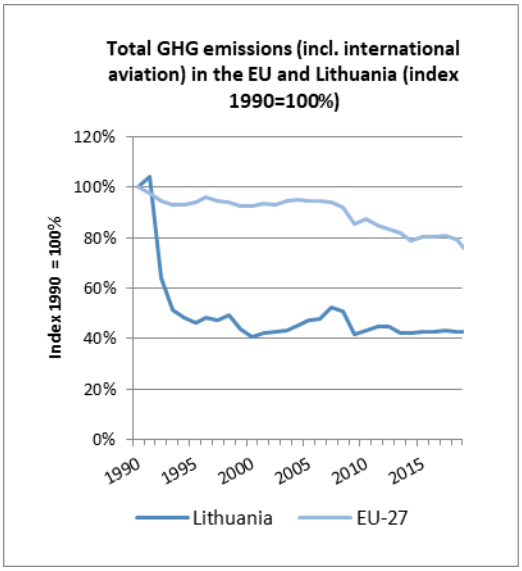
European Commission

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

Country fact sheet: Lithuania

EU Climate Action Progress Report 2020

1. Total greenhouse gas emissions



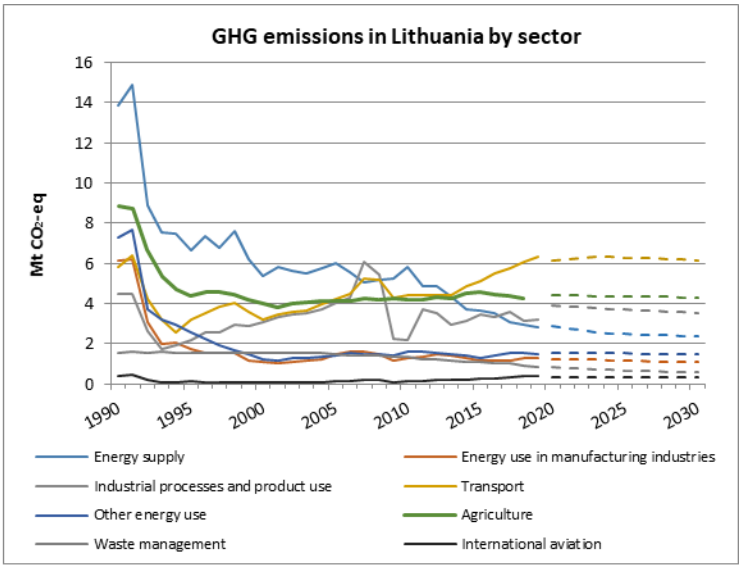


Figure 1: Left hand side: Total greenhouse gas emissions (incl. international aviation) 1990-2019 (index 1990 = 100 %). Right hand side: Greenhouse gas emissions by sector[1] – historical emissions 1990-2018, proxy 2019, projections WEM 2020-2030 (Mt CO_2-eq).

[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.

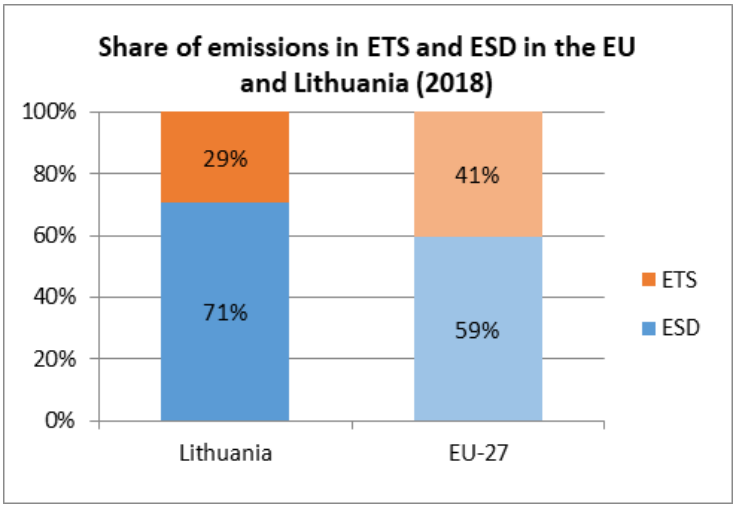


Figure 2: Share of emissions covered by the ETS and the ESD (2018).[2]

