Aberdeen City Council Climate Change Report 2021/22

RECOMMENDED SECTION - WIDER INFLUENCE

Q.1a Historic Emissions

Indicating emission amounts and units of measurement (tCO2e) and years.

	Emissions of carbon dioxide for local authority areas*														
Sector	Sector 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Units														
Total emissions	1,696.18	1,531.77	1590.42	1,485.76	1,563.65	1,480.88	1,323.94	1,275.5	1,173.84	1,111.08	1,094.86	1,073.21	952.16	ktCO2e	
Industry & commercial	659.52	584.03	609.97	571.26	603.53	568.22	498.68	457.24	384.22	368.38	341.74	307.50	239.62	ktCO2e	
Domestic	576.91	519.17	550.51	488.17	526.17	506.31	428.80	413.07	385.16	353.55	351.89	341.95	323.44	ktCO2e	
Transport Total	342.24	322.82	315.84	305.94	298.54	293.42	296.56	297.38	300.22	300.62	294.45	326.71	280.27	ktCO2e	
Per Capita	7.93	7.06	7.24	6.68	6.95	6.52	5.78	5.54	5.11	4.86	4.81	4.69	4.16	ktCO2e	

^{*}UK Local Authority and Regional Carbon Dioxide Emissions National Statistics (subset data)

Q.2a Detail wider influence targets

Sector	Description	Type of targets (units)	Baseline value	Start year	Target saving	Target / End year	Saving in latest year measured	Latest year measured	Comments
Waste - domestic	56% of household waste to be recycled through source	%				2025	45.41%	2021	Source - Waste data for Scotland Scottish Environment Protection Agency (SEPA)
Waste - domestic	No more than 5% of household waste should be landfilled	%				2025	10.00%	2021	Source - Waste data for Scotland Scottish Environment Protection Agency (SEPA)

Active travel	Modal Shift - Private Vehicle to Active Travel (Cycling/Walking)	%	3.3% cycling (2018). 25% walking (2018) (Cityvoice) to work and education	2018		2026	5.3% cycling in 2021 for work and education and 23.6% walking for work and education	2021	38% of people walking and 5% of people cycling as main mode of travel by 2026 (Local Outcome Improvement Plan)
Net Zero Aberdeen	Place based target to achieve net zero carbon emissions in the City of Aberdeen	Absolute	1793 ktCO2e (2005)	2022	1793ktCO2e	2045	840 ktCO2e	2020	Routemap approved February 2022 - 2005 baseline year. 2020 measure 952ktCO2e (53.1% reduction against baseline).
Net Zero Aberdeen – Mobility Strategy	20% reduction in car traffic	Million car km	1,244 million km (2019)	2022	248.8 million km (20%)	2030	TBC		Target 995 million car km
Net Zero Aberdeen – Mobility Strategy	Reduction in proportion of journeys by car to less than 50%	%	Car driver 53% (2019)	2022	>3%	2030	TBC		Target car driver <50%

Q. 2b Does the organisation have an overall mission statement, strategies, plans or policies outlining ambition to influence emissions beyond your corporate boundaries? If so, please detail:

Energy Transition/ Net Zero

- <u>A Net Zero Vision and Prospectus for Aberdeen</u> was approved at Urgent Business Committee in May 2020. Includes strategic objectives: leading the global transition; accelerating transition demand; resilient, productive and dynamic place; climate positive exemplar; putting people first.
- <u>Strategic Infrastructure Plan (Energy Transition)</u>: was approved at Urgent Business Committee in May 2020. It includes Strategic Infrastructure Goals: clean energy supply for the city, UK and, particularly, globally; Aberdeen's infrastructure is adaptable to changes in climate; sustainable mobility; building energy efficiency; sustainable waste management. It also includes priority area of Net Carbon Zero Public Sector.
- The <u>Net Zero Aberdeen Routemap and six enabling strategies</u> were approved by Full Council February 2022. The routemap sets a city-wide, place-based, pathway towards achieving net zero carbon emissions by 2045.
 - The key themes covered by the six enabling strategies are; Mobility, Buildings and Heat, Energy Supply, Circular Economy, Natural Environment and Empowerment.

Adaptation

• Aberdeen Adapts: Climate Adaptation Framework aims to work in partnership to build city resilient to the impacts of current and future climate change. The Aberdeen Adapts project brought together a range of organisations and businesses to identify the specific challenges for the area and the new opportunities that come from a changing climate. The aim is to create a positive and ambitious strategic approach, setting the foundations for long term local partnership working on climate change. Aberdeen Adapts was updated and reapproved in February 2022, aligning with Net Zero Aberdeen and showing synergies and interdependencies between the themes of each document.

