Circular Economy Solutions Dialogues (CESD)

Final Report: CESD1, CESD 2, CESD 3

1. Introduction

The Circular Economy Solutions Dialogue (CESD) is an initiative implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in cooperation with the Global Solutions Initiative (GSI) on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

The Circular Economy Solutions Dialogue (CESD) was launched with a view to inspiring a conducive circular economy (CE) narrative feeding into the G/T20 process. It builds on the momentum of multilateral policy dialogues and commitments on the circular economy (GACERE, ACEA, LAC CE Coalition, G20 Resource Efficiency Dialogue), and focuses on both analyzing mechanisms scaling-up circularity and devising context-sensitive strategies for their broad implementation.

The CESD spanned across three (3) thematic cycles, focusing on 1) the plastics, 2) the global value chains, 3) the urban metabolism and sustainable infrastructure.

- CESD 1: Bending the Linear Agenda: Circular Economy Policy Instruments, Business Models and Technology Uptake in the Plastics Value Chain.
- CESD 2: From Global Value Chains to a Global Circular Economy: Mapping the Journey
- CESD 3: Localizing the circular economy imperative – What is at stake for cities?

The three (3) CESD Series were complemented by a Sounding Board, a parallel, amplifying dialogue stream dedicated to developing a cross-sectoral circular economy agenda at a multilateral level. The Sounding Board targets international fora, such as the G20, T20, ASEAN and the EU to connect the thematic dialogues with a multilateral perspective.

2. Methodology and arrangments of the Dialogues

Each CESD thematic cycle was designed as a two-month multi-stakeholder dialogue, comprising:

- several (4 to 5) virtual meetings (sessions) employing a mix of dialogue methodologies and leadership impulses;
- e-collaboration to draw out ideas in between; and
- a booklet / e-publication to share experiences and disseminate solutions.

Each thematic cycle was attended by approximately thirty (30) experts including public and private sector decision makers, and representatives from civil society, academia, think tanks and international organizations involved in CE initiatives worldwide. All sessions were designed in an interactive, co-creative and participative dialogue form, and were facilitated and moderated by several experts.

The following tables (Table 1, 2, 3) provide short overviews of the arrangments of the three (3) CESD series together with brief descriptions on the sessions' objectives.

Table 1 – CESD 1: Bending the Linear Agenda: Circular Economy Policy Instruments, Business Models and Technology Uptake in the Plastics Value Chain.

4 May 2021	**1st session:** Session 1 aimed at building a common understanding of challenges and solutions in integrating circularity in value chains, focusing on plastics, and at stimulating a forward looking, solution-focused discussion viewing the circular economy in two parallel lenses: 1) enabling frameworks 2) actual implementation.
18 May 2021	**2nd session:** Session 2 focused on the technological perspective of embedding circularity into the plastics value chain. Participants addressed the issue of mainstreaming

	circular economy technologies (incl. tech-based business models) in the plastics value chain, with discussions on key enablers of technology-based CE business models (incl. innovation, regulation/ licensing, investment bankability), and on mechanisms facilitating large-scale uptake of the CE (notably standardisation and infrastructure).
8 June 2021	**3rd session:** Session 3 zoomed in on the challenge of scaling-up circularity in the plastics value chain. The participants discussed the promotion of an ecosystem-based approach to scale-up circular solutions' uptake in the plastics value chain, with discussions on policy support (notably under EPR schemes), private sector involvement, and (multi) national and urban partnerships on the CE.
29 June 2021	**4th session:** Session 4 was all about strategy. How can we define context-sensitive strategies for a broad implementation of mechanisms scaling up the uptake of circular economy practices across the plastics value chain? The discussion took due consideration of the 'why' factor: what does more circularity in the plastics value chains mean for people, business, and nature?

Table 2 – CESD 2: From Global Value Chains to a Global Circular Economy: Mapping the Journey

21 October 2021	**1st session:** Session 1 aimed at building a common understanding of challenges and solutions in integrating circularity in value chains, focusing through the lenses of circular business models and their role in achieving circularity, on the post-pandemic trends on GVCs and the CE, and on the growing importance of GVCs for trade and investment.
11 November 2021	**2nd session: The sharing economy models: Unused value is wasted value** Session 2 aimed at discussing about promising approaches on how to accelerate the transition to a circular economy. Solutions and critical success factors for sharing economy models were discussed. Existing business models, the potential of integrating circularity within them and their role in GVCs were also explored.
02 December 2021	**3rd session: Deep diving into the battery value chain** Session 3 aimed at discussing how circularity can be integrated in GVCs from a sectoral perspective, taking the example of the battery value chain and deep diving into it.
22 January 2022	**4th session: Revisiting the CESD conversations** Session 4 attempted to translate the group's collective experience into technical and policy proposals considering the special context of participating countries and peer groups.
09 December 2021	**Deep Dive: Due Diligence and Circularity Solutions for Battery Value Chains** Following the lead of session 3, the Deep Dive Webinar more deeply discussed the current state of environmental and human rights due diligence in the battery

	value chain and the potential of sustainable supply chains and circular solutions. The webinar was hosted by GIZ and GSI and was open to the public.

