

**Government of India
Ministry of Railways
(Railway Board)**

No. 2022/EnHM/10/05

New Delhi, dated. .01.2024

**The General Managers,
All Zonal Railways/PSUs/PUs & CTIs,
DG/RDSO & DG/NAIR**

Sub: MoU signed with Confederation of Indian Industry (CII) for facilitation of green initiatives in Indian Railways.

IR had signed MoU with CII for promoting green initiatives in Indian Railways in July, 2016 and renewed in September, 2019 respectively. Activities taken under these MoUs include energy efficiency improvements in Indian Railways manufacturing facilities & workshops, greening of railway stations/railway buildings/ hospitals/colonies etc.

In order to carry forward these initiatives and, also to cover more areas, another MoU has been signed between IR and CII on 04th January, 2024 for facilitation of green initiatives in Indian Railways.

A copy of signed MoU is enclosed herewith for information and necessary action.

DA: As above (07 pages)

**Signed by
Shailendra Singh
Date: 09-01-2024 19:01:35
(Shailendra Singh)
Principal Exe. Director/ME (EnHM & Proj.)
Railway Board**



INDIAN RAILWAYS
Lifeline to the nation...



Confederation of Indian Industry

MEMORANDUM OF UNDERSTANDING

BETWEEN

INDIAN RAILWAYS

AND

CONFEDERATION OF INDIAN INDUSTRY

FOR

***'FACILITATION OF GREEN INITIATIVES IN INDIAN
RAILWAYS'***

**THURSDAY, THE 04TH JANUARY, 2024
NEW DELHI**

About Indian Railways

Indian Railways (IR) is a state-owned enterprise in India, operated by the Ministry of Railways, Government of India. It is one of the largest railway networks, and one of the largest employers, in the world. IR has been actively implementing a variety of environmental sustainability projects. 17 Zonal Railways and 6 Production Units of Indian Railways have been notified as Designated Consumers (DCs) under the second cycle of Perform, Achieve & Trade (PAT) scheme of the Bureau of Energy Efficiency, Ministry of Power, Government of India.

About CII

The Confederation of Indian Industry (CII) is a leading non-government, not-for-profit, industry led and industry managed organization, playing a proactive role in India's development process. The organization works to create and sustain an environment conducive to the growth of industry in India, partnering industry and government alike through advisory and consultative processes. CII – Sohrabji Godrej Green Business Centre (CII-Godrej GBC) is one of the 9 Centers of Excellence of CII. The Centre sensitizes key stakeholders to embrace green practices and facilitates market transformation in green businesses.

CII - Godrej GBC is supporting the Indian Industry in the areas of energy management, green buildings, green companies, renewable energy, GHG Inventorization, green product certification, waste management and cleaner production processes. CII - Godrej GBC has been working with Indian industry in the area of energy efficiency for about 20 years. CII - Godrej GBC has also conducted energy studies in countries like Japan, South Korea, Thailand, Philippines and Zambia.

Progress made so far

CII signed a MoU with Indian Railways for promoting facilitation of green initiatives in Indian Railways in July 2016 and subsequently renewed in September 2019. Activities taken under this MoU include- Energy efficiency improvements in Indian Railway

manufacturing facilities & workshops, GreenCo rating of railway manufacturing facilities & workshops, greening of railway stations, and greening of railway buildings, hospitals and colonies. The details are as under:

- 1. Energy efficiency in manufacturing facilities and railway workshops:** Energy efficiency facilitation was taken up in 20 workshops and production units in two phases. The activities included energy audits, training programmes, visits to best performing units and introduction of new technologies. Through this activity, 900+ officials were trained and 250+ energy efficiency projects were implemented in the 20 units, resulting in reported energy savings of 210 lakh kWh, reported monetary savings of Rs. 1600 lakh and GHG emissions reduction of 17,440 tons of CO₂. Additionally, 6 non-traction designated consumers were provided facilitation support for the PAT scheme.
- 2. GreenCo rating:** The GreenCo rating is a method to evaluate & improve environmental performance of a facility. This has been taken up in 75 Railways units (workshops & manufacturing facilities). The first 55 units, which have been GreenCo rated, have improved their environmental performance substantially.
- 3. Green Railway Stations:** An exclusive 'Green railway station rating' was prepared by CII in consultation with Environment and Housekeeping Directorate of the Indian Railways. The objective was to evaluate and improve the environmental performance of Indian Railway Stations.

As on date, 68 railway stations have adopted green certification out of which 32 stations had been rated as per the guidelines. Adoption of Green Railway Station rating in 30 stations resulted in saving of 22 million KWh energy and 3 billion liters of water annually.
- 4. Green Buildings, Hospitals, Schools and Colonies:** More than 40 building facilities including- administrative buildings, hospitals, schools and colonies have been facilitated to become green buildings, green hospitals, green schools, and green campuses.

