BioGov.net
Governance & Upskilling for a Stronger Bioeconomy

Case Studies in Bioeconomy education, training and skills development

Case study sample: Learning Network Biobuilders (Lerend Netwerk Biobouwers)

Provinces of Noord-Brabant and Zeeland in the Netherlands; Region

AVANS

Funded by the European Union

info@biogov.net www.biogov.net

Lerend Netwerk Biobouwers

1 Abstract

Lerend Netwerk Biobouwers is a pilot project committed to the development of an innovative, practice-oriented teaching method for the construction sector. It focuses on wood and biocomposites, as examples of biocircular materials, and focuses on ecological systems thinking and “21st century skills” such as problem-solving thinking, leadership and multidisciplinary collaboration. 5 Flemish and Dutch partners, together with many stakeholders from the construction sector, worked on this future-proof, innovative teaching method until the end of 2022 as part of an Interreg Vlaanderen-Nederland project. To this end, gaps between supply and demand are being mapped out and cross-border pilots are set up in which new methods are tested. Both bachelor students and professionals will participate in the pilots. The intended result is a roadmap along which relevant study programs can further develop their existing curricula.

2 Target Groups

Professionals in the construction sector (focus on middle management positions); bachelor students universities of applied sciences.

3 Case Study Category

Bioeconomy education, training and retraining in Higher Education (HE).

4 Training Provider

Avans University of Applied Sciences; HZ University of Applied Sciences; Ghent University of Applied Sciences; Ghent University; Bouwmensen.

5 Region

Provinces of Noord-Brabant and Zeeland in the Netherlands; Region of East Flanders in Belgium.

6 Language

Dutch.

7 Objectives of the education Format

Other – Combination of entrepreneurship education for students and complementing education for professionals.

Funded by the European Union

8 Final objective of the education format

The intended result is a roadmap along which relevant study programs can further develop their existing curricula.

9 Scope and context of the education format

The Biobouwers project was implemented as part of the Interreg Netherlands-Flanders program, with a primary emphasis on fostering direct collaboration between current employees in the construction industry and future professionals, including students. The project engaged Universities, Universities of Applied Sciences, and representatives from the construction industry. Its core focus was on biobased construction and facilitating the transition to a biobased construction paradigm.

The project comprised three main components. Firstly, an exploration was conducted to identify gaps in the construction sector's knowledge regarding biobased materials and areas not adequately covered in the existing curricula of our university of applied science partners. Building upon this insight, the consortium developed a framework for teaching materials, encompassing learning objectives and core competencies. This framework was put to the test through pilot programs, and subsequent evaluations were carried out to assess the achievement of the intended goals, marking the final phase of the project.

10 Specific Skills and competences addressed

Technical competences: Within the Biobouwers approach, both technical and business economic skills are combined, with the construction sector as the central topic.

Transversal competences: problem-solving, teamwork, verbal & non-verbal communication, learning and working online & offline, connecting and collaborating effectively online & offline.

11 European Qualification Framework level/s

Level 6.

12 Main benefit of the participant

As a pilot project, the initiative did not culminate in a certificate. The aim is to further develop the outcomes of the pilot which could potentially result in educational modules that will result in a certificate for participants. (but this is not the case just yet). One of the recommendations of the roadmap is to look in to the possibility of working with microcredentials (especially in relation to Life Long Learning).

13 Main cost categories considered

This project had a budget of €599.959 and was subsidised for 50% by the Interreg Netherlands-Flanders program. The outcomes of the project were integrated in the

existing infrastructures of the involved partners and existing staff was involved in the development of the modules.

The primary investment was allocated to staff costs, with educators actively developing new courses to cultivate innovative perspectives on constructing with biobased materials. This effort resulted in the successful introduction of new courses at the three participating universities.

14 Importance and impact

235 bachelor students (divided over 3 pilots); 54 SMEs and industry partners.

15 Relevance (of the format)

The pilot project addresses a shared demand from both the construction industry and educational institutes to enhance students' and employees' timely understanding of advancements in biobased construction. The aim is to facilitate a smoother integration of these developments into their respective roles. Achieving this goal necessitates not only technical expertise but also the cultivation of specific transversal skills. The Biobouwers pilot has systematically explored this potential by testing modules that encourage collaborative efforts between students and professionals.

16 How can it inspire BioGov.net (Why was it designed in this specific way / what are the success factors?)

The format tested in this project was groundbreaking for the region, given its pilot nature. What distinguishes this project's uniqueness is not only the collaboration between students and professionals within the established concept but also the cross-institutional collaboration among students (specifically, those from the three universities of applied sciences jointly worked on shared assignments). Additionally, the project involved a bilateral cooperation between the Netherlands and Belgium.

While the pilots concentrated on the construction sector, the methodology employed showcases versatility, demonstrating its potential applicability to various themes and topics.

17 Data sources

- **Online resources:** https://www.coebbe.nl/en/projecten/lerend-netwerk-biobouwers/
- **Resource persons:** Bas Koebrugge (Avans)
- **Other sources, if any:** https://www.grensregio.eu/projecten/lerend-netwerk-biobouwers; https://www.grensregio.eu/blog/2022/biobased-bouwen; https://publicaties.avans.nl/lerend-netwerk-biobouwers1/home-lerend-netwerk-biobouwers

BioGov.net
Governance & Upskilling for a
Stronger Bioeconomy

Consortium

CIVITTA

Q-PLAN INTERNATIONAL

LOBA CUSTOMER EXPERIENCE DESIGN

PEDAL
GET YOUR BUSINESS SPINNING

btg
biomass technology group

ZVT | Agricultural Research, Ltd. Troubsko

MNEXT
MATERIALS
& ENERGY
X TRANSITION

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

FVA NEW MEDIA RESEARCH

WILA
Bonn

Funded by
the European Union

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

info@biogov.net www.biogov.net