

Chair's Summary: Circular Economy-Developing Recycling Industries Meeting Vienna, 14th-15th November 2018

The circular economy presents a paradigm shift away from our current linear production systems that are expensive, inefficient, and which place enormous burdens on global ecosystems. It is a regenerative system in which the making, using and disposal of products—from raw materials extraction to production, distribution, use, waste management and final disposal—are transformed into a continuous, cyclical and regenerative process.

Achieving a circular economy will require unprecedented coordination and collaboration amongst all echelons and participants in the economy. The circular economy will catalyze a new global system whereby goods are made, used, reused, repaired and then converted again into new raw materials. It's an ambitious goal that will require an across-the-board shift in how we think about production and consumption and an alignment of systems to support this transformation. Despite the enormity of the task ahead, the foreseen benefits promise to be felt at the environmental, economic and social levels; a goal that the linear economy has been unable to achieve.

Recycling is a fundamental lynchpin of the circular economy in that it plays a transformative role in turning industrial residuals and post-consumer materials into valuable substances or products, feeding used materials back into the value chain and correspondingly achieving the “waste-to-resource” paradigm. Recycling thus presents numerous economic, environmental and social opportunities. Despite this, its potential has yet to be fully realized due to a number of legal, policy, infrastructural and market barriers.

In order to bridge this potential with concrete action to embed recycling in a circular economy, the United Nations Industrial Development Organization (UNIDO), hosted the meeting “Circular Economy-Developing Recycling Industries” in Vienna from the 14-15th November 2018, in collaboration with its partners, representing the recycling industry, industry associations, think tanks and international organizations.

The meeting programme featured presentations and facilitated panel discussions to foster dialogue and identify areas of convergence to accelerate progress on this issue. The two days were structured around identifying the current barriers hindering progress and elucidating the types of policies and measures that would support the development of robust and sustainable recycling industries around the world. Discussions also examined the plastics, metals, textiles and composite waste streams to reveal barriers and options to encourage the recycling of these waste streams.

A draft meeting background report formed the basis of discussions, providing an overview of the key challenges to the development of a sustainable recycling industry, also presenting a number of options for remedying the current situation.

Identified barriers stemming from the discussions, can be broadly characterized as follows:

- Legal/policy/governance challenges at the international, national and sub-national levels;
- A lack of investment opportunities for value chain establishment;
- Unfavourable market forces;
- The presence of an informal market;
- A lack of infrastructure;
- Consumer forces;
- Commodity prices; and

- Demographic influences (i.e. population size; level of industrialization).

It was felt that the interaction of these factors served to create the conditions that hamper the realization of an effective and sustainable recycling industry.

Poll results

The identified barriers and possible focus areas were then aligned with a range of potential policy and market solutions by means of an interactive poll, where participants were able to indicate their preferred mechanism to address these challenges.

In regards to what participants believed to be the **most efficient policies in the development of sustainable recycling industries**, more than half of respondents thought that waste management policies in favour of recycling would be most effective in catalyzing sustainable recycling industries. Thereafter, it was felt that awareness-raising on the environmental/economic benefits of recycling, targeted at a range of stakeholders (government, private sectors, SMEs and civil society), would also be an effective measure. Less support was shown for i) green design and ii) manufacturing policy integrating recycling, and iii) green public procurement supporting recycling.

In terms of the most **preferred measures and incentives to support the development of recycling industries**, participants preferred legislation that provided incentives and clear definitions, thereafter showing an equal preference for market interventions and manufacturing requirements favouring recycling.

Participants were asked what they thought was the **most supportive form of international cooperation to support the development of recycling industries**. Respondents thought that the harmonization of requirements and procedures for recyclables management was important. However, respondents also showed almost the same preference for targeted technical assistance and capacity building, with trade liberalization being the least preferred option.

In terms of the **preferred policy options for steering the supply side of recycled plastics**, participants thought that extended producer responsibility would be the most effective option, followed by the introduction of dual or multiple stream collection systems. Lastly, incentives for better plastics design restrictions placed on the use of hazardous additives were viewed to be the least popular option.

