ENERGY EFFICIENT PROSPERITY
ENERGY EFFICIENCY IN EMERGING ECONOMIES
COP21 SIDE EVENT
1 DECEMBER, 2015

Energy Efficiency in Buildings & Industry
India’s Journey......
Energy Intensity of GDP on Decline

<table>
<thead>
<tr>
<th>Period</th>
<th>Energy Intensity (Kgoe/US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>1.09</td>
</tr>
<tr>
<td>1991</td>
<td>0.99</td>
</tr>
<tr>
<td>2001</td>
<td>0.85</td>
</tr>
<tr>
<td>2011</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Source: Planning Commission

Pursuit of Energy Efficiency - *one of the major drivers*
Perform, Achieve & Trade (PAT) Scheme

- Innovative financing scheme
  - Recognises good performers
  - Penalizes bad performers
    - Encourages new improvement strategies

- Economic benefits
  - Industrial competitiveness
    - 478 companies
    - Across 8 energy intensive sectors
  - Energy savings target under PAT Cycle-1
    - 6.686 million toe
  - Investment opportunities
    - Estimated: USD 13,703 million

Initial trends: 65% target likely to be achieved
Equivalent Net Energy Saving of 4.12 mtoe (1.05 Bn USD per year)
Green Buildings Make Good Business Sense

- Green Building Movement in India
  - 20,000 Sq.ft in 2003: 3.14 Billion Sq.ft in 2015
  - 2nd largest green building footprint in the world

- 13 IGBC Green Building Rating Systems
  - National by Choice - Global in Performance
  - Holistic in Nature

- Good Business Sense
  - Energy savings: 30 – 50 %
  - Water savings: 20 – 30 %
  - Productivity increase: 10- 15 %
  - Incremental cost: 3 %
  - Payback: 2-3 years

Push & Pull Strategy: Government - Private sector complementing each other
India’s Success Stories on Voluntary Initiatives

- **Cement sector**
  - Lowest Specific Energy Consumption
    - 61 kWh / Ton of cement
    - 684 kCal / kg of clinker
  - Extensive information sharing
    - Cooperation & Competition
    - Industry / sectoral partnership

- **Green Company (GreenCo)**
  - First of its kind in the world
  - Roadmap to drive excellence in ecological sustainability
  - 45 companies GreenCo rated
    - Savings: USD 3 Million in 6 Months

Green makes Good Business Sense
National Energy Awards

- Annual National Energy Awards for Industry
  - Organised by CII and partners for the last 15 years
  - To instil competitive attitude
  - To facilitate knowledge and information sharing
  - To foster cross-sectoral learning
  - Represents top 500 companies
Economic and Social Impacts of National Energy Awards

Last 10 years

- Energy cost savings achieved USD 3.45 Billion
- Energy saving projects implemented 46,487 Projects
- Cumulative avoided capacity 3,131 MW
- Cumulative GHG reduction achieved 20.53 Mil. T CO₂

Excellent Replication potential
## Benefits achieved through CII’s facilitation

<table>
<thead>
<tr>
<th>Activity</th>
<th>Reduction in CO₂ achieved (Tons / Annun)</th>
<th>Recurring annual savings (in Million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Audits &amp; Energy Efficiency Improvement studies</td>
<td>5,599,216</td>
<td>46</td>
</tr>
<tr>
<td>1450 Energy Audits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of CII Code by MSG Signatories and GreenCo rated companies</td>
<td>943,000</td>
<td>34</td>
</tr>
<tr>
<td>Green Buildings</td>
<td>3,806,250</td>
<td>25</td>
</tr>
<tr>
<td>750 completed green buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10,348,466</td>
<td>105</td>
</tr>
</tbody>
</table>
Thank you

Mr S Raghupathy
Executive Director
Confederation of Indian Industry
CII – Sohrabji Godrej Green Business Centre
Sy No.64, Kothaguda Post
Near Hitec City
Hyderabad
Email: s.raghupathy@cii.in
Ph.No.+91-40-44185111