

The European market potential for essential oils for food and drinks

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European demand for essential oils is strong, as the flavours and fragrances market continues to grow. New regulations urge European importers to improve the sustainability of their business, including their sourcing. For you as an exporter, understanding the sustainability concerns is becoming as important as understanding the unique qualities of your product. When you can supply an essential oil or a range of essential oils that is pure, documented as safe, and sustainably produced, you will find many interested buyers in Europe.

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1. Product description

Essential oils are obtained from vegetable raw materials (mostly plant parts) by distillation with water or steam. They can also be produced from citrus peels by pressing the peels.

Figure 1: Mint distillation in India



IFEAT 2023 Berlin Conference

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Source: N S Mint Products

Essential oils can be produced from various plant sources and from different plant parts, including flowers, seeds, roots, leaves, herbs, peels, bark, nuts and woods.

In many cases, essential oils producers use waste materials or grades of products which related industries do not value as much. Citrus peels, for example, are waste material from the juice industry and many herb oils are made from excess materials that cannot be sold on the fresh market.

Essential oils are complex mixtures which don't easily dissolve in water. They can contain over 100 substances. Unlike oleoresins, they are also volatile products, which means they lose flavour in the open air.

There is a wide variety in types of essential oils that are used in food. Over 100 essential oils are being offered on the European market, such as:

- geranium oil (flowers)
- cumin oil (seeds)
- angelica oil (roots)
- cardamom oil (seeds)
- parsley oil (seeds or herbs)
- peppermint oil (leaves)
- orange oil (peels)
- cinnamon oil (bark and leaves)
- nutmeg oil (nuts)
- sandalwood oil (woods)

The main essential oils in terms of global production volume are listed in the table below.

Table 1: Most popular essential oils

| # | Essential oil | Volume in metric tonnes (MT) |
|----|---------------------------------|------------------------------|
| 1. | Citrus oil (peels) | 1,000,000 MT |
| 2. | Mint oil (leaves) | 50,000 MT |
| 3. | Clove oil (buds, leaves, stems) | 30,000 MT |
| 4. | Eucalyptus oil (leaves) | 20,000 MT |

Source: IFEAT World, 2023

Essential oils can also be used in cosmetics, traditional medicine and aromatherapy. Our focus in this factsheet is on essential oils as flavourings for foods and drinks. If you are interested in other markets, you can read our studies about [essential oils for fragrances](#) and [essential oils for aromatherapy](#).

Within Europe, essential oils are classified according to the Harmonised System (HS). This is a coding system used in international trade. This study is based on the HS codes presented in Table 2.

Table 2: HS codes for essential oils

| HS Code | Description |
|---------|-----------------------------|
| 3301.12 | Sweet and bitter orange oil |
| 3301.13 | Lemon oil |

| | |
|---------|-------------------------|
| 3301.19 | Other citrus fruit oils |
| 3301.24 | Peppermint oil |
| 3301.25 | Other mint oils |
| 3301.29 | Other essential oils |

Source: ITC Trademap, 2023

Tips:

Identify the botanical source of the raw material for your essential oil. You must have a thorough understanding of the factors determining your product's specifications. This understanding is crucial for controlling these factors to meet required specifications of buyers.

For more information on classifying essential oils by HS, CAS and other classification systems, read our [workbook for preparing a technical dossier for natural food additives](#).

2. What makes Europe an interesting market for essential oils?

Europe plays a central role in the global essential oils market. Leading flavours and fragrances manufacturers and large importers in Europe source many of their essential oils from developing countries. These manufacturers then re-export the flavours and fragrances to countries worldwide. They have large Research & Development centres and close ties to food and drink manufacturers. This makes it possible for European flavours and fragrances manufacturers to take the lead in food and drinks innovation and maintain their leading roles.

