

Presentation
on
Team work of Experts from
Process, Production, Plant and Power
to gain “Energy Savings”
through DSM for Industries
by
IT Power Global , New Delhi
SUPREME Green Energy Solutions Pvt. Ltd, Pune

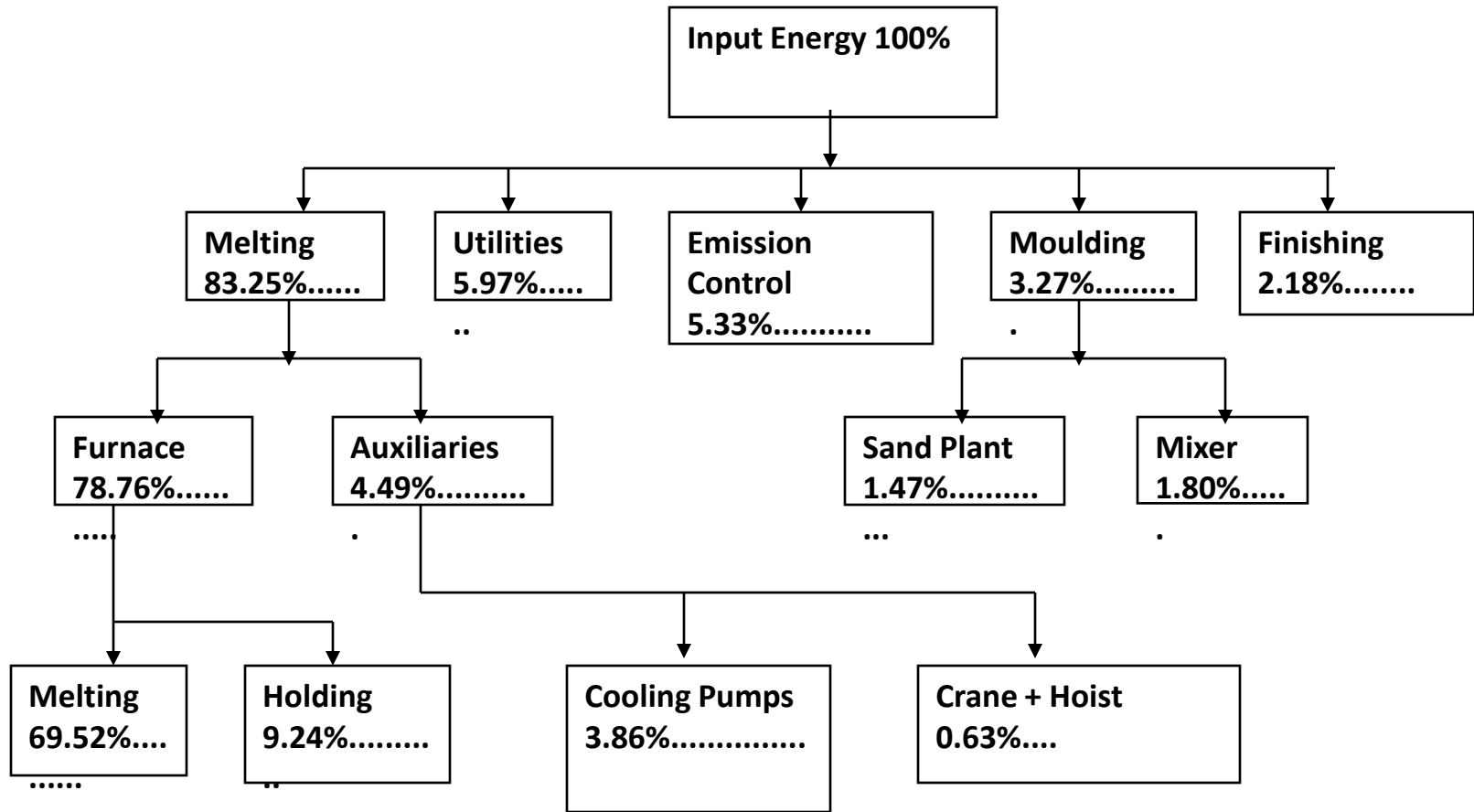
At
BEE – 3L Workshop
Hotel Pride
Pune

25th Jun10

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Process Study w.r.t. Energy



Global Electrical Energy Productivity Scenario

On Power Productivity, Rest of The World Leads Us, By Huge Margin

Country	Electricity Used		GDP	Value Added By	Value Added
	Total	By Industry		Mfg Industry	Mfg Industry
	[Bn kW-hr]	[Bn kW-hr]	[Rs. Crores]	[Rs. Crores]	[Rs/kW-hr]
India	510	179	22,912,416	3,149,952	18
China	1,356	452	55,633,488	17,896,128	40
Malaysia	69	23	4,225,968	1,424,256	62
Singapore	31	16	4,111,104	1,195,008	76
Germany	567	284	88,611,312	19,338,528	68
Japan	1,082	541	198,788,688	49,408,128	91
Korea	283	127	20,264,016	8,308,224	65
USA	4,003	2,002	483,132,720	75,196,800	38
UK	372	186	68,356,512	11,273,136	61

