# ORGANIC SUGAR IN THE EU







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### I. Introduction

With more and more Europeans focused on their diets and sustainable production methods, the European organic market segment - the second largest single market for organic products in the world after the US - has witnessed tremendous growth in recent years.

In 2018, organic retail sales represented more than 37 billion euros in the European Union: up 8% from a year ago.

Looking specifically at sugar and although it still remains a "niche" (in relative proportion of conventional sugar) at this stage, the development of the European organic market segment is undeniable. Traditionally fuelled by organic cane sugar imports, this market segment is getting increasingly attractive for major European sugar companies which have multiplied initiatives and investments in the development of organic beet sugar.

### II. Organic production systems in the EU

According to the European Commission, organic farming is an agricultural method that aims at limiting environmental impacts while promoting:

"

- the responsible use of energy and natural resources;
- the maintenance of biodiversity;
- preservation of regional ecological balances;
- enhancement of soil fertility;
- maintenance of water quality.

"

In order to guarantee the reliability of the organic production system, European organic stakeholders (including food processing, distribution and retailing sectors) are subject to inspections performed by "control bodies or authorities" which have to be officially recognized by Member States<sup>1</sup>.

In practice, any farmer, manufacturer, distributor or marketer of organic products (i.e. stakeholders) has to be registered and inspected - at least once a year - by a "control body or authority" before it can effectively market products as organic. Upon successful inspection, controlled stakeholders receive a certificate which confirms that products do meet organic standards.

In the case of imported organic products, controls are also performed to guarantee that products have been produced and shipped to the EU in accordance with organic principles<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> To access the list of control bodies and authorities from MS: https://ec.europa.eu/agriculture/ofis public/actor cbeu/ctrl.cfm?targetUrl=home

<sup>&</sup>lt;sup>2</sup> For further details about rules on imported organic goods, please see Section III.2.

#### Box 1 - Becoming a European organic farmer

Any European farmer who wishes to become certified organic must be registered and controlled by a recognized "control body or authority" which confirms that the farmer complies with organic rules.

Only farmers with a valid organic certificate (delivered after a successful inspection) are allowed to use the EU organic logo on their products<sup>3</sup>. This logo signals that "at least 95% of the ingredients used in the processed organic food is from organic origin and 5% considered an acceptable error margin."

In order to market organic products in the EU, you must use organic production methods, which are in line with the European legislation for organic products.

Most importantly and in the case of sugarbeets, you must have followed organic production methods for at least 2 years before you can certify your product as organic. This transitional period is usually referred to as the "conversion" period. It can be a challenging time for farmers as organic production rules - which usually translate into rising production costs - are yet to be fully compensated by the ability to market products at an "organic" premium price.

In the case of sugar, the most significant challenge faced by European organic sugarbeet farmers during or after the conversion period is the removal of weeds using manual labour<sup>4</sup>. This necessary step mobilizes a large number of people over a large number of hours and is therefore considered as a key "economic challenge" to lower existing production costs of organic sugarbeets. According to our information and despite significant variations depending on seeding techniques used, manual labour charges for the removal of weeds generally accounts for about [50 - 70]% of organic sugarbeet production costs.

## III. The EU regulation on organic products

for the removal of weeds in organic sugarbeet fields at this junction.

The official rules governing organic products in the EU are the following:

- Regulation (EC) No 834/2007 on organic production and labelling of organic products,
- Implementing Regulation 889/2008 on rules governing organic production, labelling and control,
- Implementing Regulation (EC) No 1235/2008 laying down detailed rules for imports of organic products from third countries.

<sup>&</sup>lt;sup>3</sup> For additional details about the compulsory use of the EU organic logo, please refer to the following page: <a href="https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance/organic-logo\_en">https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance/organic-logo\_en</a>
<sup>4</sup> Some innovative solutions involving mechanical weed control by robots are currently experimented in Switzerland and Denmark (<a href="http://farmdroid.dk/en/welcome/">http://farmdroid.dk/en/welcome/</a>) but manual labour remains the main practice

However, the European Union adopted a new <u>Regulation (EU) 2018/848</u> in 2018 which is set to be officially<sup>5</sup> enforced on 01 January 2021.

