

## Cycle Assessment Procedure for Eco-Materials

(FR) Création et Développement des Eco-Entreprises (CD2E)

Start 01 Jan 2008

End 30 Sep 2014

1 - Capitalising on innovation (1.1)

Grant rate

50.00 %

Match funding

4,546,261.85

ERDF

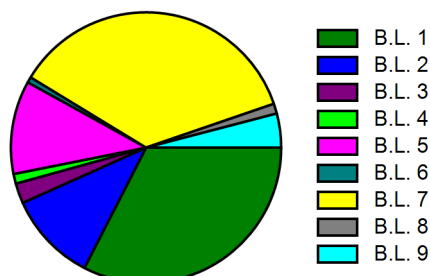
4,546,261.85

Total eligible

9,092,523.70

Budget line	Total	%
1 Partner staff	2,959,112.60	32.54 %
2 External experts	978,385.44	10.76 %
3 Travel and accommodation	218,630.92	2.40 %
4 Meetings	106,143.01	1.17 %
5 Publicity	1,013,311.75	11.14 %
6 Equipment	61,642.32	0.68 %
7 Investments	3,277,543.61	36.05 %
8 Audit cost	108,450.12	1.19 %
9 Admin cost	369,303.93	4.06 %

Total Budget

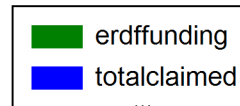
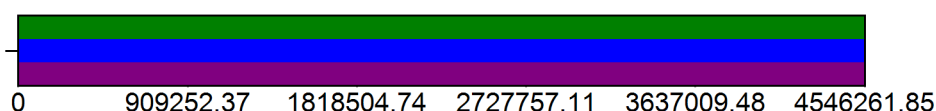


Total paid

4,546,261.86

Total claimed:

4,762,064.02



## Project summary description

The aim of the CAP'EM project is to contribute to increase the manufacture, distribution and use of eco-materials in the building industry of North West Europe (NWE), by allowing better demonstration of their benefits. The definition of "eco-materials" is directly linked to eco-designed materials which lead to improve economic and technical performance as well as environmental and health impacts. Through an international investigation, made by Ernst & Young for Cd2e in 2006 to identify why eco-materials were more developed in Northern Countries, and what were in these countries the barriers and the ways to create, develop and promote their specific markets, it appeared that different characteristics and approaches were used. Each approach has interests or specific regional / national characteristics. developing these products and ways of use them will gain from being benchmarked and more commonly promoted and tested through identical ways.

Since eco-materials are widely recognized in many others major sectors of production as electronics, the use of eco-materials terminology to verify low environmental impacts is not well developed in the building sector in Europe. CAP'EM project will begin working on the dissemination of a common definition for eco-material, shared by the major actors involved in eco and low energy building sector in NWE, both for new and renovation buildings. The project will capitalize on those materials presumed as "eco-materials" available in the areas covered by the partners involved in the project ; these materials will be analysed through a common methodology which will allow assessment of their real impacts. In order to foster their business in NWE construction public and private building sector, broad information and demonstration of the performances of the most relevant eco-materials will then be achieved.

Institution	Legal status	C-try	Eligible	ERDF	Match funding	NWE
<a href="#">1. Création et Développement des Eco-Entreprises (CD2E)</a>	Non-Profit Organisation	FR	2,817,116.99	1,408,558.50	1,408,558.50	Y

Investments for partner 1 (18.31% of total investments)

No	Description	Inv. code	Total	Paid
1	Computer software	WP1I1	100,000.00	97,106.54
2	Demonstration building (FR)	WP4I2	500,000.01	478,626.26
			600,000.01	575,732.80

<a href="#">2. Association of Community Rail Partnerships (ACORP)</a>	Non-Profit Organisation	UK	732,714.00	366,357.00	366,357.00	Y
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Investments for partner 2 (16.43% of total investments)

No	Description	Inv. code	Total	Paid
3	Demonstration building (UK)	WP4I3	538,500.00	857,100.25
			538,500.00	857,100.25

<a href="#">3. Business Support Kent (BSK)</a>	Regional Public Authority	UK	1,363,097.35	681,548.68	681,548.68	Y
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Investments for partner 3 (16.20% of total investments)

No	Description	Inv. code	Total	Paid
4	Demonstration building (UK)	WP4I4	531,000.00	677,854.57
			531,000.00	677,854.57

