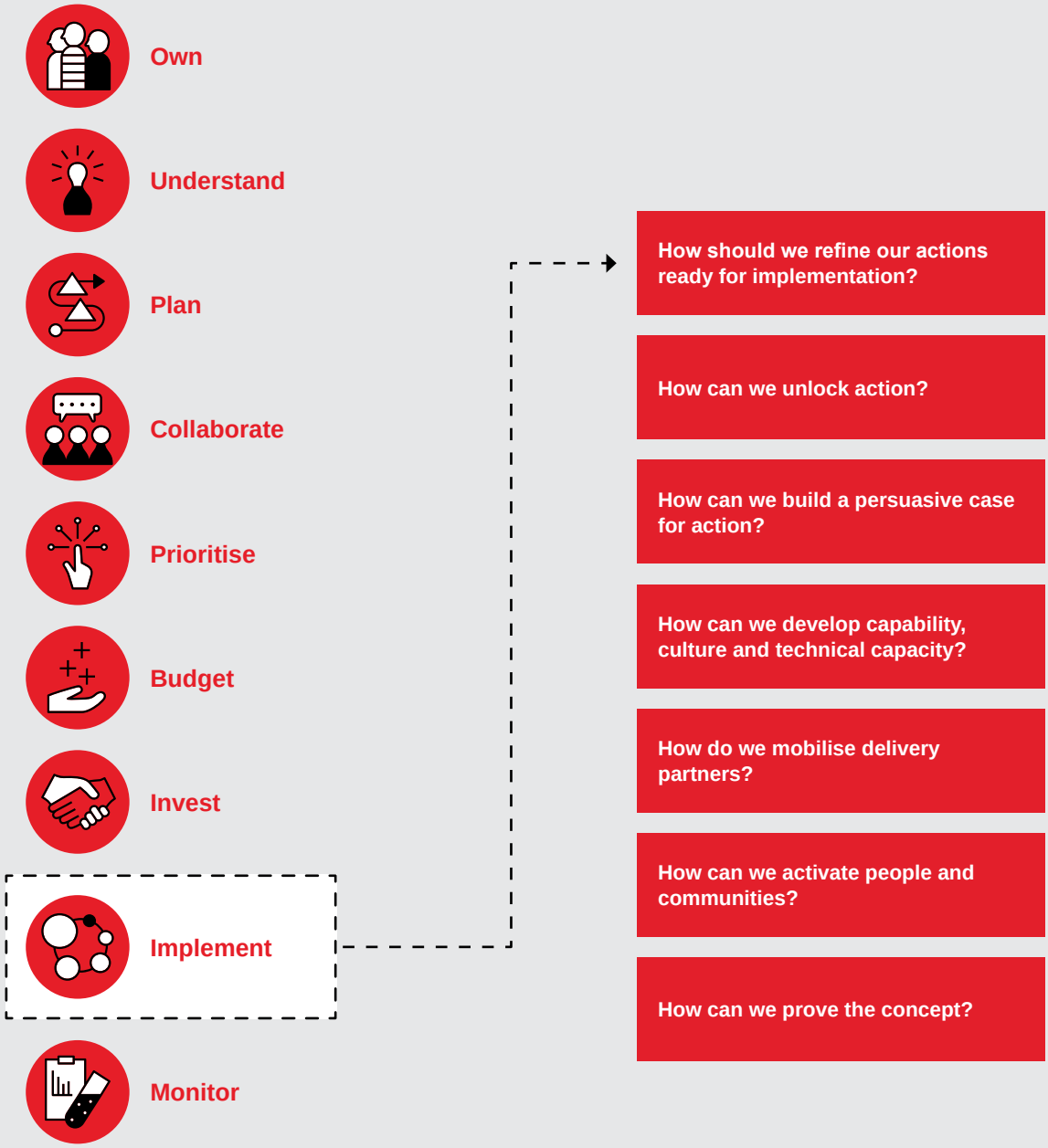
As COP27 highlighted, the pace of implementation needs to accelerate. In the context of wider social, environmental, and economic events such as Covid-19, the ongoing energy crisis and increasing extreme weather – the time to embed climate action at the heart of government plans, strategies, programmes and operations is most definitely now.

1. https://www.climateemergency.uk/blog/list-of-councils/

Steps to implementation

Our previous publication set out nine key steps in the process of developing a climate action plan. Implementation was one of those steps. Here, we break down the critical aspects of implementation to offer more practical suggestions about how to convert plans into transformative actions on the ground.

For those authorities that already have a CAP, the steps presented here are intended to help you develop your actions beyond the initial planning phase, and to prepare them for practical implementation. If you haven't yet prepared your action plan, you're in a great position to incorporate these steps into your planning work now – making sure you can hit the ground running. And of course, as you progress with implementation, there will be a continuous process of review, revision and re-orientation of plans to raise ambition over time.



How should we refine our actions ready for implementation?

In most cases, the actions set out in climate action plans – whether focused on emissions reduction or climate resilience – are articulated in a high level way, presented as a broad introduction to what will be done on the ground. Details like the scale at which the action should be implemented to achieve the intended objective, the target locations for implementation, the responsible/accountable actors, programming and so on, have not often been developed. These details will be essential to help convert action plans into implementation plans.

Deciding where to start

After publishing the region's Climate Action Plan #WM2041 in 2019, West Midlands Combined Authority (WMCA) set out its first Five Year Plan for delivery. In doing so, WMCA reviewed the actions set out in the CAP in terms of what the Authority had direct powers to deliver on its own, where it could influence others, and which actions would need other stakeholders to deliver (and who). This mapping of powers helped WMCA to determine the critical starting points for the first five years of the plan, prioritising work with regional stakeholders including local authorities, LEPs, investors and businesses, in an effort to navigate constrained powers and leverage opportunities to deliver in partnership, maximising the impact of distributed funds and resources. A practical example of partnership delivery is included on page 24.

At the transition to implementation, you might consider:

– Bundling actions that are relevant to a single sector, service or asset class, so that they can be developed and programmed in sync with each other.

– Convening multi-stakeholder working groups around bundles of actions to help flesh out the technical and practical details, assigning lead delivery officers to each.

