



Innovate  
UK

INSIGHTS

# Investing In Places

Learnings from the Net Zero  
Living Programme for local net zero  
planning and attracting investment

REGEN



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# Acknowledgements

## About the Net Zero Living Programme

Places across the UK are seizing the economic and social opportunities that come with decarbonisation, and creating warmer homes, cheaper local energy, new skills, and more secure work for their communities.

These pioneering places know what they need to do. But their teams are overstretched and they have limited resources and investment. Innovate UK has provided funding, insights and specialist technical assistance to nearly 300 businesses and local authorities, enabling them to adopt social, cultural, policy and technical innovations that will help their place prosper.

Funding has been delivered across three streams:

- **demonstrators:** practical demonstration projects showing how non-technical barriers for delivering place-based decarbonisation can be overcome.
- **pathfinders:** support for places actively delivering net zero plans and who have an understanding of systemic barriers to scaling and adopting solutions, with a view to progressing towards the demonstration phase in the future.
- **fast Followers:** funding for a local authority to embed a net zero innovation officer who can deliver net zero pilot projects within the organisation and fully engage in the Net Zero Living Programme to take learnings into their local authority.

## About Regen

Regen provides independent, evidence-led insight and advice in support of our mission to transform the UK's energy system for a net zero future. We focus on analysing the systemic challenges of decarbonising power, heat and transport. We know that a transformation of this scale will require engaging the whole of society in a just transition.

## Authors

Anna Cuckow  
Local Net Zero Senior Project Manager, Regen  
acuckow@regen.co.uk

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Bankers without Boundaries  
Blaenau Gwent County Borough Council  
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Greater South East Net Zero Hub  
Leicestershire County Council  
Manchester City Council  
North West Net Zero Hub  
Peterborough City Council  
Southampton City Council  
Stronger Stories  
Urban Foresight

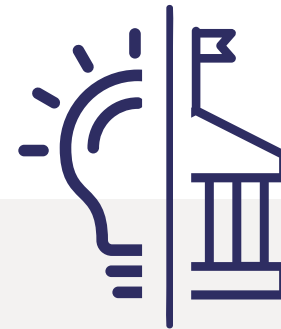
# Introduction

**The Net Zero Living Programme has shown that local and regional authorities are uniquely placed to build a vision with their communities for how to transition to net zero, and then work to attract the public and private investment needed to realise it.**



This is unlocking benefits for many places, including warmer homes, lower bills, improved health and business growth.

This report, Investing in Places, shares insights to help local authorities move faster from project planning to delivery and turn ideas into investable propositions. By adopting innovative approaches, places can lay the foundations for successful partnerships with investors, businesses and communities that help places thrive while meeting our carbon goals.



**Innovative approaches are helping local and regional authorities overcome the challenges they face in mobilising finance.**

## UK's net zero investment opportunity

# £83bn

The net zero economy contributed over £83 billion to the UK economy in 2023–24, supporting the equivalent of 951,000 full-time jobs.

# £8.2bn

Between 2025 and 2050, investing £26 billion a year into low-carbon technologies and infrastructure is forecast to save the economy £22 billion and deliver £8.2 billion in wider benefits, on average each year.

# 40 to 90%

The private sector is expected to provide the majority of this investment, with the proportion varying by year from 40% to 90%.



Adopting a place-based approach to low carbon investment could deliver twice the social and economic benefits for around a third of the cost, compared with taking a uniform approach.



# Investment in local areas is essential to building healthier, more prosperous communities and achieving the UK's carbon targets. Innovative approaches are helping local and regional authorities overcome the challenges they face in mobilising finance.

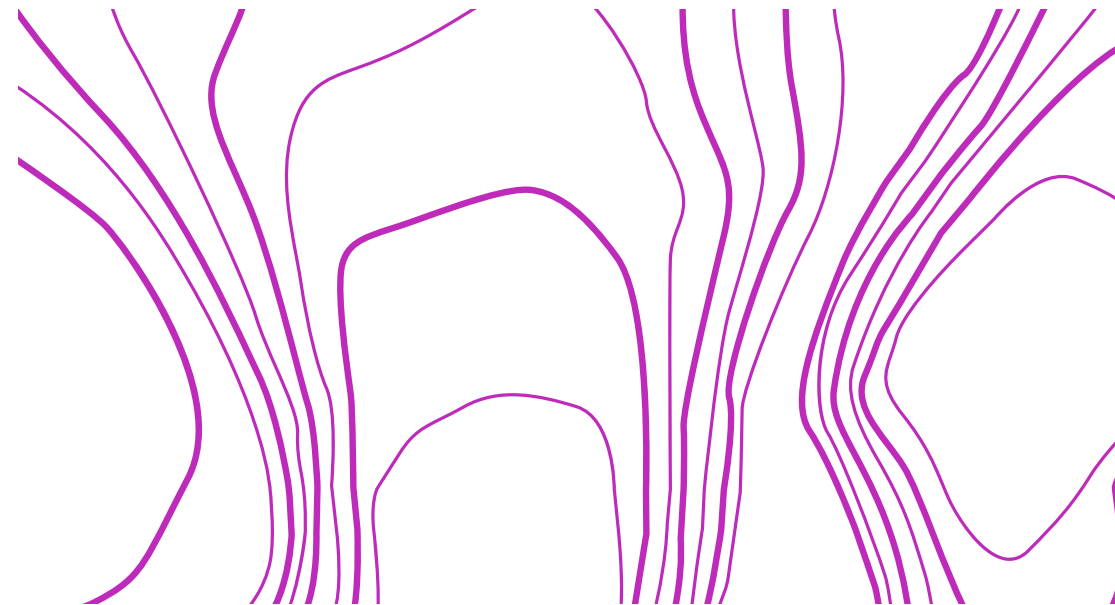
## The value of local action

Investment in our zero carbon future is fostering transformative economic opportunities across the UK. Growing rapidly and highly productive, the sector [contributed](#) £28.8 billion directly to the economy in 2023-24 and generated a further £54.3 billion through supply chain activities and broader economic contributions.

The upfront investment needed nationally into low-carbon technologies and infrastructure is substantial, but it is expected to be outpaced by long-term economic savings and wider social benefits. The Climate Change Committee [estimates](#) that investment averaging £26 billion a year will yield savings across the economy of £22 billion a year through improved efficiencies and more low-cost renewable energy, as well as wider benefits worth up to £8.2 billion a year, through improved health outcomes.

Investment of around £544 billion into local transport, buildings and energy supply [is needed by 2050](#) and taking a place-based approach will maximise the benefits. Research commissioned by Innovate UK [found that](#) enabling city regions to adopt the most socially cost-effective combination of low carbon measures for their areas could deliver double the social and economic benefits for around a third of the cost, compared to all places taking a uniform approach. These benefits, totalling around £825 billion by 2050, include lower bills, cleaner air, warmer homes, healthier people and quieter streets.

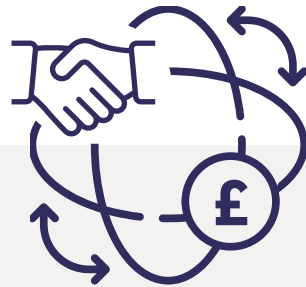
Supported by programmes such as The Net Zero Living Programme, local authorities are taking action to realise these benefits, responding to the different needs and opportunities in their areas. Councils are developing strategies, coordinating stakeholders and delivering wide-ranging projects to help accelerate the adoption of new technologies, encourage behavioural change and enable infrastructure upgrades.



### Closing the funding gap to seize the net zero opportunity

Leveraging private investment through closer partnerships between the public, private and third sectors is critical to realising the benefits of net zero for communities and businesses. In 2023-24, the net zero economy attracted over [£23 billion](#) in private funding, and the Climate Change Committee expects the private sector to provide most of the investment needed nationally, with the proportion varying by year from [40% to 90%](#).

To mobilise investment, local authorities are increasingly working with public sector loan providers, such as the National Wealth Fund and Works (Public Works Loans Board), and private sector investors. However, this process of attracting finance can be challenging, [as identified in the Net Zero Living Programme](#).<sup>1</sup> [In many cases](#), the barriers are no longer technological, they are financial, social, structural and regulatory.



**Leveraging private investment through closer partnership working between the public, private and third sectors is critical to realising the benefits of net zero for communities and businesses.**

Often, projects remain too vague for investors. Many councils require greater capacity and resources to further develop projects beyond the high-level identification stage and build investment cases, with clear project governance and procurement pathways.

Local authorities are also working to become more skilled at managing complex financial mechanisms and building the confidence of council leadership and finance teams in engaging with private finance, especially where this may increase the risk exposure or reduce control.

For many places, these challenges are constraining ambitions and delaying action, increasing reliance on short-term, grant-funded pilots. This leads to missed opportunities for local authorities to realise the benefits of investment for residents and missed opportunities to foster sustainable growth through innovative partnerships.

### Exploring innovative approaches

This paper, Investing in Places, brings together insights into how places can overcome the wide-ranging non-technological barriers hindering project planning, development and investment. It draws on learnings from numerous local authority-led projects and insights produced by expert partners, funded by the Net Zero Living Programme.

