

# Energy Efficiency in Government Health Sector



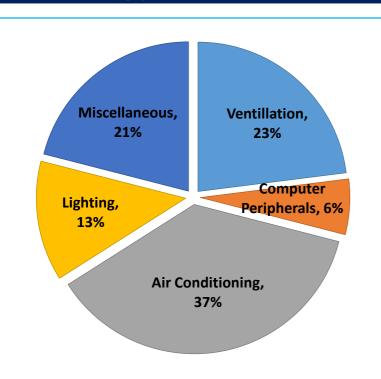
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Kerala Government operates and maintains 1283 hospitals with an overall bed strength of 37843. Role of these hospitals post pandemic diseases like NIPAH and Covid'19 is instrumental. Energy efficiency plays a vital role in optimizing the overall operational cost and serving a quality treatment in the health care sector of Kerala. Energy Audit was rolled out in the year 2020-21 at 20 Family Health Centers (FHC), 1 Taluk Hospital (TH), 1 General Hospital (GH), 1 National Health Mission (NHM) Hospital and 3 Public Health Centers (PHC). 12% of overall operational costs of these centers are met for Energy.

#### **Energy Scenario**

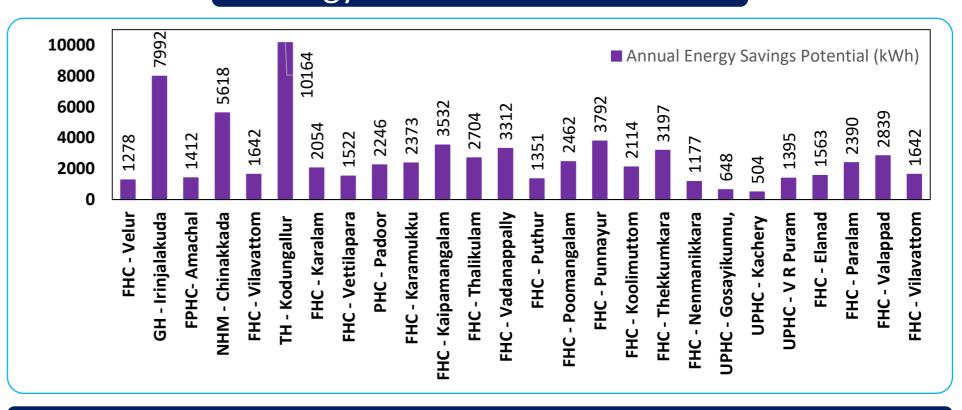
- Electrical Energy holds the major share of Energy consumed in these hospitals.
- Energy is utilised to meet the operation of various treatment equipment, lighting, ventilation and air-conditioning which shall ensure comfort of both patients and health workers.

#### **Energy Distribution**

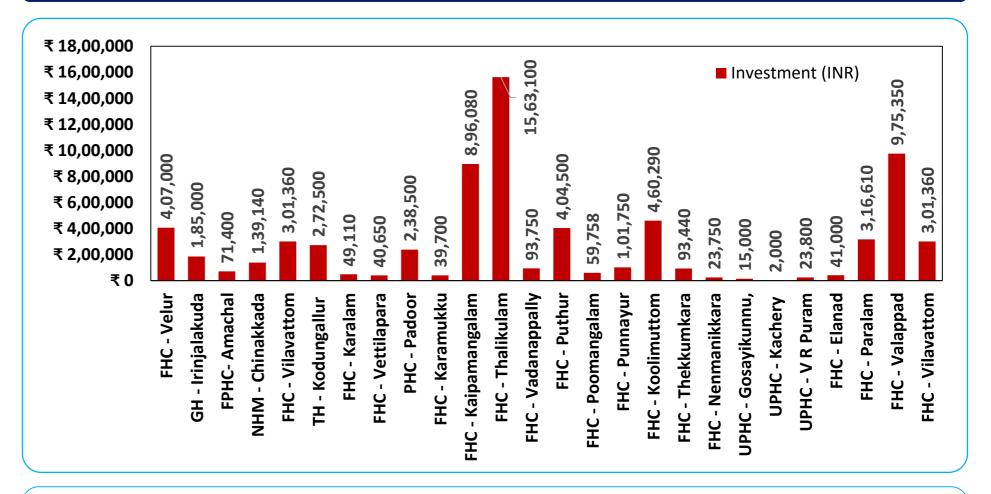


Air conditioning for human comfort and treatment holds the maximum share of energy demand. Ventilation requirements in the buildings are met by ceiling fans, wall fans and exhaust fans holding the second major share of energy demand. Lighting requirements for interior illumination, procedure lighting, street lighting and safety lighting holds the third major share of energy demand. Hence, energy optimization ideas are proposed concentrating in these areas.

## **Energy Conservation Potential**



## **Anticipated Monetary Savings (INR)**



1 Unit of Electricity saved is equivalent to 2 Units of Electricity generated. Accordingly, Energy Savings yields monetary savings. Annual Energy Savings to a tune of 70923 kWh accounting to a Monetary savings to a tune of 10 Lakhs INR is envisaged.

#### **Best Practices**

- Switch off lights and appliances not in use
- Set your AC temperature to 24°C. Reducing each degree by 1°C will increase energy
- Set ceiling fan speed to step 3 and save energy by 25% 40%
- Clean your air conditioner filter once in a month and improve cooling at no additional electricity cost
- Install a rooftop solar power plant and cut down electricity bill
- Switch to LED Bulbs and tube lights to save energy by 50% 85%
- Switch to Brushless DC fans and save energy up to 50% 60%
- Replace aged appliances and equipments with BEE Star Labelled ones



## **Energy Management Centre – Kerala**

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