
Low carbon initiatives in the Indian Brick Sector

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Background

**CONSTRUCTION SECTOR IS THE
LARGEST CONTRIBUTOR TO
CO₂ EMISSIONS IN INDIA**

Background

60% of CO₂ emissions in construction sector are contributed by

- Cement
- Steel
- Bricks

Background

The Indian Brick Sector (estimates)

- **Solid clay fired bricks**
 - **Second largest brick producer in world**
 - **Most popular building material**
 - **Annual production – 170 billion / year (approx.)**

Background

The Indian Brick Sector (estimates)

- **Decentralized unorganized production**
 - Annual turnover – Rs. 460,000 million
 - Decentralized production > 120,000 units
 - Seasonal operation
 - Employment to 12 million workers

Background

The Indian Brick Sector (estimates)

- **Resource intensive process**
 - **Single largest source of air pollution**
 - **60 million tonnes of coal / year**
 - **150 million tonnes of GHG emissions / year**
 - **Largest consumption of agricultural soil / year**

Background

The Indian Brick Sector – technologies used



C
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Background

The Indian Brick Sector – technologies used



Moving Bull Trench Kilns

Background

The Indian Brick Sector – technologies used



Fixed chimney BTK

Background

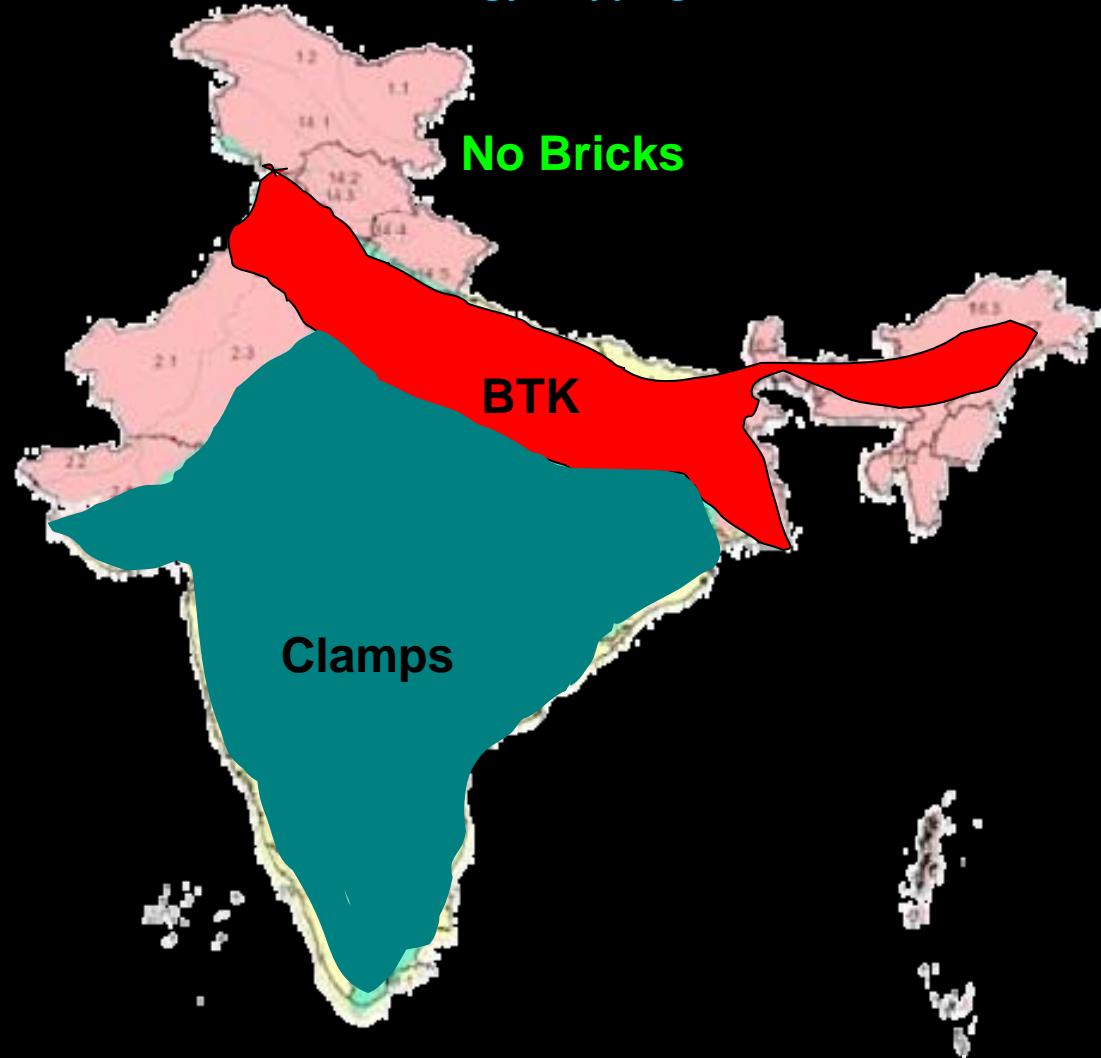
The Indian Brick Sector – technologies used



