Towns Fund Delivery Partner

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Net Zero Learning Programme

INTEGRATING NET ZERO INTO A LOCAL AUTHORITY CAPITAL PROJECTS LIFECYCLE

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THE TOWNS FUND DELIVERY PARTNERS NET ZERO PROGRAMME

In September 2019, the government invited 101 places to develop proposals for a Town Deal, as part of the £2.35 billion Towns Fund. The Towns Fund is part of the government's plan for levelling up the UK economy. Towns across England work with the Government to address growth constraints and to ensure there is a course of recovery from the impact of COVID-19. The overarching aim of the Towns Fund was to drive the sustainable economic regeneration of towns to deliver long term economic and productivity growth.

The Towns Fund Delivery Partner is a consultancy support team, appointed by DLUHC to support invited towns to successfully access the Towns Fund. A learning programme for all towns was a key part of this support, and in 2022 as part of the second phase of the Towns Fund, a Net Zero Programme was rolled out to support towns in embedding net zero and sustainability goals within their Towns Fund projects.

The Towns Fund Net Zero programme supported towns in four key areas: retrofit, new build, transportation and nature and greening. Experts provided detailed technical insights, supported knowledge exchange amongst towns and encouraged service requests to address very particular technical and implementation challenges. 47 participants across 21 towns took part across a series of 11 webinars and group calls.

Through the programme, it was clear that incorporating net zero at key points of the lifecycle in a capital project is essential in order for the projects to achieve net zero. This guide has been developed building on the lessons learnt from the Net Zero Learning Programme in order to support Towns in the future with embedding net zero into their capital projects.

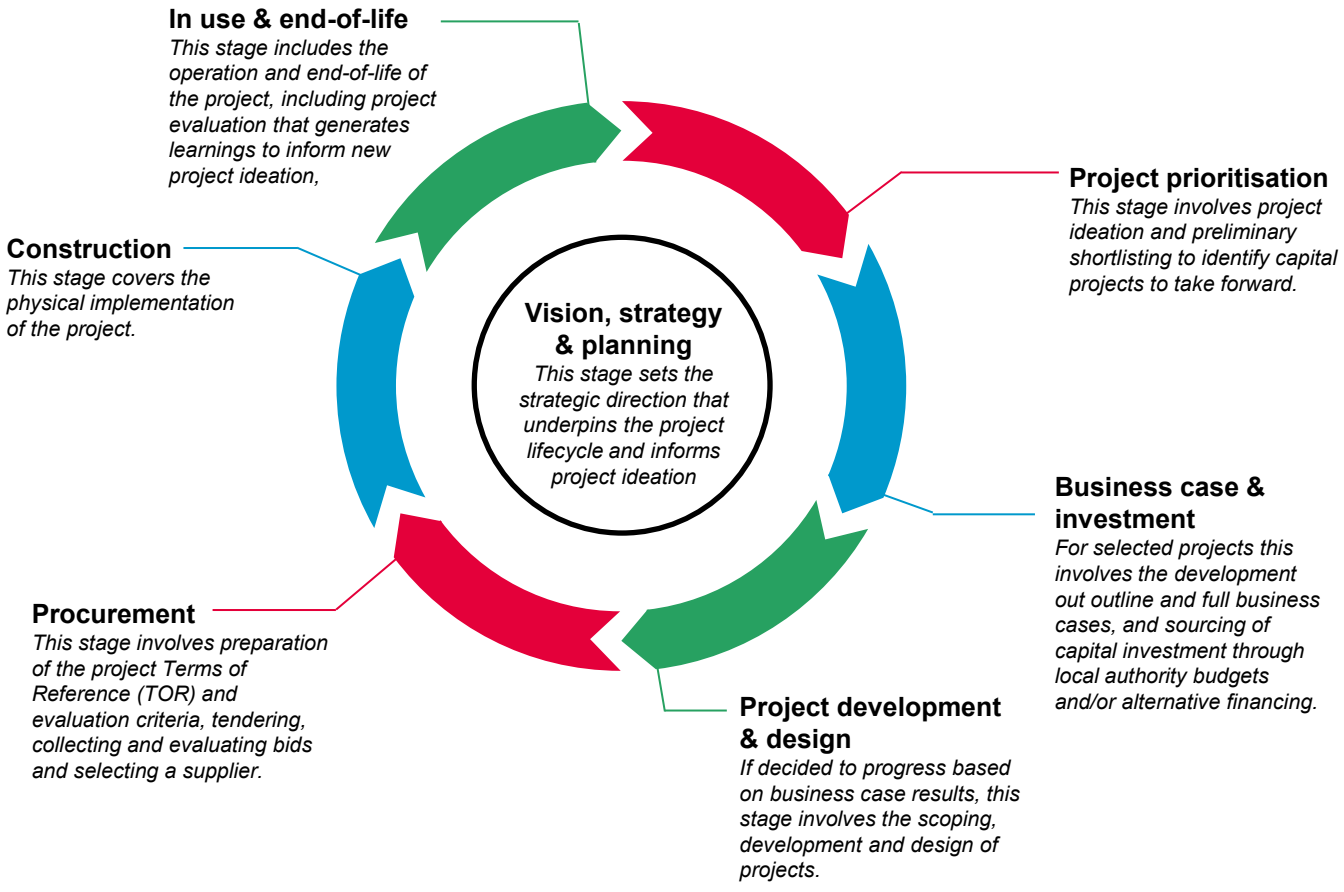
The scope of this resource covers net zero and climate change resilience, which must be achieved through natural, technological, material and process and behaviour change solutions. For this reason, the guide references interrelated priorities and principles such as biodiversity and circular economy to the extent they support net zero and climate resilience objectives. It's important to note that Towns should address the climate and ecological emergency in parallel. This resource is intended as a starting point for Towns to continuously develop as a live resource based on their own priorities, contexts, and further lessons learnt as across the UK local authorities work to incorporate net zero into all projects.