The learnings explored in this insight paper can be applied by other local areas to help them scale up and accelerate delivery of projects that deliver for communities and stimulate cleaner growth.

# Insights from the Net Zero Living Programme

## 1. Strengthening local net zero planning



Local authorities are uniquely placed to plan the steps towards a low-carbon, prosperous future across their areas. Through the Net Zero Living Programme, places are finding ways to progress faster through planning processes into pipeline development.

Ahead of undertaking Local Area Energy Planning, Southampton City Council adopted a streamlined approach to data collection and clarified its roles using the 'Enable, Embed, Enact' framework.

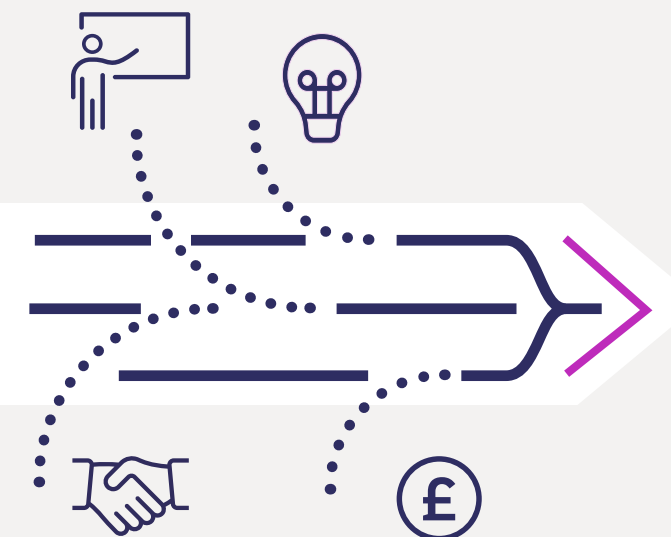
## 2. Building better investment pipelines



Places are taking different paths to build stronger project pipelines, ready for investment. They have involved communities to better meet local needs, developed powerful data tools to inform decision-making, and explored different commercial models to enable working in partnership.

Peterborough City Council is developing a suite of easy-to-use tools to identify and combine low carbon projects to form investable propositions, while Bristol and other West of England local authorities are working with community development organisations as one of the inputs to accelerate and scale clean energy investment.

## 3. Mobilising finance



The Net Zero Living Programme has helped places to adopt innovative financing mechanisms for their projects while technical partners have helped others to better understand the possibilities available and anticipate investor needs.

Blaenau Gwent County Borough Council worked with Bankers without Boundaries to develop and pitch a renewable energy opportunity to investors. They increased investor interest by combining a proposed wind turbine with rooftop solar and energy storage solutions at an industrial site and tailoring their proposition to investor needs.

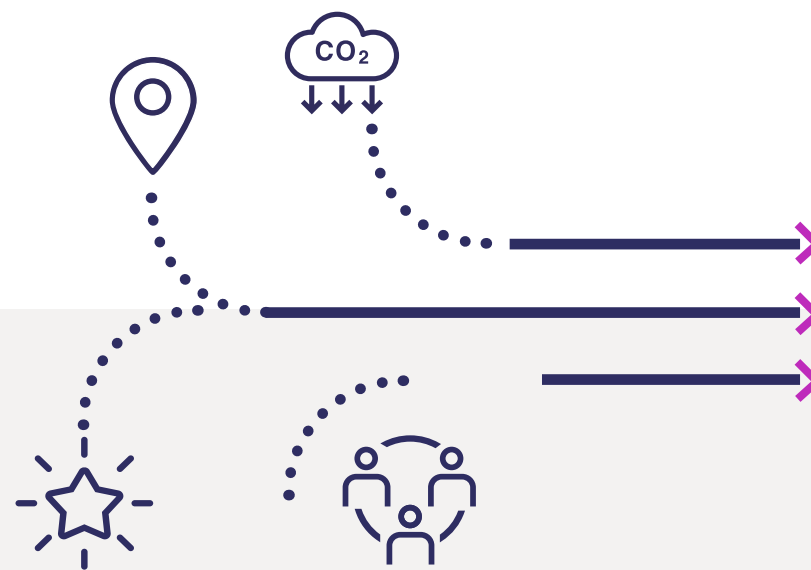
# 1. Strengthening local net zero planning

**Local governments are 'place shapers', uniquely placed to plan the steps towards a low-carbon, prosperous future, working across different scales.**

Effective planning is the foundation of successful project delivery and partnerships. Through the Net Zero Living Programme, many places have significantly progressed their net zero plans. For example, the Forest of Dean District Council is developing a new Climate and Nature Emergency Strategy, Wakefield Council is developing a Carbon Management programme, and Leicestershire County Council, among others, has developed a Local Area Energy Plan.

In discussions between Net Zero Living Programme places and partners, the benefits of these processes were clear: improved their awareness of local challenges, provided stronger support for the required pace and scale of local changes, and informed clearer strategies for deploying resources to accelerate progress. Developing cross-cutting strategies, conducting data analysis and engaging with stakeholders all help identify opportunities for action and build political and public support, in turn boosting the confidence of partners and investors.

However, these processes can be challenging. This is due to the complexity of the interventions needed, seemingly disconnected priorities, difficulty accessing and/or analysing relevant data to provide an objective, quantified evidence base. There is also an unclear division of roles and responsibilities between national and local government.<sup>2</sup>



**Through the Net Zero Living Programme, places are finding ways to progress faster through planning processes into pipeline development.**

Through the Net Zero Living Programme, places are finding ways to progress faster through planning processes into pipeline development, helping them to overcome capacity constraints. Partners have also developed wide-ranging insights to help authorities anticipate and navigate the ever-shifting policy landscape as they develop plans and policies.

**Articulating the delivery roles of local authorities to streamline planning**

During the programme one recurring obstacle raised by local authorities that slows down the move from planning to action, was a lack of clarity over their roles.

[The Enable, Embed, Enact framework](#) was developed by Regen and the Carbon Trust to help authorities consider their anticipated delivery roles earlier in the process across different areas of intervention, such as heat networks, home retrofit, zero emission public transport and developing renewable energy infrastructure. By applying this framework local authorities can better prioritise their efforts across different areas, such as the depth of data analysis required, and can continually revisit the framework as projects progress.

As described in the case study, this innovative approach has been adopted by Southampton City Council, among others. It has helped them streamline data modelling and analysis to reflect on their capacity and needs ahead of undertaking local energy planning.

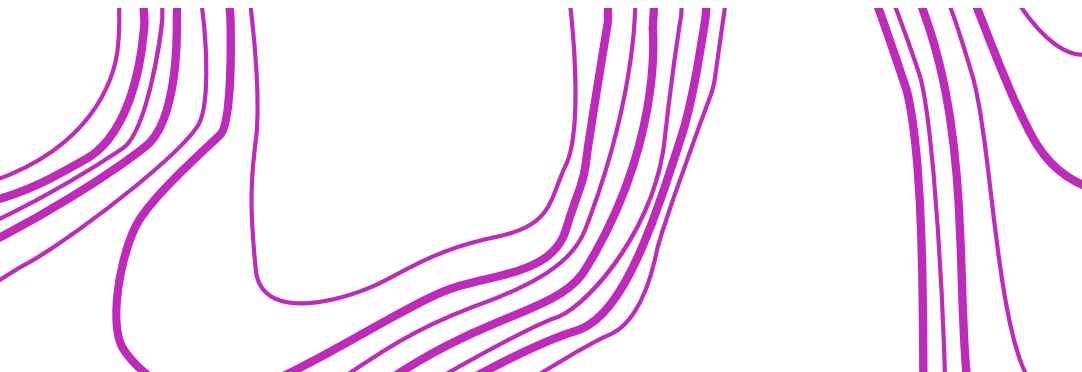
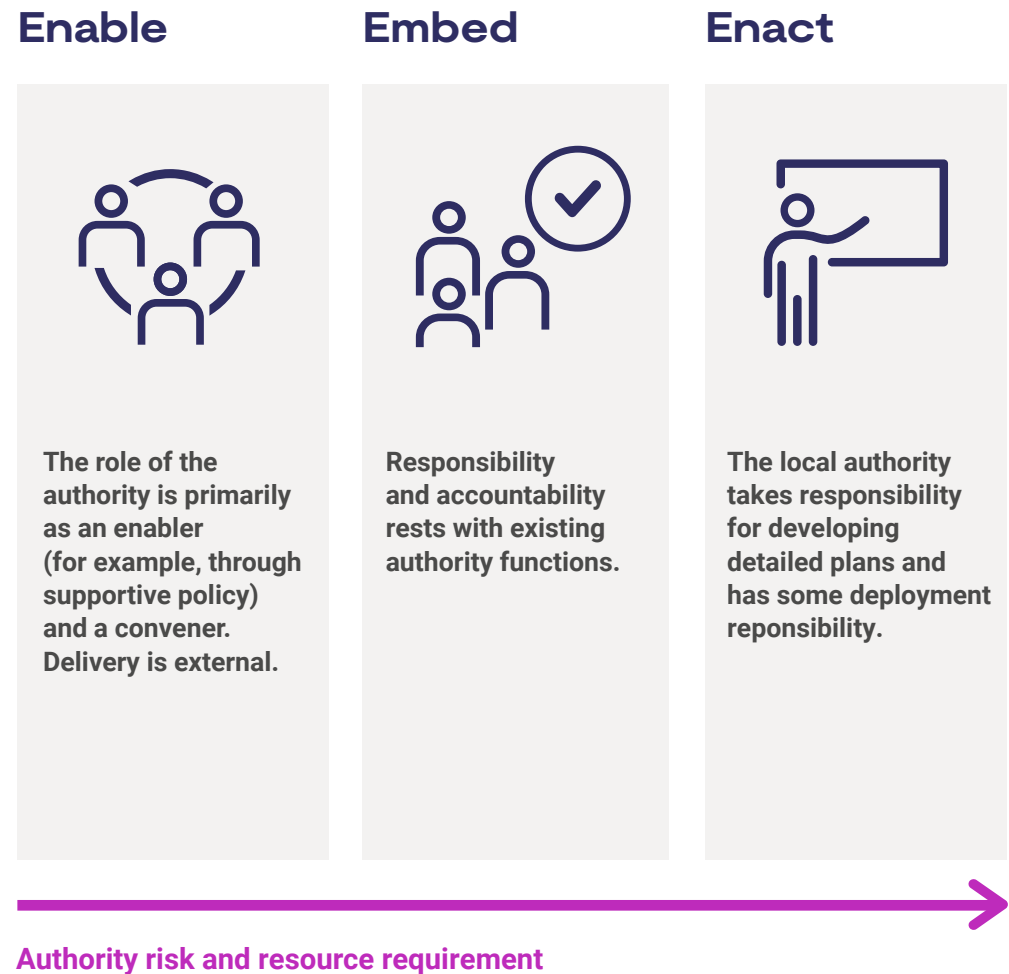


