

# France

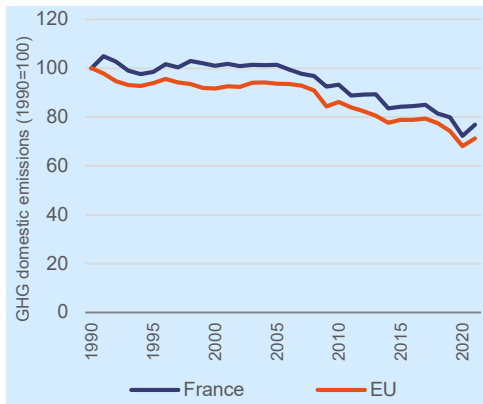
## 1) Key takeaways

- In 2021, GHG emissions in France were 3.8% below 2019 pre-pandemic levels.
- Over the same period, ETS and Effor Sharing emissions decreased by 7.7% and by 2.6%, respectively.
- Net GHG emissions (i.e. including LULUCF) in 2021 were 25.7% lower than 1990 levels.
- The LULUCF sector emitted 9.66 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 France were 418.2 MtCO<sub>2</sub>-eq, 6.4% higher compared to 2020 but 3.8% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 25.7% lower than 1990 levels.

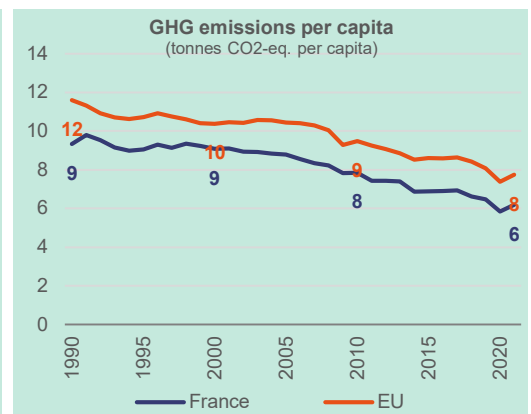
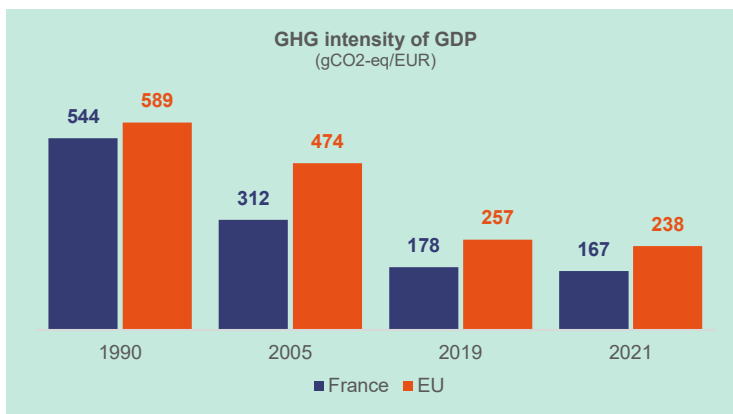


	1990 (MtCO <sub>2</sub> -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
<b>France</b>	544	1%	-21%	-4%	-23%
<b>EU</b>	4847	-6%	-21%	-4%	-29%

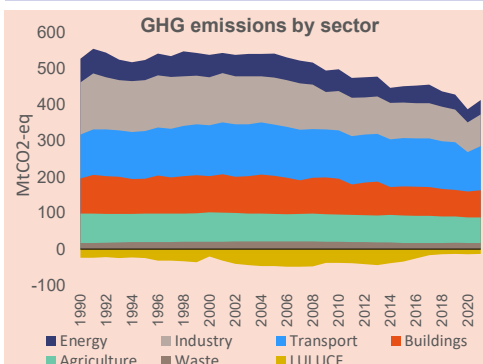
  

	1990 (MtCO <sub>2</sub> -eq)	2005 to 1990 (% change)	2019 to 2005 (% change)	2021 to 2019 (% change)	2021 to 1990 (% change)
<b>France</b>	520	-7%	-23%	-7%	-26%
<b>EU</b>	4633	-13%	-26%	-10%	-33%

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.



