Climate Action Progress Report 2023
Country profile

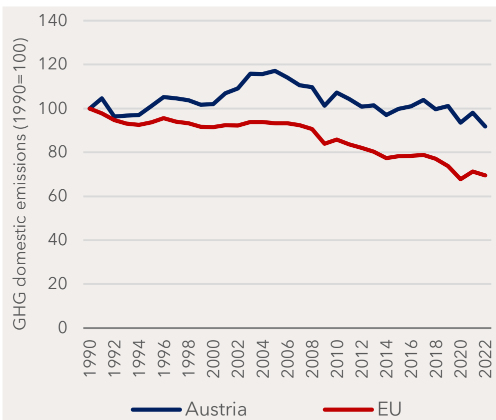
Austria

1) Key Highlights

- In 2022, GHG emissions in Austria were 72.6 MtCO2-eq, 6.4% lower compared to 2021.
- Net GHG emissions (i.e. including LULUCF) in 2022 were 7.0% lower than 1990 levels.
- Emissions covered by the Effort Sharing Regulation decreased by 6% compared to 2021.
- By 2050, net GHG emissions in Austria are expected to be 5.6 tonnes per capita.

2) Greenhouse Gas Emissions

In 2022, approximated domestic greenhouse gas (GHG) emissions in Austria were 72.6 MtCO2-eq, 6.4% lower compared to 2021 and 9.3% below pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 7.0% lower than 1990 levels.



Total domestic GHG emissions

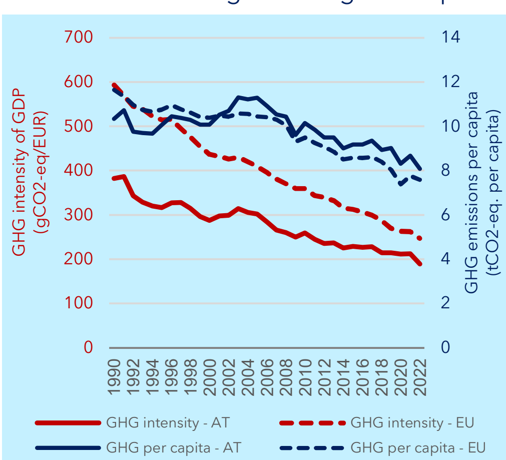
	1990 (MtCO2-eq)	2005 to 1990 (% change)	2015 to 2005 (% change)	2022 to 2015 (% change)	2022 to 1990 (% change)
Austria	79	17%	-15%	-8%	-8%
EU	4867	-7%	-16%	-11%	-30%

Total net domestic GHG emissions (including LULUCF)

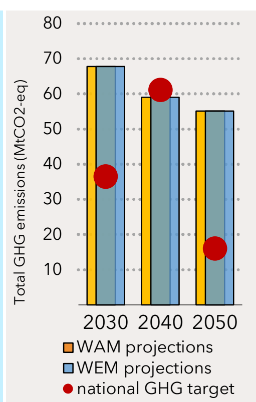
	1990 (MtCO2-eq)	2005 to 1990 (% change)	2015 to 2005 (% change)	2022 to 2015 (% change)	2022 to 1990 (% change)
Austria	67	11%	-2%	-14%	-7%
EU	4658	-10%	-17%	-10%	-32%

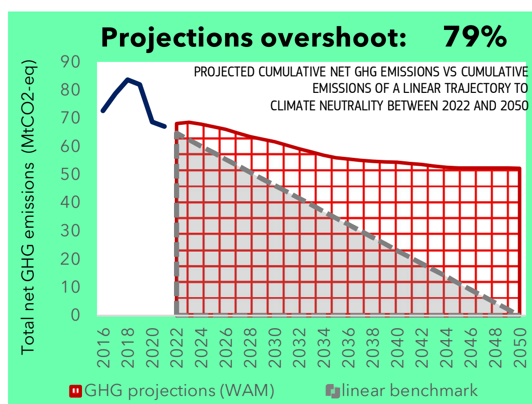
Note: GHG emissions and removals for 1990-2021 are based on data submitted by EU Member States to the UNFCCC under Regulation (EU) No 525/2013. GHG emissions for 2022 are based on approximated GHG inventories.

