

## Sustainable Energy Technology at Work - SETatWork

### Energy Efficiency – State of play in India

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# India

## - CDM Country Overview

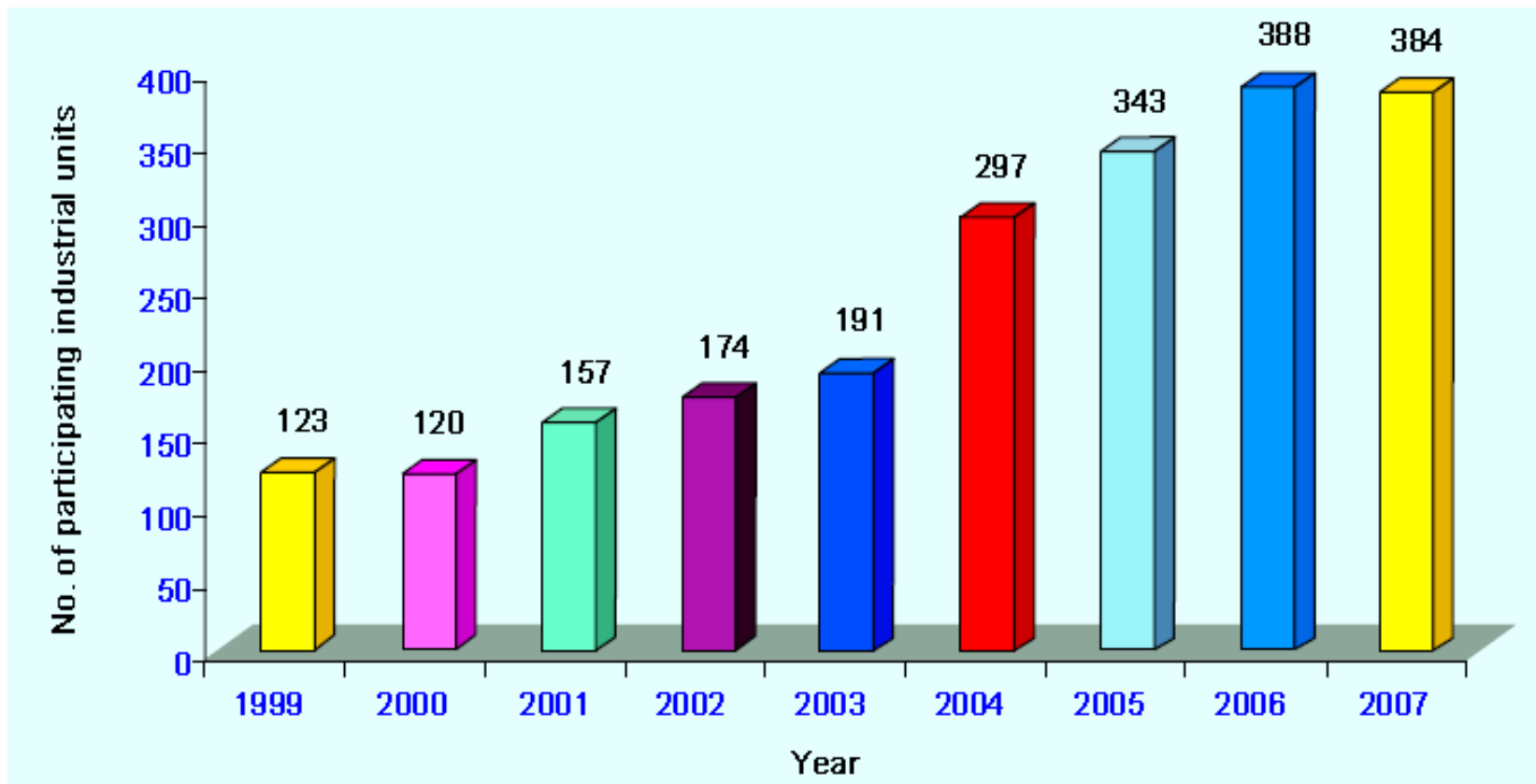
- Target to provide power to all by 2012
- Supply: Coal (53%), natural gas (10%) & oil (1%) are the primary commercial energy sources
- Increasing energy demand leading to energy shortages and subsequent energy imports
- Power from renewable: Wind and hydro.... forays into off grid renewable power as well
- **Enhanced Energy Efficiency** plan under NAPCC – Bureau of Energy Efficiency (BEE)

