

IEA-Advanced Motor Fuels ANNUAL REPORT 2025

AUSTRIA



Austria

Drivers and Policies

Transport GHG Emissions Share and Increase

The decarbonization of road transport remains the most significant structural challenge for Austria compared with other sectors. From 1990 to the mid-2000s, greenhouse gas (GHG) emissions from road transport increased by around 38%, largely driven by growing passenger and freight traffic volumes, as well as fuel sold to foreign users (i.e., fuel sold in Austria but used abroad) because of price differentials with neighbouring countries. Emissions reached a peak in 2005 and declined between 2005 and 2012 because of policy-induced reductions in fuel sales, the introduction of biofuel blending obligations, and efficiency improvements in the vehicle fleet. In the subsequent decade, emissions increased again, highlighting the limited effectiveness of existing measures in offsetting traffic growth, aside from the temporary reduction observed during the COVID-19 pandemic in 2020. Since 2022, more stringent climate and transport policies have contributed to a renewed decline in emissions, culminating in 2024 emissions at the lowest level since 2000.

For 2025, no final GHG inventory data is available yet. However, according to preliminary assessments and trend indicators published by [Environmental Agency Austria](#), transport emissions are expected to remain on a slightly downward trajectory in 2025 compared with 2024. This downward trend is supported by the accelerated deployment of electric vehicles, tighter CO₂ standards for new vehicles, lower diesel sales in freight transport, and complementary national policy measures. Nevertheless, sustained and coordinated action remains essential to achieve long-term decarbonization targets in the road transport sector.

According to the Environmental Agency Austria, the transport sector generated approximately 19.5 million tonnes of GHG emissions in 2024, expressed as carbon dioxide equivalent (CO₂e), compared with 19.8 million tonnes in 2023. In 2022, passenger cars accounted for 58% of road transport GHG emissions, followed by heavy-duty vehicles and buses (32%), light-duty vehicles (8%), and mopeds and motorcycles (around 1%); rail, aviation, inland navigation, and military transport together represented approximately 1% of total transport emissions. While no final GHG inventory data is available for 2024 and 2025, the sectoral and vehicle-class emission structure is assumed to broadly follow the most recent inventory years (2022–2024).

For Austria, the most recent officially confirmed biofuel substitution rate was 5.75% in 2022, corresponding to the statutory minimum blending obligation. For subsequent years, no final substitution shares have yet been published by Environmental Agency Austria. Based on reported emission reductions (a total of 1.87 million tonnes of CO₂ in the transport sector in 2024) and biofuel use, observed trends in fossil fuel sales, and the assumption of continued compliance with mandatory blending requirements, a conservative estimate suggests that biofuels replaced approximately 6.0–6.5% of fossil transport fuels in 2024. For 2025, assuming a continuation of these trends — including declining diesel sales, increasing use of advanced biofuels such as hydrotreated vegetable oil (HVO), and no structural changes to the regulatory framework — the substitution share is estimated to be similar to the share in 2024, at around 6.0–6.8%. These figures must be interpreted as indicative estimates rather than officially confirmed values and are subject to revision once final inventory data becomes available.

Politics: Recent Activities and Developments

Austria is committed to carbon neutrality by 2040 — a goal that requires substantially increased decarbonization efforts across all energy sectors. Especially in the transport sector, a radical turnaround is needed to achieve this political target. For this reason, Austria has adopted several measures, including a taxation system that imposes a price penalty on ecologically destructive activities. Enacted in 2021 and described in the National Emissions Trading Act of 2022 (NEHG 2022), the system introduced continuously increasing price penalties for CO₂e, ranging from EUR 30 (USD 32.4) per ton in 2022 to EUR 55 (USD 59.4) per ton in 2025. In 2025, the CO₂ pricing scheme resulted in a price increase of 15.0 cents (including value added tax [VAT]) per litre of petrol (with blending) and 16.5 cents (including VAT) per litre of diesel (with blending). In 2024, these additional costs were partially offset by the “Klimabonus,” a lump-sum cash payment to residents to offset the higher cost of

living caused by the national CO₂ price, with higher amounts granted in regions with fewer low-carbon mobility alternatives. Because the “Klimabonus” was abolished in 2025, the CO₂ levy is now fully passed on to the end consumer.