For Improvements we all know following-

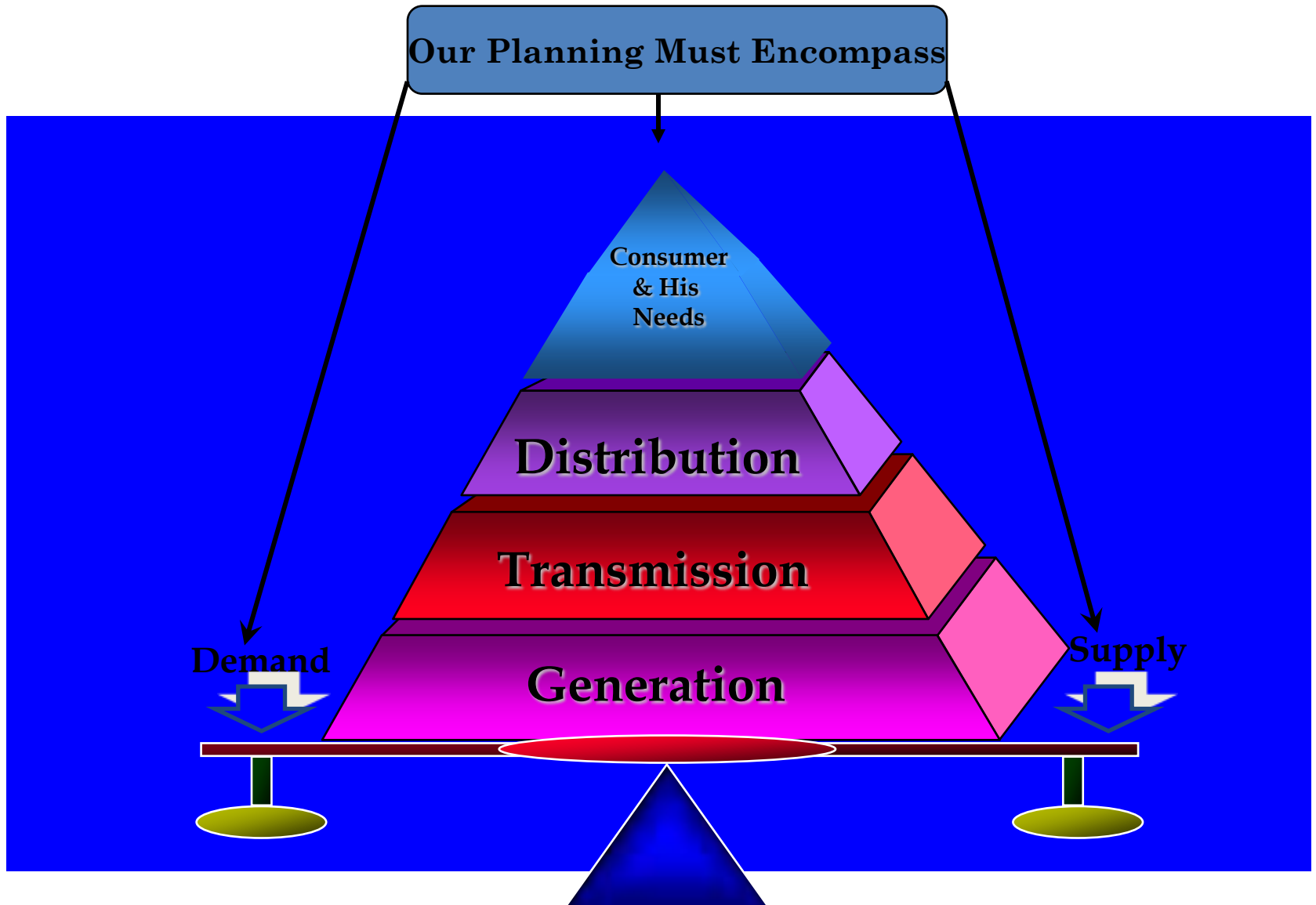
1) Avoidable Cost – eliminate it

waiting cost / delaying cost / rejection cost /
breakdown cost / un-utilized cost

2) Un - Avoidable Cost – reduce it

scrap cost / labour cost / **energy cost**
/ pre-process and post process costs

Energy/Power Dimensions



