

Love Energy



energy and carbon masterplan





Energy and Carbon Masterplan

Glasgow is transforming itself - aiming to become one of the most sustainable cities in Europe. Part of this transformation is in the energy that the city uses both in its buildings and transport systems. Increasingly Glasgow aims to be generating more energy locally from renewable and low carbon sources so that it can meet local energy needs more efficiently and help Glasgow tackle climate change and issues such as fuel poverty.

The Energy and Carbon Masterplan sets out a blueprint for how Glasgow can reduce its carbon dioxide emissions by 30% by 2020 and build a low carbon future for all its residents. Since 2006 Glasgow has reduced its energy use and carbon emissions by 14% and trends suggest that it can continue these reductions if current and new actions are undertaken. Glasgow will need to save more than 650,000 tonnes of CO₂ in order to meet its 30% reduction target.

The main sources of energy consumption in Glasgow are from natural gas, electricity and petroleum products in transport. Buildings (both domestic and industrial/commercial) account for 75% of energy use and 78% of carbon emissions. Transport accounts for around a quarter of Glasgow's total CO₂ emissions.

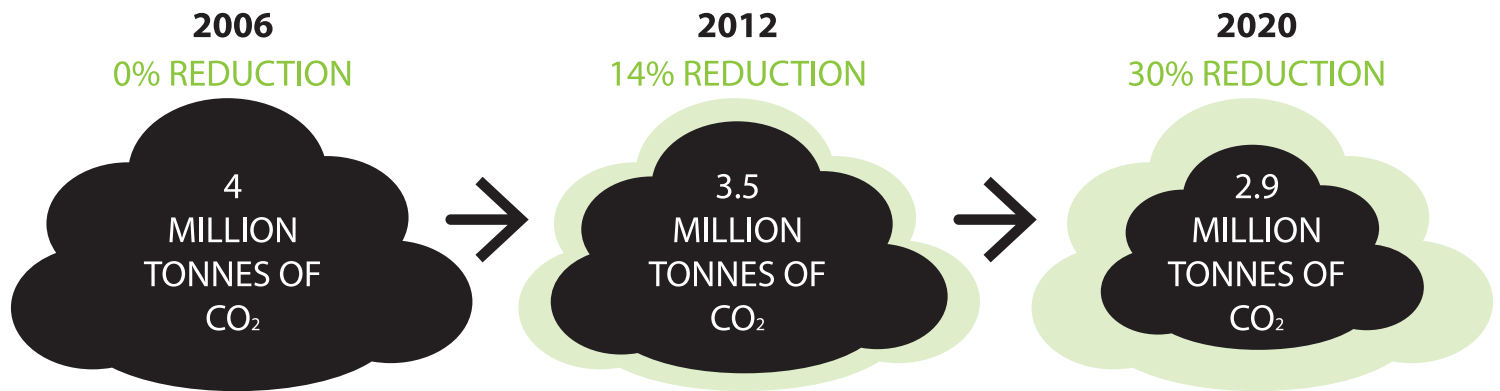
The Energy and Carbon Masterplan presents over 30 actions that aim to meet the 30% reduction target. The main actions focus on reducing the total energy the city uses and ensuring that the city uses energy efficiently. Coupled with this, actions aim to increase the proportion of energy consumed from low carbon and renewable sources. The expansion of wind energy, solar photovoltaic panels, geothermal energy and energy recovery from waste are all technologies that can be used in Glasgow - generating cheaper, clean energy and creating jobs.

Some of the main actions in the Plan are:

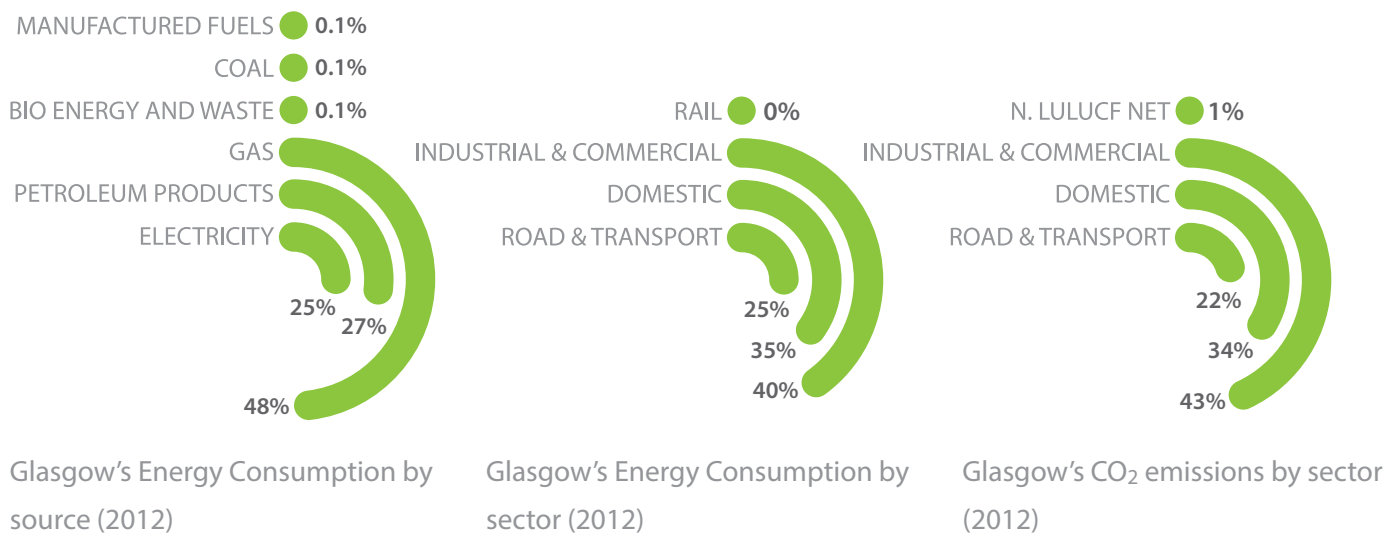
- Development of a number of co-ordinated district heating schemes in the city expanding out from installed schemes and covering a mixture of commercial and residential premises.
- Phasing out coal, oil and older inefficient electric heating in Glasgow City Council buildings and housing across the city.
- Improved energy efficiency and energy management systems across all sectors but particularly in older residential housing.
- Further expansion of waste to energy schemes including greater use of food waste and anaerobic digestion.
- Rolling out LED street lighting across the city.
- Further promotion of the use of electric vehicles and cycling as a key mode of transport, replacing the use of petrol and diesel vehicles.
- Promoting further expansion of low and zero carbon energy generation in the city through large and small-scale community schemes.
- Continued engagement of Glasgow's citizens, businesses, and public sector organisations in the delivery of new energy systems for Glasgow.