In 2022, net GHG emissions per capita in Austria were 8 tonnes of CO2 equivalent, above the EU average of 8 tCO2-eq. In the same year, the GHG intensity of GDP (i.e. net GHG emissions over GDP) was 189 gCO2-eq/EUR, below the EU average of 247 gCO2-eq/EUR.



Note: Total net GHG emissions, including LULUCF and excluding international aviation. GHG inventory 1990-2021 and approximated GHG inventory 2022 (EEA). Real GDP in 2015-prices (AMECO). Population (Eurostat).



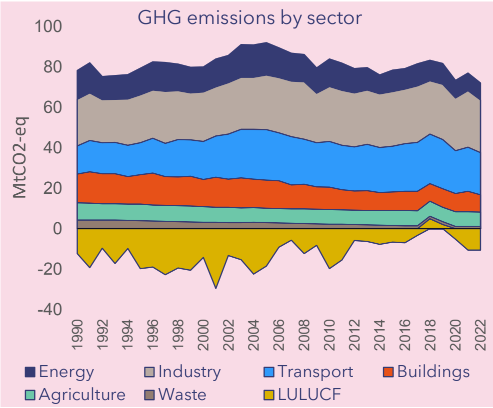


Note: (1) GHG emission projections as submitted by Member States in March 2023. (2) WEM = with existing measures; WAM = with existing and additional measures. (3) The national GHG targets are from Member States' submissions of NECP progress reports (Annex I, Table 1). Missing data are replaced by other available reported information. (4) The overshoot metric compares cumulative projected net GHG emissions under the WAM scenario (including LULUCF) with cumulative emissions underlying a linear trajectory from 2021 emissions levels to zero by 2050.

Projections submitted in March 2023 under the existing policy scenario (WEM) point to a reduction in net GHG emissions (including LULUCF) of -8% and -22% by 2030 and 2050, respectively, compared to 1990. Austria did not submit emission projections with additional measures (WAM).

Trajectories are also important. By comparing the cumulative projected net GHG emissions between 2022 and 2050 with a linear trajectory to climate neutrality by 2050, Austria shows an overshoot of 79% (i.e. cumulative projected emissions are higher than those from a linear trajectory.

3) Greenhouse Gas Emissions by Sector



	1990 (MtCO2-eq)	2005 to 1990 (% change)	2015 to 2005 (% change)	2022 to 2015 (% change)	2022 to 1990 (% change)
Energy	14.0	14%	-34%	-20%	-40%
Industry	23.2	16%	0%	-3%	12%
Transport	14.0	79%	-9%	-9%	49%
Buildings	14.3	-3%	-34%	-6%	-40%
Agriculture	8.4	-15%	3%	-2%	-14%
Waste	4.4	-30%	-46%	-29%	-73%
LULUCF	-12.2	(absolute change) *-6.2*	(absolute change) *11.9*	(absolute change) *-3.8*	(absolute change) *1.8*
International aviation	0.9	123%	9%	-42%	39%

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 includes emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors. (4) For LULUCF, the table reports differences between the given years in absolute values (MtCO2-eq). Negative values indicate a reduction of net emissions or an increase in net removals.

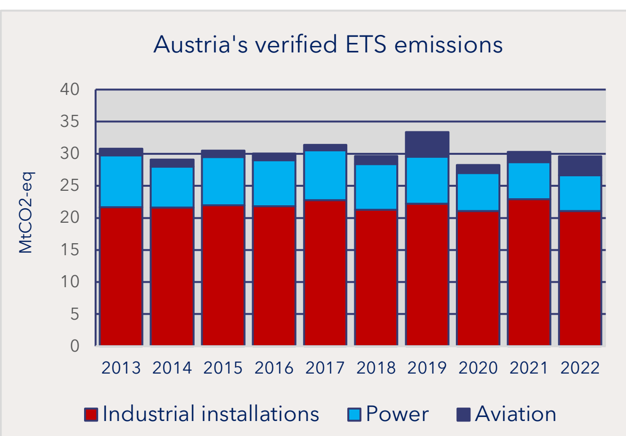
In 2022, the highest contribution to GHG emissions in Austria came from the industry sector (36%), followed by the transport sector (28%) and the buildings sector (12%), while LULUCF net removals amounted to 14.2% of total GHG emissions.

