

RECEIC Awards on Resource Efficiency & Circular Economy

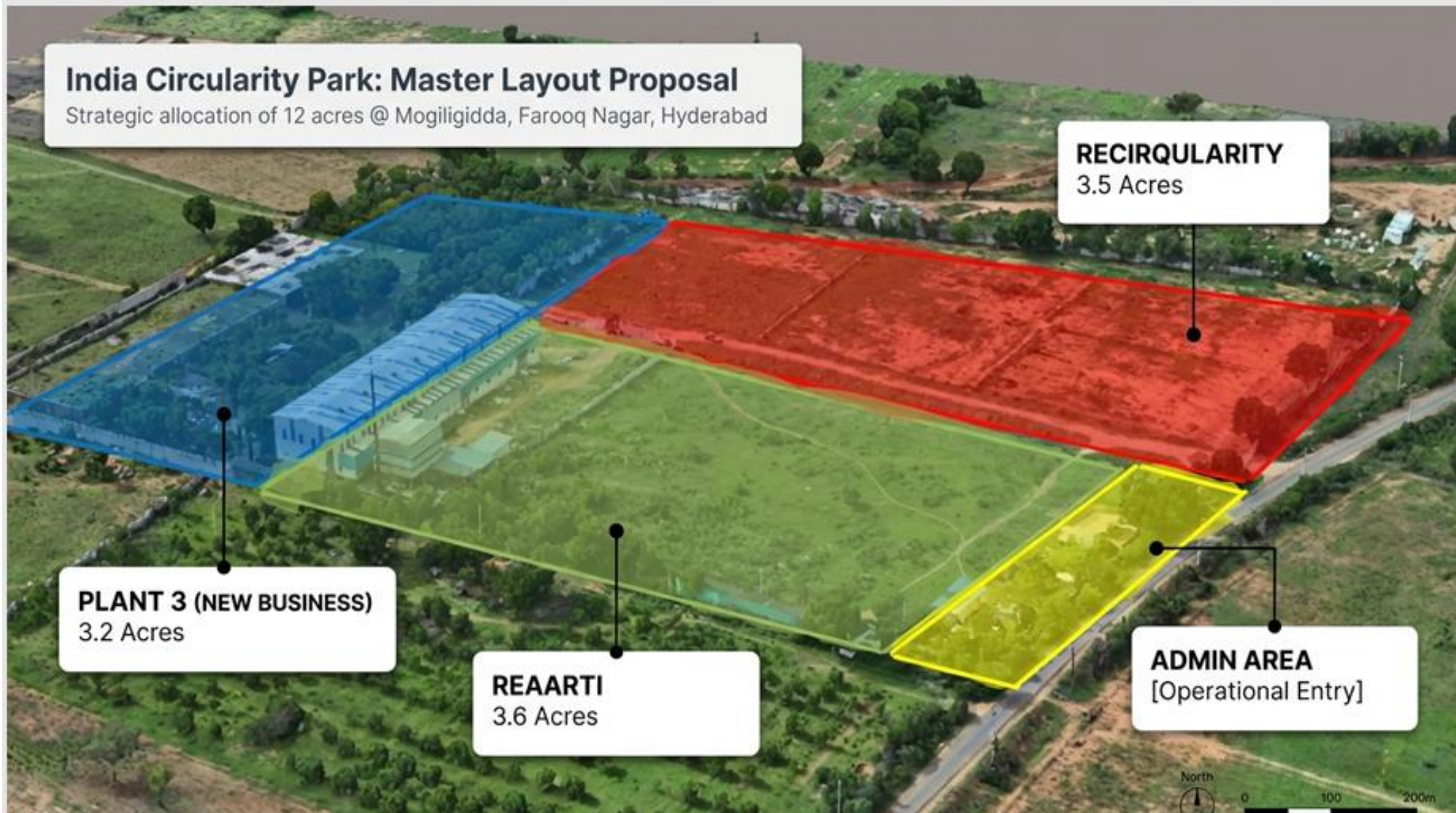


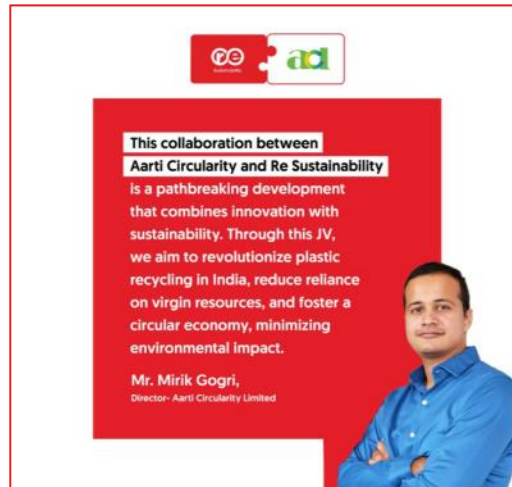
Re Aarti Private Limited

Collaboration and Partnership for Impact – Industry

21st APRIL 2026

ICP Concept





- India's first JV for Plastic Materials Recycling Facility (PMRF) based on chemical recycling, a critical step toward transforming plastic waste management.
- Objective is to convert end-of-life plastics to pyrolysis oil which will be used as a feedstock for making plastics, thereby closing the loop.
- ISCC Plus certification to establish traceability.
- Target is to recover 500+ TPD of resources by 2030 and save 350TPD of crude oil imports.