The problem/challenge is not one but several!

• Load level

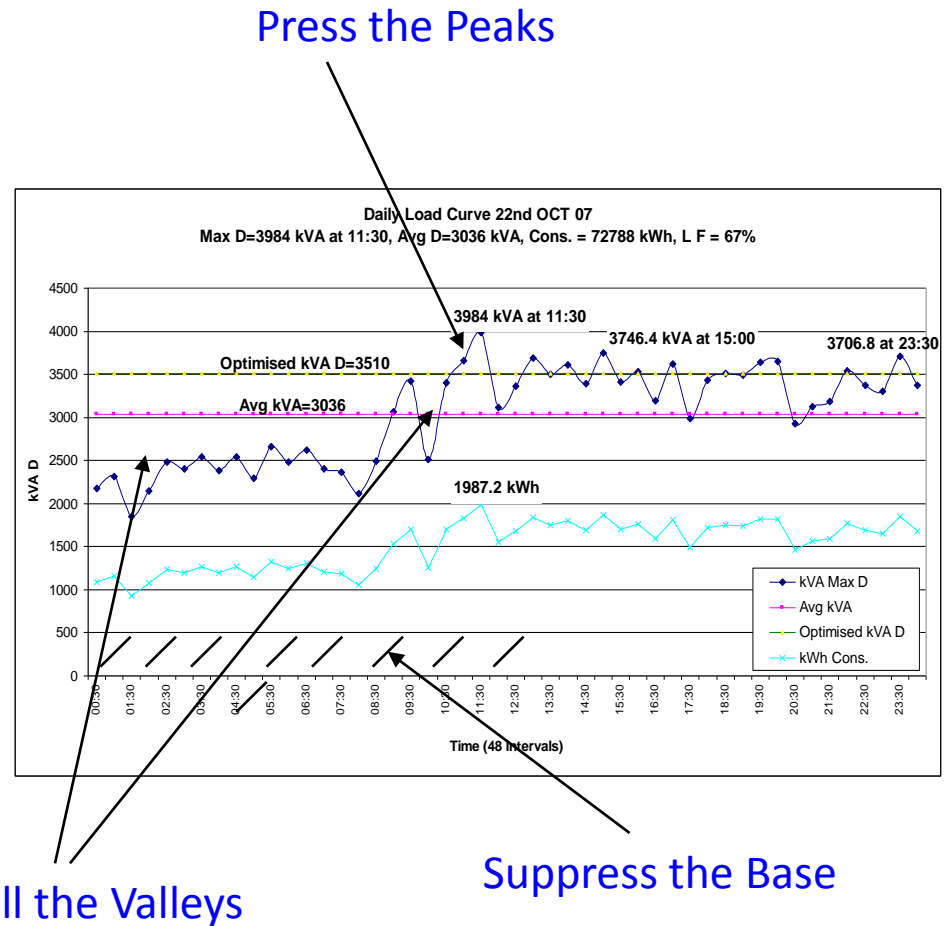
- too much supply for a wasteful demand?
- or shortage of supply for demand

• Load shape

- high peaks,
- baseline consumption
- little reserve capacity,
- bottlenecks in transmission and distribution

• Market responsibilities

- who is the owner of the problem?



What is DSM?

