

# Belgium

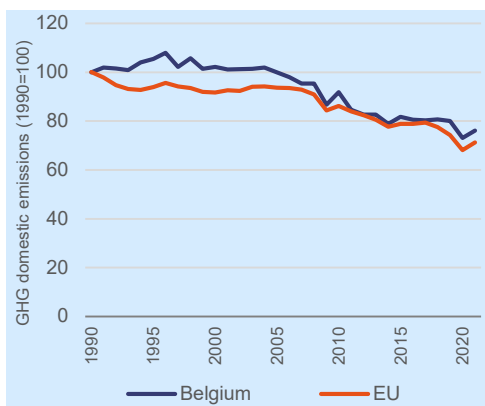
## 1) Key takeaways

- In 2021, GHG emissions in Belgium were 4.7% below 2019 pre-pandemic levels.
- Over the same period, ETS and Effor Sharing emissions decreased by 7.2% and by 3.5%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 24.1% lower than 1990 levels.
- The LULUCF sector emitted 0.03 MtCO<sub>2</sub>-eq on average per year from 2013 to 2020, based on accounting.

## 2) Greenhouse gas emissions



In 2021, approximated domestic greenhouse gas (GHG) emissions in Belgium were 110.9 MtCO<sub>2</sub>-eq, 4.2% higher compared to 2020 but 4.7% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 24.1% lower than 1990 levels.



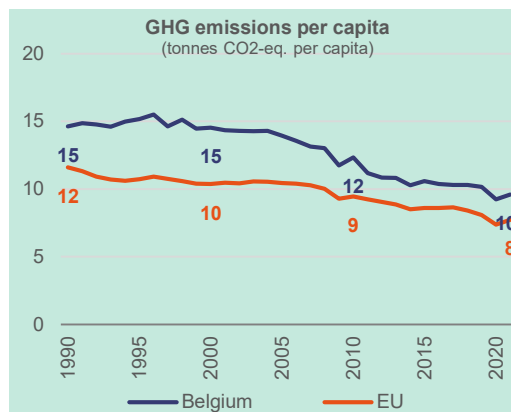
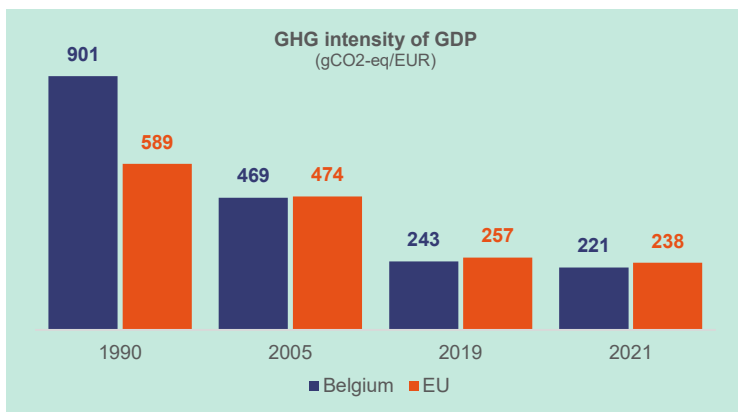
Total domestic GHG emissions

	1990 (MtCO <sub>2</sub> -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
<b>Belgium</b>	146	0%	-20%	-5%	-24%
<b>EU</b>	4847	-6%	-21%	-4%	-29%

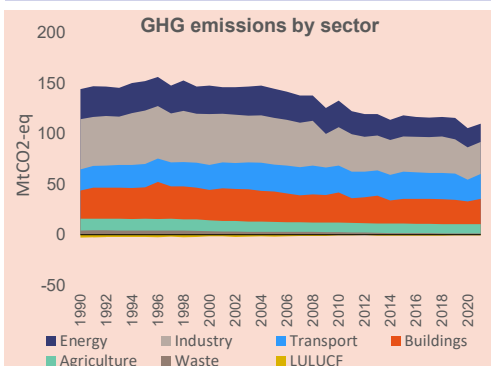
Total net domestic GHG emissions (including LULUCF)

<b>Belgium</b>	143	-1%	-20%	-5%	-24%
<b>EU</b>	4633	-13%	-26%	-10%	-33%

Note: GHG emissions and removals for 1990-2020 are based on data submitted by EU Member States to the UNFCCC under Regulation (EU) No 525/2013. Figures may change following resubmissions. GHG emissions for 2021 are based on approximated GHG inventories.