– Commissioning technical feasibility assessments to determine what can really be delivered within local limitations (geographic, financial, technology, etc.), and the required specifications for the proposed solutions. The findings of these assessments will need to feed back into your action planning to confirm that agreed targets can still be achieved.

– Preparing detailed delivery plans for the proposed actions, building these into annual operating plans for the action owner and taking into account budget cycles, deadlines for funding applications, etc.

– Outline frames for 'place based demonstrations' – such as whole street retrofit at scale, urban meadows to replace grey infrastructure, traffic free neighbourhoods, policy sandboxes to unblock transformational change.

Research led by Arup in 2021 showed that 80% of people in London, Manchester, Birmingham, Belfast, Cardiff and Glasgow believe Mayors and city leaders should have more powers to cut carbon emissions, based on a survey with 2,400 respondents.

Implement

How can we unlock action?

Unlocking action means making the most of your role as local leaders and leveraging all of the powers you hold to deliver change. This may mean thinking differently about your normal ways of working.

Enable leadership

A local authority is directly responsible for approximately 2-5% of the area's scope 1 and 2 emissions[3] through the operation of its own estate, but can potentially influence around a third of the area's emissions through leadership and partnership working. This presents a unique opportunity to drive widespread change through both day-to-day operational decisions and long-term planning. Empowering senior leaders – both cross-party Council Members and senior officers – to embed climate objectives into decision-making will ensure leadership across all Council functions and help to align public spending with climate commitments. In many cases, political declarations of a Climate Emergency have already been led by Council Members, who should be ready to take this declaration forwards in their wider roles if enabled to do so.

2. Committee on Climate Change Report: Local Authorities and the Sixth Carbon Budget

Steps to consider include:

– Make Elected Members and senior officers accountable for progress towards climate targets.

– Assign actions in your CAP to designated owners at an Officer Lead and Cabinet Lead level

– Set up regular Cabinet/Officer led cross-departmental Working Group meetings to monitor progress. Making this information publicly available will also ensure transparency and accountability.

– Set up a “Climate Partnership” to engage with third party local leaders about your climate action programme and the role they can play in implementation.

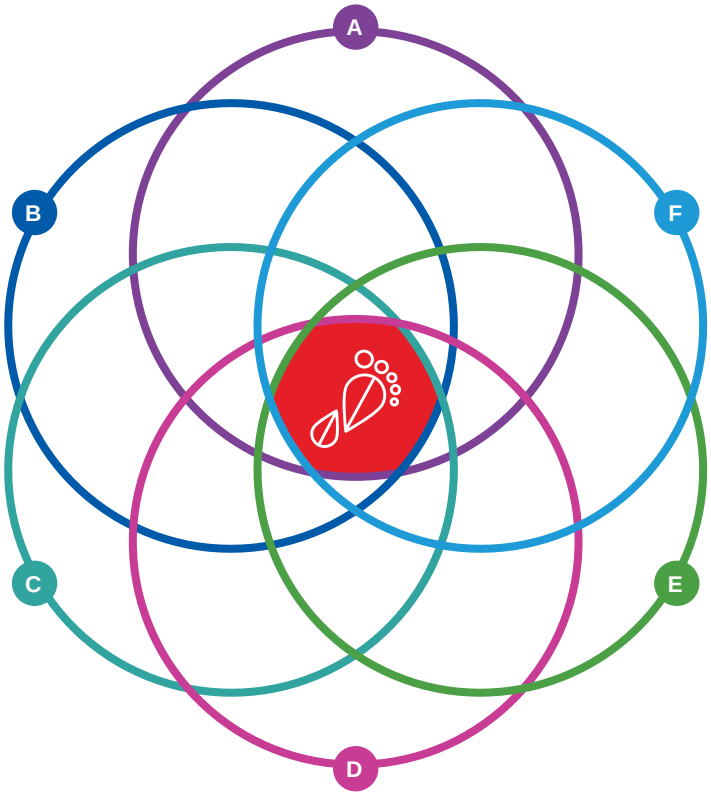
– Position climate action on the agenda for all existing forums that engage with partners across the public and private sectors. For example, many authorities have a Local Resilience Forum which engages all actors that have a role in community emergency planning and response. How could climate resilience be raised up the agenda of a forum like this?

– Establish a regular flow of progress/planning meetings between your climate action leader, Chief Executive Officer and Elected Leader or key Portfolio Holders.

– Outline 'strategic experiments’ to blend different levers of change to bring about the systemic shifts needed for a big ambition to be realised. This could involve policy change, citizen activation, new forms of knowledge, new partnerships with community groups and academia. Identify the big emitters and start a dialogue around investing in the transition. Get business onboard.

– Set up a ‘transition team’ whose focus will be to bring together the various initiatives and budgets within the Council.

– Prepare a decarbonisation budget. This will be vital for bringing in the many stakeholders affected and the Finance teams within the Council. It doesn’t have be 100% accurate but having an order of cost helps socialise the investment levels that will be needed. Do this early.



A. Direct control:
buildings, operations, travel

B. Procurement and commissioning
& commercialisation

C. Place Shaping:
using powers to control development and transport

D. Showcasing:
innovating, piloting, demonstrating and sharing good practice, scaling and replicating

E. Partnerships:
leading, bringing people & organisations together, co-ordinating & supporting others, joining others' partnerships

F. Involving, Engaging & Communicating:
Translating global & national climate change targets for local relevance, with stakeholders to raise awareness, involving people & ideas for local solutions

How local authorities control and influence emissions
(diagram based on internal Centre for Sustainability model and amended for this report).

Leverage local powers

Your organisation has the ability to deliver some climate actions directly, depending on what type of authority you are, what delegated powers you hold, the budget you receive and your ability to raise local revenues. For example:

– Most authorities will have powers to embed energy efficiency and climate resilience requirements into the maintenance/refurbishment of council-owned or managed buildings, including your offices, libraries, community centres and other public buildings.

– If you hold social housing within your portfolio, you can directly implement – or require social landlords to implement - energy efficiency retrofits and climate resilience interventions (e.g. to reduce overheating risks in older properties).

– If you are a local planning authority, you have the opportunity to revise planning policy to ensure new buildings perform beyond the requirements of existing energy efficiency regulations, new settlements are located outside of future flood risk zones, renewable energy opportunities are optimised in land use plans, and 20-minute neighbourhood principles are adopted (among other things). Some Councils require developers to pay into a Council-managed offset fund, which will be used locally to reduce emissions, restore natural habitats, etc.

