

STEPPING UP CLIMATE ACTION

LATIN AMERICAN & CARIBBEAN CLIMATE WEEK

20-23 AUGUST 2018
MONTEVIDEO

HOSTED BY  MVOTMA
Ministerio de Vivienda,
Ordenamiento Territorial
y Medio Ambiente
 UruguayNatural
Ministerio de Turismo

LAC Regional Technical Expert Meetings on Mitigation: Brief Summary Report

The secretariat of the **United Nations Framework Convention on Climate Change (UNFCCC)**, the **United Nations Industrial Development Organization (UNIDO)**, the **Technology Executive Committee (TEC)**, and the **Climate Technology Centre and Network (CTCN)** organized the regional technical expert meetings during the Latin America & Caribbean Climate Week (LACCW), which took place between 20 and 23 August in Montevideo, Uruguay. The expert gathering took place as part of the **technical examination process on mitigation**, which aims to identify and facilitate the implementation of activities that present high potential for emission reductions in order to boost climate action before 2020.

The two sessions, titled: “**Enabling circular economy solutions to boost climate action**” and “**Enabling waste-to-energy, industrial waste reuse and prevention solutions to achieve circular economy and boost climate action**”, were held to discuss the implementation of circular economies to achieve emission reductions and generate sustainable development co-benefits.



The first session presented the concept of “circular economy”, an alternative to a traditional linear economy (make, use and dispose), which is restorative and regenerative by design and redefines products and services to design waste out, being ultimately powered by renewables. The second workshop then discussed how waste-to-energy, industrial waste reuse and prevention solutions are integral parts to achieving a circular economy and its associated economic and environmental benefits.

The meetings brought together members from the civil society, UN agencies and financial institutions. The experts presented high-impact case studies to serve as a basis for discussion on the vision/goal in terms of harnessing mitigation potential and co-benefits of circular economy related policies, practices and actions as



well as on innovative approaches to waste-to-energy and waste reuse/prevention that are actionable in the short term for the region. The experts shared not only their hands-on experience but also ideas and suggestions for Parties, non-Party stakeholders, such as cities and businesses, and organizations to replicate and upscale innovative approaches.

Participants exchanged views on the necessary elements for replication and upscaling of circular economy and specifically waste-to-energy solutions, such as policy, partnerships and the need of financial, technical and capacity building resources.

Notably, the expert meeting was aligned with the format of the year-long Talanoa Dialogue, an important international conversation around ambition now and in the future. The technical expert meeting discussions were structured around the three questions of the Talanoa Dialogue (Where are we? Where do we want to go? How do we get there?) to ensure that expert inputs can easily be fed into the Talanoa Dialogue as well as into other high-level events and the pre-2020 stock take.

All information on the regional technical expert meetings (including programmes, speakers, presentations) can be found at

<https://unfccc.int/topics/mitigation/workstreams/technical-expert-meetings>.

Key message derived from the session 1 (Enabling circular economy solutions to boost climate action)

- Circular economy is all about maximizing efficiency and optimizing resources with an aim to achieve a triple win-win benefits: economic savings and gains, environment conservation and employment generation. However, it is not an overnight job. In order to transit towards circularity, it requires a consistent efforts from all sectors of society covering all part of the world.
- Circularity is not so much technological as it is political and economic.
- The steps to transit towards circular economy include: a) Analyze the current production and consumption patterns to identify the sector with high potentials and impacts; b) Inspire people to think and live in a circular way by sharing successful experiences. It is important to communicate to various stakeholders and spread the voice for circular solutions; c) Engage the private sector by enabling/supporting them to identify business opportunities and absorb the associated business/market risks. The public sector should come up with innovative mechanisms to support the private sector for sharing/reducing investment risks; d) Support transition to new production model and encourage demand from users, by aligning policy and regulations with the emerging technology and production process.
- Financial institutions should create new financial instruments, including incubation and seed fund, to support the take off and scalability of new technology and ideas, which are usually small in scale and struggle to access finance that is traditionally designed for large projects and companies.





- There is a need to link the concept of circular economy to the 4th industrial revolution. Innovative technologies, including information and communication technologies, help in reducing costs and making circular production more financially viable. Efforts should be put on development and transfer of innovative technologies.
- Governments should aspire for implementing the principle of “Polluters pay for pollution”. They should introduce taxes on old high-polluting production models and define incentive schemes for new circular production models. Furthermore, they are challenged to give value to circular economy and to rapidly support ongoing efforts with adequate regulatory framework. That would also redirect the focus of investment and research.
- It is important to communicate, educate and train about the value of circular economy beyond its business and financial opportunities. The risk of what would be the world if we continue the current production and consumption pattern should be highlighted to end users with more emphasis. This will create more demand for circular products and services. It is important to share knowledge and experiences at the global, regional and local level.
- The regional and local governments have also important roles to play.

Key message derived from the session 2 (Enabling waste-to-energy, industrial waste reuse and prevention solutions to achieve circular economy and boost climate action)

- Priority should be given to discourage the production of waste and make waste producers paying for it. Policy shall be oriented to achieve waste management hierarchy such as more priority to be given for waste production avoidance and waste reduction, followed by reuse, recycle, landfilling and incineration.
- In the LAC region, the organic waste constitutes about 50% of disposed waste but it is not treated/used and ultimately ends up at landfills that are not managed properly. Circular economy shouldn't miss the opportunity to address the issue of organic waste and harness its potential for generating energy and manure for soil.
- Waste-to-energy is not only electricity production by incinerating waste, we should also focus on production of energy from organic waste for instance biogas at the household and commercial level. Energy generated by biogas technology has a more versatile use, including thermal and mechanic consumption.
- Hazardous residues and emissions from the waste-to-energy incineration plant are still major challenges. High-end technology solutions are available for reducing environmental and health impacts caused by waste-to-energy incineration plants, but they are not cheap. Is the society ready to pay for such high-level technology solutions?
- The quantity and composition of feedstock are both issues that still pose a challenge, above all from a technical point of view. The competitive and alternative use and rising prices of waste streams may present a challenge for sustainable supply of waste streams for the waste-to-energy plants. A potential solution could be to work across sectors and find synergies for feedstock, such as combining agricultural waste with sludge, municipal green and biodegradable waste streams, used oils, and so on.





- There is a trend of decentralization of energy generation, where consumers are also producers. Obsolete infrastructure and policy framework are making it difficult for energy produced from waste to be optimally used or stored. Hence, technical infrastructure and financial model should align to this decentralization of energy generation and use. Private companies, technology provider and financial institutions need capacities to adapt to these changes. Regulation should also adapt to the changes and follow with enforcement of supportive policies.
- For businesses involved in waste-to-energy, among the biggest challenges are securing economies of scale and offtake agreements and leveraging private finance. The private finance is too focused on safer, shorter-term investments whereas the banks are being too focused on large-scale projects. Hence, financial institutions and governments should work together to create new business/financing models, with an aim to support any technology or innovation that needs medium-sized financing at a reasonable interest rate ('patient financing') in order to be piloted and brought to the market at relatively low business risk.
- In terms of the impact on employment of moving towards a circular economy, there is the issue of how waste-to-energy technologies in the municipal solid waste sector are affecting the livelihoods of waste pickers.

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