The Energy and Carbon Masterplan will be submitted to the EU Covenant of Mayors office and the implementation of the Plan will be co-ordinated by Glasgow City Council and the Sustainable Glasgow Board.

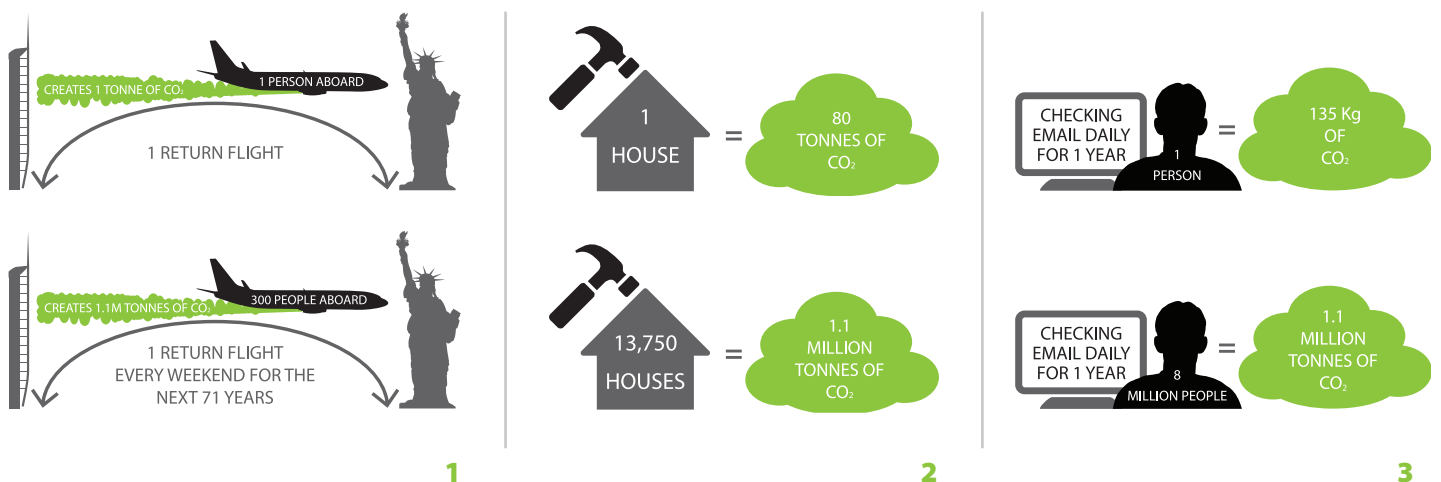
CO₂ Reduction



Glasgow's Energy Consumption and Emissions



What does 1.1M tonnes of CO₂ savings mean in practice?



1 <http://www.carbonneutralcalculator.com/flightcalculator.aspx>

2 <http://www.theguardian.com/environment/green-living-blog/2010/oct/14/carbon-footprint-house>

3 <http://www.theguardian.com/environment/green-living-blog/2010/oct/21/carbon-footprint-email>



12 months of
Glasgow's Green Year
2015 - themed events
to raise awareness



Winner of the
Community Energy
Scotland Award for
the most Solar PV
installed in 2014



CO₂ reduction
target is approximately
1.1M tonnes of CO₂
by 2020



The Energy Services Company
being formed to assist in alleviating
fuel poverty within
Glasgow

24

24 planned and implemented renewable
energy/energy saving measures on council estate
buildings; including schools, sport centres,
care homes and administrative
offices



Glasgow Recycling and Renewable Energy Centre
(GRREC) once finished will handle 200,000 tonnes of
waste a year, and produce enough
energy for 22,000
households



3 District Heating Schemes already in
city and others being planned



Free electric vehicle charging and
parking at 56 points throughout
the city

33

33 Actions to achieve a
30% reduction by 2020



Glasgow's cycle lanes have increased over
the last few years with over
301km in place in 2015



Cathkin Wind Turbine produces 7300 kilowatts of
energy a year, enough to provide electricity to
almost 700 homes, or the equivalent CO₂
emissions of around
1000 cars

**PEOPLE
MAKE
GLASGOW**

The MACH bike scheme has been
used over 20,000 times since it's launch in June 2014
which averages at about 250 cycle journeys
a day, with 700 a day at its peak during
the 2014 Commonwealth
Games.

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