# **Country fact sheet: Poland**

## 1. Total greenhouse gas emissions

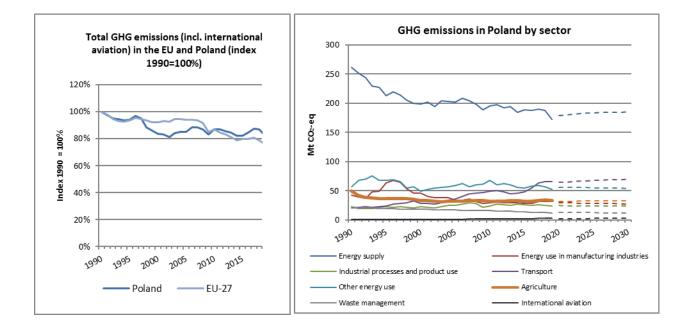


Figure 1: Left hand side: Total greenhouse gas emissions (incl. international aviation) 1990-2020 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector<sup>1</sup> – historical emissions 1990-2019, proxy 2020, projections WEM 2021-2030 (Mt CO<sub>2</sub>-eq).

<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: 1.D.1.a.

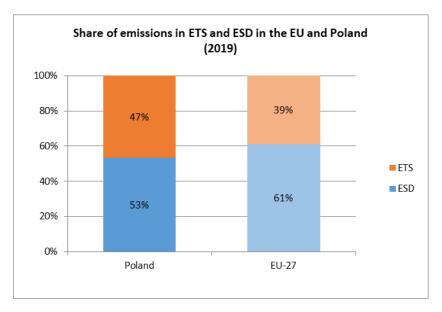
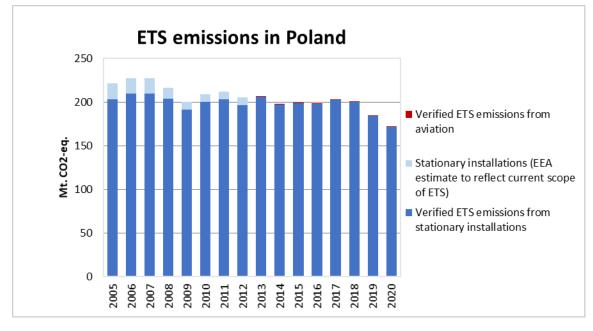


Figure 2: Share of emissions covered by the ETS and the ESD (2019).<sup>2</sup>

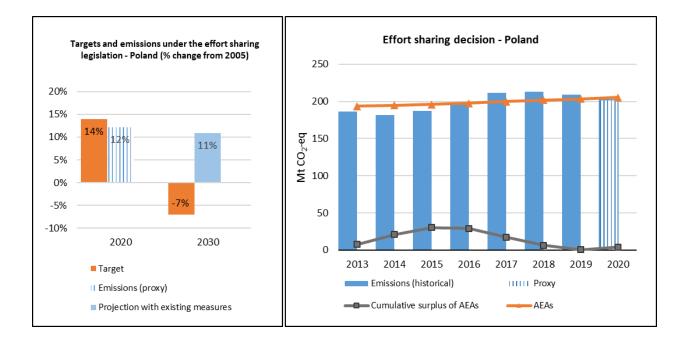
## 2. ETS emissions



### Figure 3: ETS emissions 2005-2020 (Mt CO<sub>2</sub>-eq).<sup>3</sup>

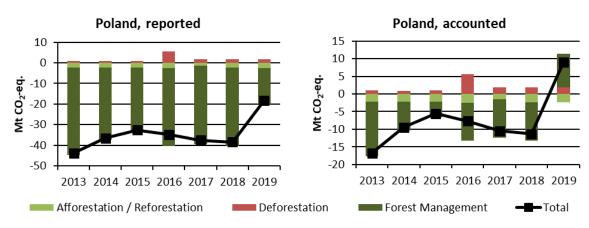
<sup>&</sup>lt;sup>2</sup> Excluding international aviation and NF<sub>3</sub>.

<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 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).



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

Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO2-eq.)<sup>4</sup>

Reported quantities under the Kyoto Protocol for Poland show net removals of, on average, -34.6 Mt CO<sub>2</sub>-eq for the period 2013 to 2019. In this regard, Poland contributes with 10.0% to the annual average sink of -344.9 Mt CO<sub>2</sub>-eq of the EU-27. Accounting for the same period depicts net credits of, on average, -7.5 Mt CO<sub>2</sub>-eq, which corresponds to 6.5% of the EU-27 accounted sink of -115.0 Mt CO<sub>2</sub>-eq. Reported net removals and accounted net credits decrease between 2013 and 2015, increase until 2018 and sharply dropped in 2019, also resulting in net debits for that year. Poland is one of 14 EU Member States that show net debits for at least one year in this preliminary accounting exercise.

The dominating reported activity is Forest Management with removals. Removals by Afforestation/Reforestation are small and emission by Deforestation negligible except for 2016 with emissions of 5.6 Mt CO<sub>2</sub>-eq. This increase is the result from large conversions of forest to settlement for expanding infrastructures required to support the growing population. Removals by Forest Management decrease between 2013 and 2015 by 11.1 Mt CO<sub>2</sub>-eq, followed by a moderate increase in 2016. In 2019 credits by Forest Management sharply declined by more than 50%. The decreasing removals from 2013 to 2015 relates to a reported increase in harvests, and the decrease in 2019 is due to windstorms.

Credits by Forest Management are the biggest accounting quantity in most years; in 2019 debits by Forest Management are highest. Poland is one of 13 EU Member States with debits by Forest Management for at least one year. Credits by Afforestation/Reforestation are moderate, and debits by Deforestation negligible except for 2016. Debits by Forest Management decreased from 2013 to 2015, increased in 2016 and remained at this level until 2018.

<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 1990–2019 (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 2020 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

Figure 2: Verified ETS emissions extracted from European Union Transaction Log 01.07.2021 (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 covered by Decision No* 406/2009/EC of the European Parliament and of the Council for the year 2019 for each Member State (forthcoming).

Figure 3: extract from European Union Transaction Log 01.07.2021 (EEA ETS data viewer: https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1.

Figure 4: European Commission: Commission Implementing Decisions on greenhouse gas emissions for each Member State for the years 2013-2019 under the Effort Sharing Decision (Implementation of the Effort Sharing Decision (europa.eu)). Approximated EU greenhouse gas inventory 2020 (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.