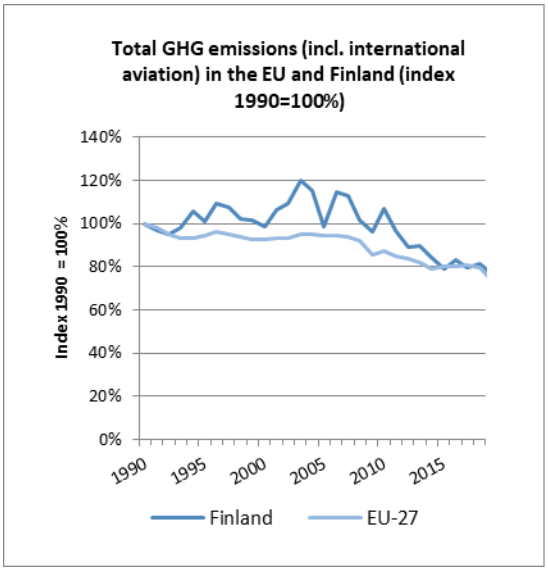
European Commission

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

Country fact sheet: Finland

EU Climate Action Progress Report 2020

1. Total greenhouse gas emissions



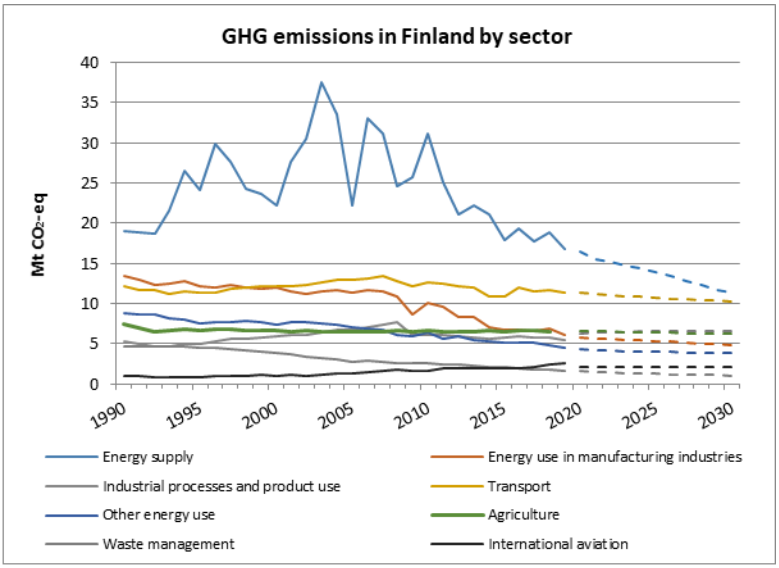


Figure 1: Left hand side: Total greenhouse gas emissions (incl. international aviation) 1990-2019 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector[1] – historical emissions 1990-2018, proxy 2019, projections WEM 2020-2030 (Mt CO_2-eq).

[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.

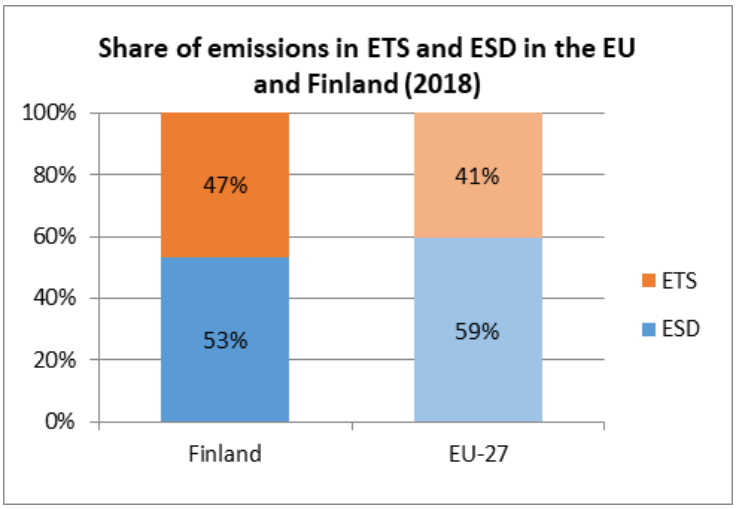


Figure 2: Share of emissions covered by the ETS and the ESD (2018).[2]