Between 2015 and 2022, the sectors which contributed the most to the change in net GHG emissions (i.e. -14%) were LULUCF, for which net removals increased by 3.8 MtCO2-eq., and energy, where emissions fell by 20%.

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

The EU ETS is an EU-wide market instrument to provide an incentive for emission reductions and transformative investments in the covered sectors. This means that it is largely the market that determines where in the EU the emission reductions take place, outside the control of Member States. However, Member States may adopt complementary (sectoral) policies in addition to the ETS's carbon price signal.

In 2022, stationary installations (e.g. power generation and manufacturing industry) in Austria emitted 26.6 MtCO2-eq (equal to 37% of total GHG emissions in Austria). This is 7.2% higher compared to 2021, but 9.9% below pre-pandemic levels. By 2022, emissions from stationary installations were down by 10.6% against the 2013 level (i.e. -26.1% to the 2005 level). Aviation emissions covered by the EU ETS were 83% higher compared to 2021, but 22% below the 2019 level.



In parallel, Austria has raised over EUR 1.60 billion in auction revenues since 2013, available for further climate action and energy transformation. Austria reported that an average of 125% of revenues was spent for climate and energy purposes over the same period.(*)

MtCO2-eq	2013	2021	2022
Power installations	8.1	5.8	5.5
% change since 2013	-	-28.6%	-31.5%
Industrial installations	21.7	22.9	21.1
% change since 2013	-	5.7%	-2.8%
Aviation (**)	1.02	1.62	2.96
% change since 2013	-	58.7%	191.1%

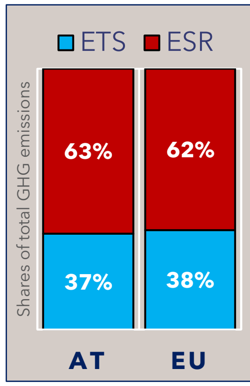
(*) Revenues are not earmarked. National spending on climate and energy purposes is >100% of auctioning revenues. In several years, climate and energy projects financed from the national budget were reported, even though their funding cannot be directly linked to the auctioning revenues. (**) ETS emissions from aviation include flights within the European Economic Area (EEA) and outgoing flights to Switzerland and to the UK.

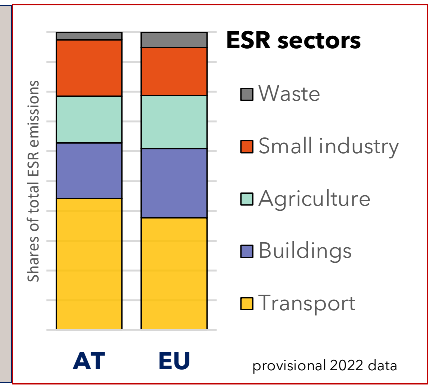
5) Emissions in Effort Sharing Sectors

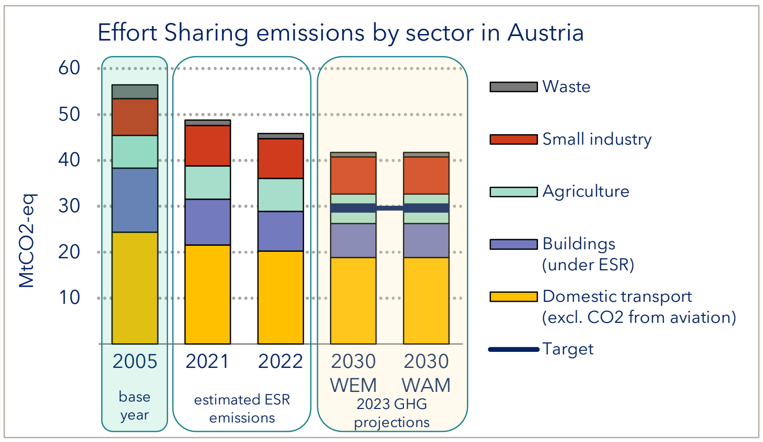
In 2022, emissions from sectors under the Effort Sharing Regulation (ESR), which excludes ETS and LULUCF emissions and removals, were 63% of total emissions in Austria compared to 62% for the EU as a whole.

In 2022, effort sharing approximated emissions in Austria were 45.9 MtCO2eq, 6.0% lower than in 2021 and 8.6% below the pre-pandemic level.

