

2024 MARKET DATA

Date: 04/2025



German Bioethanol
Industry Association

Reinhardtstraße 16
10117 Berlin

T +49 (0) 30-3 01 29 53-13
F +49 (0) 30-3 01 29 53-10

presse@bdbe.de
www.bdbe.de

Overview

German bioethanol production increased significantly last year, and domestic consumption of bioethanol as a fuel additive in petrol also saw a slight rise. In 2024, around 1.3 million tonnes of bioethanol were consumed on the fuel market, representing an increase of around 3% compared to the previous year. The demand exceeding domestic production was met through imports. The amount of petrol sold on the fuel market, which continued to grow moderately, increased by nearly 2% to around 17.8 million tonnes, while bioethanol used as a fuel additive in the petrol types Super E10, Super Plus, and Super (E5) rose to 6.9% by volume (2023: 6.8% by volume). The market share of Super E10 also increased, reaching 27.4% in 2024 (2023: 25.9%).

Bioethanol production in 2024

Last year, German biorefineries produced slightly more than 744,000 tonnes of bioethanol. This represents a significant increase in production volume of more than 73,000 tonnes or around 11% compared to 2023.

Nearly 654,000 tonnes (88%) of the produced ethanol came from feed grain, and just over 90,000 tonnes (12%) from sugar beets. The proportion of bioethanol produced from residues and waste materials was not precisely quantified by the Federal Office for Agriculture and Food (BLE).

Bioethanol production by raw material (in tonnes)

		2024	653,941	
Total grain		2023	619,985	5.5%
of which:	Maize	2024	126,329	15.9%
		2023	109,035	
	Wheat	2024	342,987	- 4.5%
		2023	359,082	
	Other	2024	184,625	21.6%
		2023	151,868	
Molasses/sugar beet pulp		2024	90,112	78.1%
		2023	50,600	
Residues and waste materials*		no data	no data	
Total*		2024	744,053	11.0%
		2023	670,585	

*Total without residues and waste materials, no data due to antitrust law

Source: Federal Office for Agriculture and Food (BLE)

© BDBe 04/2025

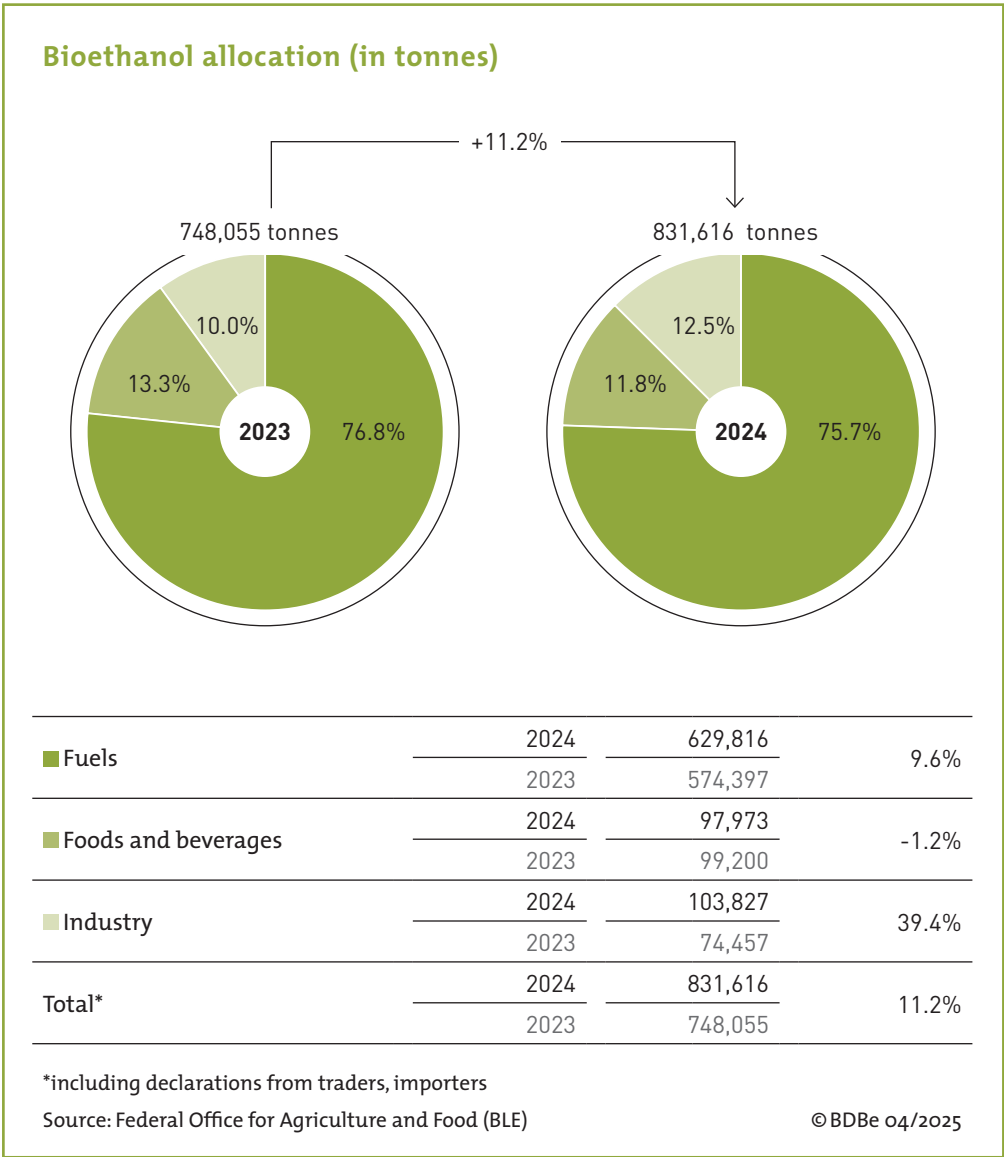
The bioethanol quantity of 90,112 tonnes produced from sugar beets and/or molasses is significantly higher than in the previous year (+78.1% compared to 2023). The bioethanol quantity corresponds to a raw material input of just more than one million tonnes of sugar beets. Nearly half a million tonnes more sugar beets were processed into bioethanol last year compared to 2023. The amount used corresponds to 2.8% of the German sugar beet harvest in 2024.

