

Date and time of event: 13 April 2021, 14:00 to 15:15
Location: WebEx Meetings
Participants: 46

During the first presentation the Level(s) framework was introduced by Josefina Lindblom, Policy Officer at DG ENV. This framework aims to provide a common language to all actors involved in building projects on the sustainability of buildings. The assessment of this sustainability is based on 16 indicators that are grouped into 6 macro-objectives, with the second macro-objective focusing on 'resource efficient and circular material life cycles'.

The tool can be used in three different levels of in the life-cycle of a building, with each level adding another layer of depth. During the first level the indicators are explained in a qualitative way. In the second level the indicators are used in a quantitative manner where different design options can be compared and what kind of impact it has on the performance. The final level covers the use-phase of the building and monitoring of the indicators. One of the main strengths of the framework is its flexibility, building professionals don't have to use all indicators and levels at once, they can gradually increase depth of the framework the more they work with it.

In the second presentation Mirko Sauvan, Sustainability Officer at SWEGON AB, explained why Life-Cycle Assessment matters in the HVAC industry. There is a lack of environmental data and Environmental Product Declarations (EPD) in the HVAC industry which makes it difficult to many stakeholders to have reliable information on high environmentally performing products. This often causes a competitive disadvantage for manufacturers who offer circular installations. Green building certifications are becoming more common and relevant however, which is why sustainability is becoming an increasingly competitive factor in the HVAC industry. There is a shift from operating carbon towards embodied carbon, that focuses on the use-stage of a building towards the whole life-cycle, which also keeps in mind the used materials, constructions process and end-of-life stage. With the embodied carbon perspective in mind, new studies have found that used mechanical equipment, e.g. air handling units, can have a large impact on the carbon emissions of HVAC systems.

Olaf Oosting, Managing Director at the engineering consultancy Valstar Simonis, shared his experiences with circular design and installations during the final presentation. He focused on tools related to circular design and installations. For circular design he stressed the importance of "design-for-disassembly", which means that products need to be designed with objective in mind to be able to recover most materials during the disassembly stage. By doing this, more financial gains can be made from a product during the end-of-life stage. Olaf presented different tools on circularity in products. The first was called the "10 R's" which gives a list of aspects to look at to assess how circular a product is. The second tool was the "circularity circle", developed by TVVL, which helps you look at how circular building installations are and supports you to implement the design-for-disassembly perspective. TVVL offered to translate the tool to English and share it with the REHVA network.

During the discussion session all participants had the opportunity to discuss and ask issues on circular economy with the speakers. Among others, Josefina was asked why there are no benchmark numbers within Level(s) to compare how sustainable your building is. She explained that the framework is meant more as a common language for different actors, e.g. certification bodies or policy-makers, to be able to compare what sustainable buildings are. In the end the different results from the survey that was taken with participants prior to the event was discussed with the speakers (see [Annex](#)). There it was remarked that there were many challenges with implementing embodied carbon certification for manufacturers but that the EPDs are starting to give more competitive advantages in the market and that in some countries, like Sweden, there also more and more legislative incentives to pursue this type of certification.