Europe plays a leading role in global flavours and fragrances manufacturing

Many of the global flavours and fragrances manufacturers are based in Europe. This indicates that Europe plays a leading role in the global flavours and fragrances market as well as in the essential oils market, as the manufacturers use essential oils as ingredients. Some European flavours and fragrances manufacturers are:

- [DSM-Firmenich](#) (Switzerland)
- [Givaudan](#) (Switzerland)
- [Symrise](#) (Germany)
- [MANE](#) (France)
- [Robertet](#) (France)

The value of the European essential oils market was €5.2 billion in 2020 and was estimated to grow at 9.1% annually to [reach €10.4 billion by 2028](#) (Research Dive, 2021). While the Asian market grows at an even faster rate of more than 10% annually, European manufacturers continue to play a leading role, as they supply their flavourings to markets globally. Most relevant for exporters of essential oils is that these European companies have many of their manufacturing sites in Europe. This means that much of the global trade in essential oils goes through Europe, where the manufacturers use essential oils from all over the world to create flavourings for distribution to their clients in Europe and all other parts of the world.

Europe is the biggest importer of essential oils globally

Trade data confirm the leading role of Europe in the global essential oils market. In 2022, European imports of essential oils amounted to 68,094 tonnes and were valued at over €1,844 million. This import value suggests that Europe accounted for 43% of global essential oil imports in 2022, which were valued at €4,301 million.

Over the past five years, European imports of essential oils showed an overall positive trend in both value and volume. Between 2018 and 2022, the value of European essential oil imports grew at an average annual rate of 2.5% and the volume grew at an average annual rate of 3.4%.

Figures 2 and 3 show that in 2022 the value of imports grew much more than the volume. This means that prices in 2022 increased significantly. This was partly the result of high inflation and partly of strong demand by European buyers, who increased their stocks in response to uncertainties in the market that could affect supplies. These uncertainties included political tensions in various countries, disrupted energy markets and effects of the COVID-19 pandemic. Industry sources indicate that the large stocks and stagnating demand in 2023 caused a slump in the essential oils trade in 2023.

Source: ITC Trade Map, 2023

As shown in Figure 3, most European imports of essential oils come from developing countries. Imports from developing countries have increased significantly in recent years, from a value of €854 million (51% of total imports) in 2018 to €992 million (54% of total imports) in 2022. In 2023, based on the data known at the moment of writing, demand is experiencing a slump. Industry sources indicate that this slump in demand and lower prices had a negative effect on the value of essential oils imports from developing countries. However, the long-term outlook for European essential oils imports remains positive.

Source: ITC Trade Map, 2023

European innovation and new product introductions

Europe is a big target market for essential oils because of its food processing industry. Essential oils are used to develop a lot of new products. The essential oils used most often for new product formulation are lemon and orange oil, followed by peppermint, lime, garlic, mint, anise, bergamot, eucalyptus, onion and paprika oil. The number of product launches is by far the highest in the UK, followed at a distance by Germany, France, the Netherlands, Denmark and Italy.

Source: [Mintel GNPD](#)

Bakery (cookies, cakes, pastries) and chocolate confectionary (tablets, seasonal chocolate, chocolate pieces) are the leading applications. In the hot beverages category, tea is the main application.

Source: [Mintel GNPD](#)

According to an analysis of product launch data by [Mintel GNPD](#), the industrial use of essential oils is concentrated. The top-30 food and drink companies account for almost 40% of all product launches that are formulated with essential oils.

The biggest food innovators using essential oils are [Nestlé](#), [Yogi Tea](#), [Lindt & Sprüngli](#), [Lakrids by Bülow](#), [Mondelez International](#) and [Ricola](#). In addition, there are big retail chains with private-label products containing essential oils, like [Sainsbury's](#), [Marks & Spencer](#), [Lidl](#), [Tesco](#) and [Aldi](#). Private-label products account for about

33% of essential oil-based product launches.

Globally leading flavours and fragrances manufacturers operate largely from Europe

A relatively small number of globally operating flavours and fragrances manufacturers have a very large influence on the global market for essential oils. These strong buyers are responsible for a large part of the global trade flows and determine many of the standards in the essential oils industry for product quality, sustainability and industry practices. To understand the market as a whole it is crucial to understand the role of these companies.

