

IFMR University's Journey towards....







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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

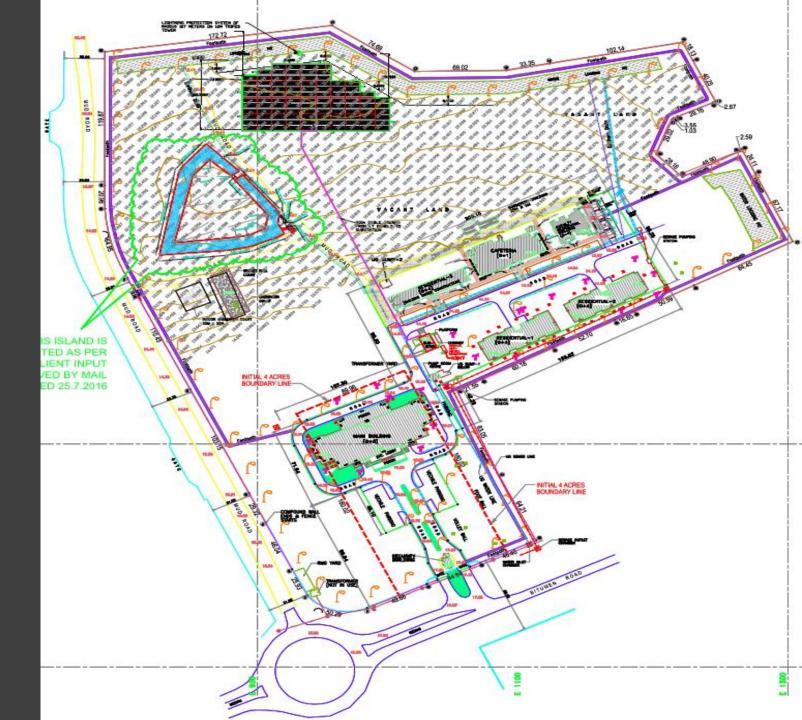


And We moved from there to here...about 60 Kms North of Chennai

3D



Layout of IFMR University





ISSUES IN ENERGY MANAGEMENT AT IFMR

<u>Mandate</u>

- 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.

<u>Solution</u>

• 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.