Notes: (1) Small industry includes emissions from energy industries, manufacturing and construction, and industrial processes, that do not fall under the EU Emission Trading System. (2) Transport includes emissions from domestic transport activities, excluding CO2 emissions from aviation. (3) Buildings includes emissions for heating buildings under the ESR.







In 2022, the largest contribution to the absolute change in ESR emissions came from buildings, for which emissions decreased by 14.7%, and transport, with emissions decreasing by 5.9% compared to 2021.

In 2022, buildings accounted for 19% of total ESR emissions in Austria, and transport accounted for 44%.

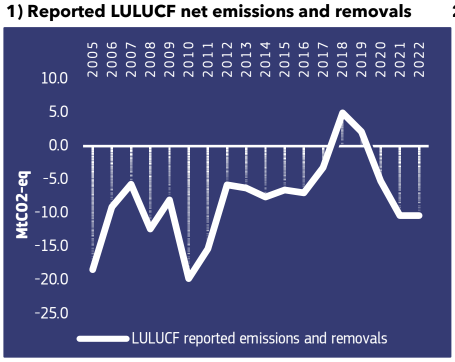
Note: (1) 2022 ESR emissions are based on approximated inventory reports and the European Environment Agency (EEA)'s calculation of ESR emissions. The approximated emissions can, therefore, deviate from Member States' reported emissions. (2) Projections as reported by Member States under Reg. (EU) 2018/1999, compiled and checked by the EEA. (3) WEM = with existing measures, WAM = with existing and additional measures.

The Effort Sharing Regulation (ESR) sets the 2030 ESR emission reduction target for Austria to 48%, compared to 2005 levels. GHG projections submitted by Austria in March 2023 under the existing measures scenario (WEM) point to a 27% decrease in ESR emissions by 2030 compared to 2005 levels, less ambitious than its ESR emission reduction target by 21 percentage points. Austria did not submit GHG emission projections considering additional measures (WAM).

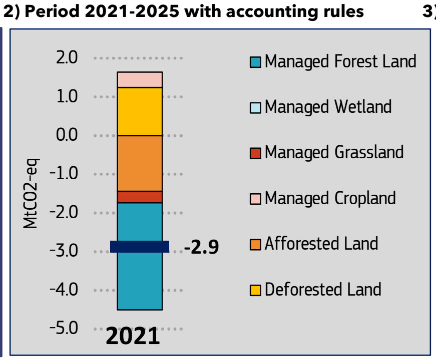
6) Land Use, Land Use Change and Forestry (LULUCF)

Based on final inventory data, in 2021, Austria reported net removals of 10.40 MtCO2-eq in the land use, land use change, and forestry sector (LULUCF). In 2022, Austria reported the same numbers as for 2021.

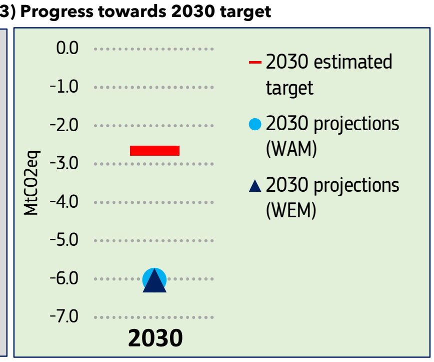
1) Reported LULUCF net emissions and removals



