APPENDIX 2 East Dunbartonshire Climate Action Plan – funding net zero

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1. INTRODUCTION

In the UK, to reach net zero, the CCC predict a need for public and private investment in low-carbon projects to be around £50 billion per year by the late 2020s and remaining at that level until at least 2050 - see Figure 1.¹ The level of investment is currently around £10 billion per annum. The required climate expenditure is particularly high, when considering national and local government budgets. In 2020, the UK Gov spent £700 billion and local governments combined spent around £180 billion across all their services.²

There are a number of mechanisms available to pay for reaching net zero including general taxation, grants and subsidies, and private finance mechanisms. At the moment, the majority of funding for net zero in the UK is met via the public purse or through encouraging public action. Numerous grants and subsidies exist that can be accessed by members of the public or businesses to deliver on net zero, these predominantly focus on energy efficiency in the built environment, low carbon technology deployment, EV charging infrastructure, and renewable energy generation. However, to reach net zero, it is now acknowledged that mobilising private finance will be critical to delivering on goals.³

This report will identify the current grant funding options available to EDC, that could contribute to their corporate and area-wide ambitions, any future waves of funding that are expected or likely to be available in the near future, as well as highlighting some innovative finance options with a focus on mobilising private sector investment for delivering on EDC's net zero goals.

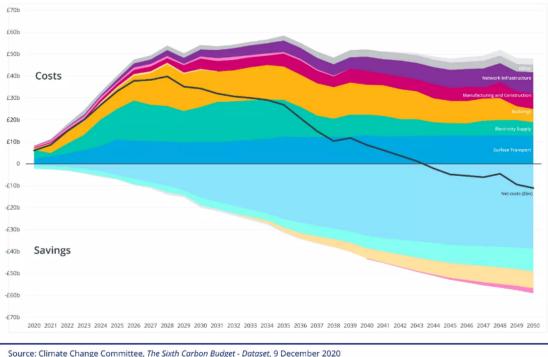


Figure 1: Capital and investment (CAPEX) and operational (OPEX) expenditure to get the UK to net zero by 2050⁴

Source: Climate Change Committee, *The Sixth Carbon Budget - Dataset*, 9 December 2020 Note: Darker colours represent CAPEX, lighter colours represent OPEX. Values are a three-year rolling average of in-year costs. "Other" includes: aviation, shipping, LULUCF, agriculture, removals, waste and F-gases. Costs of electricity are included in the energy supply sector, other low-carbon fuels such as hydrogen and bioenergy are included in the respective sectors which use those fuels.

2. GRANT FUNDING OPTIONS

Grant and subsidy funding schemes from public sources exist across many sectors that need to be aligned to net zero. Typically, these grant schemes offer a set amount of funding with a requirement for an element of match funding from the recipient. With grant funding, projects must often meet criteria set by the funding body

¹ Paying for net zero | Institute for Government

² City Investment Analysis Report (corecities.com)

³ BEIS Green Finance Strategy July 2019 (publishing.service.gov.uk)

⁴ Paying for net zero | Institute for Government

and can only be applied for by certain groups within delivery windows. With allotted bidding periods for funding, it is wise for local government bodies to develop a pipeline of projects that could be ready for grant funding windows in order to make the most of the eligible funding.

The below table lists the current funding available that EDC could apply for across several sectors in relation to net zero. These include housing, buildings, energy, heating, transport, waste, and land use as well as wider schemes that could be utilised for a variety of projects. Known future funding has also been listed.

Grant scheme guidance is released by the government or funding body prior to or within the funding application period. While it is possible to indicate the parameters of the funding requirements and details such as percentage match needed, it is not possible to predict how much funding would be available for EDC from that funding budget, if successful, and so this information cannot be included.

Table 1: existing funding streams to support net zero

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type Funding	of	Institutions apply	to	Further Funding Info	Funding open or future	Key dates	Link
A-W	Buildings	Local Energy Scotland - CARES	Community Heat Developmen t Fund	Community Heat Development Programme will work with eligible community organisations and groups of householders to help develop their ideas for locally-generated, low and zero carbon heat project ideas. Successful applicants will receive technical support to appraise the feasibility of their project.	Grants / subsidies		Community organisations, groups of householders		Not funding but free guidance on project development for community led decarbonisation of heat. Webinar with further into August 29th 2023	Open	Ongoing	https://localener gy.scot/funding/c ommunity-heat- development- programme/
A-W	Buildings	Local Energy Scotland - CARES	Let's Do Net Zero: Off Electricity Grid Communitie s Fund	The Let's Do Net Zero: Off Electricity Grid Communities Fund aims to decarbonise and future-proof the existing local independent electrical grids of those communities that are not connected to the national electricity grid.	Grants / subsidies		Applicants must b constituted non- profit distributing community organisations, including organisations with charitable status, that are established and operating across a geographically defined community ('local community organisations').	ed y	Development funding up to 100% grant available up to £25,000, capital funding up to 90% grant available with no limit (total of £3,000,000 available for 2023-2024)	Open	Ongoing	https://localener gy.scot/funding/l ets-do-net-zero- off-electricity- grid- communities- fund/
A-W	Buildings	Local Energy Scotland - CARES	Let's Do Net Zero: Community Buildings Fund	The Community Buildings Fund helps community organisations reduce their building energy costs and greenhouse gas emissions by installing renewable technologies such as heat pumps, batteries, and solar photovoltaic (PV) panels, along with energy efficiency measures.	Grants / subsidies		Charity, communit or faith group	ty	Grants of up to 80% of eligible costs up to a max of £80,000	Open	Until end of March 25	https://localener gy.scot/funding/l ets-do-net-zero- community- buildings-fund/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type o Funding	f Institu apply		to	Further Funding Info	Funding open or future	Key dates	Link
A-W	Buildings	Nationwide	Community Grants	Local organisation with a great housing solution, you can apply for a Community Grant of up to £60,000.	Grants / subsidies	comm societi with th Condu are als long a associ target and/or homel Partne conso	peratives and nunity benefit ties registered he Financial uct Authority so eligible, so as their ciated activitie housing r lessness. ership and ortia are also uraged to app	d o es	Shortlist applications our Community Board members, who'll discuss and vote on which projects receive funding in their local area.	Future	Annual fund, next round spring 2024	https://www.nati onwidecommunit ygrants.co.uk/ap ply-for-a- community-grant
Council	Buildings	Scottish Government	Scottish Central Government Energy Efficiency Scheme	A scheme to offer capital grant funding support to enable the delivery of heat decarbonisation and energy efficiency projects across the public sector.	Grants / subsidies	classif Scottis	c bodies - fied by ONS sh central nment	as	List of accepted measures across 'Renewables and low carbon heating', 'Energy conservation measures', 'Heating, cooling and ventilation'.	Open	Until 30 Sep 25	https://www.gov. scot/publications /scottish-central- government- energy- efficiency-grant- scheme-form- and- guidance/pages/ how-to-apply/
Council	Buildings	Salix Finance	Scotland Salix Recycling Fund	The Salix Recycling Fund, as part of the Scottish Public Sector Loan Scheme, is a ring-fenced fund held by the eligible public sector body, created with capital provided by Scottish Government through Salix, and equally matched by the public sector body. The Salix contribution is a long- term 100% interest-free repayable grant. Scottish local authorities can use their former Central Energy Efficiency Fund or their own capital as their match contribution. The financial savings achieved by the projects are reinvested in further eligible	Grants / subsidies combined with debt financing	author	sh local rities		Local Fund projects in Scotland can apply for a payback period of 12 years or less with a cost of no more than £305 per tonne of life- time carbon saved.	Open	Ongoing	https://www.salix finance.co.uk/re cycling- fund/scotland- recycling-fund

