



Project Information Sheet

ThermoVacuum: new process for new generation of thermally modified wood (TV4NEWOOD)

Programme area:	Eco innovation 2012, Green Business
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Partners:	CNR Ivalsa (CNR) Italy Consorzio Servizi Legno e Sughero (CSLS) Italy Swedish University of Agricultural Sciences (SLU) Sweden Ecolwood (ECW) France Arredo Mare di Chiarini Aldo & C. SAS (ARM) Italy (December '15) Italy Mediterranean Refitting Group (March 2016- August 2016) Italy
Website:	www.tv4newood.it
Benefits (max. 150 characters incl. space):	CO2 reduction of over 700 tons Cheaper and ecologic thermo treated wood for 2078 m3 in 2016 Less tropical wood imported more locally certified wood treated
Keywords:	ThermoVacuum, wood, tropical timber
Sector:	Green Business
Type of solution	Innovative process and innovative product
Duration:	01/09/2013 – 30/08/2016
Budget:	€ 1,771,928.00 (EU contribution: 50%)
Contract number:	ECO/12/333079

Summary

Thermovacuum is an innovative and environmentally friendly process born in Italy, to produce a new generation of high added-value Thermally Modified Vacuum Wood (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:

- 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.
- At the end of the project this new thermally modified wood will be available in all Europe market and will offer a high quality, ecological and convenient solution.

Expected and/or achieved results

Main outputs and results

- Registered trademark for Thermovacuum wood: Vacwood®
- Installation of at least 8 plants for the production of Vacwood® in: France (2), Belgium, Poland, Norway, Usa (2)
- Production capacity available on 2017 about 9000 m3 of Vacwood®
- Very low costs of the production process between 34 and 40 €/m3 (60% less than estimation)
- Enhancement of "poorer" species: fir, spruce, beech, oak, maritime pine, ash, poplar for a more qualified use.
- CO2 reduction of **over 700 tons related** to the reduced import of tropical timber equivalent to the production with local woods
- Production of thermo treated wood odourless = VOC Free (zero VOC Volatile Organic Compound)

The information sheet will be published in the Eco-Innovation website. The EASME reserves the right to edit the information sheet for content and length