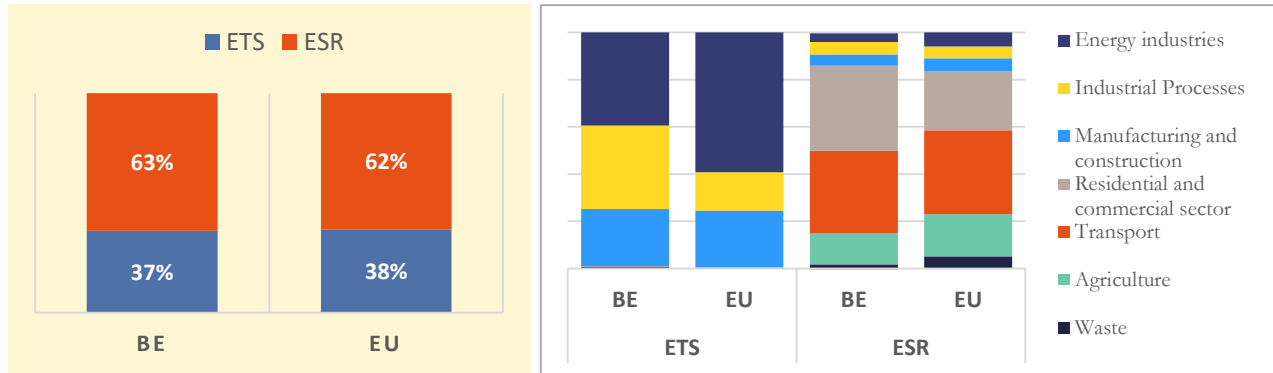
## 3) Greenhouse gas emissions by sector



	1990 (MtCO <sub>2</sub> -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
<b>Energy</b>	29.7	-2%	-28%	-13%	-39%
<b>Industry</b>	49.6	-7%	-26%	-7%	-36%
<b>Transport</b>	20.9	28%	-3%	-6%	17%
<b>Buildings</b>	28.2	7%	-21%	6%	-10%
<b>Agriculture</b>	11.5	-15%	-4%	-1%	-19%
<b>Waste</b>	4.3	-32%	-55%	-8%	-72%
<b>LULUCF</b>	-2.9	-40%	-73%	-29%	-89%
<b>International aviation</b>	3.2	14%	45%	-30%	15%

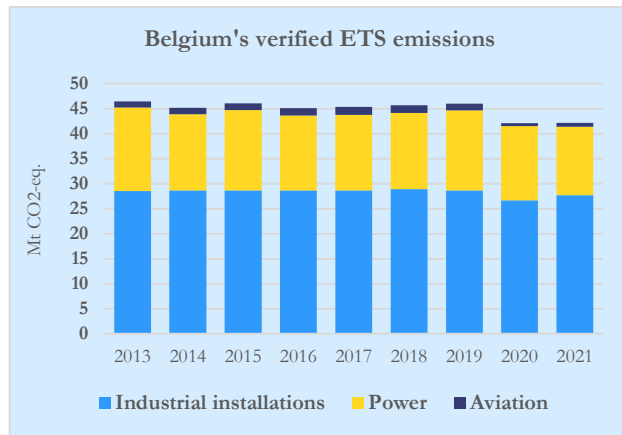
Notes: (1) Energy sector refers to electricity and heat production and petroleum refining. (2) Industry includes fuel combustion in manufacturing and construction and emissions in industrial processes and product use. (3) Buildings include emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors.

In 2021, the highest contribution to net GHG emissions in Belgium came from the Industry sector (28%), followed by the Buildings sector (22%) and the Transport sector (22%). Emissions from sectors under the Effort Sharing Regulation (ESR) were 63% compared to 62% for the EU as a whole (see shares in the charts below).



#### 4) Emissions under the EU Emissions Trading System (ETS)

In 2021, stationary installations (e.g. power generation and manufacturing industry) in Belgium emitted 41.4 million tonnes of CO<sub>2</sub>-eq emissions (equal to 37% of Belgium's total GHG emissions). This is 0.3% lower compared to 2020 and 7.2% below pre-pandemic levels. By 2021, emissions from stationary installations were down by 8.5% against 2013 level (i.e. -37.8% to 2005 levels). Aviation emissions covered by the EU ETS were 31.8% higher compared to 2020 but 46.1% below 2019 level.