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
				projects year on year, hence the term 'Recycling Fund'.						
Both	Buildings	Salix Finance	Scottish Public Sector Energy Efficiency Loan Scheme	This scheme offers zero-interest loans to the public sector to facilitate energy efficiency improvement projects that result in financial and carbon savings and contribute towards achieving their net-zero aspirations. Funded by the Scottish Government, we have been working with the public sector in Scotland since 2008. Together with our clients Salix has invested over £75 million in energy efficiency projects in Scotland to date, which is forecasted to save the public sector more than £202 million over the lifetime of the projects.	Debt financing / loans	Scottish local authorities	Project criteria in Scotland offer up to a 12-year payback at a cost of £305 per tonne of carbon dioxide (£305/tCO2) over the lifetime of the project on all new loan agreements.	Open	Ongoing	https://www.salix finance.co.uk/loa ns/scotland- loans
Both	Buildings	Scottish Government	Social Housing Net Zero Heat Fund	Set up to support social landlords across Scotland to install zero emissions heating systems and energy efficiency measures across their existing stock. £200 million available between 2021-2026.	Grant / subsidies	Scottish RSLs, local authorities, ESCOs	Projects will be required to provide 50% match funding, of which 30% loan funding can be applied for. A minimum of 20% of project costs must be funded from the project's own capital or agreed private financing.	Open	Next applicati on check point 30 June 2023	-
A-W	Buildings	Scottish Government	SME Loan Fund	The SME Loan, funded by Scottish Government, offers small to medium enterprises based in Scotland loans of up to £100,000 for renewable or energy efficiency projects. You may be able to get £30,000 cashback. This is on a first come basis and while funding lasts. An SME loan can be used to	Debt financing / loans	Small to medium enterprises, not-for- profit organisations, and charities, exact requirements:	High level of PV applications meaning new PV applications will experience delays	Open	Ongoing	https://energy.ze rowastescotland. org.uk/SMELoan

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type c Funding	f Institutions to apply	• Further Funding Info	Funding open or future	Key dates	Link
				finance the installation of energy efficient systems, equipment or building fabric, including: heating, ventilation, and air conditioning upgrades; renewable heat technologies such as installing an air source heat pump; improving insulation, draught-proofing; double or secondary glazing; installing LED lighting; installing solar panels, wind turbines and wood- burning stoves.						
A-W	Buildings	Scottish Hydro Electric Community Trust	The Scottish Hydro Electric Community Trust Connection Grant	The Trust offers help to customers faced with high charges for an electricity connection within the Scottish Hydro-Electric Distribution area.	Grant / subsidies	Member of the local community	The supply must be for a connection to a domestic property or a community project. Domestic customers up to 50% of connection cost, community projects between 50-75%. It can be for a supply to new property or to upgrade an existing supply.	Open	Deadline 5 Sep 2023	https://www.she ct.org/how-to- apply.php#:~:tex t=For%20domes tic%20customer s%20a%20grant ,community%20 will%20influence %20the%20gran t_
A-W	Heating	UK Government	Green Gas Support Scheme	The UK Government Green Gas Support Scheme will run for four years from autumn 2021. The scheme will support biomethane injection in to the gas grid and is expected to contribute 21.6MtCO2e of carbon savings over its lifetime. The scheme is to be funded via a Green Gas Levy.	Other	Producer of biomethane, or plan on producing biomethane in the future, you may be eligible to apply for the GGSS.	Applicants must meet the eligibility criteria to be granted registration. Our functions also include validating and calculating quarterly participant's periodic data and support payments, monitoring and administering compliance with the requirements of the regulations.	Open	Open until at least FY25/26	https://www.ofge m.gov.uk/enviro nmental-and- social- schemes/green- gas-support- scheme-and- green-gas- levy/green-gas- support-scheme- and-green-gas- levy-applicants

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
Both	Heating	Scottish Government	Scotland's Heat Network Fund	The Scottish Government are making £300 million available over the next parliamentary session to support the development and rollout of zero emission heat networks across Scotland. This fair and open fund aims to stimulate commercial interest, investment and maximise Scotland's vast potential in the low carbon sector, whilst contributing to the positive progress on reducing Scotland's greenhouse gas emissions.	Grants / subsidies	Public and private sector	50% funding available	Open	Ongoing	https://www.gov. scot/publications /heat-network- fund-application- guidance/
Both	Heating	Scottish Government	District Heating Loan Fund	The Scottish Government's district heating loan fund is designed to help address the financial and technical barriers to district heating projects as commercial borrowing can be extremely expensive and difficult to obtain. Low interest loans available, can be of more than £1million	Debt financing / loans	Local authorities, registered social landlords, small and medium sized enterprises and energy services companies (ESCOs) with fewer than 250 employees.	Repayment terms of 10-15 years with typical interest rates of 3.5%	Open	Ongoing	https://energysa vingtrust.org.uk/ programme/distri ct-heating-loan- fund/
Both	Housing	UK Government	Energy Company Obligation (ECO)	The Energy Company Obligation (ECO) is a UK Government programme to deliver energy efficiency measures across Great Britain (GB). The legislation obliges eligible energy providers to deliver energy efficiency improvements to help fuel poor households to reduce the cost of heating their homes (HHCRO or the Help to Heat Cost Reduction Obligation). ECO is funded through a charge on the energy bills of all customers of regulated energy companies with over 250,000 customers.	Other	Delivered by energy providers based on targets and eligibility factors. LAs can apply to participate in ECO 4 Flex, which allows LAs to widen the criteria to their area's needs. Suppliers can deliver 50% of their target via Flex	Note: As of December 2020, BEIS report that 287,996 households in Scotland have received ECO finance (13.4% of total ECO measures in GB); an average of 118 measures per 1000 households (compared to 81 in Wales and 77 in England). The council with the highest reported number of ECO measures per household (number of measures per 1000 households) in GB is Comhairle nan Eilean Siar (Western Isles council).	Open	ECO4 - running until 31 Mar 26	https://www.ofge m.gov.uk/enviro nmental-and- social- schemes/energy -company- obligation-eco ECO4 Guidance Local Authority Administration (1).pdf

