



Key Achievements

ESCP-4i Name and acronym: *European Circular Construction Alliance- ECCA*

Partners:

- *CONSTRUCTION CLUSTER OF SLOVENIA, Slovenia*
- *SEANERGIA Baltic Cluster, Poland*
- *Cluster Construcción Sostenible, Spain*

Summary of key achievements:

The main objective of the European Circular Construction Alliance (ECCA) project was to establish a meta-cluster to collaborate for innovation and internationalization of products, services and technologies in the field of circular construction. A preliminary review showed that European clusters and their members can have a highly competitive position on global market addressing circular economy challenges. The most interested thematic areas for internationalization of circular construction solutions were identified as follows:

1. Smart building & city
2. Construction and demolition waste management
3. Wood based building sustainability
4. Bio house

ECCA was officially set-up at the 1st ECCA conference, on 11-12 January, 2017, in Ljubljana, Slovenia and has at the end of the project 28 clusters and 10 supporting members. Market research study showed China, India, Emirates, Mexico, Canada, and Morocco as the most interested target third country markets to be included in the ECCA internationalization strategy and action plans, but not excluding other countries if there will be a critical mass of clusters being interested and engaged within ECCA internationalization eco system.

ECCA internationalization strategy focusses on supporting International Collaborative Innovation Partnerships (ICIP), as this approach is the most feasible for the internationalization of complex circular solutions integrated in construction value chains. This is one of the main outcomes of the ECCA COSME project. The main elements of the ECCA supporting environment including joint activities and services are: promotion, virtualization (web collaboration), networking and trust building, training and mentoring services, joint branding based on assessment of circular economy performance, and financing. ECCA foresees a co-financing agency, being able to provide co-financing to ICIPs along the innovation cycle via vouchers or other means, and being able to collect and manage financing mix for maintaining the ECCA infrastructure and services. ECCA sustainability plan outlines the strategy to assure strong position of the alliance and its sustainability.

ECCA action plans are being prepared for the six value chains where ICIP are going to be set-up and run:

- Smart, low carbon office building applying circular economy approach (**Mexico**, China, India)
- Smart, NZEB, Highrise apartment building with integrated e-mobility, replicability for different climatic zone, BIM integration, modular& flexible design (**China**, India, Canada...)
- Smart management of energy and other resources use and production for touristic districts or small cities focusing on renewables and self-sufficiency (**Morocco**, India...)
- Circular management of glass waste in construction for high level products (up cycling) (**UAE**, Canada...)
- Wood- based building refurbishment system of office or apartment buildings (**Canada**, China...)
- Bio house made of natural or ecologically grown materials for healthy living in tourist resorts and private houses (**Canada**, India...).

The most promising targeted countries are presented above in brackets but other countries (Colombia, Thailand, also countries in EU/associated/EaP) are not excluded. The actual implementation will depend on established collaboration with partners in third countries, supported by ECCA internationalization eco system.

On 5th December 2017 an international conference „Circular Economy – a global challenge for the construction industry” was held in Kolobrzeg (Poland). The conference was dedicated to all stakeholders interested in the area of the construction sector and circular economy. During the event the European experiences in implementation of circular economy was presented. The ECCA internationalization strategy plan was introduced. The 2nd General Assembly meeting was organized to confirm ECCA internationalization strategy, complete initiated ICIPs and actions plan, and confirm ECCA sustainability plan.

Cluster cooperation achievements:

The three initial members of the ECCA Alliance invited a number of other clusters and similar organization to join the alliance. ECCA partnership agreement was prepared and defines vision, goals, organization and financing of ECCA. 28 ECCA partners and 10 supporting organizations signed the ECCA partnership agreement (status December 2017).

SME cooperation achievements:

ECCA members (clusters) represent more than 300 SMEs interested for internationalization and collaborative innovation on EU level. A number of SMEs being members of clusters were invited and contributed with ideas and solutions in different fields of construction solutions.

More than 50 SMEs from 10 clusters contributed to setting-up of the action plans for six ICIPs.

Testimonials from cluster and SME:

Bernard Likar, cluster manager:

“The Slovenian Wood Industry Cluster supports its’ members for almost 15 years in the fields of RTD, trainings and internationalization. Slovenian wood industry is mostly export oriented and is now strongly focused on energy efficiency, smart, multi storey wood buildings. In this sense we see ECCA as a very promising channel for the internationalization of our members’ solutions for the energy efficient refurbishment of buildings using wood as perfect material of the circular economy. The ECCA also brought synergies between construction sector and partners from abroad in the framework of collaborative innovation, which started in the ECCA project. We are looking forward for a fruitful collaboration!”

Marko Kramar, architect, member of Construction cluster of Slovenia:

"I am a designer with many years of experience in the field of demanding Near-Zero Energy (nZEB) buildings` design. I use modern Building Information Modeling (BIM) design and presentation tools in today's digital and increasingly virtual world.

