Cornwall and Isles of Scilly[1] Local Area Energy Action Plan

Our future energy system will be cleaner, more affordable and resilient, retaining the social and economic benefits of the transition in the region.

Headline description		Mission summary
	Unlocking infrastructure, investment, skills, and supply chain to deliver the Cornwall and the Isles of Scilly Local Area Energy Plan.	Empowering local action to maximise the impact of the Plan, inspiring our residents and businesses to take action and working with partners, including national government, to inform infrastructure development, secure investment, develop local skills and supply chain for the benefit of the local economy.
1	**Cross-cutting actions and implementation steps**	
Action area		**Action / action description**
1.1	**Develop and operationalise CIoS LAEP delivery phase governance model and programme management structures, including monitoring/reporting functions, working groups and ongoing stakeholder engagement mechanisms.**	
1.1.1	CIoS LAEP governance structure and delivery working groups	Establish a CIoS LAEP delivery working group(s) and governance structure including relevant council departments, local businesses, and other local stakeholders (including the Cornwall Climate Commission), appointing points of contact for each party, agreeing terms of reference and a mechanism for administering meetings.
1.1.2	CIoS LAEP programme, monitoring and reporting	Develop and implement mechanisms to manage and monitor the delivery of the CIoS LAEP work programme, working across Cornwall Council, the Council of Isles of Scilly, local stakeholders (including via the Economic Forum Renewables Sector Sub-Group) and SWNZH (potential to develop aligned approach across SW to enable SWNZH to monitor/streamline any reporting to DESNZ). Identify and assign roles and responsibilities for delivery of CIoS LAEP actions, developing programme performance metrics and reporting, and aligning/integrating related work programmes across other areas of work including the Housing Decarbonisation Strategy, Transport

[1] Actions in this action plan relate to Cornwall & The Isles of Scilly or Cornwall only. Isles of Scilly specific actions have not been incorporated at this stage.

		Decarbonisation Plan/EV Infrastructure Strategy, Cornwall Council Climate Action Plan, Outcome Delivery Plans, and the Council of the Isles of Scilly Climate Change Action Plan.
1.1.3	CIoS LAEP resource requirements assessment and gap analysis	Assess resource requirements and gaps associated with delivering the CIoS LAEP.
1.1.4	CIoS LAEP programme prioritisation and project development	Progress CIoS LAEP programme and project development by: (i) Prioritising LAEP outline priority projects by assessing the largest carbon emission benefit across outline priority projects, against wider benefits (fuel poverty, air quality, economic development opportunities), and the risk profile and the role investors, facilitators and offtakers. (ii) Undertaking desktop feasibility studies for outline priority projects to understand intervention costs, potential benefits (including return on investment, where relevant), assess network impact and connection costs (iii) Assessing business model delivery routes (iv) Identifying funding sources and develop investment plans (v) Developing business cases (vi) Identifying and engaging stakeholders needed to deliver priority projects, including network operators, potential investors, local residents and community energy groups (vii) Undertake engineering design and update project costs
1.1.5	CIoS LAEP communications	Develop and implement CIoS LAEP Communication Strategy.
1.1.6	Social and environmental and equality and diversity	Conduct further impact assessments identified from CIoS LAEP Development and Decision Wheel and identify opportunities and risks. Implement recommendations to mitigate potential adverse impacts and maximise the benefits associated with the LAEP's delivery.
1.2	**Develop local net zero investment strategy and portfolio to secure the finance required to scale up local net zero delivery including review of public-private strategic partnership and devolution opportunities.**	
1.2.1	Political advocacy/ engagement: address funding gaps	Identify and close funding gaps to ensure continuity across the local net zero project lifecycle, including development expenditure (DEVEX) funding for scaling, commercialising, and deploying low-carbon energy innovations to support the decarbonisation of CIoS's energy system.
1.2.2	Financial options review/ strategic delivery partner(s)	Progress the options review to evaluate the potential for appointing strategic partner(s) to attract private financing and delivery capabilities to support local net zero programmes and optimise the allocation of public funding and resources.
1.2.3	Local Net Zero Investment Strategy/ Portfolio	Develop a Local Net Zero Investment Strategy and Portfolio based on the requirements identified in the CIoS LAEP, including assessing Cornwall and the Isles of Scilly's net zero investment needs, barriers (including investor risk), financial gaps, and potential enablers or solutions, by:

		(i) Identifying market opportunities for supply chain development to expedite the delivery of the plan. (ii) Creating a CIoS Net Zero Investment Strategy that outlines funding sources, investment opportunities, market incentives, and mechanisms. (iii) Evaluating and developing investable local net zero project propositions and highlighting investment opportunities.
1.2.4	Inward investment campaign	Explore opportunities to expand upon Cornwall Trade and Investment's Power for Cornwall campaign and continue promoting net zero inward investment opportunities.
1.2.5	Local authority net zero funding	Investigate potential opportunities to expand Cornwall Council's Renewable Energy Investment Fund to finance local net zero projects and support the delivery of the CIoS LAEP programme, including exploring funding sources from conventional capital markets, the Public Works Loans Board (PWLB), the National Wealth Fund (NWF), and innovative financing mechanisms such as Community and Municipal Investments (e.g., Local Climate Bonds).
1.2.6	Good Growth Plan: Net zero funding priorities	Continue engagement and efforts to ensure that future rounds of central government economic development funding make support available to fund the net-zero priorities outlined in the LAEP and the Cornwall Good Growth Plan 2024-35 (e.g., strategic network investments, scaling up innovative renewables, supporting rural decarbonisation, and establishing a Rural Net Zero Accelerator).
1.3	**Support local skills, workforce, and supply chain development to ensure CIoS has the capacity and capabilities to enable a transition to a local energy system.**	
1.3.1	Political advocacy/ engagement: local skills support offer via CIoS People Hub (net zero elements)	Seek investment from the next round of central government economic development funding to support a comprehensive people and skills offer that addresses the skills needs for CIoS's net zero energy transition, with targeted provisions through the CIoS People Hub and ongoing alignment of further education (FE) and higher education (HE) to future workforce supply for relevant sectors.
1.3.2	Net zero skills provision: engagement/ promote uptake	Seek to facilitate greater net zero skills engagement/uptake: (i) Between industry and education providers, to ensure that education curriculums meet the emerging skills needs of industry/ the net zero transition. Exploring any additional coordination/ resource requirements to facilitate enhanced engagement. (ii) Including through the provision of Careers, Education, Information, Advice and Guidance (CEIAG), which informs and inspires about future career opportunities in the net zero energy transition working through the CIoS People Hub and the Careers Hub. (iii) Leverage existing successful extracurricular STEM outreach activity (e.g., First Lego League, Greenpower) to maximise employer engagement with schools and colleges.

1.3.3	Promote an inclusive net zero workforce	Promote an inclusive net zero workforce by enhancing social value and inclusion expectations through: (i) Locally controlled funding agreements and procurement contracts for net zero projects and activities, and (ii) Engaging national funders (such as UKRI) and public investment bodies (like NWF) to incorporate inclusion into the ESG expectations of projects and companies in their funding agreements and procurement contracts (iii) Use council data to inform and support uptake of people who are 'Not in Education, Employment, or Training' (NEET) in CIoS (Noting that FLOW seabed leases have mandatory 10% targets).
1.3.4	Develop a net zero skills and workforce model	Develop a Local Net Zero Energy Skills Assessment/Model, exploring: (i) Lessons from Celtic Sea Power's approach to workforce and skills demand forecasting and provision assessment (i.e., FLOWmark) that could be broadly applicable to net zero workforce and skills development. (ii) Determine how net zero workforce and skills requirement assessments for individual sectors can be standardised and consolidated to create a comprehensive net zero workforce and skills assessment that informs engagement with providers. (iii) Identify opportunities to leverage insights from the CIoS LEP Green Skills Deep, the South West Net Zero Hub Retrofit Skills Report, the FSB Local Skills Improvement Plan (LSIP), and the projected demand identified in the CIoS LAEP and Housing Decarbonisation Strategy (which evaluated the achievable rate of retrofit given current local supply chain capacity). Use these insights to enhance workforce intelligence and identify opportunities for addressing capacity and skills gaps, thereby strengthening Cornwall and the Isles of Scilly's supply chain capabilities to meet the anticipated demand of the net zero transition. (iv) Explore what the cross-sector net-zero career pathways are in CIoS and whether strategic sectors such as FLOW and critical minerals can be used as a pull factor into the net-zero sector (i.e., FLOWmark career pathway model).
1.3.5	Local training provision: upskilling for net zero transition	Facilitate the development and raise awareness of CIoS's net-zero training offer to enable the upskilling of the local supply chain: (i) To help upskill the local workforce to meet the requirements of deploying, operating and maintaining renewable energy technologies and supporting energy infrastructure. (ii) Increasing the capabilities of the local workforce to ensure they have the skills and capacity necessary to specify, install and maintain low-carbon technologies (including specific focuses on training heat pump installers and retrofit coordinators) and energy-efficiency measures required to retrofit CIoS's existing housing and non-domestic building stock. (iii) Engaging businesses to encourage take-up of green skills training initiatives offered by FE providers.