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type o Funding	of	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
A-W	Housing	UK Government	Warm Homes Discount (WHD)	Warm Home Discount is a GB wide scheme that provides an annual one-off discount on electricity bills paid by energy companies between September and March. Currently the Warm Home Discount is worth £150 and the costs of the discount are applied to all household bills.	Other		In Scotland you qualify if you get the Guarantee Credit element of Pension Credit or are on a low income and meet supplier's criteria	Letters will be sent out by electricity suppliers telling residents if they are eligible	Future	Opening Oct 2023	https://www.gov. uk/the-warm- home-discount- scheme
Both	Housing	Scottish Government and UK Government	Affordable Housing Supply Programme	The Affordable Housing Supply Programme (AHSP) comprises a range of funding mechanisms to enable affordable housing providers to deliver homes for social rent, mid-market rent, and low cost home ownership in communities across Scotland to support local authorities' Local Housing Strategies. According to SG, this is part of a policy to "Accelerate the introduction of zero emissions heating into new homes delivered by Registered Social Landlords and local authorities ahead of regulations coming into force which will require all new buildings, for which a building warrant is applied for from 2024, to use zero emissions heating (and cooling)."	Multiple instrument types combined		Local authorities, RSLs, ALMOs	Grant funding available on a streamlined process if projects deliver housing within baseline benchmarks.	Open	Until 2026	https://www.gov. scot/policies/mor e- homes/affordabl e-housing- supply/ https://www.gov. scot/publications /affordable- housing-supply- programme- ahsp-process- and-procedures- mhdgn-2023- 01/pages/fundin g-applications- and-appraisal- procedures/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
A-W	Housing	Scottish Government	Rural and Islands Housing Funds	Funds aim to increase the supply of affordable housing of all tenures in rural Scotland and contribute to our 50,000 affordable homes target.	Grants / subsidies combined with debt financing	Both funds are open to a wide range of applicants including: community organisations development trusts private landowners private developers traditional housing providers	Have a specific site or properties identified Have support of LA Be in an eligible rural area – levels 4, 5, and 6 of the six- fold urban/rural classification - EDC eligible Demonstrate evidence of housing pressure in the location identified Be prepared to undertake appropriate community engagement Be able to provide long term affordable housing	Open	Ongoing	https://www.gov. scot/policies/mor e-homes/rural- housing-fund/
A-W	Housing	Home Energy Scotland	Home Energy Scotland Grant and Loan	Up to 40% cashback for some eligible energy efficiency measures and 75% for certain renewable heating systems	Debt financing / loans	Householders in Scotland	If applying for energy efficiency improvements only, then the work must be recommended in an Energy Performance Certificate (EPC). If applying for renewables only, then the system must be recommended in an EPC or in a report issued by a Home Energy Scotland specialist advisor.	Open	Ongoing	https://www.hom eenergyscotland .org/find- funding-grants- and- loans/interest- free-loans/
A-W	Housing	Home Energy Scotland	Warmer Homes Scotland	The Scottish Government's Warmer Homes Scotland programme offers funding and support to households struggling to stay warm and keep on top of energy bills. Improvements offered will depend on a survey of the home	Grants / subsidies	Homeowners and private tenants	Be homeowners or the tenants of a private-sector landlord Live in the home as their main residence Have lived there for at least 6 months Live in home with an energy rating of 72 or lower and which is not more than 230 square metres in floor size Live in a home that meets the tolerable living standard set out in the Housing (Scotland) Act 2006	Future	Referral s opening again Oct 23	https://www.hom eenergyscotland .org/find- funding-grants- and- loans/warmer- homes-scotland/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
							Householders must be a recipient of a passport benefit			
A-W	Housing	Home Energy Scotland	Home Energy Scotland - Private Rented Sector Landlord Loan	Scottish Government funded loan that helps landlords improve the energy efficiency of their properties and meet minimum standards.	Debt financing / loans	Landlords registered on the Scottish Landlord Register	Property must be already built and have at least one tenant occupying the property, or will be occupying within 30 days of the loan being paid	Open	Ongoing	https://www.hom eenergyscotland .org/funding/priv ate-landlord- loans/
A-W	Land use	EU Horizon Europe	A Soil Deal for Europe	The main goal of the Mission 'A Soil Deal for Europe' is to establish 100 living labs and lighthouses to lead the transition towards healthy soils by 2030. reduce soil pollution and enhance restoration and improve soil structure to enhance soil biodiversity	Grants / subsidies	n/a	Project examples include, reduce desertification, conserve soil organic carbon stocks, stop soil sealing and increase re-use of urban soils	Open	Deadline 30 Sep 2023	https://ec.europa .eu/info/research -and- innovation/fundi ng/funding- opportunities/fun ding- programmes- and-open- calls/horizon- europe/eu- missions- horizon- europe/soil- health-and- food_en
A-W	Land use	Nature Scot	Peatland Action Project	Funding from Scottish Government primarily supports on-the-ground restoration activities. Building on the work undertaken to date now also looking to fund large-scale projects over multiple years, for which we will, where appropriate, make multi-year offers.	Grants / subsidies	n/a	Recommend to apply 12 weeks before your intended start date, this is to allow time to complete an assessment.	Open	Ongoing	https://www.natu re.scot/doc/peatl and-action- application-form- guidance- applicants-and- standard-terms- and-conditions- funding

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
A-W	Land use	Scottish Government	Forestry Grant Scheme	The scheme will support the creation of new woodlands – contributing towards the Scottish Government target of 10,000 hectares of new woodlands per year and the sustainable management of existing woodlands.	Grants / subsidies	Existing owners of woodland and future owners woodland, including local authorities	Need to register with Rural Payments and Services website	Open	Ongoing	https://forestry.g ov.scot/support- regulations/fores try-grants https://forestry.g ov.scot/publicati ons/108-the- forestry-grant- scheme-a-guide- to-grant-options- for-woodland- creation/viewdoc ument/108 https://forestry.g ov.scot/publicati ons/107-the- forestry-grant- scheme-a-guide- to-grant-options- for-existing- woodland- owners/viewdoc ument/107
A-W	Land use	The Woodland Trust	MOREhedg es	MOREhedges scheme includes saplings, advice and funding for new hedging projects of 100 metres or more. Can subsidise up to 75% of the cost to plant 100 metres or more of new hedging and allow a large tree to grow every six metres. Includes advice and guidance on planting.	Grants / subsidies	Any land owners or farmers	Projects must plant 100 – 250 metres of new hedgerow with at least 100m in a single run. They must also: connect directly with existing or newly planted woodland (at least 0.2Ha in England and Wales, or 0.1Ha in Scotland and Northern Ireland) or connect to woodland within 500m of the new hedge via established hedgerows.	Open	Open for applicati ons for hedging projects delivere d Nov 23-Mar 24	https://www.woo dlandtrust.org.uk /plant- trees/trees-for- landowners-and- farmers/morehe dges- application/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type o Funding		Institutions apply	to	Further Funding Info	Funding open or future	Key dates	Link
A-W	Land use	The Woodland Trust	MOREwood s	Support to plant more trees and support landowners and farmers. Where 500+ trees are planted as woodland on at least half a hectare, MOREwoods can help you design your woodland, create a bespoke species mix, supply the agreed trees and tree protection, and cover up to 75% of costs. MOREwoods is funded by Lloyds Bank and Bank of Scotland as part of a broader commitment to plant one million trees a year over the next decade	Grants / subsidies		Any land owners o farmers	r	The MOREwoods initiative is intended to create new habitat for wildlife across the UK. Projects must plant: at least 0.5 hectare (1.25 acres) of new woodland 1,000-1,600 trees per hectare The area can be made up of smaller blocks of at least 0.1ha in size, or shelterbelt strips that must be at least 4m wide. There is no maximum size limit, although larger projects may be advised of other grant schemes available. MOREwoods cannot fund trees for restocking in established woodland, or planting on areas of recently felled woodland.	Open	Ongoing	https://www.woo dlandtrust.org.uk /plant- trees/trees-for- landowners-and- farmers/morewo ods/
A-W	Land use	Big Lottery Fund: Community Fund	Scottish Land Fund	Supporting urban and rural communities to become more resilient and sustainable through the ownership and management of land and land assets.	Grants / subsidies		Voluntary or community organisations, publ sector organisatior		All projects must clearly demonstrate that their project will help their local community to achieve more sustainable economic, environmental and/or social development through ownership of land and buildings	Open	Ongoing	https://www.tnlc ommunityfund.or g.uk/funding/pro grammes/scottis h-land-fund
A-W	Land use	Rewilding Britain	Rewilding Innovation Fund	To help remove barriers to rewilding projects within Britain, whether they're at the early planning stages or want to move a project one step wilder.	Grants / subsidies	0 N (1 g	Based in Britain, ar of the Rewilding Network, rewilding (or about to) at sca – potentially as a group of landowne – and to our rewilding principles	ile rs	Funds are awarded to projects with potential for the highest impact for people and nature. Focus areas include: following community ownership models implementing community co- design developing the health benefits of rewilding, such as social prescribing	Future	Opening Autumn 2023	https://www.rewil dingbritain.org.u k/support- rewilding/the- rewilding- network/rewildin g-innovation- fund

