Construction Industry Applications using Recycled Materials

CIARM

The 30 month CIARM project allows the co-ordinator C2M (UK) Ltd to create the first true 100% recycled construction board from recycled waste. The Recycled Glass Hybrid (R.G.Htm) board will be produced by a new manufacturing facility based in the UK. The project partners will aim to exhibit the unique properties of the R.G.Htm board across Europe with demonstrations of the material and its applications. The project will use 144 tonnes of combined waste producing boards with a carbon footprint of 278g C02e compared to 12,000g CO2e for current plasterboards. However, once the board is validated, the company has the ability to make a serious impact on the current waste stream in the next five years. The company also intends to license the manufacturing process allowing partner countries to produce the boards using their own waste, thus reducing the carbon footprint further. The project once concluded will provide each partner with an opportunity to exploit the need within the building trade for green alternatives, thus allowing each company to flourish creating jobs and wealth across the European Union. A continuous improvement program will ensure the best results for the project.

Benefits

This project offers the building industry with the first construction board produced from 100% recycled waste, allowing the waste stream to be reduced

Results

- Successful production of comparative building boards from the new material RGHtm
- Validation of the material with accreditation for use within the construction industry
- To demonstrate the material and its applications throughout the partner countries and the EU
- Turn a waste into a resource by processing 4830T pa in year 4 of recycled waste into RGHtm
- Achieve a market share of 0.5% by year 5 of the EU plasterboard market with the RGHtm board

Partners and coordinator

<table>
<thead>
<tr>
<th>Partner</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2M(UK)Ltd</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UB2 Ltd</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>VEPLAR SAS VEPLAR</td>
<td>France</td>
</tr>
<tr>
<td>Construction Engineers General Partnership</td>
<td>Greece</td>
</tr>
</tbody>
</table>

[1] [2] [3] [4]
Contact

C2M(UK)Ltd
Website: [http://www.c2muk.co.uk](http://www.c2muk.co.uk)
Gear House, Saltmeadows Road
Gateshead
Northumberland and Tyne and Wear
NE8 3AH
United Kingdom

Contact point

Name: Mr. Gary Thompson
E-mail: gary@c2muk.co.uk
Tel: +44 (0)808 186 4827

Budget

Overall budget: 1.547.204,00 € (EU contribution: 50,00 %)

Key documents

- [Project Fact File](http://www.c2muk.co.uk/ciarm.html) [6]

In brief

Sector: Buildings and Construction
Duration: 01/12/2011 to 31/07/2014
Contract number: ECO/10/277341
Website: [http://www.c2muk.co.uk/ciarm.html](http://www.c2muk.co.uk/ciarm.html)

Tags:

- building
- recycling

Related projects

- [BACOM](http://www.c2muk.co.uk/ciarm.html) [7] BACOM - SUSTAINABLE PRODUCTION OF COMPOSITE CONSTRUCTION MATERIALS
- [ECBP](http://www.c2muk.co.uk/ciarm.html) [8] ECBP - ECOLABELLED CHEMICAL BUILDING PRODUCTS. NEW ADHESIVES FOR WOOD-
- [EAMT](http://www.c2muk.co.uk/ciarm.html) [9] ECO ALTERNATIVE MORTAR THERMIC
- **ECOWALL** [20] - NOVEL COMPOSITE CONCRETE INSULATED BUILDING MATERIALS OPTIMISED
- **INSULATFH** [12] - Enhanced insulation in timber-frame housing using recycled materials
- **EUROCELL** [13] - EU market development of MODCELL: a prefabricated eco-building system...
- **GREENPIPE** [14] - Green trenchless drinking water pipe replacement
- **ECOPLASBRICK** [15] - Innovative recycled plastic based panels for building field
- **ECO2BUILDING** [16] - Market development for industrial eco2buildings in passive-house quality...
- **REBRICK** [17] - Market uptake of an automated technology for reusing old bricks
- **REWASTEE** [18] - Recycling steel making solid wastes for added value Energy Efficiency...
- **RubPWC** [19] - Rubber Fusion of Wood Plastic Composite to Make Functional Composites for...
- **SSLC** [21] - Strengthening the market uptake of the Super-Light Deck for concrete...
- **SUSTCON-EPV** [21] - Sustainable Concrete. Environmental Performance Verified
- **WAP-WIR** [22] - WAP-WIR - WALL PANEL WITHOUT RESIN - REPLACEMENT OF POLYESTER RESINS,...


Links