Since the publication of “The Limits to Growth. A Report for the Club of Rome’s Project on the Predicament of Mankind” in 1972, it is no news that the exploration of resources from nature has various downsides like the effect on climate change and simply the limit of explorable resources from nature.

As a consequence, to reduce the impact of climate change and to improve the use of resources, 2030 Agenda for Sustainable Development with its 17 SDGs was adopted at the UN Sustainable Development Summit in New York in September 2015 and later in December 2015 the Paris Agreement to limit the global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels has been adopted by 196 parties.

On European level the Green Deal was approved 2020 with the aim of making the European Union (EU) climate neutral in 2050. The Green Deal leads to new legislatively tools, for example the Sustainable finance taxonomy embedded in the EU taxonomy for sustainable activities and contains as one of the main blocks the new Circular Economy Action Plan, also adopted in 2020.

The transformation of the construction sector due to the impact of the Green Deal and Circular Economy Action Plan on the economic system, on building renovation and innovation is something all stakeholders should be prepared for. This becomes obvious by observing the ongoing processes in the European countries to adapt their legislation to the requirements of European Union and the requirements of the Green Deal. In Luxembourg for example the revision of amended law of 21 March 2012 on waste, which includes a register for new buildings to record the construction products and building materials, was passed at the end of April 2022. A large group of companies and associations worldwide and especially in Europe accompany these transformation processes, which is a responsible way to be aware of the ongoing developments and to allow them adjustment or development of their business models.

Various stakeholders in Luxembourg have noticed that comprehensive information on products and materials is available, but that this information is lost especially when products or materials are placed on the market and change from the manufacturer to the user. Information which is not valuable in the currently prevailing economy, but which is essential for circular economy. Some of these stakeholders already initiated a concept to handle and save these information by developing the Product Circular Data Sheet (PCDS) and already have taken this concept a step further by developing the ISO 59040 “Circular Economy - Product circularity data sheet”, which is planned for issue before 2024. This standard sets framework conditions, but sector-specific implementation for example by European standards is necessary for practical application of this concept.
In May 2021 a European standardisation project under the CEN/TC 350/SC 1 “Circular Economy in the Construction Sector” was launched and could, among others, offer a possibility to compare, check, adapt and improve the concept of Product Circularity Data Sheet (PCDS) for the construction sector in exchange with all parties and experts on European level. In early 2022 the CEN/TC 350/SC 1 was supported by six members operating in Luxembourg who, beyond their everyday experience, also contribute their experience gained in projects such as in the European RFCS Research project “REDUCE”, in reuse of steel sheet piles, the use of PCDS, as well as the usage of a material databanks for buildings.

This standardisation work is just at the beginning and offers the opportunity to clearly define the common objectives for Luxembourg with the joint efforts of the stakeholders willing to get involved in standardisation, through ILNAS. It also offers the opportunity for the stakeholders to accompany the latest developments, like the Proposal for the new Construction Product Regulation issued on 30th March 2022 and in general the transformation of the construction sector, to allow early check and adjustment of their existing business models to be well-positioned for the future to come. Apart from stakeholders operating in Luxembourg in the construction sector, also stakeholders with specific competences in the field of PCDS or the likes as investment funds and digital database operators, could contribute to necessary developments of European standards in Circular Economy in the Construction Sector to implement the aims of the Green Deal.

It is also an opportunity to participate and promote European developments such as the Digital Product Passport and the Sustainable Finance Taxonomy and to make a substantial contribution at European level.

CEN/TC 350/SC 1 “Circular Economy in the Construction Sector” has started in May 2021 with the creation of the inventory of the known relevant initiatives and documents in the field of circular economy and construction. Due to the volume and diversity the Committee decided to set up the following structure, to secure a solid development of a work program and the definition of work items.

The structure of the CEN/TC 350/SC 1 “Circular Economy in the Construction Sector” is as follows:

- CEN/TC 350/SC 1/WG 1 “Framework, principles and definitions”
- CEN/TC 350/SC 1/WG 2 “Gap Analysis, conclusion and recommendations”
- CEN/TC 350/SC 1/WG 3 “Chair Advisory Group (CAG)”

Based on the result of WG2 “Gap Analysis, conclusion and recommendations” it could be expected that several Work Items for standardisation will be proposed and that the number of Working Groups will increase after plenary meeting in June 2022.

The scope of the CEN/TC 350/SC 1 is extensive and complex. To give an impression please see a small selection of topics discussed as part of the work program of CEN/TC 350/SC 1 “Circular Economy in the Construction Sector”: Close the loop - Shorten the loop; Design - Construction – Procurement; Measurement - Evaluation – Assessment; Resource flow - Resource mapping; Building Passport/Digital Product Passport/Material Passport; BIM; 9R Strategy / 10R Framework; Level(s).

New stakeholders and members to contribute to the National Mirror Committee CEN/TC 350/SC 1 of Luxembourg to take the chances of the ongoing transformation are welcome. The National Mirror Committee is in the privileged situation that we can build on the structures and support provided by ILNAS. Eventually our work could be used as national reference to inspire the stakeholders of other sectors in Luxembourg as well. Transformation to circular economy is not limited to the construction sector only.