

Innovative service - BIO construction from hemp

EAFRD-funded projects

LATVIA

mplementing Local Development Strategies

Location Lielvārde

Programming period 2007 - 2013

Axis / Priority
Axis 4 – LEADER

Funding (EUR)

Total budget 19 496 RDP 11 697 Private 7 799

Project duration 2013 – 2014

Project promoter VERTESS UP, Ltd,

Contact Uģis Pauriņš ugis@hempecosystems.lv

tel. +371 26318598

Website

hempecosystems.lv/

Sustainable construction of buildings by using of innovative materials (hemp).

Summary

The company VERTESS UP was looking to expand its business operations by developing an innovative service that responds to the desire for a healthier and more natural lifestyle and housing.

EAFRD support was used to purchase equipment that enabled the production of various construction materials where hemp is used as a base material.



Results

An innovative construction technology was introduced that used biological materials.

Several promotional materials were developed to promote the service to the local community.

The company built a house from hemp shive concrete and as this is the first house of its kind in the Baltic countries, it is now used as a showcase for potential clients.

The product gained positive reputation and interest has grown. As a result, the company grew and scaled up production.

Lessons & Recommendations

☐ The investment focused on an innovative technique that involved significant risk. The main motivation of the project promoter was retaining a strong belief in the potential of hemp as construction material, and in the local market in accepting an innovative service with strong potential for development.

ENRD Contact Point

Rue de la Loi, 38 Boîte n.4 - 1040 Brussels, Belgium Tel. +32 2 801 38 00 email: info@enrd.eu website: http://enrd.ec.europa.eu/



European Network for Rural Development

Innovative service - BIO construction from hemp

Context

Hemp and its products are used and applied in various ways ranging from textiles, food and as construction material. Ongoing research on practical construction technics using hemp in a number of European countries have produced some highly encouraging results: the use of hemp fibre as an insulation material has proven very efficient, and the use hemp shives in the construction of walls, where hemp is used as the raw material for concrete, has also proven to be very advantageous (the hemp hurds or shives are the core of the stem, which is the strongest and most durable part of the fibre).

The Project promoter VERTRSS UP, Ltd was looking to capitalise upon the trend in the construction industry of being more eco-friendly. Thus they looked to innovate its work process thorough the examination of new materials and technology. For the development of a new service there was a need to purchase equipment that could be used in the production and construction process using hemp as raw material.

Objectives

The objective of the project was to purchase fixed assets for use in the development of a new biological building service through the use of organic raw materials – in this case hemp.

Activities

The company purchased a concrete mixer, pneumatic pump, transportation equipment, and a trailer for the filling material. The equipment contributed to the development of a new biological building service — using hemp concrete as the base material for walls constructed using monolith concrete (reinforced concrete cast with no joints other than construction joints) and using hemp concrete in the production of wall blocks. The company continued the development of its innovative activities by creating a service for ceiling and roof insulation and cavity wall insulation in existing buildings.

Results

As a result of the project an innovative construction technology was introduced into Latvia that used biological materials – hemp.

Several promotional materials were developed to promote the service to the local community. This was necessary as some potential customers had concerns over the suitability of the new materials.

The company has now built a house from hemp shive concrete and as this is the first house of its kind in the Baltic countries, it is now used as a showcase for potential clients.

Due to the results achieved, the product has received a positive reputation locally, and community interest has grown. As a result, the company has grown, and has scaled up production.

Lessons

One of main challenges was investment in a little known area. There was a potential risk and therefore the main motivation of the project promoter was retaining a strong belief in the potential of hemp as construction material, as well as in the local market in accepting an innovative service with strong potential for development.



Additional sources of information

LAG - Public Private Partnership Association "Zied Zeme" www.ziedzeme.lv