Last year, 653,941 tonnes of bioethanol were produced from feed grain (+5.5% compared to 2023). Around 2.6 million tonnes of feed grain were used as a raw material for this purpose. This corresponds to 6.8% of the German grain harvest, with a total harvest volume of nearly 39 million tonnes in 2024. Maize processing increased significantly, while wheat processing decreased (-4.5%). This can be attributed to an overall weaker harvest year for wheat in Germany. The previous year's grain harvest amounted to around 42.5 million tonnes.

In addition to bioethanol, the other plant components of the processed raw materials supplied proteins, dietary fibres, minerals and vitamins, which were processed into high-quality co-products. Valuable protein animal feed and other products for the food and animal feed industry, organic fertiliser and biogas as well as biogenic CO₂ for beverages and other applications were produced.

Bioethanol allocation

The total quantity provided by German bioethanol producers increased by over 11% compared to the previous year, reaching approx. 832,000 tonnes (2023: 748,055 tonnes). The chemical and pharmaceutical sectors experienced marked growth of nearly 40%, increasing from around 75,000 tonnes in 2023 to close to 104,000 tonnes last year. The quantity of bioethanol designated for the fuel sector also increased by almost 10% compared to the previous year. In contrast, the use of domestic bioethanol for food and beverages decreased slightly compared to 2023 (-1.2%).



Bioethanol consumption 2024 on the fuel market

In a slightly growing petrol market, where around 17.8 million tonnes of petrol were sold, an increase of just over 2% compared to the previous year (2023: 17.4 million tonnes), the consumption of bioethanol also increased. Bioethanol was used as a fuel additive in petrol types such as Super E10, Super Plus, and Super (E5), or used in the production of ethyl *tert*-butyl ether (ETBE).

Bioethanol use on the fuel market (in tonnes)

