

# The EU starch industry – a key enabler to boosting the bioeconomy in the EU

October 2018

## The EU starch industry welcomes the update of the EU 2012 bioeconomy strategy

Starch Europe appreciates the new impetus given by the Commission's 2018 Action Plan in its Communication: "Bioeconomy: the European way to use our natural resources".

While the EU and Member States are responsible for many of the actions, Starch Europe will welcome any opportunity to contribute to the implementation of the 2018 action plan. Indeed, the time to deliver these concrete actions will be crucial to realise the vast potential of the bioeconomy in the EU, scaling up and strengthening the existing value chains, and unlocking investments and markets for bio-based products.

## Positioned at the cross-roads of all the outlets of the bioeconomy, the EU starch industry is a key link between farmers and consumers

The EU starch industry processes EU-grown agriculture raw materials (mainly wheat, maize and starch potatoes) serving the four outlets of the bioeconomy, food, feed, industrial and energy with sustainable and added value ingredients<sup>1</sup>.

## Starch Europe's biorefineries are well-positioned to address the challenges of resource-efficiency and sustainability

Resource-efficiency is at the core of the EU starch industry's production. Through continuous innovation, the EU starch industry has reached optimum processes:

- On the one hand, the EU starch industry processes all the valuable products and co-products of the grain or the tuber. In the spirit of the circular economy<sup>2</sup>, it produces minimal waste; more than 99% of the agricultural raw materials are valorised<sup>3</sup>, generating high resource-efficiency without producing any food waste<sup>4</sup>.
- On the other, as processes are energy-intensive, the EU starch industry is covered by the EU Emissions Trading Scheme Directive<sup>5</sup>. To achieve high levels in energy

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<sup>1</sup> In 2017, it processed about 24 million tonnes of agricultural raw materials (mainly wheat, maize and starch potatoes), transformed into 11 million tonnes of starch and 5 million tonnes of proteins, fibres and oils. Ever since the starch industry began, starch has been associated as much with its non food uses as with its food ones. Of the EU's 9,4 million tonnes consumption of starch and starch derivatives, 58% go to food, 2% to feed and 40% to industrial applications.

<sup>2</sup> [PFP statement on circular economy](#)

<sup>3</sup> [Starch Europe Life Cycle Assessment](#)

<sup>4</sup> [PFP statement on food waste and resource-efficiency](#)

<sup>5</sup> [Starch Europe position on the revision of the EU ETS Directive](#)

efficiency and lower greenhouse gas emissions, it implements various techniques such as Combined Heat and Power generation and energy recovery techniques.

### Starch Europe advocates for a level playing field with competing industries

In the framework of the CAP, EU farmers must comply with some of the strictest rules in the world. This set of rules provides the users of EU-grown biomass with guarantees in sustainability across climate change, water, soil, biodiversity and landscape.

Renewable ingredients from the starch industry are functionally compatible with fossil-based chemicals. However, today there is no incentive to favour climate-friendly products.

### Starch Europe calls on the Commission to kick-off the concrete initiatives aimed at fostering the development of markets for bio-based products early in 2019

With annual investments averaging 430 million € (of which about 80 million € in Research & Development), the EU starch industry continuously innovates to meet changing customer needs and consumer expectations for new applications, developing the functionalities of the starch products and replacing fossil-based ingredients with renewable and biodegradable starch-based ones.

Substituting fossil-based consumer products with bio-based ones is key to developing a sustainable economy based on renewable materials in Europe:

- Many of these ingredients already exist and provide solutions to the market: on top of the more traditional industrial outlets like paper, cardboard and textiles, the EU starch industry today produces bio-based ingredients that are used as raw materials in the construction, chemical, cosmetics, fermentation, packaging, plastics and detergent industries.
- We welcome the Commission's support for using bio-based feedstock for the production of plastics and will continue the good cooperation with the Commission's Joint Research Centre on Life Cycle Analysis (LCA) data for alternative feedstock. Furthermore, the plastics strategy underlines that bio-based plastics should be mechanically or organically recyclable and by this, links the concepts of bioeconomy and circular economy.

### Starch Europe's recommendations to implement the action area number 1: "Strengthen and scale up the bio-based sectors, unlock investments and markets"

1. Starch Europe calls on the Commission and the Member States to provide stakeholders with a **stable, long-term and predictable legal framework**.
2. Starch Europe welcomes the inclusion of the bioeconomy as one of the objectives of the future Common Agricultural Policy (CAP) and calls on the Member States to **propose measures** and indicators in their **CAP National Strategic Plans**. The CAP is

the foundation stone of a sustainable bioeconomy in Europe and a key policy enabling the EU starch industry's sustainable supply of agricultural raw materials<sup>6</sup>.