# India

## - CDM Country Overview

- Energy Efficiency being promoted by BEE
  - Bachat Lamp Yojana
  - Standards & Labelling Scheme
  - Energy Conservation Building Code
  - EE in SMEs in XIth plan (2007 – 12)
- Enhanced Energy Efficiency Mission
  - **Energy saving certificate trading scheme**
  - Partial risk guarantee to financial institutions for supporting **ESCOs**
  - Market transformation using carbon market
  - Fiscal signals for commercial and industrial users

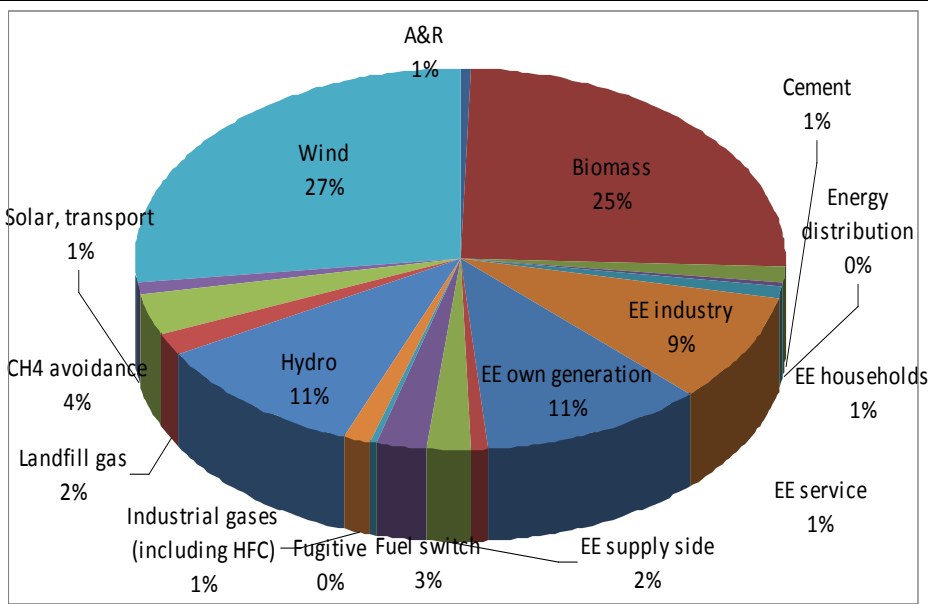
### Energy conservation award Scheme response (1999-2007)



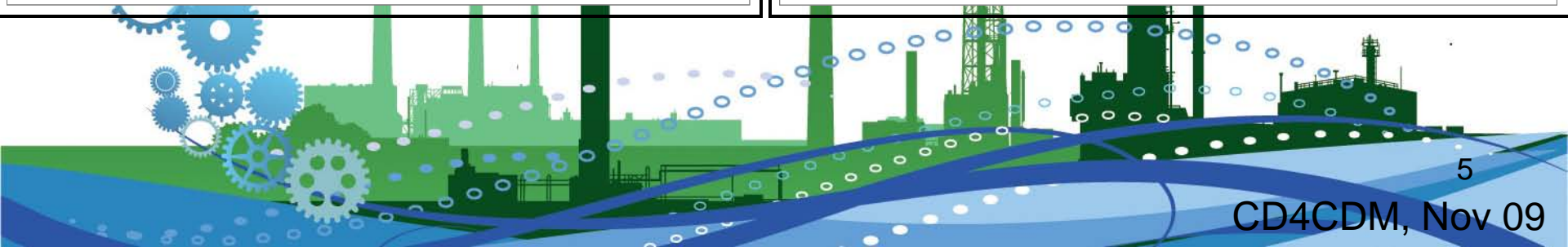
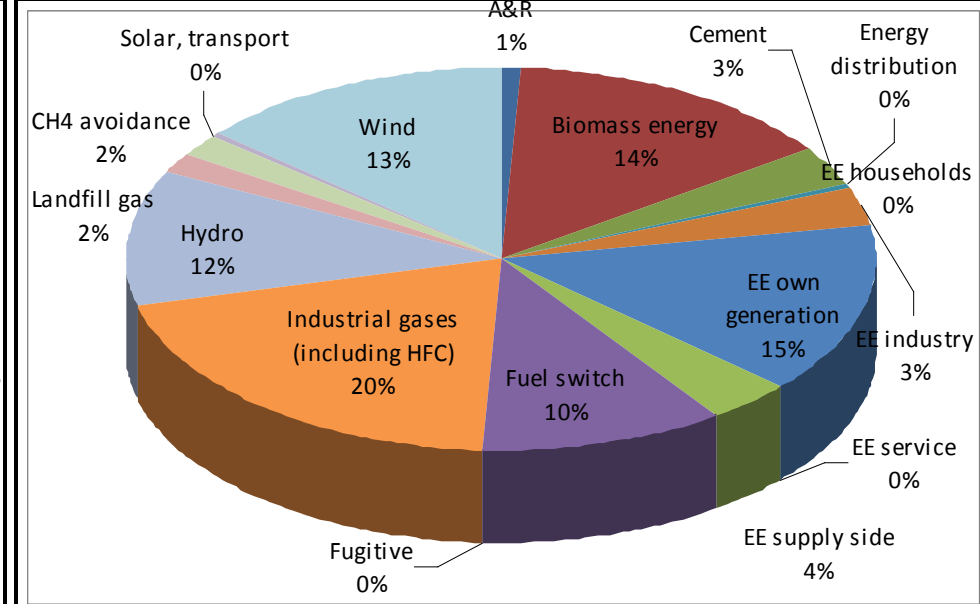
## CDM Market Development