The global essential oils market [was forecasted to grow by 9.2% annually between 2020 and 2028](#), to \$20.5 billion. Essential oils are the main ingredient for many flavourings of leading companies in the flavours and fragrances market. The size of the global flavourings and fragrances market is estimated to reach \$37.3 billion by 2026, at an annual growth rate of 5.1% through the forecast period. Figure 6 shows developments in turnover of the 12 leading players in this market. While some of these players generate part of their turnover in markets other than flavours and fragrances, the data is still representative and illustrates the strong growth in the flavours and fragrances markets. The combined turnover of these 12 companies amounted to €48.5 billion in 2022. A notable detail is the merger of IFF with DuPont's Nutrition & Biosciences. This contributed to a jump in IFF's turnover growth from €4.4 billion in 2020 to €9.8 billion in 2021.

Source: Annual reports of companies, 2019-2023

The market for essential oils for food is strongly related to the markets for essential oils for health applications and cosmetic applications. To understand major developments for essential oils for food in the 2018-2022 period, it is vital to look at developments in those related markets. Demand for essential oils for food and health applications is driven by increasing consumer demand for health and wellness. The global COVID-19 pandemic had a particularly positive short-term effect on demand for certain essential oils for health applications, including aromatherapy. The perceived health benefits of essential oils made them very attractive to many consumers looking for ways to protect their health.

At the same time, this development indirectly affected the market for essential oils for food. The surge in demand for essential oils for health applications caused an increase in prices for many of those essential oils. As a side effect, prices for essential oils for food also increased. At the same time, demand for certain essential oils without perceived health benefits that are mainly used in perfumes experienced a decline. As consumers stayed at home more, they used less perfume. This affected prices of those specific essential oils that are sometimes also used for foods.

The net result of these developments for the leading players from Figure 1 was a flat growth in 2020. With markets and consumers adapting to COVID-19 in 2021, year-on-year sales began to grow again in 2021.

In 2022 and 2023, high inflation rates in Europe pushed prices of flavourings upwards. As flavours and fragrances manufacturers adjusted their prices in line with inflation rates, their turnover increased. Taking out the effect of inflation, growth in the market for flavours and fragrances would be minimal. This was also observed by many essential oil suppliers: they experienced that high inflation rates have actually had a negative effect on demand. Consumers have been cutting back on their expenditures, and this has affected almost every kind of product.

Tips:

Visit trade fairs like [Food Ingredient Exhibition](#) and [Anuga](#) to observe potential applications for your essential oil.

Potential applications of essential oils include applications in markets other than food. For more information about the cosmetics market, see the CBI report [Exporting essential oils to Europe](#).

3. Which European countries offer the most opportunities for essential oils?

The top-6 European importing countries of essential oils (in volume and value) are France, Germany, the UK, the Netherlands, Switzerland and Spain. While France, Germany, the UK and Spain have large populations and large food industries, the Netherlands and Switzerland are important trading hubs.

Source: ITC Trade Map, 2023

Source: ITC Trade Map, 2023

France: world-leading fragrances and flavours industry with the most focus on fragrances

With 65 million inhabitants, France has the second-largest population of the EU, which largely explains its major role in the European essential oils market. Another important factor in France's essential oils trade is the large fragrances and flavours industry. Particularly in the region around Grasse in the south of France, there is a strong cluster of companies that produce essential oils, refine them, and research and develop fragrance and flavouring solutions for different industries, including the food industry. Several companies in this cluster are active globally and manage the global distribution of essential oils, fragrances and flavours. The nearby port of Marseille, one of Europe's largest, contributes to France's role as a hub for global essential oils trade.

In 2022, France imported 8,686 tonnes of essential oils, worth €401 million. Since 2018 growth was insignificant in terms of import value. French demand for essential oils was clearly affected by the COVID-19 pandemic, falling from an import value of €398 million in 2018 to €321 million in 2020. Demand increased again in 2021 and 2022, but the recovery came at a slow pace.

Most French imports of essential oils come from developing countries, including India (12%), China (8%) and Indonesia (7%). In 2022, imports from developing countries were valued at €258 million, representing 64% of total French imports of these ingredients. With an average annual growth rate of 0.5%, the growth of French imports from developing countries was almost zero between 2018 and 2022. Imports from developing countries were also severely affected in 2019 and 2020 due to pandemic restrictions.