3. Starch Europe welcomes the **increase in research and innovation funding** and supports the Commission's proposal on Horizon Europe, the most ambitious research programme ever, to dedicate 10 billion euros to food, agriculture, rural development and the bioeconomy under the 'food and natural resources' cluster.
4. Starch Europe recommends to **establish a one-stop-shop** in the "Circular Bioeconomy Thematic Investment Platform" to enable starch companies access fit-for-purpose information and dedicated support:
  - a. This will enable investment decisions based on practical advice on integrated funding and financial instruments.
  - b. Investing in existing starch biorefineries contributes to the livelihood of rural areas: EU starch plants are anchored in rural areas. Often, they are one of the major employers in the region, if not the biggest.
5. The role of research in food and nutrition is equally crucial: Starch Europe supports the **greater food orientation** of Horizon Europe in public private partnerships such as the [Bio-based Industries Joint Undertaking](#). Indeed, the EU starch industry also plays a part in food security:
  - a. During the starch production process, 5 million tonnes of valuable oil, fibres and **proteins** are produced, then sold for both animal and human nutrition.
  - b. The more starch the industry produces, the more protein and fibre-rich co-products it produces, thus providing high-quality feed and helping to offset for the EU's structural deficit in plant proteins with EU-grown proteins, developing **new value chains** on the EU territory.
6. Encompassing the [FOOD2030](#)'s recommendation on nutrition and climate-smart food systems, Starch Europe calls on the Commission to support the industrial development of a sustainable and competitive supply chain for all **plant-based proteins** in its forthcoming EU protein plan<sup>7</sup>.
7. Starch Europe commits to contributing to the creation of **standards** through CEN, the EU standardisation body, and calls on the Commission & Member States to increase references in their official communication to credible '**bio- based content' certificates and labels** based on the standard EN 16785-1:2015, such as the recently-developed NEN<sup>8</sup> certificate and label for bio-based content<sup>9</sup>.

<sup>6</sup> See [Starch Europe's position paper on Post-2020 Common Agricultural Policy](#)

<sup>7</sup> See Starch Europe's position paper on the EU protein plan: <https://www.starch.eu/blog/2018/10/24/proteins-as-part-of-the-european-starch-industrys-value-chain/>

<sup>8</sup> Netherlands Standardisation Institute

<sup>9</sup> Bio-based content certification scheme, Bio-based content 2017: <http://www.biobasedcontent.eu/>

8. Starch Europe also recommends to implement the measures in the area of **public procurement** to raise awareness about the benefit of bio-based products and create a market for these bio-based products building on existing initiatives such as:
- a. the [report<sup>10</sup>](#) of the Commission's Expert Group on bio-based products entitled "15 recommendations for an increased uptake of bio-based products in public procurement". This report outlines what needs to be done at EU, regional and national level to create dynamic new markets for home-grown, EU-sourced bio-based products.
  - b. Another good example of market-creation measure that works is the USDA biopreferred program<sup>11</sup>, whose economic contribution was presented to the US Congress in 2015 based on "[An Economic Impact Analysis of the U.S. Biobased Products Industry](#)":
    - i. In just one year, the US biopreferred program created 4 million jobs, with a 2.64 job multiplier effect and 379 US\$ billion value added in seven sectors of the US economy (Agriculture and Forestry, Biorefining, Biobased Chemicals, Enzymes, Bioplastic Bottles and Packaging, Forest Products and Textiles)<sup>12</sup>.
    - ii. By stimulating market demand for bio-based products, supply has increased: the BioPreferred Program has registered 2500 certified bio-based products on the US market, many of them European.
  - c. Last but not least, the inclusion of renewability as a criterion of Green Public Procurement and Eco-label would be a powerful instrument to communicate about the benefits of bio-based products to public procurers and consumers.

With this communication, the Commission creates the framework to launch these actions across the EU. Starch Europe calls on the Commission to kick-off the concrete initiatives that are within their remit and aim at fostering the development of markets and investments for bio-based products as early as January 2019.

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<sup>10</sup> See the Commission's web page [http://ec.europa.eu/growth/content/15-recommendations-increased-uptake-bio-based-products-public-procurement-0\\_en](http://ec.europa.eu/growth/content/15-recommendations-increased-uptake-bio-based-products-public-procurement-0_en)

<sup>11</sup> See USDA's web page at <https://www.biopreferred.gov/BioPreferred/> and <https://www.usda.gov/media/press-releases/2016/02/18/fact-sheet-overview-usdas-biopreferred-program>

<sup>12</sup> The 2015 report specifically excludes the following sectors: energy, livestock, food, feed, and pharmaceuticals.