## **About the CoE**

Considering the need for optimizing the water usage and reuse of treated wastewater, National Mission for Clean Ganga (NMCG) has taken many initiatives including development of a National Framework on Treated Wastewater Reuse, in association with India-European Union Water Partnership (IEWP).

TERI is actively working in the domain of water reuse and has developed a wastewater treatment technology called TERI Advanced Oxidation Technology (TADOX®) which could be integrated in current systems to achieve adequate treatment of municipal and industrial wastewater, help achieve ZLD in a much affordable and sustainable manner and enhance treated wastewater reuse. (https://voutu.be/tCt5rxC7eik).

NMCG thus sanctioned for setting up a NMCG-TERI Centre of Excellence on Water Reuse (NTCOE) in collaboration with TERI. NTCOE is a quadripartite association between NMCG, TERI, Industry and Knowledge partners, which envisages to design and foster research and innovation, including identification of knowledge gaps for research and need for new ideas, supporting targeted research and spurring and nurturing needed innovation to develop clean, green, cost and resource effective wastewater treatment technologies for reuse of treated water. Hence together with the government, academia and industry support, this CoE is the first of its kind in the Country on treated wastewater reuse, which also meets the objectives under Clause 5.3 & 4.2 of the Ganga Knowledge Centre (GKC) for creating knowledge partnerships.

NMCG-TERI Centre of Excellence on Water Reuse (NTCOE) envisions to become a Globally recognized Centre in Technology domain for wastewater treatment, water reuse and circular economy. It aims to achieve various UN SDG Goals and contribute in Nation building through flagship programs of the Government of India like the 'Namami Gange', 'Swatch Bharat Mission', 'Smart City Mission', Water Vision@2047, 'Make in India', 'Self-Reliant India' and others.

The Mission of the Centre is to provide a common platform to various stakeholders like the policy makers, regulatory authorities, funding & financial Institutions, Philanthropic Organizations, Investors, R&D, academia, knowledge partners, organizations engaged in training and capacity building, Consultants & Consultancy firms, Companies dealing in wastewater treatment and water reuse business, Urban Local Bodies (ULBs), Municipal Corporations/ Jal Boards and various Governments and Ministries involved in water, sanitation, urban infrastructure, Smart Cities, wastewater treatment, water reuse and circular economy.



## **Contributions in National Missions**





When treated water is reused, fresh water is conserved, it benefits the entire ecosystem. That's why water treatment, water recycling is essential.

- Shri, Narendra Modi, Prime Minister of India (Water Vision@2047, January 2023)



### lational Mission for Clean Ganaa

Developing integrated technological solutions to achieve "Nirmal Dhara" (Unpolluted Flow) objective through point source pollution abatement strategies.



### wachh Bharat Mission-Urban 2.0

To work on water reuse policies with States. Organize training and capacity building programs for ULBs on solid and liquid waste management.



### Atal Mission For Reiuvenation And Urban Transformation

To contribute in Technology Sub-Mission to encourage newer technology options to augment capacities and enhance recycle/ reuse of treated water.



Encourage decentralized wastewater treatment and reuse using micro-STPs across Construction and Housing sectors.



Industries to be encouraged to adopt integrated, sustainable and affordable technological solutions to achieve Zero Liquid Discharge (ZLD).



To encourage Circular Economy through reuse of sludge and wastewater for irrigation, industries and work with ULBs to explore revenue generation.



To encourage 'Make In India' technologies for achieving Water Security and UN SDG 6.

## Key Messages from Steering Committee Members



NMCG is committed to support 'Made in India terhnologies like TADOX for wastewater treatment, our vision to make "Atmanirbhar Bharat" and to meet the objectives of 'Nirmal Dhara' of the Namami Ganae Programme, We are also committed to promote the concept of 'Circular Economy' through "Arth Ganga" Program, in which efforts are being made to promote monetization and reuse of treated water and sludge. This CoE is expected to work efficiently in these areas



Adviser CPHEEO. MoHU

Ministry of Housing & Urban Affairs mandated all the cities to undertake recycling and reuse of used water under AMRUT 2 and SBM.2 to make them water secure & resilient. NMCG is coming with the National Policy on Safe reuse of Treated Water and now funding a dedicated Centre of Excellence to promote circularity in wastewater is a timely action. I hope that this CoF will disseminate knowledge among various stakeholders and promote cost-effective technologies for the recycling & reuse of wastewater.