### CDM project distribution in India

**Distribution of projects**

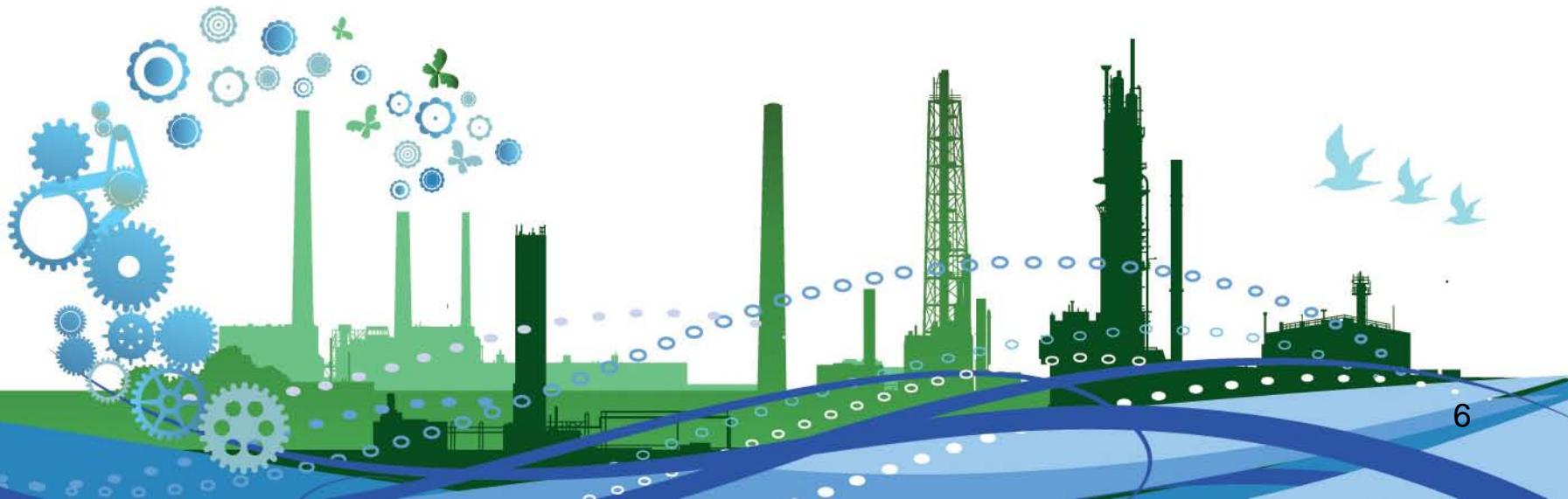


**Distribution of CERs**



## CDM Market Development

- Key observations: 473 projects registered
- Unilateral projects on the rise: 89 projects registered in 2009, 12 bilaterals
- Selling picking up slowly, still slow
- Programmatic CDM not upto expectations



# India

## - Need & Opportunities

- Need: To develop Programmatic Model
  - Financial models to support ESCOs are welcome
  - Need to address opportunities in SMEs
  - Technology mapping
- Opportunities:
  - Projects in line with NAPCC
  - Projects involving joint research and project development

