



Co-funded by the Eco-innovation
Initiative of the European Union

MARKET ANALYSIS

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DELIVERABLE D6.3
TV4NEWOOD PROJECT

**AGREEMENT NUMBER:
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Summary

Thermovacuum is an innovative and environmentally friendly process to produce a new generation of high added-value Thermally Modified Vacuum Wood (Thermovacuumwood TVW) having outstanding properties of resistance and durability. Thermovacuum combines an energy-efficient vacuum drying process with a thermal treatment to achieve the following objectives:

- market uptake with Thermovacuum Wood process
- market penetration TVW by offering a high quality, ecological and convenient solution;

To encourage the substitution of imported tropical timber, with locally produced wood with enhanced properties, preventing the over-exploitation of valuable resources and reducing significantly the adverse environmental impacts of transport of timber over long distances and the related economic costs.

In the second WP of the project is planned an analysis of the market for final users of TVW.

The aim of this analysis is to discover which types of wood are most use in different market sector and for which kind of application. Furthermore given the characteristics of TVW very similar to tropical wood, the research intends to clarify the areas in which the tropical wood is most used and for what purposes. Will clarify the types of tropical wood used in order to propose a substitution thermo vacuum-treated wood with characteristics more similar.

Till today excellent results were obtained with fir and spruce, white ash and turkish oak treated with Thermovacuum process.

From September 2014 the further test will start with a strong collaboration between Ecolwood and CNR Ivalsa. The essence that will be tasted are: maritime pine, poplar, douglas, cherry, oak, ash, beech, larch

Since the beginning of TV4NEWOOD project till today one industrial device has been produced and installed at Monistrol sur Loire (France) following the project previsions. But other important collaboration are developing:

- **IKEA group has requested test for process qualification (first stage of test performed at the end of May),**
- **Bingaman & Son Lumber, Inc.from US are interesting in test Thermovacuum**

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process with local american essences

- **one THERMOVACUUM device has been ordered in July 2014 from a customer in Norway**
- **one of the most important luxury boat manufacturers worldwide has expressed interest in TVW for furniture and claddings**

Terms of Reference and Research Question

The purpose of this market research is to find the answers to the following research questions:

- What would be the main fields of use for the TVW and how large would be the market for products that could be replaced? Since the potential fields of use are very broad, an overview of the market of wood construction materials (windows, doors, staircases) and wood outdoor structures (poles, garden furniture, playgrounds) is preferred. The geographical scope of the research should primarily cover the following countries: Sweden or Finland, Germany, and France, Italy, Spain. The information concerning trends in the consumption of wood products would provide an additional added value;
- An overview about the European countries that import most tropical wood, what kind, and for what purposes it is mainly used. Which are the price of tropical timber and by where they are coming from.
- Information regarding the wood treatment companies in Europe: the information about types of treatment and results on different type of wood. The information about costs of process and products would give an additional added value;
- An overview of the possible alternative technologies and replacement products for this technology.

Selection of Target Countries

The initial market analysis identified 7 target countries in addition to Italy for market research for ThermoVacuum process: France, Finland, Spain, Germany, Sweden, etc.

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Different considerations have been made for the substitution of tropical timber with TVW: the research will identify the most important **importers** of tropical timber in Europe.

All identified countries are members of the European Union, therefore the requirements and limitations to import tropical timber are the same; this plays an important role in the demand of TVW. However, all of the above countries are unique in terms of culture, history, architecture etc and this allows us to regard them as separate markets.

Since the primary goal for the development of the project is to sell or rent the treatment device, instead of selling the ready-made product, as much as possible data-wise, the research on the end markets includes the wooden products market of the whole Europe, thus giving a more reliable and broader base of information to rely on.

The target market for selling or rent the device consists of the timber treatment companies. The research of wood treatment companies included the question whether the company treat directly wood or buy treated wood. Since there are thousands of wood treatment companies, the scope of the research concerning the wood treatment companies was limited by the time limits of the whole market research. The scope of the wood treatment companies regard eight countries, thus covering Germany, Spain, Portugal, France, Italy, Finland, Sweden, Netherland and also including some companies from the UK and Switzerland.

Research Methodology

Various methods and sources were used in conducting this market research. Different statistical databases (including the statistics offices of the target countries, OECD, EUROSTAT), web pages of state institutions of different countries, web pages and publications of specialized umbrella organizations and chambers of commerce, web pages of companies, European scientific publications, databases and other sources (Fordaq, Europages) were used for gathering the necessary data. A significant part of the data concerning the wood treatment companies, their technology and pricing as well as information concerning the manufacture through direct contacts and through the questionnaire we sent to all partners contact list. The main principles of data collection were to choose the sources on the basis of reliability and retain the information regarding the primary sources.

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This market research is built on two different market levels. One of the target markets consists of the wood treatment companies who could buy or rent the treatment device. The other consists of the potential end users of the new Thermovacuumwood (TVW).

In order to collect data concerning the **wood treatment companies**, several sets of extensive information inquiries via electronic channels were conducted, including social network activities. A specific questionnaire was sent to over 2500 email address in Europe to collect some important data.

Other important data have been collected from past market search made by the project partners, the most important arrived from the Swedish university (SLU) of Uppsala, the National Research Council Ivalsa of Trento (CNR), and Consortium for wood and cork (CSLS).

This market search is not definitive because other data will be collected through participation in trade fairs and compilation of the questionnaires sent. The market research will ultimately be updated to included in the latest version of the business plan project

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- Most interesting countries for Thermovacuum process
- Competitors presence
- Potential customer for Thermovacuum process

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3 WOOD RESOURCE IN EUROPE (CONSUMPTION, IMPORT AND EXPORT)

Sawn Softwood (in 1,000 m³)
Softwood Logs 2014 estimates in 1,000 m³
Hardwood Logs
Investigation related to the areas of use of wood
Parquet Industry
Windows
Doors Market
Terraces and Garden Furniture
Playgrounds

4 COMMERCIAL ANALYSIS

Bricolage market in Europe
Top Italian companies windows and balcony doors industry, doors and wood floors

5 QUESTIONNAIRE

YOU CAN RECEIVE THE COMPLETE ANALYSIS FOR FREE, PLEASE REQUIRED IT WITH AN E-MAIL TO: TV4NEWOOD@WDE-MASPELL.IT

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