



PRESS INFORMATION

**European
Quality Association
for Recycling e.V. (EQAR)**

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Construction / Circular Economy / Europe / Building Materials

It is not only in individual EU member states that there is a circular economy strategy - on the contrary, the "Green Deal" and on the part of the European Commission, circular economy is at the top of the agenda. For the EU Commission, "circular economy" generally means preserving and optimising the value of products and materials for as long as possible. Waste and the use of resources are minimised, and resources remain in the economy when a product reaches the end of its useful life and are used again and again.

The European Quality Recycling Association (EQAR) took this as an opportunity to organise a building materials recycling congress at the beginning of June as part of IFAT, one of the largest environmental trade fairs in Europe, with the theme "Recycled Building Materials 2030".

EQAR President Miroslav Skopan draws a connection between climate protection and recycling: "In addition to resource protection - at least 10% of mineral raw materials can be replaced by recycling - building materials recycling offers a contribution to climate protection; be it by reducing transports through mobile recycling on site or by saving energy in the production of building materials. The EU action plan for the circular economy in particular shows the value of recycling in the construction sector - more than 2/3 of all waste comes from the construction industry, so the potential is very large there.

Sustainable procurement in the construction sector

Christian Öhler, Climate Ministry of Austria, presented sustainable procurement in Austria: By resolution of the Council of Ministers, a catalogue of criteria for the procurement process with special consideration of sustainability was made mandatory for the federal government in 2021. A paradigm shift is taking place from the lowest bidder to the best bidder principle. Section 20 (5) of the Federal Procurement Act requires that consideration be given to the environmental compatibility of the service in the award procedure. For building construction and civil engineering, there are mandatory ecological criteria and additional optional ecological criteria: For example, a 10% share of recycled aggregate in the total aggregate used for concrete production is prescribed. Optionally, an aggregate criterion for transport is recommended: A formula is used to give preference to recycled building materials, since their transport routes can be given a reduction factor of 0.7; this means that if the transport distances of primary raw materials and recycled building materials are comparable, an advantage of 30% for recycling comes into play.

Armin Grieder, City of Zurich, presents the high recycling rates in the tendering practice of the City of Zurich:

Concrete recycling has a special status; since Nov. 2021, a new SIA standard "Concrete with recycled aggregates" specifies concrete. Separate recycled concrete classes are described there. Although the recycled proportion does not bring a great gain in greenhouse gas emissions, a reduction of 30% in greenhouse gas emissions can be achieved with cement. In the city's tender practice, the following is stipulated: "Concrete components are to be constructed in recycled concrete (at least RC-C, where technically possible RC-M) with CEM III/B cement in accordance with the specifications of the Office for Buildings of the City of Zurich. Since 2002, all buildings of the AHB have been made of recycled concrete (note: usually 25% recycled granulate)!"

Mrs. Buddenbohm, representative of the German building materials recycling industry, presents the topic of "freedom from asbestos" based on a new draft of LAGA Code of Practice 23: A "cut-off criterion" of 0.01M-% for asbestos concentration is proposed in it - below this limit a waste is considered "asbestos-free". Furthermore, a cut-off date - 31.10.1993 - is proposed for Germany. Buildings erected by then will be considered as potentially containing asbestos; builders will have to refer clients to the asbestos disclosure obligation in the case of demolition of these buildings. This is also important for recycling - operators of building material recycling plants have to check that no asbestos is present on delivery; the LAGA leaflet provides the relevant documentation.

Best case of applications

An example of the best possible recycling of secondary raw materials in concrete was shown from Switzerland: With the best preparation quality (high input quality, screening of undersize particles, sieving and air classification), minimising (e.g. the use of cement) and high quality assurance are prerequisites that concretes with a proportion of recycled material of up to 70% are possible in practice!

Prof. Wistuba, TU Braunschweig, indicates the possibility of multiple use of asphalt: A D-A-CH - research project deals with the ageing of bitumen - by means of rejuvenators, which are part of the investigation of the research project, a reversal of the ageing should happen, i.e. it is possible to recycle asphalts several times with a long service life despite "brittle" binders - this is an important basis for 53 million tons of used asphalt, which accumulate annually in Europe.

Prof. Angelika Mettke, TU Brandenburg, established the link to climate protection: 839 million tonnes of construction and demolition waste were generated in the EU in 2018. Her studies showed that dry processing requires 19.6 MJ/t, (with wind sifting 29.3 MJ/t) for wet processing 21.1 MJ/t. A comparison with the production of aggregates shows that savings can be expected with recycling. 1000 tonnes of recycled building materials save 36m² of quarrying area of raw material sources - using Germany as an example, that is 2.7 km² of area per year! The latest calculations show that the potential that has been shown qualitatively many times before has now been quantified and that savings in the double-digit percentage range of greenhouse gases can be achieved.

The new Construction Products Regulation

The main topic of the EQAR Congress was also the amendment of the Construction Products Regulation. This is currently being revised due to the requirements of the EU Green Deal (COM(2019) 640) and the desired stronger consideration of the Action Plan for the Circular Economy (COM(2020) 98 final). The draft therefore contains the following recycling-relevant requirements:

Products are to be manufactured in such a way that climate compatibility is in line with the state of the art.

- recycles and recyclable materials are to be preferred
- Easy reparability of products must be ensured.
- Products must be designed in such a way as to facilitate reuse and recycling.

Special emphasis is placed on the reuse or recyclability of building materials, components and structures.

The panel discussion, which was also attended by FIEC Director General Domenico Campogrande, emphasised the importance of the amendment to the Construction Products Regulation for the recycling industry.

After a long period of absence of an international conference, the EQAR Congress was again an important contribution to the professional community. Through their contributions to the discussion, the participants showed their interest in a functioning circular economy in the construction sector - an important basis for the necessary sustainability in the construction sector.

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