– If you manage household solid waste, you have the opportunity to re-negotiate waste management contracts to provide better services for materials reuse, composting and recycling.

Recognising the limitations to delivering climate actions within the necessary time period, you might have considered opportunities to expand your powers through collaboration with other tiers of government or by negotiating devolution deals with central government.

Steps to consider:

– Review emerging policy recommendations from industry expert groups (e.g. UK Green Building Council, Committee on Climate Change, C40 Cities etc.) to understand the options for local policy to go beyond existing national requirements, and to understand the likely direction for future national policy

– Map your areas of control and influence to gather a clear understanding of the areas where you have power to act directly, and where you will need to leverage powers held by other stakeholders through collaborative approaches.

– Review Council-wide policies, programmes, and investments on a regular basis to ensure existing and emerging agendas are in alignment with climate resilience and net zero targets.

– Incorporate climate objectives into all new project proposals, including community/stakeholder engagements that could help to crowd-source knowledge and facilitate co-design of climate-safe solutions.

Governing climate action through partnerships

The development of Bristol's One City Climate Strategy and evidence base were driven by a range of stakeholders in the city's Environment Board and the Bristol Advisory Committee on Climate Change (BACCC), which includes climate change experts and stakeholders from academic institutions, public and private sector organisations, and civil society. The Advisory Committee is set up to accelerate Bristol City's progress to achieving net zero by 2030 and to adapt to climate change in an effective, efficient, inclusive, and just manner, including through liaison with the national Committee on Climate Change. The BACCC's role includes undertaking independent reviews of the city's progress on tackling the climate crisis, providing a watchdog role to help drive progress towards Bristol's 2030 carbon neutral and climate resilient targets and offer technical guidance on high-impact actions.

Leveraging local planning powers to deliver climate action

After declaring a Climate Emergency alongside ambitions to decarbonise by 2041, Wirral Council sought to embed policies into its Local Plan to maximise climate action across the borough. An evidence base of current climate change and planning legislation was prepared to provide a baseline, while viability assessments and technical guidance were developed for additional climate-related interventions. A clean energy opportunities study was also undertaken to identify potential for low-carbon and renewable energy deployment. The Council chose to focus on three key policy topics for the Local Plan: Net Zero Development, Renewable Energy and Sustainable Building Design. This work has led to the adoption of more ambitious planning policy which will drive decarbonisation and climate resilience in new developments across Wirral.

2-5%

The proportion of an area's scope 1 and 2 emissions that a local authority is directly responsible for.

1/3

The proportion of an area's emissions that a local authority can influence through leadership and partnership working. When scope 3 is included, the local authority influence rises to 60-70%.

Arup supported the C40 Global Mayors COVID-19 Recovery Task Force with research and analysis demonstrating the benefits of investing in a green and just recovery. The research showed that across the nearly 100 cities in the C40 network and their supply chains, investment in measures aligned with a green and just recovery could create over 50 million good, sustainable jobs by 2025 - over a third more than would be created by investing equivalent funds into a high-carbon recovery.

C40 Cities, Technical Report: The Case for a Green & Just Recovery

Implement

How can we build a persuasive case for action?

The benefits case for climate action typically falls under two broad categories, the "economic" case (which captures wider societal benefits) and the "investment" case (which considers affordability and financial returns). While complementing each other, they are distinct in their outcomes.

The Economic Case

A major challenge for local authorities in securing funding for climate action relates to difficulties in creating a persuasive economic case. Typically, the economic benefits are long term and may not be realised in full until far into the future, therefore making this case requires a long-term perspective – which local governments should be well placed to lead.

The benefits of climate action are wide-reaching across social, economic, and environmental domains, and may accrue to various stakeholders such as residents, the wider community, and local businesses, as well as the local authority. Again, local governments are well placed to lead an agenda which delivers broad public benefits. Quantifying and articulating these benefits as part of a comprehensive approach to cost-benefit analysis is key to developing a compelling economic case; the sum of benefits across all domains quickly balances or outweighs the costs of initial investment.

And remember – in many cases "climate action" need not be viewed as an extra activity; net zero and climate resilient objectives can be incorporated into any project or programme delivered through your core functions. In doing so, you will be providing a positive signal to the market, helping to influence private sector investment towards climate-positive outcomes.

Steps to consider:

– Update cost-benefit analysis procedures to reflect the full range of benefit categories. The Treasury's Green Book provides local government advice on evaluating the costs, benefits, and risks of project proposals from an economic, social, and environmental perspective. The UK Climate Change Risk Assessment (CCRA) also provides a framework that considers the scale, cost, and risks of climate change over the lifecycle of a proposal.

– Due to finite resources, prioritisation of actions will be inevitable. This would involve engagement with all affected stakeholders and consideration of areas where resources may be diverted to integrate climate action where possible, to lay the ground work for future larger scale interventions.

Key aspects of cost-benefit analysis

– Quantify the significant potential of climate actions to create green jobs and local economic benefits in emerging sectors such as retrofitting, renewable energy and sustainable transport, which will also support local economic growth.

– When delivered well, climate action also presents benefits for other environmental aspects, including air quality, biodiversity and resource use, which will also support wider local action plans.

– Climate action can also contribute significantly to health and wellbeing indicators that may feature as a priority in your Council strategy, helping to improve proximity to green spaces and healthy food sources, increase physical activity, reduce exposure to excessive heat, etc.

The Investment Case

Once a specific project or course of action has been identified, an investment case can be built alongside identifying appropriate sources of funding (and financing, if an intervention supports the required financial return). This presents another major challenge: creating a persuasive investment case for climate action. This entails identifying the costs (including financing costs if applicable) and revenues/savings for the project over its duration, as well as the risks and constraints associated with cashflow. Once the project financial requirements have been identified, you can identify potential sources of funding to match any deficits, to make the project affordable.