Nater connects all Sustainable Development Goals (SDGs) and all sectors need to improve the way water resources are managed and utilized. TERI has been actively working in this domain and is committed to provide all possible support o Members and realize the Vision & Mission of this CoE, which is 1st of its kind in the Country, set up by NMCG, where

arious stakeholders will work closely and

ensure the vision of Water security for all

DG. TERI



Mr. D P Mathuria. ED (Technical) NMC

he Centre of Excellence is anticipated to become a hub for research and innovation in the fields of wastewater treatment and reuse. It will also foster partnerships between stakeholders, such as research institutions and industries involved in the sector, in order to effectively address the issue of wastewater and encourage



echnology such as TADOX (TERI Advanced xidation Technology) is a breakthrough in the sector of wastewater reuse. Many more such interventions are required for addressing the issue of reuse of wastewater for meeting the demand of raw water, industries and also drinking purposes, NMCG-TERI Centre of Excellence may continue to develop such technologies in the future as well.

Adviser (Water

Resources). NITI Aavo



s an opportune moment for all takeholders to come together, share ideas and implement solutions and contribute in Nation Building and achieve UN SDG 6 Goals as 'water' has gained so much importance amongst the national missions, policies and planning of the Government, together with Industry coming along to achieve sustainability & business interest and academia is offering innovative technological solutions to bridge the knowledge gap. This CoE on Water Reuse is an earnest effort in this direction.



### Dr. (Mrs.) Nupur Bahadur

For Further Details Please Contact

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https://www.linkedin.com/company/nmcg-teri-centre-ofexcellence-on-water-reuse/about/



Website: http://nmcatericoe-wr.in







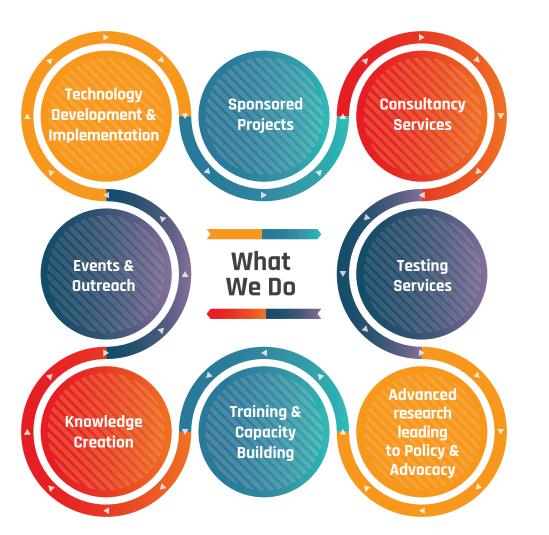
# NMCG-TERI CENTRE OF EXCELLENCE ON WATER REUSE



Funded by National Mission for Clean Ganga (NMCG) Department of Water Resources River Development and Ganga Rejuvenation Ministry of Jal Shakti, Govt. of India

