



**Roundtable on**  
**“Policy for Reuse of Treated  
Wastewater of Govt. of Gujarat”**  
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## Summary Report

### (A) Policy Overview

- Introduced in May 2018 with aim of helping urban local bodies in efficient management of municipal wastewater while supplementing limited and increasingly scarce sources of fresh water by using wastewater as a resource and treating it suitably.
- Policy meant for Municipal sewage and not for other types of Industrial waste waters.
- Focus on reusing treated wastewater (TWW)
- Broadly the initiative aims at the following types of users-
  - o Thermal power plants within the radius of 50 km from the treatment plant or the urban municipal body limit
  - o Large industries either in GIDC or other large estates or any units utilizing more than 100,000 litre of water per day (exempting industries where the water comes in direct contact with humans or used in processes resulting in products for human usage)
  - o Construction industry
  - o Large establishments viz. Commercial, Educational etc with high consumption for flushing, watering green areas, fire hydrants etc
  - o Municipal uses viz. gardening, firefighting, filling the lakes
  - o Other non-potable uses but not limited to those mentioned in the policy
  - o Irrigation purpose
- **Regulatory framework worked out as under-**
  - o State High Power Committee (SHPC) – Involved in administrative approval, in-principle approval of projects, deciding the users including amount of water and rates
  - o State Technical Committee (STC) – Involved in process, treatment plants, distribution network and related technicalities
  - o Treated Waste Water Cell (TWWC) – Involved in generating database available with urban local bodies, amount of fresh water that is being used, amount of TWW that could be generated, availability of TWW, potential users in given areas and its allocation
- **Financial Model:**
  - o Assumption that rates of TWW to be lower than fresh water to attract designated consumers.
  - o Rates to be kept flexible and to be decided on project to project basis. Consideration to location of project, type of sewage, type of treatment, cost of distribution, availability of water etc
  - o Flexibility of rates for various supplying agencies.
  - o Project report to be prepared individually for further scrutiny by state technical committee.
  - o Allocation of TWW to be calibrated by the TWWC or SHPC.
  - o Policy kept open for revision, amendments and inputs from time to time.
  - o Flexibility to urban local bodies to assume part or total responsibility.
  - o Different business models like PPP, BOT, Hybrid annuity etc also allowed depending on the merits.

**(B) Challenges and Gaps**

- Gujarat yet to have Groundwater regulatory act. Therefore difficulty to control or regulate or stop ground water extraction and use by designated and targeted users.
- Extremely difficult to therefore decide on attractive rates for users who will be motivated to use cheaper ground water.
- Challenges in drafting agreement with users who will look for short term engagements. Ideally such arrangements need to be of 15-20 years or more due to several investments in infrastructure for supplying.
- Local bodies lacking capability and capacity for handling such projects.
- Responsibility of local urban governments to be assessed and suitable arrangements to be permitted for implementation of the policy.
- As seen in another infrastructural domains, an independent third party engagement to be considered for proper implementation.
- Market for usage of TWW still nascent with many wrong perceptions in the minds of users. Hence, concerted efforts needed for assessing the technical requirements of different users for TWW in individual units and applications so as to match the quality that will be required to be delivered for matching demand parameters.
- Heavy regulation on several counts likely to be a deterrent for private investment that is wary of Government controls of most kinds.
- Costing of water not done ordinarily in India. Need to evolve costing framework for water of different types to arrive at pricing.
- Fresh water costing without any element of subsidy a must for looking at the pricing structure of TWW.
- Operational guidelines and tool-kits required to ensure efficient implementation of the policy.
- Restriction of treated water not to be used where human touch/usage is involved will decrease the market of the TWW.
- High cost for distribution infrastructure where users are at distance from treatment plants.

**(C) Way Forward – Suggestions & Recommendations**

- Policy to be kept flexible to allow market driven, technology agnostic and entrepreneurial ecosystem to evolve.
- Policy framework to become an enabler for the implementation part and to attract investments from within and outside the country.
- Private sector participation to be encouraged in the near future to showcase and project TWW to be an interesting field for different stakeholders.
- Incorporating concept of decentralized sewage treatment plants for creating small local close loop sewage recycling networks. Inspiration to be drawn from National Solar Policy and its variants.
- To allow easy and fair adoption of various technologies as long as they meet the end objectives of TWW and vital parameters.
- In light of many emerging technologies, window to be kept open for quick adoption of new technologies that deliver desired results.
- To scale up or spread proven business models such as that of Surat Municipal corporation

- An ecosystem to be created that motivates young talents, startups, private players and students to get involved in such projects.
- Market creation of good quality TWW from private industries like Reliance
- Develop a mechanism for incentivizing the use of TWW like that of the Carbon credits in green projects
- Allocate a portion of government funds to encourage innovations in water treatment. Such technologies should be tested on pilot basis in existing/planned STPs.
- Creation of infrastructure to store the TWW in select cases. Example- Ahmedabad currently has no facility for storage of water whereas Mumbai has infrastructure to store water for 10 days.
- Include other parameters along with BOD and TSS to make the water more marketable across all user segments.
- Focused training (technical and specific to handling water treatment plants/processes) among the existing operators as well as for aspirants.
- Include TWW policy in “circular economy” framework being developed by Government of India and Government of Gujarat.
- Link TWW policy with “National Health Policy 2017” and “GOBAR DHAN” scheme for optimising gains through bio gas, compress biogas (Bio CNG) and fertilizers that are outcomes of treatment plants

# Innovative Thought