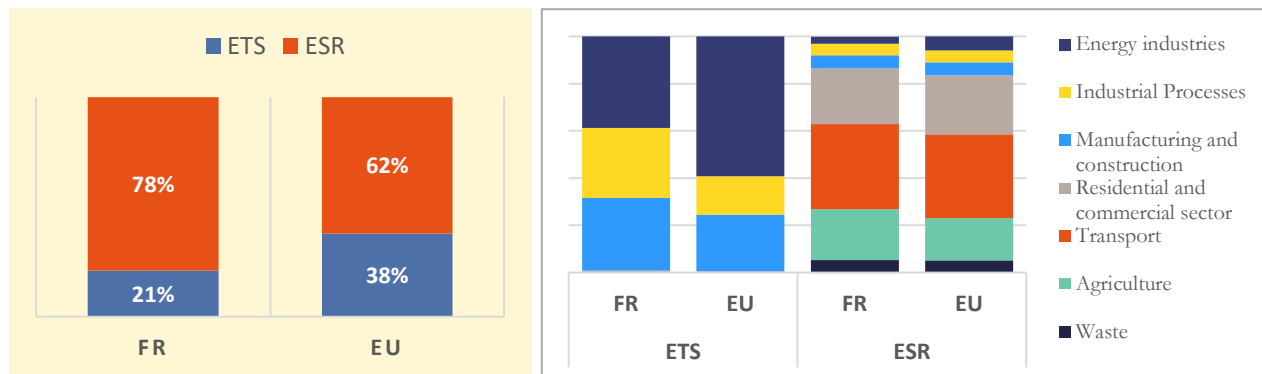
## 3) Greenhouse gas emissions by sector



	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>	66.3	1%	-38%	-4%	-40%
<b>Industry</b>	143.9	-10%	-30%	-5%	-40%
<b>Transport</b>	122.3	16%	-7%	-7%	0%
<b>Buildings</b>	98.0	9%	-30%	2%	-23%
<b>Agriculture</b>	80.8	-6%	-5%	-3%	-13%
<b>Waste</b>	17.3	24%	-15%	-4%	1%
<b>LULUCF</b>	-24.0	97%	-74%	13%	-42%
<b>International aviation</b>	8.9	79%	21%	-54%	-1%

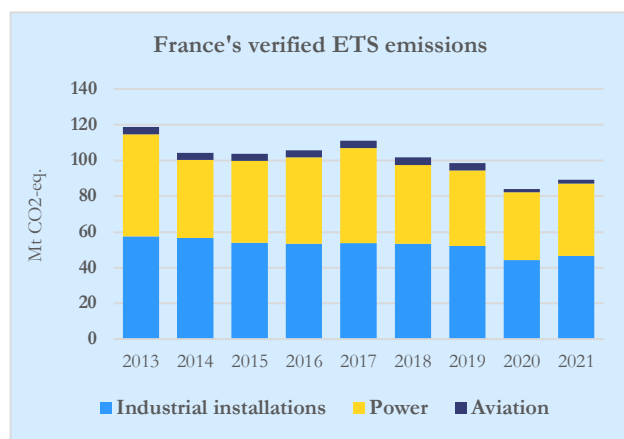
Notes: (1) Energy sector refers to electricity and heat production and petroleum refining. (2) Industry includes fuel combustion in manufacturing and construction and emissions in industrial processes and product use. (3) Buildings include emissions from energy use in residential and tertiary buildings,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

In 2021, the highest contribution to net GHG emissions in France came from the Transport sector (30%), followed by the Industry sector (21%) and the Buildings sector (19%). Emissions from sectors under the Effort Sharing Regulation (ESR) were 78% 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 France emitted 87.0 million tonnes of CO<sub>2</sub>-eq emissions (equal to 21% of France's total GHG emissions). This is 6.0% higher compared to 2020 but 7.7% below pre-pandemic levels. By 2021, emissions from stationary installations were down by 24.0% against 2013 level (i.e. -43.5% to 2005 levels). Aviation emissions covered by the EU ETS were 22.3% higher compared to 2020 but 46.2% below 2019 level.



