



## GreenCo News Letter

February 2016

### GreenCo Mumbai Forum

**Mr S R Lohokare, Chairman – GreenCo Mumbai Forum,  
Managing Director, National Peroxide Ltd**

**Host: Godrej & Boyce Mfg. Co. Ltd, Godrej Interio Division**

GreenCo Mumbai Forum met on 28 January 2016 at **Godrej & Boyce Mfg. Co. Ltd**, Vikroli campus in Mumbai. The host for this meeting was Godrej Interio division, Vikroli, one the first companies in Engineering sector to be GreenCo certified.

### **Total 30 members attended the forum meeting**

- Chairman of GreenCo Mumbai chapter, **Mr. S R Lohokare welcomed the forum members.** In his opening remarks Mr. Lohokare mentioned that GreenCo forum is an excellent platform for companies located in Mumbai and Maharashtra to go Green. He said "The objective of GreenCo forum is to Promote green technologies, green services and green investments in Mumbai region and build a network of people advocating Green Practices for the Industry" He also mentioned that till date total 53 companies are members of the GreenCo Mumbai forum and we want more Small and medium sector companies to be a part of this forum.

### **Highlights of the Technical Presentations made during GreenCo Mumbai Forum:**

#### **1. GreenCo journey of Godrej & Boyce Limited – Interio Division**

Ms. Ashwini Deodeshmukh, Assistant General Manager from Green Initiative Cell of Godrej & Boyce Ltd made an excellent presentation on the GreenCo journey of Godrej & Boyce Limited – Interio Division Vikhroli & Shirwal manufacturing units

#### **Presentation Brief:**

- Godrej & Boyce Ltd's, Interio Division has a vision to become the Largest furniture manufacturing company in India. They wanted to achieve this by enriching the lives' of people by providing a variety of home & work space solutions.
- Godrej Interio's GreenCo journey started in the year 2013 for their Vikhroli plant and achieved GreenCo Silver certification for Vikroli unit in 2014 and Shirwal Unit in 2015

#### Interio GreenCo Journey



- GreenCo journey has helped Godrej Interio in better tracking of resources expanding their scope of action areas and creating more employee involvement.

### Major accomplishments:

- Reduction in Specific Energy by 42 % ( in Vikhroli plant) and 34 % (in Shirwal plant)
  - Real time monitoring of energy through Smart Sense software
  - Replacement of pre-treatments chemicals to room temperature chemicals eliminating hot water generator
  - Installation of VFDs for pumps & blowers
- Reduction in Specific water consumption intensity by 31% ( in Vikhroli plant) and 49 % (in Shirwal plant)
  - Installation of Reverse Osmosis RO process at both the plants to reuse water
  - Rain water harvesting facility at both plants
  - Installation of low flow taps and use of recycled water in toilets
- Reduction in Specific wood consumption in Shirwal Plant by 43 % and Specific steel reduction in Vikhroli plant by 9 %
  - Reduction in waste from existing products achieved with modification in grain directions
  - Reduction in process rejects by changing resin formulation and changing impregnation process parameters
  - Reusing scrap (off cut battens) in different product categories
  - Use of alternate sizes of board to increase % utilization of material
  - Product optimization using cut rite software to ensure maximum utilization of boards
- Design For Environment DfE
  - Reduction in use of toxic chemicals in furniture
  - Product take back and recycling through WECYCLE program
- Green Supply Chain
  - Implementation of Divisional Green Procurement Policy
  - Supported 23 suppliers For EMS Certification. New suppliers with ISO14001 are preferred
  - Implementation of Green Procurement Guidelines through Cluster approach - Zero effect on environment
  - Supplier Audits
  - Recognition Programs for Suppliers
- Way Ahead-
  - Godrej Interio has decided GreenCo Framework as a standard Process for all plants and aims to cover all Interio plants for GreenCo certification by year 2018
  - Achieve minimum Gold certification level for all plants
  - Implement Cluster approach of GreenCo for SMEs