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
A-W	Transport	Transport for Scotland via Energy Saving Trust	Switched on Taxis Loan	An interest-free loan for operators and owners or hackney cabs and private-hire taxi drivers to replace vehicles with EVs.	Debt financing / loans	Businesses and sole traders	Electric cars can get loan up to £30,000, electric vans £35,000. Both must be less than £50,000. Loan repayments will be over 6 years. Can make multiple applications up to set limit per business type. New stream launching summer 2023 for purchase of used electric taxis	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/switched- on-taxis-loan/
A-W	Transport	Transport for Scotland via Energy Saving Trust	Business Charge Point Funding	In order to support the uptake of electric vehicles across Scotland, Transport Scotland has made grant funding available to help organisations install electric vehicle (EV) charging infrastructure on their premises. Funding is currently available for charge points for sole use by occupiers, staff and visitors.	Grants / subsidies	SME and third- sector organisations	Typically cover a maximum of 50%-75% of installation costs but this depends on the type of business (50% for SME, 75% for third-sector). Actual funding per project will also depend on things like overall size, cost the project, and the number of electric vehicles currently operate.	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/business- charge-point- funding/
A-W	Transport	Transport for Scotland via Energy Saving Trust	Domestic charge point funding	As part of its Electric Vehicle Home Charge scheme, OZEV currently offers applicants £350 towards the cost of a home charge point and Energy Saving Trust will provide up to £250 further funding on top of this, with an additional £100 available for those in the most remote parts of Scotland	Grants / subsidies combined with debt financing	EV owners	Electric cars can get loan up to £30,000, electric vans £35,000. Both must be less than £50,000. Loan repayments will be over 6 years. Can make multiple applications up to set limit per business type. New stream launching summer 2023 for purchase of used	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/domestic- charge-point- funding/
Both	Transport	Transport for Scotland via Energy Saving Trust	Low Carbon Transport Business Loan	Interest-free loan for businesses wanting to purchase electric or hydrogen vehicle. Cars, mopeds, utility vehicles, vans, hearses, HGVs all suitable for loan with different levels of loan.	Debt financing / loans	Businesses and sole traders including non profit and charities. Local authorities and those funded by SG or its agencies are not automatically included and will be	Mopeds and motorcycles £10,000 Electric utility vehicles £15,000 Electric cars £30,000 must be less than £50,000 total value Electric vans and hearses £35,000 Hydrogen cars £50,000 Other hydrogen vehicles	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/low- <u>carbon-</u> transport- business-loan/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
						reviewed on a case- by-case basis	£75,000 Electric HGVs £75,000			
Both	Transport	Transport for Scotland via Energy Saving Trust	e-Bike loan	The popularity of eBikes, or pedal assisted electric bikes, has been growing year on year and TfS and Energy Saving Trust are supporting individuals to transition to more active travel. We offer an interest-free loan for individuals, repayable over four years.	Debt financing / loans	Individuals with principal residence in Scotland	Can receive funding for: Up to two eBikes, a maximum loan amount of £3,000 per bike One cargo or eCargo bike, a maximum loan amount of £6,000 per bike One adapted or electric adapted cycle (valued on case-by-case basis)	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/ebike- loan/
Both	Transport	Transport for Scotland via Energy Saving Trust	e-Bike Business Loan	Interest-free loan for businesses that want to purchase an e-bike, repayable over four years.	Debt financing / loans	Businesses and sole traders including non profit and charities. Local authorities and those funded by SG or its agencies are not automatically included and will be reviewed on a case- by-case basis	Can receive funding for: eBikes, a maximum loan amount of £3,000 per bike Cargo or eCargo bike, a maximum loan amount of £6,000 per bike Adapted or electric adapted cycle (valued on case-by-case basis)	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/ebike- business-loan/
Both	Transport	Transport for Scotland via Energy Saving Trust	Used EV Loan	TfS and Energy Saving Trust are supporting individuals to transition to more sustainable travel with the used EV interest free loan or individuals, repayable over five years.	Debt financing / loans	Individuals with principal residence in Scotland	Can receive funding for: Electric moped costing £5,000 or less are eligible for £5,000 Electric motorcycle costing £5,000 or less are eligible for £5,000 Electric car costing £30,000 or less are eligible for £30,000 Electric van costing £30,000 or less are eligible for £30,000 Hydrogen vehicle requests reviewed on case-by-case basis	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/used- electric-vehicle- loan/

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type Funding	of	Institutions to apply	Further Fund	ing Info	Funding open or future	Key dates	Link
A-W	Transport	Transport for Scotland via Energy Saving Trust	Plugged-In Communitie s Grant	The Plugged-in Communities Grant Fund provides funding for not-for-profit housing associations, housing cooperatives and community groups in Scotland allowing them to secure a zero-emission car club vehicle for use by their tenants and the wider community. Customers can rent a car for a specified number of hours, paying a small fraction of the price it would cost to rent out a petrol or diesel car.	Grants / subsidies		Established community transport organisation or operators with UK bank		vehicle, either or lease costs, nmunity trips and o £75,000 per excludes VAT ed non- and no match uired. r the following vehicles:	Open	Ongoing	Plugged-in Communities Grant Fund - Energy Saving Trust
Both	Transport	Office for Zero Emission Vehicles	On-street residential charge point scheme	The Office for Zero Emission Vehicles (OZEV) announced £15 million for on-street residential chargepoint scheme (ORCS) for this financial year (FY 23-24) to increase the availability of plug-in vehicle charging infrastructure for residents who do not have access to off-street parking. This remains open to all relevant local authorities within the UK.	Grants / subsidies		Only local authorities are eligible to apply for ORCS. Some local authorities are collecting resident requests as evidence of demand in their ORCS applications.	can also be ap	oped at a 7,500. Funding	Open	Ongoing	https://energysa vingtrust.org.uk/ grants-and- loans/on-street- residential- chargepoint- scheme/
Both	Transport	Office for Zero Emission Vehicles	Residential Landlord EV Chargepoint and Infrastructur e grants	To meet demand from tenants for access to EV charging facilities, these grants allow residential building owners to apply for grant to cover 75% of cost of purchase and installation of chargepoints and wider building and installation work that is needed to install multiple chargepoints.	Grants / subsidies		Residential landlords including private, social, including local authorities. Infrastructure grant only available for multiple-occupancy properties. Commercial landlords can also apply if they are the freeholder.	£350 or 75% c chargepoint so is lowest amou for maximum 2 residential and commercial. EV Infrastructu up to £30,000	ocket (whichever unt), can apply 200 grants for 1 100 for ure grant can get or 75% owest amount),	Open	Ongoing	https://www.gov. uk/electric- vehicle- chargepoint- grant- landlords/eligibili ty

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type of Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
Both	Transport	UKRI	Scottish Zero Emission Bus Fund (SCOTZEB)	The aim of the Scottish Zero Emission Bus Challenge Fund (ScotZEB) is to support swift, and significant, change in the bus market in favour of zero- emission technologies. This will support the Scottish Government's purpose to create sustainable and inclusive growth. In particular, the fund aims to support the National Outcomes relating to the Economy, the Environment, and Fair Work and Business.	Grants / subsidies combined with debt financing	Local authorities, financiers, bus and coach operators etc	Various value thresholds exist dependent on vehicle being replaced	Open	Deadline 15 Sep 2023	https://www.tran sport.gov.scot/p ublic- transport/buses/ scottish-zero- emission-bus- challenge-fund/
A-W	Transport	Transport for Scotland	Access Bikes	Pilot programme funded by Transport Scotland aiming to increase access to bikes and cycling for the disabled and those on low incomes.	Grants / subsidies	Local organisations working with low income individuals/groups	Minimum is 3 bikes and maximum is 20	Open	Until fund runs out latest 31 Jan 2024	https://www.cycli nguk.org/access bikes
A-W	Transport	Transport for Scotland	Smarter Choices, Smarter Places - Open Fund	The Smarter Choices, Smarter Places (SCSP) Open Fund aims to encourage people to change their everyday travel behaviours. Grants are available to encourage people to use public transport or other sustainable options such as buses and community car clubs for longer journeys; walking and cycling for short journeys, and home- working to replace daily commutes.	Grants / subsidies	Constituted groups, registered charities, statutory bodies, NfPs, education, regional transport partnerships, health and social care partnerships, health boards, business improvement districts. Local authorities cannot apply 'in certain instances' - have specified LA fund	Projects need to be match funded. Funding is available for 50% of a total project cost, although 25% of the total project cost can be in-kind contributions. The funding is for revenue activities only and not for capital works.	Open	Ongoing	https://www.path sforall.org.uk/op en- fund#:~:text=Th e%20Smarter% 20Choices%2C %20Smarter%2 0Places.public% 20transport%20f or%20longer%2 0journeys.
A-W	Transport	Transport for Scotland	Smarter Choices, Smarter Places - Local	Smarter Choices, Smarter Places programme supports local authorities in Scotland to encourage more active and sustainable travel choices.	Grants / subsidies	Local authorities	Allocated on population basis and requires match funding. Funding allocated to allow project implementation from April each year	Future	Annual fund	https://www.path sforall.org.uk/loc al-authority-fund

