

WOODRUB - UTILISATION OF RECOVERED WOOD AND RUBBER FOR ALTERNATIVE COMPOSITE PRODUCTS

LIFE09 ENV/ES/000454



REQUIREMENT ON TECHNICAL ISSUES

1. Impact of dissemination actions during the Project.
2. After-life communication plan.

DISSEMINATION CARRIED OUT DURING THE PROJECT:

Dissemination of Woodrub project material

Dissemination material	Impact: nº copies / visualizations
Project board and roll up banner	The board is permanently located at the entrance of the Technological Park of Paterna, in a pass zone. The roll up has been used in trade fairs or project events.
Newsletters on project website and used as a base to further national publications	5 newsletters See data about website: Total visitors: > 10.000
Bi-lingual leaflets to be distributed at professional and EU events	Nº printed copies: 2.000
Layman’s report of the WOODRUB is a 16 page report in English and Spanish	Nº copies: 100 hard copies / 580 visualizations on web.
<p>AIDIMA’s publications</p> <ul style="list-style-type: none"> ▪ AIDIMA ECOBOLETÍN – 44, 04 November 2010 ▪ AIDIMA ECOBOLETÍN – 46, 07 February 2011 ▪ AIDIMA ECOBOLETÍN – 48, 29 November 2011 ▪ AIDIMA ECOBOLETÍN – 49, 26 March 2012 ▪ AIDIMA ECOBOLETÍN – 50, May 2013 ▪ AIDIMA ECOBOLETÍN – 51, 05 December 2013 ▪ AIDIMA ECOBOLETÍN – 52, May 2014 (After-Life but included in final justification) ▪ AIDIMA INFORMA No. 65: Woodrub. Madera recuperada y caucho vulcanizado de neumáticos – May 2011 in digital and in paper versión. ▪ AIDIMA INFORMA No. 70 – September 2013 in digital and paper version ▪ AIDIMA INFORMA No. 72 – July 2014 in digital version (After-Life but included in final justification) ▪ <i>Flash Tecnológico 2013</i> <p>NOTICIAS HÁBITAT (http://www.noticiashabitat.com/) AIDIMA’s website to disseminate sectorial news to companies.</p> <ul style="list-style-type: none"> ▪ “WoodRUB – Utilization of recovered wood and rubber for alternative composite products” 13 Sep 2010 ▪ “WOODRUB – Uso de la madera recuperada y caucho para productos compuestos alternativos” 17 Dec 2013 ▪ “Utilization of recovered wood and rubber for alternative composite products” 23 Oct 2012 ▪ “Feria Valencia acoge la presentación de nuevos tableros a partir de madera y caucho de neumáticos reciclados” 13 Feb 2014 	<p>Each publication is sent by e-mail to all the associated companies of AIDIMA. Average 2010-2014: 600 companies, so 11x600 = 6.600 mail deliveries to Spanish companies mainly from the wood, furniture, packaging and related industries.</p> <p>Noticias Hábitat it is a website visited mainly by wood, furniture packaging and related industries. Website annual visits:</p> <p style="margin-left: 40px;">Year 2014: 42.424 visits Year 2013: 51.811 visits Year 2012: 68.823 visits Year 2011: 81.039 visits Year 2010: 78.529 visits</p> <p>Note that all visits probably not read Woodrub news, but all of them are available since published, until the end of the project and after life so potential readers are accumulative.</p>

