

Omni Processor Project: Revolutionizing Municipal Solid Waste and Liquid Sludge Management in Bangladesh

17 November 2022

1:30–2:30 p.m. Dhaka time (UTC +6)

Online via Zoom

[Register Here](#)

Session Synopsis

In observance of World Toilet Day and the call for urgent action to make sanitation a global development priority, the Asian Development Bank (ADB) is organizing a session on a waste-to-energy facility using omni processor technology, which helped to provide clean water and other basic services to about 100,000 residents in a Kutupalong registered camp in Cox's Bazar, Bangladesh. The omni processor is a fecal sludge and solid waste processing unit that generates clean water, electricity, ash from waste, and feedstock.

The session objectives are:

- Discuss how the omni processor and similar technologies and innovations in municipal solid waste and liquid sludge management can help achieve SDG 6.2 and support the circular economy by creating drinkable water, and also outputs in agriculture, power, and other sectors
- Discuss other value-added benefits including enhancements to public health, sanitation, climate mitigation, integrated solid waste management, delivery of services, and others.

Agenda



Moderator

Mafalda Pinto

Water and Sanitation Specialist, Water Sector Group, Sustainable Development and Climate Change Department (SDCC), Asian Development Bank (ADB)

1:30–1:35 p.m.

Opening Remarks



Shajia Sultana

Project Officer, ADB

1:35–1:45 p.m.

The Omni Processor

Session Feature: Video on the Omni Processor technology



Jignesh Shah,

Business Head-Thermal,
Ankur Scientific Energy Technologies Pvt Ltd

1:45–1:50 p.m.

Discussion and Q&A

1:50–2:00 p.m.

Circular Economy Solutions in Solid Waste and Liquid Sludge Management



Mohammad Muktedir

Project Director, Department of Public Health Engineering (DPHE), Bangladesh

2:00–2:25 p.m.

Discussion and Q&A

2:25–2:30 p.m.

Wrap-Up and Closing Remarks



Christian Walder

Urban Development Specialist
Urban Development and Water Division (SAUW)
South Asia Department (SARD), ADB

About the Speakers



MOHAMMAD MUKTADIR

Project Director, Emergency Assistance Project for Water Supply and Sanitation at Ukhiya and Teknaf upazila in Cox's Bazar District Project (1st Revised) And Member Secretary, National Sanitation Secretariat, DPHE, Dhaka.

Muktadir is one of the leading Water, Sanitation and Hygiene (WASH) professionals in the sector and played a vital role and contributed in the development of (WASH) sector policies, strategies, and acts. He also served as Member Secretary for National Sanitation Secretariat and is instrumental in steering the national sanitation landscape of Bangladesh. He obtained his Master of Public Health degree from Mahidol University, Thailand and B.Sc. in Civil Engineering degree from Bangladesh University of Engineering and Technology (BUET).



JIGNESH SHAH

Business Head-Thermal, Ankur Scientific Energy Technologies Pvt Ltd

Jignesh Shah is an ex-committee member of ISO-South Africa and former expert advisor of TUV SU Singapore for developing omni processor norms. He is also heading the omni processor division at Ankur Scientific. Jignesh is a Mechanical Engineer from M.S. University in distinction grade with more than 27 years of experience in thermal and process design, new product launching, marketing, and business development. Currently he is working on a new conceptual design to make sanitation systems more reliable, affordable, and environment friendly.



SHAJIA SULTANA

Project Officer (Infrastructure), Bangladesh Resident Mission, ADB

Shajia Sultana is a Civil Engineer with more than 14 years' experience in international development project management. She has post-graduate qualifications in Civil Engineering and a Certified Project Management Professional from PMI. Now, she is attending CIPS, from the Chartered Institute of Purchasing and Supply, UK. Currently, Shajia is managing 2 multi-sectoral projects implemented by multiple Government and UN agencies. These projects support the improvement of water supply and sanitation, disaster risk management, sustainable energy supply, enhanced access of roads, and improved health for FDMNs in Bangladesh.



CHRISTIAN WALDER

Urban Development Specialist, Urban Development and Water Division (SAUW), South Asia Department (SARD), ADB

Christian Walder's work focuses on municipal and industrial water and wastewater treatment technologies, innovation in the water sector, water reuse and resource recovery, plant operations and asset management, sector development, and different business models (PPP, BOOT). Prior to joining ADB, Christian has worked as a process engineer and project manager in the private sector on international assignments in the design, engineering, construction and operation of municipal and industrial water and wastewater treatment plants. Christian holds an MSc in Environmental Engineering from the University of Natural Resources and Life Sciences, Vienna; an MSc in Wildlife Ecology and Wildlife Management; and an MBA in Entrepreneurship & Innovation from the WU Executive Academy, Vienna.

Discussants



IFTEKHAR ENAYETULLAH

Managing Partner, Waste Concern Consultants

A civil engineer-urban planner, and a recipient of several national and international awards, Iftekhar Enayetullah has, for over 30 years, researched, advised, lectured, managed projects, and authored/co-authored seven technical books, and published more than one hundred technical reports on solid waste management, sanitation, wastewater management, urban environmental management, environmental impact assessment, clean energy, inclusive business development, and social innovation. He retains a patent on waste recycling technology and is a reviewer of environmental engineering journals. He also serves as an external examiner of postgraduate theses and has been invited to speak at several universities and international seminars.



MARJANA CHOWDHURY

Water Resources Specialist, Agriculture, Natural Resources and Rural Development Sector, Bangladesh Resident Mission, ADB

A Civil & Environmental Engineer, and a dedicated development practitioner with over 16 years of experience working in multiple sectors including Urban and Rural infrastructure, water resources management, disaster management, climate change adaptation and other allied fields. Marjana has traveled extensively throughout Asia and Europe presenting case studies in water supply sanitation, disaster risk reduction, Climate Change adaptation and mitigation and sustainable development. Marjana attended leadership programs from Ivy League Universities in the US and received a Netherland Fellowship from the Dutch Government to complete her post-graduation studies in the Netherlands. She has several memberships including the Gender and Water Alliance and Institute of Engineers.

Moderator



MAFALDA PINTO

Water and Sanitation Specialist, ADB

Mafalda Pinto is a civil engineer, specialized in hydraulics and water resources. Before joining ADB in 2020, she worked in the private sector on international assignments in the design and engineering of municipal water, wastewater, fecal sludge networks and treatment plants. Mafalda has experience in Europe, Middle East, Africa, and Asia. Her main areas of expertise are wastewater and fecal sludge management, and circular economy. Mafalda holds a MSc in Civil Engineering for Instituto Superior Tecnico, University of Lisbon and is a Chartered Engineer with Engineers Ireland.