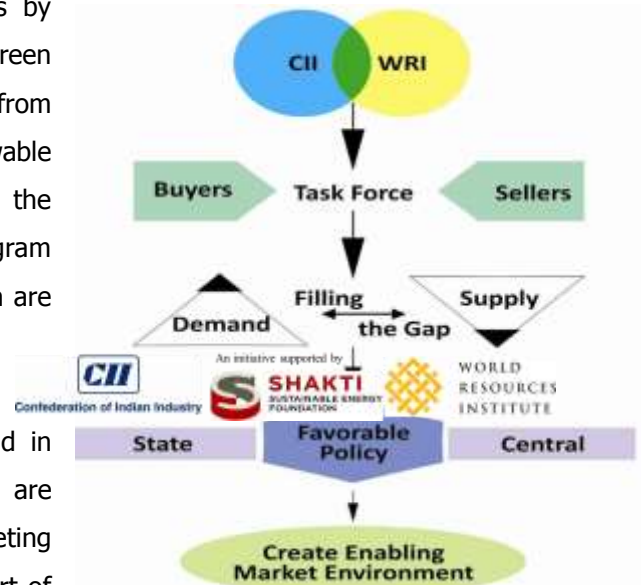


## 2. Presentation on Green Power Market Development Group Initiative (GPMDG) – India

Mr. Ravi Chander, Principal Counsellor from CII Godrej GBC made a presentation on Green power market development initiative in India

### **Presentation Brief:**

- GPMDI initiative aims to transform energy markets by enabling corporate buyers to access reliable and Green energy. The idea is to aggregate the demand from interested companies and facilitate deals with Renewable Energy (RE) developers. Apart from helping the companies from fulfilling their Green targets the program is addressing the policy and regulatory barriers which are making the procurement of RE unviable. The program is successful and has facilitated over 210 MW of RE including rooftop solar, Solar PV & Wind in Karnataka & Tamilnadu. As on date 54 companies are committed to this initiative and the program is targeting 1,000 MW of RE facilitation by 2020. Becoming a part of this program can help companies evaluate potential opportunities for renewable energy integration, connect with suppliers and address Policy & regulatory issues pertaining to green power implementation and purchase.



## 3. Presentation on Case Studies in Life Cycle Assessment (LCA)

Mr. Srikanth M, Sr. Consultant (Sustainability Solutions Management), Thinkstep explained about the concept of LCA and shared several case studies from companies that have conducted LCA Studies.

### **Presentation Brief:**

- Life Cycle Assessment is the compilation and evaluation of the input and outputs and the potential environmental impacts of a product system during its lifetime right from production phase, use phase and end of life of products
- It involves an inventory analysis of input resources and outputs- emissions & Waste.
- The impact assessment for example will be in terms of Energy consumption, Raw material consumption, Global warming, Summer smog, Acidification, Environmental toxins, Waste etc.
- Many leading companies are using life cycle management and studies to move towards providing sustainable products and service and profit from their revenue streams. Direct application of LCA



studies can include Product development and improvement, Strategic business planning, Marketing and identifying hot spots for improvement.

- Globally several organizations has conducted LCA studies.
  - Alcoa, aluminum major has done LCA Studies to identify hotspots and emission intensities at different stages of aluminum manufacturing.
  - Jaguar Land rover has done LCA study to understand the value of light weighting their vehicles and use of recycled aluminum
  - Interface , global Carpet manufacturer has done LCA studies to understand and improve their products' environmental footprints and produce Environment product declarations for all its carpet products globally for verified communication and reporting and for Product optimization and innovation
  - Alcoa , global manufacturer of aluminum products, sought to compare the environmental performance of aluminum truck wheels with their steel counterparts
  - Holcim, Cement major has done LCA Studies to estimate CO2 emissions at various processes in cement manufacturing and find out potential reduction opportunities at different scenarios such as Clinker substitution, renewable energy use etc.
- Apart from global players several Indian companies have conducted LCA studies with associated benefits. Some of the examples are given below:
  - Godrej Interio has done LCA Study for one of their furniture product to understand environmental profile of the product and identify opportunities for impact reduction and cost benefits.
  - ITC PSPD has completed LCA study for products like Coated Board Grey Back (CBGB) and Copier Paper as an Extended Producer Responsibility, marketing and meet emerging customer demand
  - Unilever had done LCA study for Pureit to compare the Global warming potential of pureit product with Boiled water, water from Water treatment device and bulk bottled water.
  - Daikin has analyzed the life cycle of an air conditioner, from design and manufacture to use and disposal and understood that majority of the CO2 emission occurs during product use and thus improved its product performance during use.

