

Energy Efficiency Enterprise (E3) Certifications Programme

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In news: Recently, the Ministry of Power launched the Energy Efficiency Enterprise (E3) Certifications Programme for Brick manufacturing Sector

About Energy Efficiency Enterprise (E3) Certifications Programme

- **Aim of E3:** To Tap huge energy efficiency potential in Brick manufacturing Sector
- E3 Certification Scheme seeks to accelerate brick sector modernization, using market incentives to create customer demand to fulfil the vision for Atma Nirbhar Bharat.
- **Eligibility:** The E3 Certificate will be awarded to those enterprises whose specific energy consumption will be 25% lower than the national baseline.
- The enterprises can qualify for E3 through adoption of energy efficient brick manufacturing process and technology and Production of lower density bricks (hollow, perforated or porous bricks).
- **Voluntary:** The adoption of the E3 Certification is currently voluntary for the Brick industry.
- Bureau of Energy Efficiency under their awareness generation programme towards building energy efficiency shall also hold consultations with various stakeholders in this sector like builders architects etc. in order to sensitise them about the benefits of energy efficient bricks

A brief note on Brick manufacturing Sector of India

- **Bricks production:** India is the world's second largest producer of bricks and this demand is expected to

multiply three to four times over the next 20 years, through E3 Certification program

- **Contribution to GDP:** This sector contributes nearly 0.7% to the country's GDP, offers seasonal employment generation to over 1 crore workers, and has a strong influence on other economic sectors such as transportation and construction.
- **Energy consumption:** This industry consumes about 45-50 million tonnes of coal equivalent annually, amounting to 5-15% of the total energy consumption in the country.
- **Potential of energy efficiency:** The Brick sector has the second largest potential for energy efficiency amongst the Indian industrial sector after steel and more than cement, and the sector has largest energy savings to offer in coming decades through this program.

Expected Outcome of E3 programme

Energy saving of 7 Million Tonnes of oil equivalent (MTOE) per year and CO₂, savings of about 25 Million Tonnes by 2030 are estimated through adoption of E3 Certification by 7500 Bricks manufacturing units.

Significance & Benefits of the programme

- **Benefits:** The implementation of E3 Certification will lead to multiple benefits in terms of energy savings in the brick manufacturing process and improved quality of bricks resulting in cost savings to builders as well as energy savings to occupiers of buildings due to better thermal comfort and improved insulation properties.
- **Promote brick manufacturing:** Energy-efficient transformation in brick manufacturing is expected to create an enabling policy environment for promoting manufacturing and utilization of energy efficient Bricks, technologies and practices in India's construction sector.
- **Phasing out of inefficient technology:** This will push

towards phasing out inefficient technology in Brick production and enhance awareness and access of energy efficient bricks and technology.

- By availing E3 Certification, the brick units shall shift towards adoption of more efficient technologies for making energy efficient bricks. Such bricks will be useful in complying with the requirements of Energy Conservation Buildings Code (ECBC).
- It is proposed to nudge the agencies/departments in the public sector like CPWD, NBCC, State Public Works Department Railways and Urban local bodies, etc., to create demand for energy efficient/hollow bricks.