## -Good Practice/Case examples

- Program to engage various industrial sectors to tackle EE in SME: Switzerland
  - Joint technology development
  - Swiss engineers partner with Indian companies
  - Develop technology suitable for local conditions

# India

## - SETatWork Intervention

- Preparatory phase
- Representation and presence in workshops
- Awareness about importance of EE in India
- Information used in EU-India background study for high level summit
- Aiming to make intervention post incorporation of COP15 outcome

# India

## - Identified CDM Projects

- Energy efficiency in Fortis hospital building in National Capital Region
- Prepare an online questionnaire for industry to gauge their requirements for energy efficiency
- Identified CDM projects so far and further process up to matchmaking event....

# India

## - Stakeholders & Initiatives

- Bureau of Energy Efficiency
  - Energy saving certificates trading
  - Financing model for ESCOs
  - Energy efficiency in SMEs
  - Contribution to State Conservation Fund (CECF) schemes
  - Standards and Labeling scheme
- What are the key local stakeholders and initiatives for SETatWork to interact with....

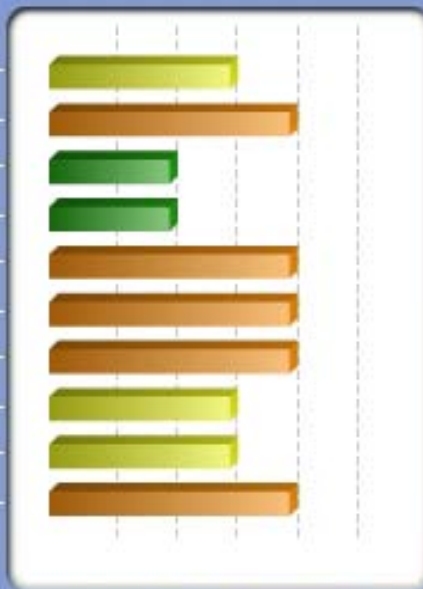
## - Prospects for EU Stakeholders

- Participation in Carbon market dismal
- Participation should be focussed on purchasing CERs
- Two pronged approach – Upfront financing needed to drive bigger efficiency measures and distributed measures to tap small scale measures
- Align approach in line with EEE to get support from government
- Specific technology assessment:

## Prospects for EU Stakeholders

### SET Priorities: India

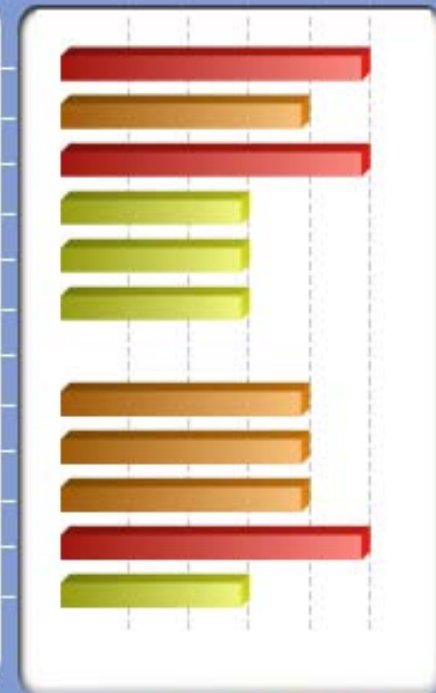
- Cement
- Ceramics, Glass, Bricks
- Chemical /Pharmaceutical
- Food Processing
- Mining
- Paper & Pulp
- Power & Heat
- Offshore
- Refineries
- Steel & Iron



Priorities by Industry Sector

V.Low Low Med High V.High  
Priority Level

- Wind Energy
- Biomass and Bioenergy
- Solar Systems
- Polygeneration
- Industrial CHP
- Fuel Switching
- Sustainable Design
- Certified Energy Man. Sys.
- Emissions Trading
- Climate Change & CSR
- Utility Systems
- Process integration



Priorities by Technology

V.Low Low Med High V.High  
Priority Level

## - Match-Making activity

- Matchmaking event – 3-4 February, 2009
- One day conference and half day meeting
- Aimed to contribute towards EEE meeting the targets
- Main topics suggested: Technology need and availability, Financing,
- B2B meeting for experience sharing and credit purchase.
- Need ideas and closer collaboration



Find out more about the activities of SETatWork  
and access the SETatWork Database at:

**[www.SETatWork.eu](http://www.SETatWork.eu)**

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