



Rajasthan State Pollution Control Board

brings you

Rajasthan Green Innovation Challenge

In association with its knowledge partner

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR



Driving Change Beyond the Challenge

Your idea could become Rajasthan's next scalable environmental solution.



www.mnit.ac.in

About RSPCB

The Rajasthan State Pollution Control Board was constituted under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974 and first formed on 7 February 1975 – works to prevent and control water pollution and restore water quality. Its mandate was later expanded to include prevention, control and abatement of air pollution under the Air (Prevention and Control of Pollution) Act, 1981; the Water (Prevention and Control of Pollution) Cess Act, 1977 enables the Board to collect cess for financial autonomy. The Environment (Protection) Act, 1986 further widened its scope, and the Board now implements the various rules framed under the EPA to regulate and protect Rajasthan's environment.

About Knowledge Partner @ MNIT

The institute was jointly established in 1963 as Malviya Regional Engineering College Jaipur by the Government of India and the Government of Rajasthan. Subsequently, on 26th June 2002 the college was given the status of National Institute of Technology. On 15th August 2007 it was recognised as the Institute of National Importance through an Act of Parliament. The institute is fully funded by the Ministry of Education (Shiksha Mantralaya) Government of India. MNIT Jaipur holds ARIIA ranking band EXCELLENT and is 42nd nationally in the NIRF ranking 2025 (Engineering category).

What is RGIC?

A focused innovation challenge to identify, validate and accelerate practical environmental solutions for Rajasthan – emphasizing low-cost monitoring, treatment, circular waste models and citizen-facing governance tools.

Why it matters:

- Rajasthan faces seasonal air pollution, localized industrial effluents and gaps in decentralized waste management.
- RGIC connects innovators with testing infrastructure, technical mentors and pilot sites to turn early ideas into demonstrable field solutions.

Thematic Areas

- Air Quality & Low-Cost Monitoring
- Industrial Effluent & Onsite Treatment
- Solid Waste & Circular Solutions
- Monitoring & Compliance
- Behavioural & Governance Interventions
- Energy-Waste Nexus



Air Quality & Low-Cost Monitoring

Problem Statements

- Develop a low-cost, scalable air quality monitoring network capable of measuring PM2.5, PM10, and dust levels across urban and industrial zones with real-time data accessibility.
- Design an AI-enabled source identification, early-warning system and decision support system that can distinguish between major pollution sources such as road dust, construction dust, vehicles, and industrial emissions.
- Create a community-level air pollution alert and exposure advisory tool for vulnerable groups such as schoolchildren, outdoor workers, and patients

Problem Statements

- Develop a compact and modular effluent treatment system for textile/ distillery effluent suitable for small and medium industries that enables onsite treatment and reuse of wastewater.
- Design a decentralized wastewater and chemical management solution that allows industrial units to monitor, treat, and recycle effluent with minimal operational complexity..
- Create a low-maintenance treatment and reuse solution for small industrial clusters operating in water-scarce regions of Rajasthan.



Industrial Effluent & Onsite Treatment

Problem Statements

- Design a scalable e-waste collection and safe recycling model that integrates formal recyclers with the informal waste sector to improve collection efficiency.
- Develop a plastic waste segregation, aggregation, and recycling solution for urban and peri-urban areas to reduce open dumping, littering, and landfill burden.
- Geo- tagged, blockchain-enabled, or GIS-based end-of-life vehicle (ELV) tracking system integrated with Transport Department data.



Solid Waste & Circular Solutions

Thematic Areas



Monitoring & Compliance

Problem Statements

- Create an IoT-based environmental monitoring platform that enables real-time tracking of emissions effluent parameters, and waste management practices while generating automated compliance reports.
- Develop a GIS-enabled environmental intelligence dashboard for local authorities that integrates pollution data, waste generation hotspots, and citizen complaints for better decision-making.
- Build an automated inspection support system that flags likely non-compliance events and prioritizes sites for enforcement action...

Problem Statements

- Develop a citizen engagement platform that enables residents to report environmental issues such as illegal dumping, air pollution, and sewage discharge using geo-tagged evidence.
- Design a digital compliance and incentive system that encourages industries and commercial establishments to adopt sustainable environmental practices.
- Create community awareness and nudging solution that improves waste segregation, anti-littering behaviour, and complaint resolution participation.



