

Dundee's Climate Emergency Response

Councillor Mark Flynn



Climate Commitments

- Climate emergency declared in June 2019
- Target of net-zero GHG by 2045 or sooner



Dundee Climate Action Plan

The title 'DUNDEE CLIMATE ACTION PLAN' is displayed in large, bold, sans-serif capital letters. Each letter is filled with a different photograph related to climate action, such as solar panels, wind turbines, green buildings, and nature scenes. The text is arranged in four lines: 'DUNDEE', 'CLIMATE', 'ACTION', and 'PLAN'.

DUNDEE CLIMATE ACTION PLAN

- Co-design process with over 50 public, private and community organisations.
- Informed by a Baseline Emissions Inventory, Climate Risk & Vulnerability Assessment and statutory Strategic Environmental Assessment.
- Approved at Policy & Resources Committee 18 Nov 2019
- Launched 4th Dec 2019



Strategic Themes

Energy



Transport

Waste



Resilience

Energy

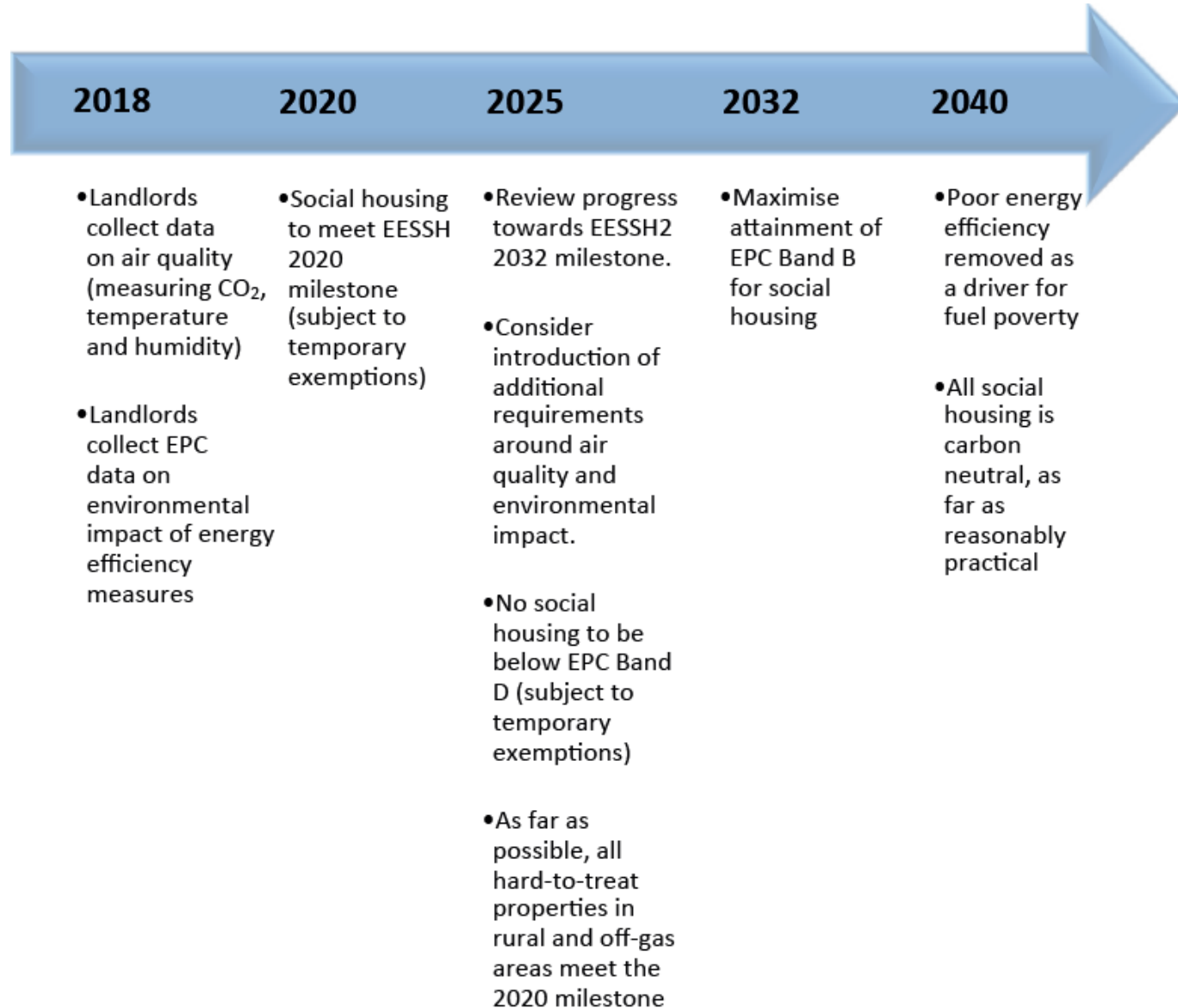
Objective: Reduce the consumption of energy, promote energy efficiency and increase the proportion of power and heat from low and zero carbon technologies.