<p>Wood, furniture, packaging and related industries sectorial publications (<i>responsable AIDIMA</i>):</p> <ol style="list-style-type: none"> 1. <i>Specialized journal Tecnimadera, No. 198 – November 2010</i> 2. <i>Magazine Boletín Plataforma Tecnológica Forestal Española “Casos de éxito en el I+D+i del sector forestal español” - December, 2010.</i> 3. <i>Specialized journal Correo del Mueble, No. 21 – 2011</i> 4. <i>Specialized journal Economía 3 “Materiales innovadores con Madera y caucho reciclados” (nº216, February 2011)</i> 5. <i>“Una segunda vida, útil y funcional para los desechos” Specialized journal Arquitectura y Construcción CIC, No. 483 – February 2011</i> 6. <i>“Materiales innovadores a base de madera y caucho reciclado”. Specialized Journal El Sector Pg 21.and Specialized review Spain Contract. March 2011.</i> 	<ol style="list-style-type: none"> 1. 5,000 journal units 2. 3.000 magazine units 3. 60.000 journal units 4. 5.000 journal units 5. 35.000 journal units 6. 25.000 journal units
<p>Mass media press releases: responsable AIDIMA</p> <ol style="list-style-type: none"> 8. <i>“AIDIMA lidera un proyecto europeo para crear materiales” Published at El Periódico Mediterráneo, 14 Nov 2010 pg 90.</i> 9. <i>“AIDIMA coordina 5 países y 10 entidades europeas para crear materiales innovadores a base de madera y caucho reciclados” Noticias Comunitat Valenciana (on-line) and at Clickug (on-line) – 4 Nov. 2010</i> 10. <i>“Aidima coordina un proyecto europeo para crear materiales innovadores a base de madera y caucho reciclados”. Published at Terra Noticias (on-line) – 4 Nov. 2010 and 20 minutos (http://www.20minutos.es/noticia/863646/0/)</i> 11. <i>“Aidima: proyecto europeo para crear materiales con madera y caucho reciclados”– December 2010 Published at Izaro http://www.izaro.com/contenidos/ver.php?id=es&se=2&su=22&co=1292340367</i> 12. <i>El Mundo: “Ecomateriales de madera y caucho reciclados” (December 2010) (responsable AIDIMA)</i> 13. <i>“AIDIMA participa en un proyecto sobre reciclaje de productos de madera y caucho en el sector industrial para el desarrollo de nuevos composites”. Published at Construible (on-line). 29/10/2012.</i> 14. <i>“Tableros en base a caucho de neumáticos y madera reciclados”. Published at InfoConstrucción (on line), 15 May 2014.</i> 15. <i>“AIDIMA edita un video sobre los nuevos tableros WoodRub de madera y caucho reciclados” Published at Noticias.Info and at MaderaSostenible.com the 16th, May, 2014 and at Tecnimadera the 1th, May, 2014. (all them on line).</i> 16. <i>Video de AIDIMA sobre los nuevos tableros WoodRub de madera y caucho reciclados” Published at IM Cocinas y Baños (on line), 19, May, 2014.</i> <p>Press releases responsivle AUTH-LFU</p> <ol style="list-style-type: none"> 17. <i>Project news in “Karditsa news” website and “Neos Agon” newspaper (November 12, 2013).</i> 	<ol style="list-style-type: none"> 8. 65.000 newspaper units 9. 3.000 visits 10. 24.723 visits 11. 300.000 newspaper units 12. 2.643 visits 13. 500.000 newspaper units 14. 9.823 visits 15. 6.893 visits 16. 22.165 visits 17. Coverage in Karditsa regional unit, population about 120.000

<p>WoodRub poster, exhibited by:</p> <ol style="list-style-type: none"> ACCIONA has installed a poster in the composites' laboratory. AUTH-LFU: placed in 5 locations at the School of Forestry and Natural Environment, Aristotle University of Thessaloniki, GR and at the School of Design and Technology of Wood and Furniture, TEI Thessalias, Karditsa, GR) and our labs at the University AIDIMA: at the Politechnic Valencian University and the 12th InnovaWood Genera Assembly, (other copy shown at CONAMA 2014) GLUNZ: Display of German posters at public entrances of Glunz plants COSMOB: Fair held in Civitanova about innovators in Marche Region. Another one is about an important workshop held in Cosmob. KERIDIS: at their facilities <p>ATTH-LFU also made a specific poster in English providing information on the prototype Woodrub BRICKS. Exhibited at events (congresses/trade fairs) and their facilities: placed outside our labs at at the School of Forestry and Natural Environment, Aristotle University of Thessaloniki, GR and at the School of Design and Technology of Wood and Furniture, TEI Thessalias, Karditsa, GR)</p>	<p>Printed 5 copies by each poster. Not possible to quantify number of persons who has shown them.</p>
<p>Scientific papers at congresses, journals:</p> <ul style="list-style-type: none"> ▪ AUTH-LFU: 15th Panhellenic Forestry Conference "Multipurpose Forestry and climate change - protection and exploitation of natural resources", 16-19 October 2011. In Proceedings of the conference: Wood recycling in Europe Adamopoulos, S., Voulgaridis, E. and C. Passialis. 2011. ▪ AUTH-LFU: In proceedings of the Annual Meeting Prosylva Europe and 16th Panhellenic Forestry Conference "Properties of gypsum bonded solid bricks manufactured with recovered wood and rubber". Voulgaridis, E., Adamopoulos, S., Passialis, C., Foti, D. and E. Voulgaridou. 2013. Thessaloniki, Greece. ▪ AUTH-LFU: Technical dissemination paper at Tire Rubber Recycling Forum 2013: "Utilisation of Recovered Wood and Rubber for Alternative Composite Products (Woodrub)." Adamopoulos, S. Brussels, Belgium. 	<p>>150 participants from the academic community within the Greek forest products sector.</p> <p>>150 participants from the academic community within the Greek forest products sector.</p> <p>Industrial community within the European rubber sector, more than 50 participants</p>

Dissemination of Woodrub project website impact indicators

The indicators from Deep Log Analyze regarding the measurement of the impact of the project website from 27/01/2011 to the end of the project + the justification period 15/07/2014 are shown below:

- Number of hits: 297,541 (235 per day)
- Number of visits: 108,553 (86 per day, average duration of each visit 13:34 min)
- Number of unique visitors: 10,798, from which 40% repeated. Most visitors were from EEUU (25%).

