



**ABERDEEN**  
CITY COUNCIL

# Carbon Management in Aberdeen

**Gordon McIntosh**

**Director of Enterprise, Planning & Infrastructure**



# Policy Background

## UK Climate Change Act (2008)

*“UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline”*

## Scottish Government (2009)

*“contribute to the reduction of greenhouse gas emissions in line with the commitment to reduce emissions by 42% by 2020 and 80% by 2050”*

## Aberdeen City Council (2010)

*“To reduce Aberdeen City Council’s CO2 emissions by 23% by 2015 and by 42% by 2020”*

*“Carbon neutral overall by 2020”*



# Aberdeen's Carbon Management Programme

- ❖ Signed Scottish Climate Change Declaration in 2007, Covenant of Mayors 2009
- ❖ Took part in Carbon Trust Local Authority Carbon Management Programme in 2004
- ❖ Taking part in the Programme again in 2010:
  - the installation and expansion of combined heat and power plants with several multi-storey blocks and eight public buildings linked into the schemes;
  - ensure all our electricity comes from renewable sources;
  - Undertaken a Green Fleet Review with the Energy Savings Trust to upgrade the Council fleet to include hybrid and electric vehicles;
  - Using lower wattage lanterns to lower the energy consumption of street lighting, including traffic signals and illuminated street signs; and
  - Reviewing staff business travel and parking

## Energy - Combined Heat and Power

- ❖ 6 multi storey blocks, 500 flats
- ❖ Plant room designed to blend with links and incorporates sports changing room
- ❖ 1 Mega Watt gas-fired CHP generator with back-up boilers
- ❖ Space for future plant additions
- ❖ Connection to public buildings – regional sports facility, beach ballroom, ice rink, leisure centre and sports pavilion





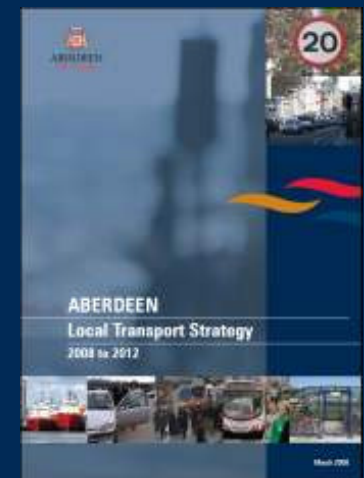
# Buildings – Marischal College

- ❖ Category A listed and 2nd largest granite building in Europe
- ❖ Being refurbished to achieve BREEAM “Excellent” standard
- ❖ Installation of a biomass heating system
- ❖ Electric car charging points
- ❖ Limited car parking
- ❖ Extensive cycle parking, showers and changing facilities
- ❖ Detailed travel plan



# Carbon Responsible Transport Strategies

- ❖ Nestrans Regional Transport Strategy (2008-2021)  
*“A transport system for the north east of Scotland which enables a more economically competitive, sustainable, and socially inclusive society.”*
- ❖ Local Transport Strategy (March 2008-2012)  
*“A sustainable transport system that is fit for the 21<sup>st</sup> Century, accessible to all, supports a vibrant economy and minimises the impact on our environment”*



## Transport – City-wide



- ❖ Transport is a significant contributor to global and domestic greenhouse gas emissions
- ❖ Road transport is the main cause of Scotland's remaining air quality problems (Audit Scotland, January 2010)
- ❖ In Aberdeen, our air quality problems are caused by transport
- ❖ The EU aims to reduce the number of premature deaths from diseases related to poor air quality by 40 per cent by 2020
- ❖ Scotland has a commitment to cut transport emissions by 30% by 2020.

# Air Quality Management Areas (AQMA)

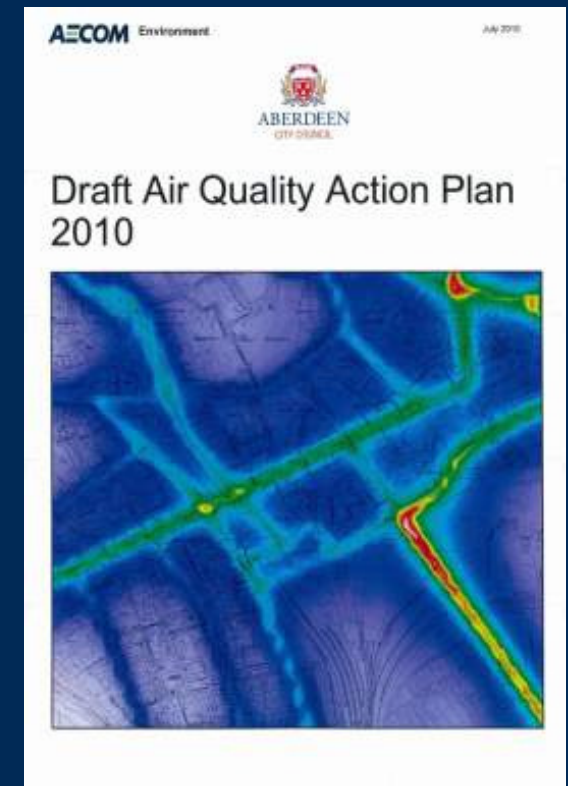
- ❖ 21 AQMAs have been declared in Scotland, Aberdeen has 3 of them.
- ❖ The following AQMAs have been designated in Aberdeen due to exceedances of national objectives for nitrogen dioxide (NO<sub>2</sub>) and fine particles (PM<sub>10</sub>):
  - City Centre (Union Street, Market Street, Commerce Street, Virginia Street and parts of Guild Street, King Street and Holburn Street)
  - Anderson Drive corridor/ Haudigan roundabout
  - Wellington Road (Queen Elizabeth II Bridge – Balnagask Road)





