

On behalf of:



of the Federal Republic of Germany



# Circular Economy Solutions Dialogues (CESD) on Organic Waste

## Organic Matter: Waste or Resource?



On behalf of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), the global project Environmental Protection Worldwide of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH continues the Circular Economy Solutions Dialogues (CESD) series with new thematic focus areas.

The Circular Economy Solutions Dialogues (CESD) on "**Organic Resources**" explored the concept of "*Organic Matter: Waste or Resource?*" through a series of four sessions, each addressing different dimensions of organic resources management. The discussions involved experts from public and private sectors, civil society, academia, think tanks, and international organizations; creating a platform for sharing knowledge and best practices. The sessions emphasized sustainable strategies, technologies, policy frameworks, and innovative approaches to organic waste management, with the goal of enhancing circular economy and reducing environmental impact.

### Summary of Sessions

Session	Date	Key Focus
Session 1: <i>"How Can We Acknowledge Organic Waste as a Resource?"</i>	April 24, 2024	The session introduced the CESD community to the current global situation regarding the organic waste value chain, emphasizing the need to view organic waste as a resource rather than as reject material. Participants explored strategies for improving organic waste management practices, such as composting and biogas production, and discussed the impact of urbanization and historical shifts in waste handling

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Session	Date	Key Focus
Session 2: <i>"How Can We Support the Circular Flows of Organic Matter between Urban and Rural Spaces?"</i>	May 22, 2024	The session addressed the urban-rural dynamics of organic waste, exploring how circular flows of organic matter can benefit both urban and rural settings. Discussions centered on prevention, sustainable development goals, and the development of food waste roadmaps to promote circularity and resource efficiency.
Session 3: <i>"What Methods and Technologies Can Help Us Prevent the Creation of Organic Waste and Encourage its Usage across Sectors?"</i>	June 19, 2024	Participants focused on innovative methods and technologies for transforming organic waste into resources. Case studies from Iran and Ghana illustrated practical strategies, while discussions highlighted barriers such as infrastructure gaps and the need for better policy frameworks to support organic waste management initiatives.
Session 4: <i>"How Can Policies Harness Organic Resources? Policies, Stakeholders, Finances, and Incentives"</i>	September 25, 2024	The session explored policy frameworks, financial models, and incentives that can drive the adoption of organic-waste-to-resource technologies. Real-world examples from biogas and compost production showcased both the challenges and solutions faced by various initiatives globally.

### Key thematic takeaways

This report collects thematically distributed key insights from the four CESD sessions, highlighting takeaways that can serve as guidance in the field of organic resources management.

#### 1. **Strategic Approaches to Organic Waste Management**

*Viewing organic waste as a resource:* Organic waste should be redefined as a valuable resource rather than waste, with sustainable practices like composting and anaerobic digestion offering opportunities for resource recovery and economic benefits.

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Prevention as a primary strategy: Prevention of organic waste generation should be prioritized, aligning with Sustainable Development Goals (SDGs) to reduce waste at the source and retain value within supply chains.

Decentralized waste management solutions: Decentralized systems, such as small-scale community composting and biogas production, offer flexibility and effectiveness, especially in urban contexts with high organic waste content.

## **2. Technological Innovations and Implementation**

Technological innovations: Both high - and low - tech solutions can significantly enhance organic waste management, such as the use of Black Soldier Fly technology for waste valorization or advanced composting methods that integrate traditional and modern approaches.

Waste-to-Energy and nutrient recycling: Transforming organic waste into biogas and nutrient-rich by-products like digestate offers dual benefits: reducing landfill waste and producing renewable energy.

Regional challenges and tailored solutions: Different regions face unique challenges in managing organic waste. Solutions must be adapted to local contexts, considering factors like waste composition, climate, and infrastructure.

## **3. Policy, Regulation, and Market Development**

Policy and legislative support: Strong policies and regulatory frameworks are crucial for effective waste management, including regulations that ban organic waste in landfills and encourage resource recovery.

Finance and market development: Financial instruments tailored to solutions, such as biogas and composting projects, as well as supportive market regulations, are essential for the scalability of organic waste management technologies.

Public-Private partnerships and collaboration: Collaboration among governments, private sectors, and civil society is necessary to address complex challenges, drive innovation, and scale successful projects.

## **4. Education, Awareness, and Community Engagement**

Community and stakeholder engagement: Successful organic waste management requires active involvement from local communities and stakeholders, fostering bottom-up approaches and community-based solutions.

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*Educational initiatives and behavioural change:* Public awareness and educational campaigns targeting youth and communities are essential for promoting long-term behavioural change and improving waste segregation and recycling rates.

*Continued learning and Aadaptation:* Continuous learning, sharing of best practices, and adaptation are necessary for overcoming barriers and achieving sustainable organic waste management globally.

### **Next Steps**

The CESD on Organic Resources provided an understanding of the challenges and opportunities in the field of organic resources management. Analytical information on all session reports, including their key take aways is available on our [Green Tech Knowledge Hub](#). Join us for our next CESD Dialogue Stream on “Behavioral Change” and be part of the discussion. If you are interested in participating, please register here: <https://greentechknowledgehub.de/events/circular-economy-solutions-dialogues-empowering-transformation-behavioural-change-circular>.