Beginning in 2028, instead of 2026 (as originally planned), a European Union (EU)-wide CO₂ emissions trading system (EU ETS II) will replace national fixed-price carbon pricing schemes, following a transitional reporting phase in 2025–2027.

Austria has also developed and applied several national strategies in the area of transport, such as the Austrian Integrated National Energy and Climate Plan as the central framework for the decarbonization of transport by 2030, the National Implementation of the Renewable Energy Directive (RED III) with quantitative targets for advanced motor fuels, the [2030 Mobility Master Plan](#) (will be revised in 2026) for the strategic embedding of advanced motor fuels, the National Strategic Framework for Alternative Fuels (AFIR Implementation) as infrastructure framework for hydrogen (H₂), liquefied natural gas (LNG)/Bio-LNG, and other fuels. Complementary strategic plans for freight transport (the [Freight Transport Master Plan 2030](#)) and for hydrogen (the [Hydrogen Strategy for Austria](#)) have also been developed.

Austrian Integrated National Energy and Climate Plan

The integrated National Energy and Climate Plan (NECP) is a planning and monitoring instrument of the EU and its member states. The NECP is intended to contribute to improved coordination of European energy and climate policy and serves as the central instrument for implementing the EU’s renewable energy and energy efficiency targets for 2030. For Austria, the current NECP includes measures to support an increase in the share of renewable energy sources in the transport sector. In Austria, the biogenic energy share, in relation to the energy content of diesel, is about 6.3%; for petrol, it is 3.4%. Austria exceeded this target in 2024: in total, around 9.2% of fossil fuels were replaced by biofuels (6.36%) and renewable electricity (1.13%). The NECP contains the national plan with a commonly shared vision, national targets and objectives, and policies and measures to ensure the achievement of the national climate targets.

Incentives and Pricing

Since July 2008, Austria applies the *Normverbrauchsabgabe* (NoVA) as a one-off registration tax when passenger cars (category M1) are first placed on the domestic market, either through a new vehicle purchase or an import. This system provides incentives to purchase vehicles with low CO₂ emissions.

In 2024, the CO₂ calculation deduction value was 97 g/km, while in 2025 it was reduced to 94 g/km, adding to the tax burden on higher-emission vehicles. In addition, the maximum NoVA rate was increased to 80% of the net vehicle price. From 2025, Austria will no longer provide a CO₂ allowance for combustion engines; also, any emissions above 155 g CO₂/km will incur a penalty, in addition to the standard NoVA, of €80 per additional gram of CO₂/km. Vehicles with 0 g CO₂/km (battery-electric vehicles [BEVs] and hydrogen fuel-cell electric vehicles [FCEVs]) remain fully exempt. In parallel with vehicle taxation, pure biofuels are exempt from the mineral oil tax, while compressed natural gas (CNG) is exempt from mineral oil taxation but remains subject to the lower natural gas tax, reflecting its comparatively favorable carbon intensity.

FTI-Pakt 2027–2029 and Industriestrategie 2030

In 2025, Austria implemented two new federal strategies with high relevance for the biofuels and advanced motor fuels sector: the FTI-Pakt and the Industriestrategie 2030.

Interplay between the FTI Pakt and the Industriestrategie 2035

The Austrian **FTI Pakt** provides the long-term governance and financing framework for research, technology development, and innovation, ensuring continuity and strategic alignment across legislative periods. The FTI Pact for Austria provides a budget of €5.5 billion for research, technology, and innovation between 2027 and 2029, with the aim of enhancing industrial value and securing Austria’s future.

The **Industriestrategie 2035** defines the economic and industrial policy objectives, with a focus on safeguarding competitiveness while steering industrial transformation toward climate neutrality.

Together, the two instruments form a coherent policy framework in which the FTI Pakt supports technology development and risk reduction, while the Industriestrategie enables market uptake, scaling, and integration into industrial value chains.