France is a very interesting market for exporters from developing countries. It buys a wide range of niche essential oils. At the same time, the origin is important to French importers; they associate this with quality and authenticity.

Many of the French companies involved in the import, distribution and processing of essential oils for food are members of SNIAA, the [professional association representing French food aromatics companies](#). SNIAA is also a French member of EFFA, the [European Flavour Association](#).

Examples of French players in the essential oils market:

- **MANE**: One of the world's largest flavours and fragrances manufacturers, with a turnover of €1,699 million in 2022.

- **Robertet**: One of the world's largest flavours and fragrances manufacturers, with a turnover of €700 million in 2022.

Germany: large market with a leading role in making the sector more sustainable

Germany has a large population of 83 million. This makes it the largest consumption market in Europe. Apart from that, Germany is a major re-exporter of food ingredients and processed foods.

In 2022, Germany imported 20,968 tonnes of essential oils, worth €364 million. Since 2018, German imports of essential oils grew both in volume and value. Despite facing multiple restrictions due to the COVID-19 pandemic, import volumes never stopped growing between 2018 and 2022. On the other hand, the associated import values were affected in 2019 and 2020, falling from €333 million in 2018 to €302 million in 2019 and €292 million in 2020. Demand has remained relatively stable, and is expected to grow at an accelerated pace based on the huge growth (20%) observed in 2021-2022.

Most German imports of essential oils (66%) come from developing countries, including Brazil (32%), India (11%) and China (8%). In 2022, Germany sourced essential oils directly from developing countries for a total value of €240 million. Imports from developing countries were severely affected due to restrictions because of the COVID-19 pandemic. Between 2018 and 2021, the total value of imports decreased by an average of 5.0% each year. During those years, Germany compensated for the fall in extra-European imports with intra-European trade that grew in value by 0.8% each year on average. In 2022, with delivery times and shipping costs at pre-pandemic levels, imports from developing countries increased by no less than 36%, while imports from other European countries decreased by 5.2%.

German flavouring manufacturers have organised themselves in the [German Association of the Flavour Industry](#) (DVAI). According to data of DVAI, the flavouring industry in Germany consisted of 60 companies with a turnover over €450 million in 2017. DVAI organises the Berlin Flavour Day. The guiding theme of the 2023 conference 'Food diversity with flavours: sustainable – safe – healthy' shows the topics of current interest in the German flavouring industry. The event focused on circular economy, sustainability and plant-based foods.

The German Supply Chain Act has been in place since early 2023. This is ahead of the EU Corporate Due Diligence Directive and shows the leading role of Germany in this area. Large German companies such as Symrise need to report on risks and remedial measures at the beginning of 2024. This requires them to increase transparency along the supply chain and make more efforts to protect people and the environment. As a result, many of them are developing company policies, guidelines on responsible sourcing and Codes of Conduct for their suppliers.

Some German players in the essential oils market:

- **Symrise**: One of the biggest flavours and fragrances manufacturers in the world. Their essential oils business is part of their Food & Beverage division.
- **BASF**: The Aroma Ingredients division of this chemicals company is one of the biggest flavours and fragrances manufacturers in the world.
- **Aromaplant**: Specialised in cultivation, processing and trade of herbal ingredients and production of aromas.
- **Oqema**: Distributor of chemicals, including a wide range of essential oils for different industries. In 2021, Oqema acquired the specialised essential oils importer Claus Nitsche & Sohn.

United Kingdom: large and innovative market

In 2022, the UK imported 11,042 tonnes of essential oils, worth €217 million. Between 2018 and 2022, the volume of imports varied widely, but grew at an average annual rate of 4.3%. In contrast, there was no growth in the value of imports, which fell on average by -3.1% each year since 2018. This implies that, while demand for essential oils remained strong in the UK, there was a significant drop in the prices of imported ingredients.

The UK sources 61% of its essential oil imports directly from developing country producers, including China (13%), India (11%) and Brazil (9%). Between 2018 and 2022, the total value of imports from developing countries showed an annual growth of 7.4%. While 2019 and 2020 saw a drop in the value of imports, in 2021-2022 there was a tremendous growth of 36%. The latter suggests that future British demand for essential oils from developing countries may be very positive.