CAPITAL PROJECT LIFECYCLE

OVERVIEW

The figure below illustrates a typical capital project lifecycle within a local authority, from visioning and the development of an overarching strategy, through identification and selection of individual projects, and their tendering, implementation, operation and end-of-life. These stages give rise to distinct opportunities to embed net zero. The remainder of the resource addresses each stage in turn, providing practical recommendations to integrate net zero across all project lifecycle stages, broken down into:

- *Targets & processes:* practical steps to take to embed net zero within this stage
- *Tools & resources:* useful material to support decision-making
- *Stakeholder engagement:* who to engage to ensure internal departments and external stakeholders are usefully involved in the process
- *Project examples:* existing examples of action taken by UK local authorities c



VISION, STRATEGY & PLANNING

Aligning the strategic and policy context with net zero is fundamental in order to create the conditions for the right projects to be delivered. Central to this is setting an ambitious target, clear policy and process direction and a robust delivery roadmap that provides confidence to investors, developers and the community.

TARGETS & PROCESSES

- At a local authority level, commit to reach net zero by 2050 at the latest, setting a clear emissions scope boundary, including Scopes 1, 2, 3.
- Develop an overarching sustainability framework to guide projects.
- Develop an area wide GHG inventory and carry out a climate risk assessment.
- Align policies and processes to net zero and climate resilience (and related agendas e.g. Just Transition, biodiversity, such as Local Plan, spatial planning etc).

TOOLS & RESOURCES

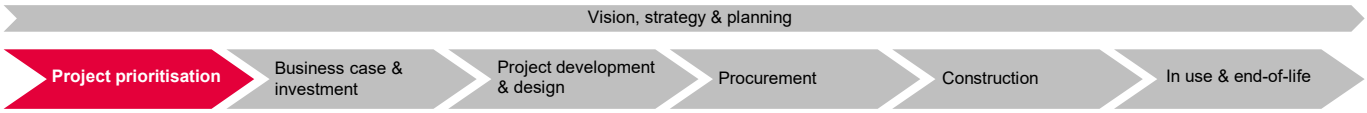
- C40's climate action planning framework can largely be applied to local authorities
- Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)
- The LGA and Local Partnerships' Greenhouse Gas Accounting Tool
- The Carbon Trust's Local Climate Action Planning framework
- Resilience Shift's Infrastructure Pathways guidance on climate-resilient infrastructure
- Arup & Ellen MacArthur Foundation's Circular Buildings Toolkit

WHO YOU NEED TO ENGAGE

- Break siloes early on by engaging all local authority departments to ensure net zero is mainstreamed, embedded and prioritised across the local authority.
- Engage all groups within the local authority to communicate the net zero target, and ensure all voices are heard in shaping delivery plans: VCS (voluntary and community sector), businesses, institutions (academic and charitable) etc. See C40 Cities Playbook: Inclusive Community Engagement.

