CII-TRIVENI WATER INSTITUTE

Confederation of Indian Industry

CII NATIONAL AWARDS FOR EXCELLENCE IN WATER MANAGEMENT 2022

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WINNERS BOOKLET

CII NATIONAL AWARDS FOR EXCELLENCE IN WATER MANAGEMENT 2022

RECOGNIZING BEST WATER PRACTICES

CII National Awards for Excellence in Water Management have been recognizing industry for its contribution in making a Water Secure World - be it through their operations, innovations, or CSR activities.

Over a decade, CII National Awards for Excellence in Water Management have been celebrating and awarding good and innovative water conservation & management practices undertaken by industries from varied sectors.

Since inception, these awards have recognized over 550 industries – both public and private, for their water management initiatives.

KEY PARTICIPANTS OVER THE YEARS

CII NATIONAL AWARDS FOR EXCELLENCE IN WATER MANAGEMENT 2022

JURY MEMBERS

Dr. Anil K Kakodkar
Chief of Jury,
CII National Awards for Excellence in Water Management &
Chairman, Rajiv Gandhi Science & Technology Commission & Former Chairman, Atomic Energy Commission

NK Ranganath
Member, Advisory Board
CII Triveni Water Institute and Former Country President, Grundfos India

Sushil Gupta
Member, Punjab Water Regulation & Development Authority &
Former Chairman,
Central Ground Water Board

B Sengupta
Former Member Secretary, Central Pollution Control Board, Ministry of Environment and Forests & CC, Govt of India

Sanjay Singh
Former Divisional Chief Executive, ITC Limited – Paperboards & Specialty Papers Division

A K Keshari
Professor,
Department of Civil Engineering, Indian Institute of Technology, (IIT) Delhi

Pinaki Bhadury
Solutions Lead - Industrial, Chistats, Freelance advisor and consultant to companies from the energy, water and IT sectors. Past Business Head, Wipro Water

SNAPSHOT

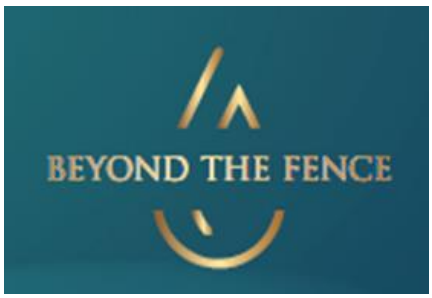
16th Edition of CII- National Water Awards in Water Management 2022 received total 101 applications, 19% more than the previous edition. The Awards are categoried under following:

1. Within the fence
2. Beyond the fence
3. Innovative water saving product

- 74 Applications received in Within the Fence category from diverse sectors.
- New sectors - Textile sack, University applied in this year.

Key Indicators

- Source of Water - 47% of applicants found to use surface water as key source of water, while, 49 % were found to be using ground water as predominent source.
- Remaining 4% found to be dependent on both ground and surface water sources.
- 63% of surface water dependent industries found to be located in extremely high baseline water stress areas.
- Ground water dependent industries - 44% found to be lying in safe zone, 38% in over exploited, 13% in semicritical and rest 5 % in critical groundwater block category.



- 11 applications received under Beyond the Fence catgeory under themes - watershed management, livelihood enhancement and Lake rejuvenation.
- 8 applicants have self funded their projects, rest have executed activities in partnership with government and community.
- 64% of total applicants found to have adoped integrated water management approach.
- Over 55% of total applications found to be targeting economical and social weeker sections.
- 82% of applications found to have addressed institutional mechanism for the sustainability of their projects.

- 16 Applications received in Innovative Water Saving Product Category
- 75% applications focused on Water Treatment Technology
- 2 applications based on Monitoring Systems and remaining 2 addressed Atmospheric Water Generators.

WINNERS -WITHIN THE FENCE

CD TECHNOTEX, ERODE, TAMIL NADU

The industry has achieved Zero Liquid Discharge through internal recycling of water. The unit has diversified its sources of water and is utilizing rainwater in its operations. The unit has achieved considerable savings through efficient monitoring of water.

LSC INFRATECH LTD

One of the largest stone crusher companies of Northern India which has reduced its groundwater dependency by 16% in the last 5 years through complete recycling of wastewater. The unit has achieved zero liquid discharge by installation of a High-Rate Thickener to recycle effluent for Industrial purpose and pollution control measures. Additionally, the unit has diversified its water sources by utilizing rainwater within its operations.

CHITKARA UNIVERSITY, PUNJAB

An Educational cum research institute which has reduced its groundwater dependency by 26% in the last 4 years. All the wastewater generated is being recycled within the premises for flushing and landscaping. The university has undertaken several initiatives that contribute to a sustainable campus. These include source diversification (through rainwater harvesting), groundwater recharge, wastewater recycling and maintenance of water bodies in the campus.

KIRLOSKAR OIL ENGINES LTD, KOLHAPUR

Kirloskar has reduced its Fresh water consumption by using treated effluent for cooling towers, gardening & toilet flushing along with enhanced use of rainwater in process by development of rainwater harvesting structures. The measures have helped Kirloskar, in reducing their dependence on freshwater sources. The outcomes of initiatives undertaken is clearly reflected through the continuous reduction in the specific water consumption of the plant.

JK TYRE & INDUSTRIES LIMITED, KANKROLI

The industry has reduced its specific water consumption by 28% in last 2 years and meets 63% of total water requirement through recycled water. The plant has installed a three stage RO followed by MVR for becoming a ZLD unit and uses entire treated effluent as feed to DM plant, the salt generated is sent to authorized waste disposing facility.