2. ETS emissions

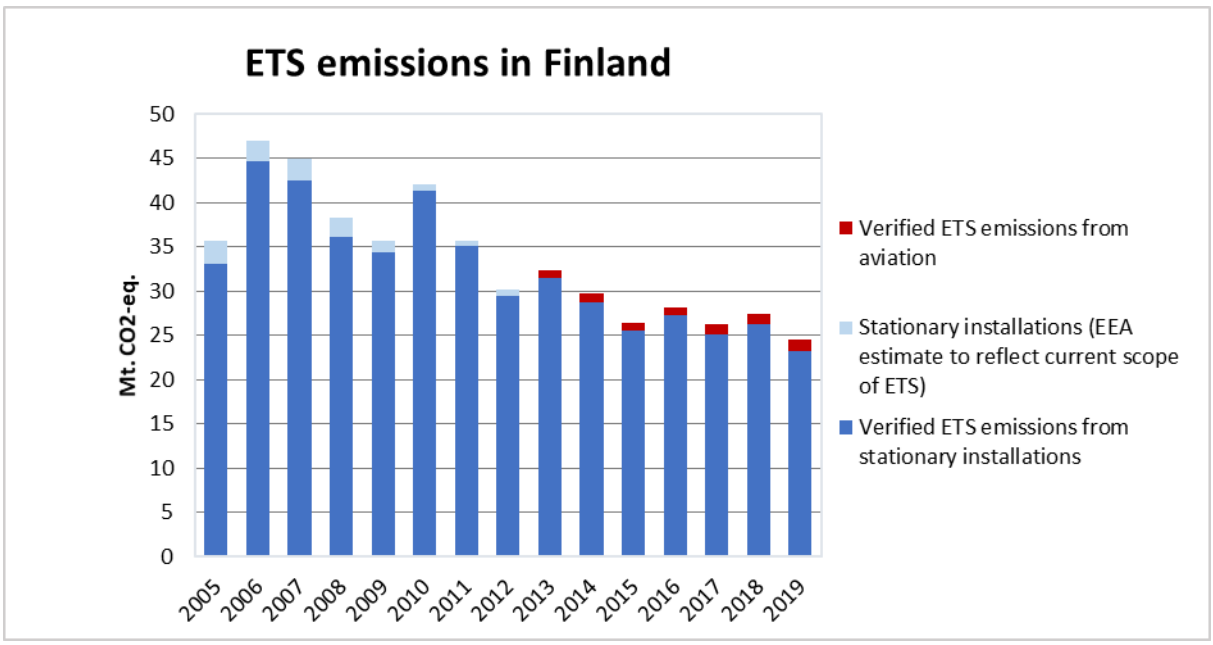


Figure 3: ETS emissions 2007-2019 (Mt CO_2-eq).[3]

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

[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.