Figure 1:  
[The Enable, Embed, Enact Framework](#)



# Case study: Southampton City Council

## Applying the Enable, Embed, Enact framework to strengthen planning

Through the Net Zero Living Programme, Southampton City Council has built a foundation for successful local net zero planning by adopting a pragmatic, data-driven approach and using the 'Enable, Embed, Enact' framework to clarify its roles.

Southampton City Council is now better equipped to tackle the data and stakeholder-related complexities of local climate action and is moving towards targeted analysis and project pipeline development.

### Understanding the local energy system and exploring council roles

Southampton City Council commissioned the Carbon Trust, a Net Zero Living Programme expert partner, to help gain a better understanding of the council's role in planning and delivering net zero locally and how it could turn analysis into real-world impact.

They created a longlist of potential decarbonisation interventions, covering sectors such as housing, transport and renewable energy generation, then applied the Enable, Embed, Enact framework.

By discussing existing assets, partnerships and resources through workshops facilitated by the Carbon Trust, SCC gained a more comprehensive overview of the local energy system and identified where the council could have most impact.



Southampton City Council realised that for projects like retrofit advice, it was more suited to taking an enabling role because another organisation already delivers this advice in Southampton, supported by the council. For rooftop solar PV, the council learned that its strength lay in enacting deployment, leading by example.

Jessica Lewis, Sustainable Projects Lead at Southampton City Council said:

“ Using the Enable, Embed, Enact framework is an effective way to prioritise interventions and allocate resources to projects that will have the most impact. The council has an important role in enabling and in building capacity to reach net zero, as well as in delivering, that is enacting, key projects itself.”

### Preparing for a Local Area Energy Plan

Southampton City Council also sought the Carbon Trust's help to map and evaluate the data required for a city-wide Local Area Energy Plan. This included assessing the Local Energy Net Zero Accelerator tool, provided by their local electricity Distribution Network Operator, Scottish and Southern Electricity Networks, so that Southampton City Council could understand the tools capabilities and potential for streamlining data collection and analysis for a Local Area Energy Plan.

The result was a data mapping matrix, aligned with Energy Systems Catapult's [guidance on local area energy plans](#). It included qualitative commentary on data quality, limitations, ownership, update frequency and resolution, and initial stakeholder mapping.

### City-wide collaboration

With a better understanding of the value that connecting data, decision-making and delivery brings, Southampton City Council is continuing to refine its datasets and progress its net zero plans. By focusing resources on key projects and support services, rather than trying to do everything at once, Southampton City Council is better placed to implement realistic yet ambitious plans.

The mapping of roles and of data undertaken through the programme have helped Southampton City Council identify key stakeholders and how they could engage effectively with them. This is helping to foster stronger alignment between delivery partners across the local energy system and promote further collaboration between the public and private sector. With partnerships established in the city, there is now an opportunity to deliver joint projects and work together towards net zero.



**Southampton City Council used the Embed, Enable, Enact framework to focus resources on key projects and support services.**

## Insights to advance net zero planning

Throughout the programme, Regen and the Carbon Trust have worked with local authorities to identify opportunities for innovation and improve approaches across local planning processes, including in response to policy changes. These have been captured in a series of insight papers, grouped below by theme.

### Improving local net zero planning processes

#### [Join the Dots: Embedding climate action](#)

Examines different approaches being taken by local authorities to integrate climate consideration across different teams and functions, recognising the opportunities presented to refresh strategies and processes presented by devolution, local government reorganisation and other changes.

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#### [A Force for Fairness: A guide for local authorities](#)

Examines how local authorities are supporting a just transition in practice and identifies tangible actions, drawing on engagement with Net Zero Living Programme local authorities. One of the four themes is plans, strategies and outcomes.

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#### [Best Laid Plans: Exploring how Regional Energy Strategic Planning can allow local governments to focus on what matters](#)

Explores how local authorities could take advantage of the development of RESP to undertake local energy planning more efficiently. In theory, RESP will offer a single, consistent planning framework which could be used by local authorities as a foundation to interpret delivery implications, identify project opportunities and help iterate regional plans.

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#### [The Missing Link: Understanding community capacity to build climate-resilient places<sup>3</sup>](#)

Sets out an innovative approach which integrates community capacity into climate risk and vulnerability assessments. These networks, organisations and voluntary groups are crucial in reaching at-risk communities, shaping resilient strategies and supporting more equitable net zero delivery.

### Guidance in response to policy changes

#### [A guide to getting ready for Regional Energy Strategic Plans \(RESP\)](#)

Provides advice and guidance for local authorities in England on how to prepare institutionally for some of the changes that may come about as a result of the RESP.

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#### [Local Authority Roles in Heat Networks Development](#)

Provides early insights and recommendations regarding the roles, decisions and delivery models that local authorities may need to consider following the introduction of heat network zoning.

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#### [Preparing for heat network regulations: key considerations for local authorities](#)

Summarises how emerging heat network regulations, may affect the various ways in which local authorities are currently involved in heat networks, introducing seven use cases.

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### Improving spatial planning processes

#### [A Double Win: A guide to integrating clean energy with nature restoration](#)

Raises awareness of the opportunities for energy and the environment presented by the move nationally towards a more integrated, strategic approach, through changes to the planning system, requirements for developers such as biodiversity net gain, local nature recovery strategies and NESO's Strategic Spatial Energy Plan (SSEP).

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#### [From plans to power: Strengthening local planning policy on renewables](#)

Presents a systematic review of renewable energy policies in local plans across England. It assesses the ambition, clarity, and consistency of these policies, identifying patterns, gaps, and examples of emerging best practice.

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## Local governments play a pivotal role as 'place shapers' in the transition to a low-carbon future.



Effective planning, supported by frameworks like 'Enable, Embed, Enact', helps clarify delivery roles and streamline processes, enabling authorities to move from planning to pipeline development more efficiently.

Insights papers by programme partners are also helping local authorities to improve their processes, better navigate the evolving policy landscape and connect their different priorities to embed progress toward net zero.

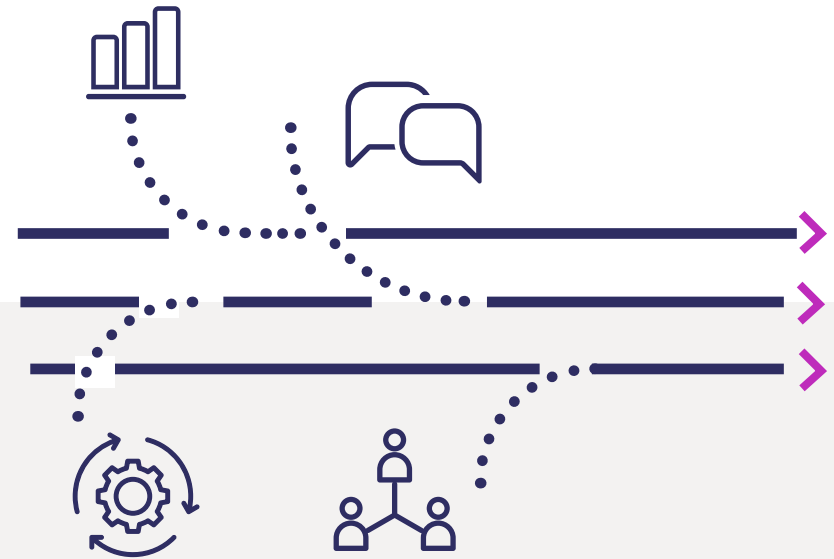
With strong plans in place, places are better positioned to lead projects through the next phase of pipeline development and adopt innovative approaches to secure investment.

