Exporting sunflower seeds to Europe

Europe is one of the most important producers of sunflower seeds. However, its market demand exceeds production, which provides interesting opportunities to suppliers elsewhere. Even though the majority of sunflower seed production is destined for the production of sunflower oil, the market for confectionery/bakery-grade seeds is growing. Sunflower seeds are used in bakery products, but also in a number of products such as healthy snacks and for direct consumption (in-shell or as kernels).

Contents of this page
1. Product definition
2. Trade statistics
3. Market trends
4. What legal requirements must my product comply with?
5. What additional requirements do buyers typically have?
6. What are the requirements for niche markets?
7. Interesting Sources

1. Product definition

Sunflower seeds originate from the sunflower plant (*Helianthus annuus*), named after its sun-shaped flower head, and are native to North-America. During the Spanish exploration of the Americas, sunflower spread to Europe and in more recent times has become a major commercial crop. Globally, the leading producers are Russia, Ukraine, Argentina, China and Kazakhstan.

The light-weight sunflower seeds provide a firm texture and mild nutty taste, making both the oil and edible seeds excellent as a food ingredient. The high vitamin E and multiple nutrients and minerals content make sunflower seed a healthy ingredient for human consumption. The seeds can be salted or roasted for direct consumption, but are often processed in baking or confectionery industries.

Codes for sesame seeds:
Harmonised System (HS) sunflower seeds, whether or not broken (excl. for sowing) are included in:

<table>
<thead>
<tr>
<th>HS code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1206 00 91 / 99</td>
<td>Sunflower seeds, whether or not broken, excl. for sowing</td>
</tr>
</tbody>
</table>
Product specification

Quality

- Sunflower seeds are categorised into two main types that differ in size, colour of the hull and application: 1) Confectionery type: large-sized, striped sunflower seed husks are processed or used for direct consumption (roasted, salted – common in Mediterranean countries). The seeds are often shelled and the kernel is sold in the bakery industry, e.g. used as a topping in breads, cakes, etc. In-shell sunflower seeds are used widely in the bird feed industry; 2) Black / crushing type: The thin and smaller black sunflower seeds are mainly used for crushing (sunflower oil). The black sunflower seeds have a relatively high oil content (between 39-49%). The distinct size also makes them directly usable for bird feed.
- Make sure that the raw material (i.e. sunflower seeds) is fresh and that there are no long delays between harvesting and extraction. Sunflower seeds should also be free from sand, stalk, plant debris and other foreign materials.
- Some of the most important quality factors concerning sunflower seeds are: odour, flavour, oil content, moisture content, colour, size, uniformity of seeds, purity and damaged/mouldy seeds.
- Sunflower seeds should also be free from mycotoxins and harmful microbiological activity. Aflatoxin B1 and ochratoxin contamination are known to be a problem for many producers, and buyers closely monitor these aspects by testing before shipment and after arrival.
- Prevent contamination by keeping facilities and equipment clean.
- Install metal detectors to be able to remove metal foreign matter.
- Ensure proper storage and transportation (see ‘Packaging’).

Organic (if relevant)

- Comply with organic standards for the production of sunflower seeds. Refer to the section on ‘Niche requirements’ for further details on organic production and labelling.
Labelling

Ensure traceability of individual batches and use English for labelling purposes, unless your buyer has indicated otherwise. Labels must include the following:

- Product name and grade
- Whether or not the product is destined for human consumption
- Manufacturer’s lot or batch code
- Name and address of exporter
- Product’s country of origin
- Shelf life: Best-before date / use-by date
- Net weight / volume in metric units
- Recommended storage conditions

Source: Werthein

Packaging

- Sunflower seeds can be transported as bulk cargo or break-bulk cargo, in jute, poly-woven bags or multiwall paper bags.
- Ensure preservation of quality by: 1) Thoroughly cleaning the holds or containers before loading the seeds; 2) Protecting the cargo from moisture during loading so as to avoid mould, spoilage and self-heating; 3) Ensuring appropriate temperature, humidity / moisture and ventilation conditions during transportation; 4) Avoiding exposure to sun and heat, as the high oil percentage and high fibre content can cause sunflower seeds to undergo self-heating during transport; 5) Protecting the cargo from pests such as beetles, moths, etc.