UPL LIMITED, TARAPUR

UPL is a zero liquid discharge unit since Oct-2017 which has installed latest technology like Multiple Effect Evaporator (MEE), MBBR, Advanced volute for sludge removal, Lamella & Teriblock system for TSS removal & RO system. The unit is also utilizing alternate source of water (rainwater) for its operations.

YARA FERTILISERS INDIA PVT LTD, BABRALA

A urea manufacturing unit which has focused on improving its water management performance through increased recycling while also utilizing alternate sources of water and thereby reducing dependency on groundwater.

BOSCH LIMITED, BIDADI

A manufacturing unit located in water scarce zone aims to become Water Neutral by 2025 by adapting 3C approach – Comply, Conserve & Collect. The plant has achieved a reduction of 17% in its Specific Water Consumption and has also achieved ZLD Status. Fresh water consumption reduction measures like smart water management, re-use/re-cycle projects and rainwater harvesting are facilitated with digital approach.

HALDIA ENERGY LIMITED, HALDIA

A (2X300 MW) Coal Based Thermal Power Plant, HEL has taken several water conservations measures to optimize water usage and hence reduced its freshwater consumption over the last 5 years. The unit meets about 12% of its water demand through rainwater harvesting.

JK PAPER LIMITED, RAYAGADH

A paper manufacturing unit which has focused on improving its water management performance by meeting its 41% of total demand from recycled backwater. The water & wastewater management systems are monitored and controlled through a 24x7 Online monitoring, digital flowmeters & SCADA system. The unit has also reduced its Specific water consumption by 5% from 29.3 m^3/Ton of product in 2020-21 to 27.8 m^3/Ton of product (2021-22).

ITC LIMITED, PSPD, BHADRACHALAM

A paper manufacturing unit, which has reduced its Specific water consumption by 15% to 33.2 m^3/Ton. The plant is re-using tertiary treated ETP water for low-end applications within the process. The water & wastewater management systems are monitored and controlled through a 24x7 Online monitoring, digital flowmeters & SCADA system

INDO COUNT INDUSTRIES LTD, KOLHAPUR

A textile unit, which meets 37% of total demand through recycled wastewater and recovered hot water. For manufacturing operations, 62% of the water demand is met through recovered hot water. The plant also uses rainwater as an alternate source of water.

WINNERS -BEYOND THE FENCE

GRUNDFOS PUMPS INDIA LIMITED

Grundfos Pumps India has taken initiatives for ensuring access to clean drinking water by rejuvenating the water storage pond and renovating the minor irrigation tank in Pattikadu Village, Chengalpattu District of Tamil Nadu. Under the initiative, Natural water filtration units were installed along with renovation of ponds to enhance storage capacity to 60 Lakhs litres.

SKODA AUTO VOLKSWAGEN INDIA PRIVATE LIMITED

Skoda Auto Volkswagen India Private Limited, has adopted an integrated approach to solve the water and related issues in Deoni Taluka, Latur District of Maharashtra. Skoda has undertaken measures for improving ground water availability and quality, provided sustainable drinking water and irrigation water sources, increased livelihood options and empowered community with knowledge sharing, sensitization & training.

APRAAVA ENERGY PRIVATE LIMITED

Apraava Energy has been working in solving water issues in water scarce and drought prone region of Khandke Catchment in Ahmednagar and Beed districts of Maharashtra. The initiative focussed on constructing 210 new civil structures, rehabilitation of 50 civil structures, increase in water storage capacity through check dams, gabions, and ponds over the span of 5 years.

BOSCH LTD., NASHIK

Bosch Ltd. has been working in Village Pahine of Nashik District in Maharashtra, to help in fulfilling the water needs of the community throughout the year. The major interventions taken up by Bosch are restoration and rejuvenation of old water harvesting structures, strengthening the supply side measures, which additionally saved costs and provided additional livelihood options such as fish farming & vegetable farming for the community.

ITC LIMITED

ITC Limited has been working to ensure water security in the villages of Pune and Ahmednagar Districts of Maharashtra through their ‘Ghod River Basin Water Security Programme’. The project has resulted in creating a net water potential of 138 MCM by March 2022, along with Improved crop yields by 21.3% and reduced cost of cultivation by 18.6%. In addition, climate smart agricultural practices were promoted which led to annual income improvement for farmers of about Rs.197 crores over 2018-2022.

WINNERS-INNOVATIVE WATER SAVING PRODUCT

NEERAIN – A ROOFTOP RAIN WATER FILTER BY NEERAIN PVT. LTD.

NeeRain is a live Rooftop Rainwater Filter with an efficiency of more than 95% with no loss of water and no stagnant impurities. It can be installed by a local plumber within two hours, doesn't need electricity and requires no maintenance.

ECOMAX-CT® – ELECTROLYTIC CT WATER TREATMENT SYSTEM BY ECOMAX SOLUTIONS PVT. LTD.

ECOMax-CT® is a chemical-free treatment system to treat water for the cooling towers. It works on the principle of electrolysis of water. Water is treated in ECOMax-CT® Electrolytic Reactor and this treatment works in the side steam, without disturbing the main cooling water flow.

MEGHDOOT AIR WATER PLANT BY MAITHRI AQUATECH

MEGHDOOT is nature-based renewable water solution which is based on the concept of Atmospheric Water Generation (AWG). It utilizes the principle of Condensation to harvest atmospheric moisture. MEGHDOOT basically mimics the rain cycle inside its system.

Congratulations!

WINNERS 2022