

Question & Answer: Molasses and the Renewable Energy Directive

1. What is molasses?

Molasses is a co-product of the sugar industry. It is a thick and sticky syrup with a high nutritional value: it contains on average 50% of sugar content and minerals such as iron, calcium, magnesium and potassium. It results from the sugar beet and sugar cane refining.

2. What is the classification of molasses?

Molasses is neither a waste or a residue, but it is a **co-product of the sugar industry**, as recognised by both the sugar industry and molasses users. That means that its use of molasses is certain and that there is already a market for molasses, in particular in human (yeast, bread, confectionery, beer, citric acid) and animal nutrition. In addition, molasses presents a high financial value and it is sold almost at the price of the industrial sugar it contains. Molasses is subject to technical regulations to guarantee food safety and is classified as a feed material¹.

3. How is molasses produced?

In Europe, sugar beets are harvested in autumn and are then transported to the sugar factory. Sugar beet is washed and sliced. The juice is then extracted from the cells of the sugar beet. Such juice, containing a high percentage of water and minerals, is evaporated and boiled so that it is concentrated in a thick juice containing a high percentage of sugar. It is at this stage that molasses production occurs: through centrifugation, sugar crystals – which will be then further refined into white sugar (commonly used for food) – are separated from molasses, a dark syrup containing around 50% of sugar and other minerals.

4. What are the main uses of molasses?

Molasses is a food and feed material that has been used for decades for the production of:

- **Yeast**, an essential ingredient in the food sector. In baking it gives us our daily **bread**; through brewing it brings us our glass of **beer**; through fermenting it produces European-famous **wines**.
- For **animal nutrition** purposes, molasses is a highly valued energy-rich taste enhancer with pellet-binding qualities that increase the palatability and the homogeneity of feed, reducing the dusty nature of feed.
- **Citric acid**, a natural antioxidant used to preserve the taste and appearance of food and beverages hereby contributing to the reduction of food waste.

¹ [COMMISSION REGULATION \(EU\) No 2017/1017 of 15 June 2017](#) on the Catalogue of feed materials



- **Amino acids** for human and animal nutrition as flavor enhancing and protein balancing feed additives and other applications.

Molasses is also used for industrial purposes, such as the production of biofuels.

5. What is the current availability of molasses in the EU?²

There is not enough molasses available in the European Union. The EU is a net importer of molasses: between 2014 and 2016, the EU imported on average around 1.4 million tonnes of molasses a year.

6. What are the future patterns of production and consumption of molasses in the EU?³

The EU production of molasses will increase from 2016 (3,199.86 tonnes) to 2018 (3,750.46 tonnes) and it will then decrease between 2018 (3,750.46 tonnes) and 2026 (3,464.27 tonnes). It will stabilise at around 3.5 million tonnes between 2020 and 2026.

Molasses consumption will be consistently higher than EU production after 2017: its average consumption will be of almost 5 million tonnes a year between 2018 and 2016.

7. What will be the availability of molasses after the end of sugar regime (October 2017)?⁴

The EU will import almost 2 million tonnes of molasses in 2017. Between 2018 and 2026, the EU will continue to import on average around 1.5 million tonnes of molasses (1,432.65 tonnes of molasses on average).

The EU will, therefore, continue to be a net importer of molasses after the end of the sugar regime: consumption of molasses will continue to be consistently higher than its production after 2017.

8. What is the current status of molasses under the Renewable Energy Directive?

According to the latest revision of the [Renewable Energy Directive](#) adopted in 2015 – that will be the EU regulatory framework on biofuels until 2020 – biofuels made from molasses are classified as food-based biofuels.

² Source: OECD/FAO (2017), *OECD-FAO Agricultural Outlook 2017-2026*, OECD Publishing, Paris. http://dx.doi.org/10.1787/agr_outlook-2017-en

³ Source: OECD/FAO (2017), *OECD-FAO Agricultural Outlook 2017-2026*, OECD Publishing, Paris. http://dx.doi.org/10.1787/agr_outlook-2017-en

⁴ Source: OECD/FAO (2017), *OECD-FAO Agricultural Outlook 2017-2026*, OECD Publishing, Paris. http://dx.doi.org/10.1787/agr_outlook-2017-en



9. What does the Commission proposal on the Renewable Energy Directive imply for molasses?

The Commission proposal on the Recast of the Renewable Energy Directive for the post-2020 period includes molasses into Annex IX-part B. The Commission proposal enables EU fuel suppliers to use molasses-based biofuels to comply with **mandatory incorporation targets** for advanced and other biofuels (6.8% of the energy content of road and rail transport by 2030), with the objective of promoting energy uses of molasses. Biofuels made from feedstocks included in Annex IX-part B (molasses, animal fats category 1 and 2 and used cooking oil) can contribute up to 1.7% of the mandatory incorporation target for advanced and other biofuels.

10. What will be the impact of the EU Commission proposal on the supply of molasses?

The introduction of an incorporation target for molasses-based biofuels will increase EU demand for molasses. This will aggravate the structural deficit in EU molasses supply. Also global supply of molasses is tight⁵: There is, therefore, limited room for additional imports of molasses from outside Europe.

Given the lack of molasses at both the EU and the global level, inclusion of molasses in Annex IX-part B will divert this raw material from existing uses (food and animal feed) to biofuels.