Figure 9: Example of orange oil



Source: Photo by [Foodie Flavours](#) on [Unsplash](#)

The UK is one of the most innovative markets according to data from Mintel's Global New Products Database. Figure 4 shows that the UK registered by far the most new essential oil-based product launches. High-end retail chains Sainsbury's and Marks & Spencer play a considerable role in this innovation with their private-label products.

Some players in the UK essential oils market:

- [De Monchy Aromatics](#): Leading supplier of ingredients for flavours and fragrances.
- [FD Copeland](#): Processor of essential oils specialising in peppermint, spearmint, citrus, aniseed, eucalyptus, and spices and herbs.
- [Lionel Hitchen](#): Manufacturer of flavours and flavouring ingredients for the food and beverage industry.
- [RC Treatt](#): Supplier of flavouring and fragrance ingredients with a particularly important role in the orange oil trade.

The Netherlands: major re-exporter of essential oils

The Netherlands is a major trade hub for food ingredients in Europe because of the port of Rotterdam. While the size of the country's population and respective domestic consumption are relatively small, importing wholesalers in the Netherlands play a large role in the processing and particularly the re-exporting of essential oils to other European countries.

In 2022, the Netherlands imported 4,673 tonnes of essential oils, worth almost €142 million. Unlike other

importing countries, demand for essential oils in the Netherlands was not affected by the COVID-19 pandemic, as throughout 2018-2022 the volume of imports grew steadily at an average annual rate of 10%. The value of imports grew by an average of 4.2% each year between 2018 and 2022. However, a drop of 5.4% was observed in 2021-2022, which contrasts with the other countries analysed.

The Netherlands sources only 26% of its essential oil imports directly from developing countries. Since 2018, the value of imports of essential oils from developing countries showed a significant growth of 11% per year on average. In 2019 and 2020 there was a drop in value, but the recovery in 2022 was rapid, growing by 43% compared to the value in 2021.

Illustrative of the role of the Netherlands in re-exports to other European markets is the company [Ultra International](#). This India-based essential oils producer has chosen the Netherlands for their European distribution centre. Some of the leading flavours and fragrances manufacturers, including IFF, Givaudan and DSM-Firmenich, also have processing or distribution locations in the Netherlands. According to data of the Dutch association of flavours and fragrances manufacturers (NEA), around [85% of Dutch production of flavours and fragrances are exported](#). This confirms the export orientation of the Dutch essential oils industry.

Some players in the Dutch essential oils market:

- [Ultra International](#) B.V.: Distributor of essential oils. Part of the Ultra Group with headquarters in India, which produces essential oils. Indonesian sister company Van Aroma covers all their Indonesian essential oil requirements.
- [De Lange](#): Supplier of essential oils and other ingredients for several industries, including food manufacturers.
- [IMCD](#): Globally operating distributor of a wide range of natural ingredients and chemicals.

Spain

Spain has a large food industry and a flavours and fragrances industry with a [turnover of €1,691 million](#). Similarly to France, the focus of the industry is on fragrances, with a 66% share of the total turnover.

As the sixth-largest importer of essential oils, Spain imported 4,302 tonnes of essential oils (€121 million) in 2022. Between 2018 and 2022, Spanish imports of essential oils decreased by an average rate of 4.6% each year. Imports fell particularly fast in 2019, from 5,185 tonnes in 2018 to 3,848 tonnes in 2019. The volume of imports has not yet reached 2018 levels. However, over the last five years the value of imports showed an average annual growth of 1.9%. Between 2021 and 2022, the value of imports even grew at a high rate of 8.4%.

Spain offers several opportunities for exporters, as it sources 65% of essential oils from producing developing countries. Since 2018, Spain's import value from developing countries showed an average annual growth of 2.5%, outpacing the growth recorded by the total value of imports. Following a 14% growth between 2021 and 2022, imports from developing countries are expected to continue to increase in the coming years.

Some players in the Spanish essential oils market:

- [Lluch Essence](#): Distributor of ingredients for flavours and fragrances manufacturers and contract manufacturers.
- [Lucta](#): One of Spain's leading flavours and fragrances manufacturers.
- [Ventos](#): Distributor and manufacturer of flavouring and fragrance ingredients.