3. Emissions in Effort Sharing sectors

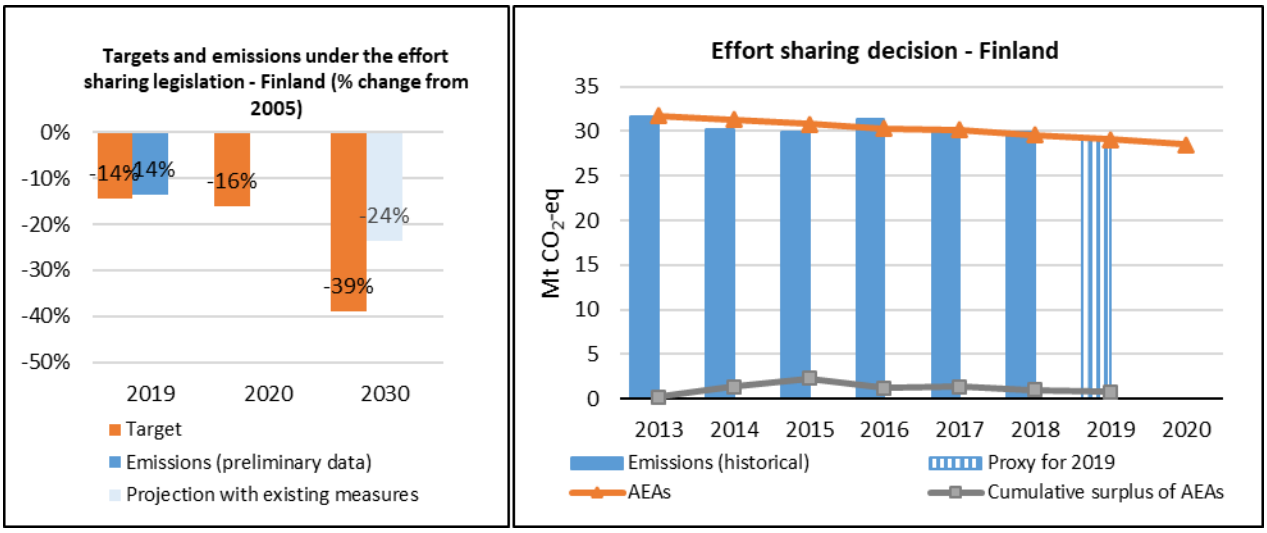


Figure 4: Left hand side: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation 2019, 2020 and 2030 as percentage change from 2005. Right hand side: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision 2013-2019 (Mt CO_2-eq).

4. Land use, land use change and forestry

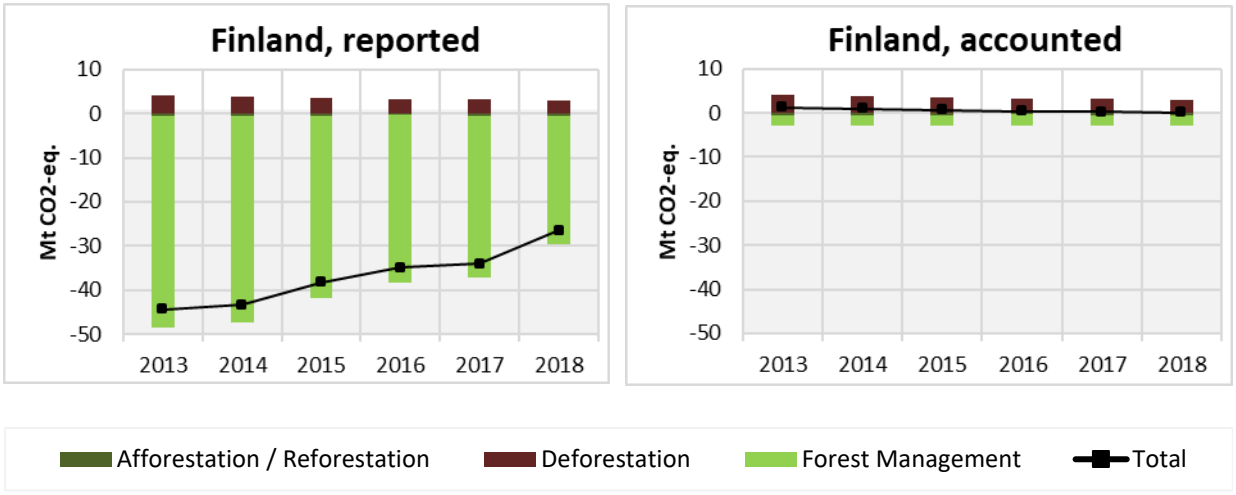


Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO_2-eq.)[4]

Reported quantities under the Kyoto Protocol for Finland show net removals of, on average, -36.9 Mt CO_2-eq for the period 2013 to 2018. In this regard, Finland contributes with 9.3% to the annual average sink of -396.7 Mt CO_2-eq of the EU-27. Accounting for the same period depicts net debits of, on average, 0.6 Mt CO_2-eq, which represents -0.5% of the EU-27 accounted sink of -114.1 Mt CO_2-eq. Reported net removals show a decreasing trend, which is opposite to the decreasing trend for accounted net debits. Finland is one of seven EU Member States with average net debits and one of ten 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. Emissions by Deforestation are comparatively small, and removals by Afforestation/Reforestation can be neglected in the emission budget of the LULUCF sector. Removals be Forest Management decrease markedly by 19.0 Mt CO_2-eq between 2013 and 2018.

Debits by Deforestation are the dominating accounting quantity over the six-year period. In this preliminary simulated accounting exercise potential credits by Forest Management of, on average, -8.6 Mt CO_2-eq per year are capped to -2.5 Mt CO_2-eq per year. Finland is one of five EU Member States that exceed the cap of 3.5% from emissions of the base year (1990). Credits from Afforestation/Reforestation are small. Debits by Deforestation show a clear decreasing trend.

[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 1990–2018 (EEA greenhouse gas data viewer: https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer). *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: 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 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.