

PA #9 The Latvian Bioeconomy and supporting knowledge on the transition to a local circular bioeconomy

The Latvian Bioeconomy encompasses all 5 bioeconomy sectors which are the food and agriculture sector, forestry and wood production sector, bioenergy and biomaterials sector and fishing and aquaculture sector, employing 124 600 people and an added value of € 2.8 billion¹.

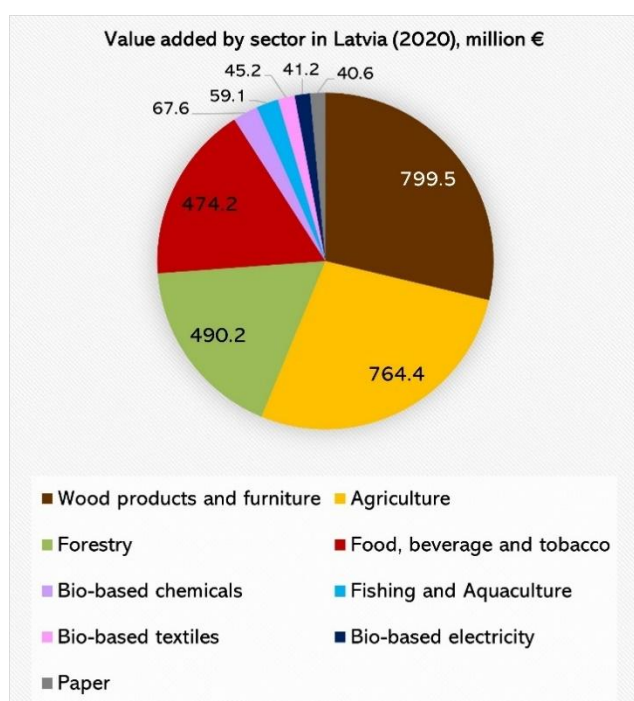


Figure 1: Value added by Sector | Latvia

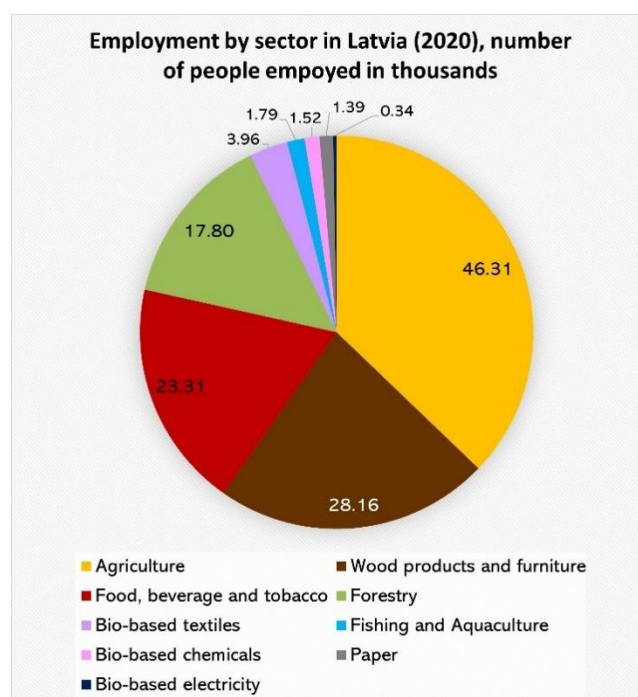


Figure 2: Employment by Sector | Latvia

Source: own calculations based on JRC Joint Research Centre Data Catalogue (<https://data.jrc.ec.europa.eu/collection/datam#datasets>)

The largest bioeconomy sector in Latvia in 2020 was the 'forestry and wood production' sector with € 1.3 billion added value (making 46.3% of total value added) and employing 45.96 thousand people. Currently, Latvia ranks 4th among European countries in terms of forest area per person.

In 2020, another large bioeconomy sector 'food and agriculture' employed 69.62 thousand people, of which 66.5% were employed in the 'agriculture' sector, while 33.5% in the 'food, beverage and tobacco' sector. Similarly, value added was mainly accounted for by the 'agriculture' sector, which stood at 61.7%, with the 'food, beverage and tobacco' sector accounting for 38.3% of the total 'food and agriculture' sector, which amounted to € 1.2 billion in 2020. Currently, Latvia ranks 2nd among European countries in terms of agricultural land area per person.

¹ Source: own calculations based on JRC Joint Research Centre Data Catalogue (<https://data.jrc.ec.europa.eu/collection/datam#datasets>)





Figure 3: EU Biomass Flows | 2021

Source: own calculations based on JRC Joint Research Centre Data Catalogue (<https://data.jrc.ec.europa.eu/collection/datam#datasets>)

Latvian documents related to bioeconomy strategy at a national level:

- *Latvian Bioeconomy Strategy 2030 (LIBRA)*
- *Research and Innovation strategy for smart specialisation (RIS3)*
- *Action Plan for the Circular Economy 2020-2027*
- *Strategy of Latvia for the Achievement of Climate Neutrality by 2050*
- *Action Plan for the Development of Organic Farming 2023-2030*

Examples of small-scale bio-based solutions from Latvia:

- **Research Institute of Agronomy:** Technology research for the development of sustainable, small-scale investment agroforestry systems.
- **AS "Smiltenes piens":** Producing milk whey protein drink "Piena spēks" from production residues - cheese whey. It contains three times more protein than regular milk.
- **SIA "Valmiermuižas alus":** The use of ladder in the production of food products such as barley malt ladder cookies and malt caramels.
- **SIA "Eco Zeme":** Given the added value that earthworms give, they are used as a "machine" for processing organic waste to create earthworm compost – biohumus.
- **AS "Biolat":** Pine and spruce needles are processed into extracts and concentrates of extractive substances, from which various products are prepared – dietary supplements, plant protection products, as well as various raw materials of household chemicals and other industries.
- **SIA "Field and Forest":** Essential oils and extracts are produced from plant processing residues and plant water obtained in the process of drying medicinal and aromatic plants.
- **SIA "Aloja Starkelsen":** Production of organic potato starch; Starch by-products are given to farmers who use the juice to fertilize the fields, and the carrion to feed the livestock. Thus, the volume of production waste is minimized, indirectly reducing the use of energy and water for the production of fertilizers and feed



AS “Madara Cosmetics”: The company does not use synthetic raw materials and preservatives in the production of cosmetics, therefore its cosmetics contain only extracts of natural origin from yarrow, horse chestnut, dewdrop, algae, aloe vera, dogwood, cucumber and other plants grown in the Baltics.



Figure 4: Aerial picture of Gauja river in Sigulda, surrounded by forest.

Source: Wirestock on Freepik (https://www.freepik.com/free-photo/aerial-shot-gauja-river-sigulda-latvia_15671296.htm)



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