2. ETS emissions

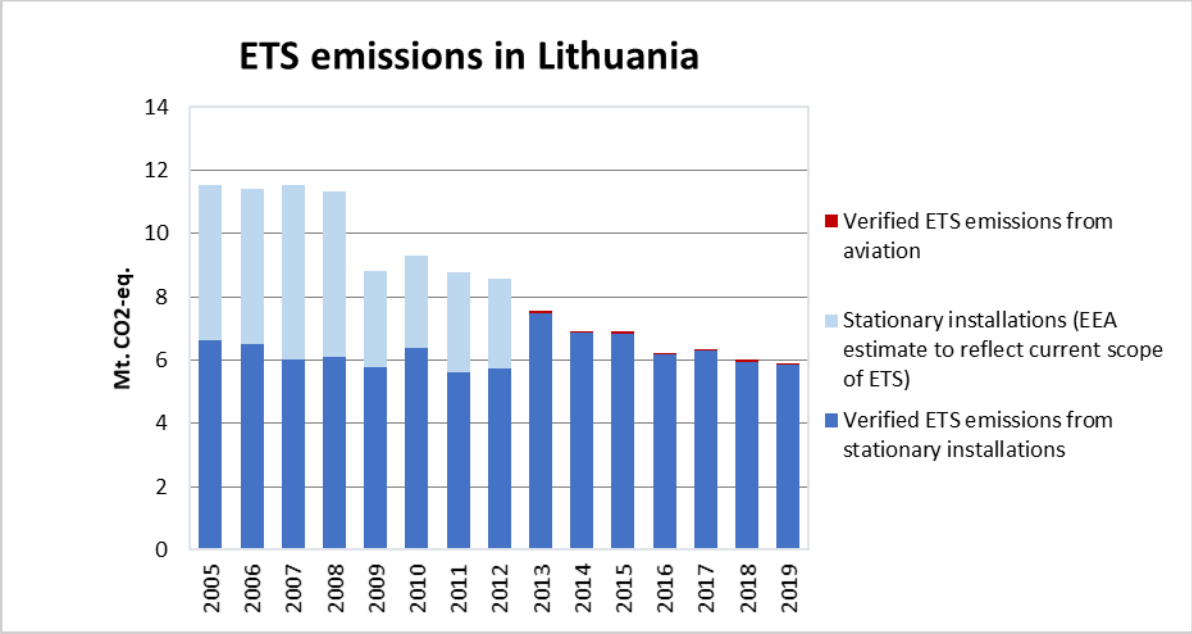


Figure 3: ETS emissions 2007-2019 (Mt CO_2-eq).[3]