		(iv) To help upskill the local workforce to meet the requirements of decarbonising transport (including electric vehicle maintenance and installing and maintaining charge points). (v) Explore options to extend support for successful SPF-funded green skills provision (The Future is Green)
1.3.6	Inform CIoS Workforce and Skills Strategy	Use the outputs of the CIoS LAEP to inform the work of the Cornwall and Isles of Scilly Workforce and Skills Board (WSB) to help address any net zero energy-related skills gaps through the CIoS Workforce and Skills Strategy. (i) Working through the sub-groups and associated forums: CIoS Economic Forum Renewable Energy sub-group (ii) Cornwall Construction Skills Advisory Panel (or replacement)
1.3.7	Local net zero supply chain	Continue engaging with local and regional suppliers to expand local supply opportunities related to CIoS's net zero transition, including through the re-procurement of Cornwall Council's Solar PV Framework.
1.3.8	Industrial acceleration	Explore use of targeted public procurement as an alternative, or in addition to grants to stimulate industrial consortia and scale ambition of local supply chain companies to grow to meet the needs of nationally significant infrastructure projects located in CIoS such as Celtic Sea FLOW, grid infrastructure upgrades, port development, and digital/comms services.
1.4	**Establish mechanisms for facilitating ongoing public participation in shaping the delivery of the CIoS LAEP and raising public awareness of the requirements, impact and opportunities associated with transitioning to a net zero local energy system.**	
1.4.1	Public participation and engagement	Establish mechanisms for ongoing public and community engagement, including: (i) Developing mechanisms to facilitate continuous public participation in the delivery and refresh of the CIoS LAEP, ensuring that citizens are actively involved in shaping and implementing the decarbonisation of CIoS's local energy system. (ii) Investigate the Residents Energy Panel's recommendation to hold additional sessions to inform decisions regarding the ongoing delivery and refresh of the CIoS LAEP, explore which entity or entities would be best suited to convene future panel sessions or administer alternative public engagement mechanisms to guide the delivery and updating of the CIoS LAEP programme.
1.4.2	Public awareness raising	Explore the benefits and opportunities of promoting a public awareness campaign based on the net-zero energy system transition requirements identified by CIoS LAEP, designed to raise awareness of: (i) The rationale and importance of CIoS transitioning to a net-zero local energy system (ii) The nature, scale and speed of change required to achieve the UK's and CIOS's net-zero targets (iii) The benefits/co-benefits for CIoS's communities and economy of locally deployed renewables (e.g., job creation) to develop public buy-in. Where possible, use/build on existing resources (e.g., those developed by the Geo-Resources Strategic Sector Strengthening project for communities that may host geothermal). (iv) The benefits of domestic retrofit among householders, landlords, community groups and partners (including available technologies, tariffs, incentives, energy efficiency, smart meters/controls, and behaviour change).

		(v) Education on the use and control of heat pumps, focusing on ensuring householders and particularly older and vulnerable people understand, are comfortable with and can effectively use new low-carbon technologies when they are deployed in their homes. (vi) Sustainable transport behaviours in line with the sustainable travel hierarchy. Raising awareness of the sustainable travel and public transport options available, including signposting to existing information (e.g., apps such as Traveline). (vii) Existing sources of information on decarbonisation and support available to the public.
1.5	**Continue working with National Grid Electricity Distribution (NGED), Wales and West Utilities (WWU), the National Energy System Operator (NESO) and other energy system stakeholders to align local area energy and network planning at strategic and operational levels, including feeding the outcomes of the CIoS LAEP into the development of the South West Regional Energy Strategic Plan (RESP).**	
1.5.1	Grid connections pipeline intelligence	Continue to improve local intelligence on project development/connections pipeline via monitoring the connections pipeline (via planning applications/approvals grid connection offers and timescales) and sector engagement, primarily via the CIoS Economic Forum Renewable Energy Sector sub-group and the FLOW grid working group, to inform the delivery of the LAEP.
1.5.2	Strategic engagement with NGED Distribution System Operator (DSO)	Continue to improve strategic collaboration with NGED's DSO function to support their forecasting/ planning for connecting new low-carbon technologies and developments, by: (i) Identifying emerging requirements associated with CIoS's net zero energy transition. (ii) Maintaining ongoing dialogue and engagements to provide early insight into local energy planning and inform NGED DSO's Distribution Future Energy Scenarios and strategic network investment process.
1.5.3	Strategic engagement with WWU	Continue to strengthen collaboration with WWU to support regional gas network decarbonisation planning, by: (i) Maintaining ongoing dialogue and engagement to provide early insight into resultant plans from LAEP actions. (ii) Facilitating planning for gas network decarbonisation, potential repurposing, and anticipated location of green gas (hydrogen and biomethane) demand and injection points.
1.5.4	Strategic engagement with NESO	Seek early engagement with NESO regarding the development of the South West England Regional Energy Strategic Plan (RESP) to feed in LAEP outputs to ensure that CIoS's local energy prioritises (including those related to FLOW, coordinated through the FLOW grid working group) are supported in the South West England RESP, including any requirements for anticipatory investments.
1.5.5	Operational engagement with NGED Distribution Network Operator (DNO)	Strengthen collaboration with NGED's DNO function at an operational and project level by gathering and sharing details of planned council-led and partners' project pipeline (generation and demand) to inform connections and resource planning. Maintain ongoing dialogue to provide early insight into connections requirements and ensure continuous communication during project delivery and seek to enable effective planning by collating information on low carbon installation pipelines at the neighbourhood level.

1.5.6	Political advocacy/ engagement: electricity grid upgrades	Continue to advocate for accelerated upgrades to the distribution and transmission grid and enable Cornwall's renewable energy resources to contribute to UK net zero power targets and unlock clean growth in Cornwall and the South West region.
Headline description		**Mission summary**
 Transitioning to renewable energy and alternative fuel supply		Enable industry, businesses, and communities to realise the opportunities presented by established and emerging technologies to power our economy and retain the benefits locally.
2	**Renewables and alternative fuels**	
Action Area		**Action / action description**
2.1	**Secure support to help transition CIoS's local energy system to net zero through the Government's flagship energy policy initiatives, including engaging with any opportunities associated with Great British (GB) Energy, Local Power Plan, and the National Wealth Fund.**	
2.1.1	Engage with GB Energy	Engage with and secure support from GB Energy to advance CIoS's renewable energy ambitions, maximising opportunities by: (i) Identifying opportunities to work with GB Energy to help deliver CIoS's renewable energy ambitions through securing support for innovative renewable technologies (e.g., floating offshore wind (FLOW) and geothermal) and scale-up the deployment of established renewable energy generation (e.g., onshore wind and solar). (ii) Engaging with stakeholders to understand the current and potential engagement of CIoS bodies and businesses, ensuring that CIoS develops a well-aligned and coordinated approach to capitalise on the opportunities presented by GB Energy. (iii) Engaging with central government, GB Energy, and, where relevant, the Crown Estate, advocating for opportunities for CIoS to benefit from GB Energy.
2.1.2	Engage with Local Power Plan	Engage with and secure support for releasing local renewables ambitions through the Local Power Plan initiative to maximise any opportunities for CIoS by:

		(i) Scoping potential opportunities to help realise CIoS's renewables ambitions through the Local Power Plan initiative (e.g., securing support for local/community and publicly owned energy). (ii) Engaging with stakeholders to seek to create CIoS's proposition to engage central government to secure support from the Local Power Plan. (iii) Engaging with central government to maximise the opportunities for CIoS to benefit from the Local Power Plan initiative.
2.1.3	Engage with National Wealth Fund	Engage with and secure support from the National Wealth Fund to help realise CIoS's Good Growth Plan priorities, maximising opportunities by: (i) Identifying potential avenues to achieve CIoS's Good Growth goals through the National Wealth Fund, including investments in green hydrogen, carbon capture and storage (CCUS), ports, or electric vehicle battery supply chains. (ii) Engaging stakeholders to develop relevant investment propositions for CIoS that align with the National Wealth Fund priorities. (iii) Ensuring coordinated and well-aligned engagement between CIoS and the National Wealth Fund (NWF).
2.2	**Identify and progress opportunities to promote the sustainable expansion of renewable energy capacity through integrating local energy and spatial planning policies to help achieve a net zero local energy system, including by supporting the safeguarding of sites for renewable energy, repowering of existing on-shore wind and ground-mount solar farms, and maximising the local social, environmental, and economic value from renewables developments.**	
2.2.1	Identify and seek to address planning constraints	Seek to identify and address potential and perceived planning constraints that could affect the net zero energy transition by: (i) Exploring avenues for engaging with central government to advocate for alleviating planning constraints related to renewable energy while maintaining alignment with other local priorities. (ii) Exploring opportunities to mitigate planning constraints impacting the net zero energy transition by addressing omissions and increasing clarity through future Local Plans and giving appropriate material weight to actions in any adopted LAEP that would support the direction of the NPPF. In addition, considering developing additional planning guidance documents (such as those for farmers wishing to install slurry covers), while ensuring that other local priorities are not unduly compromised. (iii) Identifying planning constraints that may impede progress toward Cornwall's 100% renewable electricity target.
2.2.2	Ground mount solar and onshore wind study	Progress the ground mount solar and on-shore wind study and explore how to transition to a net zero local energy system can be achieved, alongside achieving other priorities within a sustainable land-use framework, including exploring opportunities to integrate renewable energy with agricultural production (e.g., agrivoltaics) and nature recovery.