This new regulation will result in relatively limited adjustments for domestic European organic production systems but will trigger a major adjustment for the import of organic products within the EU: the concept of equivalence being removed and replaced by the need for a strict compliance with European EU rules. Such a move is to reflect "the changing nature of this rapidly growing sector (...)" while ensuring fair competition between farmers.

#### III.1 Domestic European organic production

At the moment, producing organically-grown sugarbeets in the EU involves a number of rules including (but not limited<sup>6</sup> to):

- the prohibition of mineral nitrogen fertilizers,
- the prohibition of external inputs like chemical fertilizers, herbicides and pesticides (unless they have been included in a restricted list of authorized products and substances by legislators).

From 01 January 2021 onwards, the fundamentals of the European organic production system will not be seriously affected and a few arrangements such as the one regarding the use of flavorings will be implemented.

#### III.2 The import of organic products within the EU

At the moment, all organic products imported into the EU must have an appropriate electronic certificate of inspection (e-COI) so they can be released from their European port of arrival. These certificates are managed through the Trade Control and Expert System (TRACES).

Most importantly, the current legislation allows non-EU organic products to be imported and considered as equivalent to domestically-produced European organic products as long as the country-of-origin standards and control measures have been assessed as "equivalent" to those in place in the EU<sup>7</sup>.

However, this so-called "equivalence" rule is to be removed and replaced by a "compliance" rule for which imported products will have to follow the exact same rules as the one enforced in Europe.

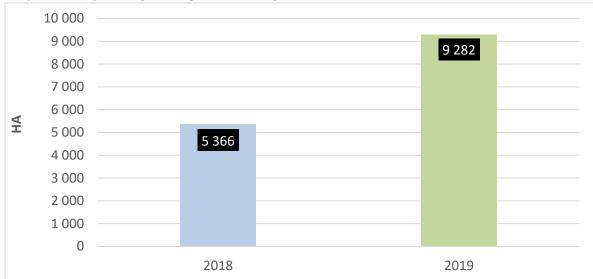
<sup>&</sup>lt;sup>5</sup> The Agricultural Committee in the European Parliament and other stakeholders within the organic sector have called for the new Regulation to be enforced after a 1-year delay i.e. on 01 January 2022. But the Commission is yet to confirm such delay at this stage.

<sup>&</sup>lt;sup>6</sup> Similarly to conventional sugarbeet growing production system, growing organic sugarbeets involves i) the use of multiannual crop rotation ii) the cultivation of nitrogen fixing plants and other green manure crops to restore the fertility of the soil and ii) the prohibition of GMOs,

<sup>&</sup>lt;sup>7</sup> Existing countries (13 in total) having equivalence agreements with the EU will have to renegotiate those organic trade agreements before 2025. For the full list of countries, please refer to the following link: <a href="https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/trade">https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/trade</a> en

### IV. EU organic sugarbeet acreage

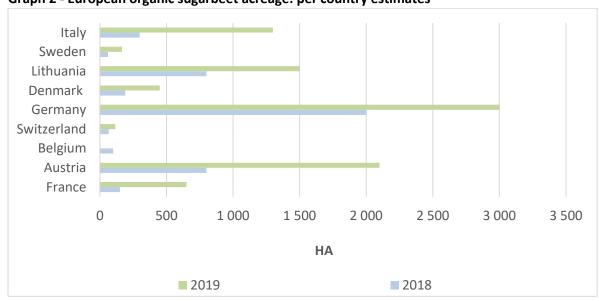
According to our market research investigations, the organic sugarbeet acreage in the EU represented 9,282 ha in 2019: up 73% between 2018 (Graph 1).



Graph 1 - European organic sugarbeet acreage: overall estimates

Source: APIC Consulting

Most significant increases were recorded in Italy, Austria, Germany, Lithuania and France (Graph 2), therefore illustrating the growing interest from European sugar processing companies for this "niche" market which accounts for 0.06% of the total (Conventional + Organic) European sugarbeet acreage.



Graph 2 - European organic sugarbeet acreage: per country estimates

Source: APIC Consulting

Driven by a growing demand from end-consumers for healthy sustainable products, 2020 organic sugarbeet acreage is anticipated to further increase although it remains too early to quantitatively assess the magnitude of this rise.