Relevance for biofuels and advanced motor fuels

For biofuels and advanced motor fuels, the FTI Pakt facilitates targeted research, pilot projects, and demonstration activities across feedstock development, conversion technologies, and fuel certification.

The Industriestrategie complements this work by creating favorable conditions for industrial deployment, investment security, and development of domestic value in fuel production and supply chains. In combination, both strategies support the transition from innovation to large-scale application, which is essential for the timely market rollout of sustainable fuels in the transport sector.

Advanced Motor Fuels Statistics

Fleet Distribution and Number of Vehicles in Austria

2025 marked the sixth time in Austria's history that the total number of motor vehicles registered in the country exceeded 7 million, with 7.51 million registered motor vehicles — an increase of 1.1% or 86,681 vehicles compared with 2024. Passenger vehicles dominate the fleet with 5.29 (compared with 5.23 in 2024) million vehicles (Table 1), representing the largest share (70.4%) of vehicles in Austria.

Fleet numbers demonstrate a continuous trend toward advanced, alternative propulsion systems, especially toward BEVs and hybrid electric vehicles (HEVs) (Figure 1). For instance, 257,717 BEVs and 440,722 HEVs were registered in 2025, illustrating a positive trend continuing from previous years. The number of vehicles powered by CNG and liquefied petroleum gas (LPG), including bivalent vehicles, decreased in 2025 by 8.8% (413 vehicles), representing a fleet level of 4,281 vehicles (compared with 4,694 in 2024). The number of bivalent vehicles decreased from 2,521 in 2024 to 2,341 in 2025, and the CNG vehicle fleet decreased marginally from 2,172 in 2024 to 1,940 in 2025. With only 53 vehicles (62 in 2024), the FCEV fleet in Austria is still negligible.

Table 1. Austrian Fleet Distribution of Passenger Vehicles (M1) by Drivetrain, 2019–2025

Drivetrain	2019	2020	2021	2022	2023	2024	2025
Gasoline	2,173,772	2,190,388	2,192,128	2,189,530	2,184,042	2,183,076	2,175,898
Diesel	2,772,854	2,762,273	2,717,475	2,651,280	2,584,985	2,510,099	2,407,428
Electric	29,523	44,507	76,539	110,225	155,490	200,603	257,717
LPG	2	2	1	1	1	1	2
CNG	2,602	2,753	2,654	2,564	2,342	2,172	1,940
Hydrogen (H ₂)	41	45	55	62	67	62	53
Bivalent gasoline/ethanol (E85)	5,770	5,190	4,878	4,595	4,326	3,424	n.a.
Bivalent gasoline/LPG	330	330	331	331	334	297	302
Bivalent gasoline/CNG	3,143	2,978	2,801	2,616	2,437	2,224	2,039
Hybrid gasoline/electric	45,645	68,983	108,978	148,284	195,439	257,588	350,304
Hybrid diesel/electric	6,172	14,378	27,996	41,402	55,543	72,347	90,418
Total	5,039,854	5,091,827	5,133,836	5,150,890	5,185,006	5,231,893	5,286,101

Source: Statistik Austria.

New Registrations

In 2025, 284,978 new passenger cars were registered (compared with 253,789 in 2024). The upward trend observed in 2024 (+6.1% or +14,639 vehicles) continued and increased in 2025 with +12.3% (+31,189 vehicles), reaching the highest level since 2019. In 2025, new registrations of petrol-powered vehicles decreased by 5.4% (-4,547 units). Registrations of diesel-powered vehicles continued to fall, by 25.2% to 33,004 (versus 44,132 in 2024).

With 60,651 new registrations, all-electric passenger cars showed a strong increase (+35.9%, +16,029 vehicles in 2025) after last year's decrease (-6.3%, -2,999 vehicles in 2024). The largest increase in 2025 compared with 2024 was for plug-in hybrid electric vehicles (PHEVs). In 2025, 28,820 PHEVs were registered; in 2024, only 16,930 — an increase of +58.7%. In 2025, the share of all-electric passenger cars was 21.3%; the share of hybrid passenger cars was 39.3%.

Overall, the share of all alternatively powered passenger cars increased to 60.6% (compared with 49.5% in 2024), confirming the transition toward alternative drivetrains.