Through the ECCA project, there was the possibility that the ideas and solutions we have developed for multi-dwelling nZEB buildings and demonstrated them through the EE - Highrise (FP7 project) can be internationalized as a solution with a European brand. Among other things, we have already presented this solution in China. To this end, I joined the SME Action Plan and Smart Building as a SME".

Robotina d.o.o. is one of the leading developers of smart energy management system in buildings in Slovenia - Devid Palčič, director:

"Within ECCA project we found new partners and options to develop solutions in new value chains in close collaboration with touristic sector, in wood value chain or even in bio houses. We are a member of Construction Cluster of Slovenia. Being a part of European Circular Construction Alliance, European Strategic Cluster Partnership for internationalization, we will be able to improve our existing position and visibility on the markets of India and United Arab Emirates, where we are already present. But most importantly, on new targeted markets such as Canada, and Latin America".

ERAIKUNE, BASQUE COUNTRY CONSTRUCTION CLUSTER JON ANSOLEAGA UGARTE Director

"ERAIKUNE, BASQUE COUNTRY CONSTRUCTION CLUSTER, is really focused and interested in the promotion of sustainable construction, therefore, we hereby reaffirm the interest of ERAIKUNE in the ECCA project and its results.

One of the main reasons that make this project so interesting for our organization is the creation of a cluster network aimed to circular economy, which enables the collaboration among different clusters and their companies, specially SME, which need a stronger support in their business development and internationalization.

Basque construction companies associated to ERAIKUNE connected to the circular economy are expecting to activate work lines, through the mentioned network, with other European companies on issues related to innovation, international marketing and sales. Furthermore, following the ECCA project, with its workshops and results, ERAIKUNE and its associates have been able to know the possible opportunities of circular economy based companies in different market niches, such as Mexico, a non-European niche with interesting potential for this kind of business".

BILJANA AVRAMOVIC, general manager - CONSTRUCTION CLUSTER DUNDJER- EUROPEAN BRONZE LABEL CERTIFICATE

"Construction cluster Dundjer from Serbia, which just recently received European Bronze Label Certificate, has within ECCA project established the innovation network with different clusters in EU, to initiate further development and internationalization of our circular solution of automotive waste recycling and use in the building industry. We see this just as a first step to closer EU wide collaboration of our cluster and our members".

Key recommendation(s) on the future of the "Cluster go International" initiative:

- The continuity of the initiative, also along the next EC programme
- More pressure to collaborate between different ESCPs to exchange experiences and best practices, at least 2x per year
- Funding rate: since the clusters have different national support in different countries, and the work of cluster in internationalization is devoted to a limited number of cluster members, and on long term, the EU funding rate should be higher (these activities are similar to CSA actions in H2020)
- Partnerships are dynamic and should be open. That also means the funding should be available to these new partners joining in particular value chain

ECCA - Phase 1

- Partnerships should be able to act as funding agencies, via vouchers for example, to support particular project where new, external partners are needed, or new activities (some research or development, support of pilot actions in third countries) not foreseen in initial proposal.

Please indicate the number of events attended by the partnership by category (preparatory events, C2C events and B2B events)¹:

TARGET COUNTRIES	EVENTS (Number)				
	Preparatory events, e.g. workshop, seminars, visits (excluding C2C and B2B events)	C2C Events	C2C meetings	B2B Events	B2B meetings
Not country related	40	1	7		
Mexico	2		1		
Canada					
India	2				
China	1				
United Arab Emirates	1				
Morocco					
...					
Other, see comment above:					
Latin America (Chile, Columbia, Brasil, Peru)	1				
Thailand	2				
TOTAL	49	1	8		

Please indicate the number of respective stakeholders (clusters and SMEs in Europe and Third countries) involved directly in the development of the partnership activities

¹ Project activities focused more on mapping the offer (circular construction solutions in new value chains), on alliance set-up and organisation, and on the strategy how to support internationalization of circular construction. The third markets were analysed in more general way in terms of circular economy. Only in the last WP5, at the final stage the six target markets have been defined. That is the reason that activities are in preparatory level and on C2C level between clusters in the alliance and not so much on third countries. Even a number of activities have been implemented as can be seen from the tables below. And not only for target six target countries.

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STAKEHOLDERS INVOLVEMENT in the development of activities (excluding surveys and promotion activities) targeting cooperation with 3rd markets (Number)				
	EU Clusters	EU SMEs	Clusters and other intermediary organisations from 3 rd -country (see also comment below)	SMEs and businesses in 3 rd country
All six target countries	20 ² (out of 27 clusters joined the ECCA as some just joined recently)	40	See below and the comment	
Mexico	1 ³		5	
Canada				
India	1	1	1	
China	1	1	1	
United Arab Emirates	1	1		
Morocco				
Other, see comment above:				
Thailand	1		1	
Indonesia	1			

Comment: a list of potential Gateway partners for different third countries have been prepared with the third market research activities.

² These are other than first three initial clusters of ECCA. They attended both ECCA conferences, and C2C meetings with SGG, SEANERGIA, or CCS.

³ These are development activities performed by three initial clusters of ECCA, e.g. SGG, SEANERGIA, or CCS.