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type c Funding	Institutions to apply	Further Funding Info	Funding open or future	Key dates	Link
			Authority Fund							
A-W	Transport	Transport for Scotland	Smarter Choices, Smarter Places - Active Nation Fund	The Active Nation Fund is available to support public, third and community sector organisations. Grants are available to encourage people to walk, wheel and cycle for short journeys. The fund aims to help cut Scotland's carbon emissions and improve our air quality. It will also help reverse the trend towards sedentary lifestyles and will tackle health inequalities.	Grants / subsidies	Constituted groups, registered charities, statutory bodies, NfPs, education, regional transport partnerships, health and social care partnerships, health boards, business improvement districts. Local authorities can apply 'in certain instances'	Projects need to be match funded. Funding is available for 50% of a total project cost, although 25% of the total project cost can be in-kind contributions. The funding is for revenue activities only and not for capital works. Projects need to be working nationally or across two or more local authority areas.	Open	Closes 6 July 2023	https://www.path sforall.org.uk/act ive- travel/smarter- choices-smarter- places-1/active- nation-fund
A-W	All sectors	EU Horizon Europe	EU Horizon Europe	Horizon Europe is an EU research and innovation programme. It has a budget of €95.5 billion and runs until 2027.The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting, and implementing EU policies while tackling global challenges. Horizon Europe incorporates research and innovation missions, these include, adaptation to climate change, climate-neutral and smart cities, soil deal and restore our oceans and water.	Grants / subsidies	Horizon Europe is open to all types of organisations across Europe and the world. Some funding calls allow a single organisation to apply but many require a team of partner organisations to form a consortium. Usually, the consortium must be made up of at least 3 organisations from different countries.	Dependent on grant applied for	Open	Until 2027	https://ec.europa .eu/info/research -and- innovation/fundi ng/funding- opportunities/fun ding- programmes- and-open- calls/horizon- europe en

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type o Funding	of	Institutions apply	to	Further Funding Info	Funding open or future	Key dates	Link
A-W	All sectors	EU Horizon Europe	Adaptation to Climate Change	This mission aims to fight climate change by better understanding its causes, evolution, risks, impacts and opportunities, and by making the energy and transport sectors more climate and environment- friendly, more efficient and competitive, smarter, safer and more resilient. The expected impacts of this cluster are contained in the Horizon Europe strategic plan.	Grants / subsidies		Mission aims to ge a wide range of regions and communities on board and assist them, alongside th national adaptatior strategy, on their specific journey, whether they are ju starting out or are already taking step towards adaptation to climate risks. Other entities, such as research institutions or businesses may endorse the Charte to declare their support to the Mission.	eir n ust n h	Regions and communities that would like to sign the Mission Charter are requested to fill in the EU Survey. An assessment of the replies and evidence provided will gauge the commitment of the regions and communities to implement adaptation measures to climate change. Regions and communities that show past, ongoing or future initiatives or the willingness to consider adaptation initiatives will be invited to sign the Charter.	Open	Calls closing on various dates in Sep 2023	https://ec.europa .eu/info/research -and- innovation/fundi ng/funding- opportunities/fun ding- programmes- and-open- calls/horizon- europe/eu- missions- horizon- europe/adaptatio n-climate- change- including- societal- transformation_e n
A-W	All sectors	The Royal Foundation and The Global Alliance Founding Partners	Earthshot Prize	The Earthshot Prize is the most prestigious global environment prize in history, designed to incentivise change and help repair our planet over the next ten years. Each Earthshot is underpinned by scientifically agreed targets including the UN Sustainable Development Goals and other internationally recognised measures to help repair our planet and will be awarded 1 million pounds to fund an innovative idea.	Grants / subsidies		Nominations can b from any country o sector in the world and represent not to profit, foundation, investment, corporate, academic, governmental and community led organizations from around the world a united by a commo aim of supporting and scaling eco- solutions that can repair and regenerate the planet in this decisive decade.	for I	Five, one million-pound prizes will be awarded each year for the next 10 years, providing at least 50 solutions to the world's greatest environmental problems by 2030.	Future	Annual award	<u>https://earthshot</u> <u>prize.org/</u>

Funding For (A-W = area- wide)	Target sector	Funding Body	Funding Programme / Scheme	Description of funding	Type Funding	of	Institutions to apply	0	Further Funding Info	Funding open or future	Key dates	Link
A-W	All sectors	National Lottery	The Heritage Lottery Fund	Heritage can be anything from the past is valued and to be passed on to future generations, the fund will provide support to range of projects that connect people and communities to UK's heritage.	Grants / subsidies		Range of organisations either non-profit or private owners of heritage including local authorities, charities, community councils	i,	Three different levels of funding with different requirements (£3-10,000, £10- 250,000, £250,000-10million)	Open	Ongoing	https://www.herit agefund.org.uk/f unding/what-we- fund

3. BEYOND GRANT FUNDING – INNOVATIVE OPTIONS AND PRIVATE FINANCE

It has been acknowledged in the UK's new Green Finance Strategy that private finance needs to be mobilised to support the net zero transition. Cities Commission for Climate Investment (3Ci) support this, highlighting that grant funding and subsidies will not be enough to finance the challenge. Finance mechanisms that must be repaid and generate a return are more likely to scale sufficiently to meet the investment levels required. There is a particular importance for these green finance solutions to be delivered at the local and regional government level, since it is at this scale that many of the changes needed in the net zero transition must occur.

The following will detail a number of different non-grant funding finance solutions that could be accessed by EDC. These will range from familiar mechanisms, such as debt instruments and bonds, to newer, more innovative solutions to deliver net zero aligned projects. Throughout, sectors which are likely to be suitable and could benefit from these solutions will be highlighted, alongside examples of the mechanism in use by other UK councils, or international case studies where appropriate.

3.1 LOANS

Debt instruments are well understood mechanisms for raising finance for green projects and involve a local authority borrowing money to be repaid at a later date over a set period of time with interest. The borrowing comes from lenders such as banks or insurance institutions.

3.1.1 Public Works Loan Board (PWLB)

One of the main lenders to councils, accounting for around two thirds of local authority debt, is the Public Works Loan Board (PWLB) lending facility which, since 2020, has been operated by the UK Debt Management Office (DMO) on behalf of HM Treasury.⁵ The **PWLB loan** function offers a low interest loan which is secured against revenues of the local authority. A successful example of a DMO loan (PWLB at time of delivery) being utilised for green projects can be seen in the development of two solar farms in York and Hull for Warrington Borough Council in partnership with GRIDSERVE.⁶ Loan repayments are funded through the Power Purchase Agreement (PPA) between the solar farms and the Council.

3.1.2 UK Infrastructure Bank (UKIB)

UKIB was established in 2021 and is a 100% treasury-owned lending facility with an initial £4 billion available for local authorities to support projects that meet the UKs net zero targets or support regional and local economic growth. UKIB has five priority sectors of clean energy, waste, water, digital, and transport. UKIB offers more flexible interest payments than PWLB with long loan durations and financial terms that match project profiles making it an attractive option.