Average CO₂ Emissions of Passenger Cars

In 2025, the CO₂ emissions of newly registered passenger cars measured, on average, 122 g/km (compared with 129 g/km in 2024), based on the Worldwide Harmonised Light Vehicles Test Procedure (WLTP) and excluding electric and hydrogen vehicles. The number drops to 96 g/km (compared with 106 g/km in 2024) if electric and hydrogen vehicles are included in the calculation. The average emissions for petrol-powered M1 vehicles in 2025 is 134 g/km (compared with 134 g/km in 2024). Diesel-powered passenger vehicles generate an average of 153 g/km (compared with 149 g/km in 2024).

Development of Filling Stations

By the end of 2024, Austria had 2,724 publicly accessible filling stations (compared with 2,751 in 2023). As an annual average for 2025, the price of gasoline for private use at a filling station was EUR 1.519 (USD 1.716) per liter; the price of diesel was EUR 1.536 (USD 1.735) per liter. Due to missing data, the correct numbers of public CNG and LPG filling stations cannot be reported for 2025. In 2024, 79 public CNG stations, and 40 LPG filling stations were available. In addition, four public LNG filling stations are located in Ennshafen, St. Marienkirchen, Feldkirchen (Styria), and Himberg (Lower Austria). In 2024, 6 LNG stations were available.

Until April 2025, Austria had five publicly accessible hydrogen fueling stations (HFSs), all operated by OMV (an Austrian integrated crude oil, natural gas, and petrochemicals group). As of April 2025, OMV had closed all five fueling stations because they could not be run profitably. There are two more hydrogen fueling stations, but access for one is limited to companies, commercial enterprises, and municipalities, and the other is dedicated to hydrogen research. Except for the latter, all HFSs support a pressure of 70 MPa.

Research and Demonstration Focus

Energy Model Region

As part of the “[Energy Model Region](#)” initiative, made-in-Austria energy technologies are developed and demonstrated in large-scale, real-world applications with international visibility. In 2025, there were no newly funded Energy Model Regions in Austria. However, there has been a strategic development regarding biofuels and advanced motor fuels. Existing pilot regions have been systematically opened to biofuels and advanced motor fuels, particularly in the transport sector, for municipal fleets, and in biomass-based value chains. One of the regions — [WIVA P&G](#) — demonstrates the transition of the Austrian economy and energy production to an energy system based heavily on green hydrogen. Emphasis is on the development of hydrogen transport applications. A [project database](#) is available online. The WIVA P&G Energy Model Region forms part of the Mission Innovation Hydrogen Valley family.

klimaaktiv mobil Program

Austria's national action program for mobility management, [klimaaktiv mobil](#), supports the development and implementation of mobility projects and transport initiatives that aim to reduce CO₂ emissions. Since 2004, 21,000 climate-friendly mobility projects have been funded. The klimaaktiv mobil website offers a map with details about each project. For 2025, the "klimaaktiv mobil" action programme was allocated a budget of € 83 million.

COMET (Competence Centers for Excellent Technologies)

COMET centres of excellence are funded by the Republic of Austria — specifically the Federal Ministry for Innovation, Mobility and Infrastructure (BMIMI) and the Federal Ministry for Economy, Energy and Tourism (BMWET) — as well as the participating federal states, companies, and research organisations. The programme is managed by the Austrian Research Promotion Agency (FFG). The COMET programme comprises several centres of excellence and modules with a clear focus on biofuels and/or advanced motor fuels. Examples include BEST — Bioenergie und nachhaltige Technologien GmbH (COMET K1) and LEC — Large Engines Competence Center (COMET K1), with a newly added COMET Module in 2025: "LEC FFF — Future Fuel Fundamentals."

IEA Technology Cooperation Programmes Funding

Austria has been actively involved in the International Energy Agency ([IEA Technology Collaboration Programmes \(TCPs\)](#)) since joining the IEA in 1975. The TCPs are an important complement to Austrian national energy research and innovation (R&I) activities and contribute, via Task outcomes and recommendations, to national priorities. This funding programme fosters Austrian participation in the collaborative work within the IEA, disseminates results, and facilitates networking activities. On a national level, a yearly network event "Nationaler Projektbeirat" connects the experts who are active in the different IEA TCPs.