In practice, due to the large up-front capital costs often associated with projects and the finite resources available to local governments, a range of stakeholders may have to be engaged to secure the necessary funding. This may include central government funding, local government budgets and private sector or commercial parties. More and more equity investors and financial institutions are offering a growing range of green loans and investment solutions that will specifically support climate-related projects. Where private sector or other commercial parties are engaged, then the project must be commercially viable for them. Inclusion of the private sector may provide much needed capital, but given the often uncertain financial returns, these parties may require certain risk protections in exchange for their participation.

A robust approach to assessing the investment case will determine financial and commercial viability of a project and, combined with a pragmatic view of funding, will maximise the potential for a successful project.

It is unlikely that you will ever deliver an action without contributing some form of funding (either capital or revenue). Funding for climate action may come via existing local government budgets or central government initiatives, but in times of austerity it can be increasingly difficult to secure budgets for new initiatives. It will therefore be important to prioritise spending and assign "climate action" the appropriate importance. This may require creativity to blend different sources of funding, including Section 106 contributions to local carbon offset funds as well as exploring non-traditional approaches (e.g. council tax hikes precepts for climate action, crowdfunding or capital contributions from local businesses looking to offset their emissions).

Steps to consider:

– Review existing funded projects and programmes to identify opportunities to incorporate emissions reduction and resilience-building aspects.

– Embed climate change objectives into the annual budgeting cycle, helping to ensure sufficient funding to departments/services responsible for delivering high-impact climate actions.

– Brief Finance teams to prepare for financing opportunities and relevant grant schemes from central government (such as BEIS and DEFRA), and ensure you have staff capacity to apply.

– Identify the full scope of costs and revenues/ savings for your projects, and be clear about funding requirements.

– Consider a broad range of funding sources for climate projects, which could include offering local people opportunities to contribute and directly benefit from the projects delivered.

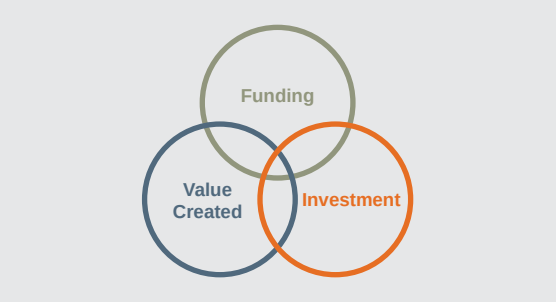
– Identify opportunities where private finance can be leveraged to support delivery (this finance will seek a return which is an additional project cost and will need to be appropriately structured to be commercially viable)

– Explore the options to capture local business offsetting payments to support community-scale emissions reduction projects that also bring wider social value benefits.

– Have you considered Retrofit credits? This is a carbon credit scheme that allows additional funding for social housing retrofits. Other types of carbon credits are also being explored.

– You will need to consider the relevant legal and regulatory requirements and restrictions for the funding sought.

– Consider new approaches to delivery, examining innovative roles for public and private sector actors - who invests, who pays, and the role of citizens.



Building the investment case for climate action

The 3Ci Net Zero Neighbourhood (NZN) programme has been derived from the UK's Net Zero strategy and policy to identify potential barriers in achieving Net Zero by 2050 by designing a programme that unlocks those barriers to provide opportunities and benefits. The programme combines a blended finance mechanism designed to leverage private sector capital on top of public finance to deliver a range of technical interventions together to decarbonise population centres in line with the UK's Net Zero target. Nationally, this could create long-term capital investment opportunities to invest into Net Zero delivery that could deliver significant broader public benefits.

Finance & Funding: Better Homes Leeds

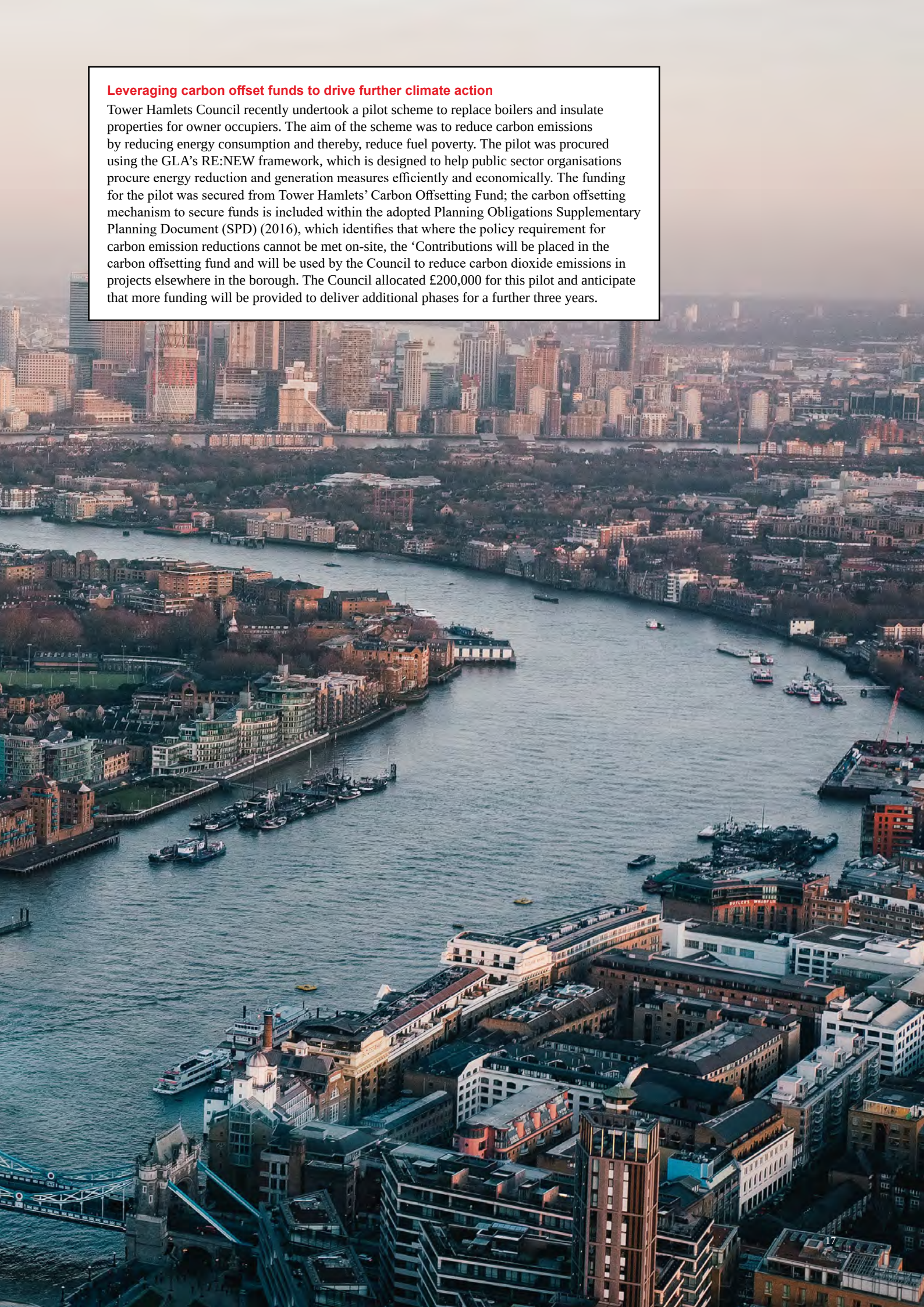
Leeds City Council has adopted an area-based approach to transforming homes and neighbourhoods. The city has undertaken to improve properties from its own stock of 55,000 homes including 115 towers, while the Better Homes Leeds programme aims to design a scalable proof of concept for domestic retrofit of privately owned homes. The financial outcomes and carbon savings of retrofit interventions have been modelled, and a pilot programme has been designed with recruitment of over 200 homes to date. The pilot will demonstrate proof of concept for future scaling of the model.