Q.3 Policies and Actions to Reduce Emissions

Please detail any of the specific policies and actions which are underway to achieve emissions reductions targets.

Sector	Start year for policy/ action	Year of full implem entation	Annual CO ₂ saving	Last year meas ured	Savings in latest year measu- red	Stat us	Metric/ indicators for monitoring progress	Delivery role	ISM used ?	Details of behaviour change activity	Value of investment (£)	Ongoing costs (£)	Primary funding source	Comments
Transport	2012	On- going	-	21/22	-	Impl eme ntati on	No. chargepoint installations organised by the Council	Direct	no	Installation and managing network of electric vehicle charge points - Aberdeen. 133 (118 in 2021). 79 public, 17 car club only, 37 for fleet	£92,000 2021/22 Further £1,125M since 2012	£75,000	Transport Scotland, Energy Saving Trust (Scotland)	-
Transport	2012	On- going	-	21/22	-	Impl eme ntati on	52 vehicles in March 2021 up from 49 last year.	Indirect	no	Car club. People able to have access to a low carbon vehicle without needing to own one.	£1,076,000	£185,000	Council budgets, Developer Contributions, Transport Scotland, Paths for All, Co- wheels car club (for this reporting period)	Car club contract re- tendered in Nov 2021.
Transport	Ongoing	On- going	-	2021	-	Impl eme ntati on	Number of schemes delivered	Indirect	no	Studies, designs and implementation of Active Travel Infrastructure across the city	-	-	Sustrans, NESTRANS	Spend figures/ delivery 20/ 21 year still to be completed

Transport	-	2021	To confirm at end of project	20/21	-	Impl eme ntati on	-	Indirect	no	Fuel Cells and Joint Undertaking Project (FCH JU JIVE) - Deliverables: 15 double-decker buses operational in Aberdeen	-	-	Funding from FCH JU JIVE project & further money from Air Quality Action Plan	Aberdeen City Council a partner
Transport	2016	2020	To confirm at end of project	20/21		Impl eme ntati on	Cenex are monitoring data for all vehicles using the ACHES station. Number of vehicles, fuel efficiency, miles driven, availability of station are also being measured.	Direct	no	Aberdeen City Hydrogen Energy Storage. Council Waste Team, Building Services and City Wardens trialled vehicles as well as Scottish Environmental Protection Agency, SCARF, CFine, NESCol, Sport Aberdeen, RGU, Aberdeenshire Council and NHS.	£2.9million	£103k	Aberdeen City Council	Funding from fuel sales ACC NESTR- ANS Transport Scotland, EU Regional Develop- ment Fund
Energy	2021	2023	-	-	-	Impl eme ntati on	-	Direct	no	District Heating – heat supplied by Energy from Waste plant. First phase of the energy from waste district heating network in Torry. Future phases are planned to connect more homes, businesses and public buildings subject to funding availability	-	-	Part funded by ACC and part funding by Scottish Government grant funding	-

Energy	2021	TBC	-			Impl eme ntati on	- Reduced energy demand - Low carbon energy (Council housing)	Direct	no	Project DORIC, a "whole house" retrofit demonstrator project, in 50 existing council properties to improve fabric and energy efficiency. Installing energy efficiency measures and PVs. Learning about the standards, timescales, cost of retrofit to inform the development of a future retrofit programme. Using smart modelling software and infrared survey techniques to better target resources.	-	-	ACC & UK government grant funding	BEIS grant funding – Social Housing Decarbonis ation Fund Demonstrat or
Energy	2002	2021	-	-	-	Com plete	The carbon savings are calculated based on the amount of heat and electricity supplied by the CHP plant operated by Aberdeen Heat and Power.	Indirect	no	Stockethill, Hazlehead, Seaton, Beach and Tillydrone CHP Energy Centres. 3,332 flats/houses are now connected and 29 public buildings and sheltered housing complexes.	-	-	Aberdeen City Council	Aberdeen Heat and Power established in 2002 providing Combined Heat and Power.
Energy	2019	2021				Com plete	Low carbon energy tCO2e	Indirect	no	369 new Council homes (Summerhill) To connect to an existing heat network mains (Stockethill Energy Centre) providing district heating.	-	-	Aberdeen City Council	-

