

Summary Of Achievements



Renewable Energy

- 70% of the energy consumption equivalent to 2927 kWh in the University is met by Renewable Energy sources.



Energy Management

- 46 % saving in energy consumption achieved by choice of energy efficient appliances.



Water Management

- 100 % surface runoff collected in Rain Harvesting Ponds.
- 100 % of used water and sewage being recycled centrally for further use.



Waste Management

- Entire Organic Waste generated in the campus fed to a Bio Gas plant.



Arboriculture

- Plantation of 2800 trees in the campus across 40 Acres.



It all began....With our move from the Metro City of Chennai in Southern India to a larger campus to meet our expansion plans



Amidst the bustling city of Chennai

And We moved from there to here...
....about 60 Kms North of Chennai





Layout of IFMR University





ISSUES IN ENERGY MANAGEMENT AT IFMR

Mandate

- Improving Energy Efficiency
- Reducing Energy Demand
- Strict Budget and Timelines

Major Energy Consumption Areas

- Thermal Comfort
- Fuel for Cooking
- Provision for Hot Water



ENERGY MANAGEMENT AT IFMR

Major Energy Consumption Area

- Thermal Comfort - 70 % of total energy consumed.

Definition

- 70 % of the energy demand was being catered by 46 % of Devices in the campus.

Solution

- Those 46 % of the devices were made energy efficient.
- 70 % of the resultant energy demand was provisioned with Solar Power thus achieving self sufficiency.



ENERGY MANAGEMENT AT IFMR

Major Energy Consumption Area

- Fuel for Cooking
- Provision of Hot Water

Definition

- 60 Kgs of LPG per day being used currently for Cooking
- Electric Geysers for Hot Water.

Solution

- 250 Kg Capacity Bio Gas Plant installed that caters to about 15 Kg of Cooking Fuel from the Organic waste generated in the kitchen and Dining halls achieving 25 % self sufficiency.

Way Forward

- Provision of Solar Powered Steam Generators being planned to achieve 60 % of self sufficiency.

Concluding Remarks

- Interplay of Energy Efficiency and Energy Demand.
- Importance of Social Psychology to reduce Energy Demand.
- Knowledge Sharing and Training on Best Practices.