Source: Rapunzel

2. Trade statistics
Imports

In 2017, imports of sunflower seeds in Europe totalled 3.4 million tonnes (€1.4 billion). Since 2013, the imported volume has increased at an annual average of +0.7%, but its value declined by -1.8%.

The largest importer of sunflower seeds in Europe is the Netherlands, taking up a 17% share in volume in 2017. In the last five years, Dutch imports have decreased at an annual rate of -2.5% in volume and -4.6% in value.

Another large import market is Spain (13% share in volume), registering an annual increase of +10.0% (in volume) since 2013.

Other large importing countries of sunflower seeds in Europe are Germany (11% share in volume in 2017), France (10%) and Romania (8%).

A large share (85%) of the sunflower seeds imported in Europe is derived from intra-European trade, especially from suppliers in Romania (37% share in volume in 2017) and Bulgaria (15%). Romania has recorded a sharp annual growth of +15% (in volume) since 2013, while Bulgaria had an annual decline of -12%. Other large intra-European suppliers are Hungary and Moldova (both 10% of market share).

Tips:

- Follow developments in the European trade for sunflower seeds and identify developments such as the emergence of new suppliers and decline of established ones. An interesting source to get acquainted with the European market and its trade dynamics is the website of the European Commission’s Trade Helpdesk. The FEDIOL website also provides annual industry statistics for sunflower seeds and centralises publications which are relevant to the oilseed sector.

- Alternatively, look for niche opportunities for specific characteristics like high oleic content or organic to gain access to the European market.
The share of European imports sourced from developing countries increased between 2013 and 2017, with an average annual increase of 20%. Between 2015 and 2016 the increase was especially sharp, from 8.5% to 21% of the total imported volume. In 2016, imports from developing countries rose to 682 million tonnes (€311 million). In 2017 imports went down to 453 million tonnes (€230 million).

In spite of the average annual increase in the share of developing countries, African suppliers producing sunflower seeds in smallholder systems find it difficult to compete with extensive agriculture systems employed elsewhere.

The largest developing country suppliers of sunflower seeds to Europe are found in the Black Sea region. In 2017, Moldova was the largest developing country supplier to Europe with 330 thousand tonnes (10% share of total supplies). Sunflower seed and sunflower oil form a quarter of the country’s agricultural commodity exports.

Ukraine accounted for 1.2% of total European imports in 2017, having increased at an annual rate of 13% in volume since 2013. Ukrainian exports registered record crops and exports in 2016.

Tip:
- Identify your potential competitors and learn from them in terms of: 1) Marketing: website, social media, trade fair participation, etc. Examples of well-structured websites are: CLC Beans and Seeds (Argentina) and Northeast Cereals (China); 2) Product characteristics: origin, quality, oil content, etc.; 3) Value addition: certifications, processing techniques.

Exports
In 2017, the total European exports of sunflower seeds amounted to 3.2 million tonnes (€1.3 billion). Since 2013, exports decreased at an annual average of 5.4% in volume and decreased by -7.0% in value.

Romania was the largest exporter of sunflower seeds in Europe (40% share in volume) in 2017. Since 2013, Romania recorded an annual decline in exports at a rate of -2.3% in volume and -4.0% in value.

Bulgaria was the second largest exporter of sunflower seeds in Europe (24% share in volume) in 2017. However, Bulgaria’s exports decreased at an average annual rate of around -11.0% in volume and -9.2% in value since 2013.

Other important exporting countries are Hungary and France (both 10% share of total volume).

The largest export destinations of European sunflower seeds are the Netherlands (15% share in volume), Germany (12%), France (11%), Spain (10%) and Portugal (7.3%).

Tip:
- The website of FoodDrinkEurope provides insights into consumption patterns of food products, including the use of sunflower seeds, across different European countries.

Consumption
- Consumer preferences for sunflower seeds can vary between the different European countries. In Spain, there is a high demand for pipas; mostly salted, roasted and in-shelled sunflower seeds for direct consumption. In the Netherlands and Germany sunflower seeds are used for bakery and confectionery purposes, processing mainly the sunflower kernels as a food ingredient. The majority of the cultivated sunflower seeds (black grade) are destined for crushing (sunflower oil production).
- Total domestic use of sunflower seeds in Europe amounted to 8.1 million tonnes in 2015/16 (of which 7.0 million for crushing), having declined from 8.9 million tonnes in 2014/15. Domestic use of sunflower seeds includes human consumption, industrial demand (including crushing) and...
the (bird) feed industry.

