

FISSAC Living Lab Sweden

The first, introductory meeting (October 2016), led by Hifab and SP, aimed to generate interest to be part of the Living Lab events during the following two years and build a foundation to a network working with circular material flow. Together the participants represented a broad constellation of actors both from public and private sector; construction contractors and developers, property owners, material producers, municipality, architects, researchers, sustainability consultants and also a representative from the Swedish construction federation. This broad constellation was recognized by the participants themselves as an advantage for the Living Lab.

The day ended in consensus that FISSAC's Living Labs can in a longer perspective help to advance the efforts on creating circular material flow in the construction sector. The actors present expressed the need for more awareness-raising activities and more knowledge of good examples of material flow in the industry. The knowledge produced in FISSAC's other WPs will be useful later in the Living Lab process. There was also a consensus around the lack of relevant business models, policy instruments and standards.

The topic for the second meeting (February 2017) was "Material logbook of the Future - what kind of information should it entail and how should it be used so that it would function as a helpful tool for increasing circular material flow in the construction sector?" The topic was proposed by the Swedish Construction Industries during Living Lab meeting #1 and welcomed by the other Living Lab participants.

A general interest of standardizing information about material content and characteristics was expressed. The former was followed by a discussion on the question of independent evaluation and the type of organization needed for carrying out the evaluation of the (recycled) materials on quality, characters, content etc. One of the proposed ideas was to create or enjoin an existing public actor to take on the task of guaranteeing the independent evaluation.

The meeting ended with a decision on topic for coming meetings. The Living Lab will take on a journey to follow a material through the steps of the building process - all the way from extracting from nature to demolishing of the building and recycling of the material.

The third meeting (May 2017) was the start of the material journey. We had jointly decided to use gypsum/plasterboards as a case study on the flow of building material throughout the process. At this meeting, focus was on the recycling step and the participants were given a guided tour at SUEZ recycling plant in Kovik, Stockholm, where we learned about treatment of the material and conditions for recycling. We



also addressed the inflow of material to the site by watching video clips with interviews with a carpenter, construction project manager and a demolition worker.

We have learned a lot about the big potential for using recycled gypsum. A plasterboard can actually be made from 100% recycled material, but the problem is that there is not enough recycled raw material available. We also learned the amounts of waste from construction sites is about 20% of delivered plasterboards. This means that every fifth plasterboard is manufactured unnecessarily.

We left Suez with new knowledge and also many questions. We are now planning for the next meeting, which will take place in June 2017. This time we will take the Living Lab to Gyproc in Bålsta and learn about the production of plasterboards.

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