# Source emissions have decreased by 46.8% since 1990, and fell by 3.3% in the latest year

Source emissions are a measure of actual greenhouse gas emissions or removals in Scotland. These figures include international aviation and shipping categories and are used for UK and international comparisons.

# Adjusted emissions have decreased by 39.1% since the baseline period, and increased by 3.7% over the latest year.

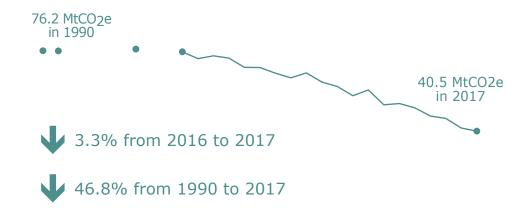
Source emissions are adjusted to account for Scotland's participation in the EU-wide emissions trading scheme.

These figures are used to monitor Scotland's emissions targets, set in The Climate Change (Scotland) Act 2009.

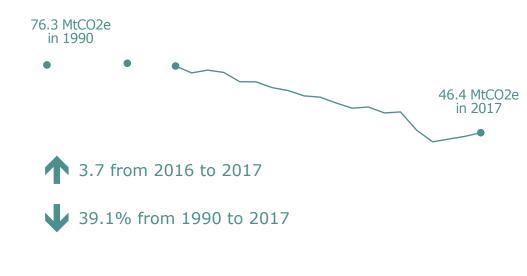
# The annual fixed target for 2017 has not been met

Adjusted emissions figures are used to measure progress against fixed annual targets set out in The Climate Change (Scotland) Act 2009.

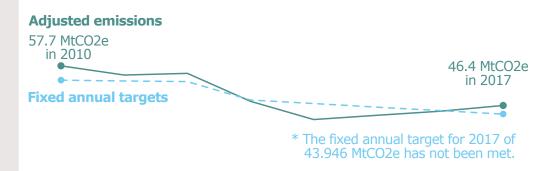
#### Source Emissions 1990 to 2017



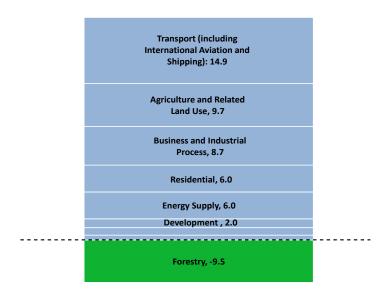
#### Adjusted Emissions: Baseline period to 2017



#### Adjusted Emissions and Targets, 2010 - 2017



#### Source emissions by sector in 2017 (MtCO2e)



## Change in source emissions by sector 1990 to 2017 (MtCO2e)

Total greenhouse gas emissions	-35.6 (-46.8%)
Energy supply	-16.7 (-73.5%)
Business and industrial process	-5.7 (-39.7%)
Forestry	-4.3 (-72.0%)
Waste management	-4.0 (-29.4%)
Agriculture and related land use	-2.5 (-34.9%)
Residential	-2.0 (-24.4%)
Public sector buildings	-0.6 (-36.2%)
Transport (excluding international aviation and shipping) -0.5 (-3.7%)	
Development	0.1 (4.4%
International aviation and shipping	0.6 (43.4%

### Change in source emissions by sector 2016 to 2017 (MtCO2e)

,	- +
Energy supply	-1.4 (-18.9%)
Total greenhouse gas emissions	-1.4 (-3.3%)
Residential	-0.3 (-4.3%)
Agriculture and related land use	-0.2 (-1.9%)
Public sector buildings	-0.0 (-3.6%)
Development	-0.0 (-2.0%)
Waste management	0.0 (2.6%)
Business and industrial process	0.0 (0.6%)
International aviation and shipping	0.1 (2.8%)
Forestry	<b>0.2</b> (1.6%)
Transport (excluding international aviation a	nd shipping 0.3 (2.1%)

### Transport is the highest emitting sector in Scotland.

In 2017, domestic transport emissions were 13 MtCO2e and International Aviation and Shipping emitted a further 1.9 MtCO2e.

Agriculture and Related Land Use was the 2nd highest emitter (9.7 MtCO2e), followed by Business and Industrial Process emissions (8.7 MtCO2e).

The Forestry sector continued to act as a substantial net-sink of CO2, removing 9.5 MtCO2e) from net GHG emissions in Scotland.

# Energy supply emissions have seen the largest decrease since 1990

This is mainly due to a reduction of emissions from power stations.

The decline in Business and Industrial Process emissions is linked to a decline in emissions from the manufacturing of iron and steel in the early part of the series.

The decrease in Waste Management emissions is largely due to improvements in landfill management.

Two sectors demonstrate a modest increase in emissions over the period; Development, and International Aviation and Shipping.

# Energy supply emissions continue to fall in latest year.

The decrease in Energy Supply emissions is driven by a reduction in coal generation in the power sector. Transport is the largest emitting sector, the increase in transport emssions was mainly due to an increase in emissions from road transport.

The increase in Forestry is due to the harvesting and thinning of trees.

The decrease in Residential emissions is linked to an decrease in the combustion of fuel in households, reflecting warmer winter and spring temperatures in 2017 compared to 2016.