Primary Food Processing - Cornerstone of plant-based food production and the bio-economy in Europe

S.1 Key findings

EU plant-based primary food processing, defined for the purpose of this study as those industries associated in PFP (Primary Food Processors, the association for the plant-based European primary food processing industry), produced €66bn of output in 2013. Primary food processors process large amounts of agricultural inputs into standardised ingredients for food, feed, fuel and a range of other bio-based products. In total, primary food processing accounts for about 8% of the production value of the food processing industry (Figure S.1 below). Despite the economic recession in Europe, the primary food processing industry has seen an increase in production value. **See > Chapter 4**

Plant-based primary food processing, as defined in this study, includes the manufacturing of vegetable oils, vegetable proteins, grain mill products, starches, sugar, and cocoa. About 4,000 companies are involved in industrial primary processing of agricultural commodities such as oilseeds, cereals, starch potatoes, sugar beet, and cocoa beans. Most of these are active in the processing of (wheat) flour. The number of companies has been decreasing as competition leads to consolidation to benefit from scale efficiencies. In the sugar industry, a major reform of the Common Agricultural Policy in 2006 has significantly reduced the number of companies in the past decade. **See > Paragraph 2.1**

EU primary food processors employ over 120,000 people directly. The employment of almost a million in EU agriculture can be indirectly linked to the presence of the primary food processing industry in the EU. On top of that, there is indirect employment in agriculture outside the EU and in other supplying industries and trade. **See > Chapter 3**

The unique position of the primary food processing industry puts it at the centre of a number of major developments that will shape the future of not only the industry itself, but also the future of agriculture and the European bio-economy as whole. As a key link in the supply chain, the primary food industry collects and processes inputs from a huge amount of farmers as efficiently as possible. The industry takes a major role in securing food availability and safety, as well as rural development and farm incomes. Furthermore, it is a key driving force behind the development of new bio-based industries, increasing sustainability of the European economy as a whole. **See > Paragraph 6.1**

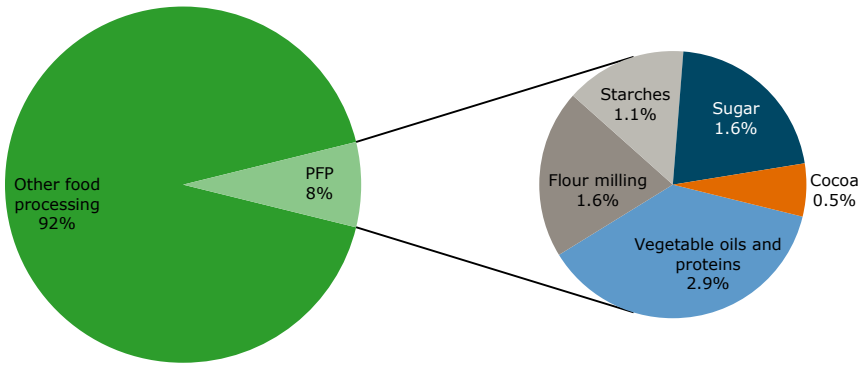

Figure S.1 *Division of production value of food manufacturing and primary food processing, in 2013, in %*
Source: Eurostat PRODCOM and Eurostat SBS

S.2 Complementary results

Plant-based primary food processors traditionally produce a limited number of basic food ingredients. However, the primary food processing industry in general, and processors of starches, vegetable oils & vegetable proteins, and cocoa in particular, have increased the number of product varieties and markets greatly, making these industries into real innovators and R&D performers. **See > Chapter 5**

Primary food processors have a higher investment rate than the food industry as a whole and total manufacturing. Some of the larger companies in primary food processing belong to the EU's top R&D performers. Patents are widely used to protect innovations. **See > Chapter 5**

Opportunities exist in a number of areas, the key ones being: **See > Paragraph 6.2**

1. Further development of new markets, especially those in the bio-economy. Primary food processors already have a major role in the innovation processes that take place in light a shift towards a bio-based economy.
2. World population growth and economic development will hugely increase demand for food, feed and fuel. Catering to this demand is a huge challenge and opportunity for the primary food processing industry.
3. Access to raw material inputs and access to end markets is a key competitive advantage. In light of increasing world demand, these assets should be further secured and improved through enhancing productivity at farm level with a focus on reducing environmental footprint. Increasing agricultural yields in Europe, securing supply from overseas and investments in efficient transport, storage and processing facilities is an opportunity to secure the future competitive position of the industry.

A number of threats were identified. Primary food processors face increasing global competition, partly caused by an un-level playing field as a result of (past and proposed future) trade liberalisation (subsidised competition) and EU food policy issues. Price volatility and climate change increase risks and uncertainty. Fragmentation of product flows and consequent loss of efficiency caused by increased pressure to introduce certifiable schemes are also seen as a threat by the industry. **See > Paragraph 6.3**

S.3 Method

This study was commissioned by Primary Food Processors (PFP) in Brussels and answers three main research questions: 1) What is the contribution of the primary food processing industries to the whole of the food and drink industry, and to the whole of the European economy, 2) What specific role do the primary food processing industries play in the food value chain, and 3) What factors will impact the future of the primary food processing industry in the EU?

The study is based on qualitative and quantitative analysis. The data in the report are based on industry reports, public databases (such as Eurostat) and a number of interviews with representatives of PFP member associations and companies. These interviews were used to validate the data presented in the report and collect additional (qualitative) information. Given the availability of data and the limited time available for data collection and analysis - apart from figures on the numbers of companies, employment and production values - Eurostat Structural Business Statistics which are compiled at a somewhat higher level of aggregation are used. These data include some secondary processing and smaller non-industrial companies in specific industry codes, which are strictly speaking not part of PFP. More specific disaggregated data from PRODCOM about the production value of manufactured products was used to calculate the production value of the industry. The indirect labour effects were calculated using Eurostat statistics on labour force and land use, and FAOSTAT statistics on yields. **See > Paragraph 1.2**