



**Joint Session at the India Water Week 2019**  
**REUSE OF TREATED WASTEWATER: POLICY, INNOVATION AND TECHNOLOGY**  
26 September 2019, 10:00 – 17:00, Vigyan Bhavan, New Delhi  
**Concept and Programme**

## Background

Over the last decade, wastewater treatment and its reuse has become a priority in India, with policies and approaches in development as well as implementation in several Indian states. The National Mission for Clean Ganga (NMCG) and the National Water Mission (NWM) have initiated a process for drafting a National Water Reuse Policy Framework. The 'Reuse of Treated Wastewater' is also one of the Priority Areas (PR8) under the India-EU Water Partnership (IEWP) and aims at finding approaches and strategies for implementing treated wastewater reuse. The process makes use of experiences in policy development, implementation, technological improvements and innovations from the European Union (EU).

As a first step, the IEWP prepared a comparative assessment of the existing EU and Indian policy frameworks. The draft report was presented during a roundtable discussion organised by the IEWP in association with NMCG and NWM on 23 July 2019 in New Delhi. 75 participants involved pro-actively in the discussion including the Ministry of Jal Shakti (MoJS), the Government of India and its allied institutions (CWC, CGWB, NMCG, NWM), the EU Member States, academia and research, representatives from states, public & private industries. One of the major outcomes from the discussions was the interest shown by the Ministry of Jal Shakti in developing a national water reuse policy of India with the support of the IEWP and the German Development Cooperation.

## Proposed Sessions

In the above context, two inter-linked sessions will be organised at the 6<sup>th</sup> India Water Week 2019 in collaboration with the NMCG, NWM, IEWP, the German Development Cooperation and the European Business and Technology Center (EBTC). The first will be the '**Policy Session**', which will focus on the need for effective policy development for implementing reuse of treated wastewater in India. The session will hold Indian contributions and selected examples from the EU. This will be followed by the '**Business Session**,' which will provide insights into the improvements and innovations in treated wastewater reuse practices and technologies that are important for achieving policy aims.

### **Policy Session: Reuse of Treated Wastewater in India and the EU – Potential, Progress and Challenges** **Time and Venue: 10:00-13:00, 26 September 2019, Room 2 & 3**

This session aims at informing and supporting the development of a national policy on treated wastewater reuse for India by providing insights into EU approaches/strategies. In the EU, a pan-European guideline for treated wastewater reuse in agriculture and for managed aquifer recharge has been developed. The session will provide an opportunity for the relevant departments and allied institutions of the MoJS, the EU Member States, institutions and experts to deliberate as well as discuss options and processes towards a policy framework on treated wastewater reuse in India.

### **Business Session: Innovation in Treated Wastewater Reuse Practices and Technologies** **Time and venue: 14:00-17:00, 26 September 2019, Room: Annexe**

The session aims at providing:

- 1] Market overview and economic implications of the treated wastewater reuse sector in India
- 2] Insights from the case studies on technologies and solutions for wastewater reuse implemented in cooperation models between the EU and the Indian businesses
- 3] Options for joint research (technological development and innovations) and business opportunities

The session will also witness the launch of the beta-version of the European Technology Engagement Cell (ETEC) which is a platform for European water companies to initiate collaborations within the IEWP.