Climate budgeting at the local government level

Climate budgets integrate emission targets into existing governance processes to deliver the required reductions through funded measures and policy, at the scale necessary to achieve meaningful climate outcomes. They are seen as an emerging tool to mainstream climate consideration into city-level decision-making, translating medium and long-term climate targets into delivery plans that are routinely reviewed and improved. London is following a phase-based approach to implementing a climate budget. In July 2022, the Greater London Authority (GLA) included climate budgeting in their ordinary budget guidance and prepared specific guidance for departments to produce a climate budget and assess climate impacts. In Year 1 they are reviewing the emissions of the GLA organisations (e.g. emissions and fleet). In Year 2, they would like to incorporate emissions for the whole of London (including areas they are not directly responsible for). By Year 3, London hopes to have an approach that covers embodied emissions for all supply chains too.

Leveraging carbon offset funds to drive further climate action

Tower Hamlets Council recently undertook a pilot scheme to replace boilers and insulate properties for owner occupiers. The aim of the scheme was to reduce carbon emissions by reducing energy consumption and thereby, reduce fuel poverty. The pilot was procured using the GLA's RE:NEW framework, which is designed to help public sector organisations procure energy reduction and generation measures efficiently and economically. The funding for the pilot was secured from Tower Hamlets' Carbon Offsetting Fund; the carbon offsetting mechanism to secure funds is included within the adopted Planning Obligations Supplementary Planning Document (SPD) (2016), which identifies that where the policy requirement for carbon emission reductions cannot be met on-site, the 'Contributions will be placed in the carbon offsetting fund and will be used by the Council to reduce carbon dioxide emissions in projects elsewhere in the borough. The Council allocated £200,000 for this pilot and anticipate that more funding will be provided to deliver additional phases for a further three years.



How can we develop capability, culture and technical capacity?

Climate action often requires knowledge of new technologies, different (more integrated) decision-making procedures, revised policy criteria and behaviours compared with existing practices. The relevant knowledge and skills are not yet widespread within any organisation.

In parallel, understanding and delivering the scale of action needed will be a further concern for many local government organisations, and by sharing knowledge with peers you may find opportunities for co-delivery of projects. It is crucial to understand what your current capabilities are, what your existing partners can do, and where the gaps are to build the necessary in-house knowledge, skills and culture, and the external collaborations to deliver climate action.

Steps to consider:

– Who are the key delivery agents across your organisation's service areas? Explore the capabilities these departments have to deliver climate action and identify opportunities to expand technical capability, either within the organisation or through out-sourcing.

– Find out where you can utilise existing contractors or partners to fill knowledge and technical gaps, and highlight the skills and services you will need from new contractors.

– Upskill staff across your service areas to become climate literate. This can be achieved through mandatory training modules for all staff grades (including Elected Members) or a pledge to become a Carbon Literate Organisation, where training can be provided for nominated staff to facilitate and deliver sessions internally. The Local Government Association also offers regular free climate change training for Elected Members.

– Find opportunities for 'peer to peer learning' with other local government organisations to share lessons learned and explore opportunities for collaboration. Networks like the Core Cities, Key Cities, M10 and Global Covenant of Mayors provide knowledge exchange opportunities like this.

– Create internal forums and working groups to share knowledge across teams.

– Create job specifications through future recruitment campaigns that address skills and capabilities that are missing from the organisation. These could be cross-departmental roles that will help achieve more joined-up work planning and decision-making.

– Map the current ecosystem of NGOs and community volunteers, and harness this local movement into meaningful projects.

Become Climate Literate: The Carbon Literacy Project

The Carbon Literacy Project is aimed at equipping learners to understand the basic principles of climate change and ways to reduce their personal and professional carbon footprint. Many organisations have pledged to become a Carbon Literate Organisation (CLO) – the accreditation is designed to showcase their commitments to delivering a low carbon culture and pro-environmental behavioural change. Councils that have become accredited CLOs include Stockport Metropolitan Borough Council, Cambridge County Council and Manchester City Council.

Consider new approaches to recruiting the skills you need

Public Practice is a social enterprise operating a leading local authority job placement programme. They place mid-career private-sector built environment professionals looking for a career change, into forward-thinking public sector organisations looking for new skills and expertise. For the authorities, they provide a cost-effective way to build capacity and diversify skills, while the placement staff become established in a peer network of associates working for public authorities across the UK - benefiting from knowledge transfer and partnerships that may bear fruit in the long term.

How do we mobilise delivery partners?

The actions in a CAP cannot be delivered unilaterally by a single organisation – it is a journey which requires wider collaboration with a range of public and private partners, funders, and people in your area, and in conjunction with regional and central government.

Local government provides a focal point for local delivery partners and interested stakeholders. Your "soft" powers as a convenor and facilitator give you the opportunity to raise awareness of the climate change agenda and mobilise action by other parties. Furthermore, through instruments such as planning policy and procurement requirements (as mentioned above), local governments have the opportunity to compel action by developers, contractors and suppliers.

