Country fact sheet: Hungary

1. Total greenhouse gas emissions

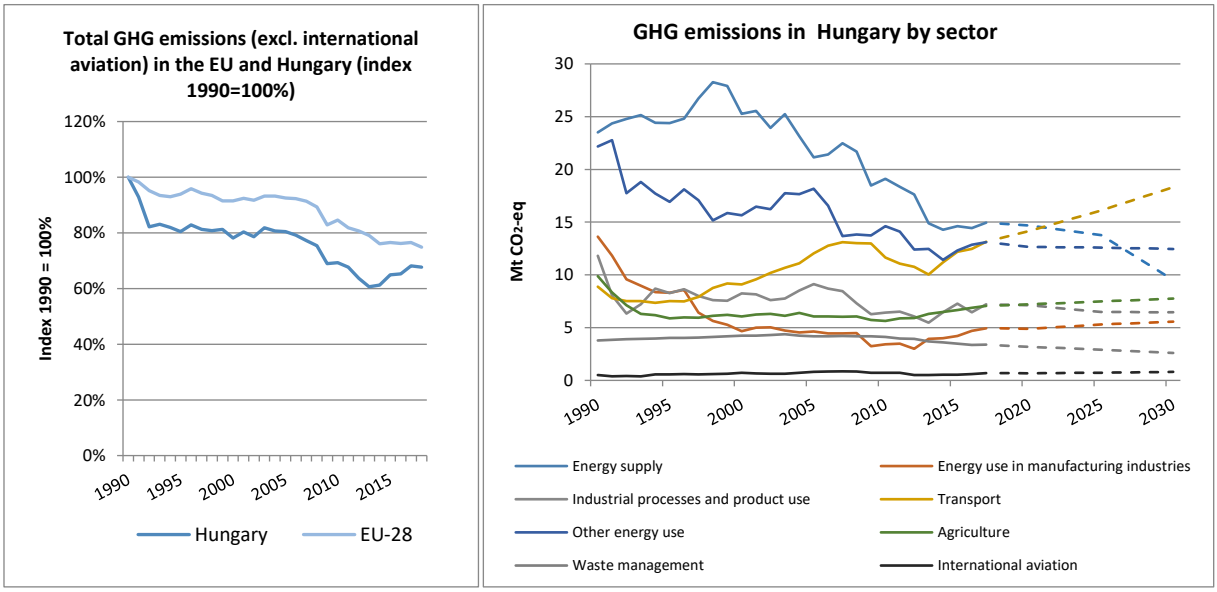

Figure 1: Left hand side: Total greenhouse gas emissions (excl. international aviation) 1990-2018 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector[1] – historical emissions 1990-2017, projections 2018-2030 (Mt CO_2-eq).

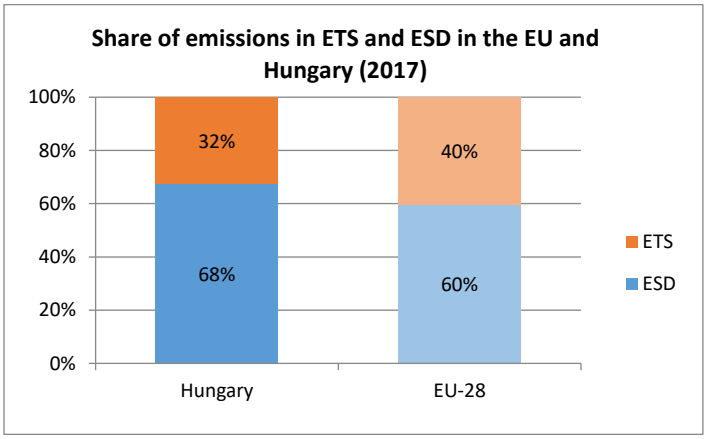

Figure 2: Share of emissions covered by the ETS and the ESD (2017).[2]

[1] 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.

[2] Excluding international aviation, CO_2 from domestic aviation and NF_3.

