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UNITED ARAB EMIRATES

& ENVIRONMENT

MINISTRY OF CLIMATE CHANGE



Initiated by

Tadweer

In partnership with



WASTE TO ZERO THE GLOBAL INITIATIVE FOR WASTE DECARBONIZATION

Waste toZero

Rationale

Waste management plays a pivotal role in achieving sustainability. Globally, more than 18bn tons of solid waste are generated every year. By 2050, waste generation is expected to accelerate by 50%¹. Today waste disposal remains largely unformalized with ~50%¹ of our solid waste ending up disposed – illegally or in landfills - without any value recovery or environmental protection. Such practices contribute to the emission of highly damaging greenhouse gases (GHG), such as methane and carbon dioxide. Waste emissions are estimated to represent at least 3%² of world GHG emissions. Methane from waste landfilling contributes alone to ~20%² of global methane emissions. But these assumptions are underestimating the impact of wide spread illegal practices such as open dumping and open burning, directly generating CO2 and methane emissions at the global level. On top of the direct impact on emissions, the sector is at the origin of other crucial negative externalities such as natural ecosystems and water pollution, food and resource scarcity, and threat to public health.

Waste management practices therefore urgently need to be formalized and considered as a lever to positively contribute to climate action. The latest IPCC report (March 2023) highlights the critical role played by the sector in mitigating GHG emissions. The potential in GHG emission reduction could reach 1.8 GtCO2-eq per year³, by focusing on reducing methane from waste and wastewater, enhancing recycling and circular economy, and reducing food loss and waste.

Despite these findings, previous COP meetings have not put waste and the related sector challenges at the heart of the discussions, despite the sector directly impacting all UN SDGs and representing an unseized mitigation potential.

In the context of the UAE COP28 Presidency and with the endorsement of the UAE Ministry of Climate Change and Environment, waste management will be incorporated as part of the Conference's official agenda. This global voluntary initiative to decarbonize the waste management sector will be launched to engage all the ecosystem (Governments, international institutions, financial entities, waste management companies, waste producers, NGOs, and academics)

Waste to Zero

to collaborate and activate concrete scalable solutions to decarbonize the waste management value chain. in line with the third COP28 implementation pillar which focuses on putting lives and livelihoods at the heart of the climate process.

The Initiative aims to bridge the gaps between the status quo of the waste management sector and a future ambitious target where waste becomes a resource rather than an environmental burden. Therefore, It aims to decarbonize the waste management sector but also unlock the economic potential of a circular economy and improve the health and well-being of our planet. This Initiative will also create substantial green investment cases in the value chain and propose viable funding mechanisms. The first contribution of Waste to Zero will be to conduct the initial and comprehensive assessment of the sector's GHG emissions from collection to disposal at the global level. From the starting point, the initiative will propose a target in emissions reduction by COP29 and draft the pathway to achieve this ambition. It will represent the first coordinated contribution to the Paris Agreement by the waste management sector. The Initiative will publish updates on the efforts and impacts realized on an annual basis at COP.

The Global Initiative for Waste Decarbonization invites all interested institutions of the waste management sector to seize the momentum and build a pivotal coalition to contribute towards global climate change mitigation and adaptation endeavors for the first time at COP.

Key Facts · Global Waste

~20% contribution of waste to global **methane emissions**

2.6 GtCO2e expected emissions from waste by 2050¹ 3.3% contribution of waste to global GHG emissions

1/3 of waste openly dumped globally

References:

World Bank Group (2018), What a waste 2.0 report World Economic Forum (2022), This is how cities can reduce emissions with waste-reduction solution IPCC (March 2023), Sixth Assessment Report (AR6)

Scope & Execution Map

To achieve the sector decarbonization, Waste to Zero intends to structure and fund projects across the entire value chain and waste streams, and rapidly address the rooted challenges by:

- Setting an ambitious and global target, to be . included in the Implementation efforts of the Paris Agreement
- Creating a non-binding coalition of regulators, investors, waste management EPC and OEM, and waste producers
- Strengthening regulatory frameworks and establishing EPR schemes
- Establishing a multidisciplinary governance
- Securing viable and sustainable financing mechanisms
- Implementing circular economy principles within the entire value chain

Waste to Zero will contribute directly to the Sustainable Development Goals (SDG) of the United Nations (UN) and the implementation of the Paris Agreement.