Project Overview



Re Aarti Private Limited

About the Initiatives

- **Problem statement:**
India is the world's largest plastic polluter, generating 10 million tons of plastic waste annually. Traditional mechanical recycling cannot process end-of-life plastics, leading them into landfill or into the sea.
- **Solution:**
Setup continuous-mode Advanced Chemical Recycling Plants (ACRP) across the country to meet environmental and safety requirements
- **Leadership involvement:**
Ensure continuous waste feedstock by RESL.
Safety & automation engineering by AIL.



10% of annual global crude oil (fossil source) production is used for manufacturing of plastics.



Global plastic waste expected to be 800 million MT by 2050.

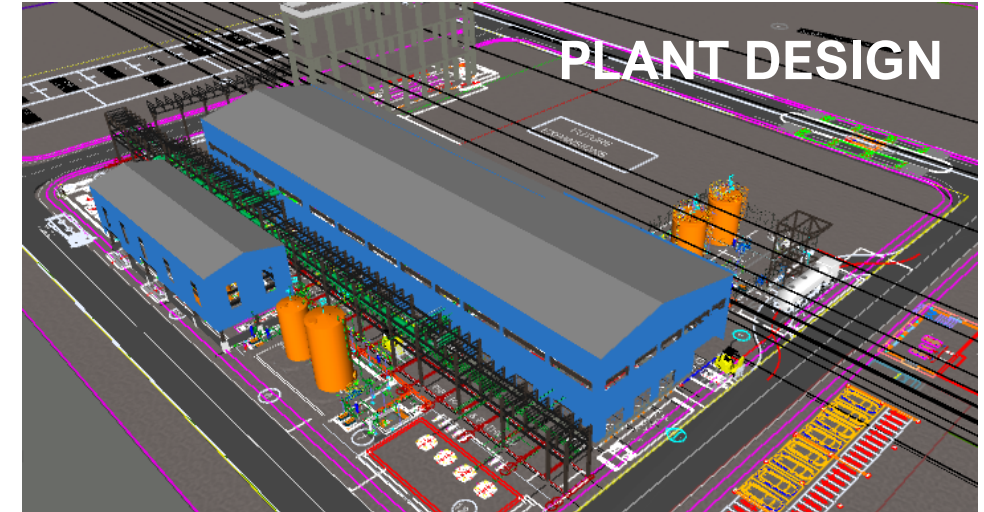


ReSL & ACL have signed a JV to drive the development of Plastic Materials Recycling Facilities (PMRFS) across India.

About the Initiatives

- **Maturity Level:**
Globally, Chemical recycling of plastics is a proven tech TRL 9 , with several plants commercially operational Globally.

For 1st Phase, Plant equipment fabrication completed, project construction under progress at Shadnagar, Hyderabad.
- **Geographical Coverage:**
An initial 100 TPD facility is being constructed in Hyderabad. Other potential locations shortlisted for expansion are Delhi, Bangalore, Chennai, Mumbai.



Accomplishments & Benefits

- **Progress on Ground:**
 - CFE approval received from SPCB enabling start of construction for 1st PMRF.
 - Technology equipment manufactured and under transit for delivery at site.
 - Land acquired, civil works & Infra development is under progress at site.
- **Economic:**
 - The venture is expected to generate INR 500 Crores in revenue within five years.
 - Engagement & growth of informal sector to channalise supply of waste plastic feedstock.
- **Environmental Impact:**
 - Targets a reduction of 150 tons of CO2 equivalents per day.
 - Shall substitutes 350 tons of crude oil per day with circular feedstock (Py-Oil).
 - Facility design compliant for ISCC+ certification and EPR credit management , meeting all regulatory requirements
- **Social Impact:**
 - Creation of direct employment for approx 500 individuals.
 - Indirect employment across waste collection, sorting & logistics value chain.



Road map for APRC

The Strategic Roadmap to Achieving 500 TPD by 2030



A phased rollout ensures scalable, de-risked expansion across key strategic locations.

- **Scalability:**
 - Phase 2 technology development & scale up of technology from 25TPD to 100 TPD.
- **Stakeholder engagement:**
 - Discussions underway with indigenous & global refineries for the supply /export of pyrolysis oil, ensuring a secured commercial offtake / agreements for sustainability.

Leadership support:

- Invest in R&D and Laboratory infrastructure to improve circular products specs to meet feedstock.
- Plan to explore other avenues to realise material circularity (used oil, solar panels, batteries, etc...)

THANK YOU