Project: Woodrub		Deep Log Analyze	
Report for website: http://www.woodrub.com			
Web server logs imported: 27/01/2011 14:34:33 - 15/07/2014 7:43:25			
Report Date Interval: All Dates (1266 Days)			
General Information for selected dates			
Hits Summary		Total	Per Day
Number of Hits:	297,541	235	
Number of Successful Hits:	246,275 (83%)	195	
Outgoing Traffic:	0 Kb	0 Kb	
Incoming Traffic:	0 Kb	0 Kb	
Visits Summary		Total	
Number of Visits:	108,553		
Average Number of Visits per Day:	86		
Average Visit Duration:	13:34 Min		
Visitors Summary		Total	
Number of Unique visitors:	10,798		
Visitors who visited once:	6,459 (60%)		
Repeat visitors:	4,339 (40%)		
Average Visits per visitor:	10,05		
Most visitors from this Country :	United States (25% visitors)		
Page Views Summary		Total	Hits
Total Page Views:	249,433		
Most popular Pages:	/index.asp	36,170	
Most popular Download:	.../Brochure_Woodrub_ITA_red...	774	
Most popular Entry Page:	/index.asp	30,443	
Most popular Exit Page:	/index.asp	28,424	
Referral information			
Referral Summary		Hits	
Top Referring Website:		0	
Search Engines Summary		Hits	
Top Search Engine:		0	
Top Key Phrase:		0	
Spiders Requests:		33,998	
Technical information			
Technical Summary			
Most Popular Browser:	Mozilla or other Mozilla based 5.0		
Most Popular Operating System:	Windows XP		
Error Hits:	51,266 (17%)		
This report is generated by Deep Log Analyzer			



Dissemination of Woodrub project in events

Scope: R: regional, N: national, I: international

Place/Scope*	Event	Partner	Dates	IMPACT: N° Attendees or visitors	Type of dissemination
Madrid, Spain/ N	Congreso de Innovación Forestal	AIDIMA	December 14, 2010		Project presentation
Madrid, Spain/ N	The LIFE +Kick off meeting	AIDIMA	January 12, 2011	Around 70 LIFE project coordinators	Project presentation to other LIFE projects coordinators
Paterna, Spain/I	Area Demo "Workshop on LIFE projects" in ECOFIRA the International Fair for Water, Soil, Air, Wastes and Their Technologies and Services	AIDIMA	February, 18, 2011	>100 Professionals from the environmental sector	Project presentation
Pesaro, Italy/ I	ZeroCO2 event	COSMOB: event organizer AIDIMA: project presentation	20th May 2011	45 Professionals and academics from the Italian furniture and wooden sectors	Presentation of Woodrub project and dissemination at COSMOB website www.cosmob.it/notizie-ed-eventi/130-eventi-cosmob/621-zero2-emission-furniture-20-maggio-2011.html Italian press interview
Warsaw, Poland	5th Conference of the European Construction Technology	ACCIONA	October 4-5, 2011	Not available	Leaflets distribution
Karditsa, Greece.	15th Panhellenic Forestry Conference "Multipurpose Forestry and climate change - protection and exploitation of natural resources", www.wfdt.teilar.gr/15 th Panhellenic Forestry CONFERENCE/index.html	AUTH-LFU	16-19 October 2011	Academic community within the Greek forest products sector, >150 participants	In Proceedings of the conference: Adamopoulos, S., Voulgaridis, E. and C. Passialis. 2011. Wood recycling in Europe.
Milan – Italy	Salone del Mobile 2012	COSMOB	April 2012	More than 320.000 visitors	Distribution of leaflets
Zagreb – Croatia	Ambienta Fairs 2011	COSMOB	October 21th, 2011	Around 80 (Teachers, PhD students, Companies)	Project presentation and distribution of leaflets
Cardiff, UK	Meeting with the Composite Research Group	BRUNEL	November, 2011	Cardiff CRG is one of the world leading groups for natural fibre composites. Joint promotion for WOODRUB outcomes were discussed between two groups (23 group members attended the discussion)	Professor Fan exchanged 'Woodrub' results to national relevant parties for example to discuss the possible new type of WOODRUB product development.
Chesterfield, UK	Conference on 'Natural Aligned Fibres and Textiles for Use in Structural Composites - Natex'	BRUNEL	18th of April 2012	Natex conference attracted more than 60	Presentation of Woodrub project



Birmingham, UK	Composite Workshop A workshop to identify innovative composites for construction organized by the Netcomposites (NGCC: National Group for Composites in Construction)	BRUNEL	27th April 2012	people from composite and construction sectors. The 'Woodrub' presentations to these events have been well received, which not only extended the family of composite materials, but also provided environmental credits to the composite developments.	The outcomes of the Woodrub project were discussed in the workshop.
UK, several locations	Visit to several UK companies identifies as stakeholders.	BRUNEL	1.18 May 2012 2.8 May 2012 3.15 May 2012 4.1 June 2012	These companies are the major institutions in UK, who operate businesses internationally. The 'Woodrub' outcomes/knowledge developed in the project allow the companies much better understanding of the rubber and waste wood materials for possible value added application, especially for high volume construction application. This has not only provided some useful background information for the sectors, but also provided significant endorsement of confidence for these business sectors.	Personal interviews of Professor Fan and Mr Bartosz Weclawski with: 1. Charles Lawrence, to discuss possible fusion of car tyre for 'Woodrub' 2. Hatfield Recycling Ltd, to exchange the knowledge developed in the 'Woodrub' project and discuss how the waste wood can be used for 'Woodrub' composites 3. World Rubber Ltd., to exchange the project outcomes and needs for the rubber materials 4. Woodhorn Group, to discuss the 'Woodrub' project and its needs from rubber materials.
Paris, France/l	JCE Europe Composites show ~ conferences It represents, promotes and expands composites markets by providing global and local networking as well as information services.	ACCIONA	27-29 Mar 2012	JEC is the largest composites industry organization in Europe and in the world with a network of 250,000 professionals from 96 different countries.	Leaflets distribution
Brussels, Belgium/l	European Tyre Recycling Association (ETRA) 20th Conference	KERIDIS with collaboration of AUTH-LFU to prepare the material.	22 March 2013	>50 participants, mainly tyre recycling managers and scientists from all over Europe.	Project presentation
Rimini, Italy/l	16th International Trade Fair of Material & Energy Recovery and Sustainable Development. The	COSMOB	7-10 November 2012	Many companies (84,351 trade visitors) dealing with collection, management, disposal, treatment, recovery and	Distributed informative leaflets about WoodRub



