

Our Pathway Towards Net Zero Investment and Growth

October 2022









Executive Summary

3Ci – Cities Commission for Climate Investment – was founded by Connected Places Catapult, Core Cities UK, London Councils, and supported by the UK Government's Department for Business, Energy and Industrial Strategy (BEIS) and Innovate UK. Acting in partnership with the private sector and the wider local government family, including the Scottish Cities Alliance (SCA), the M10 group of Metro Mayors and the Local Government Association (LGA), 3Ci is developing innovative financing models alongside a programme of technical assistance for cities and regions that will:

- Drive additional private investment into local Net Zero programmes at scale (approx. £200 billion for the founding partners alone);
- Build a pipeline of new projects, bringing them to the market at a high level of investment readiness;
- Boost local capacity to assemble and deliver projects, allowing them to be scaled;
- Create new financial partnerships with fund managers and banks, enabling them to invest with confidence in local Net Zero projects;
- Operate across multiple asset classes in an integrated, place-based manner including:
 - retrofit of homes and commercial properties;
 - integration of renewable energy;
 - shifts to sustainable transport;
 - circular waste management; and
 - the enhancement of green spaces and waterways.

On the ground, 3Ci initiatives bring business, finance, and local political and community leadership together to accelerate change through innovation that is fair to all and has local support. Our aim is to leave a lasting legacy not just of reduced emissions, but improved neighbourhoods alongside a major skills and jobs dividend.

The opportunity cost of not doing this work will create short and long-term systemic barriers and structures. This will mean the significant growth opportunities in terms of jobs and business growth, estimated at £825 billion¹ through a place-based approach will not be realised. In addition, £billions will be required to strengthen the resilience of our infrastructure, buildings and places to mitigate the damaging effects of climate change, estimated as an increase from 1.1% of GDP at present to 3.3% by 2050.²



"3Ci is helping to establish and create a new market for Net Zero in the UK. We recognise that one solution lies in convening partners to generate investable propositions, creating opportunities for economic growth and carbon reduction. The work which 3Ci are doing in this regard is critical."

Carl Ennis, Chief Executive, Siemens

"If we are to tackle the many challenges the climate emergency presents, it's essential we take a collaborative approach to find long term solutions. Already, we have achieved a huge amount in the short time since 3Ci's inception; identifying the scale of the financial challenge needed to meet net zero, acquiring the backing of private investors and local authorities across the UK and being a respected forum for national investors, cities and communities to learn from and feed into. Through this work, encouraged and supported by 3Ci, we are ensuring the transition to net zero is a just one that leaves no city or community behind."

Cllr Georgia Gould, Chair of London Councils and Leader, Camden Borough Council

^{1 &#}x27;Accelerating Net Zero Delivery', Innovate UK, March 2022

^{2 &#}x27;What will climate change cost the UK?', The Grantham Research Institute on Climate Change and the Environment, May 2022

Establishing the Market

There are three pillars that form the foundation of our work, which collectively underpin our ambition to support local authorities in securing the necessary finance required to deliver their Net Zero ambitions.

- Innovating new approaches and mechanisms for securing investment, testing and deploying these within the market.
- **Accelerating** the speed of collaboration between local and national government, industry and financial institutions by convening partners and promoting best practice.
- Advocating for changes in approach to investment across local and national government, which help secure the levels of investment needed.

To support these pillars we have established five practical focused workstreams:



National Net Zero Project Pipeline

Development of a national register of local and regionally led bankable projects, articulated to a common and combinable format, to deliver net zero outcomes.



Regional Investor Events

Series of events aimed at convening cities and local governments with investors to showcase opportunities, building mutual understanding and confidence.



Local Integrated Investment Pilots

A programme of geographically diverse pilots which test and demonstrate the delivery of integrated local investment model that aggregates different domains and sectors to optimise co-benefits and facilitate crossinvestment.



Dissemination of Local and Regional Innovations

Development of a national platform to share innovations rapidly in an easily accessible and standardised format.



National Technical Assistance Programme

Creation of a development fund that invests in the necessary capacity and skills to bring projects forward for investment.

In the challenging global economic environment we currently face, the need to generate inclusive, sustainable, and long-term economic growth is imperative for the overall wellbeing of citizens and businesses. A UK-wide rollout of the 3Ci programme would bolster sustainable economic growth through additional investments in cleaner infrastructure, creating capital deepening. Furthermore, the linkages between generating additional capital deepening with new technology, innovation and the involvement in, or access to, global value chains would provide a boost to infrastructure-led growth through improvements in total factor productivity.