#### **4. Presentation on Solarize your roof Top**

Mr. Sharad Saxena, CEO of Chemtrols Solar Pvt. Ltd made a brief presentation on solarizing the roof tops and shared several case studies in Roof top solar.

##### **Presentation Brief:**

- Any Roof can be Solarized! - Flat RCC Roof , •Sloping Roof with GI or Steel Sheets , Sloping Roof with Asbestos Sheets (possible but not recommended)
- Energy Generation depends upon Shadow-free area available on the roof, •Orientation of the Sloping

Roof ( sloping towards south is ideal) , -Angle of inclination of the sloping roof and -Grid availability and its quality for the Grid-connected systems

➤ **Case Study: India's First MW Scale Rooftop Solar PV-Diesel Hybrid Power Plant at ALPINE KNITS (INDIA) Pvt Ltd, Tirupur, TN done by Chemtrols Solar**

- First in India and only second PV plant in the World to have a PV-Diesel Hybrid system to synchronize up to 70% of DG set capacity with PV power plant
- Total plant capacity installed on the existing sloping roofs of the factory, saving the land for other uses with Unique Sprinkler mechanism to clean the modules.
- Uses 'Fuel Saver' system- In the event of a grid failure the Solar Power Plant has the capability of synchronizing with the 1.25MVA DG set to provide up to 65% to 70% of the energy required by the Alpine Knits factory.



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**53 companies are members of GreenCo Mumbai forum.**

**16 Companies are working on GreenCo Rating from Mumbai region.**

**Discussion points from the forum:**

- Members of the forum were interested in knowing about upcoming policies and regulatory framework related to Energy Efficiency, Renewable energy, Water use and discharge and Environmental management
- Members requested information on the following areas:
  - National Green Tribunal concerns over the use of Plastics
  - Use of gypsum Boards for construction in housing
  - Role of SINE, Society for Innovation and Entrepreneurship, hosted by Indian Institute of Technology, Bombay in promoting Green businesses
- Members sought Presentations to be made on Green Supply Chain Management and Green Packaging during next forum meeting
- JSW steel showed its willingness to share some of its best practices and initiatives taken on Sustainable Water Management
- ACC Ltd had set up a new Innovation Lab in Thane and has shown interest to host next GreenCo forum meeting

## Photo Shoot



*Mr. Lohokare, Chairman, GreenCo Mumbai Forum along with forum members*

*Visit to Godrej Mangroves by Forum members*

### **About us:**

CII -Sohrabji Godrej Green Business Centre, Hyderabad is one of the 10 centres of excellence of Confederation of Indian Industry that stewards green movement for the Indian Industry across several streams in the country - Green buildings , energy efficiency, water management, environment management, Renewable energy , climate change activities, Green Companies & Green Products.

CII Godrej GBC has developed the **GreenCo Rating system, the "first-of-its-kind in the world"**.

This unique rating adopts a holistic approach to provide guidance and leadership to organizations to tread green path. The objective is to define and assess "How Green is the company", and evince the way forward to facilitate world class competitiveness in green. Larger goal is to make Indian companies world class and one of the global leader in doing environmentally sustainable businesses. To further consolidate the green company movement in the Indian Industry, CII has constituted **GreenCo Forums** at various cities, aiming to promote green practices and spearhead Green Companies at city / state level. The objective of GreenCo forum is to give an enabling platform for companies to share and learn green practices from each other and facilitate Indian Industry to achieve world class excellence in green

Till date, GreenCo forum chapters were launched in 7 cities **Bangalore, Chennai, Delhi,Hyderabad, Kolkata, Mumbai, Pune** and total **330** companies are part of the GreenCo Forum Pan India

If you would like to become the member of the GreenCo Forum please contact:

**N Muthusezhiyan**

Principal Counsellor

**Confederation of Indian Industry (CII)**

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