	event is annually organized by Ecomondo, the most reliable platform in Southern Europe and in the Mediterranean area for the development and reuse of materials and more in general for the largest industry in the future, also called Green Economy			valorization of waste are involved during the period of the fair.	
Beijing, P.R. China	International Conference 'Nanotechnology for Composites'	BRUNEL	12-18 January 2013.	The conference was attended by more than 300 people from many countries.	Mizi Fan presented 'Woodrub' outcomes. And has the meantime made provisional collaborative discussion on the subject or possible technology take up in near future (especially for flooring product developments). This is to discuss the possible solution of using nanoscale of waste rubber and wood wastes for possible high value nano composites. The presentation was well received. One of these interested parties is the China Academy of Forestry, Wood Industry Research Institute (CAF). CAF has carried out significant developments on wood composite products, one of these is wood-rubber composites (especially for acoustics and impact resistance products).
Prague, Czech Republic/I	International conference " Application of structural fire engineering "	BRUNEL	April 19-20 2013	Around 200 people from construction industries and relevant research institutions. They are most interested in the new materials for fire resistance construction, and their novel design. Information of 'Woodrub' for a candidate material is well received.	This is an international conference on 'Structural performance of construction materials, their requirements ('Woodrub' as connections was presented)'. This is most relevant to potentially how can our 'Woodrub' products be used for construction applications, bearing in mind that 'Woodrub' potentially applicable for the structure connection due to its good fire and elasticity. The presentation was well received. Indeed this also communicated to other potential stakeholders for possible take up of our project outcomes.



Paterna, Spain /R	LIFE+ Networking Event	AIDIMA	May 2013	Around 50 persons from companies and technological researchers interested in LIFE programme	WoodRub project presentation
Tenerife, Spain/I	21st International conference on 'Composites and Nano Engineering'	BRUNEL	22-27 July, 2013	The ICCE-21 was attended by more than 500 people from many different countries. Wood-rubber composite was one of the many composite topics with the conference themes. The 'Woodrub' outcomes were well received, especially their potential application for infrastructures.	Presentation: 'Characterization and mechanics of natural fibre composites (part of it is wood-rubber composites)'
Fuzhou, P.R. China coorganised by China Academy of Forestry and Fujian Forestry University	Forestry Congress, Division 'Wood Based Composites'.	BRUNEL	12-19/9/2013	About 1800 people attended during 3 days conferences. This Forestry Congress was presented by many major experts around the world. Using wood wastes for value added products is one of the central topics discussed throughout the Congress. Our presentation was well received as our innovative technologies presented potential solutions for waste management	Presentation: 'Wood-Rubber bonding systems' Mizi Fan
Thessaloniki, Greece.	In Proceedings of the Annual Meeting Prosylva Europe and 16th Panhellenic Forestry Conference.	AUTH-LFU	6-9 October 2013	Academic community within the European forest products sector, more than 150 participants.	Technical dissemination paper: "Properties of gypsum bonded solid bricks manufactured with recovered wood and rubber". Voulgaridis, E., Adamopoulos, S., Passialis, C., Foti, D. and E. Voulgaridou. 2013.
Thessaloniki, Greece	16th Panhellenic Forestry Conference	AUTH-LFU	6-9 October 2013	More than 150 participants	Dissemination to the Greek academic community the leaflet in Greek.
Le Chatelain, rue du Chatelain 17, Brussels 1000, Belgium	Tire Rubber Recycling Forum 2013	AUTH-LFU.	November 19-20 2013	Industrial community within the European rubber sector, more than 50 participants, very positive feedback – great interested in our prototypes.	Technical dissemination paper: "Utilisation of Recovered Wood and Rubber for Alternative Composite Products (Woodrub)." Adamopoulos, S There was a very big interest in our prototypes and informed the participants for the final Valencia event. Some concerns and questions were related to odor, leaching and