Steps to consider:

– Procurement is one of the greatest opportunities you have to drive your supply chain towards more climate-friendly operations. Each procurement decision you make has the potential to stimulate market transformation. Train Procurement Officers to understand net zero and climate resilience targets and to incorporate climate-related indicators into evaluation criteria and contractual terms.

– Carry out market engagement activities with suppliers to highlight and promote the criticality of climate action.

– Discuss your climate targets with your external partners to develop alignment and cooperation. These could range from healthcare providers and trade unions, to arts, educational and academic institutions, housing associations, small and large businesses, cultural institutions, etc.

– Develop "competitions" for local businesses to achieve specific climate targets or embed specific actions. Competitions may be supported by guidance to enable organisational change in line with your targets for the area.

– Ask organisations across your area to publicly pledge their commitment to reach your climate targets. Include these organisations in processes for regular progress review and monitoring.

Driving responsibility for climate action

The Swansea Council Charter on Climate Change sets out the Council's commitments to become a net zero organisation through collaborative partnership working, climate action and active stakeholder engagement with young people. The Council recognises that climate action cannot be delivered alone and requires support from a wide range of stakeholders on their decarbonisation journey. Residents, businesses, voluntary and community groups, schools and young people are actively encouraged to submit their own climate pledge in support of the Charter, which are available to view online.

How can we activate people and communities?

In many cases, people and communities should be seen as key delivery agents. Engaging communities – both as global citizens and as “customers” to the projects you’re delivering - is crucial to success, ensuring widespread support for actions, ensuring willingness-to-pay, and inspiring long-term behavioural changes.

As the impacts of climate change, such as heatwaves and flooding, will disproportionately impact the most vulnerable in society, it is critical that inclusive climate action delivers socially positive and equitable outcomes. Regular engagement with your local communities will reinforce how serious you are about tackling climate change and could enable greater levels of support as you move into implementation. A varied approach to engagement - through a number of forums and using different modes of communication - will be important to reach a cross-section of community groups.

Using the United Nations Sustainable Development Goals as a framework, Arup's Global Community Engagement programme aims to help the poorest, most marginalised, and vulnerable to enjoy a safer, more resilient, and inclusive future. We are working with community groups across the UK, and may already be supporting grassroots activity in your area.

Steps to consider:

– Create a local community forum – or utilise an existing forum - to share progress on the climate action plan and how people can get involved. Groups can range from the voluntary and charity/ community sector, youth organisations, local environmental groups, academic and educational institutions, and faith communities; paying particular attention to including the most hard-to-reach groups.

– Utilise teams across your organisation - such as Public Health departments or frontline services - to reinforce messages about climate change. As trusted communicators, these teams will already have established links with community groups in your area.

– Raise the co-benefits of climate action through regular marketing campaigns highlighting local projects led by local government.

– Ask your Elected Members and senior managers to publicly endorse climate pledges and participate in local events relating to climate change and sustainability.

– Develop a citizen jury. This gives citizens a real say in decision making.

– Utilise government incentives and subsidies to encourage community groups and schools to pilot their own climate projects.

– Create a citizen assembly. Bring a cross section of the community together to deep listen to their views. Find ways to enable their passion to do something climate related in the place they love. Be really conscious about which voices you aren’t hearing and design a process to include them.

– Activate citizens to be involved in community projects: nature restoration, food production, repair cafes, enhancement of parks, using meanwhile space for community activities.

– Introduce participatory budgeting. This gives communities a real say in how Council budgets are being spent, increases engagement and support.

– Use apps and digital tools to track progress. There are a number of these that will facilitate virtual conversations and help you to track progress.

– Launch "citizen science" experiments in targeted communities, empowering action and ownership while creating local impact.

Activating youth communities for climate action

Lambeth Borough Council formed a citizens' assembly during the preparation of its climate action plan. Within the citizen assembly, a local charity (We Rise) developed trust through a process of deep listening, identifying that young people of colour from disadvantaged backgrounds were not represented in the plan. Arup and We Rise invited young people from Lambeth schools into visioning workshops, which enabled young people to identify the skills needed for future pathways of employment and included topics such as circular fashion, greening neighbourhoods through retrofit at scale, and organic food production (working through another local initiative - Incredible Edible Lambeth). The success of the workshops was highlighted in a white paper which fed into the plan and is now informing policy makers.

Implement

How can we prove the concept?

Where climate action involves unfamiliar technologies, designs, plans or ways of working, its implementation can often be challenged by uncertainty about what it will "look like" on the ground, and how (or whether) it will work.

Proof of concept may be needed before stakeholders are willing to commit to scaling up climate action to a transformative level. This is where place-based demonstrations, or pilot projects, are valuable to bring an action to life and demonstrate its impact.

Steps to consider:

– Is there a building, neighbourhood or other defined boundary within your area where a particular climate challenge is most tangible and a demonstrator project could be rolled out? For example, this could be a council-owned heritage building where retrofit solutions could be demonstrated, a social housing neighbourhood experiencing poor thermal efficiency, or a neighbourhood with minimal green space experiencing severe challenges of surface water flooding.

– Are there routes to funding for a place-based demonstrator? Will technology providers sponsor implementation as a proof of concept?

