



G20 OECD-BNCT WORKSHOP
Bioeconomy in the OECD countries
Presidency of council of Ministers
July 16, 2021

Panel 2:
Targets and monitoring tools: towards
a common framework to monitor
progress in the bioeconomy



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Bioeconomy in numbers

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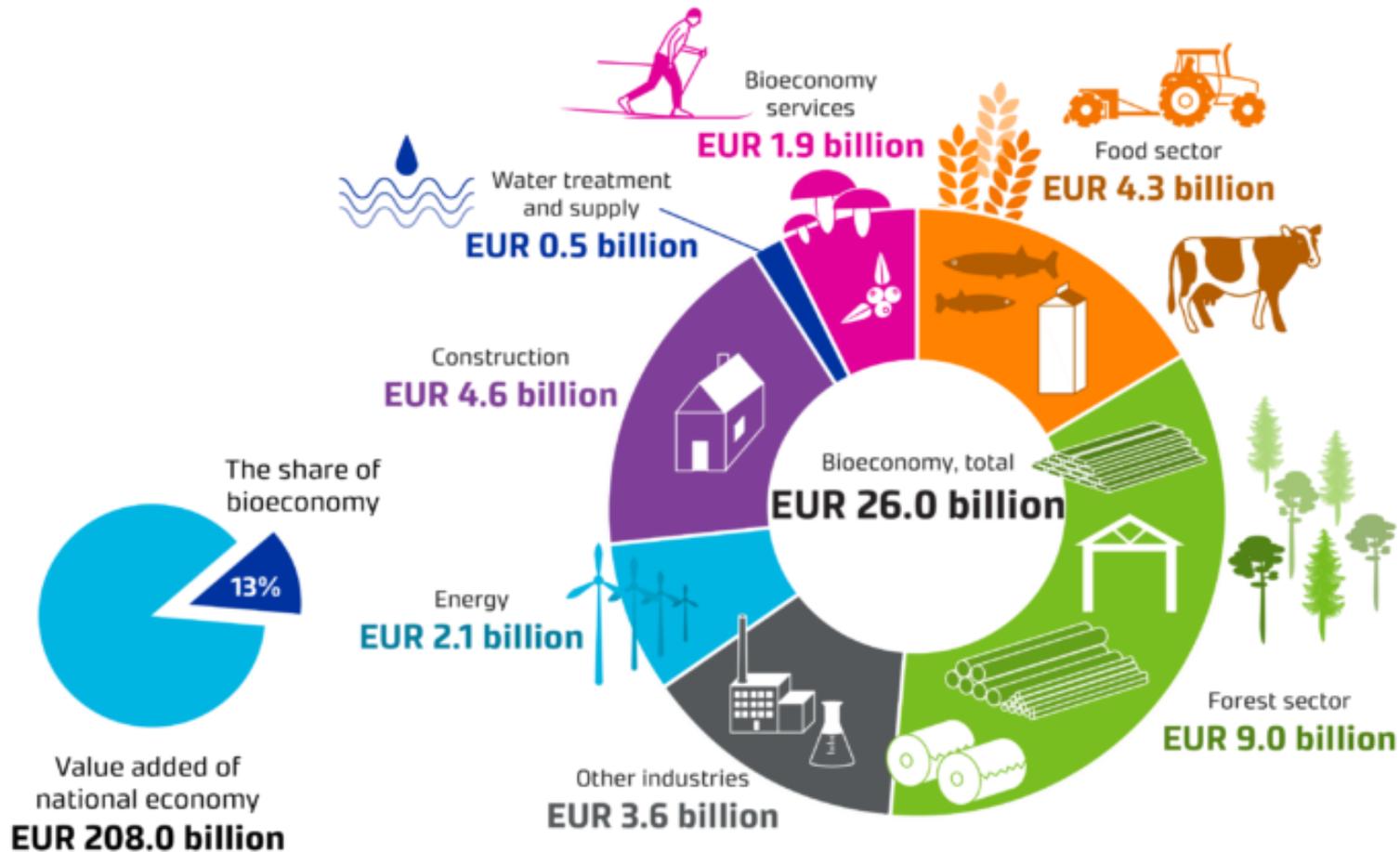