Energy	2019	2022	-	-	-	Com plete	Low carbon energy tCO2e	Indirect	no	283 new Council homes (Wellheads) to connect to an onsite CHP energy centre providing district heating (connected to communal heating within the site).	-	-	Aberdeen City Council-	AHP deploying smart meters, working in conjunction with SCARF.
Energy	2020	2023	-	-	-	Impl eme ntati on	Low carbon energy tCO2e	Indirect	no	213 new Council homes (Kincorth) Gold Standard homes to connect to an onsite CHP energy centre providing district heating (connected to communal heating within the site).	-	-	Aberdeen City Council	Plan to connect with EFW heat network (post 2023)
Energy	2020	2023	-	-	-	Impl eme ntati on	Low carbon energy tCO2e	Indirect	no	99 new Council Homes (Craighill) Gold Standard homes to connect to an onsite CHP energy centre providing district heating (connected to communal heating within the site).	-	-	Aberdeen City Council	Plan to connect with EFW heat network (post 2023)
Energy	2020	2022	-	-	-	Impl eme ntati on	Low carbon energy tCO2e	Indirect	no	92 new Council homes (Auchmill) Gold Standard Housing. Connected to existing CHP system	-	-	Aberdeen City Council	

Energy	2020	2022	-	-	-	Impl eme ntati on	Low carbon energy tCO2e -	Indirect	no	36 new Council homes (Kaimhill) Gold Standard housing. To be incorporating low/ zero carbon renewable technologies e.g. heat pumps and solar PV + battery.	-	-	Aberdeen City Council	Cost preparation underway.
Energy	2021	2025	-	-	-	Impl eme ntati on	Low carbon energy tCO2e	Indirect	no	536 new Council homes (Cloverhill) Gold Standard housing. To include renewable technologies.	-	-	Aberdeen City Council	To include renewable technologie s.
Energy	2021	2021	-	-	-	Com plete	-	Indirect	no	Hydrogen for Heat - A technical and feasibility study to inform hydrogen for heat demand for Aberdeen. Links to the city-wide development of a Hydrogen Hub	-	-	-	Specific locations identified for energy centres, where hydrogen could be used for alternative (clean/gree n fuel) heat sources to replace gas.

Q.4 Partnership Working, Communications and Capacity Building

Key action type	Description	Organisation project role	Lead organisation (if not reporting organisation)	Private partners	Public partners	3 rd sector partners	Outputs	Comments
Partnership working	Net Zero Aberdeen – Comprised of Net Zero Leadership Board and Net Zero Delivery Unit working on city-wide climate mitigation pathway.	Lead	-	Range of privat partners (23 org	e and public sector ganisations)	-	Partnership working to create the Net Zero Aberdeen Routemap and six Enabling Strategies – all approved at Council February 2022.	Net Zero Aberdeen Routemap and six enabling strategies
Partnership working	North East Scotland Fleet Review (Hydrogen Demand). A H2 Aberdeen study to bring about an increased demand of hydrogen in north east Scotland, through the Aberdeen Hydrogen Hub.	Lead	-	Opportunity North East, Royal Mail	Scottish Water, Scottish Enterprise, Aberdeenshire Council, Highland Council, Angus Council, Moray Council, NHS Grampian, Robert Gordon University, North East Scotland College, Scottish Environment Protection Agency, NatureScot	-	The Fleet Review part of the project aimed to deliver a commercial supply of green hydrogen in north east Scotland, initially for transport uses.	Proposal Template (aberdeencity.go v.uk)
Partnership working	HyTrEc2. Supporting the further use of Hydrogen Fuel Cell Electric Vehicles (FCEVs).	Lead	-	Sweden and No	ne UK, Germany, The Nethe orway are working together n in the transport and energ	to support the	Deployment of hydrogen vehicles, green hydrogen production and storage, development of hydrogen refuelling stations and training.	Interreg North Sea Region Project
Partnership working	JIVE – Fuel Cell & Hydrogen Joint Undertaking. To advance the commercialisation of fuel cell buses through large-scale deployment of vehicles and infrastructure	Participant.	-	The project con seven countries	sortium comprises 22 partness.	ers from	Deliverables: hydrogen double decker buses. JIVE will run for six years from January 2017.	https://www.fuelc ellbuses.eu/proje cts/jive