Sunflower-seed crushing

- The largest European crusher of sunflower seeds in 2017 was Hungary: the country crushed 1.7 million tonnes of sunflower seeds (21% of the European Union total).
- Spain and France are also large crushers of sunflower seeds. In 2017, crushing activities amounted to 1.1 million tonnes in Spain and 1.2 million tonnes in France. From the French domestic production of sunflower seeds, around 90% is destined for crushing.
- Countries that engage in smaller-scale crushing of sunflower seeds are Bulgaria (987 thousand tonnes in 2017), Romania (930 thousand tonnes), the Netherlands (486 thousand tonnes) and Italy (413 thousand tonnes).

Production

![Production of sunflower seeds in the European Union 2013/14-2016/17](image)

- In 2016/17, total production of sunflower seeds in Europe amounted to 8.5 million tonnes, which is an increase of 7.4% in relation to 2015/16.
- Romania and Bulgaria are the largest producers of sunflower seeds in the European Union. Production in Romania amounted to 2.0 million tonnes and the production in Bulgaria to 1.9 million tonnes in 2016. Romania accounted for 24% and Bulgaria for 22% of total European Union’s production.
- Other large European producers include Hungary (1.5 million tonnes in 2016), France (1.2 million tonnes) and Spain (755 thousand tonnes).

Tip:

- Find out more about consumption (& crushing) and production of sunflower seeds in Europe through the statistics provided by FAOSTAT and FEDIOL (Federation of the European Vegetable Oil and Protein meal Industry).
3 . Market trends

This section describes market trends relevant for confectionery-grade sunflower seeds only (that is, edible seed industry). Market trends related to sunflower oil and sunflower seed-crushing activities are described in our study on the European market for sunflower oil.

Health and wellness

- The healthy content of sunflower seed makes it a popular ingredient for health food products. Sunflower seeds contain a high amount of proteins, vitamin B1 & E, other minerals (including calcium), as well as dietary fibres and linoleic acids. Its contents make confectionery-grade sunflower seed an interesting ingredient for health food products, a growing market in Europe.
- One important health trend related to sunflower oil is the growth of lighter oils (i.e. high oleic). In France and other West-European countries, the market has been slowly switching to high-oleic sunflower oil, stimulating growers to adapt the raw material (sunflower seeds) accordingly. In addition, European importers report that the demand for high-oleic sunflower oil surpasses its current availability, which can be turned into prospective market opportunities for producers and exporters who succeed in filling this gap. Read more about this trend in CBI Product Fact Sheet 'Sunflower Oil in Europe'.
- Additional to its high nutritional value, sunflower seed also provides a valuable alternative to peanuts or tree-nuts. Unlike peanuts, sunflower seed allergies are rare. The high nutritional value and low allergy risk of sunflower seeds in food products has made the seed a popular alternative ingredient in salads, snacks and convenience foods.

Convenience and functionality

- Functional snacks and convenience foods are among the fastest growing markets in Western Europe. With the increased use of nuts and oilseeds, including sunflower seeds, exporters of sunflower seeds can benefit from this trend as well.
- This is especially true for the low-fat snack segment. Sunflower seeds, following pumpkin seed, are a popular ingredient due to their relatively low fat percentage (around 25%).

Tips:

- Promote the various applications and health properties of sunflower seeds. Make sure to provide your buyer with accurate product specifications and composition details, with a focus on: 1) Product description and code, 2) Grade, 3) Origin, 4) Certificate(s) [if applicable], 5) Production: ingredients, additives, process, 6) Sensorial properties: smell, colour, taste, appearance, 7) Packing: net content, kind of packaging, size, layers, 8) Shelf life, 9) Nutritional values, 10) Analytical properties, 11) Microbiological properties, 12) Allergy list.
- Make sure your product characteristics and quality match your target market and end-user in terms of: 1) Taste and odour, 2) Oil content, 3) Purity level, 4) Uniformity and appearance, 5) Natural / shelled.
- Stay informed on the Nutrition trends in the European Union by visiting websites such as Food Navigator, Nutraingredients and Food Ingredients First.

4 . What legal requirements must my product comply with?

Contaminants in food: The European Union has laid down maximum levels of contaminants in food, including ingredients such as sunflower seeds.
Tip:

- Check out the maximum levels for contaminants in food set by European Union legislation.