					fire behavior of rubber.
Munich, Germany	EU Raw Materials meeting organized by the Forestry Technology Platform	BRUNEL	November, 2013	About 80 attendees In the meeting there was discussed future EU programmes, one of which is EU Raw Materials. Woodrub project is providing one of possible solutions for raw materials supply in Europe and its research outcomes are given as the background information. In fact, this activity has now fruited with the EU EIP on Raw Materials project, entitled 'Enhancing the cascade use of wood by integrating an intensified mobilisation of forest resources – ECAMOB'	Presentation of Woodrub project
London, UK	Grow2Build project meeting	BRUNEL	5th -16th May 2014 (After-Life)	16 attendees from 12 EU institutes. In addition to 'Grow2Build' meeting, these people are all involved in the low carbon materials for construction uses. 'Woodrub' outcomes are all relevant to their research and businesses and their clients.	Presentation of project outcomes
Paterna, Spain	Woodrub Final Conference held during the FIMMA-MADERALIA-HABITAT 2014 trade fair.	AIDIMA		25 professionals from the wooden and furniture sector	Project outcomes presentation

Educational activities

Partner: AIDIMA

1. Course: “Curso Piloto del certificado de profesionalidad: proyectos de carpintería y mueble” (Pilot course of professionalism certificate: carpentry and furniture projects) **15/11/2012**. At AIDIMA’s installations in Paterna, Valencia (Spain). Founded by: Consellería de educación, formación y empleo. 15 students.

Main objective: to capacitate workers of wood and furniture sector to obtain a certificate to validate their knowledge in design and development products of furniture sector. Ecodesign and life cycle assessment were introduced to these technical office workers, as important tools to develop less environmental impact products. Woodrub project, and specially WP related to LCA was explained as example of new recycled materials research.

2. Dr. Manuel Belanche, is professor of the Industrial Engineering School at the Valencian Polytechnic University (UPV). He trains about wastes management, and he included the Woodrub project as a practical case of research and innovation action focused on waste recycling, in their lessons to the students (20 students). Last updated was the **18th June, 2014**, so it can also be considered an **After-Life Communication action**.





Partner AUTH-LFU

Presentation of WOODRUB project (Objectives, Participants, Prototype woodrub products) in 110 undergraduate and post graduate students (50 undergraduate and 10 postgraduate students of the School of Forestry and Natural Environment, Aristotle University of Thessaloniki, GR and 50 undergraduate students in the School of Design and Technology of Wood and Furniture, TEI Thessalias,GR) - March 2014.

Partner: BRUNEL

The 'Woodrub' project and project outcomes have been presented in many other events, some of them include:

- ResCon Research student conferences on 18 June 2012; 160 students.
- ResCon research student conference on 24-26 June 2013; about 150 students.
- Postgraduate open days on 23 August 2012; around 60 students.
- Undergraduate open day on 24 June 2011; around 220 students.
- Undergraduate open day on 27th July 2013 around 350 students.

AFTER-LIFE DISSEMINATION PLAN

AIDIMA

Activities done from the project end date.

AIDIMA, as coordinator has followed its dissemination work after the project. Following activities have been done between the ends of the project to nowadays.

- **Spanish national environmental congress “CONAMA 2014: economía baja en carbono” (Low carbón economy).** 24-27 November, 2014, Madrid, Spain. Done together with the EIMA 2014 congress: “Encuentro Iberoamericano sobre desarrollo sostenible (Ibero-american congress on sustainable development)”
More than 6000 visitors from Spain and South America.
All the following disseminated material is also available at the congress website: www.conama2014.conama.or
 - Technical communications: Poster presentation



- Contribution to the Ecodesign working group work document with the output of Woodrub project as an ecodesign strategy in recycled materials.
- Ponence: BP1. “Avances recientes en materiales ecoinnovadores en el sector de la madera” (including Woodrub project). During the conference, some prototypes were presented to the audience (around 50 persons).



- **WOOD2GOOD conference. 2th October, 2014. Paterna, Spain.**
 Conference organized by AIDIMA and FEVAMA in the framework of Wood2Good project. The ponence of AIDIMA was about environmental strategies to the wood sector companies, and Woodrub outputs were included and explained and a recommendation to visit the Woodrub website was made. To the conference assist, industrials, wood technicians and local authorities.



- Workshop **“Mastalmond: ¿Cómo saber si cumplo los requisitos medioambientales aplicables a mi empresa?”**. Manuel Belanche, from AIDIMA, presented Woodrub Project outcomes in a LIFE project’s event, organized by AIJU (Ibi, Alicante), the **19th November, 2014**. Woodrub was shown as a case study on waste valorization to around 20 Valencian industries.



- Since the end of the project and from an initial contact at HABITAT 2014 Trade Fair with some **wooden and furniture companies** (see some names below). AIDIMA has corresponded their initial interest and has provided them some additional information on our materials and re-addressing them to the website where the video is available.
 - COMERPLAST
 - MOBILIARIO HERMDIDA
 - SYNTHELAST, S.A.
 - CREDOR
 - Rosa Roselló (Freelance)
 - INDUSTRIAS COSDMIC, S.A.U.
 - PLASFI
 - ADOSPROYECTOS
 - PESUPO GRUPO
 - ABSARA INDUSTRIAL

Besides, delivery of samples of material prototypes to one of them (Mobiliario Hermida) to their assessment focused to potential implementation into their products.