Source: https://greentechknowledgehub.de/events/circular-economy-solutions-dialogues-cesd-202122

Table 3 – CESD 3: Localizing the circular economy imperative – What is at stake for cities?

9 March 2022	**1st session: Setting up the scene and exploring the paradigm shift that the circular economy demands** Session 1 connected the findings of the two first cycles of circular economy dialogues on 'plastics' and 'supply chains' in an urban perspective in developing and developed regions. It highlighted governance and government responses at interdependent local, national and multilateral levels regarding cities as nodes of global supply chains and as epicentres of material cycles, such as plastics and biomass.
6 April 2022	**2nd session: The materiality of urban circular economy** Session 2 built on an analysis of ongoing transformations and gridlocks in critical sectors, including housing, real estate and construction industry, critical urban services and infrastructure, including nature-based solutions, mobility and logistics, impact entrepreneurship etc. The focus was placed on the intersections between the different sets of solutions and policymaking to accelerate transformations.
4 May 2022	**3rd session: Models for the future?** Session 3 focused on promising approaches on how to accelerate the transition to a circular economy. Solutions and critical success factors were investigated. In this session, governance and business models involving public and private stakeholders were presented and discussed. The issues of public goods and the scope of the informal economy, the attempts to foster a well-being economy, the role of multilateral financial institutions, in particular public development banks, were investigated. Participants were asked to provide elements of visualisation of future models.
18 May 2022	**4th session: Policy directions** Session 4 was about translating the group's collective experience into policy proposals and technical recommendations. The final session connected different sets of issues across sectors, governance requirements and business priorities in order to identify levers to promote circularity. The guiding question was: *What are the patterns and demands for future development on the ground in cities and through multilateral cooperation?*
8 June 2022	**Deep Dive: Shifting the paradigm of urban governance and business models towards circularity in urban spheres** Following the lead of session 3, the Deep Dive webinar more deeply discussed urban governance and business models necessary for a paradigm shift. Relevant stakeholders took the stage to highlight urban planning issues and offered integrated circular economy solutions for urban spheres. The webinar was hosted by a partner institution and was open to the public.

Source: https://greentechknowledgehub.de/events/circular-economy-solutions-dialogues-cesd-2022-localizing-circular-economy-imperative-what

3. Key takeaway messages

Key takeaway messages were generated over the course of the dialogue sessions. These are summarised and clustered around the following four (4) intervention areas:

3.1. Inspiring & Learning

Develop awareness and knowledge for the CE transition.

- Map the wide range of actors (roles, needs, capacities) comprising the CE ecosystem.
- Bring different stakeholders together and create joint agendas.
- Build a shared understanding of the CE potential and a narrative of an inclusive one world circularity.
- Ensure that identical CE-related terminology and labelling is used universally.
- Invest in building social acceptance and trust and highlight the inclusive and social character of CE (strengthen the buy in factors).
- Invest in structural changes in education, communication, and social media regarding the need for and usefulness of reuse and other CE-related behavior.
- Invest in building (labor) skills, in sharing knowledge and know-how in modernizing infrastructure and in developing the basis for technology uptake.
- Raise the awareness of consumers and especially young people and children about their power to drive the CE business models through their decisions. Remove cultural barriers (e.g., on ownership, hygiene-related concerns, etc.) substantially affecting the performance of re-use models.
- Raise the awareness of entrepreneurs about the significant potential for innovation in the value chains.
- Raise the awareness of policy and business decision makers about the recycling value chain actors' needs, policy enforcement, and potential unintended consequences.
- Raise the awareness of policy and business decision makers about the informal actors' needs and how the sector affects the use of recycling infrastructure and collection.
- Promote the exchange of knowledge to all relevant and affected (by the transition) stakeholders. Promote best practice exchange and transferability between the global and local and vice versa, as well as between advanced and emerging economies and vice versa.
- Establish multi-stakeholder networks suitable for the facilitation of information flow and exchange of best practices, e.g., through regional/global initiatives like the SWITCH programmes.
- Improve the availability and sharing of information / data (e.g., on plastic streams) by innovation companies (e.g., digital monitoring systems using a central information repository) to build well-informed consumers.

