

Multiplying effects of the Bioeconomy

Research Brief

HIGHLIGHTS

- Spending on bioeconomy products supports multiple activities throughout the bioeconomy value chains.
- Each million euro of spending on bioeconomy products generates as many jobs in bioeconomy sectors as in other sectors (e.g. trade), and generates more value added in non-bioeconomy sectors than in bioeconomy sectors.
- Most of the job and value added generated by spending on bioeconomy products are found in agriculture, the food and paper industry and in trading, business services and transportation.
- Limitations of the multiplier analysis lies in its static view and non-recent database (here for the year 2010)

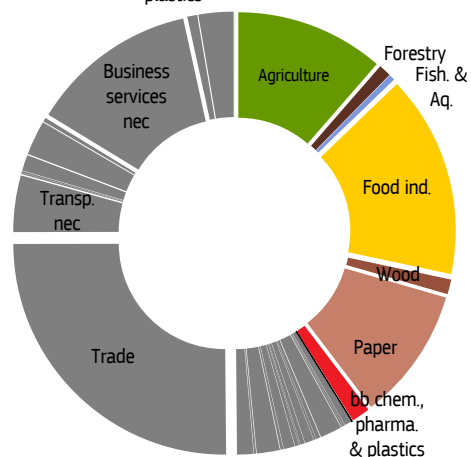
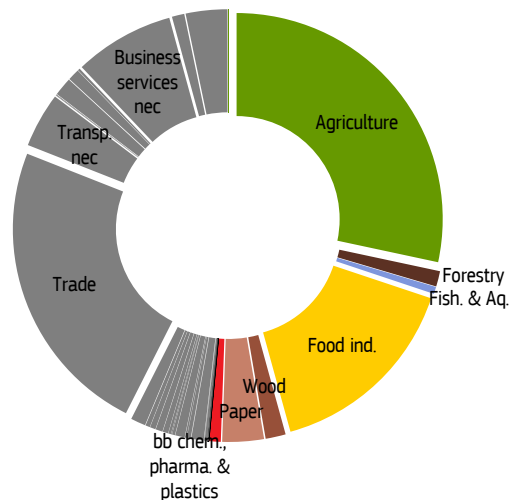
For each million euro spent on bioeconomy products,

12 persons are employed in bioeconomy value chains

- Half of them work in biomass producing and manufacturing sectors (direct bioeconomy employment). Jobs in agriculture and the food industry dominate.
- Half of them work in up-stream and down-stream sectors (indirect bioeconomy employment). Jobs in trading, business services and transportation predominate.

0.57 million euros of value added are generated by bioeconomy value chains

- 40% of this value added comes from biomass producing and manufacturing sectors (in particular from agriculture, the food industry and the manufacture of paper).
- 60% of this value added comes from up-stream and down-stream sectors (in particular from trading, business services and transportation).



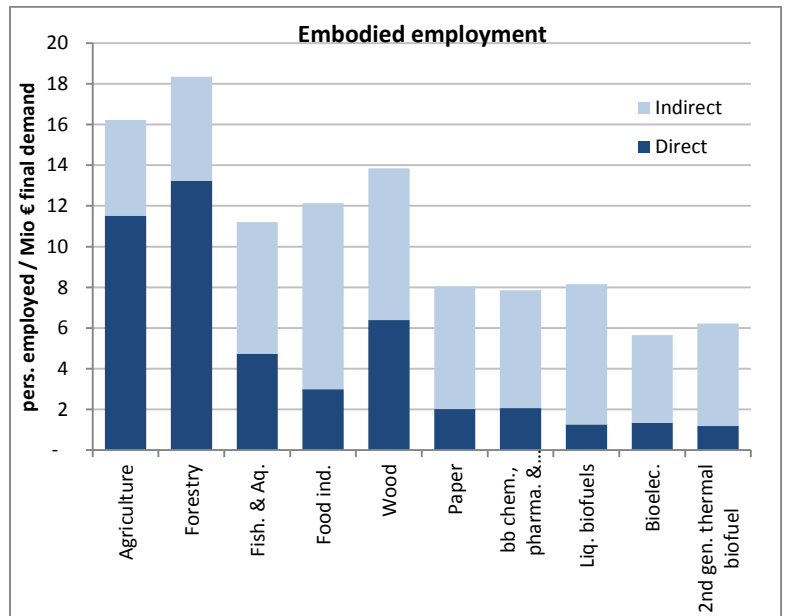
Jobs and value added multiplier effects are mainly found in agriculture, the food industry, the manufacture of paper and in trading, business services and transportation



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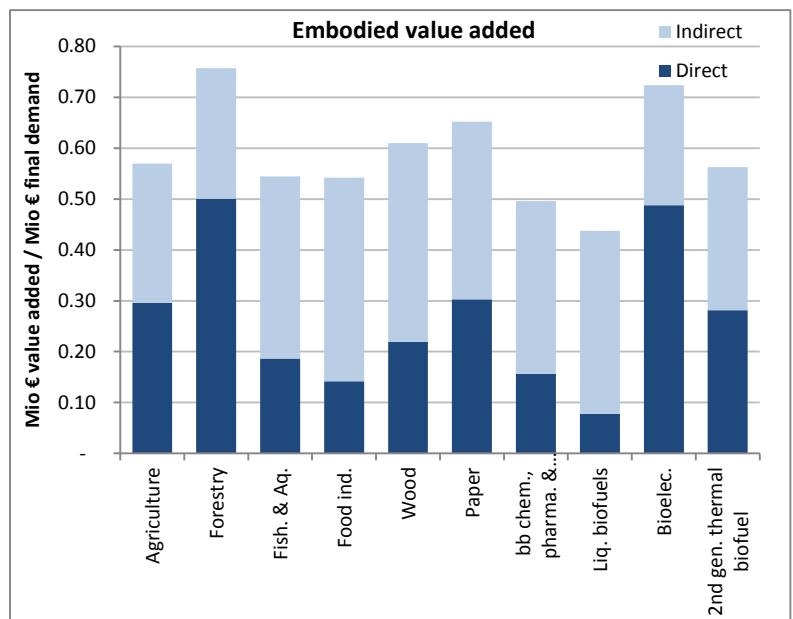
Among bioeconomy products, expenditure on forestry and agricultural products generates remuneration for the highest number of people

- Spending in agricultural and forest products has more direct than indirect employment effects.
- Spending in other types of bioeconomy products has more indirect than direct employment effects.



Among bioeconomy products, expenditure on forestry and bioelectricity products generates the highest value added

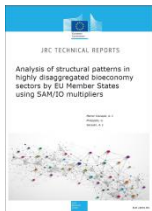
- Spending in agricultural and forest products as well as in bioelectricity has more direct than indirect employment effects.
- Spending in other types of bioeconomy products has more indirect than direct employment effects.



Current limitations

- Some bioeconomy sectors are not well represented in the Social-Accounting Matrices used in this multiplier analysis. For instance the manufacture of bio-based textile has still to be unraveled from the manufacture of synthetic fibre-based textile.
- Warning, multipliers are computed for one point in time (here 2010): they show a static view of the economy.

References and further literature



Mainar-Causapé et al. (2017). "Analysis of structural patterns in highly disaggregated bioeconomy sectors by EU Member States using SAM/IO multipliers". EUR 28591. JRC Technical Reports. European Commission-Joint Research Centre. doi:10.2760/822918



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