2. ETS emissions

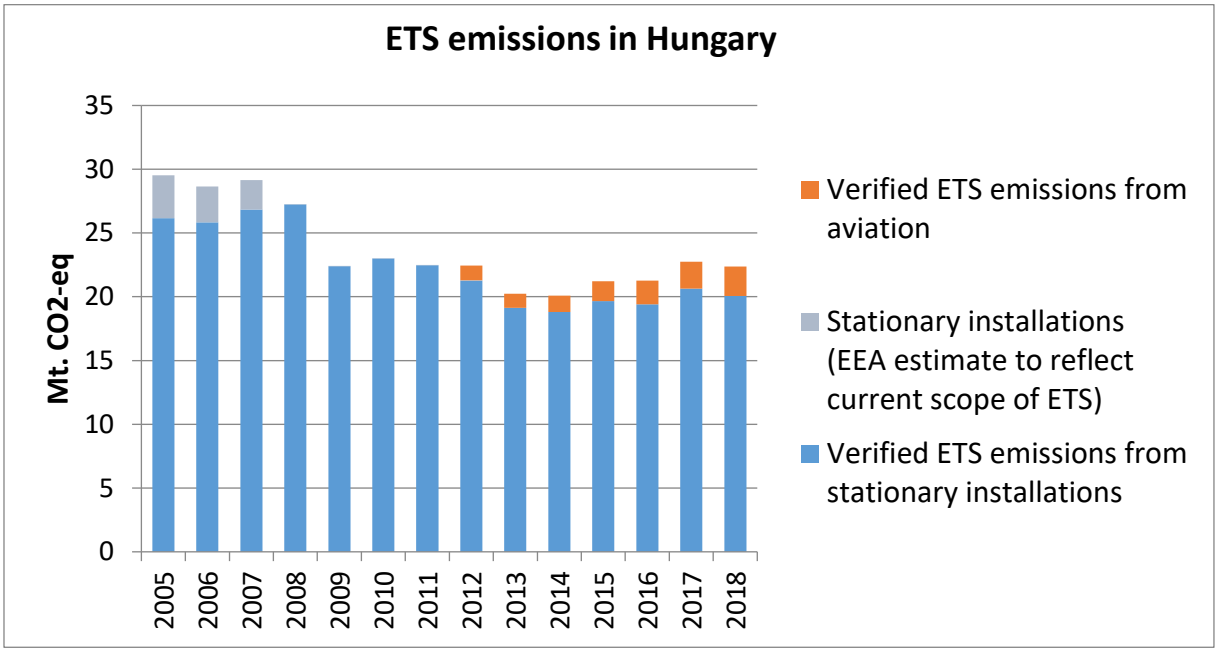

Figure 3: ETS emissions 2005-2018 (Mt CO_2-eq).[3]