EXAMPLES

- Milton Keynes' Local Plan Plan:MK 2016-2031 includes carbon reduction and climate resilience as a strategic objective, and attributes significant weighting to carbon reduction criteria within the planning policy framework.
- Following their Climate Emergency declaration in 2019, Calderdale Council introduced a cabinet post for Climate Change & Resilience, which meets regularly with service directors and ensures net zero is embedded within leadership.



PROJECT PRIORITISATION

Incorporating net zero and climate resilience criteria into the project prioritisation phase will help to generate projects that make a meaningful contribution towards climate goals alongside other key local authority priorities, as well as exclude projects that contribute to locking in carbon in the future.

TARGETS & PROCESSES

- Carry out high level carbon benchmarking of potential projects to prioritise projects. Include qualitative assessment of how projects could lock in carbon in the future.
- Assess potential projects in terms of primary benefits (e.g. greenhouse gas emission mitigation, increased resilience) and co-benefits (depending on local priorities, e.g. health, public services, local environment, etc.), for example using a ranked multi-criteria assessment.
- Evaluate key implementation barriers (e.g. technological, financial, etc.).

TOOLS & RESOURCES

- Developed with the input of more than 40 local authorities in the UK, the Net Zero Navigator is a strategic tool which local authorities and other stakeholders can use to formulate, iterate and finalise plans which are tailored to their local context.
- C40 Action Selection and Prioritisation (ASAP) Tool

WHO YOU NEED TO ENGAGE

- Engage all local authority departments involved in the potential projects to ensure net zero is understood, embedded and prioritised.
- Engage all groups potentially involved in the projects being assessed to ensure support for the target and that perspectives are heard: VCS (voluntary and community sector), businesses, institutions (academic and charitable) etc. See C40 Cities Playbook: Inclusive Community Engagement

EXAMPLES

- Cornwall Council has developed a decision-making wheel that seeks to ensure climate action and social justice considerations are embedded in decisions, and is based on the concept of Doughnut Economics developed by Kate Raworth.
- Crawley Borough Council are in the process of adapting Cornwall's decision-making wheel to guide the identification, evaluation and selection of projects.

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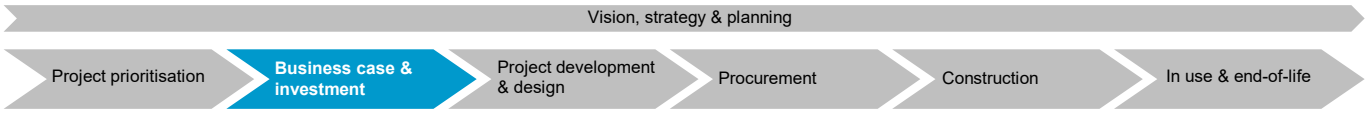


BUSINESS CASE AND INVESTMENT

A comprehensive business case that includes clear specification of net zero and the evaluation of wider benefits will help to build the economic case for net zero projects and can facilitate investment from private investors with net zero targets.

TARGETS & PROCESSES

- Include carbon and climate resilience metrics within cost-benefit analysis (CBA) (and wider co-benefits), including technology assumptions for net zero in the cost build up, linked to overarching sustainability framework
- Identify potential sources of funding and finance, including private investors seeking net zero projects aligned with their targets.
- Map projects against potential sources of funding and finance e.g. debt finance, Public Private Partnerships, etc.

TOOLS & RESOURCES

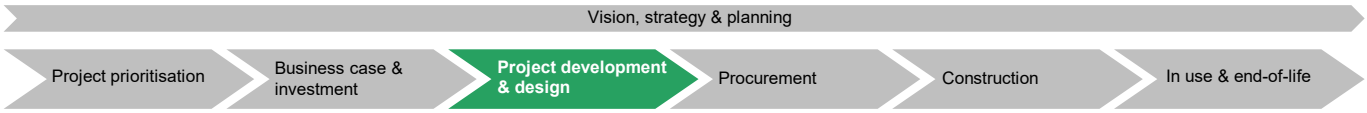
- UK government's the Green Book (2022) includes guidance on project appraisals
- UK government's The Business Case Guidance for Projects – provides detailed guidance on the development and approval of capital spending projects
- The LGA has produced a Green Guide for Finance that supports councils in England to find the most appropriate ways to finance their green ambition.
- UKCCIC City Investment Analysis Report

WHO YOU NEED TO ENGAGE

- Finance team and any colleagues with knowledge of relevant funding sources.
- Institutional investors, banks and other investment organisations who may be interested in partnering to provide finance for local net zero projects.
- Specialists experienced in the evaluation and monetisation of net zero and wider benefits (e.g. climate resilience, air quality, biodiversity, health and wellbeing, land value uplift) to support cost-benefit analyses.