## 2. Building investable pipelines

**Pipeline development is a crucial but often overlooked step in delivering key strategic growth and climate priorities. It bridges the gap between identifying opportunities and securing funding or finance, ultimately enabling delivery.**

Successful net zero planning can result in better understanding among stakeholders of what needs to be done and the council's role, at a high level. However, for many authorities, it can be challenging to decide which projects should be prioritised for an investable pipeline, and how such projects should be progressed, turning plans into deliverable, fundable projects.

Councils that made the most progress built delivery pipelines around local priorities, technical feasibility, and commercial viability. Across the Net Zero Living Programme, places have taken different paths, including developing tools, involving communities, clarifying their roles and exploring different commercial models.



**From strategy to delivery is a complex process requiring expertise to align technical feasibility, commercial viability and governance processes and build successful partnerships.**

## Mapping the steps to investment

Moving from strategy to delivery is a complex process. Investable pipeline development requires the expertise of different teams to align technical feasibility, commercial viability and governance processes and build successful partnerships.

Places build strong pipelines by investing in early-stage development, including feasibility modelling, commercial structuring, technical assurance and stakeholder co-design.

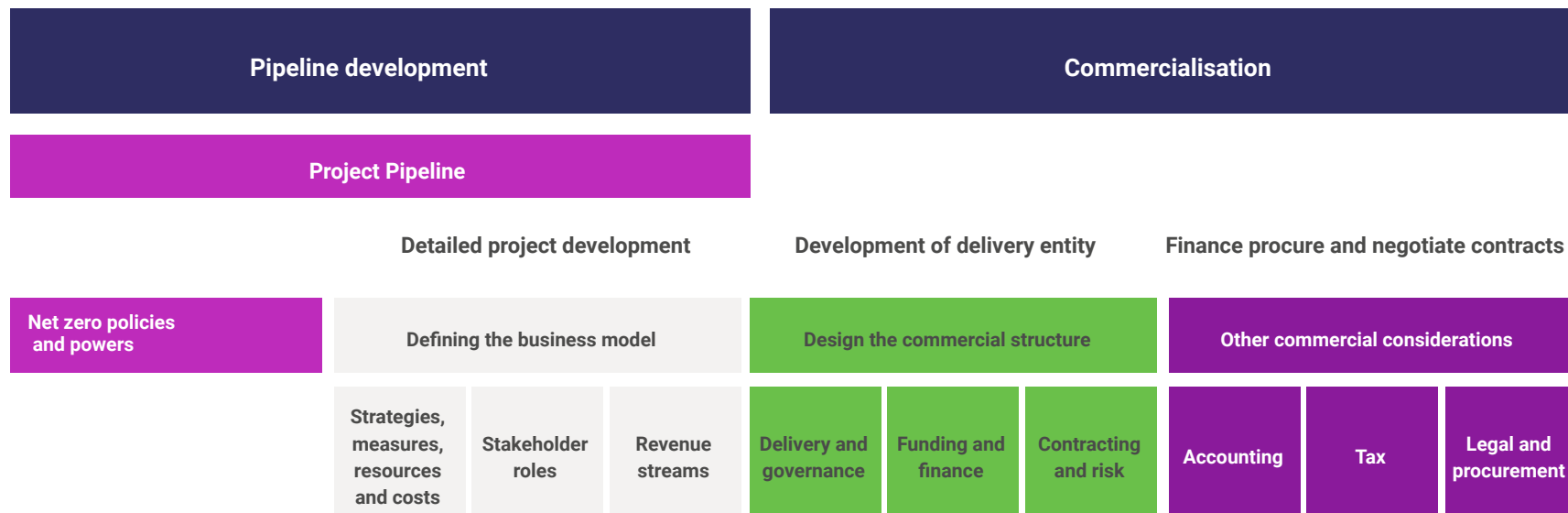
The comprehensive guide [Financing Local Net Zero Projects](#), commissioned by Innovate UK, outlines some of the steps local authorities should take to reach commercialisation, as shown in figure 2.

In summary, once a strategy and potentially feasible projects are established, the guidance advocates defining business models, then determining the right commercial structure and considering the related implications.

This paper mirrors this structured process. However, rather than covering every step, it focuses on the steps where Net Zero Living and its technical partners have concentrated their efforts, generating learnings for others.

To become ‘investor ready’ effort is also required to build the ‘enabling ecosystem’ required, including political support and internal readiness. [Creating Better Places: Ten areas where local innovation can improve lives and unlock growth](#) offers insight into these other critical actions.<sup>3</sup>

**Figure 2:** Guide sections mapping to the project development lifecycle.  
Source: [IUK/PWC \(2023\) Financing Local Net Zero Projects](#)



## Key definitions and concepts

### What is a pipeline?

Many councils tend to use the word 'pipeline' in a different sense to investors.

Within councils, 'pipeline' typically refers to a broad mix of work the council has underway, ranging from strategy and feasibility studies to community initiatives and capacity building. Not all of this is investable from the perspective of an external finance provider.

In contrast, an investable pipeline is a focused list of capital projects, meaning projects that create, improve or renew physical assets like buildings, infrastructure or equipment. These projects are aligned with council strategy but are developed and structured with attracting external investment as the key goal.

### What is an investment portfolio?

As multiple pipeline projects secure funding and move into delivery, they form an 'investment portfolio', the overall group of funded capital projects in delivery.

Portfolio management is the ongoing oversight of these projects, monitoring performance, risks and outcomes, and balancing exposure across projects. Learnings from live investments can be used to refine future pipeline development.

### Why does scale of a portfolio matter to investors?

The investment size or scale of the portfolio is one of the key criteria for all investors considering an opportunity. Minimum ticket sizes will vary significantly based on investor and project types. As a general indicator, minimum commitments from institutional investors will be in the £10s of millions or above, with pension funds likely to target £50 million+. Public sector investors, such as the National Wealth Fund, have a minimum ticket size of around £5 million.

Investable project pipelines therefore need to be able to offer sufficient scale in order to interest investors in conducting the relevant due diligence and assessing for investment.

### Harnessing data and tools to create shared focus

Building an investable pipeline requires moving from pursuing smaller-scale, potentially disparate projects individually to structured programmes that meet the scale and commercial returns expected by investors.

Authorities in the Net Zero Living Programme moved successfully from single project concepts to shared portfolios by using practical tools. For example, [Cambridgeshire's](#) Locally Determined Contribution toolkit translated carbon budgets into usable, region-wide planning frameworks. Meanwhile, [Runnymede Borough Council](#) and Heathrow Airport partners developed a Functional Carbon Area and prototyped voluntary carbon credit governance, linking local control to investor confidence.

Others developed specialist management platforms, such as Peterborough (see case study on the next page). These tools allowed places to set shared objectives, align resources, and sequence investment, making local ambition visible and investable.

# Case study: Peterborough City Council

## A toolkit for net zero project planning

By working with digital specialists, the council is developing a suite of easy-to-use, modular tools to enable them to identify and combine low carbon projects to form potentially investable propositions which could also fulfil their strategic aims.

### ODIN Tool

Developed by Nordic Energy, this tool allows Peterborough to identify the most promising net zero project opportunities in selected areas of the city. Currently, the technologies covered include heat networks, ground mounted solar, wind and domestic (energy efficiency, heat pumps and solar), with plans to expand to car port solar, rooftop solar and electric vehicle charging infrastructure. The tool generates approximate project capital, operating costs and revenue generation, based on optimal design, and evaluates site suitability.

For example, the tool was used to analyse five areas identified through a pilot scheme for heat network zoning. The council used the tool to view anchor tenant buildings within the zone and iterate the selection until they found an optimal configuration which is now being developed into an outline business case.

Being able to assess initial project viability with little training or additional resource is potentially transformational in allowing local authorities to quickly develop a project pipeline. The tool is also flexible (business model agnostic) meaning it could be easily used by other councils in future.



### zero.earth

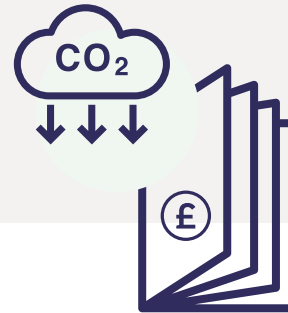
zero.earth, developed by edenseven, is a key component of the toolkit. This portfolio management platform enables Peterborough to further progress projects by allowing the council to compare emissions reduction scenarios from different projects and build a strategic pipeline that helps them advance towards their decarbonisation goals.