Domestic Energy Efficiency

- 12,500 Council houses
- 5,000 homes now have external wall insulation fitted, reducing carbon emissions
- £47m investment
- Installation of photovoltaic panels installed on multi-story developments



EESH 2 Trajectory



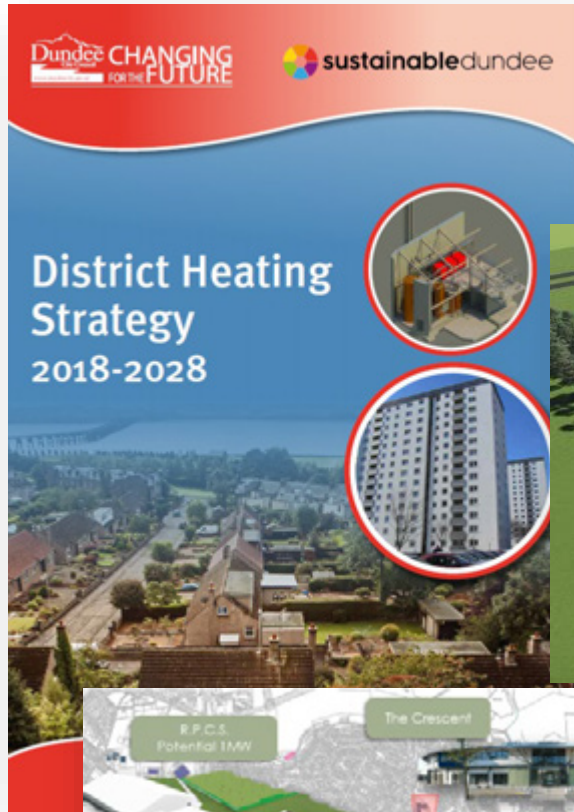
Decarbonising heat and power

Non-Domestic - Retrofit

- Energy Performance Contracting – Phase 1: £1.7m investment in 8 properties (7.5yr payback).
- Measures include: LED Lighting, more efficient hardware/software (motors, boiler burners, control of pumps), Combined Heat and Power, insulation, solar PV.
- Contractor has to guarantee the energy savings with DCC monitoring and measuring the energy consumption which an independent 3rd party expert verifies.
- Will achieve savings of at least £222,000 per annum and a further 1,000 tonnes of CO₂.
- 3rd phase underway with long term plan to include more than 100 Council properties.



Decarbonising Heat and Power



- Strategy developed that sets out long-term vision to support the city's growth and transition to a low carbon economy using decentralised energy.



- Low Carbon District Energy Hub at Regional Performance Centre for Sport (RPC Dundee).
- £3m LCITP funding awarded + £3m capital investment.
- LZCT's combines heat pumps, gas CHP, solar thermal, PV and large thermal stores.
- Capable of generating 100% of its electrical demand and save >536 tCO₂ per annum.
- Catalyst project with future capacity to feed adjacent housing.



- Dighty Corridor network: preparing Investment Ready Business Case to link RPC to social housing and non-domestic properties.



Transport

Objective: Encourage active travel through walking, cycling and public transport and deploy sustainable alternatives to decarbonise transport.

Embark Dundee e-bike hire



- Launching autumn 2020
- 150 ebikes
- Charging stations across city to connect major workplaces, visitor attractions and campuses



Active Travel Hub at Waterfront Place



- Bike Hire
- Cycle parking
- Bike maintenance
- EV car club
- Community outreach programmes