## **Membership Categories**

Membership	Government	Industry & Industrial Associations	F	Funding, Philanthropic & Civil Society Organizations	Knowledge Partners
<b>Categories</b> Members	Central and State Govt. Organizations; MoEFCC, CPCB, SPCBs, NITI Aayog, ULBs, Jal Boards etc. and International Government Organizations; Embassies	Private or Public listed company in India, PSUs, Industrial associations like FICCI, CII, ASSOCHAM, BDMAI, Textile Associations, Tannery Associations etc.		Bilateral & Multilateral Funding Organizations, Philanthropic Organizations/ Trusts/ Foundations, CSOs, NGOs, etc.	University, R&D Organization(s), Water Associations, Retired Professionals, Consultants etc.
Expectations from Members	<ul> <li>To provide opportunities to the CoE to contribute in National Missions and Programmes like the SBM, AMRUT, JJM, Smart Cities Mission etc.</li> <li>To involve COE in organizing various events and stakeholder discussions at the National &amp; State level, as part of National Missions, policy &amp; advocacy dialogues.</li> <li>To involve CoE in National Training &amp; Capacity Building Programs under various schemes and govt. initiatives.</li> <li>To provide funding support for piloting, validation and adoption of promising CoE Technologies to early adopters.</li> </ul>	<ul> <li>To provide infrastructural support towards the development of CoE.</li> <li>To establish NABL accredited laboratory for water testing.</li> <li>To fund R&amp;D activities &amp; targeted research</li> <li>Sponsor Fellowships/ Internships</li> <li>Fund pilots through CSR initiatives.</li> <li>To represent Industry Body and assist CoE to shape opinion, policies and perspectives in the areas of wastewater treatment and water reuse technology domain</li> <li>To provide platform for networking and coorganize events &amp; stakeholder discussions</li> <li>To utilize its membership base to disseminate outcomes of various activities of the CoE.</li> </ul>		To fund towards piloting of CoE Technologies for assessment, validation and community benefit. Sponsor research towards development of newer technologies for enhanced water reuse. To Sponsor need-based studies in the emerging areas of concern like the micropollutants, microplastics, antimicrobial resistance (AMR) in water & wastewater etc., where India needs base line studies, data collection, bring in standards of testing, monitoring & treatment, current & future trends, policy and legislation.  To foster bilateral & multilateral research & technology development platforms.	<ul> <li>To contribute to the knowledge creation activities of the CoE like the Newsletter, Policy Brief, Discussion Papers, Best Case Studies etc.</li> <li>To jointly work and bring in funds for collaborative research.</li> <li>To be part of Research Advisory Board, SRCs, Supervisory Board, Consultative Group of Experts etc.</li> <li>To provide R&amp;D laboratory, testing &amp; piloting facilities, as needed during collaborative work.</li> <li>Consultants may bring in funded projects to the CoE.</li> </ul>
Benefits to the Members	<ul> <li>Meeting objectives of Missions and Programs of National interest.</li> <li>CoE support in formulation of policy and advocacy initiatives of the government.</li> <li>CoE support in providing training &amp; capacity building initiatives, preparation of knowledge documents, preparation &amp; revision of Water Reuse Policies from time to time.</li> <li>Help Embassies in facilitating collaborations amongst various stakeholders in India.</li> </ul>	<ul> <li>Opportunities to show case &amp; commercialize own products, services and technologies.</li> <li>Opportunity to commercialize CoE technologies.</li> <li>Exchange of knowledge on advanced &amp; cleaner technology options</li> <li>Member companies of such Associations will get a chance to showcase their best practices &amp; be part of the Compendium of best-case studies in the area of water reuse.</li> </ul>		Best utilization of funds Foster collaboration & partnership at the National & International levels. Collective attainment of SDG Goals.	<ul> <li>Suitable opportunities for Industrial visits, site visits, paid Internships/ Dissertations/ Joint Ph. D. to research scholars of registered organizations.</li> <li>Institutional support to consultants/retired professionals in the projects.</li> <li>Participation as experts/ consultants in CoE projects</li> </ul>



## **Membership Engagement**

## STANDARD Benefits Organization's logo on NTCoE website, events, newsletters etc. for better brand outreach Subscription to NTCoE Newsletter Institutional support projects

## PREMIUM

### Benefits +

- Member's Directory (both
- Access to publication & reports from CoE
- to consultants/retired professionals in their

- online & hard bound) displaying products, services & catalogue to generate business leads
- Platform to interact with other Members, Institutions, Government & International
- Organizations for exploring collaborations Participation as Experts/ Consultants in CoE
  - for Industrial & Site visits, paid Internships/ Dissertations/ Joint Ph. D. to research scholars of members of R&D Organizations and Universities

Suitable opportunities

projects

## Benefits ++

ELITE

- Membership in the Steering Committee of the NTCoE
- Membership in the Executive cum Technical Committee of the NTCoE
- Membership in Research & Advisory Committees of the NTCoE
- Complimentary Participation & Speaking opportunities for the top management in the events like the Seminars/ Webinars, Training Programs, Conferences, and Meetings of the CoE
- Complimentary invitation for the top management in TERI's annual flagship programs like the World Sustainable Development Summit (WSDS)

For more information on membership engagement and fee structure, please contact us.