3. Emissions in Effort Sharing sectors

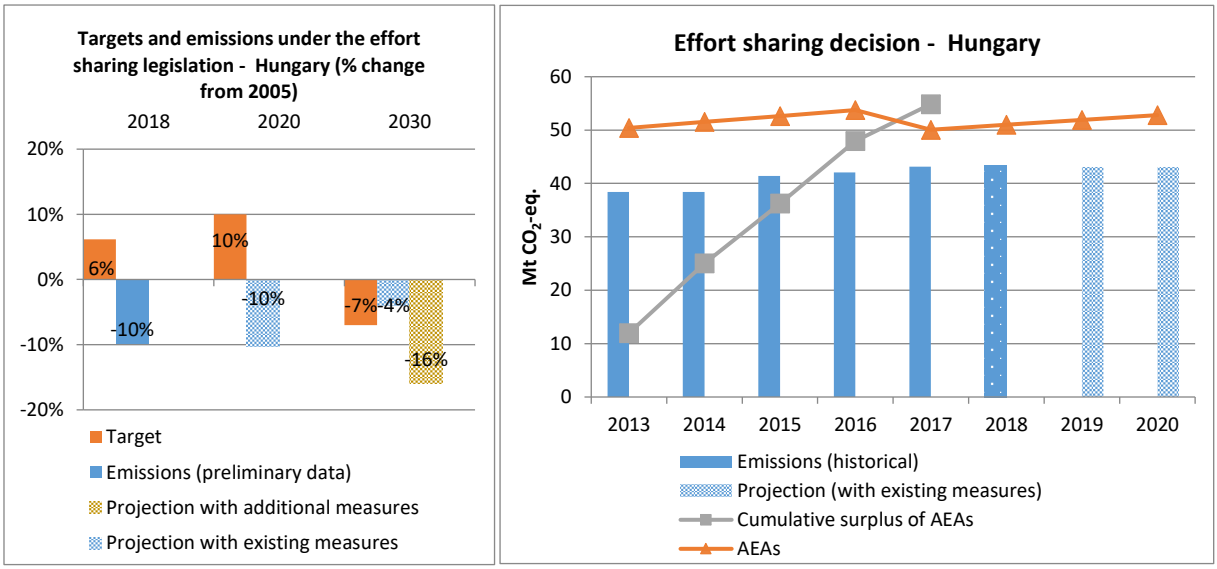

Figure 4: Left hand side: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation 2018, 2020 and 2030 as percentage change from 2005. Right hand side: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision 2013-2020 (Mt CO_2-eq).

[3] 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

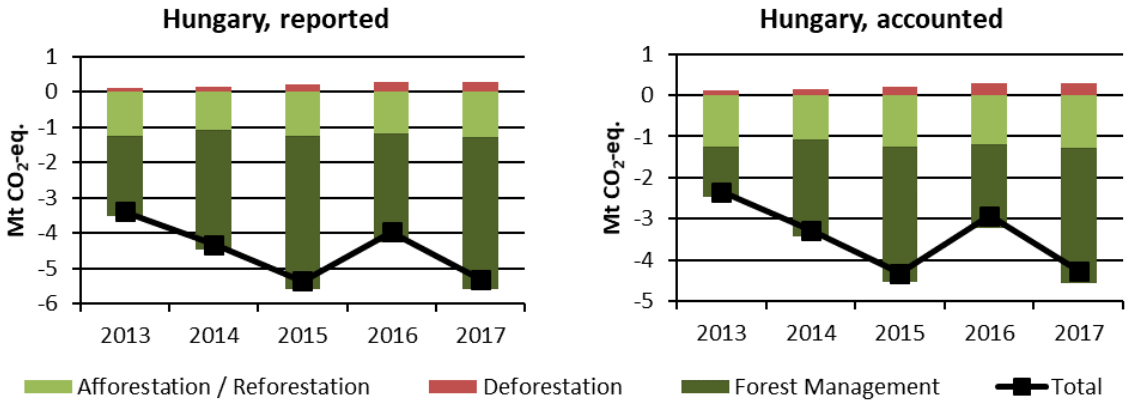

Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO_2-eq.)[4]

Reported quantities under the Kyoto Protocol for Hungary show net removals of, on average, -4.5 Mt CO_2-eq for the period 2013 to 2017. In this regard, Hungary contributes with 1.1% to the annual average sink of -411.9 Mt CO_2-eq of the EU-28. Accounting for the same period depicts net credits of, on average, -3.4 Mt CO_2-eq, which corresponds to 3.1% of the EU-28 accounted sink of -111.9 Mt CO_2-eq. Reported net removals and accounted net credits show a fluctuating pattern with an overall increase between 2013 and 2017.

Highest reported quantities are removals by Forest Management, which overall increased between 2013 and 2017 with a notable drop in 2016. Removals by Afforestation/Reforestation are moderate and remain stable and emissions by Deforestation, while slightly increasing, make up only a small portion of the emission budget of the LULUCF sector

Credits by Forest Management are the dominating accounting quantity over the five-year period. Credits by Afforestation/Reforestation are sizable; in fact, they are the biggest quantity for 2013. They remain nearly unchanged over the five-year period. Debits by Deforestation represent only a limited fraction of the total accounted quantities.. The peak in net credits for 2015 and 2017 is a result of increasing and decreasing credits by Forest Management.

[4] 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: https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer). *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: https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1). 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: 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 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.