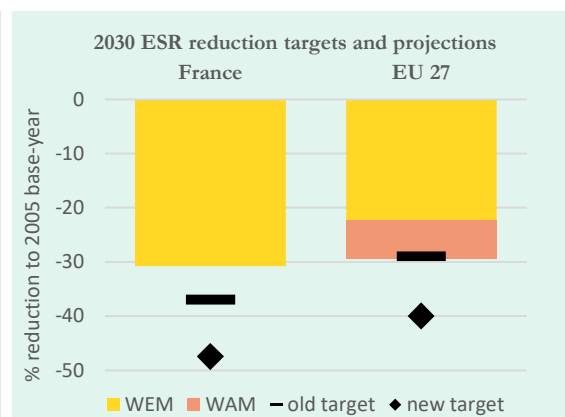
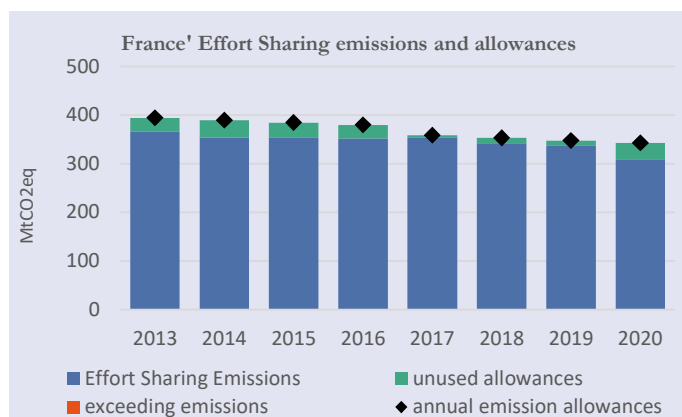
In parallel, France has raised over EUR 5.0 billion in auction revenues since 2013, available for further climate action and energy transformation. France reported that an average of 88% of revenues was spent for climate and energy purposes over the same period. (\*)

Mt CO <sub>2</sub> -eq	2013	2020	2021
<b>Power installations</b>	57.2	37.9	40.4
% change since 2013	-	-33.7%	-29.4%
<b>Industrial installations</b>	57.4	44.2	46.6
% change since 2013	-	-22.9%	-18.7%
<b>Aviation (**)</b>	4.13	1.85	2.26
% change since 2013	-	-55.2%	-45.3%

(\*) The auctioning revenues co-fund energy efficiency improvements of low-income housing, up to a ceiling of EUR 420 million per year. The remainder is not earmarked but goes to the general budget, which, among others, covers climate and energy investments (not included here).

(\*\*) 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 France were 327.5 MtCO<sub>2</sub>eq (equal to 78% of France's total GHG emissions), 6.4% higher than in 2020 but 2.6% lower than 2019 pre-pandemic level.