Switzerland: home to some of the world's leading flavours and fragrances manufacturers

Switzerland is a small country in Europe, with a population of only 5.8 million. Based on its population size, Switzerland would not be expected to actually have a very influential food industry. But in addition to [Nestlé](#), one of the world's largest food companies, and many leading chocolate manufacturers, Switzerland also hosts

some of the world's largest flavours and fragrances manufacturers, including Givaudan and DSM-Firmenich. These leading companies are responsible for much of the essential oils imports to Switzerland.

In 2022, Switzerland imported 3,084 tonnes of essential oils, worth €139 million. Swiss imports were severely affected by the COVID-19 pandemic, falling from 3,422 tonnes in 2018 to 3,084 tonnes in 2022. On average, the volume of imports fell by 2.6% each year and has not yet reached pre-pandemic levels. Nevertheless, Switzerland is still among the four largest importers of essential oils in Europe and therefore offers good opportunities, even if its recovery is slow. In terms of import value, a moderate average growth of 1.6% per year was recorded. Although there were significant drops in value in 2019 and 2020, a significant growth of 19% was observed in 2022 compared to the value in 2021.

Switzerland sources 36% of its essential oil imports directly from developing countries. Since 2018, total imports from developing countries decreased on average at a rate of 0.6% per year. However, growth of 7.7% was observed in 2021-2022, which means promising forecasts for future demand.

Some Swiss essential oil buyers:

- **Givaudan:** One of the biggest flavours and fragrances manufacturers in the world, with headquarters and two production locations in Switzerland. The turnover of Givaudan amounted to €7.1 billion in 2022.
- **DSM-Firmenich:** One of the biggest flavours and fragrances manufacturers in the world. The turnover of Firmenich amounted to €4.9 billion in 2022. In 2023, Firmenich and DSM (Netherlands) merged.
- **Lindt & Spruengli:** Global leader in the premium chocolate sector, accounting for many new product launches with essential oils as ingredients, according to Mintel's Global New Products Database.

4. Which trends offer opportunities or pose threats on the European essential oils market?

The main trend in the food market is health and wellness. This has led to various other trends, such as the development of low-fat, low-sugar, low-salt products and plant-based foods, and the formulation of foods with natural ingredients as opposed to synthetic ingredients. In addition, a growing interest in sustainability prompts the market to look for different ways to reduce its negative impact on people and the environment.

Essential oils provide a solution for low-fat, low-sugar, low-salt products

Many Europeans consume more fat, sugar and salt than is healthy for them. As part of the health and wellness trend, consumers are looking for products that are low in fat, sugar and salt. In 2023, flavouring manufacturer Symrise reported a focus on reducing sugar in beverages, dairy products and savoury applications (Perfumer & Flavorist, 2023).

As consumers expect the taste of foods and beverages to remain the same, they are pushing the flavouring industry to identify taste solutions that can mask, modify and provide an overall ability to cover off-notes. For example, several essential oils such as cardamom oil can mask salt reduction. In addition, consumers are looking for taste solutions that provide a cooling, warming, mouth-watering or tingling sensation. This provides opportunities for cooling essential oils such as mint and pungent essential oils such as pepper and ginger.

Tip:

Raise awareness about the potential of essential oils in product formulations aimed at fat, sugar and salt reduction. Provide info on processing characteristics and application of essential oils to support food and drink manufacturers with substitution solutions.

Essential oils can support growth in plant-based foods

Flavouring manufacturers can use essential oils to improve the taste of plant proteins as meat substitutes or for use in dairy products. This application has become a significant opportunity in the past five years, as the [European market for plant-based foods](#) grew by 21% between 2020 and 2022 to reach a record €5.8 billion. In 2023, however, the plant-based food market was stagnating again. High inflation rates in Europe were causing consumers to turn to low-cost food and beverage options. Meat and dairy are often less expensive than their plant-based substitutes.