2.2.3	Repowering existing renewables nearing end of operational life	Help realise the repowering opportunity to increase renewable generation at existing wind/solar farm sites and secure enhanced local benefits for CIoS by: (i) Assessing the potential repowering opportunities and challenges to repowering (turbine availability/size, space limitations/buffer zones, grid capacity) and exploring opportunities to maximise the potential for and local benefits from repowered wind/solar farms. (ii) Explore opportunities to strengthen policy support with regard to repowering existing onshore wind and solar farms to maximise additional generation potential and secure improved local benefits, including through the exploration of the potential to safeguard the repowering of existing onshore wind sites (In Cornwall these would be sites outside the broad areas identified as suitable for onshore wind in the Climate Emergency Development Plan Document). Actions may include improving coverage of repowering in relevant local policies, enhancing existing safeguarding provisions for repowering, and, subject to awaiting any national guidance from central government, exploring ways to provide guidance to encourage increased local/community ownership, enhancing local benefits and local supply arrangements.
2.2.4	Safeguarding sites for renewables	Explore whether it would be beneficial to develop additional guidance with regard to safeguarding sites of renewable energy (including onshore wind sites within the broad areas identified as being suitable for onshore wind in the Cornwall Climate Emergency Development Plan Document), including by refreshing the assessment and mapping the areas potentially suitability to accommodate additional renewables deployments, exploring resource potential, constraints, grid capacity and economic viability.
2.2.5	Supporting for sustainable renewables deployment	Explore developing guidance and signposting resources to help maximise the social and environmental sustainability and local economic benefit for renewable energy developers, building on the CIoS Social and Environmental solution portfolio developed by Celtic Sea Power for FLOW (aligned with the Contracts for Difference Sustainable Industry Reward). Where relevant, aligning work between the CIoS LAEP and the CIoS Local Nature Recovery Strategy and Marine Nature Recovery Framework.

2.3	**Identify and progress opportunities to increase rooftop solar PV deployment across CIoS.**	
2.3.1	Accelerate rooftop solar deployment	Identify opportunities for supporting increased rooftop PV deployment by: (i) Investigating whether there are any opportunities to enhance the support given to rooftop solar in local planning policies / guidance. (ii) Seeking to identify opportunities to support consumers and businesses when procuring and installing rooftop solar. (iii) Investigating options for promoting solar collective purchase and community solar schemes. (iv) Exploring options for financing solar and battery offers. (v) Increasing the PV deployment on council-owned properties via the Cornwall Council Renewable Energy Investment Fund (or successor funding).
2.3.2	Solar supply chain sustainability	Provide procurement guidance outlining the necessary actions to address concerns about sustainability and the risks of modern slavery in the PV supply chain.
2.4	**Identify and progress opportunities to support community energy and local investment in renewable energy projects and maximise local benefit from commercial renewable energy projects across CIoS**	
2.4.1	Support Local Electricity Bill	Continue to advocate for the Local Electricity Bill (private members bill) and the "Licence Local" proposal.
2.4.2	Increase community energy/ local benefits from renewable energy projects	Work with partners to increase community energy projects and maximise local benefits from renewable energy initiatives across CIoS by: (i) Drawing on lessons from other local authorities who have worked with community energy organisations on renewable energy projects, including shared public and community ownership models, community ownership, and local supply/tariffs. (ii) Exploring opportunities to strengthen support for community energy projects in council policies. (iii) Engaging with communities to Explore strategic use of community benefit funds (e.g., for community hubs) to provide regular income for communities to invest in local net zero projects. (iv) Conducting a needs and gap analysis of existing community energy support, identifying additional resources needed to build capacity and assist community energy projects. In Cornwall this would include exploring whether to re-open or re-capitalise Cornwall Council's revolving loan fund for community renewables. (v) Exploring re-establishing the Cornwall community working group to foster collaboration between community energy groups and councils, facilitating knowledge exchange, and identifying energy project opportunities potentially suitable for accessing the Community Energy Fund or successor funding.

2.5	**Continue to work towards unlocking the opportunities associated with floating offshore wind (FLOW) in the Celtic Sea coming ashore in Cornwall, including the potential for local supply, industrial decarbonisation and Power-to-X.**	
2.5.1	FLOW and Marine Co-ordination & Operations Centre	Advocate for investment from the next round of central government economic development funding to develop a FLOW and marine coordination centre and an operation base, alongside market development investment for anchors and mooring, cables, and concrete foundations.
2.5.2	TwinHub	Demonstrate FLOW deployment in the Celtic Sea via the 32 MW TwinHub project deployed within the existing Wave Hub site, approximately 16 km off the coast of Hayle in Cornwall.
2.5.3	Maximise opportunities from FLOW in the Celtic Sea	Continue to support the development of floating offshore wind (FLOW) in the Celtic Sea by: (i) Continuing to make the case for and work towards landing the power generated by FLOW in the Celtic Sea in Cornwall, and the necessary electricity network upgrades to enable this, highlighting the potential for local supply, industrial decarbonisation and Power-to-X. (ii) Facilitating the growth of private sector capacity in the region to deliver offshore renewable energy at scale. (iii) Supporting port, infrastructure and grid upgrades ahead of industrial-scale renewable energy development. (iv) Collaborating with stakeholders on regional characterisation to minimise impacts and reduce consenting risks. Including work with: a. The Cornwall Marine and Coastal Partnership to continue to develop a joined-up approach to ensure that the requirements of coastal management and the planned development of floating offshore wind (FLOW) in the Celtic Sea are aligned and that the next iteration of the South West Marine Plan includes coverage of FLOW (including exploration of the potential for marine energy safeguarding in CIoS waters learning from the Welsh Government's proposals for the introduction of a Marine Planning Notice (MPN) identifying Strategic Resource Areas for Marine Planning). b. Work with local stakeholders to promote environmental and social value from FLOW.
2.6	**Continue work to unlock the CIoS's geothermal resource potential, fully utilise geothermal heat, and grow the sector, including by supporting experimental development and technological advances to drive down drilling costs and time, advocating for supportive policy, and seeking to identify funding for feasibility and financial instruments to reduce drilling and investor risk.**	
2.6.1	RD&I Centre of Excellence for Deep Geothermal and super-hot rock	Advocate for investment from the next round of central government economic development funding to establish an RD&I centre of excellence for deep geothermal and super-hot rock (SHR), similar to the US DoE FORGE project.
2.6.2	Geothermal co-investment	Advocate for investment from the next round of central government economic development funding for geothermal co-investment to ensure the effective utilisation of geothermal heat, including through heat-only wells and the co-production with lithium extraction or combined heat and power plants.