So far, £120million has been lent to LAs for projects. Three pilot projects with Bristol City Council, Transport for Greater Manchester, and West Yorkshire Combined Authority have benefitted delivering a range of projects including strategic heat networks, zero-emission fleet support, and mass transit programmes.

3.1.3 Sustainability linked loans (SLL)

SLLs are another form of loan which can be acquired from lenders, such as banks, which links the economic outcome of the loan with the borrower delivering on certain sustainability performance targets. As demonstrating a good track record in Environment, Social and Governance (ESG) becomes more important to lenders in the market, the sustainability element of the loan is expanding to include social requirements as well as environmental. SLLs or ESGLs (Environmental and Social Governance Loans) do not require the loan to be utilised on green projects but commonly they are. Examples of SLLs delivered in the UK have seen registered social landlords (RSLs), access bank and insurance loans for the delivery of energy efficient

⁵ Local Authority Lending (dmo.gov.uk)

⁶ UK's most advanced hybrid solar farm completed for Warrington council | GRIDSERVE

homes.⁷⁸ Tesco, the supermarket, has also signed an SLL providing it lower interest repayments should the supermarket perform against its climate KPIs.⁹

3.1.4 Suitable sectors

A PWLB loan is most commonly utilised for large infrastructure projects but as non-discretionary lenders, the DMO does not ask the purpose of a loan and so could be suitable for a range of sectors. SLL loans are similar in that terms will be agreed with the provider, but it is expected these will be non-discretionary in terms of the loans purpose. UKIB loans must fall within their five priority sectors.

3.2 BONDS

Another form of debt financing is bonds. A bond is essentially an IOU that can be traded on financial markets and is another form of revenue raising that is paid back over a long time with low interest.¹⁰ There is growing interest in climate bonds being issued as a means for Local Authorities to raise revenues for green projects. They can be delivered through various models including those backed by assets (Asset Backed Securitisations - ABS), where the collateral for the debt comes from streams of revenue collected by the issuer, such as taxes or fees, or project bonds whereby the investors will make returns from the assets related to the project, such as energy savings.

3.2.1 Municipal Loans Board Agency (UKMBA)

The UKMBA is a lending agency owned by local government for local government, with the Local Government Association (LGA) and 56 local authorities as its shareholders. UKMBA sells municipal bonds on the capital markets to raise funds that can be lent to local councils, with favourable lending terms around or below those of the PWLB making it a good option for capital net zero projects.

3.2.2 Local Climate Bonds (LCB) or green bonds

LCBs¹¹ issued by Local Authorities, are positioned as an inclusive way to raise revenue as they allow retail investors, including members of the local public, to be involved. Along with offering a long-term form of investment returns for the public, they also heighten the sense of community involvement when the climate projects the bond are raised for are delivered locally. Many Local Authorities have begun to issue LCBs, and the Green Finance Institute (GFI) is running a campaign to increase their prevalence in the UK. Signatories so far include Lewes District Council, Eastbourne District Council, Westminster City Council, Blaenau Gwent County Borough Council.¹² Upon signing the pledge, signatories must issue a LCB within 18 months.

There are numerous case studies of LCBs already being delivered as well, including:

- West Berkshire Council Community Municipal Bond
 - July 2020 the first LCB in the UK
 - o Delivered through Abundance Investment crowdfunding platform, regulated by FCS
 - Raised £1million from 543 investors, 22% of the funds raised from local people
 - Projects to be delivered with the fund include:
 - Solar PV installations on roofs of council offices, care facility, leisure centre and school
 - Urban tree planting
 - Active travel infrastructure projects
 - Energy efficiency upgrades for traffic signals and street lighting
 - In 2021, 1 in 6 investors donated their returns back to the council to further invest into a wildflower project
- Warrington Borough Council CMI

⁷ Social Housing - News - Bromford and NatWest sign debut SLL based on energy-efficient homes

⁸ Social Housing - News - Manchester housing association secures £60m loan in first deal with Scottish Widows

⁹ Sustainable Loan: Tesco's £2.5bn sustainability-linked loan | IFR (ifre.com)

¹⁰ Financing Green Ambitions | Local Government Association

¹¹ Often the terms climate bond and green bond are used interchangeably but it is understood that while climate bond relates to those projects that deliver measures to reduce carbon emissions or improve carbon sinks, green bonds may have wider environmental impacts, such as increasing biodiversity or combating air pollution. The term Community Municipal Investments can also refer to these local green and climate bonds.

¹² Local Climate Bonds (greenfinanceinstitute.co.uk)

- o August 2020
- Delivered through Abundance Investment crowdfunding platform
- $\circ \quad \text{Raised } \mathtt{£1m}$
- Revenues part funded the development of ground mounted solar system with battery storage
- Five-year term and will pay investors 1.2% twice per year
- Islington Council Greener Futures CMI
 - o October 2021
 - London's first CMI
 - Delivered through Abundance Investment crowdfunding platform
 - Raised £1million from 661 investors, with 21% of the funds raised by local people
 - \circ $\;$ Projects to be delivered with the fund include:
 - Traffic and mobility improvements to improve air quality outside of schools
 - Zero carbon recycling and waste collection efforts
 - EV charging points
 - LED and solar PV installations on public buildings
- The most recent example is Westminster City Council, which has launched Westminster Green Investment in partnership with Abundance Investment.
 - o March 2023
 - Aiming to raise £1million from first round
 - Residents can invest as little as £5 and will earn returns of 4.2% a year across 5 years paid 6 monthly
 - Westminster has a target of becoming a net zero Council by 2030 and a net zero city by 2040
 - Currently the City of Westminster has some of the highest carbon emissions in the country by local authority area and will need to reduce city-wide emissions by 91,000 tonnes a year to reach their 2040 goal
 - Projects on council buildings and community owned sites that will be supported by the fund will be
 - Installation of solar PV
 - Fabric upgrades
 - Heat pump installation

Abundance Investment, the ethical crowdsourcing platform, which is a large player in the LCB arena, involved with issuing all case study LCBs, believes up to £3 billion could be leveraged if all local authorities issued their own bonds.¹³

3.2.3 Suitable sectors

As with loans, bonds may be used for a range of purposes and could suit all sectors. With the local climate bonds, keeping retail investors updated on progress and where the money has been spent will be key to maintain community support for projects and this method of fund raising.

3.3 SPECIFIC FUNDS

Creating specific funds for climate action projects is another way to guarantee costs can be met for delivering measures on a long-term basis. This may involve creating a revolving fund, establishing and utilising a local offset fund or protecting energy efficiency savings.

3.3.1 Revolving green funds

Revolving green funds are separate funds from other expenditure accounts, with savings/outputs generated, from projects the money is spent on, then being reinvested into the fund to spend on other projects – it is a cyclical way of using savings from investments to continue to build and utilise funding for similar projects. As mentioned in the grant and funding section above, the Salix Recycling Fund is available to public organisations in Scotland to begin a revolving fund for energy efficiency projects. However, funds can be started without

¹³ West Berkshire Council launches 'UK's first' resident-funded green bond - edie

public input, including through investment from Council's directly, offsetting funds, or mobilising community investment.

In England, Hampshire County Council have created a Revolving Community Energy Fund as part of the Community Energy Pathways project. The aim of the fund is to provide up to £25,000 from the Council for investment in local community renewable energy projects.¹⁴ The Council expect the fund will stimulate significant community investment through share offers in the scheme and eventually become self-sustaining. Any ongoing profits will be returned to the revolving fund so that they can be utilised for additional community projects.