- AIDIMA has support with the proposal and further R&D tasks two Spanish companies (**Mobiliario Royo S.A. and Plásticos Viters S.A.**) **to develop a project during 2014 co-funded by the Valencian program:** Instrumento Financiero de I+D en Cooperación (Financial Instrument for R&D in cooperation). Project title (and aim) is: Desarrollo de nuevos paneles compuestos para mobiliario de baño mediante la utilización de residuos. (Development of new composite panels to bathroom furniture by using wastes).
- Contact with SIGNUS Ecovalor, the Spanish integrated management system organization regarding end of life tyres and their valorization options.
- Visits to AIDIMA. After the final conference at the HABITAT 2014 trade fair, the Woodrub dissemination stand used in that event is permanently exhibited at AIDIMA's hall with a selection of WOODRUB prototypes and the final poster. Woodrub outputs are explained to both, wooden sector companies and professionals, and also students. It is not possible to count how many individual companies visit AIDIMA, but the number of training events for companies of the wooden sector and the list of Educational Centers since March 2014 are and the number of attendees shown below:
 - Training events carried on at AIDIMA facilities: 21 with a total number of 280 professionals from wooden sector.
 - List of educational centers visits:

nº	FECHA	Nº VISITORS	EDUCATIVE CENTRE	GROUP
3*	12/03/2014	15	B&S FORMACIÓN	INSTALACIÓN DE MUEBLES
4	16/04/2013	14	B&S FORMACIÓN	CARPINTERIA Y MUEBLE
5	06/05/2014	16	CIPFP CATARROJA	TECNICO SUPERIOR EN DISEÑO Y AMUEBLAMIENTO
6	20/06/2014	15	ESCUELA DE DISEÑO ELISABA DE BARCELONA	MASTER DE DISEÑO DE MOBILIARIO
7	10/07/2014	12	AYTO. PATERNA	DELEGACIÓN CHINA
8	25/09/2014	30	CENTRO SERVEF DE PATERNA	CURSO MECANIZADO DE MADERA Y DERIVADOS
9	20/11/2014	20	UNIVERSIDAD DE VALENCIA	ESCUELA DE ARTE
10	01/12/2014	22	UPV	INGENIERÍA FORESTAL
11	21/01/2015	17	B&S FORMACIÓN	CARPINTERIA Y MUEBLE
Total visits: 9		163	8 CENTRES	

*Thought this visit was made during the last justification period, it was not included in previous justification. So, it is considered in After-Life communication plan.

Pictures from one of the professional training events:



Picture from one of the educational visits:



- AIDIMA published in YOUTUBE the Woodrub video in the 5 edited languages in the long (around 4 and half minutes) and also in Spanish the short one (less than 1 minute). Number of visualizations it is also a measure on the impact of all the other dissemination activities.

Dissemination Woodrub videos	Impact: nº copies/visualizations
Long Spanish version published 20 th May 2014 https://www.youtube.com/watch?v=lbgRZogEFLM	351 visualizations
Short Spanish version published 20 th May 2014 https://www.youtube.com/watch?v=vy56VQw093o	147 visualizations
Long English version published 20 th May 2014 https://www.youtube.com/watch?v=lbgRZogEFLM	227 visualizations
Long German version published 20 th May 2014 https://www.youtube.com/watch?v=M6OZJb-eEOM	62 visualizations
Long Italian version published 20 th May 2014 https://www.youtube.com/watch?v=tEwEgQjKb_M	40 visualizations
Long Greek version published 20 th May 2014 https://www.youtube.com/watch?v=YXk9cqdNJPw	5 visualizations

Publication of an article summarizing project outputs at Spanish level in following media (document yet included in documentation additional to final report):

- AIDIMA ECOBOLETÍN – **52, May 2014**
- AIDIMA Informa – **72, July 2014**

Future planned activities.

Besides is going to be sent in following days the AIDIMA's publication Flash Tecnológico 2014 – **February 2015**, a summary of 2014 technical new and advances with several references to Woodrub project).

AIDIMA has developed these dissemination activities with their own resources as part of its commitment with the LIFE program and plans to follow with them in a future:

- Explanations of the project to visitors, professionals and students
- Contact with wooden and furniture companies to introduce the new materials into the market.
- Also during the realization of other dissemination events (workshops and trade Fairs) AIDIMA will follow their dissemination.

Other kind of activities would need some additional funding, but AIDIMA is looking for that to follow the development of recycled panels. Examples of new actions in a near future are:

- FIMMA-MADERALIA-HABITAT 2015 Trade Fair.
Manuel Belanche, from AIDIMA will present Woodrub outcomes in the workshop “Nuevos Materiales y sus aplicaciones: Materiales Inteligentes, funcionales y sostenibles” with the presentation “Materiales compuestos en el hábitat” (Composite materials in the habitat).
http://www.nosvemosvalencia.com/event/nuevos-materiales-y-sus-aplicaciones-materiales-inteligentes-funcionales-y-sostenibles/?instance_id=530
See attached programe.
- It is planned to write two technical articles in next years to be published in sectorial media and/or scientific journals.
- AIDIMA has received a proposal of potential collaboration with the Polytechnic University of Valencia. Dr.Manuel Lecuona is responsible of Dept. of Drawing at the School of Design Engineering, specialized in research and management of design. The proposal is under consideration and would consist in the production by AIDIMA of Woodrub materials to be used by the design students in their product development projects.

