Country fact sheet: Luxembourg

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 sector¹ – historical emissions 1990-2017, projections 2018-2030 (Mt CO₂-eq).

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

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² Excluding international aviation, CO₂ from domestic aviation and NF₃.
2. ETS emissions

![ETS emissions in Luxembourg](image)

Figure 3: ETS emissions 2005-2018 (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.

3. Emissions in Effort Sharing sectors

![ Targets and emissions under the effort sharing legislation - Luxembourg (% change from 2005) ](image)

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

Reported quantities under the Kyoto Protocol for Luxembourg show net removals of, on average, -0.4 Mt CO$_2$-eq for the period 2013 to 2017. In this regard, Luxembourg contributes with 0.1% 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, -0.2 Mt CO$_2$-eq, which corresponds to 0.2% of the EU-28 accounted sink of -111.9 Mt CO$_2$-eq. Reported net removals and accounted net credits show a fluctuating but generally declining trend between 2013 and 2017.

Highest reported quantities are removals by Forest Management which show a decreasing pattern between 2013 and 2017. Removals by Afforestation/Reforestation make up a sizable amount the emission budget of the LULUCF sector and remain stable throughout the period. Emissions by Deforestation are minor.

Credits by Afforestation/Reforestation are the dominating accounting quantity and debits by deforestation are rather small; both show nearly no change over the five-year period. Credits by Forest Management decrease between 2013 and 2017 to nearly zero for the last year.

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Figure 5: Reported and accounted emissions and removals from LULUCF (Mt CO$_2$-eq.)

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’.

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Data sources


Figure 5: European Commission based on data accounted and reported by Member States under the Kyoto Protocol.