

GENERAL DESCRIPTION

LIFE_PHIPP project will display environmental benefits and cost-efficiency brought by a new type of insulation material, made of recycled low-quality waste paper and hemp fibre.

The product will be manufactured in Latvia – on a test production line.

Compared to mineral wool, the new soft heat insulation plates will be designed to have good heat insulation and sound insulation qualities and be easy to install. Other advantages of the product involve air permeability, easy disposal and care for health.

The project's main goal is to create an innovative waste paper - hemp fibre building insulation material in plates and clearly demonstrate the economic and environmental advantages of manufacturing and using this material.

- To promote use of waste paper - hemp fibre plates in insulation of buildings.
- To reduce burning or burying of low-category waste paper at landfills.
- During the manufacturing process, CO₂ emissions will be reduced significantly, compared to manufacturing of other heat insulation materials.
- To promote development of circular economy in regions.



TAKES PLACE

PROBLEM:

A huge amount of waste paper arising from household waste is buried at landfills or burned, despite the fact that waste paper is recycled relatively well (on average approx. 70% in Europe).

Referring to the European Union Council Directive **1999/31/EC**, the objective of EU is to gradually eliminate the amount of waste buried at landfills through efficient waste management and use of waste as production resources.



PROJECT ACTIVITIES

To achieve the project goals and expected results, specific activities will be implemented:

- Development of a prototype machine and a recipe for manufacturing of waste paper - hemp fibre plates that would be able to compete with mineral wool.
- Certification of plates and demo house insulation in the Baltic states, Germany, Great Britain and Finland.
- Launching of waste paper - hemp fibre plates on the market. Patent, documentation and handouts.

RESULTS OF THE PROJECT:

- Reducing greenhouse gas emissions
- Reducing the use of hazardous substances
- Waste management promotion
- Energy saving
- Increasing employment