Fixed chimney BTK

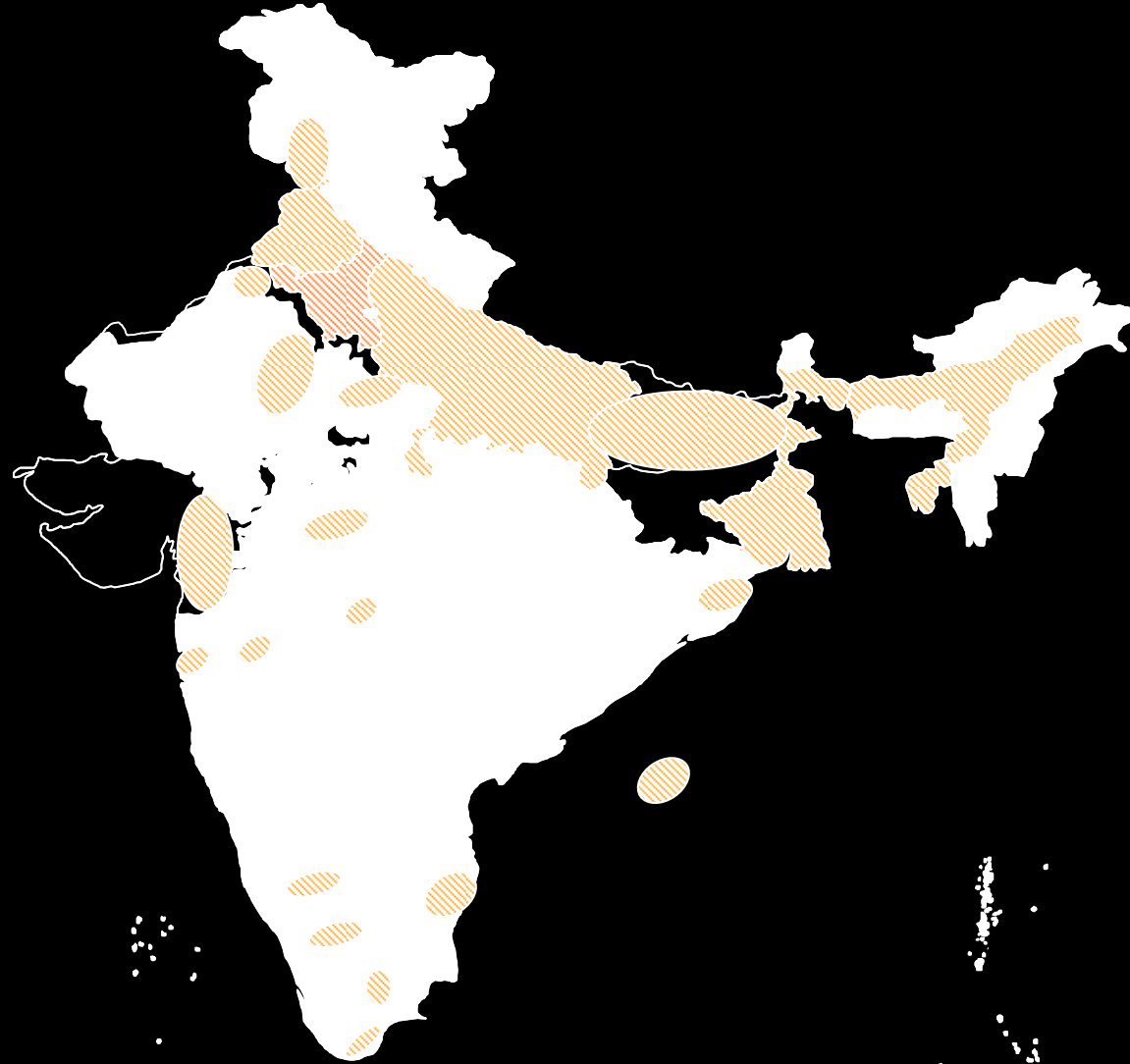
Background

The Indian Brick Sector - technology mapping



Background

The Indian Brick Sector - Technology mapping



Background

The Indian Brick Sector - living conditions



Potentials and opportunities

Improvement of existing technologies



Potentials and opportunities

Improvement of existing technologies



Potentials and opportunities

Improvement of existing technologies



Potentials and opportunities

Introduction of new technologies – The EcoKiln



Potentials and opportunities

Introduction of new technologies – The EcoKiln



Potentials and opportunities

Advantages – The EcoKiln

- Diverse scale of production
- Adaptability by all segments of brick production
- Cleaner production methods
- Energy efficiency
- Environmental benefits
- Increased profitability
- Utilization of local unskilled workers
- 365 days of production

Potentials and opportunities

Introduction of new technologies – Fly ash



Potentials and opportunities

Introduction of new technologies

- Energy savings by 30 million tonnes
- 100 million tonnes of CO₂

Challenges

SCALING UP
&
SCALING OUT

Way forward

- Increased awareness
- Favorable policies and adequate enforcement
- Improved access to finance
- Change in mindset

THANKS