### V. EU organic sugarbeet yields, production and prices

According to data analyzed and collected throughout the EU, EU organic sugarbeet yields usually range between [40 - 60] t/ha: significantly lower than the average 73.4 t/ha recorded for conventional sugarbeets since 2017/18. From a methodological point of view, it is useful to highlight that estimated organic sugarbeet yields refer to harvested sugarbeet fields only. The inability to harvest some organic sugarbeet fields due to pest infestations or diseases is therefore excluded from the scope of those yield calculations.

Meanwhile, the average sugar content is generally comprised between [16 - 18]% while conventional sugarbeets averaged 17.9 % over the past three seasons.

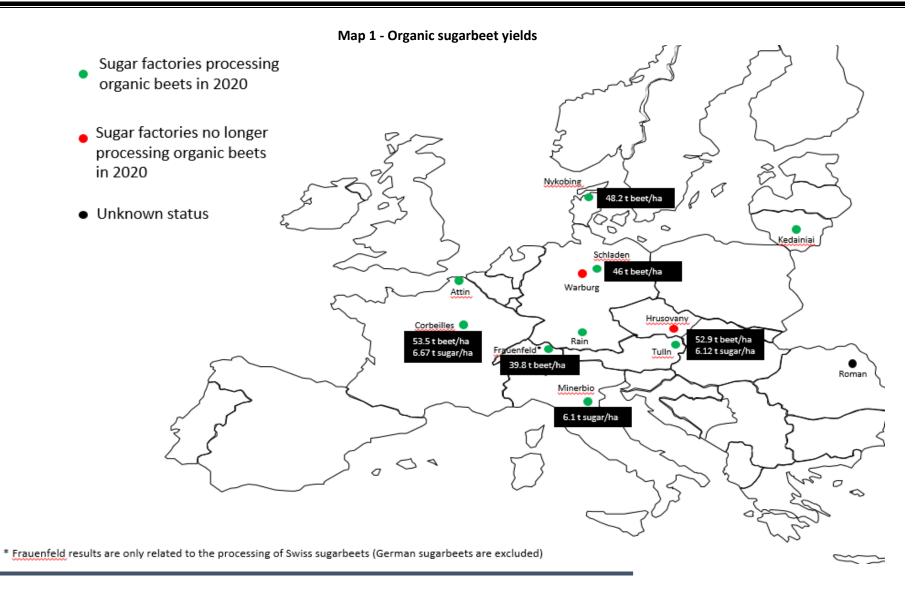
On this basis, the 2019 organic sugarbeet production is estimated to have totaled about 493,106 t at a standard 16% sugar content.

Map 1 offers an overview of 2019 results collected throughout the EU<sup>8</sup>. Beet yields are expressed in t beet/ha at actual sugar content.

Looking at organic sugarbeet prices, they are structurally higher than conventional sugarbeet prices in order to cover structurally higher production costs arising from manual labour charges (cf. Section II. - Box 1). According to our information, organic sugarbeet prices is usually negotiated between 70 and 100 EUR/t at 16% sugar content: more than three times the price of conventional sugarbeets. Some companies also offer additional payment expressed on a per ha basis (and therefore independent of yields) should growers commit to multi-annual contracts (usually 3 years).

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<sup>&</sup>lt;sup>8</sup> The map only displays partial results as some companies did not disclose their results in full.



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### VI. EU organic sugar processing facilities and production

As of 2020 and according to our research, a total of 9 sugar factories are reportedly processing organic sugarbeets (cf. Map 2). From a technical point of view, organic sugarbeets are generally processed at the very beginning of the season (i.e early September) to avoid any risk of cross contamination with conventional sugarbeet processing activities.

This indirectly and negatively impacts sugarbeet yields since an early processing limits the growth potential of the plant and mechanically reduces sugarbeet yields.

Meanwhile, it is interesting to mention that some "organic" sugar factories - such as Nykobing (DK)<sup>9</sup> or Frauenfeld (CH) source organic sugarbeets from other countries.