2.6.3	Geothermal feasibility funding and financial instruments	Seek to identify funding for feasibility and financial instruments to reduce geothermal drilling and investor risk.
2.6.4	Geothermal policy advocacy	Continue to advocate for supportive policy to help maximise geothermal's contribution to decarbonising CIoS's local energy system and grow the sector.
2.6.5	Geothermal drilling innovation	Seek to identify opportunities to support experimental development and technological advances that reduce the drilling cost and time required for geothermal wells in CIoS.
2.6.6	Geothermal heat research/policy view	Explore conducting Geothermal heat research/policy view exploring heat ownership issues/ lack of regulation, exploring best practice geothermal heat regulation from the European Union.
2.7	**Support the development of alternative fuel market opportunities by improving intelligence on CIoS's alternative fuel value chain and infrastructure needs along with advocating for policies that address barriers to increasing the local supply and use of biomethane and green hydrogen, along with the use of Hydrotreated vegetable oil (HVO) as a transitional fuel.**	
2.7.1	Hydrogen and biomethane opportunity mapping	Improve intelligence concerning alternative fuel value chain by: (i) Building on the Role of Hydrogen in Cornwall and the Isles of Scilly study: a. Update the analysis/opportunity mapping of potential sites for future Hydrogen Allocation Round (HAR) electrolysers and end users across CIoS based on the potential availability of subsidised green hydrogen. b. Identify opportunities for CIoS to engage with the Decentralised Alliance for South West Hydrogen (DASH) and the WWU South West Conceptual Plan (SWCP). (ii) Continuing to work with WWU and local stakeholders on understanding the role hydrogen will play in CIoS's energy transition and develop a better understanding of the actions required to facilitate the emergence of a green hydrogen value chain in CIoS (noting pending national decision on hydrogen use in heating expected in 2026). (iii) Identifying potential biomethane providers and users across CIoS by building on the analysis being conducted through the Biomethane Strategic Development Grant project funded by the South West Net Zero Hub (SWNZH) and Net Zero Methane Hub project by mapping the locations of potential producers/users and suitable sites for gas network injection and biomethane refuelling infrastructure. (iv) Explore opportunities for second-generation biogas upgrading (i.e., synthesis and methanation) and potential uses of methane/hydrogen as inter-seasonal/inter-annual storage mediums.

2.7.2	Hydrogen and biomethane opportunity development	Develop alternative fuel market opportunities by: (i) Continuing work with WWU and local stakeholders to explore hydrogen pilot/demonstration opportunities and improve intelligence on emerging opportunities for: - Hydrogen usage (e.g. industrial/extractive industries, hard-to-decarbonise transport sectors including maritime, aviation and heavy/specialist vehicles) - Potential green hydrogen production in CIoS and the Celtic Sea (including opportunities for CIoS activities under the GW-SHIFT project, applications for Network Innovation Allowance (NIA) and the Strategic Innovation Fund (SIF) innovation projects, as well as any emerging Hydrogen Allocation Round applications/ projects and opportunities to build on the Wales-based Celtic Sea Power led Milford Haven: Hydrogen Kingdom (MH:HK) project. (ii) Exploring piloting using biomethane (captured from slurry management) for domestic heating where electrification is challenging/expensive, such as a rural park homes site. The pilot would seek to identify regulatory barriers and market incentives to keep operational costs affordable, including insetting to pay for the slurry cover and reducing the need for high returns to pay for CAPEX.
2.7.3	HVO refuelling	Progress existing plans for HVO use as a transitional fuel by public and private fleet/plant operators and explore opportunities to expand HVO refuelling availability for other potential users, including exploration of the potential for collective purchase of HVO and its applicability in hard-to-decarbonise sectors.
2.7.4	Support the Future Ready Fuel campaign	Support the Future Ready Fuel campaign and call on the government to support the use of HVO as a drop-in transition fuel in off-gas non-domestic and domestic properties by: (i) Aligning the duty charged on HVO with kerosene by reducing the duty on HVO to zero when used in heating. (ii) Implementing a renewable fuel incentive system similar to the one already in place for the road transport sector.
2.8	**Other actions**	
2.8.1	Resident Energy Panel recommendation on Small Modular Reactors (SMRs)	Explore the recommendation from the Residents Energy Panel that nuclear energy, particularly small modular reactors (SMRs), should be explored as a potential source of net zero electricity generation for Cornwall. Including reviewing developments in SMR technology, exploring whether developers could deploy SMRs in Cornwall and public opinion on the technology.

Headline description		Mission summary
	Decarbonisation of buildings, heat and cooling demand	Tackle fuel poverty through working with government, homeowners and housing providers to improve household energy efficiency in new and existing properties, unlock the deployment of low carbon heating and cooling technologies and maximising opportunities for heat networks where appropriate.
3	**Decarbonising buildings, heat and cooling demand**	
Action Area		**Action / action description**
3.1	**Work to tackle fuel poverty and ensure the interests of fuel-poor households and other vulnerable groups are protected during the transition of CIoS's local energy system to net zero.**	
3.1.1	Political advocacy/ engagement: electricity-to-gas price ratio	Advocate for rebalancing energy costs (such as the electricity-to-gas price ratio) to support decarbonisation through electrification while ensuring that fuel-poor and vulnerable households in CIoS are not adversely affected by the transition to electric heating, including for social tariffs.
3.1.2	Political advocacy/ engagement: clean heat transition	Advocate for a fair distribution of costs associated with decarbonising heat and retrofitting homes. Advocate for the allocation of sufficient grant funding and support to meet the needs of fuel-poor and vulnerable households and to ensure that national housing decarbonisation policies are inclusive and equitable and promote the wellbeing of residents (including consumer protection explorations around heat networks and the decommissioning of gas infrastructure).
3.2	**Promote the uptake of low-carbon heating, energy efficiency measures, and domestic renewable energy to help decarbonise CIoS's housing stock, reduce energy costs, and make homes healthier places to live.**	
3.2.1	Housing decarbonisation programme management	Continue to improve housing decarbonisation programme management mechanisms, including the programme reporting functions and post-installation monitoring, evaluation and progress reporting.

3.2.2	Housing decarbonisation/ retrofit partnership working/ working group	Improve housing decarbonisation partnership working / working group focused on: (i) Exploring opportunities for joint-working / partnership delivery (including potential for collective purchasing). (ii) Exploring funding solutions to scale up retrofit/low carbon heat delivery (including blended funding and developing proposals for long-term single-pot retrofit grant funding for CIoS) and develop investment propositions/ feed into the development of the Local Net Zero Investment Portfolio. (iii) Sharing of retrofit/new-build pipeline planning, experience, data/reporting, expected skills and supply chain requirements (including low carbon technology and new-build pipeline to share with NGED, any plans impacting gas network to share with WWU). (iv) Exploring opportunities to engage skills providers to help CIoS develop the necessary workforce to meet expected demand. (v) Exploring opportunities to engage with the local supply chain to work with them to build their capacity/ capabilities to meet the expected demands of decarbonising CIoS's housing stock. (vi) Developing a better understanding of CIoS's collective housing decarbonisation challenges/ needs to support the development of well-aligned and coordinated messaging to inform CIoS's engagement with government. (vii) Ensuring that opportunities to help tackle energy and health inequalities are addressed in CIoS's housing decarbonisation programmes (including alignment with the work of CIoS Winter Wellbeing Partnership).
3.2.3	Domestic retrofit funding and financing	Create a supportive investment environment to maximise funding opportunities for CIoS, including grants, loans, incentives and private finance by: (i) Exploring initiatives to drive down installation costs for low carbon technologies and energy efficiency measures. (ii) Identifying, assessing and developing CIoS's domestic retrofit portfolio/ investment proposition(s), and exploring opportunities to blend funding.
3.2.4	Political advocacy/ engagement: Good Growth investment into domestic retrofit	Advocate for central government investment to provide long-term funding to facilitate retrofitting the existing housing building stock across CIoS, including flexible top-up funding to enable blended funding solutions and supplement the grant funding allocated to CIoS through the Warm Homes Plan.
3.2.5	Political advocacy/ engagement: support for rural/ off-gas homes	Advocate for the allocation of sufficient grant support to meet the decarbonisation needs of CIoS's off-gas priorities and to ensure that the delivery strategy for the Warm Homes Plan is sufficiently rural-proofed.
3.2.6	Local housing decarbonisation supply chain readiness assessment	Assess the readiness of CIoS's existing supply chain for the scale of retrofit identified in the LAEP (and Cornwall Housing Decarbonisation Strategy) and identify the actions required to increase local capacity and capabilities.