Another successful example is the London Green Fund (LGA). This was launched in 2009 with support from the European Regional Development Fund (ERDF), the Greater London Authority (GLA), the London Waste and Recycling Board (LWARB), and some private investment. The LGA provides funding for three revolving funds for waste projects, energy efficiency projects, and green social housing. The London Energy Efficiency Fund (LEEF) since its inception has invested nearly £90m of capital into energy projects, with all original capital spent by 2015 and continuing to recycle funds for a further 3 years.¹⁵ It is now known as Mayor of London's Energy Efficiency Fund (MEEF) and has £500m to invest in low carbon projects.

3.3.2 Offsetting / Insetting Funds

Another potential source of seed capital for a revolving fund is through the creation of offsetting or insetting funds. As described in section 2.8, offsetting occurs where a project or company, cannot reach set net zero targets and, to compensate for emissions which cannot be avoided, 'offset' the residual emissions by buying carbon credits for projects delivered offsite that would reduce the same amount of emissions, or through providing the monetary value per tonne of carbon still emitted by the project or company into a designated offsetting fund. Offsetting funds are often developed by Local Planning Authorities (LPA) and they collect income from developments which do not reach net zero through measures taken to reduce their operational impact at site. The price to offset the carbon can be set locally. This means local authorities should have an indication of their offset funds value based off approved planning applications, which can be helpful for project planning.

Examples of UK local authorities with carbon offsetting funds that link to planned development net zero differences include Greater London Authorities,²³ such as Camden Council¹⁶ and Lambeth Council¹⁷, and Bristol City Council are developing a Carbon Multiplier Fund as part of their Net Zero Investment Co-Innovation Lab.¹⁸

3.3.3 Insetting

Insetting can also provide source capital for a revolving fund, whereby financial savings from energy efficiency or low carbon technologies are reinvested into the same supply chain or sector where the emissions would have been emitted. EDC could reinvest monetary savings from energy efficiency or low carbon projects into additional projects within specific sectors and supply chains within the local area continually.

Both offsetting and insetting funds can be created and used without setting up as a revolving fund, however, by protecting the savings and profits made from the use of this funding, there can be a longer-term cash flow to continue delivering projects in their operations or local area.

3.3.4 Suitable sectors

As these funds are set up by the Council, they have the opportunity to determine the scope of the fund. If using grant funding to set up the fund, such as Salix Finance's Scottish Recycling Fund, there will likely to certain parameters that must be met which could restrict the sectors suitable.

¹⁴ County Council agrees £0.25 million investment fund for community energy projects | Hampshire County Council (hants.gov.uk)

¹⁵ <u>The London Energy Efficiency Fund is a £112m fund that provides competitively priced finance for energy efficiency retrofit and decentralised energy projects in existing private and public sector buildings | Amber (amberinfrastructure.com)</u>

¹⁶ Camden climate fund - Camden Council

¹⁷ <u>Minimising greenhouse gas emissions | Lambeth Council</u>

¹⁸ €1.5 million more secured for Bristol Climate Action

3.4 PUBLIC-PRIVATE-PARTNERSHIPS (PPPS)

Public-private-partnerships (PPPs) are collaborations between public and private sectors to achieve common goals. Typically, PPPs are long term, fixed contracts and are often used for large scale infrastructure projects required by governments and local authorities. Raising the funds for the project is the responsibility of the private company involved in the PPP, unless it is a co-funding arrangement where responsibility is shared.

PPPs have faced criticism as tools for delivering public projects as the profit seeking element of private businesses is seen to conflict with delivering the full scope of public benefits required of these projects. Importantly, in light of criticisms, the World Bank has created a toolkit for maximising the benefits of PPPs for climate change mitigation and adaptation projects.

Examples include Castle Park View, a low carbon regeneration project, delivered between Homes England, Bristol City Council, and M&G, Linkcity, and Bouygues UK, and Aberdeen Hydrogen Hub, a collaboration between Aberdeen City Council and bp.

3.4.1 Suitable sectors

PPPS are best suited to larger scale net-zero projects including electrification of transport networks, industrial cluster development, heat networks, and large-scale renewable energy generation projects.

4. ADDITIONAL INNOVATIVE SOLUTIONS

Alongside these tried-and-tested financing methods, other, often more innovative, solutions are being utilised to fund net zero projects in the UK and worldwide.

4.1 REVENUE RAISING

Revenue raising or saving activities for local authorities can take many forms. There are familiar mechanisms related to net zero projects, such as parking levies or congestion charges, that have been used across the UK, as well as emerging ways to boost an organisations finance.

Scheme	Description	UK Examples	Considerations
Scheme Congestion charges and Clean Air Zone (CAZ) charges	DescriptionFees are imposed on drivers for driving in specific areas during peak hours (congestion charges), and for driving vehicles that fail to meet specific emissions standards (clean air zone charges).CAZ have different progressive classes depending on which vehicles they affect. Class A includes buses, coaches, and private hire vehicles.	London: the seminal scheme – London introduced congestion charges in 2003 and the first clean air zone in 2008. This has evolved to include an ultra- low emission zone which will be expanding across all London Boroughs in August 2023. ¹⁹ During the ULEV's first year of operation in 2019,	Considerations While CAZ charges can reduce vehicle use in city centres and contribute to reducing air pollution, introducing charges should be considered alongside the cost-of-living crisis and the ability of local areas to manage the collection element of CAZ penalties.
		the central city districts. ²²	
Parking levies	Workplace parking levies (WPL) charge employers who provide workplace	Nottingham City Council introduced the WPL in 2012 to tackle traffic congestion. For	These charges directly affect the public and consideration should be

¹⁹ <u>Ultra Low Emission Zone - Transport for London (tfl.gov.uk)</u>

²² Bristol's Clean Air Zone

²⁰ ULEZ gross income rises to £226 million in 2022 (swlondoner.co.uk)

²¹ Introduction | A clean air zone for Birmingham | Birmingham City Council

	· · · · ·		
	parking. Employers can cover the charge themselves of pass all or part of the costs onto staff driving to work. Small employers with 10 or fewer workers are exempt.	2023-24 the annual charge is £522 per parking space (over 10 spaces). Scotland introduced legislation in March 2022 that will allow councils to introduce WPLs if they want to. Individual councils will be able to decide the terms and how much is charged. ²³	given to low-income households when developing policy.
Fleet loan out	To increase fleet utilisation and raise additional revenue, organisations and government offices can offer the option for public hire of their EV fleet.	Scottish Borders Council, in conjunction with E-Car Club, opened their EV fleet booking system to allow the public to use the fleet when it was not inuse by Council staff. In the first 6 months of running the scheme, 6,500 bookings were made on 55 vehicles. ²⁴	There may be special insurance requirements. Working in collaboration with existing car-share schemes or car-club could ease administration requirements.
Flexible energy services / Demand side response	Flexible energy systems involve a range of services that can help the grid balance energy demand and supply issues. This could involve selling locally generated energy back to the grid at times of low supply or restraining energy consumption from appliances or EV charging at times of high demand.	 The Home Response project was a trial of DSR solutions in London. Two use cases were investigated: Battery installations in households with existing solar PV installations. Smart controls and monitoring equipment for existing electrically heated hot water storage tanks on E7 tariffs in flats owned by housing associations or local authorities. Lambeth, Islington, Barking and Dagenham, Newham, and Southwark Councils took part. The study suggested for battery installation households could save £117/year and hot water storage tank households could save 50% of costs.²⁵ 	If councils do decide to take part through a 'demand side provider', they should ensure that the provider is signed up to the voluntary Flex Assure scheme. Flex Assure is a Code of Conduct and compliance scheme, which sets common standards for flexibility services providers (sometimes referred to as 'aggregators'). ²⁶
Scaled infrastructure investment – what do you really need?	The key to saving costs is understanding the requirement and looking at a wide range of solutions that could offer this. Infrastructure will be required to meet the scale of decarbonisation and electrification of a lot of systems, but could these be met by different types of infrastructure at lower costs?	Leeds City Council chose to provide home charging facilities to its employees that would be using their EV fleet. Instead of developing a large charging depot that would put constraint on the local grid and may require reinforcement, LCC chose to offer home charging to staff. This reduces and spreads out the demand on the grid as well as providing the benefit of reducing	Time should be built into project development to weigh up other options that could provide the same solution in a more efficient way. The Council should take time to understand their need across different sectors and the available options.