1. Objectives versus indicators:

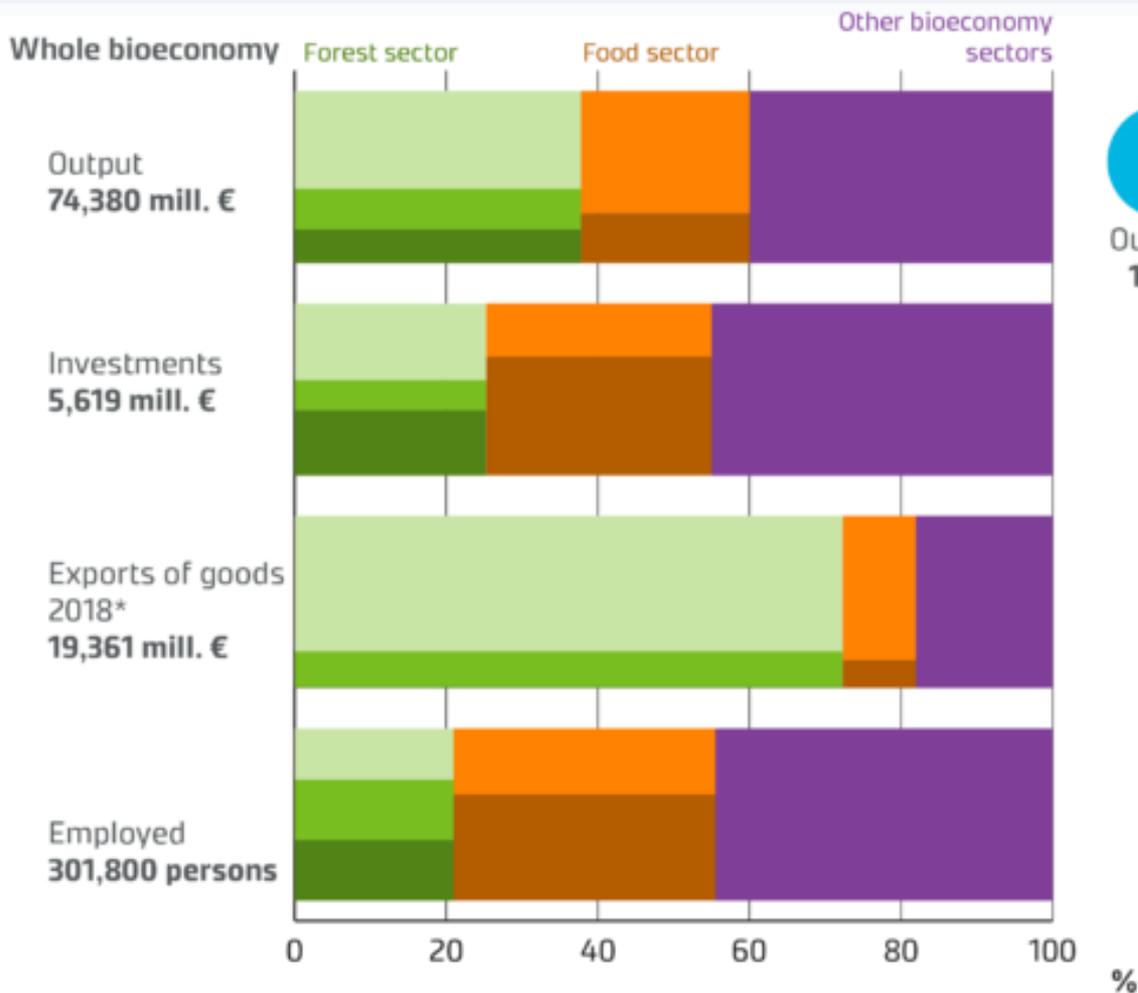
Taking into account the context of your national Bioeconomy, what indicators (economical, environmental and social ?) are you using and would be appropriate for the corresponding monitoring?