They can also use the tool to collaborate and standardise tracking projects across the organisation, simplifying reporting. It aims to replace fragmented Excel-based workflows with standardised, easy-to-use digital infrastructure. For details, see this [video case study](#) and [Creating Better Places: Ten areas where local innovation can improve lives and unlock growth](#). By displaying emissions and finance impacts in intuitive and accessible way, the tool supports decision making by non-technical stakeholders.

### Next steps

Informed by cost and revenue estimates, as well as the projected impact of proposed projects, officers are now better placed to select projects to bring forward in pipeline development.

The functionality of the tools will continue to expand. The next iteration of the zero.earth tool will include more investor metrics, be able to capture co-benefits of projects and allow the council to combine projects into financially investable portfolios. The council is developing an investor prospectus to demonstrate the attractive net zero investment opportunities that Peterborough has to offer.



**The council is developing an investor prospectus to demonstrate the attractive net zero investment opportunities that Peterborough City Council has to offer.**

### Forming an investable pipeline through partnerships

While forming partnerships when all parties are grant-funded is simpler and less risky compared to entering commercial contracts, the Net Zero Living Programme shows the multiple benefits of collaboration for local authorities looking to develop their investment pipelines.

Firstly, pooling projects across multiple partners within an area or across similar asset classes is one way for local authorities to achieve the scale needed by investors. When projects are structured, supported, and strategically positioned within partnerships, this can build confidence and reduce risk.

Secondly, partnerships can align systems and people to overcome missing capabilities. During the Net Zero Living Programme, local authorities progressed faster when they collaborated with partners, such as businesses, communities, universities and neighbouring councils, who bring specialised expertise, delivery capability, or community insight.

#### Places have collaborated in diverse ways, including:

[Belfast City Council](#) worked with public sector asset owners to identify anchor sites, then commissioned legal, commercial, and technical analysis to move rooftop solar and heat networks into delivery.

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Surrey's finance knowledge hub, [Shift to Net Zero](#), brokered private sector engagement with independent governance to reduce political risk.

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[Derry City and Strabane District Council](#) embedded delivery in a multi-partner Climate Commission with themed action clusters, for example, education, community and health, and housing, and a funded coordinator role to maintain pipeline momentum.

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Thirdly, partnerships can also help to embed net zero into broader economic, spatial and finance strategies, increasing their ability to secure capital. For example, Westmorland and Furness Council linked early food/tourism carbon pilots to regional economic development.

Finally, working with local partners and communities can help to de-risk projects. Partnerships can help enhance the confidence of local communities and stakeholders, not just regarding their capabilities, but also their social licence to operate. Many partners involved in the Net Zero Living Programme have described how collaborating across the public, private and third sectors has helped mutually enhance their credibility when engaging with local communities.

Developing projects together with communities also means action is more likely to be supported and succeed. As explored in the case study, Bristol City Council ensured neighbourhood-scale community climate investment plans could feed into its region-wide investment plan, meaning local priorities are being addressed and increasing confidence in local demand and support. The huge value of engaging and empowering citizens to strengthen decision making, reduce risk and unlock local ingenuity during the net zero transition is explored further in [Communities Driving Change](#).

# Case study: Bristol City Council

## Building a project pipeline through community partnership

Bristol City Council identified a clear challenge in connecting work done by communities on planning their low carbon transition to the growing amount of private capital available, significant given the constraints on grant funding. The council led the Mission Net Zero Project which aimed to accelerate Bristol and the West of England's transition to net zero by addressing barriers such as access to investment, skills development, and supply chain resilience.

## Co-production of community climate investment plans

Mission Net Zero has moved the region closer to a pipeline of projects informed by communities and aligned with finance, skills, and delivery capacity. Community climate investment plans were developed with three active community development organisations: Knowle West Media Centre, Southmead Development Trust and Eastside Community Trust, with their time funded by the project. These groups were selected after the council invited organisations to submit an expression of interest.

Project partner Centre for Sustainable Energy introduced tools to assist the organisations to create investment plans, building on their community climate action plans. For example, analysis of the 'enabling environment' identified barriers and enabling skills within groups and partners, while a maturity framework allowed groups to articulate early ideas in the language of investors, categorising projects using metrics that allowed comparison of projects when viewed within the regional pipeline.



Using an 'I do, you do, we do' approach to clarify the delivery roles of the council and community groups, the interests and capabilities of different actors were mapped to turn action plans into community climate investment plans. Community organisations brought trust and on-the-ground insight, including identifying co-benefits on community health, wealth and adaptability. The project also considered where specialist skills sit in the wider system, such as investment structuring, procurement and risk planning. An enabling study was commissioned by each community group to explore a project of interest.

The whole process stress-tested community ideas early, moving projects towards bankable propositions while building community capacity to develop projects and secure funding.

## Regional Pipeline Development

Neighbourhood community climate investment plans fed into a West of England Clean Energy Investment Plan and a proposal for project development support, guiding projects from concept to investable stage. Regional pipeline projects came from various sources, with community energy projects in particular emerging from the community climate investment plans.

## Learnings from the project

Incorporating community-generated projects into a broader regional pipeline is a potential way to achieve the scale needed for private investment while delivering local priorities.

Key lessons are to pair community knowledge, creativity and trust with specialist expertise to build long-lasting partnerships by investing in the work of community development groups, iterative, design-led cycles to refine governance and benefit-sharing models are also valuable. The partnerships between community development groups, local government and specialists are supported by a strong culture of climate and nature action in Bristol but the approach, being further streamlined by the project partners, is designed to be applicable across other locations.



**Key lessons are to pair community knowledge, creativity and trust with specialist expertise**



## Clarifying the delivery role of local authorities in project investment

An early, crucial step is determining what approach the local authority wants to take in delivering investments. Establishing clear roles is the foundation of successful investment pipeline development. Councils need to decide if they will invest directly into projects and how involved they wish to be in project delivery and decision-making.

Many factors should be considered when deciding the council's role, such as resources available, technological maturity and geographical scope. A key learning from the programme is that this decision is highly individualised for each authority, reflecting their resources, political buy in, skills, capacity, and ambition.

This is often an iterative process, considered during both the planning phase and pipeline development, to inform how the local authority allocates resources and to identify where private sector involvement, such as finance, operational control, or specialist skills, might be most suitable.

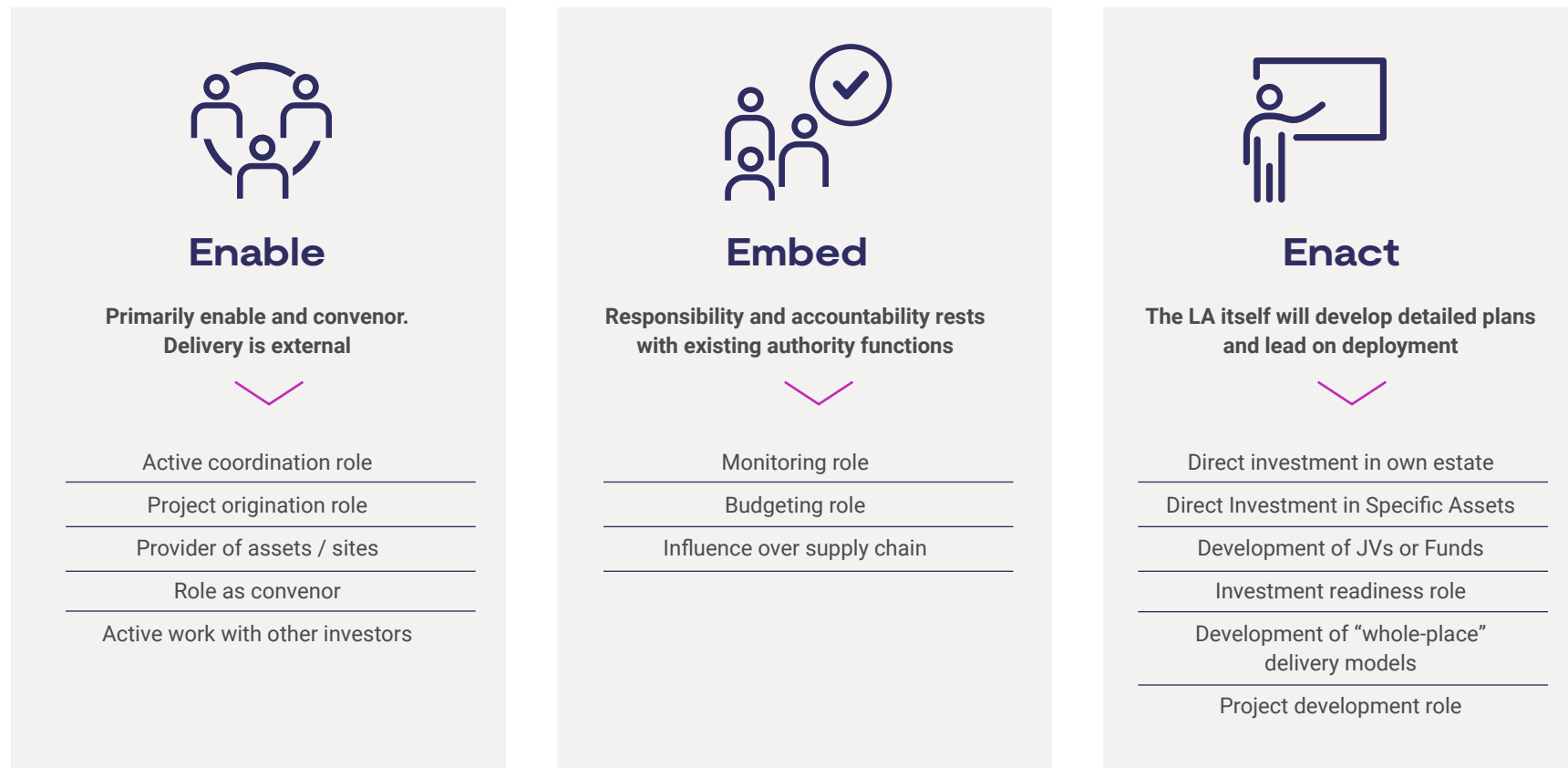
### Using the Embed, Enable, Enact framework

Several Net Zero Living Programme places found revisiting the 'Enable, Embed, Enact' framework a valuable and pragmatic step. Originally introduced to articulate strategic roles during the local net zero planning stage, the three roles can also be used to categorise investment actions, as seen in figure 3.