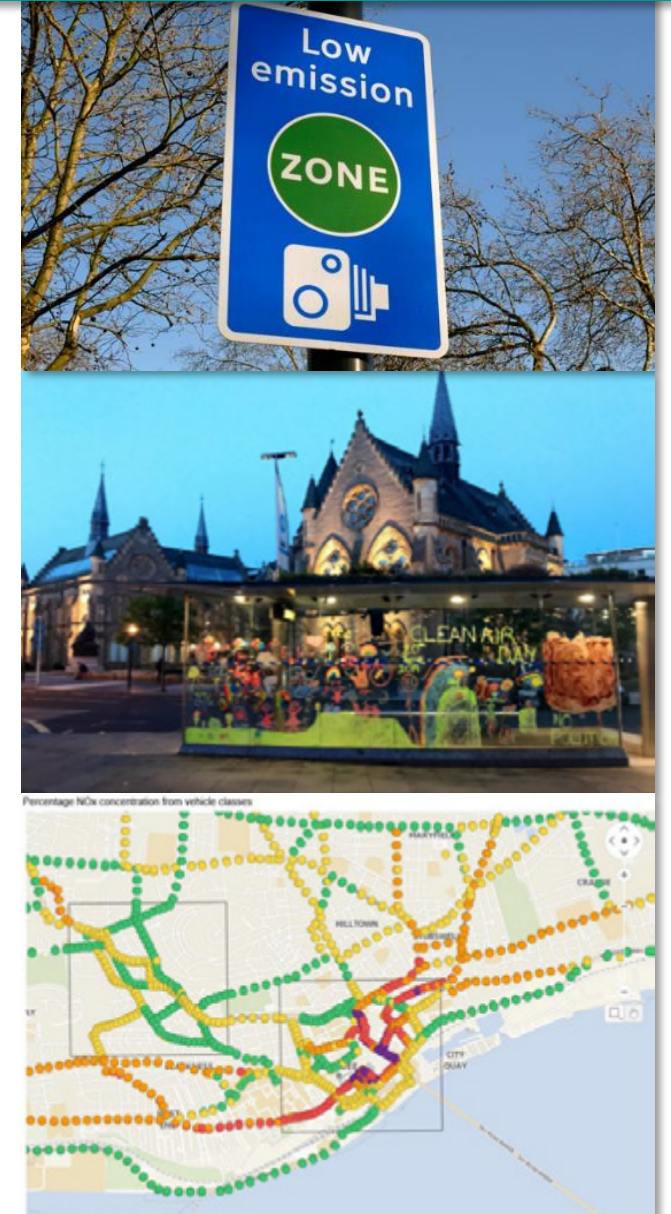


Spaces for People



Low Emission Zone

- Objective is to improve air quality, resulting in benefits to public health
- Provisions within Transport (Scotland) Bill to enable local authorities to implement and enforce
- Details on exemptions, penalty rates, emission standards, enforcement, minimum grace periods will be in Regulations currently in development
- Penalties to drivers who enter LEZ in non-compliant vehicles
- Scenario testing, Air Quality City model and Paramics traffic model
- Stakeholder engagement



Electric Vehicle commitment

Dundee has on the highest concentration of Electric Vehicles (EVs) of any city in the UK, with the Council fleet of over 100 EVs being the largest of any local authority.

Our goal is to have all cars, small and medium vans all electric by the end of 2022. As a local authority we have also introduced 2 mini buses, 2 Dennis Eagle bin lorries and 1 Johnston Sweeper which are all fully electric (the first in the UK).



Electric Vehicle commitment



- 3 rapid charging hubs each with 6 x 50kW and 4 x 22kW chargers.
- In 2019, DCC embarked on a project to design and build 3 EV charging hubs on the top of the 3 city centre MSCP each with 20 x 7kW charge points, battery storage and dynamic load management.



Pictured top left- Princess Street Hub, Bottom Left- Queen Street Hub, Bottom Right- Greenmarket

Charging infrastructure



The first 150kW charger in Dundee- located at Greenmarket Coach spaces. This charger will be used for our HGVs in the city.



Clean Streets Pop Up chargers – first in the UK- this pilot project will see Dundee host these new innovative pop up chargers in residential streets.



Taxi trade

- 128 electric taxis in the city (equates to 18% of the city's taxi trade).
- This number is continually growing and is helping make EV more visible around the city.
- Types of EV's used as a taxi: Nissan Leafs, Tesla Model 3, Hyundai, MG ZS, Kia E-Niro



Sustainable Mobility and Low Carbon Energy



- Michelin Scotland Innovation Parc (MSIP) integrated energy park deploying hydrogen fuel buses, fleet vehicles and hydrogen refuelling infrastructure with energy being derived from renewable technologies.
- Advance commercialisation of hydrogen fuel cell buses through large-scale deployment of vehicles and infrastructure.
- 12 new hydrogen buses would be operational in Dundee as part of the JIVE project (Joint Initiative for Hydrogen vehicles across Europe).
- Creation of a hydrogen refuelling station utilising green on-site energy generation for electrolyser.