Another factor behind the stagnation in this market is consumer concerns about the flavour of plant-based meat and dairy alternatives. Manufacturers are struggling to formulate plant-based meat and dairy products that meet the expectations of consumers. Essential oils can be part of the solution for these manufacturers.

Tips:

Promote your products as plant-based instead of vegan: this avoids focusing on the vegan niche market rather than the overall healthy food market.

Read more about [opportunities for natural food additives in plant-based foods](#).

Essential oils are functional ingredients in food and drink products. A partnership with an importer with strong application capabilities and a wide network is highly recommended to provide formulation solutions to plant-based food manufacturers.

Food and beverage manufacturers still look for natural solutions

Consumers prefer reading simple ingredients on product labels that are easy to understand and list few synthetic constituents. Food and beverage manufacturers strive to provide clean labels. Clean labels do not contain the names of ingredients that sound unhealthy to the majority of consumers, such as chemical formulas of synthetic ingredients. This consumer preference motivates manufacturers to use essential oils instead of synthetic ingredients. Essential oils are some of the most important natural ingredients for manufacturers. The wide variety of essential oils gives them numerous possibilities to formulate new or improved natural flavourings.

The challenge for flavouring manufacturers is to produce consistent natural flavours. Compared to synthetic ingredients, essential oils vary more often in their composition. This aspect may affect their processing characteristics and function in the end product. As a result, flavouring manufacturers have very strict specifications for essential oils. You must comply with these strict specifications in order to gain access to the European flavourings market.

Consumer perceptions of healthy natural ingredients particularly benefit suppliers of organic-certified essential oils. Organic certification strengthens your claim of providing a natural and healthy product.

Tips:

Show food manufacturers how to apply your essential oil. Provide information on its performance under different conditions (e.g. temperatures, acidity).

Supply highly consistent quality. Refer to the section on product specifications for tips on how to do so. If you buy raw materials from other suppliers, offer an extension of services to your regular suppliers in order to improve quality consistency and secure their commitment to your company.

Apply for organic certification to strengthen the image of your product as being natural and healthy.

Sustainable sourcing and transparency are vital

Sustainable sourcing is a key trend in Europe. Consumers want to know where their food and ingredients come from, who has produced the ingredient, under which conditions, and how this impacts the planet. Consumers are becoming more aware of the impact of what they buy has on people and the environment. They have growing concerns about global issues such as climate change and expect suppliers to take more corporate social responsibility (CSR).

Non-governmental organisations (NGOs) have often taken a lead in encouraging companies to improve their CSR and source sustainably. Together with leading brands and manufacturers they originally focused on commodities, which allowed them to maximise impact. Nowadays, manufacturers are also applying their sustainable sourcing strategies to ingredients they only use in small amounts, such as essential oils.

In addition to NGOs, investors are increasingly demanding action from large European companies to improve their ESG (environment, social, governance) performance. These companies must publish reports, such as this [CSR report by MANE](#), to show that they are making measurable improvements. A growing number of investors focus their investments on companies with high ESG scores; this has an effect on these companies' access to financing and provides an extra motivation to improve sustainability.

The strategies of leading flavouring manufacturers in Europe provide useful insights into possibilities to improve sustainability in essential oil markets. Many of them are implementing strategies that align with the [Sustainability Charter of the International Organisation of the Flavor Industry \(IOFI\)](#), which currently has 137 signatory companies. IOFI has established five focus areas for sustainability and reports on progress in these areas via companies responding to their survey. The next sections provide information on the shares of companies taking action in these five focus areas and on what actions they are taking.

Responsible sourcing

Manufacturing companies are working with supply chain partners to identify and manage risks related to labour standards and environmental impact. Over 50% of IOFI respondents have a responsible sourcing strategy in place.