- The Finnish bioeconomy is monitored using **five indicators**: output, value added, investments, employment and exports. The main source is the annual national accounts, produced by Statistics Finland.
- It should be noted that the indirect effects of bioeconomy reach several sectors of industry outside the conventional bioeconomy accounts. Therefore, the future challenge is to make even these linkages visible using bioeconomy statistics and indicators.
- The social and environmental performance of the bioeconomy has not been followed separately, they part many other monitoring systems, like Sustainable development by UN 2030 SDG's. Results and info:
<https://kestavakehitys.fi/en/frontpage>
- The Government published a sustainability roadmap describes the current state of social, economic and ecological sustainability in Finland and sets goals for 2030. The roadmap gives specific form to the Government Programme's goal of a socially, economically and ecologically sustainable society.
<https://valtioneuvosto.fi/en/-/10616/government-s-sustainability-roadmap-describes-the-current-state-of-social-economic-and-ecological-sustainability-and-sets-goals-for-2030>

Value added of bioeconomy, 2019*



Forest and food sectors in Finland's bioeconomy, 2019*



The share of national economy



Output
16%



Investments
10%



Exports of goods
31%



Employed
11%



Forest and food sectors broken down by sub-sector

- Forestry
- Wood-products industries
- Pulp and paper industries
- Agriculture
- Food industry

* Preliminary data

Sources: Statistics Finland and Natural Resources Institute Finland



2. Managing complexity and interlinks:

How did your country tackle the challenge of accessing statistical sources of high quality, homogeneous and aggregated data for monitoring and assessing the impact of the national bioeconomy strategy?

The first bioeconomy calculations were released in March 2018. The scope of bioeconomy calculations is based on the national accounts framework provided by Statistics Finland.

The information concerning the Finnish national economy is compliant with the global SNA2008 recommendation (System of National Accounts) and is therefore internationally comparable.

The transactions included in the calculations for national accounts are output, value added, investments and employment and exports of bioeconomy goods.

The industrial division is based on the Standard Industrial Classification TOL 2008, which is compatible with the classification of economic activities in the European Union (NACE, rev. 2). Those sectors defined as being part of the bioeconomy have been selected in their entirety for the calculations.

The relative share of the bioeconomy has been estimated for some sectors using, alongside national accounts, other statistical sources and expert opinions.

The calculations only take into account the direct effects generated by bioeconomy sectors. The indirect effects on sectors supplying e.g. machinery and equipment, raw materials or services as inputs to the bioeconomy are deliberately excluded.



What kind of cooperation is needed/you suggest between countries and actors active in this field, such as the FAO, JRC Bioeconomy Observatory, in order to reach consistent and comparable country assessment and results?

- What you monitor is what you get – there must be a reason and useful purpose for the indicators and monitoring, and they should be available in a reasonable timeframe.
- Circular economy, sustainability goals and green deals create even more challenging reporting environment – what can be done together? Do we need to separate bioeconomy in all stats?
- We need to remember and underline, **that bioeconomy possibilities and needs vary from country to country and even within the country.** This reflects also definitions, monitoring needs and available indicators.
- The issue with the statistical considerations may lead to conclusions based to average numbers, that are not valid in any country. Too centralized, too simplified presentations may lead decision makers to wrong conclusions. Also the load given to those responsible reporting must be fair.
- It is even more important to study, what kind of opportunities digitalisation, sensors, AI and analytical tools combined with satellites could provide to the monitoring systems.
- Good coordination and cooperation between all relevant institutions and stakeholders is essential. **Sharing data should be the new normal in our digital platform era.**
- In particular, ***we encourage to form a common positive and forward-looking approach***, which stresses the future opportunities of sustainable bioeconomy and provides means to exploit these possibilities.