3.2.7	Local housing decarbonisation implementation plan	Develop a Housing Decarbonisation Implementation Plan for all housing tenures exploring the requirements of different house archetypes/ householder typologies and developing targeted approaches to meet these (in Cornwall this should build on the Cornwall Housing Decarbonisation Strategy roadmap).
3.2.8	Council-owned homes retrofit plan	Develop plans for retrofitting CIoS's council homes that highlight the importance of decarbonising heat and improving energy efficiency by setting long-term targets, and seek the investment required to enable an accelerated programme of improvement works.
3.2.9	Local Retrofit Hub/ advice centre for consumers and supply chain	Provide a central domestic retrofit advice centre or 'Retrofit Hub' as a 'one-stop shop'/'single front door' to provide information and support to transition to low-carbon heating systems, improve the energy efficiency of CIoS's housing stock and promote the installation of renewable energy generation, tackle misinformation and support households' access to lower-cost energy supplies through tariff advice. The Retrofit Hub should be designed to provide information and advice to consumers and CIoS's supply chain (e.g. covering topics including industry accreditation/qualifications, government policy/incentives, energy efficiency measures, and low carbon technology options, including effective use of heat pumps and smart heating controls) and to build on the SWNZH-funded Local Energy Advice Demonstrator Programme's Far South West Retrofit Consortium project and the lottery-funded Cornwall Low Carbon Energy Advice Network project.
3.2.10	Heat pump and fabric retrofit quality assurance/ approved installer scheme	Improve heat pump and fabric retrofit quality assurance by working with installers and manufacturers to close the feedback loop on heat pumps and fabric retrofit to ensure CIoS has adequate support services and an approved installer scheme. Establishing a local quality assurance scheme is intended to help identify reliable local suppliers' homeowners can access, support the delivery of retrofit programmes, and reduce barriers to entry for local suppliers.
3.2.11	Coordinated approach to domestic retrofit programmes	Develop a coordinated approach to domestic retrofit programme delivery in CIoS by: (i) Working with local partners and SWNZH to determine how to deliver a coordinated, area-based approach to heat decarbonisation, fabric retrofit and solar deployment on CIoS's housing stock (exploring governance, resource, finance and policy). (ii) Actively identifying, targeting, and connecting funding sources with eligible homes/ householders and prioritising funding to those in greatest need. Where possible, bring programmes together to coordinate demand and deliver place-based retrofit across all tenures. (iii) Exploring opportunities to work with partners to scale up the installation of basic insulation measures (i.e., loft, cavity wall and underfloor insulation) to improve homes in CIoS, supported by the Great British Insulation Scheme (GBIS)/ successor schemes, and seek to identify additional top-up funding to meet ineligible costs and address barriers to uptake (e.g., loft clearances).

3.2.12	Scaling-up Council-led domestic retrofit programme delivery	Continue to deliver and scale up council-led domestic retrofit programmes and coordinate with other retrofit programmes being planned/delivered across CIoS by: (i) Seeking to work with partners/stakeholders to align domestic retrofit programmes across CIoS to coordinate demand and, where possible, deliver area-based retrofit across all tenures. (ii) Building on Cornwall Council's existing retrofit projects focused on addressing social housing and fuel poverty (e.g. building on Home Upgrade Grant (HUG), Social Housing Decarbonisation Fund (SHDF) and Energy Company Obligation Local Authority Flexible Eligibility) to scale up retrofit delivery across CIoS, helping promote affordable warmth, and address energy and health inequalities under the Warm Homes Plan (Warm Homes: Local Grant and Social Housing Fund) as part of the council's commitment to supporting a just net zero transition.
3.2.13	Winter Wellbeing support	Explore what financial and practical support can be provided to householders who are not eligible for existing schemes/ programmes working alongside the CIoS Winter Wellbeing Partnership to help address energy and health inequalities whilst supporting the decarbonisation of homes in CIoS (i.e., no-one left behind principle).
3.2.14	Rural household renewable heating	Explore opportunities to support rural households across all tenures in transitioning to renewable heating systems with a particular focus on deploying heat pumps in off-gas areas (i.e., replacing oil boilers, LPG, solid fuel and direct electric heating).
3.2.15	Heat pump ready households	Identify opportunities to engage with and support heat pump-ready households in transitioning to heat pumps when replacing their current heating system or at other natural intervention points.
3.2.16	Local policy for domestic renewables/ energy efficiency (general)	Review existing policies to identify any opportunities for policy amendments that may help facilitate the installation of renewable energy/low carbon technologies. Support energy efficiency practices by ensuring councils have aligned net zero policies, strategies and/or guidance that both promote housing decarbonisation and help to address energy and health inequalities.
3.2.17	Local policy for domestic renewables/ energy efficiency (spatial planning)	Explore opportunities to alleviate perceived planning constraints that impact the deployment of retrofit measures (e.g., rooftop PV, fabric upgrades) on historic/listed buildings and in conservation areas. This includes considering local conservation area management plans and town and parish council/neighbourhood plans, without unduly affecting other local priorities.
3.2.18	Building regulatory compliance	Work to ensure building regulation compliance where regulation exists to support decarbonisation (i.e., MEES), engaging with owners of non-compliant properties to drive improvements and compliance.
3.2.19	Retrofit options for hard-to-treat/ system build properties	Continue working to improve understanding, assess the viability of, and develop solutions to enable the retrofitting of CIoS's system-build and other hard-to-treat properties, building on the work carried out in the Whole House Retrofit Innovation and Social Housing Decarbonisation Fund Demonstrator projects.

3.2.20	Home showcases and case studies to demonstrate heat decarbonisation	Explore developing local showcase home retrofit and new-build case studies to demonstrate decarbonised heat/ energy efficiency upgrades, help dispel myths, and grow consumer confidence. and share best practice.
3.2.21	Net zero new-build homes and domestic retrofit innovation	Explore opportunities to support energy and building materials innovations with the potential to support the decarbonisation of CIoS's homes and/or help address energy and health inequalities.
3.3	**Identify and progress opportunities to collaborate with partners on heat zoning and advance heat network planning and delivery, including delivering green heat networks and the potential for shared ground loop arrays.**	
3.3.1	Local heat plan development: heat zoning assessment	Explore commissioning an analysis to enable heat zoning of areas within Cornwall, including exploration of waste heat source opportunities, building on the analysis conducted for the SWNZH-funded The Role of Waste Heat in the South West study and the Mine Water Resources in Cornwall study. This analysis would involve exploration of heat loads and mapping of what low-carbon heat technologies may be appropriate for new and existing buildings in particular areas and build on any existing heat zoning assessments conducted for the CIoS LAEP and DESNZ's heat network zoning work.
3.3.2	Local heat plan development: heat zoning policy	Explore developing a local heat zoning policy framework covering existing areas and any new development areas/housing allocations (including explorations of geothermal resource and waste heat potential, any heat network zones identified, the potential for shared ground loop arrays, areas where hydrogen or biomethane supplies may be available, and areas where air source heat pumps will likely dominate) to help with the identification of priority renewable heat projects both in off-gas areas and any requirements to plan for area-based gas network disconnections.
3.3.3	Local heat plan project development (project scoping and feasibility): Geothermal heat opportunity mapping	Explore opportunities to work with partners to assess/map opportunities, carry out feasibility, and seek to develop any opportunities identified for centralised heat networks, including exploration of potential deep geothermal (heat only, combined heat and power, co-production with lithium, and geothermal-heat pump augmentation), mine water heat sources, opportunities for co-extraction of heat with lithium, and waste heat sources.
3.3.4	Local heat plan project development (project scoping and feasibility): shared ground loops	Explore opportunities to work with partners to assess/map potential, conduct feasibility studies, and seek funding to progress projects for shared ground loops in areas identified as suitable in the heat zoning assessment.
3.3.5	Local heat plan project development (project scoping and feasibility) and delivery: Heat networks	Work with Treveth and other partners/stakeholders to progress the delivery of renewable heat networks, including: (i) A deep geothermal heat network for the Langarth Garden Village development to deliver ~50GWh of clean heat to up to 3,800 new homes and non-domestic buildings by 2050. (ii) By assessing the feasibility of, developing, and delivering future strategic heat opportunities identified in the CIoS LAEP and/or from existing and future heat network opportunity assessments (e.g., Truro, St Austell) and any opportunities for retrofitting existing heat networks.

3.4	**Identify and progress opportunities to implement net-zero building standards in CIoS through policy and regulation enhancements.**	
3.4.1	Political advocacy/ engagement: strengthening Building Regulations	Advocate for the strengthening of Building Regulations to ensure that all new buildings are constructed to achieve a net-zero operational energy standard, either by enhancing the proposed Future Homes and Buildings Standard 2025 or by alternative means for updating the energy efficiency requirements for new homes and non-domestic buildings as outlined in Part L (Conservation of Fuel and Power) and Part 6 of the Building Regulations 2010.
3.4.2	Local planning policy: operational energy provisions for new build	Explore opportunities to strengthen the existing net zero operational energy policy standards (set out in the Cornwall Council Climate Emergency Development Plan Document Policy SEC1) by: (i) Introducing specific net zero provisions which can be directly applied to residential annexes, non-residential buildings under 1000m², and non-residential buildings over 1000m² that are not covered by the BREEAM standard. (ii) Assessing whether the current provisions for new-build residential developments should be enhanced based on lessons learned and industry advances since the policy's implementation.
3.4.3	Local planning policy: whole life/ embodied carbon polices	Evaluate the potential to address whole-life/ embodied carbon explorations through future Local Plans, including the relationship between operational energy and embodied carbon, the status of embodied carbon quantification (metrics and methodologies), the applicability of emerging standards (e.g. Net Zero Carbon Building Standard pilot), and the potential carbon implications of demolition of existing buildings and opportunities to promote design for sustainable deconstruction and end-of-life of new builds.
3.5	**Identify and progress opportunities to encourage the uptake of low-carbon cooling solutions in CIoS's buildings.**	
3.5.1	Investigate CIoS's projected low carbon cooling requirements and impacts	Build on the analysis conducted into the decarbonising cooling in UK homes through the Flex-Cool-Store project to improve understanding of CIoS's future cooling requirements and the potential impact of active cooling loads on networks.
3.5.2	Investigate options to implement low carbon solutions in CIoS	Assess opportunities for delivering low carbon cooling through: (i) Interventions to avoid the need for cooling and implement passive solutions to reduce active cooling requirements (such as strategic planning on site, plus associated increased canopy cover, alongside brise soleil) (ii) Opportunities for aligning cooling and heating to develop holistic theme comfort solutions (such as exploring cooling requirements when developing heat networks, shared ground loop arrays, hydronic heat pumps (including ground, water and air-source), and air-to-air heat pumps.

