

Presentation

on

***FICCI- RCM Services on
Energy, Water & Environment Management***



By

TL- M A Patil, Sr. Director

Resource Conservation & Management Group

Email: ma.patil@ficci.com

Services Offered by RCM Group

Energy, Water, Environment & Safety Management



What do we do?

➤ **We offer consultancy & Capacity building Services to help Industries/
Businesses to**

- **Increase Energy Efficiency, Reduce Energy Consumption, reduce energy bills**
- **Reduce fresh water consumption & waste water discharge to rivers/
environment**
- **Reduce Air pollution**
- **Improve health of machineries, through improved maintenance
practices**
- **Improved occupational health & Safety**

**Broadly, Increase overall productivity & Environmental
performance**

RCM Team Strength - In-house Capabilities

- ❑ FICCI is Accredited Energy Audit Agency by BEE, GoI under Energy Conservation Act 2001
- ❑ 8 nos. of in-house experts/officers, mostly Engineers
- ❑ Audits led by Team Leader, with over 32 years of consulting experience in Energy, water & Environment Management
- ❑ 4 Nos. of BEE Accredited Energy Auditors
- ❑ 2 nos. of Environment, Water & Safety Experts

- ❑ *Additionally, External experienced process/ sectoral Experts are engaged as team members, as required.*

Energy Audit/ other Services – Sectors covered

- Detail Energy Audits : **Industries (SMEs & Large), Commercial buildings, Hospitals, Hotels**
- Mandatory Energy Audits (MEA) under PAT Scheme : **Cement, Fertiliser, Aluminium, Textile Mills, Thermal power plants, Oil refinery, Steel, etc)**
- M&V Audits under BEE-PAT Scheme
- National level Studies leading to evolving policy
- SME Cluster level Studies

FICCI studies identify potential for Energy Savings in Industries upto 5-20 % with payback periods less than 3 years

Water Audit / other Services : Sectors covered

- Water Audits for Industries : **Cement, Textile, Thermal Power plants, Food processing, Leather, Chemicals, Dairy etc**
- Water audits for Commercial complexes : **Hotels, Hospitals,**
- Water audits for **Office buildings & Townships, Banks (RBI),**
- Potential Assessment is done for Reduce, Recycle, Treatment & Reuse of water
- Survey & assessment on **Rain Water Harvesting and Groundwater Recharge & provide schemes**
- Water Risk Assessment and Sustainability studies : **For Vedanta group companies**
- Preparation of **Training manuals** related to Water & Wastewater use and management

FICCI studies helped industries to achieve Water & associated cost savings upto 5-30% with payback periods less than 2 years

Environment Audit/ other Services : Sectors covered

- Performance Up-gradation of Air Pollution Control Devices (APCDs)
- Human Health Risk Assessment (HHRA) studies
- Evolving low carbon plan for next 5-10 years
- Evolved Water Use Best Practices for Pulp & Paper and Sugar sector & Demonstrated/ implemented few best practices in 2 industries in Ganga Basin, **resulting in reduced wastewater discharges to Ganges** (for WWF)

Projects/ Studies done for Govt Ministries to evolve National Policies

Ministry/ Govt Agency	Project Title	Remarks
CPCB/ MoEF	Evolve national environmental policies for Rice Mills, Electroplating and secondary steel industry sectors	Air/ water pollution Policy Notifications issued. (Revenue 40 L)
Ministry of Water Resources	Evolved Water Accounting Guidelines for 18 Industrial Sectors	Revenue : 25 L
MoP / BEE	Benchmarking Specific Energy Consumption for Aluminium Smelter Industries	Helped MoP evolve PAT scheme policy document (Revenue : 20 L)
MoP / BEE	Baseline Energy Audits in 40 industries in 5 sectors	Helped MoP fix the baseline & set variable energy saving targets (Revenue : 40 L)
		8

National Conferences/Technical Meets conducted : *(Paid conferences, Avg Rs 10K)*

- **Electricity Utility Management**
- **Waste Heat Recovery**
- **Air Pollution Control & Measurement Technologies**
- **Industrial Heating**
- **Hazardous Waste Management**
- **Reliability Improvement of Electrical Equipments & Systems**
- **Electrical Systems in Modern Buildings**
- **Advanced Combustion Technology**
- **Total Corrosion Management**
- **Thermal Insulation System**
- **Industrial Process Safety Management**
- **Plant Maintenance**
- **Power Quality**

RCM Activities highlights

Over past 18 years :

- more than **180** consultancy Assignments/projects completed (for members/ other businesses/ industries/ Gol / State Govt agencies)
- more than **250** technical programs conducted, building capacity of more than **12000** industry managers/ practicing engineers
- **11** Nos of international consultancy projects completed, covering **30** odd industries
(Kenya , Zambia, Senegal, France, Luxemburg, Czech Republic, Italy, etc)

RCM Activities : National & International

Energy & Water consultancy assignments, Technical Seminars/Meets, Capacity building programs

West Bengal	Orissa	Chattisgarh	Assam	MP
Punjab	Chandigarh	Uttarakhand	J &K	UP
Rajasthan	Gujarat	Goa	Maharashtra	Haryana
Kerala	Karnataka	Tamil Nadu	Pondichery	AP
ZAMBIA	KENYA	SENEGAL		
FRANCE	ITALY	CZECH REPUBL	LUXEMBOURG	

Partial List of Members Served – Energy / Water Audits

Corporate

- ACC Ltd
- Ambuja cements
- **Cairn india X 2**
- **Chambal Fertilisers X 2**
- IOCL
- **NTPC X 6**
- ITC Ltd
- Shree Cements
- HPCL
- DLF Ltd

Associate

- Atlas Cycles
- **Hindusthan Tin works X 2**
- **HINDALCO Ltd X 3**
- Hindusthan Zinc
- RCF Trombay
- Zuari Agro Chemicals
- JK Paper
- **BALCO chattisgarh X 2**
- **Vedanta Ltd X 4**
- Ultratech Cement

Partial List of *Government & International organizations served* :

- Bureau of Energy Efficiency (BEE), Ministry of Power, GoI
- Petroleum Conservation Research Association (PCRA), MoPNG GoI
- Energy Efficiency Services Limited (EESL)
- Ministry of Water Resources (MoWR), GoI
- Central Pollution Control Board (CPCB)
- State Designated Agencies (SDA)
- Ministry of External Affairs (MEA)
- Govt of Gujarat
- Govt of Kerala
- Govt of Karnataka
- United Nations Development Programme (UNDP)
- World Bank
- Small Industries Development Bank of India (SIDBI)
- World Wide Fund for Nature (WWF)
- United Nations Industrial Development Organization (UNIDO)
- Shakti Foundation
- DANIDA
- ICPCI
- Kenya Association of Manufacturers (KAM)

Thank You