ACCIONA-AIDIMA

Activities done from the project end date.

- Workshop on Diffusion of Waste Related Technologies (see attached PDF document).
Distribution of some Woodrub Project leaflets. Published at: EL MUNDO (INNOVADORES) 29/05/14. MADRID Printed copies: 289.449 copies; Dissemination: 206.007 copies

AUTH-LFU

Activities done from the project end date.

AUTH-LFU presented their results on woodrub bricks, after the end of the project, in the COST Action FP1303 International Conference, in Slovenia, 23-24 October 2014, as shown below: Adamopoulos, S., Voulgaridis, E. and C. Passialis. 2014. Gypsum-based bricks (WoodRub BRICKS) manufactured from recovered wood and rubber. Poster presented at the 1st Conference of COST Action FP1303: Performance and maintenance of biobased building materials influencing the life cycle and LCA, 23-24 October, Kranjska Gora, Slovenia. Book of abstracts, p. 33-34 (see attached pdf).

Future planned activities.

The Partner AUTH-LFU is going to continue the research work on Woodrub bricks in order to improve their properties and to forward them to a pilot plant production. These future activities are going to include:

1. Preparation of a paper with our results on the experimental Woodrub bricks to be published in international scientific journal.
2. Contacts with companies of recycling paper or rubber that are interested to re-use their by-products (textile materials from rubber recycling companies, recycling and re-use paper residues) for production of bricks for interior structures.
 - a. We have already visit a rubber recycling company (Retire A.B.E.E., Drama, GR) which is interested to re-use the textile material produced from the rubber recycling processes.
3. Planning of our research work: Use of textile material, as it is produced from rubber recycling companies before and after sieve screening in order to use fractions > 4 mm and <4 mm, in three proportions (10%, 20% and 30% by weight) with gypsum, to produce experimental bricks for interior purposes. Use, also, of small paper particles (4 mm X 18 mm) from newspapers, in three proportions (10%, 20% and 30% by weight) with gypsum. Assessment of mechanical and other properties of the products (bricks).
4. Financing of research work: There is a need of financing the above mentioned research work and to buy some laboratory equipment. We try to submit research proposals on national level and to collaborate with rubber/paper recycling companies to provide the necessary experimental material and to support our research.

KERIDIS

Future planned activities.

Keridis will collaborate with AUTH-LFU in further dissemination events, and will keep their contact with ETRA and client companies offering them information on alternative applications of materials and products containing the recovered rubber granulate that they produce.

BRUNEL

Activities done from the project end date.

After-Life communication plan from Brunel University will mainly include:

1. Brunel project team will continue to disseminate the 'Woodrub' outcomes/results, without extra costs from EU, to national and international relevant events. For example, Brunel has so far presented some of the extended 'Woodrub' results to following international conferences:
 - i) **34th Annual Cement and Concrete Science Conference, 14 -16 September 2014, Sheffield, United Kingdom;**
 - ii) **Structure, Materials and Construction Engineering Conference (CONST ENG'14), 20 – 22 November 2014, DAKAM-Istanbul, Turkey;**
 - iii) **8th International Conference on Materials Science and Technology (MSAT-8), 15 - 16 December 2014, Bangkok, Thailand.**
2. The next international dissemination will be for the Professor Fan to present some of 'Woodrub' outcomes to the **23rd International Conference on COMPOSITES/NANO ENGINEERING (ICCE-23) on July 12-18, 2015 Chengdu, China.**
3. Brunel is currently considering using the rubber and wood wastes for the extended application for construction products. Some of the knowledge/experience developed in 'Woodrub' project is to be used for the new EU project, such as 'RubWPC'.
4. Brunel is also working with a leading UK company (Ecodek) on WPC to consider using waste wood and rubber as the raw materials for their products.

Future planned activities.

1. Brunel plan to publish at least 2 scientific papers on rubber-wood composites in next 2 years to international scientific journals, such to extend the impact of the 'Woodrub' project outcomes across the world.
2. Brunel will continue to exchange the 'Woodrub' project outcomes to the relevant rubber and wood wastes companies, make them aware of potential utilisation of these waste as raw materials for construction applications, and the technologies for converting the wastes as value added products.

COSMOB

Activities done from the project end date.

- Fair for innovators held in Civitanova (Marche Region) June, 2014. See attached pdf.



- Dissemination event held in Udine November, 2014. Giovanni Tossi from COSMOB spoke about WoodRub Project. See attached programme. The innovation conference was organized by Federlegno, the Italian association of stakeholders of the wood-furniture sector. See link of the event' site explaining that WoodRub was selected among other ideas about new materials and other, thanks to its innovative aspects. The public target was composed by about 200 people belonging to the most famous Italian companies producing furniture and wood-based panels, beyond policy makers and journalists.
<http://www.federlegnoarredo.it/it/federazione/eventi/forum-dell-innovazione-del-legno-arredo/2014/elevator-pitch-le-10-innovazioni>



In this sense, COSMOB confirm their commitment in participating to all the events during which we can explain the results of WoodRub (at this moment we have not a detailed plan of future events).