Headline description		Mission summary
	Decarbonisation of industry, waste and agriculture processes	Strengthen engagement with local businesses to understand their energy use and facilitate opportunities to accelerate their net zero transition, reducing bill and improving business resilience.
4	**Decarbonising industry, waste and agricultural processes**	
Action Area		**Action / action description**
4.1	**Strengthen engagement with the CIoS business community regarding the net zero transition helping to develop a clearer understanding of their needs, exploring opportunities for collaboration, and supporting business-led decarbonisation initiatives.**	
4.1.1	Political advocacy/ engagement: net zero business support	Advocate for investment from the next round of central government economic development funding to enable the provision of a strong business support offer (including net zero business support), building on the single front door provided by CIoS Growth Hub. With support provided to drive productivity across all sectors (building on the Green Futures project), targeted sector-specific support (including building on Farm Net Zero and Agri Carbon Kernow), and support for the provision of independent technical assistance/information and feasibility studies to inform and unlock business-led decarbonisation opportunities.
4.1.2	Political advocacy/ engagement: support for retrofitting workplaces	Advocate for investment from the next round of central government economic development funding from central government to enable the retrofitting of workplaces across Cornwall to help drive down energy costs for businesses.

4.1.3	Business engagement/ awareness raising/ support	Business engagement/ awareness raising focused on facilitating CIoS's net zero energy transition by: (i) Continuing to help CIoS's businesses respond to the requirements and opportunities of net zero through targeted business support programmes (e.g., Growth Hub net zero support, the Future is Green) and any opportunities to continue/ expand upon existing support. (ii) Raising awareness of the funding opportunities available for non-domestic buildings to support the uptake of low-carbon heating and energy efficiency, focusing initial communication on off-gas properties. (iii) Raise awareness of CIoS's businesses regarding the requirements of the net zero energy transition and how these can be implemented (including encouraging them to engage with their council and NGED when developing significant low-carbon technology projects (e.g., renewable electricity generation, electric vehicle charging points, low-carbon heating) and developments that may create material new energy demands). (iv) Assess stakeholder interest and explore opportunities/potential mechanisms to facilitate business-to-business net zero knowledge/ best practice sharing.
4.1.4	Non-domestic retrofit	Raise awareness of the funding opportunities available for non-domestic buildings to support the uptake of low-carbon heating and energy efficiency, focusing initial communication on off-gas properties.
4.1.5	Tourism sector decarbonisation	Work with organisation in the visitor economy, including Visit Cornwall, to engage with the tourism sector to identify opportunities for supporting the development and implementation of a tourism net-zero strategy, exploring: (i) How decarbonisation knowledge, experience, and best practices can be shared across the tourism sector. (ii) Independent advice and guidance be provided to help inform tourism business net-zero planning.
4.2	**Improve engagement with large energy users in industrial and commercial sectors across CIoS to better understand their energy use and decarbonisation plans to identify opportunities to support and accelerate their transition to net zero.**	
4.2.1	Political advocacy/ engagement: financial incentives for business decarbonisation	Advocate for financial incentives to support decarbonisation of energy-intensive industries (e.g., business rate relief for efficient buildings, VAT break for EV charging point purchase).
4.2.2	Political advocacy/ engagement: support growth of clean critical minerals sector	Advocate for CIoS's emerging critical minerals industry to ensure that it can develop low-carbon operations from the outset, including by addressing discrepancies in existing funding mechanisms, such as the Industrial Energy Transformation Fund (IETF), which has only been available to support the decarbonisation of existing industries.

4.2.3	Industrial decarbonisation	Establish mechanisms for engaging with large energy users within CIoS's industrial and commercial sector to: (i) Improve understanding of their energy demands, decarbonisation challenges and support requirements. (ii) Help identify opportunities to progress decarbonisation initiatives. (Including a specific focus on large energy users from the extractive industries, tourism, food and drink, and manufacturing sectors where there may be opportunities for technical/investment interaction, developing area-based and distributed low-carbon industrial clusters in CIoS, sharing experience, best practice, and joint working).
4.2.4	Extractive Industries decarbonisation	Improve intelligence on the projected energy demand from the extractive industries (covering locations and processes) and help identify how to realise decarbonisation opportunities, including opportunities for using waste heat/regenerative plant, pumped storage, on/near-site generation, microgrids/private wire, building on the Extractive Industries Decarbonisation study produced for the Geo-Resources Strategic Sector Strengthening project.
4.3	**Enhance engagement with agricultural sector stakeholders on net zero to gain a deeper understanding of the sector's energy use, explore decarbonisation options, and promote energy-independent farming, including opportunities to increase on-farm biomethane production as a locally sourced alternative for on-farm fuel use, and other heavy vehicles, and as a substitute for natural gas.**	
4.3.1	Political advocacy/ engagement: secure support for rural decarbonisation	Advocate for investment from the next round of central government economic development funding to support rural decarbonisation of farms and regenerative farming, including support for the rollout of on-farm methane capture slurry lagoon covers and production and use of green gas to facilitate the decarbonisation of industry, heat and transport.
4.3.2	Political advocacy/ engagement: secure support for rural decarbonisation	Engage central government to seek to advocate for increasing support for the decarbonisation of agricultural energy use, including: (i) Support for deploying small anaerobic digesters (AD) and on-farm slurry lagoon biogas capture where there is gas grid injection, and no support is currently available via the UK Green Gas Support Scheme. (ii) Support for supply chain investment in methane recovery (such as investments by milk processors in supplier farms) through tax incentives. (iii) Expanding the eligibility of Defra's Slurry Infrastructure Grant for England to include support for biomethane capture. (iv) Support low-carbon agricultural vehicle adoption by expanding the scope of future Farming Equipment and Technology Fund grant funding or an equivalent grant scheme. (v) Increase support for the adoption of agri-tech solutions which reduce agricultural emissions and increase productivity.

4.3.3	Energy independent farming - decarbonisation options	Engage agriculture stakeholders to: (i) Develop a more detailed understanding of local agricultural energy use and investigate options to decarbonise the sector, including on-farm biogas production from agricultural waste to fuel agricultural machinery. (ii) Raise awareness of the economic and environmental benefits of improving slurry management to capture fugitive emissions, produce biomethane and digestate to replace chemical based fertilisers. (iii) Explore opportunities for enabling further farmer-to-farmer knowledge sharing/ farm visits concerning net zero farming.
4.3.4	Energy independent farming - support services	Explore opportunities to support farmers who are considering installing slurry lagoon covers to capture fugitive emissions/ produce biomethane (e.g., potentially covering planning, financing, regulations, consultancy). Building on the work of the Net Zero Methane Hub and the outputs of the SWNZH-CC Biomethane Strategic Development Grant project (e.g., planning advice and assessment of financial barriers), explore additional support that could be provided. This could include: (i) Investigating the potential for establishing a loan fund for tenant farmers who are unable to access affordable lending due to asset ownership and contractual complications. (ii) Creating a matchmaking scheme to connect biomethane suppliers with demand. (iii) Developing and piloting biomethane purchase agreements. (iv) Mapping, engaging, and upskilling agricultural consultants working in CIoS.
4.3.5	Energy independent farming - machinery	Review opportunities to support farmers exploring investing in decarbonising their mobile and static machinery.
4.5.6	Agri-tech to facilitate decarbonisation	Explore opportunities to work with the sector and research partners to support agri-tech research, development, innovation, demonstration and adoption to facilitate the decarbonisation of agricultural energy usage, building on the progress made through the Agritech Cornwall and IoS project.
4.3.7	Cornwall Council Farms Decarbonisation Plan	Develop a Cornwall Council Farms Decarbonisation Plan, including exploration of how the Council Farms estate can continue to lead by example in demonstrating the capturing of fugitive biomethane and developing energy-independent farming.