Direct investment in specific assets is only one of many roles that a local authority could take, as described in

[City Science's guide, Unlocking Climate Capital](#). For example, local authorities may decide to instead take a convening role and advocate for a pipeline of local projects through platforms and processes, such as Regional Energy Strategic Planning. Innovate UK and PwC's guidance, [financing local net zero projects](#), builds on this, outlining the roles, responsibilities, costs and risks applicable to a wider range of project stakeholders. Understanding these roles enables the subsequent selection of an appropriate commercial structure and successful collaborative partnerships.

**Figure 3** Delivery roles mapped against the Enable, embed, enact framework.  
Source: [City Science, 2025](#)



## Case study: Forest of Dean District Council

### Using the Embed, Enable, Enact framework to clarify the council's investment approach

Following structural changes, the Forest of Dean District Council sought to clarify its role regarding net zero delivery, inviting City Science to deliver an in-person workshop for their finance and sustainability teams.

**“This was one of the first times where we really got them (senior leaders) together to focus on what we would do as a council, other than individual pilots”,**  
Forest of Dean District Council Project Lead

### Mapping the council's roles

Using the Embed, Enable, Enact framework, the council reflected on their asset ownership, level of control as a district authority, and resource availability. An outcome of the workshop was a categorised list of potential initiatives, clarifying thinking:

- **enable:** includes supporting renewable energy, community energy and natural capital projects.
- **embed:** includes decarbonising the council's 'linked' estate (e.g. leisure centres) and complex sites, for example, industrial estates with mixed ownership.
- **enact:** includes regeneration schemes, the Forest of Dean District Council estate and fleet, such as electric refuse collection vehicles.

### An alternative investment approach

This mapping then enabled a review of their investment approach, considering constraints, existing programmes and areas of market failure.



A critical insight emerged: the council has limited borrowing capacity due to its small asset base. However, alternative opportunities surfaced to drive investment, including securing grant funding, exploring alternative financing mechanisms beyond borrowing, and convening partners, such as local businesses.

### Next steps

Since the workshop, the council and partners have secured over £325,000 in grant funding and established stronger partnerships with county-wide initiatives, public sector bodies and community organisations, unlocking cross-sector innovation.

Work continues to explore alternative finance models, including climate bonds for low-risk investment in public assets, collaboration with the community energy sector to leverage local ownership, and mechanisms to enable low-cost finance for domestic retrofit.

### Developing rigorous business cases

Once their role is established, local authorities can progress with developing a project's business case, often using HM Treasury's [Green Book](#) business case model. A credible investment pipeline depends on a rigorous business case.

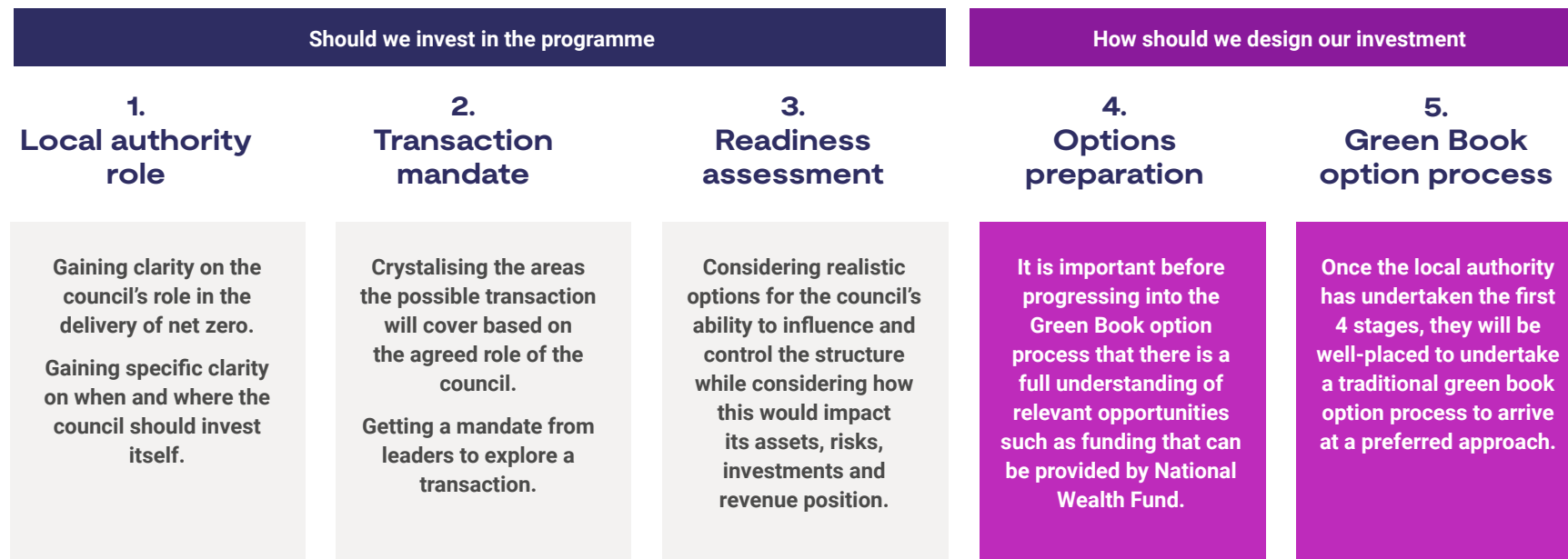
### Strengthening economic cases through standardising options appraisals

A key component of a Green Book business case is the economic options appraisal. While this methodology is well established, the Net Zero Living Programme has advanced thinking on a particular aspect, providing an in-depth strategy for conducting an options appraisal, after recognising that a lack of standardisation in approach was a barrier to efficient and effective delivery.

Options appraisal is a structured decision-making process which evaluates the costs, benefits and risks of a long list of options to identify the one which presents best value for money or social value. Ultimately, the process helps [maximise value for money and reduce risk](#).

City Science published a [net zero finance options framework](#), shown in figure 4, which aims to help local authorities prepare for the Green Book option process. The key innovation of the framework is its structured five-step methodology which local authorities can apply consistently across diverse project types. It combines established decision-making tools with practical templates and stakeholder guidance to reduce financial risk, improve clarity and comparability, and build confidence, ultimately enabling the translation of complex decarbonisation ambitions into clear, Green Book compliant business cases.

Figure 4: [Net Zero Finance Options Framework](#), developed by City Science, 2025



### Embracing different commercial models

After establishing the role of the authority, local authorities can make an informed decision on what commercial model would be suitable for them and their project.

The commercial case requires local authorities to select an appropriate commercial model, which range from entirely private sector solutions to schemes wholly funded, owned, and operated by the public sector. Common structures include in-house delivery, creating a new organisation, concession models, joint ventures, outsourcing and framework agreements.

Working in partnership with the private sector can empower local authorities to scale up project delivery while helping to stimulate local growth and address market failures.

As projects and places will have preferences for different models, the Net Zero Living Programme and partners have focused on helping places enhance their understanding of the various commercial structures available. Leicestershire County Council's experience of doing this is explored in the case study below.

### Multiple resources have been developed, now available to others:

#### [City Science's Net Zero Finance Options Framework](#)

The third step of the framework outlines readiness assessment to help an authority examine its assets, influence, and how much control it wishes to retain in the project. Step 4 covers the benefits and risks of each model.

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#### [Innovate UK and PwC's Financing Net Zero Projects Guidance on Delivery and Governance](#)

Describes common structures and includes decision-tree to help local authorities identify the most suitable model, based on the local authority's intentions and the attractiveness of the project to delivery by the private sector.

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#### [DESNZ-funded Local Net Zero Accelerator Programme](#)

Tests innovative ways to finance net zero programmes at scale and pace, with three combined authorities pilots, and a financial support service pilot. Key learning has been developed into resources, available on the [Fit4Finance portal](#), to help local authorities navigate investment challenges, and to inform future financial advisory provision for the public sector.