EXAMPLES

- Bristol City LEAP is a green fund that aims to deliver £1 billion of investment in net zero within Bristol, and is a joint venture between the City Council and a private sector partner.
- West Berkshire Council's Community Municipal Investment raised over £1 million from 600 investors, 20% of which were local, to finance low carbon projects.
- A Green New Deal Fund (GNDF) was recently set up by North of Tyne Combined Authority and Amber Infrastructure to finance decarbonisation projects using a combination of public and private capital.



PROJECT DEVELOPMENT AND DESIGN

Decisions made at this stage determine the physical development of the project and therefore it is critical the net zero and climate resilience is deeply embedded into development and design processes, guiding low carbon, resilient and green choices.

TARGETS & PROCESSES

- Set project-level net zero and wider sustainability targets.
- Establish a monitoring and evaluation framework to track progress.
- Design guidance should incorporate net zero and climate resilience targets, circular economy and biodiversity net gain (BNG) approaches.
- Establish a whole life carbon (WLC) approach and require WLC assessments in planning permission criteria.
- Prioritise low-carbon construction materials, green infrastructure and renewables in the design.

TOOLS & RESOURCES

- UKGBC Whole Life Carbon Roadmap includes net zero design requirements and energy-use intensity targets.
- At planning stage explore sustainability frameworks and certificates such as BREEAM, WELL and CEEQUAL.
- Arup & Ellen MacArthur Foundation's Circular Buildings Toolkit
- RICS Whole Life Carbon Assessment for the built environment
- The London Energy Transformation Initiative (LETI) design guide

WHO YOU NEED TO ENGAGE

- Design team should be trained in net zero and circular economy design approaches, included within technical scopes of works and regularly reviewed through design workshops and/or a carbon tracking tool.
- Engage all departments involved in the project and establish a governance structure.
- Engagement should involve climate and ecology expertise.
- Engage the community that will be affected/ targeted by the project e.g. occupants of existing building for retrofit.

EXAMPLES

- Design for a Circular Economy Primer was released by the GLA to help the built environment sector understand how they can embed circular economy principles into their projects and design processes.
- Building with Nature is a set of green infrastructure standards designed to create better places for humans and wildlife.
- St Cuthbert's Garden Village is an ambitious masterplan incorporating net zero, climate resilience and biodiversity targets within its design.

PROCUREMENT

Procurement is a critical and currently underutilised lever local authorities possess to work with suppliers to decarbonise major projects within the local area. Embedding net zero specifications into procurement will ensure that suppliers are actively contributing to net zero targets, ideally at a competitive cost.

TARGETS & PROCESSES

- Procurement processes should reward low carbon and resilient solutions, either through pass/fail or competition-based evaluation criteria.
- Project-level net zero targets can be written into contracts and specifications, laying out standards that the supplier will be held to.
- Local authority procurement policy should be aligned with net zero.
- Social Value Guidance should be updated to explicitly refer to net zero.

TOOLS & RESOURCES

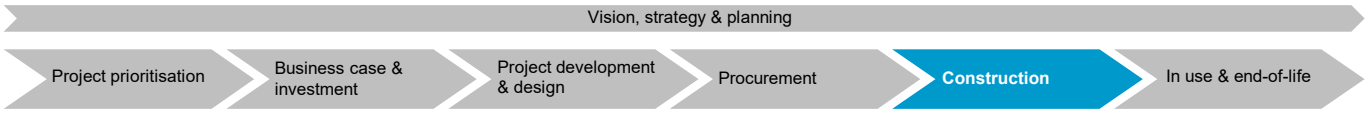
- Central government low carbon procurement guidance can be applied at the local authority level: Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts
- Re:London Guide on sourcing reclaimed construction materials
- UKGBC developing a client brief for embodied carbon

WHO YOU NEED TO ENGAGE

- Procurement officer should ensure ITT (invitation to tender), specification and evaluation criteria includes appropriate net zero considerations.
- Procurement teams should be trained in net zero in order to write and evaluate tenders appropriately.
- Early market engagement with suppliers should emphasise the importance of net zero to the procurement and the evaluation process.

