

A study of French waste fibreboard

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Context

Despite recent downturn in MDF production this product can be considered as a great success. The growth in global production capacity was near exponential during the years 1992 to 2021, reaching a peak of over 110 million cubic metres (FAO 2023). Wood fibre-based insulation products have also grown significantly over the same period. The increased use of wood-fibre products will result in more end-of-life waste fibreboard. The rapid growth in their use will logically increase the proportion of fibreboard in wood waste streams.

Currently, the majority of wood waste that is recycled is converted to particleboard. The chipping process when applied to fibreboard creates particles that are not suitable for particleboard production. It would be much easier to make particleboard if the fibreboard was not present in the waste stream. Hence the EcoReFibre project exists to find solutions for this context. A group of 10 companies has come formed a consortium together with 4 networks and 6 research providers to establish the *EcoReFibre* project, which is in the process of demonstrating:

1. An efficient sorting machine that is able to efficiently sort post-consumer wood waste into three fractions: solid wood; fibreboard; and composites (principally particleboard, OSB, plywood)
2. How the separated fibreboard and solid wood fractions can be successfully processed into secondary raw materials for new products
3. The quality of these secondary raw materials by incorporating them into market certifiable products

If fibreboard is sorted out of the post-consumer wood waste stream then it must be valorised in some way. The team at ESB has studied the fibreboard fraction in detail. The proposed poster will highlight:

1. The proportion of fibreboard found in French waste wood streams
2. The proportion of fibreboard particles that have coatings attached to them
3. The cleanliness of waste fibreboard

Data for each of these aspects will be added once the poster is accepted for the conference.

Acknowledgements

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References

FAO (2023) Forestry Production and Trade, Food and Agriculture Organization of the United Nations. Available at: <https://www.fao.org/faostat/en/#data/FO> (Accessed: 8 March 2