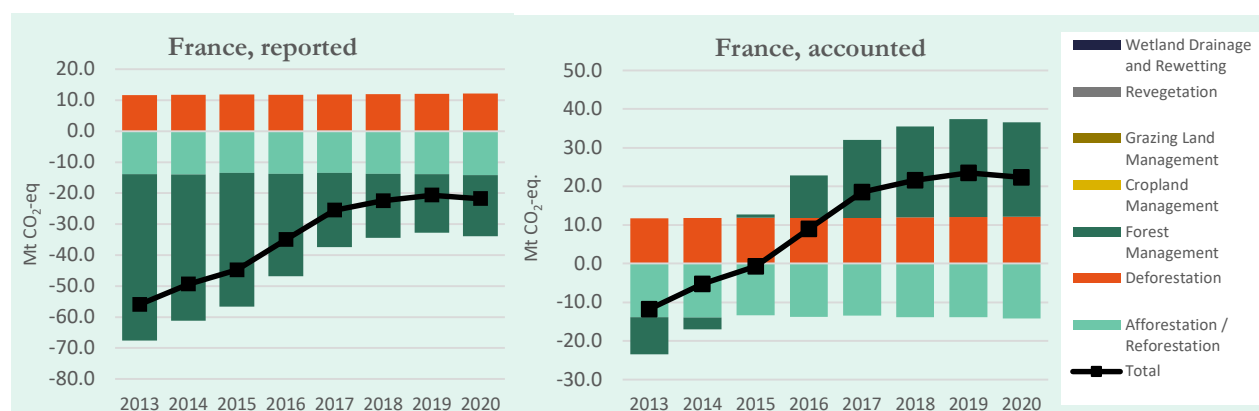
Between 2013 and 2019, France's emissions have always been below the annual limits.

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

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



Reported quantities under the Kyoto Protocol for France show net removals of -34.4 Mt CO<sub>2</sub>-eq on average per year for the period 2013 to 2020. In this regard, France contributes with 10.8% to the annual average sink of -320.2 Mt CO<sub>2</sub>-eq of the EU-27. Accounting for the same period depicts net average annual credits of -0.8 Mt CO<sub>2</sub>-eq, which corresponds to -11.6% of the EU-27 accounted sink of -83.4 Mt CO<sub>2</sub>-eq. Reported net removals show a decreasing trend over the eight year period, with a small increase in 2020. Accounted quantities show the same pattern but more accentuated, with net credits in 2013, 2014 and 2016 and increasing net debits in all other years.



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. Removals by Afforestation/Reforestation and emissions by Deforestation make up a sizable portion of the emission budget of the LULUCF sector. Removals by Forest Management decrease markedly by 34.0 Mt CO<sub>2</sub>-eq between 2013 and 2020. The reason for this decrease is a combination of aging forests with increased mortality and lower growth, thus removing less CO<sub>2</sub> from the atmosphere, of droughts and disturbances, and of increased harvest.

Credits by Afforestation/Reforestation are slightly higher than debits by Deforestation; both with an increasing trend over the eight-year period. Credits by Forest Management in 2013 and 2014 turned into significant debits of up to 24,3 Mt CO<sub>2</sub>-eq in 2020. Overall, however, the trend is towards accounted debits.

## 7) Financing Climate Action



### Cohesion policy

#### France'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	5	16.7
Large Scale Projects	3	346.1

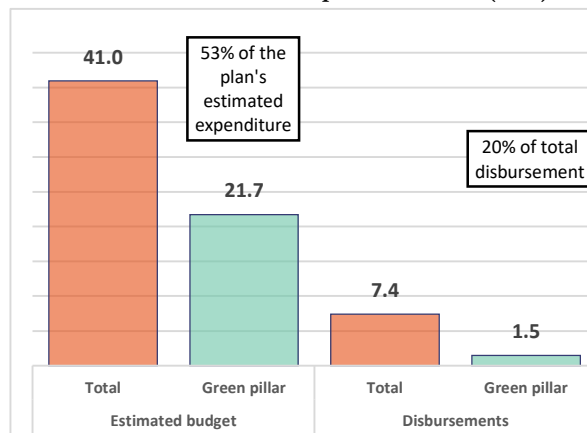
**Modernisation Fund** n. EUR million

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

### Recovery & Resilience Facilities

RRF allocations (EUR billion)	Grants:	Loans:	% of GDP
	39.37	-	1.6

#### RRF contribution to the Green pillar in France (€ 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<sup>2</sup> (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)