Partnership working	Smart HyAware. Promoting hydrogen electric mobility by tackling the main infrastructural -and technological and market uptake barriers related to hydrogen for electromobility.	Participant.	-				Deliverables: update the Hydrogen Strategy with extensive stakeholder engagement and increase awareness of hydrogen potential throughout the city region.	Interreg Europe Programme.
Partnership working	HECTOR project – Hydrogen Waste Collection Vehicles in North West Europe	Lead	-	Arnhem, Nether	een, Scotland; Groningen, I rlands; Duisburg, Germany; ny; Touraine Vallee de l'Indr um	·	Deliverables: hydrogen fuel cell waste truck, development of training and operational recommendations, business case for upscaling based on real life operational data.	Interreg North West Europe Project
Partnership working	Getabout Partnership. Sustainable travel brand promoting walking, cycling, use of public transport, lift share. This helps the Council realise the aims and objectives of its Local Transport Strategy and Active Travel Action Plan	Participant	Getabout Partnership	-	Aberdeen City Council, Aberdeenshire Council, University of Aberdeen, Robert Gordon University, North East College, James Hutton Institute, Energy Saving Trust, NESTRANS, NHS	-	Getabout brand	Investment into partnership - around £198,000. Smarter Choices, Smarter Places funding from Transport Scotland/ Paths for All
Partnership working	Car club. Car club in Aberdeen and associated promotion of this.	Participant	Car club		Co-wheels, Getabout	СоМо	City Car Club. Gives residents access to a shared vehicle.	Investment into partnership - Around £185,000 per year by Council Car club contract re-tendered in Nov 2021.
Partnership working	EV chargepoint Network. External funding allows the Council to provide a recharging network for electric vehicles to encourage their uptake.	Lead	-	Swarco, Siemens, BMM Energy Solutions, BP Chargemaster	Transport Scotland, Energy Saving Trust (Scotland) Electric Vehicle Association Scotland (EVAS) European Union	-	EV chargepoint network. Supporting electric vehicles and encouraging a shift away from diesel and petrol cars.	Investment into partnership - £1,125,000 by Council

Partnership working	Facilitating Active Travel Infrastructure	Participant	Aberdeen City Council		NESTRANS, Sustran Transport Scotland	S, -	Active Travel infrastructure studies, designs and physical infrastructure to encourage more walking and cycling.	-
Partnership working	Aberdeen Renewable Energy Group (AREG). AREG works closely in partnership with the Council to identify and help facilitate the delivery of projects that could provide additional renewable energy infrastructure.	Lead	-	Membership directions.	deenrenewables.com/	members/full-	Aberdeen Renewable Energy Group working to ensure businesses in Aberdeen City and Shire capitalise on opportunities in renewable energy.	https://www.aber deenrenewables .com/
Partnership working	Dee Catchment Partnership. Effective management and conservation of the river Dee and its surrounding environment, including natural flood management.	Supporting	Dee Catchment Partnership	Aberdeen Harbour Board, National Farmers Union Scotland	Aberdeenshire Council, Cairngorms National Park Authority, Scottish Forestry James Hutton Institute, Scotland Rural College (SRUC), Scottish Environment Protection Agency, Scottish Government, Scottish Natural Heritage, Scottish Water	Royal Society for the Protection of Birds (RSPB), Dee District Salmon Fishery Board	Dee Catchment Management Plan and Partnership. Natural Flood Management.	https://www.dee partnership.org/a bout-us/our- partners/
Partnership working	North East Scotland Biodiversity Partnership (NESBiP). Tackling threats to biodiversity and facilitating conservation action for local biodiversity.	Participant	Coordinator, hosted by James Hutton Institute	2 independent individual members, James Hutton Institute	NatureScot, Scottish Forestry	RSPB, Scottish Wildlife Trust, East Grampian Coastal Partnership, NFU Scotland	NESBiP's Strategic Delivery Plan and actions complement the Council's environmental and community objectives and helps to support land-use planning duties.	https://www.nes biodiversity.org.u k/