4.4	**Progress activities to decarbonise waste collection and processing, including identifying opportunities for decarbonising the Cornwall Energy Recovery Centre (CERC), assessing the feasibility of developing an anaerobic digestor to process domestic and commercial food waste and increase biomethane production, along with improving intelligence on green/wood waste and opportunities for bioenergy with carbon capture and storage (BECCS).**	
4.1.1	Energy from waste decarbonisation	Identify opportunities for decarbonising Cornwall Energy Recovery Centre (CERC). Including exploring opportunities to utilise waste heat, which could reduce the expenditure), and options for carbon capture, usage and storage (CCUS) given the implications of the proposals to expand the scope of the UK Emissions Trading Scheme (UK-ETS) to include waste combustion and EfW facilities starting from 2028 will mean an additional expenditure of approximately £6m per annum.
4.1.2	Food waste anaerobic digestor	Carry out a detailed feasibility assessment and develop a business/ investment case for a food waste anaerobic digestor to process the domestic food waste collected in Cornwall and the potential to process commercial food waste to enable a greater circular economy for food waste generated in Cornwall (building on the initial assessment and options appraisal conducted in Cornwall Council Biomethane Strategic Development Grant project).
4.1.3	Wastewater anaerobic digestion	Engage South West Water to seek to understand any potential opportunities to increase biogas production from Cornwall's wastewater treatment plants, building on the analysis conducted by the International Fugitive Emissions Abatement Association (IFEAA) in the Potential for Methane Capture and Use within the CIoS Local Enterprise Partnership Region study.
4.1.4	Green/wood waste intelligence and bioenergy with carbon capture and storage (BECCS)	Improve intelligence on green/wood waste and opportunities for bioenergy with carbon capture and storage (BECCS).
4.1.5	New Cornwall Waste Strategy delivery	Implementation of the new Cornwall Waste Strategy to help facilitate a gradual improvement in recycling rates and reduce the carbon impact of waste services. Starting in 2026, the procurement of a new waste collection contract will enable the collection of a wider range of materials and greater flexibility. The strategy is expected to include a deposit return scheme, 'simpler' recycling, the ability to process additional materials (generating further potential opportunities for Energy from Waste (EfW)) and explore travel to re-cycling centres.

Headline description		Mission summary
	Decarbonising the public sector estate	Coordinate action across public sector partners to reduce carbon and costs by accelerating the transition to low carbon practices.
5	**Decarbonising the public sector estates**	
Action Area		**Action / action description**
5.1	**Continue to deliver council-led renewable energy projects.**	
5.1.1	Local authority investment in renewables: LA led project development	Continue implementing council-led energy projects alongside external funding where applicable, ensuring schemes deliver adequate returns on investment. Projects could include a mix of rooftop solar PV, ground-mounted solar PV, solar canopies, and wind energy initiatives.
5.1.2	Local authority investment in renewables: shared ownership	Work with partners to explore opportunities for public and private co-investment in renewable energy projects developed by third parties.
5.2	**Decarbonise the public sector estate seeking opportunities for collaboration between public bodies to co-invest, optimise estate utilisation and facilitate a decentralised workforce model.**	
5.2.1	Public sector decarbonisation: collaboration	Improve public sector joint working on estate decarbonisation with the aim of: (i) Identifying opportunities for joint-working/ partnership delivery, including sharing data, exploring potential opportunities for estate rationalisation/co-location, heat networks, aggregation of demand, and shared infrastructure provision for public fleets/ grey fleets. (ii) Sharing learning from public sector estates decarbonisation programmes/initiatives. (iii) Explore the potential to consolidate public sector carbon reporting to improve intelligence concerning the scale of CIoS's public sector organisations' carbon emissions and progress towards meeting carbon targets.

5.2.2	Public sector estate: heat decarbonisation plan	Develop a comprehensive long-term plan for a phased approach to heat decarbonisation following a whole-building approach across the public sector estate to enable strategic bids to the Public Sector Decarbonisation Scheme (PSDS): (i) Ensuring that the public sector can effectively secure funding for eligible projects. (ii) Outlining the steps and timelines for implementing decarbonisation measures, aligning with the Government's target to phase out fossil fuel heating systems by 2035. (iii) Applying a whole-building approach, ensuring measures are suitable and based on robust analysis to maximise efficiency and savings. (iv) Implementing a phased approach, with building fabric and energy efficiency improvements carried out first, to ensure buildings are suitable and economically viable before the transition to low-carbon heating.
5.2.3	Public sector estate: decarbonisation initiatives	Continue delivery of Public Sector Estate Decarbonisation projects, including: (i) Public Sector Decarbonisation Scheme (PSDS) funding that has been secured for heat decarbonisation (whole building approach) for example retrofit at Tregenver (Falmouth), with potential schemes identified for submission to Phase 4 of the PSDS, targeting heating systems nearing the end of their lifecycle within the funding period: Phase 4 is due to run from 2025/26 to 2027/28, with project completion required by end-March 2028. (ii) Energy audits and condition surveys: Ongoing assessment of energy audits and condition reports to pinpoint energy efficiency improvements. (iii) LCSF bidding: Actively pursue additional funding during the bidding windows for heat decarbonisation feasibility studies and RIBA Stage 3/4 designs to support strategy development and future PSDS bids. (iv) Monitoring and targeting: Continuous monitoring and targeting of energy usage to mitigate energy waste, contributing to a carbon-managed estate. (v) Maximising onsite generation: Seeking further opportunities to increase onsite renewable energy generation to enhance sustainability and energy independence. (vi) Renewable energy tariffs: Purchase of electricity backed by Renewable Energy Guarantees of Origin REGOs).
5.2.4	Cornwall Council leisure estate: decarbonisation	Explore pathways to decarbonise Council owned but tenanted leisure assets, working with leisure operators: (i) Develop heat decarbonisation plans for leisure centres (ii) Engage with operators to develop decarbonisation targets and timeframes (iii) Explore funding options (e.g., LCSF and PSDS) and collaborate with operators on eligible bids (iv) Develop and implement decarbonisation projects across the estate (v) Target net zero for any new build leisure centres
5.2.5	School's decarbonisation	Progress school's decarbonisation by: (i) Defining the approach to decarbonising local authority-maintained schools, prioritising those schools with annual emissions of over 200 tCO2e/yr and a defining a programme decarbonise smaller schools. (ii) Supporting and encouraging the wider school's community to decarbonise.

5.2.6	Cornwall Council's capital projects sustainability	Seek to progress the development and implementation of Cornwall Council's Capital Projects Sustainability Assurance Framework to progress work to promote net zero carbon real estate and infrastructure project delivery.
5.2.7	Public sector digital transformation as a decarbonisation enabler	Work to implement digital communication strategies that support public sector decarbonisation and organisational transformation efforts, such as Cornwall Council's Digital Futures transformation programme.

Headline description		Mission summary
	Decarbonising transport	Work with government, regional, national and international partners to reduce private vehicle use and transition to active travel and low carbon bus and rail services. Alongside reducing energy use and exploring opportunities for decarbonising freight, aviation and maritime activities.
6	**Decarbonising mobility actions and implementation steps**	
Action Area		**Action / action description**
6.1	**Continue to develop and deliver plans to decarbonise local transport systems.**	
6.1.1	Political advocacy/ engagement: secure support for decarbonising mobility	Advocate for investment from the next round of central government economic development funding to support a decarbonised transport system, including public transport / zero emission buses, active travel and EV charge point network to support our net zero strategy and ensure resilient and strategic connectivity, including: (i) Revenue and Capital funding for transport improvements and network stability, including the bus network, (ii) Funding for feasibility work to develop a pipeline of schemes, including developing strategic rail schemes, low carbon transport improvements, public EV charging, fleet electrification, and links between Cornwall and the wider South West region.
6.1.2	Develop Transport Decarbonisation Plan	Develop evidence-based Transport Decarbonisation Plans. For example, considering the scale of change and actions required to decarbonise Cornwall's road transport, covering: (i) Demand reduction and modal shift (including to bus, rail, and active travel/micro-mobility) assessing the viability of working towards the LAEP goal of achieving a 12% reduction in total mileage travelled by cars (ii) Decarbonisation of road vehicles - working towards the LAEP goals of 100% electrification of light vehicles and integration of alternative fuels into HGV and bus fleets) Implementation steps:

		(i) integrating the outcomes of the LAEP and identifying gaps in modelling where more detail and/or refinement is needed (ii) Modelling of transport decarbonisation scenarios and interventions (iii) Aligning with any Government guidance (iv) Stakeholder engagement (v) Production of the Transport Decarbonisation Plan (vi) Delivery of the Cornwall Transport Decarbonisation Plan.
6.1.3	Deliver Cornwall EV Infrastructure Strategy	Deliver the Electric Vehicle Infrastructure (EVI) strategy actions to encourage the rollout and use of EV charging infrastructure across Cornwall by: (i) Expanding the network of public EV charge points (ii) Supporting residents without access to off-street parking (iii) Supporting rural areas to have access to EV charging (iv) Supporting tourists and visitors to be able to charge (v) Raise awareness and grow confidence in EVs (vi) Accelerate the uptake of EVs in areas the council can directly influence, including Cornwall Council's fleets, taxis, buses, contracted fleets, other fleets, encouraging EVI deployment through planning policy.
6.1.4	Deliver Cornwall Local EV Infrastructure (LEVI) project	Develop and deliver a Cornwall Local Electric Vehicle Infrastructure (LEVI) project for which £5.5m grant funding has been provisionally allocated to Cornwall Council to help enable the deployment of additional public chargepoints in Cornwall, with a particular focus on helping to meet the EV-changing needs of residents without off-street parking.
6.2	**Continue work to facilitate public and private fleet and freight decarbonisation across CIoS.**	
6.2.1	Fleet operator engagement	Engage fleet operators to consider opportunities for collaboration on fleet decarbonisation planning and infrastructure across CIoS.
6.2.2	Ultra-low emission buses (ULEBs)/ zero emission buses (ZEBs)	Continue to deliver the draft Cornwall Ultra Low Emission Bus (ULEB) Strategy by: (i) Delivering the ZEBRA 2 project - enabling the replacement of the Truro Park and Ride bus fleet with electric buses, introduction of an electric mini-bus servicing the Falmouth area (Service 60) and joint working with Plymouth City Council/Plymouth City Bus to provide electric buses servicing south-east Cornwall. (ii) Learning from the delivery of the ZEBRA 2 project to inform the development of the next phase of integrating Zero Emission Buses (ZEBs) into Cornwall's bus fleet.

6.2.3	Cornwall Council/Corserv fleet decarbonisation	Continue delivery of the Cornwall Council Fleet Transition Project/Corserv Alternative Fleet Strategy, including: (i) Light fleet electrification and the deployment of supporting workplace charge point infrastructure. (ii) Progressing the biomethane HGV uptake and refuelling infrastructure. (iii) Considering the potential to pilot/ introduce HVO as a transitional fuel for heavy and specialist vehicles and plant.
6.2.4	Hydrogen specialist/heavy vehicles	Scope opportunities for potential to pilot hydrogen specialist/heavy vehicles and potential for shared infrastructure.
6.2.5	Public fleets decarbonisation joint-working	Explore and seek to realise opportunities to collaborate on public sector fleet transition planning and providing shared (EV/ alternative fuel) infrastructure to support public fleet and grey fleet decarbonisation.
6.2.6	Contracted fleets: waste	Consider options for reducing emissions from contracted waste fleets as opportunities arise, including consideration of opportunities for vehicle efficiency and introducing alternative fuel options within Cornwall Council's contracted waste fleet when procuring the next waste collection contract.
6.2.7	Freight strategy	Work with Peninsula Transport sub-national transport body (STB) and stakeholders to consider the potential implications and opportunities of the South West Freight Strategy for decarbonising Cornwall's local freight network and the potential to inform a local freight transport strategy, including consideration of opportunities for freight consolidation, freight/intermodal hubs and last mile logistics.
6.2.8	Depot strategy	Continue to work with stakeholders to develop a Cornwall Depot Strategy by investigating the current operational needs and facilities of the Cornwall Council/ Corserv fleet, the contracted waste fleet, bus operators, and other major stakeholders (e.g., National Highways), including their depot and emerging electric vehicle and alternative fuel infrastructure requirements.
6.3	**Continue activities to support demand reduction and facilitate modal shift to public transport and active travel.**	
6.3.1	Demand reduction through spatial planning	Maximise opportunities for demand management through the development of the next Local Plan, ensuring appropriate location of housing growth and supporting transport infrastructure.
6.3.2	Bus networks and capped fares	Maintain and improve the existing integrated bus networks and capped fares to enable modal choice and potential modal switch, supporting integrated public transport networks.
6.3.3	Rural mobility	Work with the Peninsula Transport STB to pilot rural mobility solutions that will inform future rural transport decarbonisation interventions and supporting models of delivery/operation.
6.3.4	Intermodal transport hubs	Support the development of intermodal transport hubs to maximise transport integration and modal choice and facilitate sustainable last/first mile trips.

6.3.5	School transport decarbonisation planning	Explore options for Cornwall Council to influence the decarbonisation of public service vehicle (PSV) school transport providers.
6.3.6	Non-contracted bus fleet decarbonisation	Consider opportunities for engaging bus operators to assess any opportunities to facilitate decarbonisation of the non-contracted bus fleet.
6.3.7	Taxi decarbonisation options review	Consider commissioning a review of taxi sector decarbonisation options.
6.3.8	Mobility as a service and co-mobility	Consider opportunities for mobility as a service in Cornwall, including multi-modal integration/ co-mobility and shared mobility (including car clubs).
6.4	**Continue to work with rail stakeholders to plan and deliver strategic rail connectivity improvements and understand opportunities for rail decarbonisation.**	
6.4.1	Strategic rail connectivity improvements	Develop the pipeline of strategic rail connectivity improvements and work with Peninsula Transport to secure funding (building on the delivery of the Mid Cornwall Metro project) to maximise opportunities for modal switch and well-connected new developments.
6.4.2	Rail decarbonisation	Engage Network Rail and operators to understand their planning and opportunities for decarbonising Cornwall's branch lines to help assess the nature, scale, and timescales of any emergency demand and impacts/links on the transition of the local energy system transition.
6.5	**Continue to advance green travel planning and efforts to identify opportunities for public sector collaboration and joint working with other major employers on workforce travel plans, including exploring the potential for shared mobility solutions.**	
6.5.1	Shared mobility pilot	Implement Cornwall Council's blended pool car/ car club pilot for council staff and community use. Initially delivering three trials to support the development of the business case for procuring a Cornwall-wide share mobility/blended pool car solution: (i) Location-based shared pool car trial (ii) Champion-led shared pool car trial (iii) Community car club rural trial
6.5.2	Green travel collaboration	Identify options for collaboration on green travel/ shared mobility initiatives with other public sector and major employers across CIoS.
6.5.3	Demand reduction through digital transformation	Continue working with partners to identify and implement further reductions of workforce business travel and commuting through digital transformation initiatives, including the potential for joint working between Cornwall Council and the NHS in Cornwall.

6.5.4	Employee public transport discounts	Consider the applicability of employee incentive schemes operated by NHS Trusts elsewhere in the UK offering staff discounted travel on public transport (e.g., commuter travel club model).
6.6	**Improve understanding of energy use in CIoS's maritime and aviation sectors and explore opportunities for decarbonisation.**	
6.6.1	Maritime energy use intelligence	Engage CIoS's port/harbour operators and the maritime sector to develop a more detailed understanding of local energy use and investigate potential decarbonisation options.
6.6.2	Maritime/ ports and harbour decarbonisation	Work with CIoS's port/harbour operators, the maritime sector and university partners to identify opportunities to access funding to support maritime sector decarbonisation demonstrators building on: (i) The Electric Seaway pilot project to increase electric vessel uptake and harbour charging infrastructure. (ii) Cornwall & Isles of Scilly Marine Hydrogen-Electric Propulsion Centre of Excellence project to progress the adoption of alternative marine fuels.
6.6.3	Facilitating transitional fuels for the maritime sector	Explore opportunities to supply HVO and other potential transitional fuels to support medium-term vessel decarbonisation.
6.6.4	Political advocacy/ engagement: secure support maritime decarbonisation	Advocate for the Renewable Transport Fuel Obligation (RTFO) to be applied for maritime use of HVO for vessels operating beyond inland waters up to the British Fishery Limit.
6.6.5	Torpoint ferry decarbonisation	Seek funding to conduct a Front-End Engineering Design (FEED) study to produce a design concept and costed implementation program for an alternative fuel-powered replacement vessel for the Torpoint ferry, building on the Torpoint Ferries Decarbonisation Feasibility Study.
6.6.6	Shore power	Progress shore power opportunities, including: (i) Delivering the multi-vessel shore power connection capability installed at the A&P Falmouth docks facilitated by funding from the Zero Emission Vessel and Infrastructure fund (ZEVI). (ii) Consider shore power review and potential for shore power upgrade for Penzance Harbour.
6.6.7	Aviation/ airport decarbonisation	Engage CIoS's airport operators and aviation sector stakeholders to develop a more detailed understanding of energy use by the sector and investigate decarbonisation options and opportunities: (i) For aviation operating from CIoS. (ii) To progress actions towards meeting the national 2040 net zero airports' target. (iii) To access funding to support CIoS-based pilots of sustainable propulsion alternatives suitable for application in regional aviation services.