- The **planning and implementation of** those activities designed to **influence the end-use/consumer's use of** electricity (energy) in ways that will produce **desired changes in the load shape**—(its pattern and magnitude)
- DSM encompasses the entire range of management functions
(**planning, implementation, monitoring and evaluation**)

Approach - DSM to CER

- Load Management
- Energy Efficiency
- Energy Conservation

Benchmarking SEC - specific energy consumption

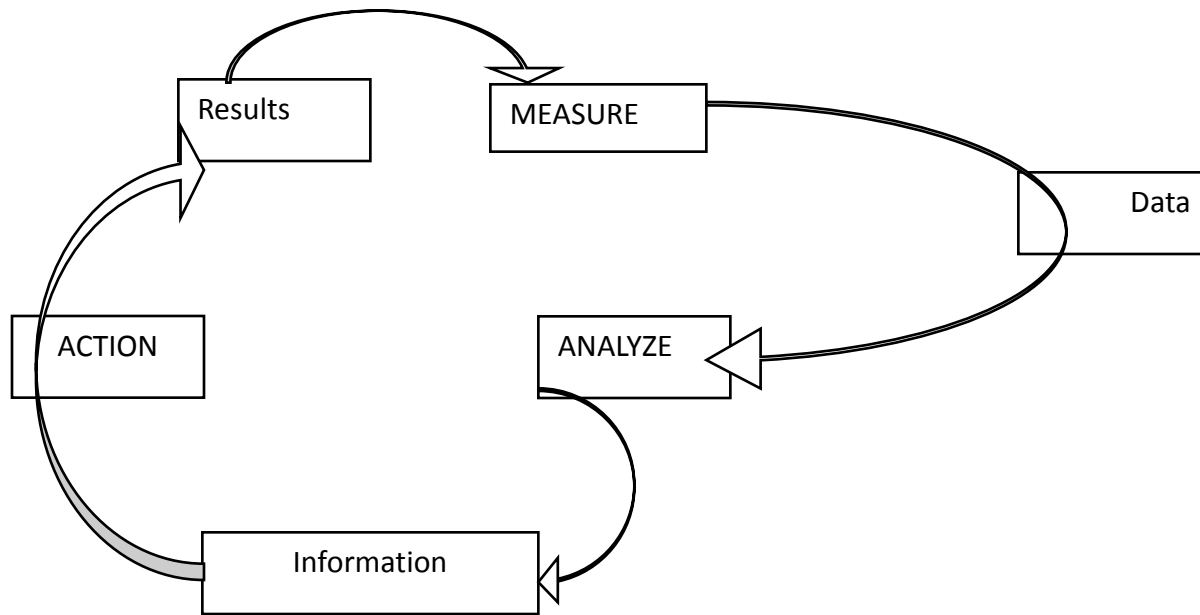
- Power Installation Condition Evaluation
- Renewable Energy profiling
- Renewable Energy/Distributed Generation
- **Claiming Carbon Credits - Under Kyoto CDM Project for CER**

Proposed Methodology – by SGEs - Mechanics of DSM

- 10 step Roadmap and Methodology -

STEP 1	Feeder wise List of all Connected Loads
STEP 2	Schematic Line Diagram with Locations of Loads
STEP 3	Factory Layout Drawing showing Loads
STEP 4	Factory Level typical Load Curve (Estimated)
STEP 5	Installation of Meters
STEP 6	Measured Readings and its Analysis
STEP 7	8 Step Procedure according to Methodology
STEP 8	Load Curve Study and Brainstorming
STEP 9	List of Recommendations
STEP 10	Implementation