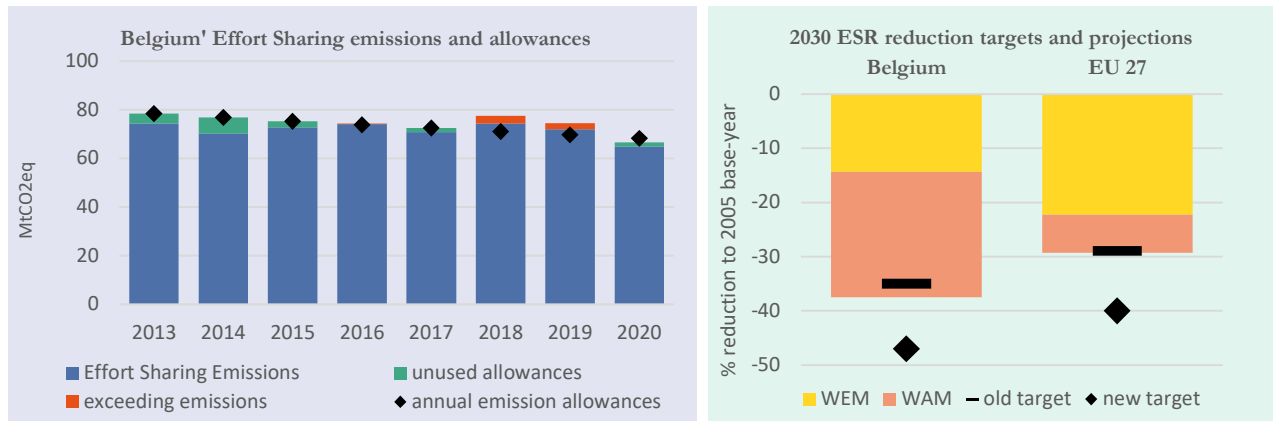
In parallel, Belgium has raised over EUR 2.2 billion in auction revenues since 2013, available for further climate action and energy transformation. Belgium reported that an average of 44% of revenues was spent for climate and energy purposes over the same period. (\*)

Mt CO <sub>2</sub> -eq	2013	2020	2021
<b>Power installations</b>	16.7	14.8	13.7
% change since 2013	-	-11.3%	-18.1%
<b>Industrial installations</b>	28.5	26.7	27.7
% change since 2013	-	-6.4%	-2.8%
<b>Aviation (**)</b>	1.24	0.57	0.75
% change since 2013	-	-54.3%	-39.8%

(\*) The policy is that 100% of auctioning revenues are spent on energy and climate projects. The revenues for the years 2013-2020 have been divided over the regions and the federal government in shares determined by a cooperation agreement. Work on such an agreement for 2021-2030 is still ongoing. Until completed, revenues are carried over. The amount spent in 2021 came from both 2020 revenues and anticipated 2021 revenues.

(\*\*) ETS emissions from aviation include flights within the European Economic Area (EEA) and outgoing flights to Switzerland and to the UK.

#### 5) Emissions in Effort Sharing sectors



Note: (1) Verified emissions based on annual inventory review under the Effort Sharing Decision (ESD). (2) Projections as reported by Member States under Reg. (EU) 2018/1999, compiled and checked by the EEA. (3) ESR base-year emissions and targets have been approximately converted into GWP AR4 for comparability. For these reasons, the distances to targets for 2030 are provided for illustrative purposes only (4) WEM = with existing measures, WAM = with additional measures.

In 2021, effort sharing approximated emissions in Belgium were 69.5 MtCO<sub>2</sub>eq (equal to 63% of Belgium's total GHG emissions), 7.1% higher than in 2020 but 3.5% lower than 2019 pre-pandemic level.

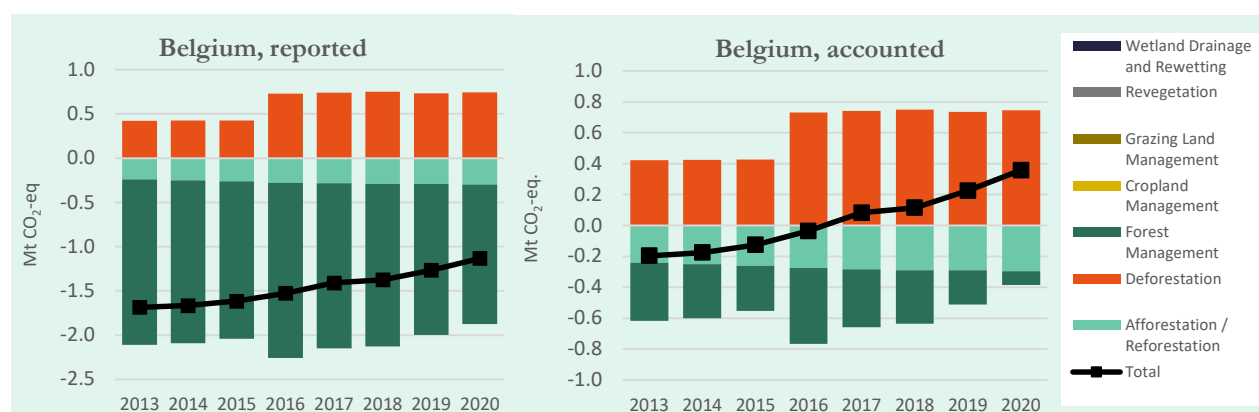
Between 2013 and 2019, Belgium exceeded its annual emission allocations (AEAs) 3 times. However, Belgium complied with the Effort Sharing Decision by making use of the flexibilities provided therein.

In 2020, effort sharing emissions in Belgium were below the annual limit.