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#### [Shift to Net Zero's Net Zero Delivery Vehicle Knowledge Sharing Platform](#)

Wide-ranging resources, including on developing and financing net zero projects, produced by a consortium of public and private partners.

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# Case study: The Leicestershire CAN partnership

## Moving from a LAEP to an investible pipeline

The Net Zero Living Programme funded Leicestershire County Council's demonstrator project Leicestershire: Collaborate to Net Zero (LCAN) to develop a Local Area Energy Plan (LAEP) and explore how to move it from a strategic document to investable projects.

### From LAEP to projects

A Local Area Energy Plan is a high-level strategic output that identifies what is needed to meet the UK Government's net zero target, however, investable projects need to be identified 'on the ground'. In collaboration with Energy Systems Catapult, Leicestershire County Council created 'LAEP Lens', [a publicly available digital platform](#) which identifies specific opportunities that could be taken forward which support the LAEP's strategic aims.

### Exploring funding and commercial models

Leicestershire invited City Science to hold a workshop to discuss different financing options, such as blended regional funds ([see page 33](#)), and the characteristics of different commercial models. The council and stakeholders identified blended regional funds as being of particular interest. However, this prompted a valuable discussion about the need for partnerships and cross-boundary collaboration to deliver a pipeline at the scale required for such a fund.



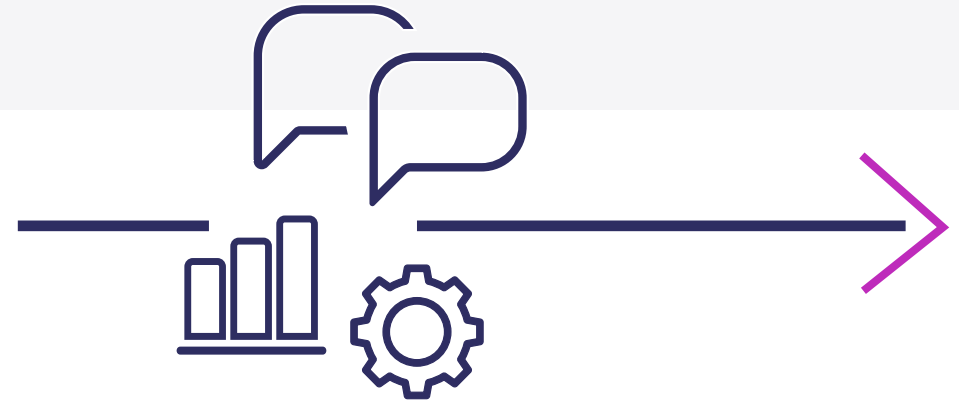
### Next Steps

Building on the learning gained through the Net Zero Living Programme, the partnership is now working to apply a range of commercial models in a pilot programme to retrofit 300 homes. De Montfort University are investigating how to build capacity among local SMEs and form the partnerships needed to enable retrofit delivery, at pace and scale. For larger projects, Special Purpose Vehicles (SPV) models may be a valuable mechanism to unlock investment while managing risk.

The Leicestershire CAN partnership is continuing to investigate sources of financing to help realise the opportunities first identified through the LAEP. Through moving to a more collaborative structure, the partnership plans to continue to investigate local climate funds, and in the longer term, to form an Energy Investment Group, helping to sustain the momentum initiated by the Net Zero Living Programme funding.

## Summary

**Credible investment pipelines are built on partnerships that bring multiple benefits, clear delivery roles to focus resources, and rigorous business cases.**



Through the Programme, tools and approaches have been developed to assist decision-making, such as Peterborough City Council's portfolio management suite, Bristol City Council's Community Investment Plan methodology and City Science's net zero finance options framework.

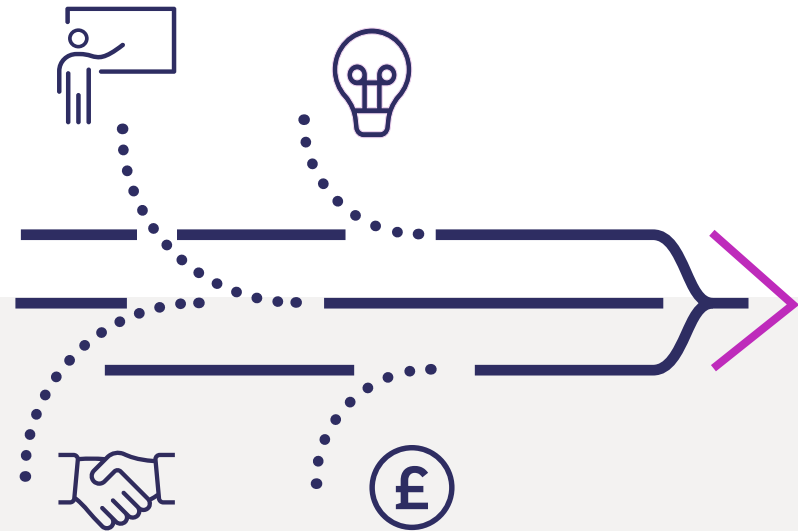
Places have found that working collaboratively with partners and exploring commercial options early significantly strengthens pipelines and builds confidence in innovative approaches.

### 3. Mobilising finance

**While unfamiliar ground for many local authorities, seeking finance from the private sector can open up opportunities and enable the scaling-up of delivery.**

Partnering with the private sector can make otherwise unfeasible projects possible, driving local economic growth and generating lasting benefits for communities.

The Net Zero Living Programme has helped places to adopt innovative financing mechanisms, commissioned research to help local authorities better understand the possibilities available, and helped some projects turn their business cases into 'investment cases', a crucial step to attract finance.



**To meet the UK's climate goals by 2050, £544 billion is needed for local investment, such as into buildings, transport and local energy assets. It is estimated the private sector needs to provide about half of this total, complementing public funding, such as government grants or loans.**

### Tailoring project presentations to interest investors

A key insight from the Net Zero Living Programme has been the realisation, by both local authorities and investors, of the need to better align their communications and requirements to drive faster progress and unlock finance. Infrastructure investors do not back bold ideas or novelty, they fund well-developed projects that fit their mandate.

Through training and one-to-one conversations with technical advisors, local authorities have taken steps to better position their projects for success.

### Developing an Investment Thesis

While various business cases aligned with the Government's Green Book methodology are likely to be prepared during the pipeline development phase, these rarely suit the needs of other parties accustomed to seeing financial information presented differently.

Investors will need to be presented with a solid investment case, or investment thesis, that demonstrates the risk and returns are suitable for the investor or investors being approached.

This may involve elements of a Green Book approved business case, however the overall the content will have a different focus. The investment thesis will address the key considerations and decision-making criteria of the relevant investor.

As an example, a typical infrastructure investor may expect proof of long-term cash flow visibility, proof of robust market fundamentals (e.g. long term demand drivers), clear operating and capital cost breakdown, clear risk allocation and considerations and a full financial model detailing expected returns.

Scale and replicability are also usually important, with articulation of upcoming similar opportunities within the investment pipeline viewed as a positive. Aspects such as the wider socioeconomic benefits may be important to the local area, for example, see [Cardiff City Council's](#) work to quantify the benefits of retrofitting homes. However, if these wider benefits are of interest to investors depends specifically on their mandate and, in most instances, will not be considered if the financial risk-return profile does not stack up.

Through the Net Zero Living Programme, several local authorities had opportunity to test presenting their projects to investors. The aim was to help councils understand what investors look for, which aspects of their projects investors can finance, and how best to tailor their presentation. This meant considering return profiles, data fundamentals, and structuring the storyline. The case study explores Blaenau Gwent Council's experience.

# Case study: Blaenau Gwent Borough County Council

## Shaping projects to attract investor interest

As part of the Net Zero Living Programme, Bankers without Boundaries and City Science gave places the opportunity to present to investors. One of the places that took up the opportunity was Blaenau Gwent County Borough Council

### Opportunity identified

Blaenau Gwent County Borough Council presented a single wind turbine project for which a feasibility study had recently been completed. While promising, this project did not meet the minimum spend requirements of investors who need projects to be at scale to be financially viable.

### Working with expert partners to recognise the 'at scale' opportunity

Working with Bankers without Boundaries, the council identified a way to broaden the project scope. Blaenau Gwent County Borough Council had previously assessed an industrial site's suitability for rooftop solar, identifying several suitable buildings. The businesses within the site would act as direct energy off-takers for both the wind turbine and the solar installation through incorporating this with battery storage.

### Creating the investment proposition

By combining the proposed wind turbine with rooftop solar capacity and energy storage solutions, the council could deliver an integrated system supplying energy via private wire to businesses on the industrial site. This approach reduces dependence on the grid, lowers risk for investors, and improves financial certainty through identified off-takers. Pooling these assets creates a more scalable investment opportunity aligned with investor mandates and minimum threshold requirements.



Additionally, by carrying out the feasibility study, identifying off-takers, and securing planning permission for the wind turbine, Blaenau Gwent had mitigated several risks that often deter investors from engaging.