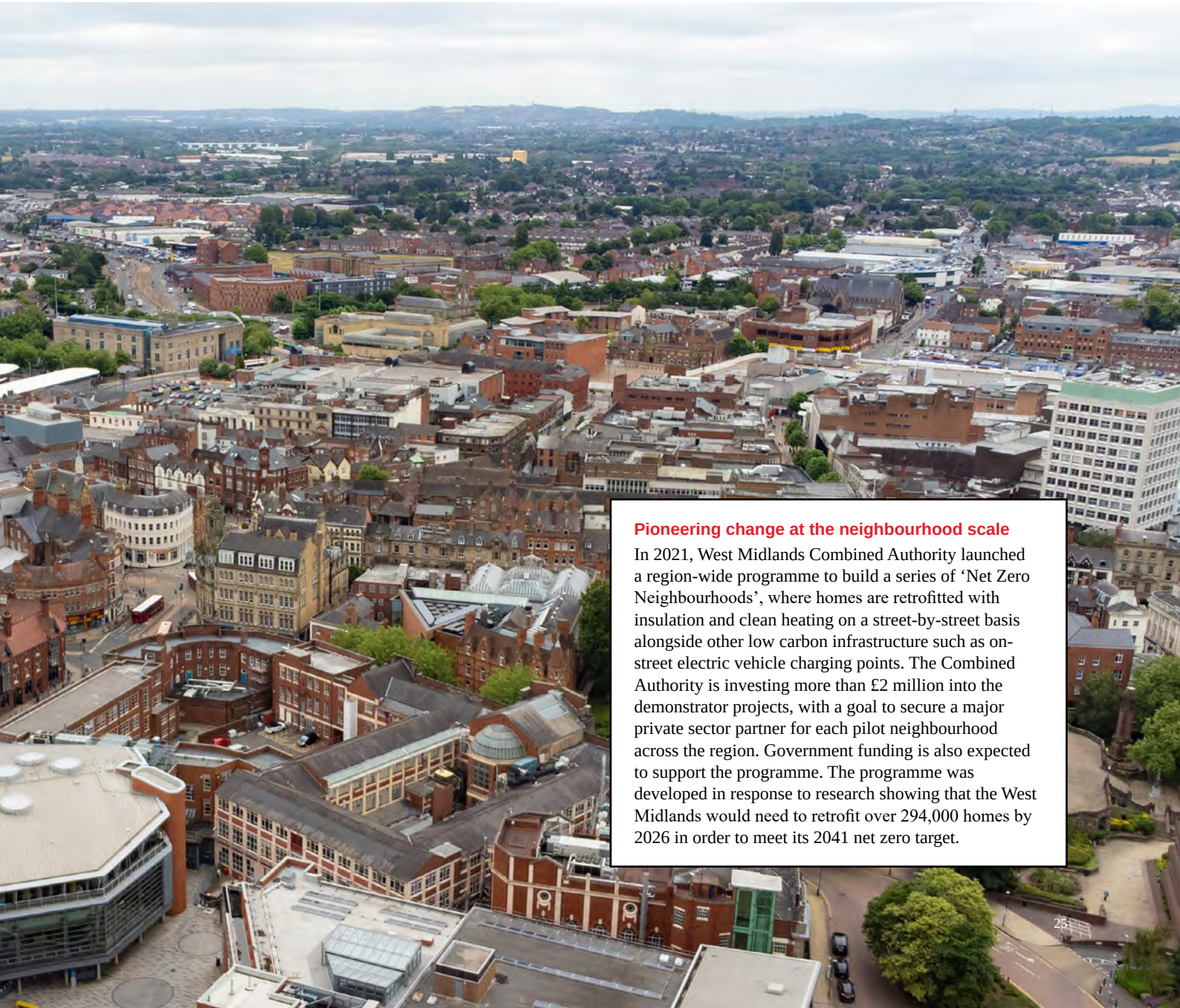
– Could a demonstrator project be incorporated into any existing development or regeneration schemes?

Copenhagen Living Lab for Urban Nature

A Living Lab for Urban Nature has been established in Copenhagen's Bispebjerg and Osterbro districts - managed by a team of public and private sector partners - to test the impacts of nature-based solutions like flower planting and vertical rain gardens. The Lab's pilot project will seek to limit biodiversity loss in the city of Copenhagen by encouraging urban greening on roads and streets. Collaborating with the local administration, the lab will promote the role of urban nature as a buffer to climate hazards such as extreme precipitation, drought, or flooding. Analysis of the findings will help to demonstrate the strategic use of plants in the urban environment for reducing pollution, improving residents' health and to support the creation of green neighbourhoods. The lab is a replicable model to demonstrate the benefits of other intervention types in other locations.

L'Innesto, Italy's first carbon neutral social housing development

The City of Milan has unveiled a bold regeneration strategy for a 6-hectare former rail depot site, which will become the country's first carbon neutral social housing development. The vision, which is based on the delivery of an innovative, decentralised low-carbon district heating network, won the C40 Cities' Reinventing Cities competition, a global contest that invites innovative carbon-free and resilient design solutions for the regeneration of underused urban space. The design embeds circular economy principles from the strategic planning stage, and unlocks value for private investors, public sector actors, the rail administration, and local people. The site will provide 21,000 square metres of affordable housing, and 72% of the area will be green space. The project is expected to be a replicable and scalable intervention to test carbon neutral initiatives and inform future policy making.



Pioneering change at the neighbourhood scale

In 2021, West Midlands Combined Authority launched a region-wide programme to build a series of 'Net Zero Neighbourhoods', where homes are retrofitted with insulation and clean heating on a street-by-street basis alongside other low carbon infrastructure such as on-street electric vehicle charging points. The Combined Authority is investing more than £2 million into the demonstrator projects, with a goal to secure a major private sector partner for each pilot neighbourhood across the region. Government funding is also expected to support the programme. The programme was developed in response to research showing that the West Midlands would need to retrofit over 294,000 homes by 2026 in order to meet its 2041 net zero target.

Action on the ground

We end with some examples of projects already implemented on the ground, which have been crafted to deliver carbon and climate benefits while also addressing other local needs. We hope these examples will offer inspiration for your next steps in delivering climate action locally.

Securing flood resilience alongside wider community benefits – Connswater Community Greenway, Belfast

Connswater Community Greenway is a visionary urban regeneration project that is transforming East Belfast by combining improved flood protection with the creation of public spaces and pedestrian/cycle routes that connect communities.

The project represents a £40m investment, delivered by Belfast City Council in close collaboration with local regeneration organisation, EastSide Partnership. Another key participant is Northern Ireland's Rivers Agency, which is delivering flood alleviation measures for homes and businesses within the catchments of three rivers – the Connswater, Knock and Loop rivers. All three channels have been artificially influenced in the past and a key project goal has been to restore the rivers back to more natural forms in order to increase biodiversity, allow greater public access and improve their general appearance.