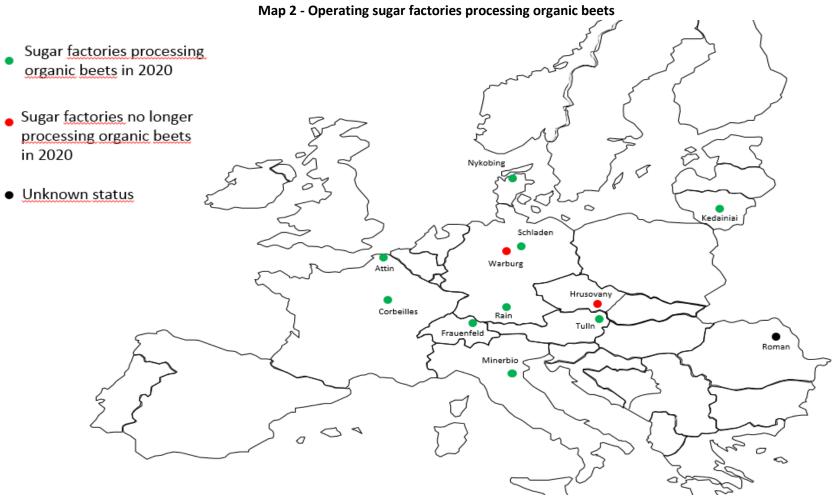
In the case of Frauenfeld, the factory eventually processed a total of 69,571 t of beets in 2019 including:

- 64,960 t coming from Germany<sup>10</sup>,
- 4,611 t from Switzerland itself.

Additionally and taking into account industrial processing losses, effective organic beet sugar yields currently average 6 t sugar/ha. This eventually resulted in about 56 kt of organic beet sugar produced in 2019 (although some marginal amount of beets may not have been processed in the case of field trial purposes only).

<sup>&</sup>lt;sup>9</sup> The Nykobing factory processed a total of 8,000 coming from Sweden in addition to the organic Danish sugarbeets harvested (166 ha) in 2019.

<sup>&</sup>lt;sup>10</sup> German sugarbeets were sent to Switzerland using railways (70%) and trucks (30%).



Following the closure of the Warburg factory in 2019, Sudzucker has now relocated its entire organic processing sugar activities in Rain am Lech ("Rain") while organic sugarbeets traditionally processed in the Hrusovany factory are processed in the Tulln factory since 2018/19.

# VII. EU organic sugar market

The European organic sugar market is largely driven by imports which represented a total of 166,328 t in 2018 (Table 1).

Table 1 - Overview of organic sugar imports in 2018

[t]	2018
TOTAL IMPORTS	166,328
Ecuador	1,462
India	22,794
Brazil	53,244
Mexico	16,018
Peru	2,418
US	696
Tunisia	557
Others	69,139

Source: 2019 TRACES report

On this basis, it is legitimate to consider that about [230 - 250] kt of sugar are domestically sold in the EU every year. Considering that end-consumers are increasingly looking for healthy products, the size of the European organic sugar segment is expected to grow in coming years.

However, assessing the average annual growth rate of the European organic sugar market segment remains difficult especially since the dynamics on this segment have only recently changed. Further quantitative data are therefore required to allow robust statistical analysis at this stage.

## VIII. EU organic sugar prices

According to our regular monitoring of the special sugar market segment in the EU<sup>11</sup>, we have been able to identify proxys to determine the import price (CIF basis) of organic cane sugar in the EU.

In 2019, we have determined that organic cane sugar prices ranged:

- between [850 1,200] EUR/t CIF for raw sugars,
- between [850 1,300] EUR/t CIF for golden sugars,
- between [1,200 1,500] EUR/t CIF for non-centrifuged (or very limited centrifuged) sugars such as Muscovado or soft brown sugars.

It is also interesting to note that organic cane sugar imported and sold in the EU is often combined with fairtrade certification especially in the UK and the Netherlands.

Looking at retail prices, Table 2 offers an overview of the average prices recorded in some EU Member States during 2019 and Q1 2020.

<sup>&</sup>lt;sup>11</sup> For additional information about this monitoring, please contact us: <a href="mailto:info@apic-consulting.com">info@apic-consulting.com</a>

Table 2 - Average retail prices for organic sugar in targeted EU Member States

[EUR/t]	FR	UK	NL	ES	IT	DE	PT
			[2,800 -	[3,000 -	[3,000 -	[3,000 -	
Raws	[3,500 - 5,500]	-	3,500]	5,000]	4,000]	5,000]	5,500
					[3,400 -		
Golden sugars	[3,500 - 6,000]	2,500	-	-	5,500]	-	-
Non-							
centrifuged				[4,000 -	[4,500 -	[2,500 -	
sugars	[4,000 - 6,500]	-	-	5,000]	6,000]	4,600]	-