This has resulted in significant improvements in their environmental performance, improvement in the quality of environment for staff as well as reduction of operational expenditure.

5. **Coffee Table Book:** 3 exclusive coffee table books were developed showcasing the best practices adopted by railway stations, production units and workshops. These coffee table books were released in Dec'21. It has demonstrated the leadership of Indian Railway in the green built environment.

Overall, earlier MoUs have facilitated in significant positive impacts in terms of reduction in energy consumption and water consumption, reduced GHG emissions, substitution of conventional fuel with renewable forms of energy and awareness creation among the railways' officials.

Encouraged by the excellent response and impact results, CII & Indian Railways would jointly work to take environmental sustainability initiatives in the Indian Railways to the next level.

Areas of Partnership

CII would continue to work with Indian Railways in the following areas (but not limited to)

1. **GreenCo Rating:** Upgrading of rating levels by the units that have already been rated, and undertaking of GreenCo rating by the remaining, unrated units. The objective is to continually improve the environmental performance, improve resource efficiency and reduce costs.
2. **Green built environment:** Facilitate greening of schools, hospitals, colonies, and others of built environment as per IGBC green building rating system. The objective is to reduce environmental impact, reduce costs, as well as improve the well-being of the people working in those buildings.
3. **Greening of railway stations:** Facilitate greening of railway stations as per Green Railway Station rating system.

The present Green Railway Station Rating will be reviewed by IGBC experts and Indian Railways team - together. The revision of the guidelines will also incorporate the requirements of NGT directions.

4. **ISO 50001 certification:** CII will support the Indian railway for adoption of ISO 50001 certification for its workshops and production units. This certification will help units in achieving continual improvement of energy performance, including energy efficiency, energy security, energy use and consumption.
5. **Energy efficiency:** Activities related to identification of more energy efficiency opportunities, capacity building, engagement with technology suppliers, and energy efficiency awards for IR units will be undertaken for selected Production Units/Workshops. Interactions with engineering and auto companies in the private sector will also be organized in the form of meetings and missions to facilitate learning from peers.
6. **Energy Efficient Framework for Loco/Sheds:** CII will work with Indian Railway officials in developing a framework for Loco/EMU Car sheds, coaching depots for enhancing energy efficiency. The framework can be shared with the respective Indian Railways teams for continuous improvement in energy performance.
7. **Net-zero Energy Stations:** CII- IGBC has developed 'Net Zero Energy Building' Rating System. CII will work with Indian Railways in developing 'Net Zero' framework for Indian Railway station.
8. **Net Zero Waste PUs & Workshops:** CII-IGBC has developed 'Net Zero Waste' Rating System. CII will work with Indian Railways in implementing 'Net Zero Waste' concept in Railway Establishments.
9. **Information Dashboard:** CII will work with Indian Railway officials in developing an information dashboard to showcase the progress made on these activities. The proposed dashboard will display the progress made by railway stations. It will also provide information regarding energy and water savings by the Indian railways.

10. Technologies: CII will continue to work with IR in bringing new, relevant technologies and facilitate their implementation in Indian Railways manufacturing facilities/ workshops/ railway stations and buildings.

11. Capacity building and skill development: Organize periodic workshops/awareness sessions/ training programs/ Missions on various aspects/ updates on energy and environmental management.

Free Deliverables:

1. Development of 'Net Zero' Framework for Indian Railway Station.
2. Three demonstrative pilots project of 'net-zero' Energy Railway Stations.
3. Development of Net Zero Framework for Railway PUs and Workshops.
4. Continuous sharing of best practices on energy and environment through training Programmes, other plant visits.
5. Development of an informative dashboard.

From the date of signing, this MOU will be effective for duration of three years.

This MOU has been signed on Thursday, 04th January, 2024 at New Delhi, India.

IN WITNESS WHEREOF, the authorized representatives of the parties have hereunto set their hands upon the date first above written.

For and on behalf of:
Government of India, Ministry of Railways
(Railway Board)

Witness-

Signature:

04/01/2024

Name: Shailendra Singh
Designation: Principal Executive Director,
ME/(EnHM & Project), Rly.
Board

Date: 04th January, 2024

Signature:

04/01/2024

Name: Manish Gupta
Designation: Executive Director,
EE (M), Rly. Board

Date: 04th January, 2024

For and on behalf of:
Confederation of Indian Industry (CII)

Witness-

Signature:


Name: Seema Arora
Designation: Deputy Director
General, CII

Date: 04th January, 2024

Signature:


Name: K.S. Venkatagiri
Designation: Executive Director
CII-GBC

Date: 04th January, 2024

Signed in the presence of

Smt. Jaya Varma Sinha, Chairman & Chief Executive Officer, Railway Board