One of the most visible features of Connswater Community Greenway is a new 9km linear park linking existing green and open spaces and allowing residents to travel across the city easily via car-free corridors. The scheme has delivered a significant upgrade to the quality, safety and vibrancy of East Belfast. In addition, these interventions support community cohesion and interactivity, economic development, improvements in public health, cleaner rivers and greater flood resilience. What could have been delivered as a standalone flood alleviation scheme and a separate urban regeneration programme have been combined to become an award-winning project with lasting and positive benefits.

Refurbishing existing buildings to reduce emissions, preserve heritage and boost the local economy – Burrell Collection, Glasgow

The Burrell Collection is a museum owned by Glasgow City Council. First opened in 1983, it is one of Scotland's few Category-A listed post-war buildings and a major visitor attraction. Over the years, the building fabric deteriorated and visitor numbers were declining. Arup worked with the Council to deliver a transformational refurbishment, using circular economy principles to ensure that as much original material was recovered and recycled as possible, maintaining the building's history while adding to its sustainability credentials. 8.5 tonnes of aluminium were saved; 16 tonnes of glass were reused; and more than 80 tonnes of carbon emissions were avoided by eliminating the need to extract new raw materials.

Much of the building's glass façade was south-facing, exposing visitors and artworks to intense sunlight, which created significant overheating and comfort issues and placed a heavy strain on cooling systems. The refurbishment implemented thermal breaks and installed new high-performance glazing into the existing system. Improved solar control across the building will save 70 tonnes of carbon per year in operation, while thermal and air-tightness improvements will deliver a further 130 tonnes of carbon reduction per annum. In total, operational carbon emissions will be reduced by 69% following the refurbishment. The refurbished building has achieved a BREEAM rating of Excellent, putting it in the top 10% of energy efficient buildings in the UK and helping to restore visitor numbers.

Enabling city-scale active travel through safe cycle ways – Cardiff

Cardiff Council has set out a vision to double the proportion of cycle trips within the city by 2030. Its plan is to develop Cardiff so that walking or cycling is the first choice of transport for short trips. To facilitate this movement and increase connectivity, there is a requirement to develop safe, practical and accessible cycling infrastructure. The development of over 30km of new, primarily segregated cycle routes will be part of an important step-change, projected to increase the rate of cycling by 115%.

Arup has been working closely with Cardiff Council to develop proposals for the network of cycleways. Five primary route corridors have been identified and will connect major destinations, existing communities and strategic development sites across the city. Arup's work appraised different options to establish the proposed routes and required infrastructure. The routes have subsequently been split into sections for further development. Health and safety considerations are critical for the success of any active travel scheme, and significant design risk reviews were undertaken, including kerbside parking considerations, interactions with pedestrians at bus stop locations, existing infrastructure and utilities, flooding risks, plus connectivity with the existing road network for cyclists at key junctions and route ends.

The implementation of routes has been phased, starting with main priority areas that connect the city centre, Cardiff University and Cardiff Bay. The first section of the cycleway opened in January 2020 and – accelerated by the experience of the Covid-19 pandemic - the cycling infrastructure will continue to extend across the city, helping to promote cycling for all ages and abilities within Cardiff.

Greening the neighbourhood and building climate resilience – The Bermondsey Project, London

The Bermondsey Project is one of London's largest built-to-rent developments, located on a 5.4 ha site previously home to the Peek Freans Biscuit Factory in the London Borough of Southwark. The project aims to revitalise the neighbourhood and re-establish the area as an inclusive, resilient and vibrant economic hub while preserving the distinctive industrial heritage and character of Bermondsey. The masterplan will deliver over 1,500 new Private Rented Sector (PRS) homes, a new school, and public realm. The landscape design aims to:

- enhance connectivity and permeability of the site and the wider neighbourhood for both new and existing residents;
- create a distinctive public realm that responds to the industrial heritage and character of Bermondsey; and
- preserve and enrich the existing tree network, improve local biodiversity and maximise urban green infrastructure.

Underpinned by the Healthy Streets agenda, which focuses on people and their health as central to design, the streetscape proposals ensure a series of inclusive pedestrian priority routes to encourage active travel across the site. The carefully selected palette of trees and plants will provide at least 22,000m² of greening at ground and roof levels - 41% of the entire site, in the form of rain gardens, mixed shrub and perennial planting beds, tree planting, vertical greening, amenity lawns and intensive, extensive and biodiverse roofs. This significant increase in greening will create a network of green corridors, enhancing local biodiversity and minimising heat concentration within the development, also known as the urban heat island effect. Sustainable drainage systems (SuDS) in the form of rain gardens will help manage storm water runoff.

Next steps

The steps outlined here will help to set you up to deliver your climate action plan on the ground. We know this will take time, and we know it will take resources that you might not have available right now.

But the key thing is to make a start as early as possible and unearth every opportunity to deliver climate action through your existing work programmes. Leverage parallel initiatives as far as you can to deliver climate action alongside other funded priorities. Mobilise your partners to deliver on your behalf. Don’t let your climate action plan gather dust.

The opportunity to keep the world within 2 degrees of warming, and to ensure our resilience to unstoppable change, is already slipping away. The time to act, is now.

Key Contacts

Diane Emerson
UKIMEA Climate & Sustainability Portfolio Leader

Juliet Mian
UKIMEA Adaptation & Resilience Service Leader, Climate Leader (Midlands)

Sean Lockie
UKIMEA Decarbonisation Service Leader

Joanna Corrigan
Climate Leader (North, Northern Ireland, Scotland)

Natasha Connolly
UKIMEA Sustainability Service Leader, Climate Leader (Northwest & Yorkshire)

Ann Cousins
Climate Leader (West)

Laura Frost
Climate Leader (South)

Tolu Osekita
Associate Director, City Economics

Becci Taylor
Director, Retrofit-at-Scale

Stephen Cook
Director, Urban Energy

Resources and Links

Arup & Ellen MacArthur Foundation's Circular Buildings Toolkit

Arup: You've declared a climate emergency… Next steps: Transport

Arup: Carbon offsetting in the neighbourhood

C40 Cities: Playbook for Inclusive Community Engagement

HACT: Retrofit Credits

Local Authorities and the Sixth Carbon Budget

The Carbon Literacy Project

3Ci: Cities Commission for Climate Investment

Climate Change Adaptation: practical examples for local authorities

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Acknowledgements

Contributors
Kimberley Jassal

Yawar Malik

Graphic design
Stewart Ramsdale

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