





In October 2019, the Climate Change (Emissions Reduction Targets) (Scotland) Bill 2019 received Royal Assent, amending the Climate Change (Scotland) Act 2009 and setting out targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, and 90% by 2040.

The Public Bodies Duties in the Climate Change (Scotland) Act 2009 make it a legislative requirement for public bodies to act on climate change, both mitigation and adaptation, and to do so within the frame of sustainability. The current COVID context has further sharpened our focus on Climate Change, with green recovery and sustainability at the heart of recovery and renewal priorities

Given the significance of this major policy agenda for local government, it is important that the LGBF includes measures which support Local Government in its efforts to contribute to national carbon reduction targets.

This year, the framework introduces two new measures to reflect this focus drawn from UK local authority and regional carbon dioxide emissions national statistics. Data for 2020/21 is not yet available, so the analysis below is based on data from 2010/11 to 2019/20.

The two climate measures included in the LGBF are:

- 1. CO2 emissions area wide
- 2. CO2 emissions area wide: emissions within scope of LA subset

Within scope emissions form a subset of the area wide measure, excluding certain emissions which it has been considered local authorities are unable to directly influence. Removing these emissions has a significant impact on some Local Authorities. The following emissions included in the full dataset are excluded from 'within scope':

- emissions from sites within the EU ETS (except power stations, whose emissions are indirectly included via the end-user estimates which cover electricity use),
- emissions from motorway traffic
- · emissions from diesel railways, and
- emissions from the Land Use, Land Use Change, and Forestry (LULUCF) sector.

**Table 64: Carbon Emissions** 

	2010- 11	2011- 12	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	Value Change 2018-19 to 2019-20	Value Change 2010-11 to 2019-20
CO <sub>2</sub> emissions area wide per tonne, per capita	8.2	7.4	7.7	7.4	6.6	6.5	6.1	5.9	5.9	5.7	dna	-3.7%	-30.5%
co <sub>2</sub> emissions area wide: emissions within scope of LA per tonne, per capita	7.2	6.4	6.7	6.4	5.7	5.5	5.2	4.9	4.8	4.6	dna	-4.4%	-35.5%



The area wide and within scope CO2 emissions have reduced by 30% and 36% respectively since 2010/11. Reductions in within scope emissions have been reported in all 32 councils (ranging from -46% to -23%) while reductions in area wide have been recorded in 31 council areas (ranging from -42% to +2%).

In 2019/20, the variation between authorities is significantly wider for area wide emissions (3.1 to 21.6) than for within scope emissions (3.2 to 7.5). While there is no systematic relationship with rurality or deprivation for area wide emissions, factors which may contribute to variation between councils include the level of heavy industry, land use, transport, and population density.

Variation in emissions within scope of Local Authorities does reveal a clear relationship with geography as can be seen in the graph below, with rural authorities reporting significantly higher CO2 emissions (6.2 compared to 3.9).



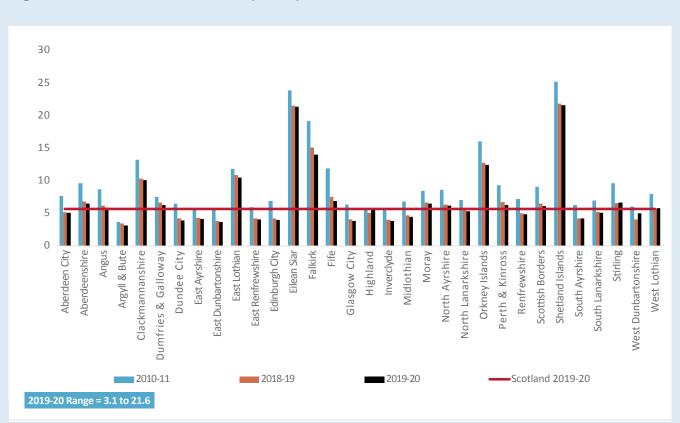


Fig 161: CO2 emissions area wide per capita

Source: UK local authority and regional carbon dioxide emissions national statistics



# Local Variation – CO2 emissions area wide per capita

### 2019/20 Value

Scotland: 5.7t; council range: 3.1t – 14t (excluding outliers). Narrowing variation in the most recent year. Higher emissions in rural councils compared to urban councils (10.4t compared to 5.6t, not statistically significant).

### **Change Over Time**

In 2018/19: Scotland: -3.7%. councils: 4 increased and 28 decreased (range: -10.2% to +24.5%).

Since 2010/11: Scotland: -30.5%. councils: 1 increased and 31 decreased (range: -42% to +1.6%).



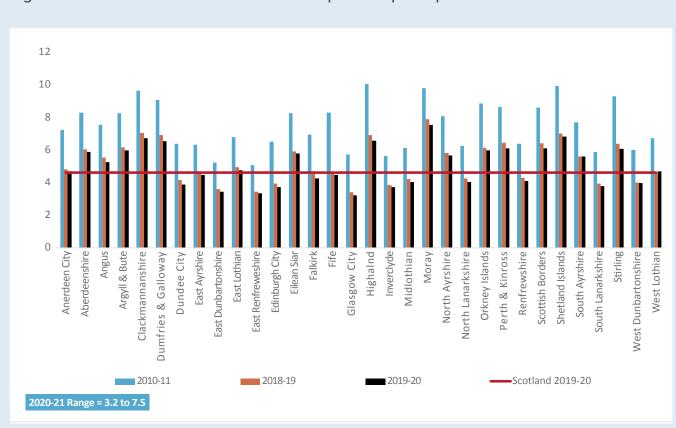


Fig 162: CO2 emissions area wide within scope of LA per capita

Source: UK local authority and regional carbon dioxide emissions national statistics



# Local Variation – CO2 emissions within LA Scope per capita

### 2019/20 Value

Scotland: 4.6t; council range: 3.2t – 7.5t. Narrowing variation in the most recent year. Significantly higher emissions in rural councils compared to urban councils (6.2t compared to 3.9t).

### **Change Over Time**

In 2018/19: Scotland: -4.4%. councils: 1 increased and 31 decreased (range: -9.3% to +1.9%).

Since 2010/11: Scotland: -35.5%. councils: all 32 councils decreased (range: -45.9% to -23%).



Figure 163: CO2 emissions area wide within scope of LA per capita by family group - geography