EXAMPLES

- Manchester City Council has recently added a 10% weight for carbon reduction (alongside 20% for Social Value) in their procurement assessment criteria. All capital tenders must include a carbon assessment as part of the financial approval process.
- Bromley Council is developing a circular procurement tool to address material reuse and embodied carbon with Re.London and this will be shareable to other local authorities soon.



CONSTRUCTION

Ensuring construction processes and techniques aim towards low whole life carbon as well as circular economy principles can have a significant impact on carbon emissions. Local authorities should specify low carbon construction in procurement (previous stage), and support implementation through monitoring of emissions and working collaboratively with suppliers on solutions.

TARGETS & PROCESSES

- Monitor emissions during construction, ensuring construction contractors are meeting any contractually obliged net zero requirements set out in the procurement process including whole life carbon.
- Establish net zero waste construction hubs/materials reuse sites.

TOOLS & RESOURCES

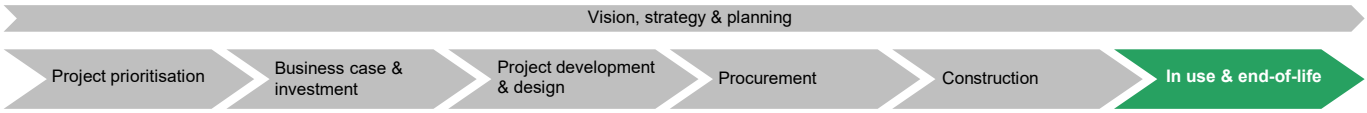
- The UKGBC's Net Zero Carbon Buildings framework sets out a pathway to achieving net zero carbon buildings not only in operation, but in construction as well
- C40's guide 'How to reduce embodied emissions in municipal construction and lead by example'
- The Green Construction Board's Low Carbon Routemap for the Built Environment

WHO YOU NEED TO ENGAGE

- Work with contractors to embed sustainable construction practices and ensure circular economy principles are adhered to.
- Positively engage the surrounding community; promote how you are considering their needs in your project through your inclusive, net zero principles.
- Ecological consultants to ensure construction impacts avoid unnecessary clearance / impacts on valuable habitats.

EXAMPLES

- The City of Wolverhampton Council are partnering with the University of Wolverhampton to develop a National Centre for Sustainable Construction
- A number of C40 cities including Oslo and Paris have embraced Clean Construction practices



IN USE AND END-OF-LIFE

Whilst decisions that have the greatest impact on emissions have already been made by this stage, there are important actions that can be taken to ensure the project is meeting performance targets in practice. The end-of-life treatment can have a significant impact on whole-life carbon of the project.

TARGETS & PROCESSES

- Regularly monitor, evaluate and report on emissions under the overarching net zero and sustainability framework of the project.
- Ensure energy use is from renewables.
- Ease of Recovery + Ease of Reuse and Recycling Scoring, currently defined as per EU Level(s) Indicator 2.4 Design for Deconstruction (UK guidance is forthcoming).
- Optimisation of building performance through fine tuning can have a significant carbon impact – see UK GBC retrofit guidance (point 7).

TOOLS & RESOURCES

- C40's City Monitoring, Evaluation and Reporting Guidance
- IEA's Empowering people to act
- Evaluating re-use potential
- DGNB criteria "Ease of recovery and recycling"
- Biodiversity Net Gain: Good Practice Principles for Development,
- Towns Fund Renewable Powered Towns Guide
- NABERS UK to identify operational improvement opportunities

WHO YOU NEED TO ENGAGE

- Communities and in-use stakeholders (such as building tenants) on energy-efficient and low carbon behaviour change to ensure design targets are being realised in practice.
- Plant and facilities operators on appropriate use of controls and effective maintenance programmes.
- Circular economy experts on end-of-life approaches.

EXAMPLES

- Circular Economy Statements in London demonstrate how a development, including any public realm or supporting infrastructure, will incorporate Circular Economy measures into all aspects of the design, construction and operation process before coming full circle back to re-use at the end of the assets life.
- Warrington Borough Council are developing a solar farm, which would produce electricity above its annual energy consumption.

TERMS & CONDITIONS

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