

Project description

Feasibility study Typha insulation

Summary

Within the framework of resource efficiency, it is important to recycle and reuse materials, replace fossil fuel-based products with bio-based alternatives and avoid the use of toxic substances. New applications are being sought for locally grown biomass. In Groningen buildings need reinforcement to guarantee safety for its users, due to man-induced earthquakes. Plans are to combine the work needed for reinforcement with the improvement of energy performance of these buildings. The idea is to use bio-based building materials, preferably grown and processed in the region.

In this study it is investigated whether it is feasible to use Typha (a swap plant) as a basis for a bio-based insulation product. In order to start the activities necessary to further develop this idea into a commercial product and start a dedicated company, a number of important questions have to be answered in terms of feasibility. This study therefore aims at mapping economic, organisational and technical issues and associated risks and possibilities. Based on these results a development trajectory can be started to set up a dedicated supply chain with the appropriate partners, research projects can be designed to develop the missing knowledge and the required funding can be acquired.

InterReg VA 'Bio-economie in de Non-Food sector, offers the possibility to find additional funding to answer the following research questions. This means the following questions will be addressed in this feasibility study:

- a. What is available and missing knowledge required for a LCA? (technical)
- b. What kind of sales channels could potentially be used for Typha?
(organisational)
- c. What indications can be given for the potential of sales market in Groningen?
(financial)
- d. What indications can be given for the processing and production potential of Typha in the region? (financial)

Expected results

The following information will be retrieved aiming to assess economic, technical and organisational feasibility:

- a. Available and missing knowledge required for a LCA
- b. An overview of possible sales channels for selling of Typha insulation
- c. Quick scan of the potential of sales market in Groningen

- d. Quick scan of possibilities for processing and production of Typha in the region of Groningen.

After this feasibility study it is possible to indicate how much additional revenue Typha isolation can contribute to the annual turnover for the group of companies around the Wetland Products Foundation. The expectation is that the processing and production of building components can generate new jobs for the region.

In the follow-up phase, the Foundation for Wetland Products aims to develop the insulated isolation as a commercial product with its associated sales channels, for a period of 2-3 years for Germany and 4-5 years for Groningen so that it is suitable for use in the renovation market.

Partners

- Stichting Wetlands products (Lead Partner)
- Rijksuniversiteit Groningen (RUG)
- Hanze, University of Applied Science
- Forest@Design

Financiële bijdrage



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