In terms of **steering the demand side of recycled plastics** the most preferred option amongst respondents was a tax on virgin plastics, followed by recycled content rules. The next preference after this was for recycled content product labels and lastly, respondents thought that public procurement would be the least effective option.

Participants were also encouraged to look beyond policy as the only option for encouraging recycling. More specifically, in regards to metal recycling, participants were surveyed as to what they thought was the **most effective non-policy measures to encourage metal recycling**. A slight majority thought that intelligent design for future recycling would be the most effective non-policy measure, followed by an improvement of the recycling technologies and then information and education. Standardization was the least popular option.

In concluding the polls, participants were asked to rank what they believed to be the **main barriers to metals recycling**. A lack of standards and recycling were perceived to be the largest barriers, closely followed by price volatility, which in turn was followed by the cost of collection and virgin ores; the latter two options receiving equal votes.

The way forward

The meeting was concluded with participants endorsing the contents of the draft background report, and the attached Chair's Summary (at Attachment A). The Chair's Summary represents the participants' agreement as to the main barriers and challenges to realizing a sustainable recycling industry as part of a circular economy. At the same time, it also represents participants' consensus as to a shared way forward for UNIDO's programmatic and policy work, with the ambition of embedding recycling as a central cog in the circular economy.



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Chair's Summary of Circular Economy: Development of Recycling Industries

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Policy context

Circular Economy (CE) & recycling:

Sustainable Development Goals (SDGs) & recycling

Barriers to the development of a sustainable recycling industry

Despite the policy support accorded to the role of recycling in the SDGs and the transition to a CE, barriers to the development of recycling industries exist at different levels, especially in emerging economies and developing countries.

A. Barriers related to institutional, structural and economic issues

A.1. Lack of infrastructure for collection, storage, dismantling and processing

A.2. Limited investment possibilities for value chain establishment

A.3. Unfavourable market forces affecting recycling: volatility of commodity prices (e.g. copper, tin); large proportion of essential primary resource controlled by one country (e.g. cobalt / DRC, rare earth metals / China)

A.4. Impact on population and economic growth

A.5. Mode of consumption patterns- throwaway society

A. Possible interventions to address barriers related to institutional, structural and economic issues

A.1. Infrastructure development

A. 2. Market interventions

B. Barriers related to lack of support of recycling by policy and regulation

B.1. Lack of clear distinction between waste and secondary raw materials used in recycling processes and lack of clear distinction between hazardous and non-hazardous materials. This places a significant financial and administrative burden on recyclers.

B.2. Lack of legal/ policy incentives for recycling

- B.3. Lack of political support for recycling: Low level of awareness of environmental/economic benefits of recycling; recycling not considered a priority in government programmes and budgets, lack of support for collection systems to ensure that the demand for recycling is met.
- B.4. Legislation are not enforced; policy decisions are not in line with legislation
- B.5. Waste and chemical regulations are not working in syn- waste regulations aiming for high recycling rates, chemicals regulation restricting chemicals. Exemption from ban is not a solution.

B. Possible interventions to address barriers related to lack of support of recycling by policy and legislation

- B.1. Development or revision of legal instruments
- B.2. Adoption of supportive policies
- B.3. Measures to raise awareness among politicians, private sector, SMEs and civil society
- B.4. Strengthening enforcement through global, regional networks and partnerships
- Strengthening of cross-border cooperation

C. Barriers related to international trade

Given that recyclable materials are subject to international trade, the development of a recycling industry can be impacted by:

- C.1. Different national regulatory requirements for the management of recyclable materials:
- C.2. Pro/contract for national import bans on certain types of materials (different views expressed by panel and the audience)
- C.3. Other trade barriers

C. Possible interventions to address barriers related to international trade

- C.1. Harmonization of national laws
- C.2. Modification of national import bans
- C.2./ C.3. Engagement through global or regional trade agreements

D. Barriers related to industrial activity

- D.1. Barriers related to the informal sector
- D.2. Barriers related to manufacturing
- D.3. Barriers related to technical, financial and capacity constraints

D. Possible interventions to address barriers related to industrial activity

- D.1. Integrate informal recyclers in the process rather than trying to eliminate them
- D.2. Introduction or clarification of obligations to manufactures and/or consumers
- D.3. Possible approaches to support capacity building and funding