2021 MARKET DATA

BDBe

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Overview

The German Bioethanol Industry Association (BDBe) takes a positive view of 2020 despite the ongoing coronavirus crisis. In Germany last year, sales of bioethanol as a fuel additive in petrol fell slightly compared to the previous year by around 4% to just under 1.1 million tonnes. However, petrol sales decreased even more, with a drop of about 10%, which can mainly be attributed to the restrictions on public life in spring and autumn 2020. As a result, the volume of bioethanol as an admixture in the petrol types Super E10, Super Plus and Super E5 increased from 6.0% in 2019 to 6.4% the previous year. The market share of Super E10 rose from 13.7% in 2019 to 14.0% in 2020. Domestic bioethanol production also significantly expanded last year.

Bioethanol production in 2020

The bioethanol plants located in the federal states of Brandenburg, Mecklenburg-Western Pomerania, Saxony-Anhalt and Bavaria significantly increased their bioethanol production. A total of around 700,000 tonnes of bioethanol were produced last year. Compared to 2019, this is an increase of 7.1%.

About 590,000 tonnes (85%) of production came from feed grain and almost 108,000 tonnes (about 15%) from sugar beet pulp. A low proportion of bioethanol was also produced from residues and waste materials, which was again not precisely quantified by the Federal Office for Agriculture and Food (BLE).

Bioethanol production by raw material (in tonnes)

Total grain		2020	590,251	+ 5.2 %
		2019	560,872	
of which:	Maize	2020	178,656	−13.0 %
		2019	205,392	
	Wheat	2020	199,181	+ 9.1 %
		2019	182,505	
	Other	2020	212,413	+ 22.8 %
		2019	172,975	
Molasses / sugar beet pulp		2020	107,856	+ 18.9 %
		2019	90,693	
Residues and waste materials*		No data	No data	
Total*		2020	698,107	+ 7.1 %
		2019	651,565	

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

Source: BLe

The bioethanol volume of around 108,000 tonnes from sugar beet pulp or molasses (+18.9% compared to 2019) corresponds to a raw material input of 1.13 million tonnes of sugar beet. This means that 23.9% (approx. 217,000 tonnes) more sugar beet was processed into bioethanol last year than in 2019. The quantity processed represents almost 4.5% of the German beet harvest.

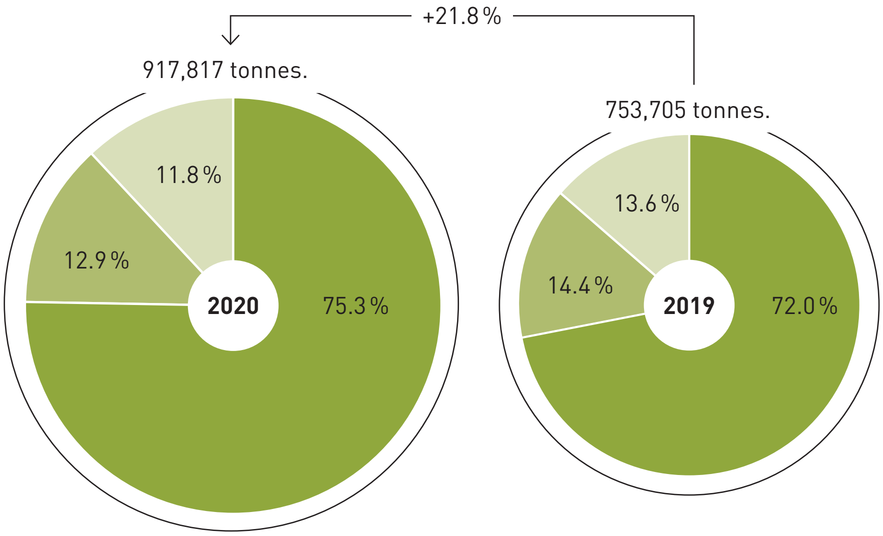
Feed grain was used to produce around 590,000 tonnes of bioethanol last year (+5.2% compared to 2019). Around 2.5 million tonnes of feed grain were used as a raw material for this purpose. This corresponds to 5.8% of Germany’s grain harvest of 43.2 million tonnes in 2020.

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: protein feed from grains, concentrated feed from sugar beets and other products for the food and feed industry, gluten for aquaculture or biogenic carbon dioxide for beverages

In 2020, the volume of bioethanol sold by producers, traders and importers increased significantly by 22% to roughly 920,000 tonnes compared to 2019 (754,000 tonnes). The sharp increase is primarily due to the more than 27% rise in sales of bioethanol for use as fuel (2020: 691,000 tonnes).

The volume of bioethanol sold destined for the food and beverage industry (+9.4%) and the chemical and pharmaceutical industry (+5.1%) also increased compared to 2019.

Use of bioethanol by industry (in tonnes)



Fuels	2020	691,400	+27.4 %
	2019	542,699	
Food and beverages	2020	118,605	+9.4 %
	2019	108,437	
Industry	2020	107,812	+5.1 %
	2019	102,569	
Total*	2020	917,817	+21.8 %
	2019	753,705	

*including declarations from traders, importers

Source: BLe

Bioethanol consumption 2020 on the fuel market

In a sharply declining petrol market in 2020 due to the pandemic, in which 16.2 million tonnes of petrol were sold, down nearly 10% from the previous year (2019: just under 18 million tonnes), the absolute consumption of bioethanol, which was used as an admixture in petrol types Super E10, Super Plus and Super (E5) or to produce ethyl tertiary butyl ether (ETBE), also fell by 4% to just under 1.10 million tonnes (2019: 1.14 million tonnes). More than 125,000 tonnes of bioethanol were used for ETBE production, which is equivalent to 42.8% more than in 2019 (88,000 tonnes).

