



FOSTERING INDUSTRIAL SYMBIOSIS FOR A SUSTAINABLE RESOURCE
INTENSIVE INDUSTRY ACROSS THE EXTENDED CONSTRUCTION VALUE CHAIN

Business models

Executive summary

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D8.5 Business model definition
WP8, T8.3

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The goal of the Deliverable is to draft a business model of the FISSAC IS model. The report also includes industrial symbiosis assessment, theoretical chapter, and conclusions from industrial symbiosis and secondary raw material markets. It is important to note that all reported findings should be treated as preliminary as the actual data such as definition of fees or ownership shares will be determined precisely later.

Industrial Symbiosis

Involved stakeholders benefit from the platform network connection in several ways: for businesses, it directly improves profitability environmental performance, and at an economy-wide level, economic prosperity, reduced consumption of resources and carbon intensity, less material lost to landfills. The local and regional authorities benefit from an improved industrial waste management system, local job creation and local economic opportunities.

Barriers of Industrial

Seven types of barriers have been identified overall in the D1.2 and could be classified as follows: three barriers related to the three pillars of sustainable development (environment, economic, social), two barriers related to “soft aptitudes” (information and collaboration) and two barriers related to “practical obstacles” (techniques and regulations).

Dominant economic sectors for FISSAC

The following have been identified as well as its secondary raw materials:

Sector	Secondary raw material
Steel sector	Steel slags (EAF Electric-Arc-Furnace slag, LF slags (Ladle furnace basic slag)
Glass sector	Domestic glass, container glass, flat glass, other glass
Ceramic sector	Ceramic waste
Aluminium sector	Aluminum waste
Natural stone sector	Marble slurry, other natural stone waste
Chemical sector	Tire rubber, plastic waste, wood waste

New products from secondary raw material identified followings products which can support the industrial symbiosis and increase usability of waste

streams: Eco-cement, Green concrete, Wood-plastic composites (WPC), Ceramic products.

Theoretical understanding

Business model Canvas is an innovative and modern entrepreneurs’ tool which is widely used for developing an efficient, functional and viable business model. This tool enable entrepreneur to define all crucial parts linked with the future business, reveal all substantial parts of the business and give the first estimation of future business profitability and viability based on business cost and revenue streams.

Business model Canvas consist of nine business building blocks which are sorted in a specific chronological structure. This concept enables to develop the business model from the bottom to the top place emphasis on harmonic combination of all business model parts. All building blocks defined at business model Canvas has to be defined in following order:

1. Customer segment
2. Value proposition
3. Channels
4. Customer relationship
5. Revenue streams
6. Key resources
7. Key activities
8. Key partnership
9. Cost structure

FISSAC Business model

FISSAC is a multi-sided platform joining together many business subjects and stakeholders. These are summarized in the figure below.



A business model was drafted for all interested parties. However, due to confidentiality, it is not possible to publicly share. The use of platform is expected to be chargeable; depending on the level of involvement and type of use. Business model revenue streams are sorted in four different income components: registration fee as a FISSAC platform participant, monthly fee for access the FISSAC database (market database, info database), marketing fees -advertising and special platform service fee.

Conclusion

The success of the multi-sided platform depends on Industrial Symbiosis market which faces numerous business obstacles: Financial, Community engagement, Lack of information, Culture for cooperation, Technical, Regulatory. Core activities for the FISSAC platform are to implement and establish partnerships between FISSAC and large companies. Number and size of the companies who operate in the FISSAC would influence the successfulness of the platform.