Maximum Residue Levels (MRLs) of pesticides in food: European Union legislation has been laid down to regulate the presence of pesticide residues (MRLs) in food products.

Tip:

- If the sunflower seeds have been treated with pesticides, verify that residues remain within limits. For more information, consult the relevant European Union legislation: Maximum Residue Levels (MRLs) of pesticides in food.

Additives, enzymes and flavourings in food: The European Union has set a list of permitted flavourings and requirements for use in foodstuffs intended for human consumption, which includes sunflower seeds. This is particularly relevant to food manufacturers. Insight into this legislation can help you to understand the requirements.

Tip:

- Familiarise yourself with the concerns of the end-users of your products by checking EU legislation on additives, enzymes and flavourings in food.

Hygiene of foodstuffs: Food business operators are required to put in place, implement and maintain a permanent procedure, or procedures, based on the HACCP (Hazard Analysis and Critical Control Points) principles. This also applies to the import of food into the European Union and export from the European Union.

Tip:

- Ensure compliance with European Union legislation on Hygiene of foodstuffs (HACCP).

5. What additional requirements do buyers typically have?

Food safety management: Buyers commonly require their suppliers to have a quality/food safety management system in place. These systems require companies to demonstrate their ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.
6. What are the requirements for niche markets?

Regulation (EC) 834/2007 on organic agriculture: The European Union has established requirements on the production and labelling requirements with which an organic product of agricultural origin must comply in order to be marketed in the European Union as ‘organic’.

Tip:
- In general, the market for organic sunflower seeds is still a niche segment. If you do choose to obtain a certificate for organic production, find out more about the legislation for Organic production and labelling.

Fair Trade: Fairtrade Labelling Organisations International (FLO) is the leading standard-setting and certification organisation for Fairtrade. Products which carry the Fairtrade label indicate that producers are paid a Fairtrade Minimum Price. However, FLO does not have a minimum price for sunflower seeds. Other fair trade standards available in the European market are Fair Trade Ecocert and the Institute for Market Ecology’s Fair for Life.

Tip:
- Before engaging in a Fairtrade certification programme, make sure to check (in consultation with your potential buyer) that this label has sufficient demand in your target market and whether it will be cost-beneficial for your product. Although FLO certification is the leading fair trade certification scheme in Europe, you can also check out other schemes such as IMO’s ‘Fair for Life’ and Ecocert Fair Trade. See our study on Buyer Requirements for the oilseeds market for more information.

Market channels and segments

Figure 5: Trade channels for sunflower seeds in Europe
Figure 5 depicts the different steps in the trade channels for sunflower seeds as a food ingredient. Even though sunflower seeds go through a similar route, the actual processes are different for the specific segments. As such, the European market for sunflower seeds can be segmented into:

- **Crushing industry**: Sunflower seeds are mainly used for oil extraction (80-95% of total production). According to FEDIOL, sunflower seed crushing in the European Union amounted to 7.9 million tonnes in 2017. Hungary (21% of the market), France (15%) and Spain (14%) are the largest crushers, followed by Bulgaria and Romania (both with a share of 12%).
- **Edible seed industry**: Within the edible seed industry, sunflower seeds are used either for direct human consumption or as an ingredient in food products, mostly in bakery. Direct human consumption of sunflower seeds is increasing in Europe, following the general trend towards health foods and convenience snacks. The seeds can also be sprinkled over salads and sautéed vegetables. Within bakery products, sunflower seeds are often mixed with other oilseeds. In Germany and countries in Central Europe, sunflower seed flour is used in making dark bread (Sonnenblumenbrot).

Figure 6: Segmentation of sunflower seeds in Europe
Price
The global demand for sunflower seeds is increasing, but record crop levels in the Black Sea region, South America, United States, Asia and also in the European Union (following a decline in the previous 2015/16 season) will maintain a balanced supply-demand scenario. This is expected to keep prices stable. The Rotterdam/Amsterdam CIF sunflower seed price in August 2016 was USD 404 per tonne, the lowest in 24 months (excluding July 2016).

7. Interesting Sources
- The federation representing the European Vegetable Oil and Proteinmeal Industry in Europe: FEDIOL
- The International Sunflower Association (ISA)
- The Food and Agriculture Organization of the United Nations agricultural databases
- Latest market developments in the oils and seeds sector: IEG VU
- B2B marketplace: Go4WorldBusiness

Please review our market information disclaimer.