# Draft Air Quality Action Plan 2010

- ❖ Draft Air Quality Action Plan 2010 Aberdeen City Council recently approved to go out for consultation with the public and stakeholders
  
- ❖ Contains a number of actions in relation to:
  - Modal shift and travel choice
  - Lower emissions and cleaner vehicles
  - Roads infrastructure
  - Traffic management
  - Planning & Policies
  - Non-transport measures



## Projects for Aberdeen: Low Emission Zone (LEZ)

- ❖ A Low Emission Zone (LEZ) is a 'geographically defined area where the most polluting vehicles are restricted, deterred or discouraged from access and use'
- ❖ Examples of UK LEZs: Greenwich Peninsula, Oxford, Norwich, Bath, London. Areas considering: Sheffield, Glasgow, Edinburgh, Leeds
- ❖ Usually apply to freight vehicles and buses... but....  
On Union Street buses are the main source of the emissions, while on Market Street HGVs are the principal source. Although cars contribute proportionately less to the total pollution, they account for around 70-80% of total vehicles, causing congestion and hence increased pollution.

# A Low Emission Zone for Aberdeen?

- ❖ Currently undertaking a feasibility study – scoping assessment complete, detailed assessment underway
- ❖ The options that are being considered in detail are:
  - A bus LEZ covering the City centre AQMA or, all routes within the City; and
  - An HGV LEZ covering Market Street and Virginia Street (i.e. routes to/ from the harbour area)
- ❖ Initial analysis has concluded that the LEZ will have limited benefit to carbon emissions, but will improve air quality
- ❖ Consultation with stakeholders, public, bus companies and HGV operators to be undertaken shortly
- ❖ A range of complementary measures to support the LEZ also being investigated with the aim of making the LEZ work more effectively, and making the LEZ more acceptable to those most affected, including route signage, management of loading and waiting restrictions, traffic management measures
- ❖ Also determining possible alternatives to full LEZ - including reassessment of road hierarchy and traffic management measures

## Other Initiatives... Car Club

- ❖ A Car Club is an organisation that owns and maintains a fleet of cars from which its members can book a car for however long they need it. The Club pays for all tax, insurance, servicing, cleaning and fuel, whilst members usually pay a joining fee and for each journey they make.
- ❖ On-street parking locations have been identified
  - Union Street, Queen Street, Chapel Street, Loch Street, Golden Square, Railway Station. Possible extension to Universities and Hospital site
- ❖ Traffic Management
  - Traffic Management Regulation Orders going through in November/January
- ❖ Appoint a car club provider in Summer 2011



## Other Initiatives...Off Bus Ticketing

- ❖ Study to be undertaken to determine whether on-street ticket machines will speed up boarding – with service benefits – and therefore reduce the amount of time buses are stopped on Union Street and at other key locations
- ❖ Establish where the best locations are – Union Street, Bus Station, Airport, NHS Grampian at Foresterhill, Universities
- ❖ Whether the machines can be used for both Stagecoach and First services



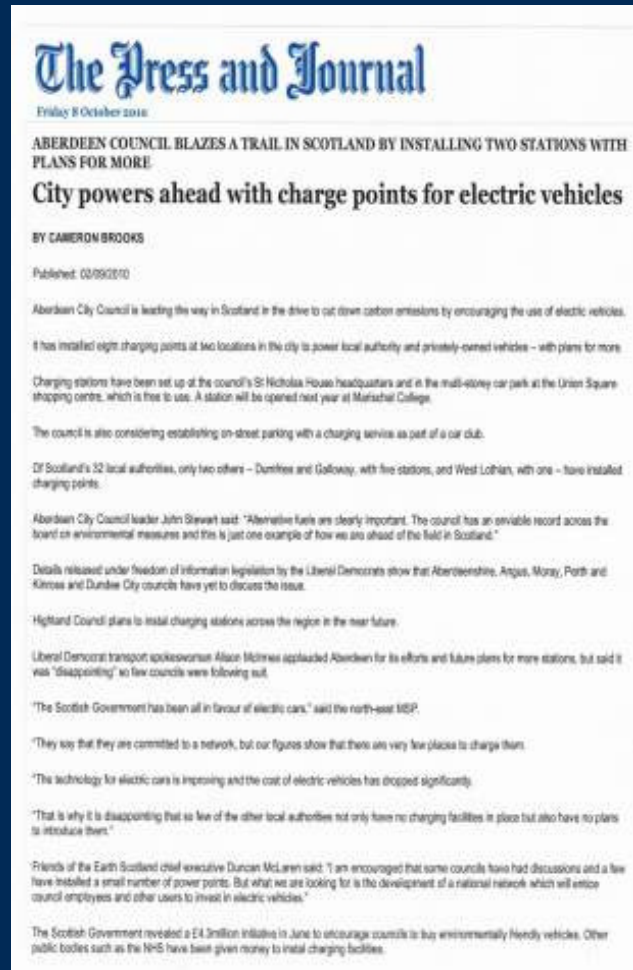
## Other Initiatives...Emission Based Parking Charges

- ❖ Other cities already have emissions based parking charges, study is underway to determine whether this could apply in Aberdeen
- ❖ Undertaken with a full review of parking zones and pricing structures
- ❖ Possibility of applying to residents and business permits initially
- ❖ Based on carbon emissions of vehicles
- ❖ Report to go before our Enterprise, Planning & Infrastructure Committee in Spring 2011

# Other Initiatives...



- ❖ On-street bicycle rental
- ❖ Freight distribution strategy for city centre
- ❖ Electric Charge points – recent press coverage by the Scotsman, Press & Journal
- ❖ Purchase of electric vehicles for Aberdeen City Council fleet
- ❖ Travel awareness and promotion – Getabout



Thank you