3.2. Enabling

Promote a conducive environment through regulation, frameworks and policy making.

- Capitalise on multilateral collaborations to help countries establish their own CE systems (EPR schemes and / or the adoption of economic instruments, e.g., taxes).
- Globalize EU's digital product passport for tracing the life cycle of a product. Enforce transparency and traceability across the value chain. Ensure through legislation that this can be standardized and open across all industries.
- Embed voluntary standards in mandatory legislative frameworks (e.g., standardization of recycling practices in global value chains).
- Ensure that due diligence legislation covers upstream suppliers and holds buyers / downstream producers in the Global North accountable.
- Prioritize the development of resource management strategies at city level (e.g., impose taxes or introduce other regulatory interventions that would make primary material use more expensive, encouraging local loops).
- Prioritize the development of bio-economic / bio-based solutions, human-technology centric and inclusive approaches in policy making, by acknowledging the interconnections and exchanges that exist between people, territories etc.

- Provide incentives so that industries recognize the informal sector as a real part of their supply chain / value chain.
- Formulate policies that take into consideration the different cultural-phycological contexts and the necessity for social cohesion.
- Enforce the application of existing regulation (e.g., in the plastics value chain) by introducing controlling procedures and enhancing market checks / audits through universally applied methodologies, metrics, criteria and indicators.
- Define a common and globally applied and understood CE-related terminology and definitions, that is accessible and flexible to evolve as the respective CE actors mature in applying the circular economy.
- Introduce cross-boundary jurisdictions and application of measures to address increasing resource consumption and waste generation in cities.
- Introduce regulations and incentives to reduce imbalances in a market that is characterised by (recyclables) supply shortage.
- Introduce regulations and incentives to enhance the participation of informal actors in the policy making.
- Improve the working conditions, compensation and human rights of workers in the informal sector.
- Promote reuse schemes through a distributed infrastructure that enables / facilitates use and collection.
- Promote localised decision making as a response to CE challenges, like access to green finance, appropriate technology selection, and an effective implementation of enabling policies.
- Design / revise trade policies and agreements to ensure that CE spreads along all segments of the supply chain
- Advance multi-stakeholder engagement through equitable agreements to promote and make possible the CE objectives, making sure that local stakeholders are early engaged.

3.3. Financing

Facilitate access to finance, move away from unsustainable investments, increase sustainable investments, as well as diversify sustainable investments beyond renewable energy production and energy efficiency, to also address circularity in other value chains, sectors, and territorial contexts.

- Introduce mandatory environmental and social reporting requirements for large companies, as a means to encourage financial flows towards CE technology solutions.
- Invest in systems, rather than individual firms or technologies.
- Align finance mechanisms to evidence-based targets.
- Promote blended finance, including instruments like guarantees, loans, and partial grants.
- No "one-size-fits-all" solution: Provide tailored approaches and type of financial support.
- Provide the right mix of incentives and taxes for the CE transition and the development of CE business models.
- Provide a variety of incentives for innovating firms to encourage and support innovation and to embed CE solutions at an early stage of production.
- Promote the diversification of available financial support, including local banks, investment funds, angel finance, etc.
- Promote sustainable finance to encourage environmental and social benefits.
- Provide finance mechanisms to ensure fair pricing of services for all community members.
- Ensure fair and proportionate distribution of the costs of Global Value Chains between countries / regions.
- Stabilize and decouple the profitability of recycling / second life of certain products from raw materials.

3.4. Implementing

Introduce new business models, technology and innovation.

- Provide the needed infrastructure to successfully integrate circularity in cities (e.g., waste management / reverse logistics infrastructure, social infrastructure, data (resource) governance, etc.).

- Expand recycling infrastructure (collection/ recycling) beyond the hot-spot consumption areas.
- Improve skills and competencies on how to apply CE-related processes.
- Adopt nature-based solutions.
- Apply cost-benefit analysis to demonstrate the short-term, long-term, tangible and intangible benefits of the CE model.
- Invest in technology, innovation and digitization (e.g., urban data platforms and digital twin technology).
- Develop detailed accurate baselines and robust data to support policy making and scaling up of circular business models.
- Support the adjustment of successful CE practices to different contexts.
- Create local markets for recyclables (to support the feasibility of EPR schemes and advance the narrative towards the ownership of the responsibility).
- Creation of bio-labs and cross-industry pilots to test at scale new materials.