

# Kick-starting the journey towards a climate-neutral Europe by 2050



**Country fact sheet: Bulgaria** 

**EU Climate Action Progress Report 2020** 

### 1. Total greenhouse gas emissions

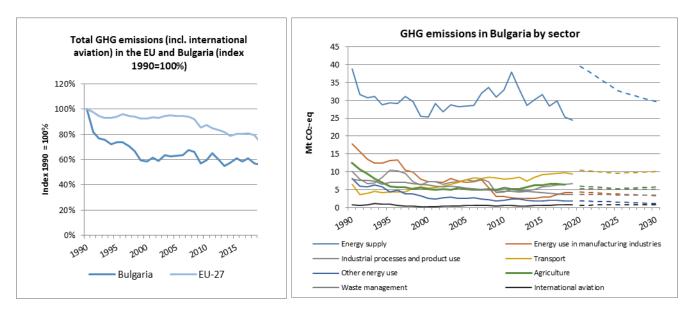


Figure 1: Left hand side: Total greenhouse gas emissions (incl. international aviation) 1990-2019 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector<sup>1</sup> – historical emissions 1990-2018, proxy 2019, projections WEM 2020-2030 (Mt CO<sub>2</sub>-eq).

<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.

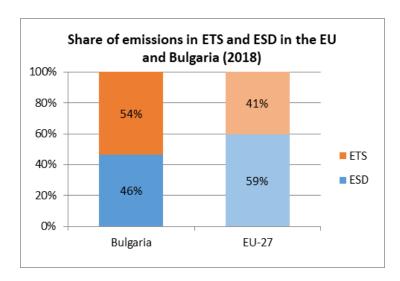


Figure 2: Share of emissions covered by the ETS and the ESD (2018).<sup>2</sup>

#### 2. ETS emissions

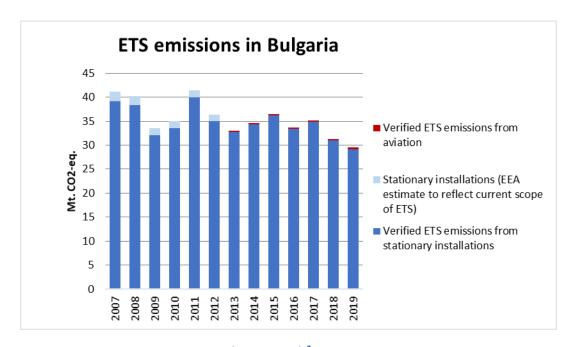
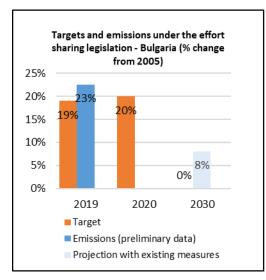


Figure 3: ETS emissions 2007-2019 (Mt CO<sub>2</sub>-eq).<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Excluding international aviation, CO<sub>2</sub> from domestic aviation and NF<sub>3</sub>.

<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.

## 3. Emissions in Effort Sharing sectors



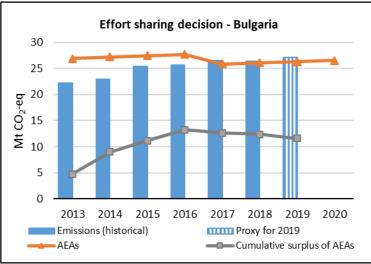


Figure 4: Left hand side: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation 2019, 2020 and 2030 as percentage change from 2005. Right hand side: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision 2013-2019 (Mt CO<sub>2</sub>-eq).

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

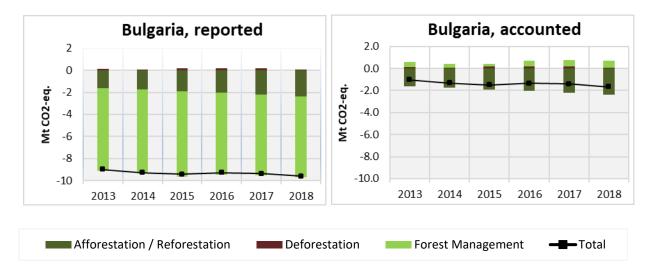


Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO<sub>2</sub>-eq.)<sup>4</sup>

Reported quantities under the Kyoto Protocol for Bulgaria show net removals of, on average, -9.3 Mt  $CO_2$ -eq for the period 2013 to 2018. In this regard, Bulgaria contributes with 2.4% to the annual average sink of -396.7 Mt  $CO_2$ -eq of the EU-27. Accounting for the same period shows net credits of, on average, -1.4 Mt  $CO_2$ -eq, which makes up 1.2% of the EU-27 accounted sink of -114.1 Mt  $CO_2$ -eq. Reported net removals show minor variations with a slightly increasing trend overall; the same pattern is more accentuated for accounted net credits.

The dominating reported activity is Forest Management with removals. Removals by Afforestation/Reforestation are sizable but emissions by Deforestation can be neglected in the overall emission budget of the LULUCF sector. Removals by Afforestation/Reforestation show an increasing trend over the six-year period.

Credits from Afforestation/Reforestation outweigh the debits by Forest Management and Deforestation. Bulgaria is one of 13 EU Member States with debits by Forest Management for at least one year. Credits by Afforestation/Reforestation show a clear increasing trend over the six-year period. Debits by Forest Management are higher in the period 2016 to 2018 compared to the three previous years.

<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'.

Bulgaria

#### **Data sources**

Figure 1: Annual European Union greenhouse gas inventory 1990–2018 (EEA greenhouse gas data viewer: <a href="https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer">https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer</a>). Approximated EU greenhouse gas inventory 2019 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

Figure 2: Verified ETS emissions abstracted from European Union Transaction Log 30.06.2020 (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>). ESD data from European Commission: Commission Implementing Decision (EU) on greenhouse gas emissions for each Member State for the year 2018 covered by Decision No 406/2009/EC of the European Parliament and of the Council (forthcoming).

Figure 3: abstract from European Union Transaction Log 30.06.2020 (EEA ETS data viewer: https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1).

Figure 4: European Commission: Commission Implementing Decision (EU) on greenhouse gas emissions for each Member State for the year 2018 covered by Decision No 406/2009/EC of the European Parliament and of the Council (forthcoming). Approximated EU greenhouse gas inventory 2019 (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.