Dissemination of Woodrub project website impact indicators

The indicators from Deep Log Analyze regarding the measurement of the impact of the project website until 03/02/2015 and increment after the project end (July) are shown below:

- Number of hits: 365,794 (199 per day). Increment since end of the project: **68,253 hits**
- Number of visits: 140,645. Increment since end of the project: **32,092 visits**
- Number of unique visitors: 13,532 Increment since end of the project: **2,734 visitors**

Project: Woodrub		Deep Log Analyzer	
Report for website: http://www.woodrub.com			
Web server logs imported: 27/01/2011 14:34:33 - 03/02/2015 9:05:33			
Report Date Interval: 27/01/2010 - 03/02/2015 (1834 Days)			
General Information for selected dates			
Hits Summary		Total	Per Day
Number of Hits:	365,794	199	
Number of Successful Hits:	314,528 (86%)	171	
Outgoing Traffic:	0 Kb	0 Kb	
Incoming Traffic:	0 Kb	0 Kb	
Visits Summary		Total	Per Day
Number of Visits:	140,645	77	
Average Number of Visits per Day:			
Average Visit Duration:		13:08 Min	
Visitors Summary		Total	Per Day
Number of Unique visitors:	13,532		
Visitors who visited once:	8,113 (60%)		
Repeat visitors:	5,419 (40%)		
Average Visits per visitor:	10,39		
Most visitors from the Country :	United States (24% visitors)		
Page Views Summary		Total	Per Day
Total Page Views:	309,041		
Most popular Page:	/index.asp	50,182	
Most popular Download:	.../Brochure_Woodrub_ITA_red...	872	
Most popular Entry Page:	/index.asp	43,489	
Most popular Exit Page:	/index.asp	41,148	
Referral Information			
Referral Summary		Hits	
Top Referring Website:		0	
Search Engines Summary		Hits	
Top Search Engine:		0	
Top Key Phrase:		0	
Spiders Requests:		57,864	
Technical Information			
Technical Summary		Total	Per Day
Most Popular Browser:	Mozilla or other Mozilla based 5.0		
Most Popular Operating System:	Windows XP		
Error Hits:	51,266 (14%)		
This report is generated by Deep Log Analyzer			

ANNEXES

AIDIMA: CONAMA 2014

CONAMA2014

DEL 24 AL 27 DE NOVIEMBRE DE 2014 | MADRID

ACCESO USUARIOS

PRESENTACIÓN
FONDO DOCUMENTAL
EXPOSICIÓN
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Consulta las Comunicaciones Técnicas

Conoce los distintos proyectos que nos llegan a través de las comunicaciones técnicas escritas y/o formato póster al Conama 2014. A través de este buscador podrás consultar fácilmente esta información que recoge el trabajo que distintas instituciones están realizando a favor de la sostenibilidad.

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978-84-697-2060-8

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Tecnología e innovación

Tipo de comunicaciones:

Buscar

1 comunicaciones técnicas encontradas con el criterio de búsqueda Búsqueda: woodrub

1-1 de 1 comunicaciones Ver: 20

Título	Autor	Institución	Documento
WOODRUB, utilización de residuos de madera y caucho en materiales compuestos alternativos			Doc. Panel
Belanche Parido, Manuel Ignacio			
AIDIMA			

Patrocinadores

www.conama2014.org

Video

CONAMA2014 DEL 24 AL 27 DE NOVIEMBRE DE 2014 |

PRESENTACIÓN FONDO DOCUMENTAL EXPOSICIÓN IBEROAMÉRICA GREENJOBS FINANCIACIÓN

Actividades Personas Instituciones Documentos Comunicaciones técnicas Galería

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Energía Biodiversidad Territorio y D. Rural Sociedad

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Economía Agua Tecnología e innovación

Tipo de actividad: Actividad:

Tipo de documentos:

20 documentos encontrados con el criterio de búsqueda , GT-15, Grupos de Trabajo

1-20 de 20 documentos 1 Ver: 20

Tipo	Título	Autor	Institución	Documento	Actividad
Ponencia	BP1. Avances recientes en materiales ecoinnovadores en el sector de la madera	Boquera Tovar, Patricia	Instituto Tecnológico de Madera, Muebles, Embalaje y Afines (AIDIMA)	Presentación	GT-15
				Presentación	

ANNEX: AIDIMA-ACCIONA dissemination After - Life.

- New on newspaper: El mundo 2014. Attached pdf.
- Programme Technical Workshops at FIMMA-MADERALIA 2015 TRADE FAIR.

ANNEXES: BRUNEL dissemination during the project.

Consider attached documents also in response to Brunel financial requirements.

- Forestry Congress. Attached pdf.
- Nano Technology for Composites. Attached pdf.
- ICCE21 Fan Rubber. Attached pdf.

ANNEXES: COSMOB dissemination After - Life.

- Programme Civitanova
- Programme Forum DEF.

ANNEXES: AUTH-LFU dissemination After - Life.

- COST Action FP1303 International Conference, in Slovenia.