Environmental footprint and climate change

The first step for many flavouring manufacturers is to start measuring their greenhouse gas (GHG) emissions and water and energy use. More than 50% of IOFI respondents are measuring these. This requires them to do a life cycle analysis to determine for each stage of the production process which GHGs such as CO₂ are emitted and how much. For example, cloves produced in Indonesia currently have a [climate footprint of 51 kg CO₂e/kg at farm level](#) and cinnamon produced in Indonesia has a [climate footprint of 13 kg CO₂e/kg at farm level](#). This life cycle analysis includes all steps of the life cycle, starting from the production of agricultural inputs, including agriculture, the production of non-agricultural ingredients, transport, processing, packaging, storage and distribution, up to the product's final stage in the supply chain when it is delivered. In 2021, the European Commission proposed the [Product Environmental Footprint \(PEF\) and Organisation Environmental Footprint \(OEF\)](#) methods as a common way to measure environmental performance, based on existing life cycle analysis methods. And in 2023, IOFI started the [development of GHG emission factors for a selection of ingredients](#) commonly used in the flavouring industry.

Green chemistry, as opposed to regular chemistry, includes improved energy use, water efficiency and improving waste management practices. See these [12 principles for green chemistry](#) for details. For example,

MANE developed an extraction technology to replace the chemical solvent hexane with a biodegradable solvent. For essential oil production, a major contributor to total energy use and CO2 emissions is the boiler for the production of steam for distillation. The use of green technology for distillation can have a large positive impact on energy use and CO2 emissions. Examples of green technology include the use of waste materials as fuel and improving the efficiency and insulation of boilers.

Recycling is part of the waste management strategy. Companies can reduce waste by collecting packaging materials and by cooperating with partners such as packaging suppliers to recycle. Upcycling is another common element in a waste management strategy. Upcycling is the use of waste or byproducts from essential oil production to create new products. Suppliers of citrus oils can consider their essential oils as upcycled products, as they are pressed from citrus peels, a byproduct of citrus juice production.

Workplace culture

Companies take care of their employees by implementing occupational health and safety (OHS) strategies: 70% of IOFI respondents have OHS strategies in place. Many companies also promote equality, diversity and inclusion. Almost 50% of IOFI respondents have such policies.

Product safety and design

The health and safety impact of essential oils is largely addressed through the REACH regulation ([Registration, Evaluation, Authorisation and Restriction of Chemicals](#)); 60% of IOFI respondents go beyond these legal requirements to educate partners on product safety.

Transparency

Sustainability reporting is becoming the norm for leading companies in the European essential oils market. Currently, over 50% of IOFI respondents report on their sustainability performance. With increasing pressure from the EU (Corporate Sustainability Reporting Directive), investors (ESG reporting) and clients, this share of companies reporting on sustainability will surely increase.

As European companies are making efforts to improve the sustainability of their business, they require their essential oil suppliers to do the same. Exporters have many possibilities to improve their sustainability performance – from adhering to local labour laws to supporting farmers with transitioning to regenerative agriculture, as the following case study illustrates.

[Norex Flavours Private Limited](#) in India provides an example of an essential oils exporter that is working to improve sustainability. Norex Flavours works together with smallholder farmers, who have been struggling with several issues:

- Low prices of mint oil
- Reducing yields
- Increasing cost of cultivation
- Climate issues

As a result, farmers have been losing interest in agriculture and particularly mint farming, which until very recently provided economic security to smallholder farmers. Norex Flavours is supporting farmers to implement regenerative agriculture practices. They aim to reduce the cost of cultivation by increasing productivity through delivery of the following services:

- Helping farmers become independent in knowledge, skills and resources/inputs required for farming.
- Restoring means of production and creating access to production sources.
- Helping develop the ecosystems on the farms to maximise yield and production.

Tips:

Conduct a waste audit to determine your waste production and then establish a waste management plan to reduce waste through circular product design, reuse, recycling and upcycling.

As life cycle assessment ([LCA](#)) is a complex exercise, essential oil exporters are currently not expected to calculate the climate footprint or product environmental footprint. See if IOFI will provide GHG emission factors for your product or if other leading organisations can provide this information.

Look for potential partners to improve sustainability. Use available programmes and subsidies from governmental or non-governmental organisations for investments in sustainability. For more information, check out websites like the [Netherlands Enterprise Agency](#) and the [German Ministry for Economic Cooperation and Development](#).

Find out more about sustainable practices in the natural ingredients sector in our [Tips to go green](#) and [Tips to become a socially responsible supplier](#).

[ProFound](#) carried out this study on behalf of CBI.

Please review our [market information disclaimer](#).