Our Pathway Towards Net Zero Investment and Growth

A Place-Based Approach to Investment

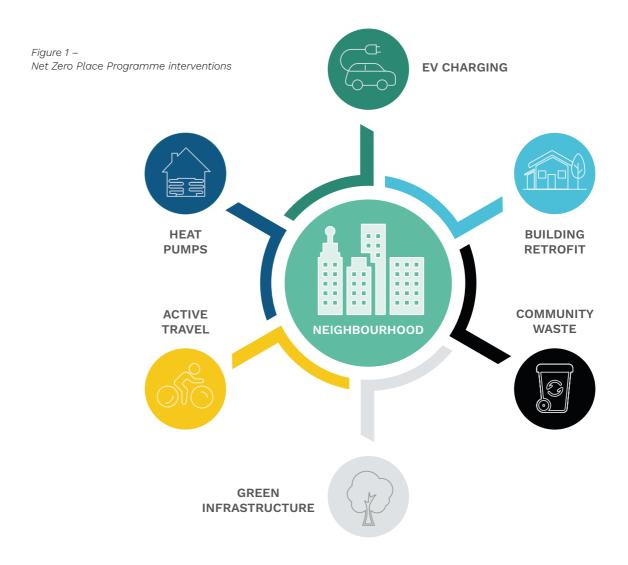
A place-based, multi-intervention, blended finance model occurs when some of the dividends from the most financially attractive assets, such as renewable energy generation schemes, are used to help fund some of the more challenging interventions like waste management decarbonisation or green infrastructure. Local authorities are key conveners and have a critical curating role to play in bringing together green investment opportunities to create a bankable package of schemes.

In 2021 the Commission created a model for delivering a multi-intervention, place-based route to decarbonisation, which can deliver an economic outcome that will attract both financial and returndriven capital as well as capital with socio-economic outcomes as its core focus. By aggregating the low carbon investment plans of the UK's largest cities – worth an estimated £206 billion – it is possible to create a more attractive and substantial proposition for investors. Through support from BEIS we have established the case for a new programme *Net Zero Place Programme (NZPP)* that builds on this model incorporating a series of *Net Zero Neighbourhoods (NZNs)*.

The Net Zero Place Programme is derived from considering the UK's Net Zero strategy and policy, identifying potential barriers and designing a programme that unlocks those barriers and provides opportunities and benefits. Considering this, the NZPP presents a viable and credible intervention for contributing to achieving Net Zero by 2050, at pace and scale, as a result of its unique characteristics, which include:

- Firstly, it promotes a place-based approach to decarbonisation that encourages community and local authority buy-in and participation.
- Secondly, it facilitates the delivery of multiple interventions in one place in order to scale up delivery, generate efficiencies and derive wider socio-economic benefits.
- Thirdly, it provides a blended funding model, which combines Government and outcome-seeking funding, with profit-seeking private investment.
 It also provides cost savings to the government, possibly reducing what could be a 70-80% subsidy, to around 35%, and
- Lastly, it generates revenues that can be used to fund the programme (repayable finance) and removes the need for individual residents and asset owners to personally fund the significant costs of decarbonisation, whilst providing an incentive to participate (reduced energy bills).

Close to 100 million tons of GHG emissions³ per year could be abated across the UK under a full 3Ci programme roll-out



³ As per economic modeling undertaken in separate outline business case



In addition to these key characteristics, the programme has broader co-objectives that could be achieved including: providing the implementation vehicle for a 'National Energy Efficiency Roll Out Programme', supporting a just transition and growth agenda, generating improved health and quality of life outcomes, and contributing to alleviating the cost-of-living crisis through mitigating fuel poverty and increasing disposable income.

The UK Government has a Net Zero policy and strategy to achieve Net Zero by 2050, highlighting its commitment to addressing climate change impacts. Whilst the policy and strategy are in place, gaps remain in relation to actual delivery, instruments and interventions available that will foster further progress in achieving the target. This is because of barriers that exist and continue to persist, such as capacity, coordination and affordability constraints. The NZPP and its supporting governance and management structures, provide unlocking features (such as scalability, replicability and invest-ability) that serve to capture private sector finance addressing gaps around delivery, instruments and interventions.