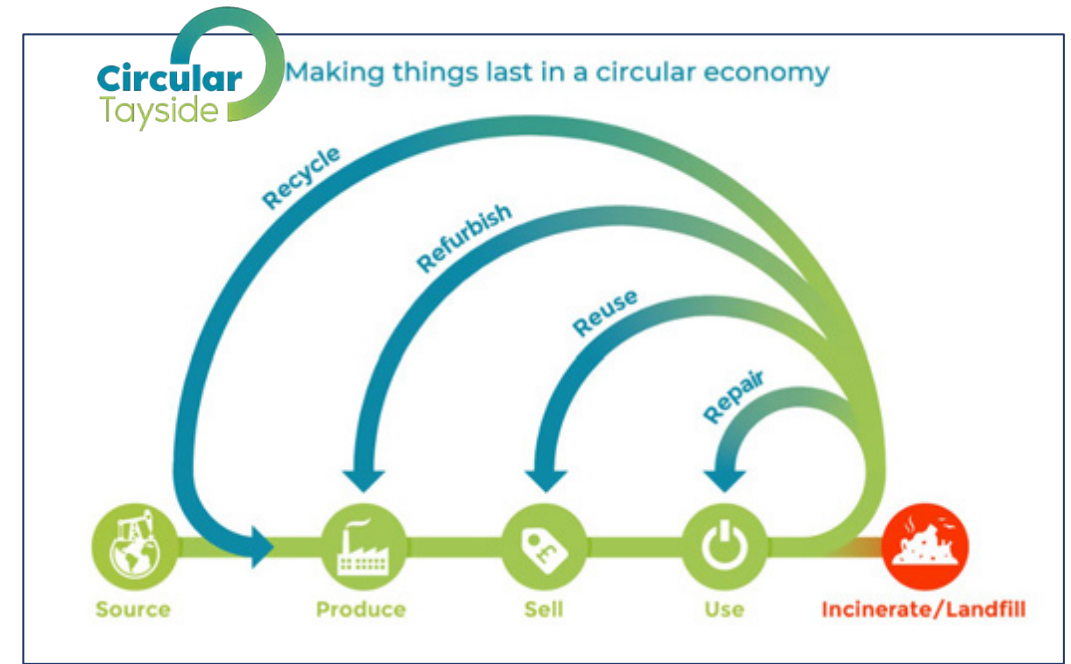


Waste

Objective: Manage waste sustainably by reducing, reusing, recycling and recovering waste to improve resource efficiency whilst working towards a circular economy.

The Challenge – 70% Recycling Rate by 2025

- City-wide waste education
- Support the Scottish Governments Deposit Return Scheme
- Reducing single use plastics
- Developing and implementing circular economy projects and education identified by the Circular Tayside initiative.
- Whole Life Costing approach to developments to ensure resilient low carbon buildings with minimal waste
- Stimulate reuse, upcycling and repairing opportunities and skills.
- ZWS Food Pilot scheme





Resilience

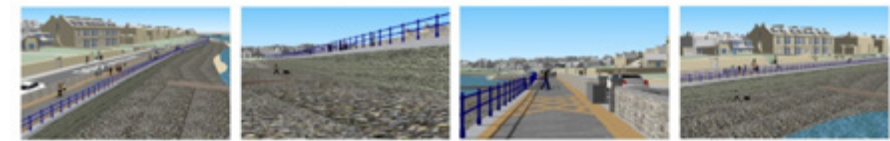
Objective: Ensure our communities, green networks and infrastructure are adaptable to a changing climate and reduce the risks and vulnerability to unavoidable impacts.

Resilience - examples

- Biodiversity Strategy published Jan 2020:
 - Proposal for naturalised grass areas in 27 parks and greenspaces across the city. Consultation running until December.
- Eden Project Scotland – feasibility stage
- Dune restoration works
- Broughty Ferry Flood Protection Scheme
- Green Health Partnership formed

