# Source emissions have decreased by 49.0% since baseline levels, and dropped by 10.3% over 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 45.2% since baseline, and increased by 2.5% 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.

# Annual fixed target for 2016 has been met

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

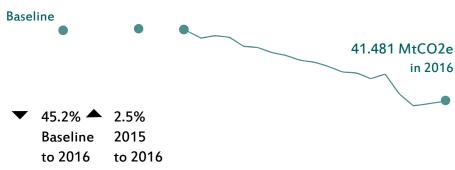
Source Emissions 1990 to 2016

### 75.6 MtCO2e

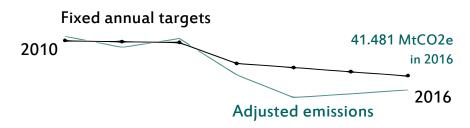


Adjusted Emissions Baseline to 2016

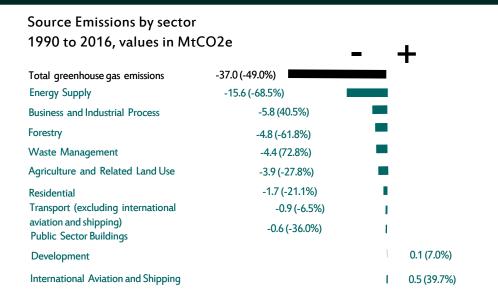
#### 75.7 MtCO2e



Adjusted Emissions and Targets 2010-2016

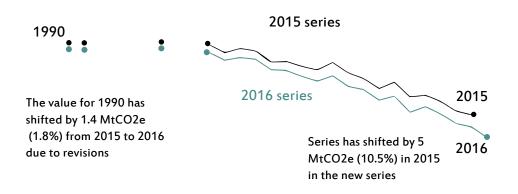


\*The fixed annual target for 2016 of 44.958 MtCO2e has been met and this is the third consecutive year the annual target has been met.



#### Source Emissions by sector 2015 to 2016, values in MtCO2e **Energy Supply** -5.1 (-41.4%) Total greenhouse gas emissions -4.4 (-10.3%) -0.1 (-1.1%) Agriculture and Related Land Use **Business and Industrial Process** -0.1 (-1.1%) Waste Management -0.1 (-4.9%) **Public Sector Buildings** 0.0 (1.9%) International Aviation and Shipping 0.1 (7.0%) Development 0.2 (8.1%) Transport (excluding international 0.2 (1.6%) aviation and shipping) 0.2 (3.3%) Residential Forestry 0.2 (1.8%)

## Methodological changes between the 2015 and 2016 publications



# 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.

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

# Transport is the largest emitting sector

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 increase in Residential emissions is linked to an increase in the combustion of fuel in households, reflecting cooler mean winter and autumn temperatures in 2016 compared to 2015.

#### Methodology changes

The figures have been revised since last year's publication to incorporate methodological improvements and new data.

Forestry changes have increased the estimated size of the carbon sink and decreased overall emissions by on average 5 MtCO2e across the whole timeseries. Changes to agriculture and related land use have decreased emissions on average by approximately 0.7 MtCO2e across the whole timeseries. Changes to shipping have on average increased emissions by 1.5 MtCO2e across the series.