11. Will the 1.7% limit on Annex IX-part B biofuels preserve current applications of molasses in food and feed?

No. Given the deficit in molasses supply in Europe, the 1.7% limit is ineffective and will not preserve food and feed applications of molasses.

12. Has there been a comprehensive impact assessment on the inclusion of molasses in Annex IX?

No. The word molasses never appears in the Commission impact assessment on the Renewable Energy Directive

⁵ Average global production of molasses will be 66,991,216 tonnes, while consumption will be 66,607,148 tonnes (average over the years 2017-2026). Source: OECD/FAO (2017), *OECD-FAO Agricultural Outlook 2017-2026*, OECD Publishing, Paris.

http://dx.doi.org/10.1787/agr_outlook-2017-en



About us

Confederation of European Yeast Producers (Cofalec)

COFALEC is the confederation of yeast producers that represents the EU yeast industry in Europe. With 33 factories scattered through the European Union, one million ton of yeast produced each year and more than 30% of the production exported outside Europe, the yeast industry is an important player of the European food industry. Yeast is a natural living micro-organism used in traditional fermented products (bread, wine, beer) and more recently in human and animal health (probiotics).

For more information, please visit Cofalec's [website](#)

The European Fermentation Group (EFG)

The **European Fermentation Group** is the voice of the European fermentation industry *vis-à-vis* EU institutions, national governments, and civil society. The main objective of the EFG is to ensure that EU policies promote the competitiveness of the fermentation industry contributing to the development of a sustainable European bioeconomy. Our companies mainly produce citric acid, lactic acid, vitamins, amino acids for animal feed and penicillin for antibiotics.

For more information, please visit the European Fermentation Group's [website](#)

The Brewers of Europe

Based in Brussels, The Brewers of Europe brings together national brewers' associations from 29 European Member countries and provides a voice to represent the united interests of Europe's 7500 breweries. The Brewers of Europe promotes the positive role played by beer and the brewing sector in Europe and advocates the creation of the right conditions to allow brewers to continue to freely, cost-effectively and responsibly brew and market beer across Europe.

For more information, please visit The Brewers of Europe's [website](#)

International Association of Plant Bakers (AIBI)



The International Association of Plant Bakeries was founded in Paris in 1956. At present, 16 national member organizations are affiliated to AIBI. The association's headquarters have been set up in Brussels Grand Place since the beginning of 2011. The markets for bread and pastry products have become more integrated over the years and the AIBI must take this development into account. AIBI holds contacts to key Members of the European Parliament and the European Commission services. The association's presence in Brussels also facilitates the collaboration with other chain partner associations located here.

For more information, please visit AIBI's [website](#)

European Confederation of National Bakery and Confectionery Organizations (CEBP)

CEBP is the craft association of the national Bakery and Confectionery Associations in the EU member states. CEBP represents more than 190,000 small and medium-sized enterprises with more than 2 million employees in Europe.

One of our main tasks is to inform and convince the European Administration and the European Parliament about the local and regional importance of small and medium-sized enterprises through our interlocutors. The object is to reduce the endless number of regulations coming from the EU pushing small and medium-sized enterprises out of the food market. Furthermore, CEBP focuses on special tasks such as the hygiene law, the complete food law etc.

For more information, please visit CEBP's [website](#)

European Feed Manufacturer's Federation (FEFAC)

The European Feed Manufacturers' Federation (FEFAC) was founded in 1959 by five national compound feed associations from France, Belgium, Germany, Italy and the Netherlands.

FEFAC membership today consists of 24 national associations in 23 EU Member States as full members as well as Associations in Switzerland, Turkey, Norway, Serbia and Russia with observer/associate member status. The European compound feed industry employs over 100,000 persons on app. 3,500 production sites often in rural areas, which offer few employment opportunities. Farm animals in the EU-28 consume an estimated 480 million tonnes of feed a year, of which about 30% are produced by the compound feed manufacturers. Turnover of the European compound feed industry is estimated at 50 billion €.

FEFAC is the only independent spokesman of the European Compound Feed Industry at the level of the European Institutions. FEFAC holds observer status in CODEX Alimentarius.

For more information, please visit FEFAC's [website](#)

European Former Foodstuff Processors Association (EFFPA)



The European Former Foodstuff Processors Association was established in January 2014 and represents 4 national associations (UK, NL, DE, FR), 3 full member companies (BE, IT, ES), 2 associate member company (CA, US) and 1 observer company (GR). EFFPA estimates approximately 3.5 million tonnes of former foodstuffs annually are processed into animal feed in the EU with a sector turnover of over € 1 billion for 2016. EFFPA strives to strengthen the position of the Former Foodstuff Processing industry as a responsible partner in the food and feed chain, advocating the contribution the sector makes to the circular economy.

For more information, please visit EFFPA's [website](#)

Association of Chocolate, Biscuits and Confectionery Industries of Europe (CAOBISCO)

CAOBISCO is the Association of Chocolate, Biscuit and Confectionery Industries of Europe.

Our mission is:

- to support our member companies' freedom to market their products in a flexible and responsible manner and;
- to support the development of an innovative, sustainable, competitive and creative chocolate, biscuit and confectionery industry in Europe that represents the values of our member companies.

With 15 member National Associations as well as direct member companies and affiliated members, CAOBISCO is the voice of more than 12.700 European chocolate, biscuit and confectionery manufacturers all over Europe.

For more information on CAOBISCO, please visit CAOBISCO's [website](#)