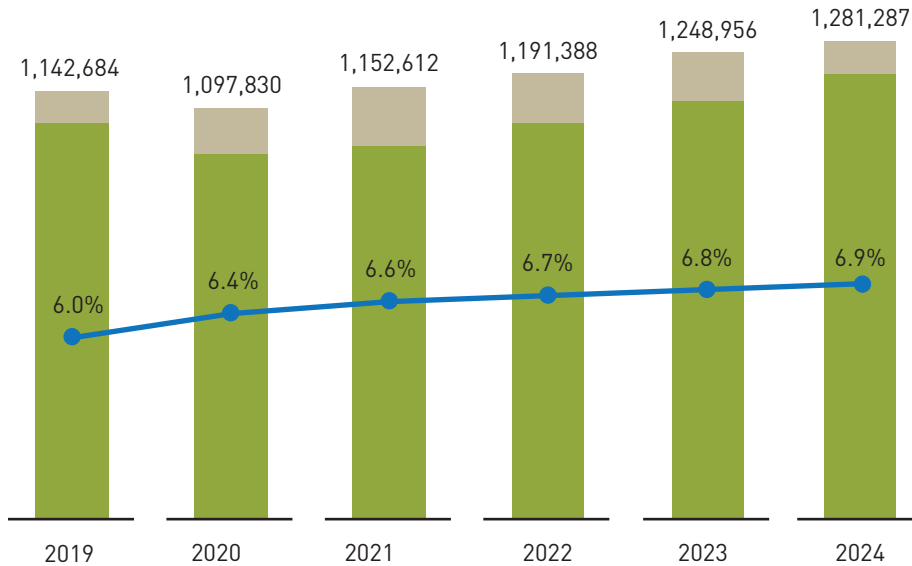
Total bioethanol		2024	1,281,287	+ 2.6%
		2023	1,248,956	
of which:	Bioethanol Fuel additive	2024	1,190,933	+ 6.5%
		2023	1,117,785	
	Bioethanol for ETBE*	2024	90,354	- 31.1%
		2023	131,171	
Engine fuels (incl. bioethanol)		2024	17,751,755	+ 1.8%
		2023	17,438,666	
Share of bioethanol in engine fuels [vol.-%]		2024	6.9%	
		2023	6.8%	

*ETBE: ethyl *tert*-butyl ether, additive produced from bioethanol

Source: Federal Office for Economic Affairs and Export Control

© BDBe 04/2025

Bioethanol as a fuel additive in petrol (in tonnes)



Fuel additive in petrol

■ as ETBE* ■ as bioethanol —●— Percentage of bioethanol in petrol [vol. %]

*ETBE: ethyl *tert*-butyl ether, additive produced from bioethanol

Source: Federal Office for Economic Affairs and Export Control

© BDBe 04/2025

Bioethanol consumption here rose less markedly than in 2023, but still by almost 3% to nearly 1.3 million tonnes (2023: 1.2 million tonnes). 90,000 tonnes of bioethanol were used to produce ETBE, 31.1% less than in 2023 (over 131,000 tonnes). The bioethanol share in the petrol market rose slightly to around 6.9% by volume (6.8% by volume in 2023) due to the slightly higher fuel additive compared to the previous year.

The market share of Super E10 petrol in petrol sales also increased in 2024: from 25.9% in 2023 to 27.4%. The absolute sales volume increased by 7.5%, totalling almost 4.9 million tonnes. The market share of Super (E5) decreased slightly and was just under 68%, with almost 12.1 million tonnes of fuel sold. The market share of Super Plus, which is also blended with up to 5% bioethanol, was 5.0% in 2024, the same as in the previous year.

Sales of petrol types 2024 and 2023 (in tonnes)

			Change	Market share
Super Plus	2024	886,750	+0.9%	5.0%
	2023	879,257		5.0%
Super (E5)	2024	12,077,266	-0.3%	67.6%
	2023	12,040,325		69.0%
Super E10	2024	4,857,779	+7.5%	27.4%
	2023	4,519,084		25.9%
Total	2024	17,751,755	+1.8%	
	2023	17,438,666		

Source: Federal Office for Economic Affairs and Export Control © BDBe 04/2025

Outlook 2025

The upward trend in sales of Super E10 that emerged last year is also expected to continue at the beginning of 2025. The price difference between Super E10 and Super (E5) remains unchanged at around 5 to 6 cents per litre nationwide. This is also due to the national CO₂ price for fossil motor and heating fuels, which has been steadily rising for several years and is not charged on sustainably produced renewable fuel components. In Germany, the annual phased increase in the greenhouse gas reduction quota (GHG quota) will ensure stable sales trends for renewable fuels until 2030. The current GHG quota is 10.6% (2023: 9.35%) and will rise to at least 12.6% next year. Super E10 fuel is now available in 19 EU member states, as well as in Liechtenstein, Norway, and the United Kingdom. It has a market share of over 50% in 14 of these countries, as well as over 80% in ten of them.