

Mission report

Subject	GreenX3 2nd Workshop “Sustainability and Circular Economy – Case Study: Coffee Beans”
Place and dates	Trieste, Italy – 11-12 February 2026
ICO staff member	<ul style="list-style-type: none"> • Vanusia Nogueira, Executive Director
Purpose of travel	<ul style="list-style-type: none"> • Participate as keynote Speaker in the panel “Circular Economy in the Coffee Chain” • Attend the DEMUS S.p.A. site visit
Five-Year Action Plan/Programme of Activities relevance	<p>Five-Year Action Plan:</p> <ul style="list-style-type: none"> • Strategic Goal II: Using the Organization’s convening power to provide a forum for dialogue between and within the public and private sectors • Strategic Goal III: Facilitating the development of projects and promotion programmes through public-private partnerships <p>Results and Deliverables from the PoA:</p> <ul style="list-style-type: none"> • II.A.3 Consultations and advocacy to increase the engagement of ICO Members, private sector/other stakeholders in CPPTF and the realization of the Roadmap • II.A.6 Engaging IGOs, IFIs and NGOs in ICO events and participation in external events • III.A.5 Providing advisory services and cooperation with IGOs, private sector, civil society/academia • III.A.7 Supporting the operation and promotion of the Center for Circular Economy in Coffee (C4CEC)

OVERVIEW

1. GreenX3 2nd Workshop Sustainability and Circular Economy - Case Study: Coffee Beans

GreenX3 is a Marie Skłodowska Curie Doctoral Network Industrial Doctorate (DN-ID) co-funded by the European Commission through the Horizon Europe Research and Innovation programme and by UK Research and Innovation (UKRI) under the UK Government’s Horizon Europe funding guarantee. Its second workshop, entitled “Sustainability and Circular Economy - Case Study: Coffee Beans”, brought together research, industry practice and policy perspectives to explore how sustainability and circular economy approaches are reshaping the global coffee sector.

With topics ranging from sustainability certifications and consumer perceptions to circular strategies for coffee by-products, regenerative agriculture and resource-efficient processing, including decaffeination and roasting, the workshop also highlighted the enabling role of institutions, finance and investment, as well as the practical challenges posed by legislation and market structures. By connecting production practices with market outcomes, it aimed to foster dialogue on how sustainability and circularity can enhance competitiveness, resilience, and long-term viability for coffee producers, enterprises and communities worldwide.

Attended by stakeholders from across sectors, including academic and non-academic partners, researchers and innovation enthusiasts, the workshop focused on the analysis of greener materials and their environmental impact, the development of novel environment-friendly industrial processes, and key enabling technologies (KETs) designed to enhance resource management and product quality. Through keynote contributions, case studies, and applied research, the sessions examined how innovation in technologies, business models, certification systems and regulatory frameworks can reduce environmental impacts, while creating economic and social value across the coffee value chain.

2. Panel “Circular Economy in the Coffee Chain”

The Executive Director participated as keynote speaker in this session, which aimed to showcase the role of the coffee value chain as a model for fairness, sustainability and innovation practices in agribusiness, and highlighted the use of technology in farming to enhance efficiency, strengthen production resilience and balance out costs.

3. DEMUS S.p.A. site visit

Demus S.p.A. is a Trieste-based benefit corporation, active since 1962, specializing in sustainable decaffeination and coffee research and recognized for its quality, safety and innovation.

During the site visit, the Executive Director and other workshop participants, including, gained valuable insights on the company’s decaffeination and coffee dewaxing processes. Key focus areas included:

- (a) Industrial Innovation: researching, testing, and applying new, eco-friendly, and organic decaffeination methods, including the utilization of raw waste materials;
- (b) Scientific Analysis: evaluating the quality of decaffeinated coffee, caffeine recovery, and raw material stability at their pilot plant; and

- (c) Sustainability & Safety: showcasing of ISO-certified processes (9001, 14001, FSSC 22000) that maintain high-quality taste using water and activated carbon.

CONCLUSIONS/MAIN OUTCOMES

1. The ED's participation in the event contributed to:
 - (a) Highlighting the role of circular economy principles in transforming the coffee sector into a more regenerative, inclusive, and resilient system;
 - (b) Reinforcing the ICO's role in promoting dialogue, international cooperation, and data-driven policies among producing and consuming countries;
 - (c) Showcasing circular economy strategies that reduce environmental impact while creating economic value for farmers and communities;
 - (d) Emphasizing the importance of supportive policies, investment, and partnerships to scale sustainable solutions in the coffee sector;
 - (e) Calling for collective action to integrate circularity into the global coffee economy; and
 - (f) Strengthening the ICO's position as a leading advocate for sustainable agricultural practices, economic fairness, and the preservation of planetary resources.

AOB

N/A