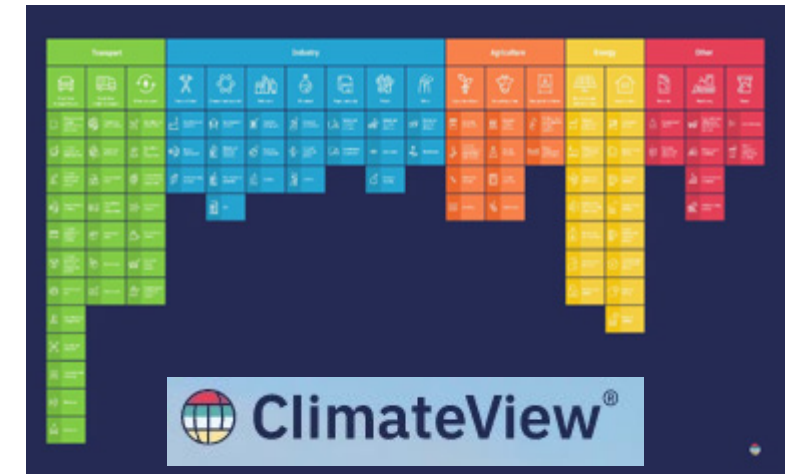
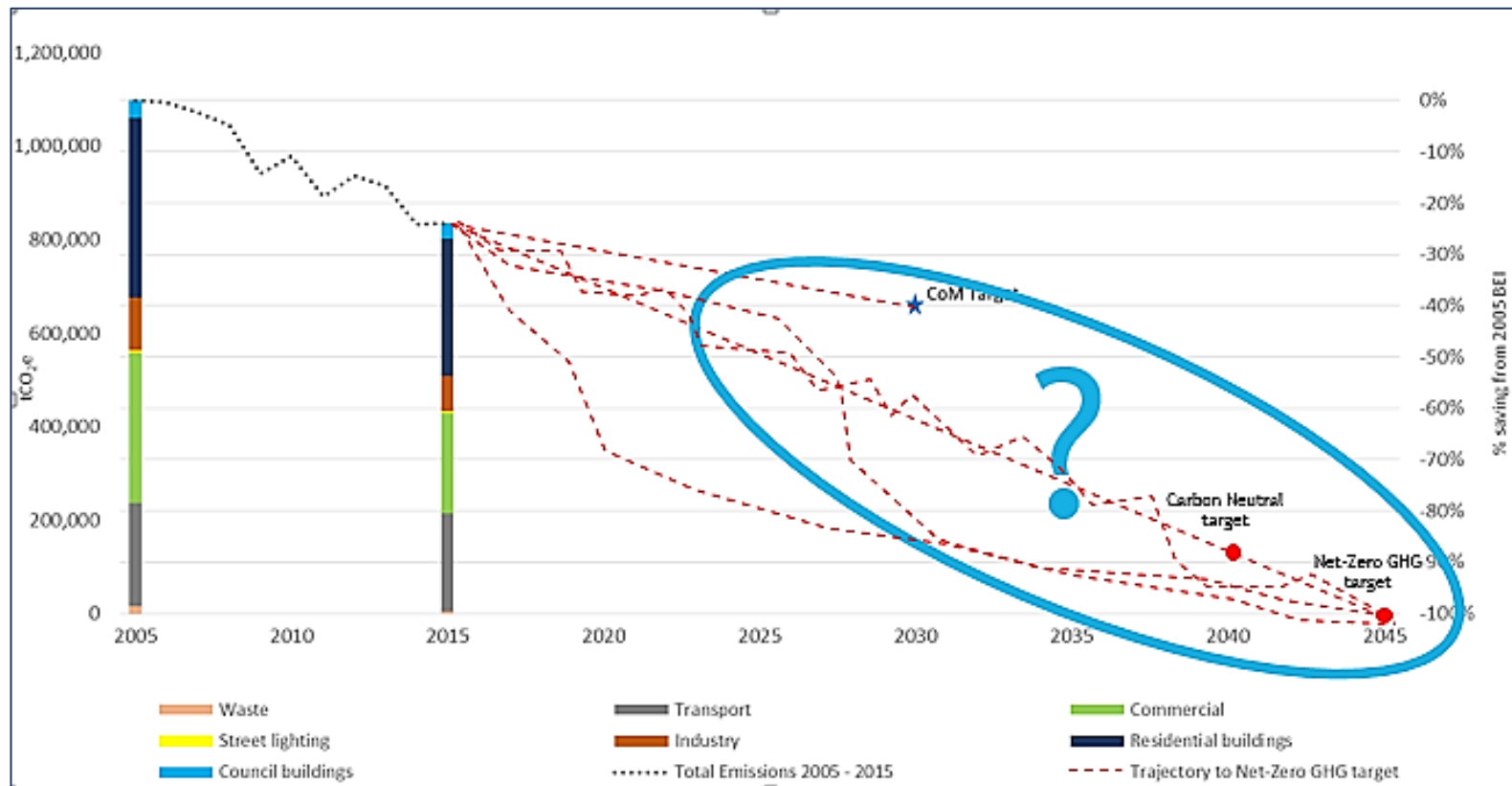
Others:

- New Food Growing Strategy
- Eco Schools and Climate Ready classrooms
- Support to businesses and the tourist industry in Dundee on resilience and climate change



How to get to Net-Zero?

- Over 70% of Dundee emissions come from the energy for heating and lighting
- Council properties only contribute 4% of total energy related emissions which is why a city-wide approach is essential.
- Current planned projects will not mitigate to the extent required to reach net zero.
- The path to net-zero will not be a linear one.



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