<a href="#">4. De Groene Stee (DGS)</a>	Private Enterprise	NL	124,561.83	62,280.92	62,280.92	Y
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Investments for partner 4 (% of total investments)

No	Description	Inv. code	Total	Paid
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<a href="#">5. Cluster Eco-Construction</a>	Non-Profit Organisation	BE	0.00	0.00	0.00	Y
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Investments for partner 5 (% of total investments)

No	Description	Inv. code	Total	Paid
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<a href="#">6. Globe 21</a>	Non-Profit Organisation	FR	260,405.80	130,202.90	130,202.90	Y
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Investments for partner 6 (0.85% of total investments)

No	Description	Inv. code	Total	Paid
6	Demonstration showroom (FR)	WP4I6	27,893.60	65,720.37
			27,893.60	65,720.37

<a href="#">7. Handwerkskammer - Münster (HWK)</a>	Local Public Authority	DE	1,120,856.76	560,428.38	560,428.38	Y
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Investments for partner 7 (23.98% of total investments)

No	Description	Inv. code	Total	Paid
7	Demonstration building (DE)	WP4I7	785,999.99	1,414,269.51
			785,999.99	1,414,269.51

<a href="#">8. Stichting Viba Expo (SVE)</a>	Private Enterprise	NL	0.00	0.00	0.00	Y
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Investments for partner 8 (0.00% of total investments)

No	Description	Inv. code	Total	Paid
8	Demonstration building (NL)	WP4I8	0.00	0.00
			0.00	0.00

<a href="#">9. Vlaams Instituut voor Bio-Ecologisch bouwen en wonen (VIBE)</a>	Non-Profit Organisation	BE	1,505,642.97	752,821.49	752,821.49	Y
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Investments for partner 9 (17.24% of total investments)

No	Description	Inv. code	Total	Paid
5	Demonstration showroom (BE)	WP4I5	50,000.00	0.00
9	Demonstration building (BE)	WP4I9	515,180.01	1,645,777.28
			565,180.01	1,645,777.28

<a href="#">10. STICHING AGRODOME</a>	Non-Profit Organisation	NL	968,465.00	484,232.50	484,232.50	Y
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Investments for partner 10 (6.99% of total investments)

No	Description	Inv. code	Total	Paid
10	Demonstration building (NL)	WP4I10	228,970.00	405,893.02
			228,970.00	405,893.02

<a href="#">11. National Green Specifications Ltd</a>	Private Enterprise	UK	199,663.00	99,831.50	99,831.50	Y
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Investments for partner 11 (% of total investments)

No	Description	Inv. code	Total	Paid
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## WorkPackages

No.	Title	Start date	End date	Budget
1	Development of assessment procedure and methodology	01 Sep 2008	01 Jul 2011	772,864.51
2	Evaluation of identified available eco-materials	01 Jan 2009	01 Apr 2012	1,272,953.32
3	Dissemination of knowledge on eco-materials among professionals	01 Jan 2010	01 Dec 2012	1,454,803.79
4	Demonstration and follow-up of the use of eco-materials in NWE	01 Jan 2009	01 Dec 2012	4,091,635.66
5	Interlinking CAPEM with national Life Cycle tools and databases	01 Sep 2013	01 Jul 2014	545,551.42
6	Establishment of a CAP'EM Environmental Product Declaration (EPD) Programme	01 Sep 2013	01 Aug 2014	545,551.42

Outputs	Start Date	End Date	Budget
<b>WP 1 - Development of assessment procedure and methodology</b> <ul style="list-style-type: none"> <li>• State-of-art of simplified LCA methodologies among the partners</li> <li>• Harmonized definitions of eco-material and eco-construction</li> <li>• Harmonized assessment procedure (methodology, tool and database)</li> <li>• Computer software specifications</li> <li>• 30 reference eco-materials</li> <li>• Validated computer software</li> <li>• Validated assessment procedure for identification of materials as eco-materials</li> <li>• Installed computer software (Excel sheet)</li> </ul>	01 Sep 2008	01 Jul 2011	772,865
<b>WP 2 - Evaluation of identified available eco-materials</b> <ul style="list-style-type: none"> <li>• At least 100 selected eco-materials to be evaluated</li> <li>• Requested datas (technical, financial, economic, environmental and health informations) for at least 100 selected eco-materials</li> <li>• Simplified LCA results for at least 100 selected eco-materials</li> <li>• Ranking classification of at least 100 evaluated eco-materials</li> <li>• Markets features for at least 100 evaluated eco-materials</li> </ul>	01 Jan 2009	01 Apr 2012	1,272,953
<b>WP 3 - Dissemination of knowledge on eco-materials among professionals</b> <ul style="list-style-type: none"> <li>• Communication strategies designs towards manufacturers, retailers, users and advisers</li> <li>• Communication strategies specifications towards manufacturers, retailers, users and advisers</li> <li>• Communication strategies documents towards manufacturers, retailers, users and advisers</li> <li>• Communication strategies objects towards manufacturers, retailers, users and advisers</li> </ul>	01 Jan 2010	01 Dec 2012	1,454,804

