



## New Circular Economy Business Model for More Sustainable Urban Construction



REPORT from the 1<sup>st</sup> CINDERELA International Seminar  
*"Circular economy: a buzzword or a real business driver  
for construction sector"*

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## REPORT FROM THE 1ST CINDERELA INTERNATIONAL SEMINAR "*CIRCULAR ECONOMY: A BUZZWORD OR A REAL BUSINESS DRIVER FOR CONSTRUCTION SECTOR*"

The 1<sup>st</sup> CINDERELA International Seminar "*Circular economy: a buzzword or a real business driver for construction sector*" was held on the 6<sup>th</sup> November 2019 in Rimini, Italy, at the ECOMONDO fair.

The aim of the CINDERELA seminar was to provide a forum for presenting and discussing the implementation of the circular economy concepts in construction sector. In particular to:

- present and discuss the experiences of the construction companies that already took the first steps in becoming circular,
- present the development of the CINDERELA business model and accompanying 'one-stop-shop' (CinderOSS) service,
- collect feedback on these tools from companies, authorities, industries and policy makers,
- discuss the barriers, market drivers, financing relevant for setting up circular business models relevant for the use of SRM in construction sector, and
- take inspiration about how a circular economy approach could turn into new business opportunities for the construction sector.

The seminar gathered an audience of over 60 international participants including representatives of companies who are waste stream holders, manufacturers of construction materials, construction companies, public procurers and investors, local/regional decision makers interested in setting up or stimulating circular economy business models that involve turning waste into value.

The seminar started with introduction by Keti Medarova-Bergstrom from EASME emphasizing the needs for circularity in construction sector, being one of the most consuming and productive sector in Europe. This was followed by an introductory presentation of the CINDERELA project delivered by Alenka Mauko Pranjić, CINDERELA project coordinator from the Slovenian National Building and Civil Engineering Institute (ZAG).

Nuša Lazar and Tadej Žurman (NIGRAD) presented some practical approaches on implementing circular economy concepts from the perspective of public and private enterprises, using the experiences and lessons learned at NIGRAD d.d. and in Municipality of Maribor, the first Slovenian city adopting circular economy strategy. NIGRAD is a utility company of Municipality of Maribor in Slovenia dealing with maintenance of public transport areas, streets, squares and roads with related facilities and devices, maintenance of public sewerage, public lightning, traffic light system, and implementation of construction and other works for municipal infrastructure needs. As a company they seek to implement circular economy by utilising different waste streams for manufacturing of secondary raw materials based composites and their use for geotechnical and civil engineering works. NIGRAD is project partner in CINDERELA involved in the implementation of a large scale demos in which such materials will be used for revitalisation of a degraded area in Maribor (Slovenia) as well as construction of a road and a small facility with the use of green concrete.

The opportunities of asphalt production by using recycled materials such as end-of-life materials from iron industry, plastics, rubber powders and reclaimed asphalt were introduced by Nicola Ongaro, the CEO of Italian company Impresa Facchetti Adolfo e Figli (IFAF s.p.a). The company has a many-year



experience in road and bridges construction for public and private clients. IFAF also aims to be more circular by performing research and implementing cutting-edge technologies for bituminous production. One of the areas where the company is particularly successful in implementing circular economy concepts is production of bituminous conglomerates with the use of plastic waste and amide obtained from vegetable oil waste. Within the scope of the SARR project (Advanced Systems for Waste Recovery) IFAF managed to produce an asphalt mixture with the use of waste heterogeneous plastics and amide of much better performance compared to conventional one.

Douwe Huitema from KplusV consultancy presented the CINDERELA 'one-stop-shop' (CinderOSS) service: support for a circular construction sector as a tool where entrepreneurs can find a pathway to bring construction related circular business models into real life, where the construction sector can find circular construction products and potential business partners and where public bodies can find good examples of circular policies in Europe and adjust their own. The CinderOSS structure was also discussed.

The keynote speaker Massimiano Tellini, from Intesa Sanpaolo Innovation Center Lab, debated the attractiveness of circular economy for the market from the point of view of the finance sector. He stressed the need to redesign existing products and industrial ecosystems switching to an alternative model that decouples economic development from the exploitation of natural resources. Current linear business models need to be transformed into circular ones. He emphasised the need of companies to stop selling goods and start selling services in order for the goods to fulfil the requirements of circular economy.

The last part of the workshop was a round table discussion on the circular economy in practice from the perspective of public and private sector. The discussion was moderated by Fabio Iraldo from Scuola Superiore Sant'Anna with the participation of Enrico Cancila from ART-ER - Development agency of Emilia Romagna Region, Laura Pighi from HABITECH - Energy and Environment District Trentino, Manuela Brotto from OPICE srl., Jaime Moreno Juez from TECNALIA, and Valentina Beghetto from Cà Foscari University. The discussion covered a variety of issues related to the switch from linear to circular paradigm of economy including the role and involvement of public and private actors in the process, the need for new enabling technologies and associated green skills and key barriers for making circular economy an industrial practice in construction. The participants of the debate highlighted the lack of synergies between the different agents in the value chains, lack of technical skills and insufficient awareness about opportunities offered to construction sector by circular economy based concepts as the main bottlenecks.

The 1<sup>st</sup> CINDERELA International Seminar was a successful event, which allowed participants to present and discuss the experiences related to the implementation of circular economy in the construction sector. It also provided valuable stakeholders input to CINDERELA developments.