The programme would establish a number of economic benefits to the UK, including direct carbon emissions reductions and financial benefits (energy bill savings) from building retrofit as well as indirect benefits from active travel, waste and green interventions, which contribute to better physical and mental health outcomes, among others.

It proposes numerous Net Zero Neighbourhood (NZN) demonstrators based on a set of principles, including: minimising intermediaries between funders and revenue generation; minimising risk of ownership structure; flexibility to work with authorities of different readiness and capacity; primacy of local authorities in local decision making, primacy of place-based approach, and scalability.

Based on a proxy neighbourhood of circa 1300 properties across different tenure types and socio-economic conditions, each NZN will:

- Result in energy bill savings of £59.5m overall, of which, £26.5m will accrue to the resident of the property, £20.3m to the private investor and £12.7m will go towards the asset maintenance fund and operating cost.
- Generate additional benefits of £25.7m from carbon emission savings and £12.2m from other benefits such as air quality benefits, distributional uplift and jobs.

The key constraints in implementing a scaled programme are primarily related to the economic return profile of implementing deep building retrofit, heat degasification, and distributed renewable energy generation and storage. Traditional models have highlighted that the costs of implementation are high relative to the financial saving on the energy bill of the resident. However, the NZPP addresses this in two ways:

- reducing the up front implementation costs through procurement economies, implementation economies and system design economies via a place-based approach, and
- by aggregating the non-subsidy funding component across multiple dwellings, energy savings can be valued over the investment time horizon of institutional investors (30-50 years) instead of individual homes owners (5-10 years).

As a result, the NZPP provides cost savings to the Government by reducing the required subsidy from c.80% to around 35%; it removes the need for homeowners to fund the cost of retrofit and delivers a return to institutional investors.

Accelerating Activity

3Ci works with local and national government, industry and finance partners to create the market for Net Zero investment. Our work has demonstrated that convening these partners will stimulate innovation and new approaches to financing and accelerate implementation on the ground.

Individually we seek to support the aims and objectives of our partners in delivering their Net Zero ambitions. It is our collective view, borne out of consultation with local and national government, industry and financial institutions, that the following areas of activity provide the basis for the next phase of activity and investment:

- Further interrogation of the 3Ci programme through a **Full Business Case (FBC)** to establish the management arrangements for the successful delivery of the programme's outputs and activities.
- Design and establish a set of **demonstrators** in a series of locations where the programme principles and blended finance model could be effectively tested.
- Continued development of the **National Net Zero Project pipeline**, which currently includes over 900 projects from 50 local authorities. This would include, additional quality assurance work, the funding model for its ongoing development, operation and delviery, migration to an online portal and expansion to other local authorities across the UK.
- Knowledge development and dissemination through a series of publications aimed at accelerating innovation and sharing good practice, establishment of an annual regional investor event programme and the creation of a 'masters programme' to develop capacity and capability within local government.
- Commitment towards funding the establishment of a **National Technical Assistance Facility**, which in the first case would build on scoping work being undertaken by 3Ci but is required to understand the capabilities and capacity required, management and operational arrangements and the mechanism for funding it.

About 3Ci

The work of 3Ci is overseen by an Advisory Board which is chaired by Professor Greg Clark CBE.



Professor Greg Clark CBE:Chair, Connected Places Catapult,
Chair, 3Ci



Mayor Marvin Rees:Mayor of Bristol;
Chair of Core Cities UK



Mayor Sadiq Khan: Mayor of London; member of M10 Combined Authority Mayors



Mayor Philip Glanville:Mayor of Hackney



Keith Bottomley: Deputy Policy Chairman, City of London Corporation



Lucy Yu: Chief Executive, Centre for Net Zero



Cllr Susan Aitken: Leader of Glasgow City Council



Cllr John Merry: Deputy Mayor of Salford; Chair of Key Cities Group



Cllr Kevin Bentley: Leader Essex County Council; Chair, LGA People and Places Board

The Board is supported by an Executive team based at the Connected Places Catapult

Steve Turner, Director

Zoe Jennings, Head of Climate Investment
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Mariana Bui Beganton, Strategic Programmes Manager
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Helena Downey, Governance and Secretariat Officer
Chris Murray, Strategic Engagement Manager
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Department for Business, Energy & Industrial Strategy

Please get in touch

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