[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

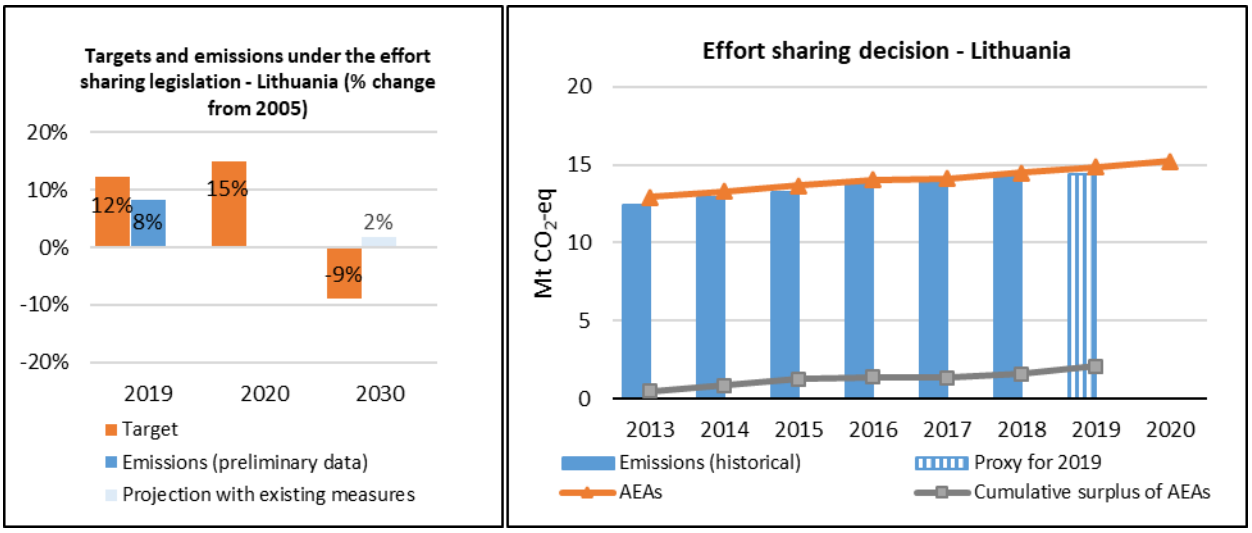


Figure 4: Left hand side: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation 2019, 2020 and 2030 as percentage change from 2005. Right hand side: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision 2013-2019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

4. Land use, land use change and forestry

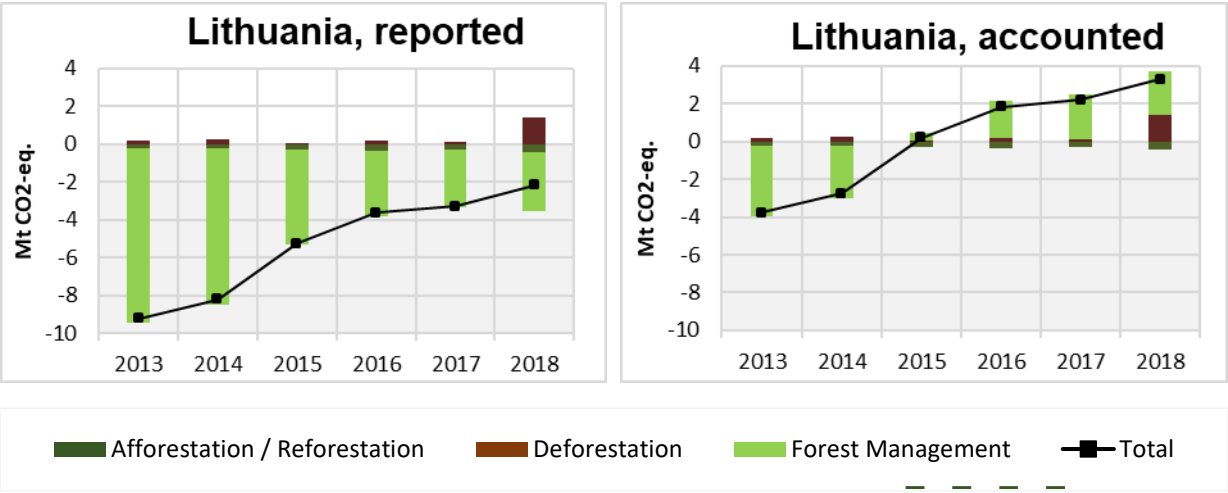


Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO_2-eq.)[4]

Reported quantities under the Kyoto Protocol for Lithuania show net removals of, on average, -5.3 Mt CO_2-eq for the period 2013 to 2018. In this regard, Lithuania contributes with 1.3% to the annual average sink of -396.7 Mt CO_2-eq of the EU-27. Accounting for the same period depicts average annual net debits of 0.2 Mt CO_2-eq, which represents -0.1% of the EU-27 accounted sink of -114.1 Mt CO_2-eq. Reported net removals show a sharply decreasing trend. The same trend is shown for accounted quantities with net credits in 2013 and 2014 becoming net debits for the years thereafter. Lithuania 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. Removals by Afforestation/Reforestation and emissions by Deforestation are small. Removals by Forest Management decrease markedly from -9.2 Mt CO_2-eq in 2013 to -3.1 Mt CO_2-eq in 2017 and 2018. The driver for this development is an increase in harvests. Emissions by Deforestation depict a notable increase in 2018 due to a significant increase in deforested areas.

Forest Management provides highest accounting quantities with credits in 2013 and 2014 and debits thereafter. Lithuania is one of 13 EU Member States with debits by Forest Management for at least one year. Debits by Deforestation are small except for year 2018; credits by Afforestation/Reforestation only play a minor role. The trend in net accounted quantities is explained by Forest Management credits becoming debits; in 2018 the continued trend of increasing net debits is due to the significant increase in debits by Deforestation.

[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.