Mitigation Enabling Energy Transition in the MEDiterranean region



# Demand Side Management Programs

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#### Energy Audits in Industrial Small Medium Enterprises (SMES) - Training Course

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#### Why Demand Side Management?

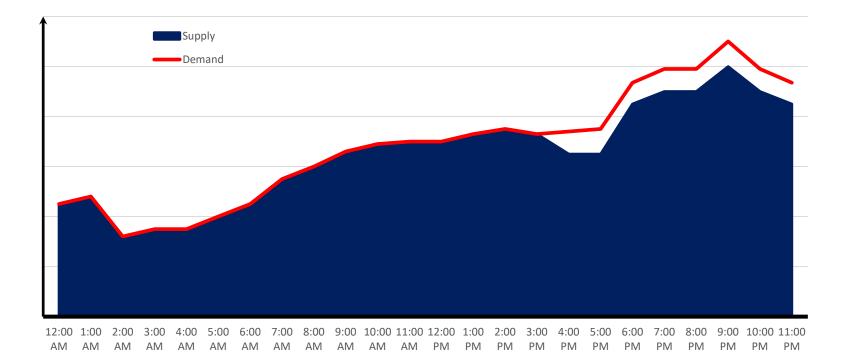
- Securing Demand versus Supply.
- Enhancement and Optimization of the investment at Supply Side.
- Restructuring for Demand and Energy Tariffs.
- Setting the corrective actions for Energy Performance Schemes.
- Upgrade to the Supply Side Loading Factor.







#### **Demand Profile**







#### **Analysis to Demand Profile**

- Analyze and assess for Peak Demand Contributors of different load.
  - Cooling.
  - Heating.
  - Lighting System.
  - Motors.
  - Appliances.
  - Etc.







#### Ways to reduce Peak Demand

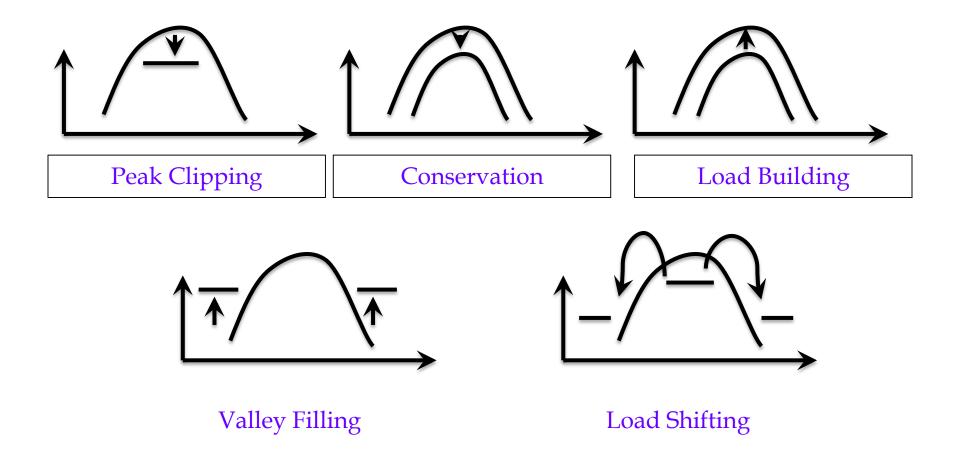
- Energy Efficient Programs.
- Efficient Appliances.
- Load Shifting/Shaving.
  - Shift Peak loads if possible to off peak.
  - Shave the peak demand through shutdown of non essential loads.
- Energy Storage Approaches during off peak (Thermal);
  - Cooling Load.
  - Heating Load.







#### **Common Approaches for DSM**



#### **RCREEE**



## **Steps to Design DSM Programs**

Development of necessary infrastructure for implementation

Load research and load profiling

Market survey

Consumer awareness and marketing programme

Regulatory approval

Development & implementation of DSM programme

Development & implementation of DSM bidding process

Monitoring & evaluation of DSM programme





#### **Utilities Driven Programs**

- Tariff Reforms
- Load Management Directives
- Public awareness campaigns
- Funding Options for DSM
- Sector specific programmes in residential, commercial, industrial sectors.