## 6) Land Use, Land Use Change and Forestry (LULUCF)



Reported quantities under the Kyoto Protocol for Belgium show net removals of -1.5 Mt CO<sub>2</sub>-eq on average per year for the period 2013 to 2020. In this regard, Belgium contributes with 0.5% to the annual average sink of -320.2 Mt CO<sub>2</sub>-eq of the EU-27. Accounting for the same period shows net credits of, on average, -0.0 Mt CO<sub>2</sub>-eq, which corresponds to 0.0% of the EU-27 accounted sink of -83.4 Mt CO<sub>2</sub>-eq. Reported net removals and accounted net credits show a decrease over the eight-year period. Accounted net credits show an overall decreasing trend that turns into net debits from 2017 onwards. Belgium is one of eight EU Member States with average net debits and one of 14 EU Member States with net debits for at least one year.



Notes: (1) Charts based on the submissions delivered until May 2022. (2) Data reported for the period 2013-2020, for mandatory and elected LULUCF activities, were submitted by Member States to the European Environment Agency (EEA) and underwent a simulated accounting process developed by the Joint Research Centre (JRC), together with DG CLIMA. (3) Reported data represent the gross annual flux of greenhouse gas from the sector, by activity, according to the IPCC methods for calculation in the framework of the Kyoto Protocol (KP). Accounting is aimed at assessing the impact of policies on climate actions on the actual data, for example as an increase in the sink within the Forest Management activity. (4) The simulated accounting process does not take into account any adjustments or flexibilities that a Member State may apply, for example the purchase of KP credits.

The dominating reported activity is Forest Management with removals that decrease from 2016 onwards. Emissions by Deforestation are notable and higher than removals by Afforestation/Reforestation. Emissions by Deforestation are higher in the period 2016 to 2020 as compared to the three previous years.

Debits by Deforestation dominate the accounting. Credits by Forest Management vary and decrease towards nearly zero in 2020, and credits by Afforestation/Reforestation are small. Debits by Deforestation increase in 2016 and remain at this level thereafter. Overall, however, the trend is towards accounted debits.

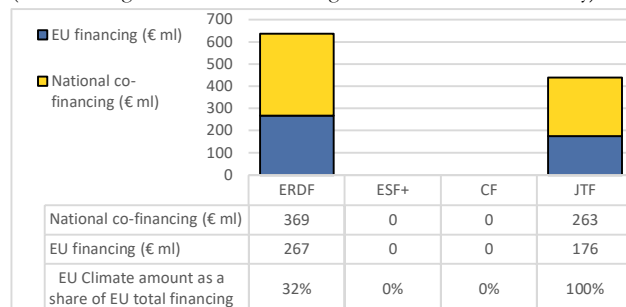
## 7) Financing Climate Action



### Cohesion policy

#### Belgium's Planned Financing for Climate Actions

(EU financing & national co-financing - 2021-2027 Cohesion Policy)



The chart presents information on investment plans and achievement targets from adopted programmes. Financing for cohesion policy uses a categorisation to provide thematic information on the finances planned.

Source: <https://cohesiondata.ec.europa.eu/>

### Innovation and Modernisation Fund

**Innovation Fund** (Portfolio of signed projects)

	n.	EUR million
Small Scale Projects	-	-
Large Scale Projects	1	356.9

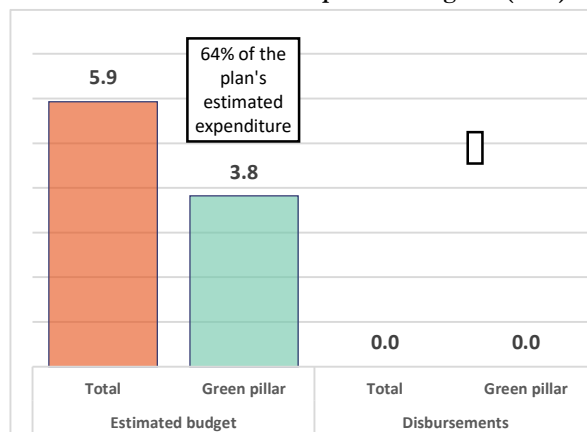
**Modernisation Fund** n. EUR million

(List of confirmed or approved investment proposals) non-beneficiary

### Recovery & Resilience Facilities

RRF allocations (EUR billion)	Grants:	Loans:	% of GDP
	5.92	-	1.2

#### RRF contribution to the Green pillar in Belgium (€ bn)



This graph displays: 1) the estimated cost of measures attributed by the Commission, in consultation with the Member State, to the green pillar either as primary or secondary assignments; and 2) how disbursements under the RRF (excluding pre-financing) relate to the green pillar.

Source: [https://ec.europa.eu/economy\\_finance/recovery-and-resilience-scoreboard/index.html?lang=en](https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en)