Outputs	Start Date	End Date	Budget
<p>WP 4 - Demonstration and follow-up of the use of eco-materials in NWE</p> <ul style="list-style-type: none"> <li>• Design and specifications of demonstration buildings, including the demonstration showrooms</li> <li>• Organized demonstration network of five represented member states</li> <li>• Booklet of the eco-materials demonstration network</li> <li>• Transnational building sites visit reports</li> </ul> <p>local level actions :</p> <ul style="list-style-type: none"> <li>- One day per week will be dedicated to consciousness raising and communication on eco-materials / eco-construction / energy savings to final users, in link with public communities.</li> <li>- One thematic “technical” event for professionals will be organised each month by each partner. One other partner will be invited to attend the event. Transnational exchange of know how, expertise, technologies and knowledge on eco-materials will then be shared permanently. .</li> <li>- a specific demonstration show will be organised every two months in each demonstration center: the focus will be on the “way to use” a specific “eco-material”.</li> </ul> <p>transnational actions :</p> <ul style="list-style-type: none"> <li>- An international scientific conference will be organised twice a year, in the framework of CAPEM project, each time in a different place. A call for papers will be organised 6 months before, at European and international level.</li> <li>- Realtime assessment of technical performance : CAPEM partners will update regularly the official CAPEM project website by bringing information concerning hydrothermal characteristics of the walls, ceilings, floors of the different demonstration buildings using eco-materials selected in the CAPEM project.</li> <li>- Newspaper specialised articles: during and after the CAPEM project, newspaper articles will be proposed to the specialised press. The aim is to reach mid and final users, and also professionals. Specialised and conventional press will be mobilised. A focus on one eco-material selected by CAPEM project or a group of eco-materials will be proposed in partnership with specialised press on eco-construction.</li> </ul>	01 Jan 2009	01 Dec 2012	4,091,636
<p>WP 5 - Interlinking CAPEM with national Life Cycle tools and databases</p> <p>1 benchmark of LC tools for the building industry in the UK, France, Belgium and the Netherlands</p> <p>Partnerships with 8 organisations (2 in each participating country: UK, France, Belgium, the Netherlands)</p> <p>8 recalculation methods developed and approved by partners</p> <p>80 regional references for eco-materials (at least 10 materials in each tool/database)</p> <p>CAP'EM Building Product Comparison System enhanced to include end of life data (“gate to grave”)</p> <p>“Gate to grave” data included for 20 pilot materials in the CAP'EM Building Product Comparison System</p> <p>1 transnational event with 150 participants</p>	01 Sep 2013	01 Jul 2014	545,551
<p>WP 6 - Establishment of a CAP'EM Environmental Product Declaration (EPD) Programme</p> <p>Internationally recognised CAP'EM EPD Programme Operator Established</p> <p>General Programme Instructions developed and approved</p> <p>Product Category rules developed and approved</p> <p>20 EPDs produced</p>	01 Sep 2013	01 Aug 2014	545,551

## Investments

[Show Investment\(s\) Gantt chart](#)