Partnership working	Sustainable City Group – Community Planning Aberdeen	Participant			Aberdeen City Council, Scottish Fire and Rescue Service, NESTRANS, SEPA, NHS Grampian, NatureScot	Active Aberdeen Partnership, ACVO, Cfine	Lead and be responsible for actions which support delivery relevant outcomes of the Local Outcome Improvement Plan (LOIP).	https://communit yplanningaberde en.org.uk/sustai nable-city-2/
Partnership working	North East Scotland Area Advisory Group. Local River Basin Management and Local Flood Risk Management Plan	Participant	SEPA		org.uk/media/75414/ up-membership-list.p		Working together to ensure water bodies achieve a certain ecological status. Working together to prevent and alleviate flooding.	-
Partnership working	Ness Energy Project. Energy from waste facility	Participant	-	-	Aberdeenshire and Moray Councils	-	Treatment and recovery of residual waste to produce heat and electricity by the three authorities in the north east of Scotland.	http://nessenerg y.co.uk/
Partnership working	Sustainable Food Places Partnership Aberdeen	Participant	-	Enscape Ltd	Council Aberdeen Health & Social Care Partnership NHS Grampian's Public Health Directorate Robert Gordon University	Community Food Initiatives North East (CFINE) The Allotment Market Stall Tillydrone Community Flat	Seeks to develop high-level co-ordination and influence over food policies and practises in Aberdeen.	https://www.sust ainablefoodplace s.org/Portals/4/D ocuments/Sustai nable%20Food %20Partnership %20Aberdeen% 20MoU.pdf
Capacity Building	Hydrogen Economy for Aberdeen.	Lead	-	First Group, Stagecoach	Scottish Government, NESTRANS, European Regional Development Fund, Office of Low Emission Vehicles.	-	To develop the supply chain for a hydrogen economy in Aberdeen.	http://www.h2ab erdeen.com/hom e/H2-Aberdeen- hydrogen- economy.aspx
Partnership working	Scottish Cities Alliance – Peer to Peer Network	Lead	-	-	Aberdeen, Dundee, Dunfermline, Edinburgh, Glasgow, Inverness, Perth,	-	A network encouraging knowledge sharing across the cities and enabling officers to learn from each other and share best practice.	

					Stirling, Scottish Government			
Partnership working	Aberdeen Fairtrade Steering Group	Partner	Aberdeen Fairtrade Steering Group	-	-	-	Awareness raising of Fairtrade products, participation in events (e.g. Fairtrade fortnight). Maintaining certification of Aberdeen as a Fairtrade city. Fairtrade Pledge via ACC website.	
Communica tions	Net Zero Aberdeen website	Lead	-	-	-	1	Net Zero Aberdeen website launched March 2022. Microsite hosted on ACC website.	Net Zero Aberdeen Aberdeen City Council
Communica tions	Net Zero Aberdeen Climate Week North East webinar	Lead	-	-	-	•	Public webinar held Fri, 25 March 2022 – 50 free spaces made available to the public, all filled. Informing on NZA routemap/strategies, next steps and time for questions/feedback.	Net Zero Aberdeen Tickets, Fri 25 Mar 2022 at 12:30 Eventbrite

Q.5 Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below.

Key action type	Key action description	Organisation's project role	Impacts	Comments
Food and Drink	Granite City Growing	Lead	Implementation of a food growing strategy for the city encompassing allotments, communities and urban farming.	Ongoing initiative https://www.aberdeencity.gov.uk/services/e nvironment/food-growing-strategy
Biodiversity	Hazlehead Grove Nursery	Lead	Providing an opportunity to develop life skills and learning opportunities for people, through various activities including plant cultivation and other horticultural related activities for the benefit of the city's parks and open spaces and an outdoor educational space.	Ongoing initiative
Biodiversity	North East Scotland Biodiversity Records Centre (NESBReC)	Participant	NESBReC collect, store, manage and disseminate biological data for various organisations including local authorities.	http://www.nesbrec.org.uk/
Biodiversity	Managing non-native invasive species	Lead	Countryside Ranger Service work to manage invasive non-native plant species across the City.	
Food and Drink	Sustainable Food Places	Participant	The initiative promotes a sustainable approach to food and could see more local food growing projects, organic food, less food waste, less food transportation and stronger links between consumers and local producers. A reduced footprint will reduce city-wide carbon emissions.	http://sustainablefoodcities.org/findacity/city information/userid/462
Food and Drink	Aberdeen Fairtrade City	Participant	The Council reaffirmed its support for Fairtrade Buying more Fairtrade supports an income stream and engagement with communities in developing countries. This gives them more	Ongoing initiative

			opportunity to adapt to a changing climate and to pursue low carbon solutions relevant to their needs. This is an on-going initiative.	
Food and Drink	Community Food Growing	Lead	Several projects aimed at developing new community growing spaces in Aberdeen as part of the delivery of a Food Growing Strategy.	Ongoing initiative