Behavioural & Governance Interventions

Problem Statements

- Develop micro-scale waste-to-energy technologies suitable for institutional campuses, markets, and small urban clusters.
- Create a waste-derived fuel or resource recovery model that converts segregated non-recyclable waste into useful energy or alternative products.



Energy-Waste Nexus

Any Other (Any other problem statement related to environment and pollution control not falling under the above themes)

Who should apply:

Student teams/Researchers/Startups/MSMEs/Civic innovators working on air, water, solid waste, monitoring & compliance, or energy-waste nexus solutions.

Program structure

- **Pre-Hackathon** – Registration & Screening – online application; top ~100 teams shortlisted.
- **Idea Pitch** (Online) – 10-minute pitch; up to 50 teams will advance.
- **Development Showcase** (Online) - mentoring + technical presentations; top 20 teams will advance and receive INR 20,000 each for prototyping.
- **Final Pitch** (Offline) (after ~4 weeks of prototyping) – demo day, certificates and awards; top 3 winners eligible for work orders (up to INR 25 Lakh)/startup support.

What participants get:

- ➔ Mentorship from domain specialists
- ➔ Prototyping grant (if shortlisted)
- ➔ Field pilot opportunities with Agency support

Rules & Regulations

The Rajasthan Green Innovation Challenge (RGIC) is designed to identify and support solution-oriented innovations addressing critical environmental challenges. The challenge strictly focuses on practical, implementation-ready solutions rather than early-stage or purely conceptual ideas. Applicants are expected to propose technologies or solutions that can be readily developed, deployed, and validated through pilot implementation. The objective is to enable scalable, real-world impact by supporting innovations with clear feasibility, operational viability, and potential for on-ground adoption.

For detailed rules & regulations and terms & conditions, please visit registration portal.

Timeline (Tentative)

Event	Date
Launch (Registration Start)	Thursday March 19 th , 2026
Registration Closes on	Tuesday March 31st, 2026 (11:59 pm)
Extension in Registration dates (if required)	till Saturday April 4th, 2026 (11:59 pm)
Initial Screening Result Declaration	Monday April 6th, 2026 (<i>100 ideas</i>)
Orientation Session	Wednesday April 8th, 2026
Idea Pitch	Monday April 13th, 2026
Idea Pitch Round Result Declaration	Wednesday April 15th, 2026 (<i>50 ideas</i>)
<i>Mentoring Session Online</i>	Wednesday April 22nd, 2026
Developmental Showcase	Wednesday April 29th, 2026
Developmental Showcase Result Declaration	Thursday April 30th , 2026 (<i>20 ideas</i>)
<i>Mentoring Session Online</i>	Monday May 4th, 2026
<i>Mentoring Session Online</i>	Monday May 11th, 2026
<i>Mentoring Session Online</i>	Monday May 18th, 2026
<i>Mentoring Session Online</i>	Monday May 25th, 2026
Final Pitch Round	Wednesday June 3rd , 2026 (May 29th, 2026*)
Final Pitch Round	Wednesday June 4th, 2026 (May 30th, 2026*)
Awards and Closing Ceremony	Friday June 5th, 2026

How to apply:

- Form a team (2–5 members).
- Select the short problem statement from thematic areas. (see registration portal download section).
- Develop preliminary solution and submit via the online portal (scan the QR)
- Visit portal for announcements and timeline.

Eligibility & key notes:

- Open to pan-India teams (students, startups, MSMEs, innovators etc.).
- Shortlisted teams invited to online pitch rounds; top teams supported for onsite demonstrations and pilots.
- IP filing assistance as per rules and regulations. Pilot data sharing and limited use for regulatory evaluation.

Program PI

Prof. Monica Sharma
Professor DMS, MNIT Jaipur

Guiding Force

Prof. N. P. Padhy
Director, MNIT Jaipur

Contact us:

Email: greeninnovation@mnit.ac.in

Phone: Mr. Shekhar Dhuliya (8630174009);
Mr. Deepak Dhaka (8000282119)



Scan Me
APPLY NOW!!
Last Date to apply
31st March 2026

Organizers & Partners:

Organized by: Rajasthan State Pollution Control Board
Knowledge Partner: Malaviya National Institute of Technology Jaipur

See full terms & conditions, selection criteria & guidelines on the registration portal.