No.	Title	Code	P. No.	WP	Start date	End date	Total
1	Simplified LCA computer software for eco-materials	WP1I1	1	1	01 Feb 2009	01 Oct 2011	100,000.00
2	Renovated demonstration building in Northern France	WP4I2	1	4	01 Jan 2010	01 Dec 2012	500,000.00
3	Renovated demonstration building in UK (North)	WP4I3	2	4	01 Jan 2010	01 Dec 2012	538,500.00
4	New demonstration building in UK (South)	WP4I4	3	4	01 Jan 2009	01 Dec 2012	531,000.00
5	Renovated demonstration building in Belgium (Wallonia)	WP4I5	9	4	01 Jan 2010	01 Dec 2012	50,000.00
6	Showroom in Picardie Region	WP4I6	6	4	01 Jan 2009	01 Dec 2012	27,893.60
7	Renovated demonstration building in Germany	WP4I7	7	4	01 Sep 2009	01 Dec 2012	786,000.00
8	Renovated demonstration building in The Netherlands	WP4I8	8	4	01 Jan 2010	01 Dec 2010	0.00
9	New demonstration building in Belgium (Flanders)	WP4I9	9	4	01 Jan 2009	01 Dec 2011	515,180.00
10	Movable and permanent eco-materials exhibition in the Netherlands	WP4I10	10	4	01 Oct 2010	31 Dec 2012	228,970.00

# Action Plan

[Show Action Plan Gantt chart](#)

No	Name	Start date	End date	WP
1	Presentation of existing methodologies / benchmark	01 Jan 2009	01 Mar 2010	1
2	Discussion and design of procedure (definitions, methodology, tool and database)	01 Mar 2009	01 May 2011	1
3	Specification of simplified LCA computer software	01 May 2009	01 Nov 2010	1
4	Selection of 30 reference known eco-materials	01 Jul 2009	01 Jun 2010	1
5	Testing and setting of computer software with 30 reference eco-materials	01 Sep 2009	01 Jul 2011	1
6	Testing and setting of assessment procedure with 30 reference eco-materials	01 Nov 2009	01 Jul 2011	1
7	Selection of 150 eco-materials for all construction systems properly covering the 5 member states	01 Sep 2009	01 Nov 2010	2
8	Critical collection of requested data for 150 eco-materials	01 Sep 2009	01 Dec 2011	2
9	Evaluation of 150 eco-materials	01 Jan 2010	01 Dec 2011	2
10	Classification of 150 eco-materials	01 Jun 2010	01 Feb 2012	2
11	Market approach for 150 eco-materials	01 Jul 2010	01 Apr 2012	2
12	Design and specification of communication strategy - manufacturers	01 May 2010	01 Jun 2010	3
13	Design and specification of communication strategy - retailers	01 May 2010	01 Jun 2010	3
14	Design and specification of communication strategy - users	01 May 2010	01 Jun 2010	3
15	Design and specification of communication strategy - advisers	01 May 2010	01 Jun 2010	3
16	Implementation of communication strategy - manufacturers	01 Jul 2010	01 Dec 2012	3
17	Implementation of communication strategy - retailers	01 Jul 2010	01 Dec 2012	3
18	Implementation of communication strategy - users	01 Jul 2010	01 Dec 2012	3
19	Implementation of communication strategy - advisers	01 Jul 2010	01 Dec 2012	3
20	Design and specification of demonstration buildings	01 Jan 2009	01 Jun 2011	4
21	Implementation of the demonstration network	01 Jan 2010	01 Dec 2012	4
22	Transnational visits to the building sites at various stages	01 Jan 2010	01 Dec 2012	4
23	BENCHMARK AND PARTNERSHIP WITH LIFE CYCLE DATABASES AND LIFE CYCLE CALCULATION TOOLS FOR THE BUILDING INDUSTRY IN NORTH WEST EUROPE	01 Sep 2013	01 Dec 2013	5
24	ADAPTATION OF CAP'EM DATA FOR INCORPORATION IN THE PARTNERS' TOOLS	01 Dec 2013	01 Jul 2014	5
25	EXTENSION OF THE CAP'EM BUILDING PRODUCT COMPARISON SYSTEM WITH 'GATE-TO-GRAVE' DATA AND BESPOKE ADAPTATION TO EACH REGIONAL TOOL.	01 Feb 2014	01 Jul 2014	5
26	TRANSNATIONAL LIFE CYCLE IN BUILDINGS EVENT	01 Apr 2014	01 Jul 2014	5
27	ESTABLISHING A PROGRAMME OPERATOR	01 Sep 2013	01 Dec 2013	6
28	PRODUCTION OF A GENERAL PROGRAMME INSTRUCTIONS (GPI)	01 Dec 2013	01 Apr 2014	6
29	DEVELOPMENT OF PRODUCT CATEGORY RULES (PCRS)	01 Apr 2014	01 Jun 2014	6
30	PRODUCTION OF EPDS FROM CAP'EM DATA	01 May 2014	01 Aug 2014	6