CETP (Clean Energy Transition Partnership)

The Clean Energy Transition Partnership (CET Partnership) is a transnational initiative on joint research, technological development, and Innovation (RTDI) programming to boost and accelerate the energy transition, building upon regional and national RTDI funding programs. It brings together more than 70 partners from 32 countries. An Austrian national requirement for applicants is a clear focus on mobility. The yearly funding sum is around 1.5 to 2.0 Mio. EUR (USD 1.62 million to 2.16 million) for Austrian participants.

SET-Plan IWG (Implementation Working Group) on hydrogen

The Implementation Working Group (IWG) on hydrogen established in 2023 aims to implement part of the Strategic Research and Innovation Agenda (SRIA) of the European Research Area (ERA) pilot on green hydrogen and coordinate the work on hydrogen previously split between different IWGs of the SET Plan.

Outlook

In its government programme, the new Austrian government confirms the goal of reaching carbon neutrality by 2040. Alternative fuels are indispensable for reaching this ambitious goal. The governmental programme reflects a continuation of measures defined in the [Austrian Climate and Energy Strategy](#) to reach this goal. Advanced motor fuels play a crucial role in the Austrian Climate and Energy Strategy and are considered an essential element for a successful Austrian transition toward sustainable mobility, as acknowledged in the governmental programme.

The areas of deployment depend on the use case. Electrification is the preferred option for use cases with limited energy requirements, such as passenger cars or light-duty vehicles with limited mileage. Use cases with high-energy-density demands — such as aviation, waterborne, or non-road mobile machinery applications — focus on hydrogen, biofuel, and synthetic and advanced fuels. Although R&I funding schemes and programs are no longer directed at improving internal combustion engine (ICE) drivetrains, they aim to support the improvement and uptake of ICE applications, such as hydrogen, biofuel, and synthetic and advanced fuels for use cases with high-energy-density demands.

Since April 13, 2024, Regulation (EU) 2023/1804 on the deployment of alternative fuels infrastructure has been in force. The regulation outlines a framework for the deployment of charging and refueling infrastructure for road vehicles across the EU. It includes mandatory targets for member states instead of previous indicative targets, thus aiming to solve the uneven distribution of publicly accessible charging infrastructure — a prerequisite for an EU-wide transition toward alternative drivetrains. As stated in the governmental programme, the new EU Renewable Energy Directive III (RED III) regulation will be implemented as quickly and completely as possible (e.g., through acceleration of authorization procedures). Currently (March 2026) there have been partial implementations and draft proposals, but no comprehensive package of measures that is fully effective across the country.

AFIR (Alternative Fuels Infrastructure Regulation) has been in force in Austria since April 2024 and has been formally implemented (a strategic framework is in place); its roll-out is progressing, but achieving the targets in full — particularly regarding TEN-T gaps, heavy goods traffic, and hydrogen — will require further acceleration by 2030.

The new FTI Pakt 2027–2029 is strategically focused on (1) strengthening technology-neutral research across the entire value chain, (2) facilitating industrial demonstration for biofuels and advanced motor fuels, based on improved R&D framework conditions, and (3) scaling technologies up from pilot to demonstration plants. In operational terms, it will provide greater planning certainty for flagship projects; COMET modules and funding calls; and mechanisms for companies to invest in facilities, testing, and system integration (e.g., engines, logistics, sustainability certifications) with lower risk.

The Industriestrategie 2035 complements the FTI Pakt by prioritizing transformation pathways for energy-intensive processes and mobility and by addressing demand-side levers (e.g., public procurement, real-world laboratories, regulatory sandboxes) for renewable fuels.

The goal with both new strategic documents is that federal policy will shift the focus partially from pure basic research toward market-oriented scaleup, linking R&D funding more closely to regulation (RED III/AFIR context) and providing a realistic pathway for biofuels/advanced motor fuels to move from the laboratory to industrial application.

Additional Information Sources

- [Federal Ministry for Innovation, Mobility, and Infrastructure](#)