²³ Workplace Parking Licensing and the Transport (Scotland) Act | Transport Scotland

²⁴ City Investment Analysis Report (corecities.com)

²⁵ <u>hr_-_insights_report_-_final.pdf (london.gov.uk)</u>

²⁶ National Energy Category Strategy for Local Government 2022 – energising procurement | Local Government Association

		commuting costs for employees. ⁵⁴	
Group procurement	Group procurement typically creates larger projects that encourage cost efficiencies and savings. Rather than piecemeal change, 3Ci are keen for local authorities to develop projects at neighbourhood to regional levels that make projects easier to deliver and more likely to attract private investment.	Newcastle City Council is working with at least 15 schools across the city as part of their Net Zero Schools programme. The project will include solar PV installations, energy efficiency and low carbon measures, taking a whole buildings approach. The project has attracted private finance due to its scale and 30- year cash flows. Solar Together is another example of group procurement leading to savings. Individuals in participating council areas can register their interest for installing PV and/or battery onto their property. Once a phase of registrations is completed, a reverse auction is run for pre-approved installers and the lowest bid wins, setting the price for all installations.	Establishing the contractual relationship between all parties is key. Consortium or group procured contracts may still need to be managed at authority level and councils should ensure they have the appropriate resources to undertake this.

4.2 AS-A-SERVICE MODELS

As-a-service models are forms of long-term loans that allow for upfront financing for projects to be provided by a separate third party and the recipient will pay back the loan through additional charges on bills, such as utility, service, or tax bills.²⁷ This turns upfront capital, that can often be the main hindering factor in project delivery for local government, into a more manageable and easier to budget operational cost.²⁸

The options for 'as a service' are vast and can support many different types of net zero project.

Energy-as-a-service:: Energy as a service (Eaas) shifts from the traditional energy model of asset focused, centralised power generation and subsequent sale to passive end customers, to an end-to-end management of a customer's energy assets and services as part of a smarter energy system. Like paying for a phone or streaming subscription, energy is bundled into a customer-centric subscription or ongoing maintenance model.²⁹ Eaas has been delivered through network infrastructure companies paying for electrical infrastructure or upgrades in return for monthly service charges, or where energy supply is part of a product purchase, such as charging allowances with EV purchases.

Heat-as-a-service: This is already well-established in a traditional format within multi-occupancy dwellings that utilise heat networks or communal heating, such as commercial buildings with multiple tenants, flat blocks, and some social housing estates. Heat is provided by the building owners and can be charged to tenants as part of service packages. The ERDF funded Heat the Streets project in Truro, Cornwall has seen Kensa Utilities install shared loop ground source heat pumps in neighbourhoods with an annual connection fee paid rather than customers paying for the install. The concept is gaining traction with ClimateXChange recommending the Scottish government investigate Haas to support building decarbonisation³⁰, and Energy Systems Catapult has been researching Haas models with support from Baxi.³¹

²⁷ On-Bill Financing: Encouraging Energy Efficiency - Center for Climate and Energy Solutions (c2es.org)

²⁸ <u>City Investment Analysis Report (corecities.com)</u>

²⁹ deloitte-uk-energy-as-a-service-report-2019.pdf

³⁰ The potential of Heat as a Service as a route to decarbonisation for Scotland (climatexchange.org.uk)

³¹ Baxi & Bristol Energy Heat | Energy Systems Catapult

Transport-as-a-service: Familiar examples of this include car-leasing and the ever-growing network of scooter, e-bike, and cargo bike hire options across cities. Interestingly, the model can also be expanded to larger scale vehicles.

In some local areas, E-buses are starting to be provided using this model. Bus operators in Newport,³² Guildford,³³ London,³⁴ and Coventry⁴⁴ have all utilised the Zenobe Energy EV fleet offer which sees an endto-end service where Zenobe Energy provide 'new electric vehicles, on-board battery replacement, charging and grid infrastructure, a second life battery system at the depot, unique software to optimise charging, parts, and full operational support.'³⁵ In return, operators pay a monthly operational fee, or a charge based on mileage usage of the fleet.

Funding environmental services: The concept of economic valuation of ecosystem services has raised social and ethical debates regarding the appropriateness of allowing nature to be valued in a capitalist way, in contrast to acknowledging nature's intrinsic, social, and cultural values. While these debates are valid, there remains a significant gap in funding for ecological and environmental projects (the Financing Nature Recovery UK initiative estimates a gap of £5.6 billion annually),³⁶ and charging companies for the benefits they receive from ecosystem services may be one way to raise revenue.

The Wyre Catchment Natural Flood Management Project³⁷ is using this innovative model to provide part of the costs needed for nature-based improvements such as restoring wetlands, floodplains, and woodland that will store, slow, and intercept flood water and prevent peak flow in the Wyre catchment. The finance solution is being supported by the Natural Environment Investment Readiness Fund, which was set up to bring natural environment projects and private investment together.³⁸ Beneficiaries of the reduced flood risk, such as United Utilities, the Environment Agency and Flood Re will fund part of the improvements through an annual project fee from year one, which is conditional on the implementation and maintenance of the interventions by land managers. From year 6, outcomes-benefit payments will start once performance data has been captured and verified.

Retrofit as a service: Using the former successful examples of as-a-service models delivering decarbonisation and climate change projects, 3Ci suggests that local authorities and private companies should trial retrofit-as-a-service models to upscale delivery of deep-retrofit.

They envisage a scheme where:

- there are no upfront costs to asset owners
- the costs are attached to buildings rather than occupiers
- whole retrofit solutions delivered at scale
- there is a street-by-street approach
- economies of scale are delivered through joint procurement
- Returns are made through legal contracts with properties to capture net resident energy savings

3Ci cite the largescale need for retrofit across the UK domestic and non-domestic stock as an opportunity to create retrofit-as-a-service models that could span from more localised areas to joining multiple cities' requirements into a larger offering.

4.2.1 Suitable sectors

Service models can be applied to most sectors by turning upfront capital costs products, materials or construction works into operational costs.

³² Newport Transport orders electric Yutong fleet - CBW (cbwmagazine.com)

³³ Stagecoach to introduce Zenobē battery powered 'electric' buses on the Guildford Park & Ride - Zenobē (zenobe.com)

³⁴ Zenobē Energy featured in the Financial Times - Zenobē (zenobe.com)

³⁵ Zenobe announces deal for 130 electric buses for National Express in Coventry - Zenobē

³⁶ FINAL Financing UK Nature Recovery Final Report Overview ONLINE VERSION.pdf (cdn-website.com)

³⁷ The Wyre Catchment Natural Flood Management Project (greenfinanceinstitute.co.uk)

³⁸ <u>Natural Environment Investment Readiness Fund (greenfinanceinstitute.co.uk)</u>

5. CONCLUSIONS

The investment required to reach net zero is vast, however the cost of not meeting net zero will be much larger, not only financially but also socially and ecologically. To meet this vast requirement, there is a need to go beyond public grant funding and to incentivise large scale private investment into the net zero transition. To do this, long term returns on investment need to be established for net zero projects. The UK's 2023 Finance Strategy makes a core recommendation that local authorities should blend finance streams as much as possible utilising available funds, match funding, and mobilised private investment.

When developing business cases for those projects that are hard to finance, quantifying holistic co-benefits can increase the attractiveness for investment and will mean those important projects that do not have as high or obvious returns profiles can get funded.



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