ANNEX

Survey results: 11 respondents

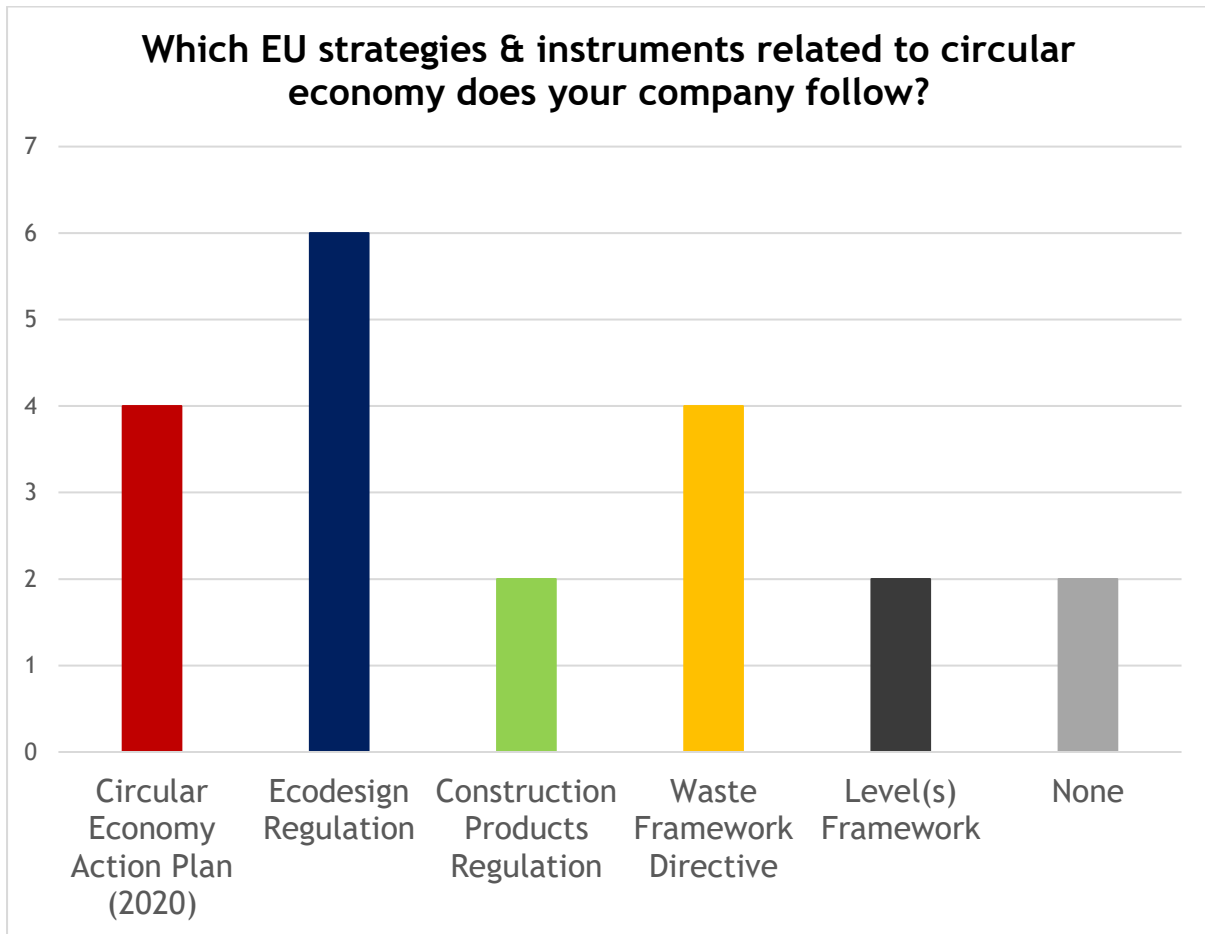
Question 1:



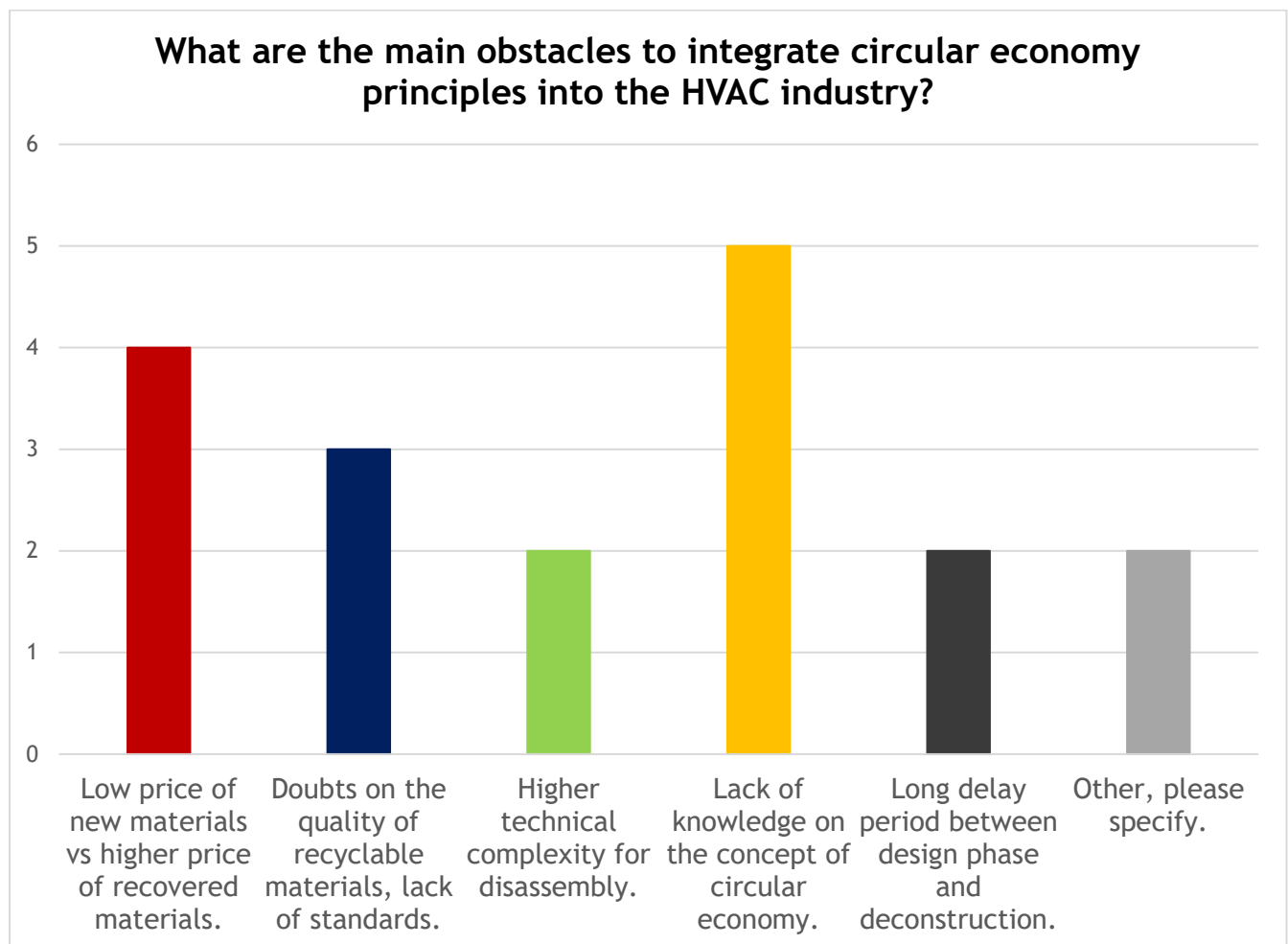
Answers under 'Other':

- Develop concepts/protocols related to circularity.
- Carbon performance of products/buildings.

Question 2:



Question 3:



Answers under 'Other':

- Lack of economic business models that support circularity.
- High bureaucracy demands to integrate principles of circular economy.

Question 4: What do you consider as the 3 most relevant issues regarding circular economy in your industry?

List of answers:

- Lack of interest on the topic from mechanical / building services engineers, e.g. architects are more proactive in terms of circular facades.
- Setting of overarching (geographical) standards for the HVAC industry, harmonising standards.
- Carbon performance.
- Circular economy of refrigerants.
- Making it economically beneficial to buy refurbished & recycled products.
- Increasing awareness, cooperation and information-sharing in the value chain.
- Ensuring that it does not increase bureaucratic demands by too much. Ensuring European-wide solutions that harmonise requirements would be highly beneficial.