### Investor feedback

Investors responded very positively to the presentation and indicated strong interest in further engagement. Blaenau Gwent County Borough Council's experience demonstrated that investable and bankable projects already exist within places. However, further work and analysis are sometimes needed to pool assets and present opportunities in a well-prepared manner to attract investor interest and support the council's strategic goals.

### How places are attracting finance

Places participating in the Net Zero Living Programme have used the grant funding available from Innovate UK as a catalyst to develop new funding mechanisms and attract additional investment across a diverse range of projects, helping to secure a long-term legacy from the programme.

[Essex County Council](#) established Essex Community Energy CIC, a social enterprise that connects communities with funding, data and delivery partners to get solar and storage projects off the ground. By testing a 'pay-as-you-go' model and supporting parish partnerships, the project showed that local trust and clear data can unlock self-funded installations. Its use of Revenue Based Finance (RBF) enables the programme to be 100% socially owned, whilst incorporating a return to funders that is related to project performance. Further information is available from [Innovate UK Business Connect](#).

[Gwynedd Council](#) is also pursuing a similar Community Energy Services Company.

[Oxford City Council](#) developed a local carbon matchmaking scheme that connects businesses looking to offset emissions with SMEs and charities needing to retrofit ageing buildings. The council worked with the Low Carbon Hub and Environmental Information Exchange to design a clear accreditation method and build trust with small organisations, creating an investable pathway that would have otherwise been inaccessible. In just 8 weeks, external funders contributed over £200,000 and engaged over 130 organisations.

[Blackpool Council](#) is exploring a cooperative heat network using waste heat from renewable powered data centres. Delivered in partnership with Community Broadband Network Limited, the project is being designed as a cooperative to share ownership, manage risk and, crucially, return long term benefits to local people and public services.

[City of York Council](#) developed the YorEnergy Service, a retrofit one-stop-shop. Innovations include developing a financial product with project partner Abundance through a local credit union to offer consumers accessible credit to fund retrofit works at an interest rate of 6.5% which is not asset-backed (secured against building or mortgage).

[Orkney Islands Council](#) has secured a low-cost loan from the National Wealth Fund for a six turbine wind farm, and received technical support from Net Zero Living Programme partners, Regen. It is forecast that the project will generate average annual surpluses of more than £3 million, in today's money, for the council, providing a revenue stream to protect and develop public services; accumulating an expected £120 million over a 25-year term. It will also provide a £144,000 community benefit scheme.

Other examples of local finance solutions for retrofitting are discussed in [Warmer, Better Homes](#) and a [report by City Science on retrofit programmes](#).

### Scaling up private sector finance through new approaches

Through the programme, places have been encouraged to consider how they could use innovative funding models to scale-up private sector involvement, such as through regional blended finance funds and whole system finance approaches.

#### Developing regional blended finance funds

In response to growing interest, Bankers without Boundaries developed guidance under the Net Zero Living programme to help local authorities determine if a [blended finance regional fund for net zero](#) is a suitable option for them. A key consideration in determining whether such a fund is a relevant option is the availability and status of an investable pipeline.

A regional blended finance fund describes a structured pool of capital deployed into projects within an area with the specified aim of helping to achieve climate-related goals (or another overarching goal of the local authority), which strategically uses public capital to attract incremental additional private capital.

Illustrated by case studies, the guide sets out the key components of such funds, capital flows, requirements to establish a fund, the process of raising capital and operating a fund. While all viable funds must have a clear mandate and bring together a credible fund manager, investable pipeline and cornerstone capital, funds can be of different scales, use various instruments, including grants, loans, bonds, and equity, to finance different types of projects, and have different governance models with varying levels of local authority involvement.

Drawing on their experience, Bankers without Boundaries advises that technical assistance and advisory support are essential to bridge the valley of death in project development. This is in order to ensure that the project pipeline is developed, and continues to be developed, to a point where there is sufficient bankability for the fund to raise private capital.

### Applying whole system finance to heat networks

Programme expert on finance, City Science, explored the role of heat networks in whole system finance to understand how heat networks can be critical infrastructure to form larger portfolios. A Net Zero Living Programme webinar shared insights from Glasgow City Council, Department for Energy Security and Net Zero, investors and advisors.

Whole system finance is an approach to management and analysis that considers the entire ecosystem, rather than focusing on isolated elements, such as individual transactions or segments. It brings projects together into a unified, region-wide approach, using tools like:

- **bundling:** bringing high and low yielding projects together.
- **Revenue stacking:** bringing different income streams across traditional silos.
- **Blended finance:** bringing together public and private sector funding to optimise for scale (or risk) compared to the cost of capital.

Oldham Council is now pursuing this approach, seeking a Strategic Delivery Partner to develop, finance, deliver and operate multiple energy-infrastructure projects for an initial term of 15 years. The Oldham Town Centre Heat Network is the anchor project, including an existing scheme, and over £8 million has already been secured from the Government's Green Heat Network Fund.

**Attracting private sector investment requires local authorities to tailor their approach to build credible investment cases that demonstrate financial and technical feasibility.**



Showing opportunities are scalable and replicable is essential to meet investor mandates.

Net Zero Living Programme places are already attracting private finance, proving what is possible. Looking ahead, regional blended finance models and whole-system finance approaches offer significant potential for scaling investment.

# Conclusions

**Improving how local places undertake planning and empowering local and regional authorities to seek private investment can help unlock a lower carbon, healthier and more prosperous future.**



**Whether a local authority seeking inspiration, or a national policymaker considering how to provide support, the shared learnings from the Net Zero Living Programme provide a breadth of knowledge and insight.**

The steps needed to build this future will depend on the priorities and needs of different communities, but the Net Zero Living Programme has identified innovative approaches that can be applied across local government, from the start of planning through to attracting investment, which can inspire bold action.

## **1. Strengthening net zero planning**

Clarifying roles can help local authorities focus efforts and progress faster from strategies to project development, despite ongoing challenges nationally affecting local capacity, budgets and responsibilities.

**2. Building investable pipelines** Targeted effort is needed for local authorities to develop a credible pipeline of projects, underpinned by evidence, partnerships and robust business cases. Greater support (funding and guidance for officers) is needed to help more authorities navigate this crucial yet often misunderstood step.

## **3. Mobilising finance**

The Net Zero Living Programme has shown what is possible and helped authorities better understand their options and the process they need to take, including developing tailored investment cases. Innovation is crucial to mobilise finance at the pace and scale needed to meet the UK's targets.

# Further reading and references

## Innovate UK Net Zero Living Programme

[Webpage](#)

## Case studies

[Southampton City Council](#)

[Peterborough City Council](#)

[Bristol City Council](#)

[Forest of Dean District Council](#)

[Leicestershire CAN](#)

[Blaenau Gwent County Borough Council](#)

## References

1. For example, see the [Net Zero Living Programme Shift to Net Zero project](#) and [Creating Better Places: Ten areas where local innovation can improve lives and unlock growth](#).
2. Many organisations have commented on the roles and responsibilities of local government, including the Climate Change Committee. On behalf of Net Zero Living Programme places, Regen submitted a response in May 2015 to the Local Government Association's consultation on Local government and legal responsibilities to act on climate change. Copy available on request.

## Insights

[Embed, Enact, Enable: Maximising the value of net zero planning](#)

[Join the Dots: Embedding climate action](#)

[A Force for Fairness: A guide to embedding a just transition in local authorities](#)

[Best Laid Plans: Exploring how RESP can allow local governments to focus on what matters](#)

[The Missing Link: Understanding community capacity to build climate-resilient places](#)

[A guide to getting ready for Regional Energy Strategic Plans](#)

[Local Authority Roles in Heat Networks Development](#)

[Preparing for heat network regulations: key considerations for local authorities](#)

[A Double Win: A guide to integrating clean energy with nature restoration](#)

[From Plans to Power: Strengthening local planning policy on renewables](#)

[Financing Local Net Zero Projects](#)

[Unlocking Climate Capital: A Business Case Framework for Local Authority Net Zero Projects](#)

[Blended Finance Regional Funds for Net Zero](#)

[Communities Driving Change: Learnings from the Net Zero Living Programme for empowering communities](#)

[Better, Warmer Homes: Learnings from the Net Zero Living programme for scaling place-based retrofit](#)

[Creating Better Places: Ten areas where local innovation can improve lives and unlock growth](#)



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# Investing In Places

This report was funded by Innovate UK.

The views and opinions expressed in this report are those collated from and delivered by Regen supporting Innovate UK's Net Zero Living Programme, a collection of over 50 local authorities, partners and communities working to deliver net zero projects in their local areas funded by Innovate UK.

This document does not necessarily reflect the opinions or views of Innovate UK or its affiliate organisations.

Issue date:  
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Report by:  
Anna Cuckow  
Local Net Zero Senior Project Manager, Regen,

Regen  
Bradninch Court,  
Castle St,  
Exeter EX4 3PL

A decorative graphic on the right side of the page consists of several overlapping, wavy, purple lines of varying thicknesses that flow downwards from the top right towards the bottom right, creating a sense of movement and depth. The lines are set against a white background that transitions into a solid purple block at the bottom right.

REGEN