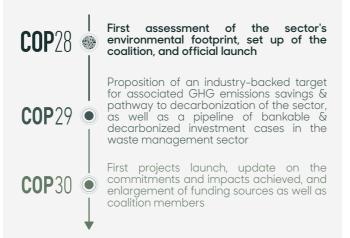
With this objective, the Initiative will invite all voluntary institutions, from both public and private ecosystems at the international level to contribute to this ambitious target:

Government	Investors
l Regulators	🙊 Academia
Am Private companies	ମ୍ଭିକ NGOs & advocates
WM ¹ companies	International organizations

Once initiated at COP28, the Initiative will ramp-up over three years to allow for an assessment of the first impacts achieved.



By 2025, Waste to Zero is committed to deliver on three main milestones:



To support the transformation and decarbonization of the sector, the Initiative will work closely with other coalitions to set up dedicated funding vehicles, voluntary recycling credit standards and voluntary carbon credit markets. The Initiative envisions to amplify its impact by cooperating with all relevant stakeholders, in all geographies and by promoting innovation.



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network of committed

data and technologies

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Attract and access to

Board of Trustees

Organization

led by the Chairperson, in charge to set and ensure adherence to the Initiative's vision & mission, lobbying





composed of sectorial & functional





Streams coordinator Supported by Roland Berger

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t	Minimizing waste hrough sustainable solutions	Securing and upgrading WM infrastructure for landfill diversion	Unlocking t potential of r waste manage technologie
	Support waste minimization via policy reforms, awareness, nvestment in R&D, promotion of eco-design, and ollaborative efforts towards efficient food production	Upgrade the waste Mgmt. infrastructure through treatment/ recycling technologies to increase landfill diversion & shift away from unformalized practices (open burning, open dumping)	Leverage the potential of inno- into waste colle sorting, treatr and recycli technologies reduce the environmen footprint and in- materials circu

1. Waste Management



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To ensure success of the Initiative and alignment of all parties, a transparent governance has been structured around three different bodies, under the supervision of the Chairperson.



Impact streams

formed by all voluntary institutions key thematic areas, defining, funding & the overall decarbonization roadmap

the new ement ies

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Decarbonizina waste operations & logistics

Foster decarbonized electrification across operations and logistics and maximize energy efficiency in the core waste treatment processes. Capture residual emissions generated

Enabling and tracking impact through data and digital solutions

Build a database and relevant analysis tools to measure and track the emissions of the sector. Develop new technological platforms to trade materials, recycling credits and emission credits

Next steps

To engage and contribute to the Initiative, interested institutions are invited to sign up through the online registration. Direct access is provided at the bottom of this page. Upon registration, institutions will receive supplementary information and documents ahead of COP28, facilitating collaborative efforts towards the Initiative's success. Registration is reserved to institutions – not individual staff.

Interested institutions will be offered the possibility to contribute to the first global emission assessment of the waste management sector. Additional information will be shared with institutions expressing their interest in the registration form.

This information will be instrumental in establishing an accurate baseline, charting a realistic pathway to decarbonized operations, and identifying a clear pipeline of projects and investment opportunities worldwide.

For the first time at COP, the global voluntary initiative will catalyze a coordinated shift towards sustainable and decarbonized waste management practices, making a significant contribution to the implementation of the Paris Agreement. **The Initiative will be launched at COP28**, via an official Declaration signed by the founding members, MOCCAE, Tadweer and Roland Berger.





تحویسر Tadweer ک شرکه آبوظبی ادارهٔ الافایات Abu Dhabi Waste Management Company