## Programme

### Policy Session: Reuse of Treated Wastewater in India and the EU – Potential, Progress and Challenges

10:00-13:00, 26 September 2019, Room 2&3, Vigyan Bhavan, New Delhi

Time (hrs)	Contribution	Panellists and Speakers
10:00-10:20	<u>Opening Remarks:</u> Need for and importance of a comprehensive policy on the reuse of treated wastewater (4 minutes for each panellist)	<u>Chair:</u> <b>Mr. Manoj Kumar Singh</b> , Principal Secretary, Urban Development, Government of Uttar Pradesh <u>Co-Chair:</u> <b>Mr. S. K. Haldar</b> , Member (WP&P), Central Water Commission, Ministry of Jal Shakti <b>Ms. Henriette Faergemann</b> , First Counsellor, Delegation of the European Union to India (EUD) <b>Mr D. P. Mathuria</b> , Executive Director (Technical), National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti <b>Ms Martina Burkard</b> , Head of Programme, Support to Ganga Rejuvenation, GIZ India
<b>Part 1: Treated Wastewater Reuse in India and the European Union: Status-quo and policy development</b> <i>Moderated by Vikrant Tyagi (IEWP Project Coordinator)</i>		
10:20	Water reuse in India: status and the policy action	Mr. G. Asok Kumar, Director National Water Mission, Ministry of Jal Shakti
10:35	Added value of the European policy action to foster water reuse	Mr. Bernd Gawlik, European Commission Joint Research Centre
10:50	Review and comparative assessment of the EU and Indian states policies on treated water reuse	Mr. Nitin Bassi, Consultant, IEWP Consultant
11:00	Challenges of introducing and implementing reuse of treated wastewater in UP	Mr. Manoj Kumar Singh, Principal Secretary Urban Development/Uttar Pradesh
11:10	Policy enabling factors for promoting water reuse in the public sector undertakings: example of IOCL	Mr. Sunil Kapoor, Indian Oil Corporation Limited (IOCL), Mathura (tbc)
<b>Part 2: From Policy Visions to Implementation: Experiences from India and the European Union</b> <i>Moderated by Nitin Bassi (IEWP Consultant)</i>		
11:20	How to set up and implement feasible water reuse scheme? Lessons learned from Europe	Mr. Yvan Poussade, Water Reuse Europe
11:30	Industrial water reuse and recycling: key issues	Dr. Josef Lahnsteiner, VA TECH WABAG
11:40	Support to implement 'one city one operator' approach in Ganga Basin	Representative of NMCG (Adani/tbd)
11:50	Treated wastewater as an alternative water source for irrigation and managed aquifer recharge: the Flanders experience	Mr. Paul Campling, VITO
11:50-12:20	Technological Innovations for reuse and recycling of wastewater (6 minutes for each presenter)	<b>S. Raychaudhuri</b> , ICAR-Indian Institute of Water Management (Bio-remediation) <b>Ramanathan V.</b> , SIST and MIT-ADT University (Solar Still) <b>Nupur Bahahdur</b> , TERI (Advanced Oxidation Nanotechnology) <b>Suresh Kumar</b> , Osmania University (Flow Distribution Chamber) <b>Vaishnav B.</b> , Parul University (Nanotechnology)



**Part 3: Panel Discussion- Towards Comprehensive Treated Wastewater Reuse Policy Development in India**  
 Moderated by Birgit Vogel (IEWP Project Manager)

12:20	<b>Panel Kick-Off presentation:</b> Process and approach for effective wastewater reuse policy making	Mr. Jeremy Bird, Water Resources Policy Expert, UK
12:35-13:00	<b>Panel Discussion</b> (including closing remarks)	<b>Ms. Henriette Faergemann</b> , EUD <b>Mr. Donal Cannon</b> , European Investment Bank <b>Mr. D. P. Mathuria</b> , NMCG <b>Mr. Bernd Gawlik</b> , European Commission Joint Research Centre <b>Mr. Sharad K. Jain</b> , Director, National Institute of Hydrology (tbc) <b>Mr. Jeremy Bird</b> , EU expert/Policy process

**Business Session: Innovation in Treated Wastewater Reuse Practices and Technologies**

14:00-17:00, 26 Sep 2019, **Room 4**, Vigyan Bhavan, New Delhi

Time	Contribution and Speakers	
14:00	Reuse of treated wastewater in India - market overview and economic implications	<b>Ms. Sonal Pareek Kaushik</b> , Senior Advisor Sustainability, EBTC
14:15	Private sector finance for sustainable water management	<b>Mr. Donal Cannon</b> , Regional Head South Asia, European Investment Bank
14:30	<b>Announcement of the European Technology Engagement Cell (ETEC)<sup>1</sup> - a platform for European water technologies in India</b>	

**Presentation of Case Studies:**

**Technologies and solutions for reuse of wastewater - best practices and examples from EU countries and India-EU (business) cooperation models**

14:35	1. Case Study Flanders	<b>Mr. Ralph Moreau</b> , Science & Technology Counsellor of Flanders Investment and Trade
14:50	2. Case Study European Union - Industrial water reuse: Turning a challenge into an opportunity	<b>Mr. Yvan Poussade</b> , Water Reuse Europe
15:05	3. Case Study India: Reclamation of water from petroleum refinery wastewater – a technological challenge	<b>Ms Aashti Hamid</b> , M.S. University of Baroda, Gujarat
15:20	4. Case study Torreele - Treated wastewater for managed aquifer recharge	<b>Mr. Paul Campling</b> , VITO
15:35	Questions and Answers	

<sup>1</sup> Launch of beta version of ETEC for business involvement.



**Towards comprehensive treated wastewater reuse through technological development / innovation in India - opportunities for business collaboration?**

15:45	1. Vacuum Membrane Distillation (VMD) Pilot plant tests at IOCL, Panipat	<b>Mr. SB. Pillai</b> , VA Tech Wabag GmbH
16:00	2. Potable water reuse: A sustainable water management option	<b>Mr. Josef Lahnsteiner</b> , VA Tech Wabag GmbH
16:15	3. Eco-friendly desalination & water purification (non-polluting greenfield technology)	<b>Mr. Anil Sharma</b> , M/s WME GmbH Germany
16:30	Interactive Discussion	
16:45 - 16:50	Conclusions and Vote of Thanks by IEWP	