Bioethanol use on the fuel market (in tonnes)

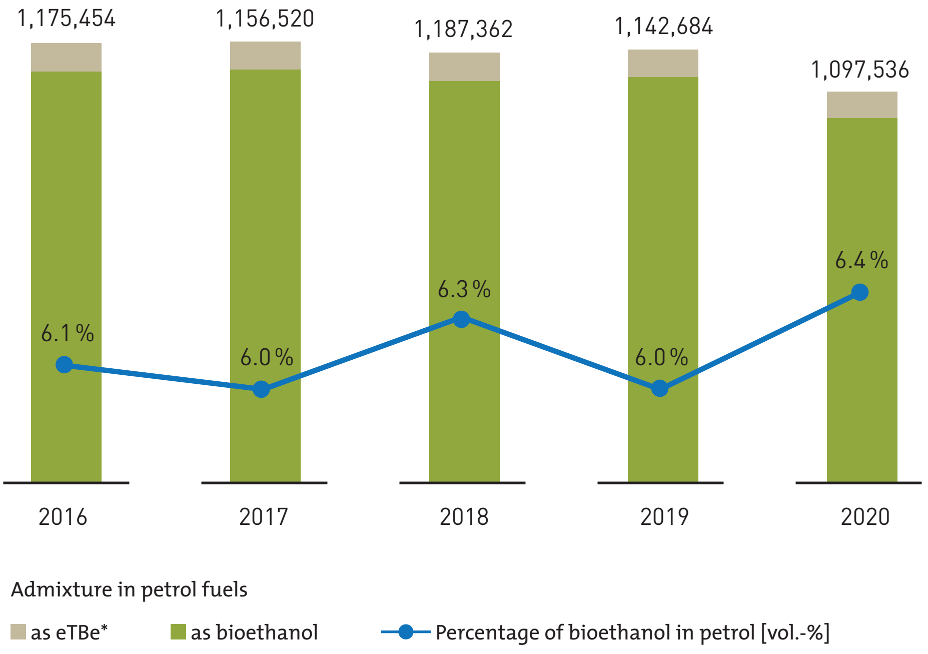
Total bioethanol consumption		2020	1,097,536	–4.0 %
		2019	1,142,684	
of which:	Bioethanol for use as an admixture	2020	971,711	–7.9 %
		2019	1,054,582	
	Bioethanol for eTBe*	2020	125,825	+ 42.8 %
		2019	88,102	
Engine fuelse (incl. bioethanol)		2020	16,217,890	–9.7 %
		2019	17,965,914	
Share of bioethanol in engine fuels [% by volume]		2020	6.4 %	
		2019	6.0 %	

*eTBe: ethyl tertiary butyl ether, also produced from bioethanol

Source: BaFa

As total petrol sales fell by nearly 10% from around 18.0 million tonnes to 16.2 million tonnes, the market share of bioethanol rose to 6.4% by volume (2019: 6.0% by volume). This is the highest percentage in the past five years.

Bioethanol as an admixture in petrol fuels (in tonnes)



*eTBe: ethyl tertiary butyl ether, also produced from bioethanol

Source: Federal Office of Economic Affairs and Export Control (BAFA)

The market share of Super E10 petrol in petrol sales increased to 14.0% (2019: 13.7%). The absolute sales volume in this case was 2.27 million tonnes. This figure was 2.46 million tonnes in the previous year. At 13.1 million tonnes in 2020, Super E5 achieved a market share of 80.6%. In the previous year, the 14.7 million tonnes of Super (E5) sold represented a market share of 81.7%. Super Plus, a blend also containing up to 5.0% bioethanol, was 5.4% in 2020, above the previous year's level (2019: 4.6% market share). At almost 878,000 tonnes, 5.4% more Super Plus was sold than in the previous year (2019: 833,000 tonnes).

Sales of petrol types 2020 and 2019 (in tonnes)

			Change	Market share
Super Plus	2020	877,756	+5.4%	5.4%
	2019	832,992		4.6%
Super (E5)	2020	13,069,083	−10.9%	80.6%
	2019	14,668,534		81.7%
Super E10	2020	2,271,051	−7.8%	14.0%
	2019	2,464,388		13.7%
Total	2020	16,217,890	−9.7%	
	2019	17,965,914		

Source: Federal Office of Economic Affairs and Export Control (BAFA)

Outlook 2021

The positive upward trend in sales of Super E10 gained even more momentum in the course of December 2020: the market share of Super E10 was almost 18% in the last month of the year. Super E10 is now available in 14 EU member states; Austria and the UK, which left the EU at the end of the year, are planning to launch it this year. In the meantime, the price gap between Super E10 and Super E5 at German petrol stations has risen to 6 cents/litre, so that consumers pay significantly less for climate-friendly petrol.

The greenhouse gas reduction targets for the petroleum industry, which rose from 4% to 6% last year, are set to increase further in the coming years. The law addressing the further development of the greenhouse gas reduction quota (GHG quota) is currently being discussed in parliament. It includes a plan to raise the GHG quota from 6% to 22% in 2030. This increase will lead to a further rise in the share of sustainable biofuels in transport in the medium term.