The Quality Infrastructure at the service of National Projects in Circular Economy

QICA needs assessment workshop

Last March 2nd, a virtual Workshop was held to share the needs in Quality Infrastructure Services in the national QI4CE projects (Quality Infrastructure [QI] for the Circular Economy [CE]), organized by the Quality Infrastructure Council – QICA.

BACKGROUND

QICA brings together the regional bodies engaged in QI in the Americas, namely the Inter-American Metrology System (SIM), the Inter-American Accreditation Cooperation (IAAC) and the Pan American Standards Commission (COPANT).

The Project Quality Infrastructure for the Circular Economy - QI4CE, which is funded by PTB, fosters the cooperation of the above-mentioned regional quality infrastructure organizations together with their national members in the field of circular economy. It seeks to strengthen their technical competencies and, in addition, to raise awareness of the benefits of quality infrastructure among circular economy stakeholders.

Sectorally, The Project focuses on the promotion of value-added cycles in food, plastics and construction, and aims to identify and strengthen the potential contributions of quality infrastructures within them. The regional approach will allow to broaden the working experience of individual value cycles.

But then how can Quality Infrastructure contribute to the needs of the Circular Economy, a study answering these questions was published as part of The Project.

In a nutshell, QI can contribute in the following ways:

- To have harmonized terminology and conceptual clarity regarding the circular economy;
- To support the generation of a culture of responsible production and consumption;
- Promote the generation of policies and regulatory framework;
- Generate trust, traceability and interoperability of information;
- Provide competitive products and services; and
- Establish a scientific, technological and innovation base.
On the other hand, and always within the framework of the project, COPANT developed, through a Working Group, a Guide to include circularity in standardization, which is in its second draft phase and is expected to be published in June 2023.

**THE WORKSHOP**

The objective of the workshop was to identify the service needs of the Quality Infrastructure in the national projects, to collaborate from the regional organizations (IAA-SIM-COPANT) to develop the required services or documents and/or suggest solutions to support the expected results in the projects.

The agenda included the following presentations:

- The Project QI4CE - Caroline Jansen (PTB)
- CABUREK Projects and The Fund’s Projects - Focusing on Quality Infrastructure Needs
  - Coaches
    - Agro-food - Alexis Valqui
    - Plastics - Mahdha Flores-Campos
    - Construction - Ulrich Harmes-Liedtke
    - Fund’s Projects - Evelyn Canelas
- Scope of the COPANT Draft Guide on Circularity – Daniel Trillos (ICONTEC)

Each Working Group then separated into rooms to prioritize needs and establish a work plan.

The Workshop was attended by 85 delegates representing the following 20 countries: Argentina, Barbados, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Germany, Guatemala, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Trinidad & Tobago, United States, United States and Uruguay. Representatives from CROSQ (CARICOM’s standardization body) were also present.

**NATIONAL PROJECTS AND QI REQUIREMENTS**

Among the national Projects presented, the following needs were identified for Quality Infrastructure services:

**WG1: Plastics:**

The following countries Antigua and Barbuda, Argentina, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Panama, Trinidad and Tobago, and Uruguay, presented projects related to

- Plastic waste management
- Biodegradability / Compostability
- Recyclability
- Single-use regulations

Needs were identified with respect to adoption of standards being developed, for example, in the ISO/TC 323 committee on Circular Economy, to develop sector specific standards and guidelines, conformity assessment needs were also identified to, for example, identify and
certify reprocessed material, and in terms of metrology, measurement capabilities needs were identified for biodegradability and compostability testing to name a few.

At the conclusion of the presentations, Working Group 1 on Plastics met separately and reached the following conclusions:

The following needs are considered a priority to be addressed in this order:

1. Biodegradability/Compostability: Develop a guide to provide guidance on the selection of which biodegradability/compostability standard to choose. To this end, it is suggested that an expert be hired to guide the COPANT working group.
3. Develop a standard for estimating the percentage of recyclable material in plastic products.
4. Develop a standard for single-use plastics.
5. Elaborate a circular economy standard for e-products including e-waste.
6. Establish services for the measurement and evaluation of circularity in packaging.

**WG2: Construction**

The following countries: Argentina, Colombia, the Dominican Republic and Uruguay, presented projects related to the following topics:

- Circular Economy applied to Synthetic Sleepers
- Product Category Rules (PCR) for construction products, services or materials
- Recycled coarse aggregates (RCA) for use in hydraulic concrete
- QI tools to facilitate aggregate recycling and use of structural timber

The results of the group’s discussions can be summarized as follows:

- Develop specific guidance for circular building standards.
- Develop an Inventory of construction standards relevant to the CE
- Regional exchange platform on standardization drafts in the region
- Development of business models
- Revision of building codes and treatment of reuse of materials

**WG3: Agri-Foods**

The following countries: Bolivia, Brazil, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Peru, presented projects related to the following topics:

- Circular Green Energies
- Biofuels from food waste
- Plant biomass as raw substrate for production of agricultural bio-inputs
- Strengthening the link between CE initiatives in agribusiness with QI
- Circular enterprises for quinoa, yerba mate, coffee, cacao and others.
Among the needs identified were the need to adopt or develop specific standards including circularity or specifications and characteristics; in metrology, to establish traceability methods for measurements, the need to have certified reference materials; in terms of conformity assessment, the need for laboratory tests to determine the concentration of contaminants, for example, and product certifications, among others, were identified.

The results of the group's discussions can be summarized as follows:

- Launch an awareness campaign based on the COPANT Guide on CE and implement capacity building of standardizers based on the COPANT Guide.
- Organize a workshop to present national strategies and exchange experiences on the development of general CE standards and follow-up to the ISO/TC 323 CE committee.
- Develop and implement a strategy to promote the use of (accredited) Conformity Assessment in CE standardization processes.
- Develop and implement a system (database) to share information on existing laboratory and other Conformity Assessment capabilities in the region.
- Organize a workshop to share experiences on metrology applied to CE.

**CONCLUSIONS**

Each Working Group defined the priorities of the issues to be worked on and will develop a work and meeting plan to achieve the expected results.

*Recordings of the workshop and working groups can be found here:* recordings