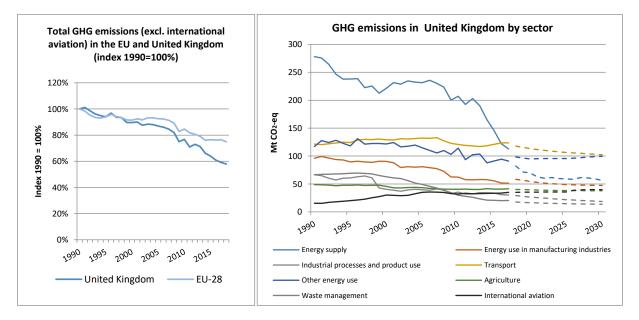
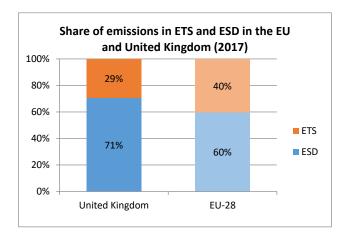
# Country fact sheet: United Kingdom



## 1. Total greenhouse gas emissions

Figure 1: Left hand side: Total greenhouse gas emissions (excl. international aviation) 1990-2018 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector<sup>1</sup> – historical emissions 1990-2017, projections 2018-2030 (Mt  $CO_2$ -eq).





<sup>&</sup>lt;sup>1</sup> The sectors in the figure correspond to the following IPCC sectors: Energy supply: 1A1, 1B and 1C. Energy use in manufacturing industries: 1A2. Industrial processes and product use: 2. Transport: 1A3. Other energy use: 1A4, 1A5 and 6. Agriculture: 3. Waste: 5. International aviation: memo item.

<sup>&</sup>lt;sup>2</sup> Evoluting international aviation CO, from domestic aviation and NE

 $<sup>^2</sup>$  Excluding international aviation,  $\text{CO}_2$  from domestic aviation and  $\text{NF}_3.$ 

## 2. ETS emissions

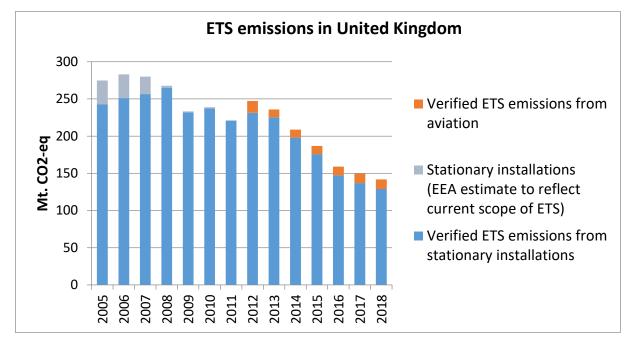


Figure 3: ETS emissions 2005-2018 (Mt CO<sub>2</sub>-eq).<sup>3</sup>

## 3. Emissions in Effort Sharing sectors

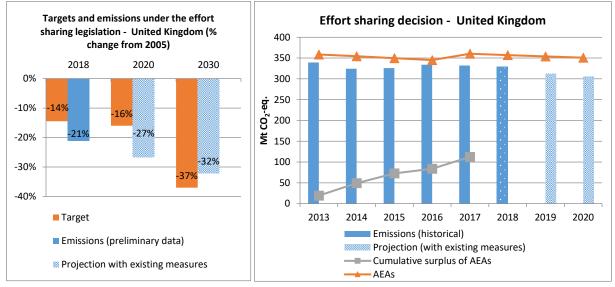
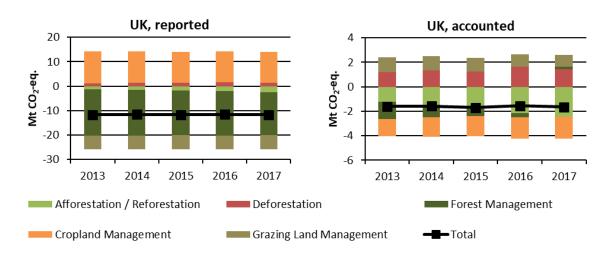


Figure 4: Left hand side: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation 2018, 2020 and 2030 as percentage change from 2005. Right hand side: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision 2013-2020 (Mt CO<sub>2</sub>-eq).

<sup>&</sup>lt;sup>3</sup> The scope of ETS was extended from 2013. To reflect the current scope of ETS, estimates made by EEA are included in the figures from 2005 to 2012. The estimates cover only emissions from stationary installations.



### 4. Land use, land use change and forestry

Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO<sub>2</sub>-eq.)<sup>4</sup>

Reported quantities under the Kyoto Protocol for the United Kingdom show net removals of, on average, -11.6 Mt CO<sub>2</sub>-eq for the period 2013 to 2017. In this regard, the United Kingdom contributes with 2.8% to the annual average sink of -411.9 Mt CO<sub>2</sub>-eq of the EU-28. Accounting for the same period depicts net credits of, on average, -1.6 Mt CO<sub>2</sub>-eq, which corresponds to 1.4% of the EU-28 accounted sink of -111.9 Mt CO<sub>2</sub>-eq. Reported net removals and accounted net credits remain nearly unchanged throughout the period. The United Kingdom elected to report and account for Cropland Management as one of seven EU Member States and for Grazing Land Management as one of six EU Member States. The United Kingdom is the only EU Member State that elected to report and account for Wetland Drainage and Rewetting but has so far not provided any data.

Highest reported quantities are removals by Forest Management and emissions by Cropland Management. Moderate removals by Grazing Land Management also play a role in the overall emission budget of the LULUCF sector. Despite their increasing quantities, removals by Afforestation/Reforestation and emissions by Deforestation can be neglected.

All activities contribute in notable quantities to the accounts of the United Kingdom. On average, credits by Afforestation/Reforestation are the largest accounting category followed by credits by Cropland Management. Credits from both activities have an increasing trend. Debits by Deforestation, which increased for 2016, and debits by Grazing Land Management partly counterbalance the accounts. Negligible credits by Forest Management between 2013 and 2016 turn into a small quantity of debits for 2017. The United Kingdom is one of twelve EU Member States with debits by Forest Management for at least one year.

<sup>&</sup>lt;sup>4</sup> The differences between reported and accounted emissions from LULUCF under the Kyoto Protocol are described in the '*explanatory note on LULUCF – accounted and reported quantities under the Kyoto Protocol*'.

### Data sources

Figure 1: Annual European Union greenhouse gas inventory 1990–2017 (EEA greenhouse gas data viewer: <u>https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer</u>). Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

Figure 2: Verified ETS emissions abstracted from European Union Transaction Log 21.10.2019 (EEA ETS data viewer: <u>https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1</u>). ESD data from European Commission: *Commission Implementing Decision (EU) on greenhouse gas emissions for each Member State for the year 2017 covered by Decision No 406/2009/EC of the European Parliament and of the Council* (forthcoming).

Figure 3: abstract from European Union Transaction Log 21.10.2019 (EEA ETS data viewer: <a href="https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1">https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1</a>).

Figure 4: European Commission: Commission Implementing Decision (EU) on greenhouse gas emissions for each Member State for the year 2017 covered by Decision No 406/2009/EC of the European Parliament and of the Council (forthcoming). Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

Figure 5: European Commission based on data accounted and reported by Member States under the Kyoto Protocol.