2) Period 2021-2025 with accounting rules



3) Progress towards 2030 target



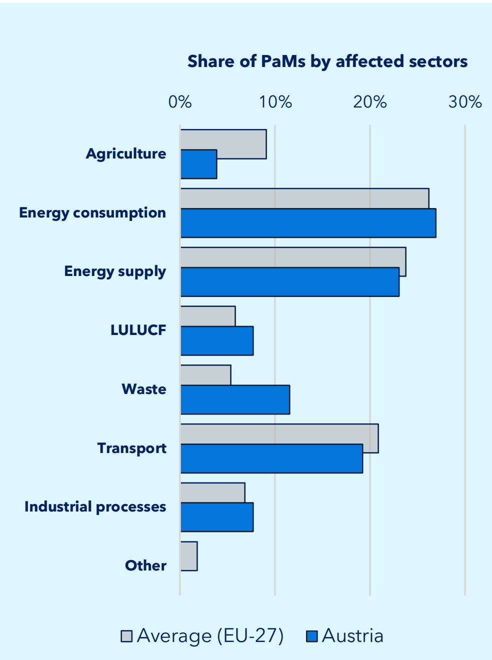
Notes: (1) Figure 1 shows net reported emissions and removals for the LULUCF sector. Net removals are expressed as negative numbers and net emissions as positive numbers. (2) Figure 2 shows the accounted emissions and removals for the LULUCF sector in 2021. Computation of the accounts per land use category, applying the standardised rules in the LULUCF Regulation EU) 2018/841. The input data for this analysis have been extracted from the EU Greenhouse Gas Inventory Report 2023 for 1990-2021 based on final Member States' inventory submissions under the EU Governance Regulation (EU) 2018/1999. Seven Member States report 2021 data as approximated data for 2022. (3) Figure 3 shows projected progress with existing measures (WEM) and with additional measures (WAM) in relation to the national 2030 target. The LULUCF Regulation sets out binding national 2030 targets for each Member State encompassing all emissions and removals in the LULUCF sector (Art. 4.3). The targets are specified in Annex IIa of the LULUCF Regulation. Individual targets are derived from the EU-wide target of -310 MtCO2-eq net removals by 2030, Member States' average historic net removals from their GHG inventories for the years 2016, 2017 and 2018 and the countries' share of total EU managed land area.

With current LULUCF accounting rules – with a limited scope – applicable to the period 2021 to 2025, the provisional 'accounted' balance for 2021 using the 2023 GHG inventory submission produced an accounted credit of 2.9 MtCO2-eq.

Managed Forest Land and Afforested Land were the dominating land activities, with accounted net removals of 2.8 and accounted net removals of 1.4 MtCO2-eq, respectively.

2023 LULUCF projections for Austria show net removals in 2030 of 6.0 MtCO2-eq with existing measures (WEM), a surplus of around 3.4 MtCO2-eq to the estimated 2030 net removal target of 2.7 MtCO2-eq. In March 2023, Austria did not submit projections with additional measures (WAM).

7) Policies and Measures



In 2023, Austria reported 18 single policies and measures (PaMs), representing a decrease of -33% compared to 2021. As of 2023, 0% of the reported PaMs are planned but not yet implemented.

Ex-ante emission savings

For 22% of its single and group PaMs, Austria estimates the expected emission reduction effect for the year 2030. However, it does not provide such estimates for the year 2040 for any of its PaMs.

By implementing these PaMs, Austria estimates emission savings of 13.3 MtCO2-eq in 2030. However, Austria does not provide estimates of emission reductions for 2040.

Investment needs

Austria did not provide estimates of investment need for any of its single or group PaMs.

More information and visualisations are available at the EEA integrated national energy and climate policies and measures data viewer.
Source: https://climate-energy.eea.europa.eu/topics/policies-and-measures/climate-and-energy-policies-and-measures/data

8) Climate-Neutrality Dashboard

	Total net GHG emissions 2022-1990 (% change)	Total net GHG emissions 2022-2015 (% change)	GHG intensity of GDP 2022-2015 (% change)	Projected net GHG emissions by 2030 (tonnes per capita)	Projected net GHG emissions by 2050 (tonnes per capita)	Overshoot vs. linear trajectory (net GHG emissions 2022-2050)	Overshoot vs. non-linear benchmark (total GHG emissions 2022-2050)	Target year for climate neutrality (NECP progress reports, national long-term strategies or "*" other sources)	Legal status of the climate-neutrality target (based on the Net-Zero Tracker)
Austria	**-7%**	**-14%**	**-23%**	**6.8**	**5.6**	**79%**	**61%**	**2050**	**In law**
EU27	-32%	-10%	-20%	5.1	3.6	34%	40%	2050	In law

