

Partnership with the Ministry of Steel

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United Nations Development Programme

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UNDP is proud of its longstanding partnership with the Ministry of Steel

UNDP's partnership with the Ministry of Steel is one of its most important in India. Starting in 2004, UNDP has been privileged to partner with the Ministry, helping to identify and apply energy efficient technologies, particularly in the secondary steel

sector. UNDP has provided support through two projects: From 2004-2013, UNDP supported the Ministry through a project aimed at removing barriers to energy efficiency in the steel re-rolling mill sector; starting in 2013 and extending through 2015, UNDP is helping to implement the second phase of the project.



The partnership has supported key priorities

During the first phase of the project, a number of energy efficient technologies have been introduced for the first time in India into 34 model steel rerolling units. Direct rolling, which allows hot billet to move from induction furnaces to rolling without requiring the furnace to be full re-heated has been introduced into three of the mills. To incentivize the use of these technologies, financial support has been provided and managers and staff have received on-the-job training and mentoring, helping them to understand and apply the new technologies. Of the total investment costs, 80 percent has been provided by the mills themselves. Additional support has been mobilized through the Global Environment Facility and the Ministry of Steel in the form of technical assistance and financial incentives.

The impact of the new technology has been immediate. Within 14 months, mills have been able to recover the cost of their original investments and are averaging 25-30 percent savings on their energy costs. In a big win for the environment, greenhouse gas emissions are being reduced by 2,600 tonnes of carbon dioxide annually in every steel mill that has adopted energy efficient technologies. Three of the original mills which introduced the technologies have received Energy Efficient Awards from state and central governments.

During the second phase of the project, 30 composite mills are replicating direct rolling technology. Other innovative technologies piloted for the first time through the project include: the use of biomass gasifiers; improved pulverized coal firing; use of coal bed methane; computerized roll pass design; and improved furnace design.

Key initiatives underway

1. **Provide** technical assistance to implement energy efficiency measures in 300 steel units
2. **Develop** new technology packages for scrap-based steel re-rolling mill units, induction furnace units and second generation technologies
3. **Build** the capacity of 400 shop-floor workers on energy efficiency and 200 plant managers on standard operating practices and standard manufacturing practices
4. **Create** awareness of energy efficiency measures for small steel mills among 100 Certified Energy Managers and Certified Energy Auditors
5. **Explore** the possibility of introducing energy efficiency into diploma and ITI curriculum
6. **Develop** a roadmap for further diffusion of energy efficiency in the small scale steel sector

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