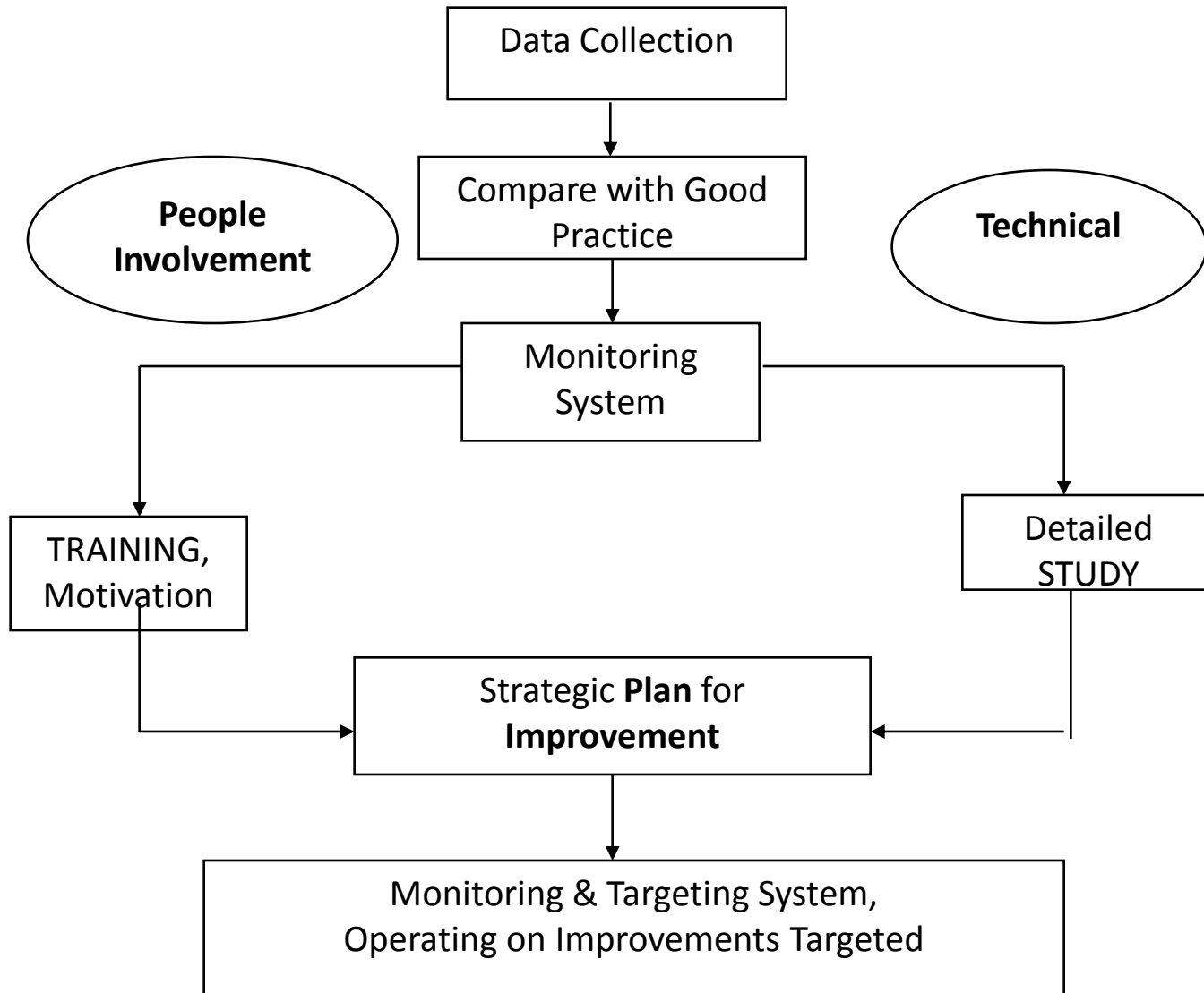
Information System -



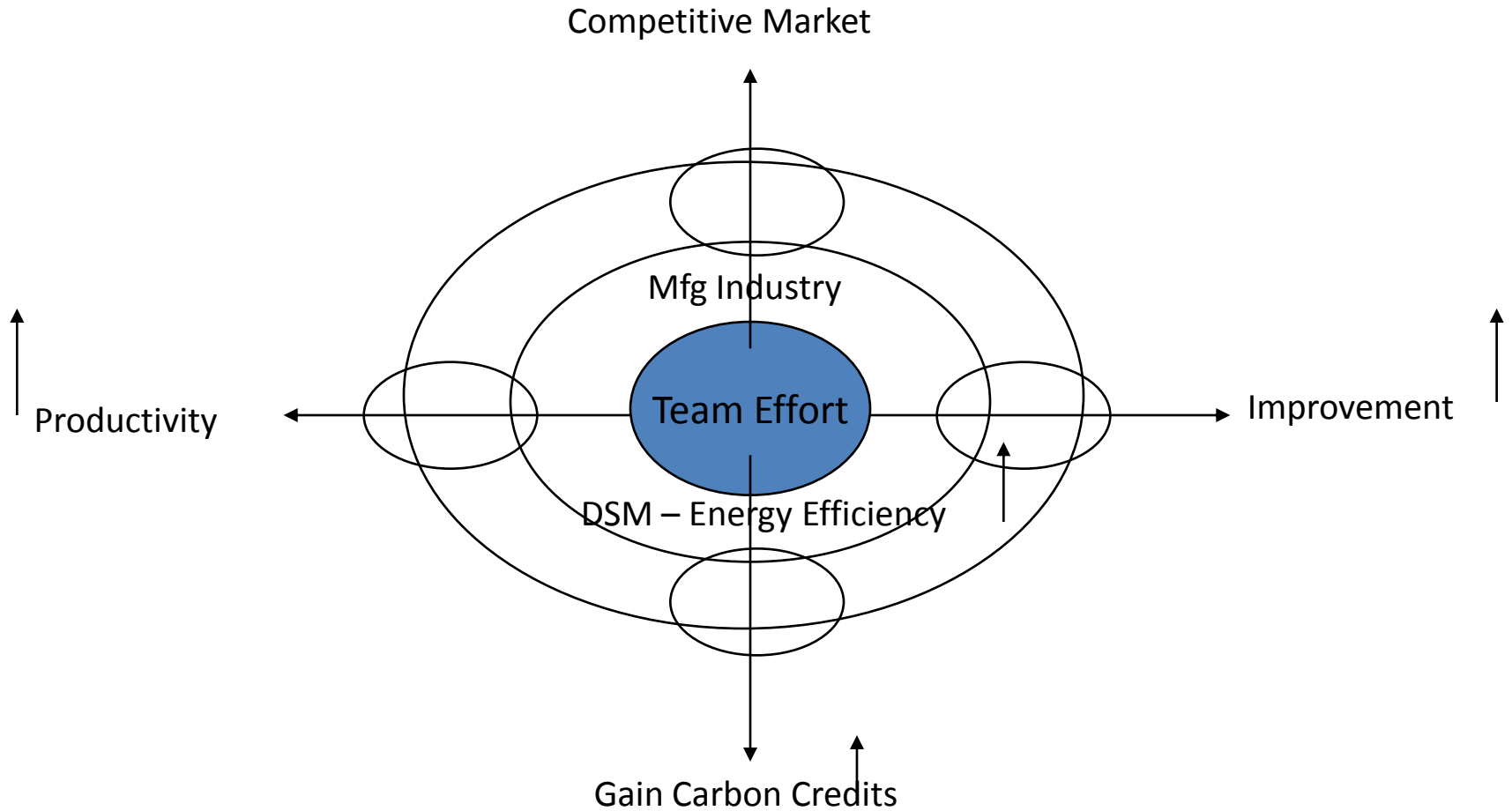
Load Curve Study and Brainstorming -

- Specialize here
- Build a collaborative Team of Energy-Process Experts and Process, Production and Plant Experts internally and externally (ESCO)
- Study the power usage pattern (load curve) and train the team to implement and monitor the sub projects (Energy Conservation Measures -ECM's)of DSM
- Energy Manager and Team shall lead to define on going DSM exercise
- Team would operate independently in next year *to facilitate energy system operations*

Strategy Plan –



Results -



- DSM is concerned with reducing Demand and Energy in specific way, thus maintains reliability and over a longer term defer the need for Distribution System augmentation.
- DSM optimizes the use of energy, saves energy, leads to CERs

Thank you.....
www.itpi.co.in
www.greenenergyindia.org

Past Projects completed successfully



Success Stories :

Our 2 clients, where we have Successfully Executed a Project of “Energy Conservation through Demand Side Management” are the recipient of the "First Prize" for “Excellence in Energy Conservation and Management" from Maharashtra Energy Development Agency (MEDA) for the year 2007-08



M/s menon and menon Ltd, Kolhapur received 1st Prize in the category of Metal and Steel at the hands of the Hon'ble Governor of the State of Maharashtra, His Excellency, S C Jamir

M/s GITS Food Products Pvt. Ltd, Pune recieved 1st Prize in the category of SME at the hands of the Hon'ble Minister for Renewable Energy GoM, Vinay Kore



Clients -



ACCURATE



Cipla

Thank for your time