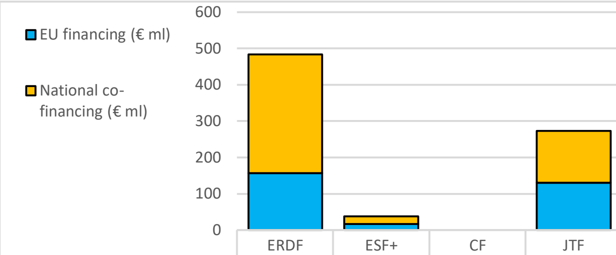
Note to the table: (1) Historical GHG emissions and removals (1990-2022) are based on the EEA's 2023 GHG Inventory and Approximated emissions and removals. (2) GHG intensity of GDP (gCO2-eq/EUR2015) uses net GHG emissions (i.e. including LULUCF and excluding international aviation). Real GDP and population data from Eurostat. (3) GHG emission projections as submitted in 2023 by Member States under Art. 18 of the Governance Regulation considering additional measures (WAM). EU Population in 2050 is based on the latest Eurostat population projections. (4) The overshoot vs. a linear trajectory compares, for each Member State, the cumulative projected net GHG emissions (including LULUCF) between 2022 and 2050 with a linear trajectory starting from the 2021 emission level to zero by 2050. The overshoot against a non-linear indicative benchmark compares the cumulative projected GHG emissions (excluding LULUCF) with an indicative pathway to climate neutrality based on the scenarios proposed by the European Scientific Advisory Board on Climate Change, and then distributed across Member States according to the country's share of EU emissions in the core policy scenario supporting the initiatives delivering the European Green Deal. Projections consider, where available, the impact of both existing and additional policies and measures. (5) Target dates to achieve climate neutrality as in the NECP progress reports or, with an asterisk "", when from other unofficial sources (Net-Zero Tracker: https://zerotracker.net/).*

9) Financing Climate Action

Cohesion policy

Austria's planned financing for climate action

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



	ERDF	ESF+	CF	JTF
National co-financing (€ ml)	328	22	0	143
EU financing (€ ml)	157	16	0	131
EU Climate amount as a share of EU total financing	30%	4%	0%	96%

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	1	2.4
Large-scale projects	-	-

Modernisation Fund	n.	EUR million
(List of confirmed or approved investment proposals)	non-beneficiary	

Major Innovation Fund projects

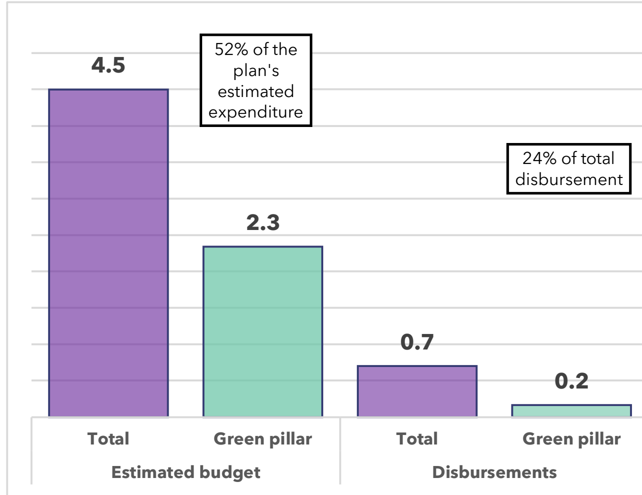
GtF	**Green the flex: achieving significant greenhouse gas**	Intra-day electricity storage	**EUR 2.4 ml.**

Source: Innovation Fund Project Portfolio - Innovation Fund - Portfolio of signed projects | Sheet - Qlik Sense (europa.eu)

Recovery & Resilience Facilities

RRF allocations (EUR billion)	**Grants:**	**Loans:**	**% of GDP**
	3.46	-	**0.9**

RRF contribution to the Green pillar in Austria (€ 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.

Major green transformation RRF recipients

ÖBB-Infrastruktur Aktiengesellschaft	Construction of new railways and electrification of regional railways	**EUR 351.0 ml.**
Österreichische Forschungsförderungs-gesellschaft	IPCEI Hydrogen, IPCEI Microelectronics and Connectivity, Quantum Austria – Promotion of Quantum Sciences, Widespread availability of Gigabit capable access networks and creation of new symmetric	**EUR 4.1 ml.**
Porsche Bank Aktiengesellschaft	Green investments in enterprises	**EUR 4.0 ml.**
Jugend am Werk Bildungs:Raum GmbH	Green investments in enterprises, Promoting re-skilling and up-skilling	**EUR 3.9 ml.**

Based on the list of the 100 final recipients receiving the highest amount of funding for the implementation of measures under the RRF per country as reported by the Member State in line with Article 25(a) of Regulation (EU) 2023/435 amending the Regulation (EU) 2021/241 on the establishment of the Recovery and Resilience Mechanism.

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en