



Government of Kerala
Kerala State Energy Conservation Awards 2013



This is the 17th State Energy Conservation Awards, an appreciation for noble and concerted effort towards energy conservation in the State of Kerala. The State Level Monitoring Committee for Energy Conservation in Kerala, on evaluating the various entries for State level awards selected the following organizations/individuals for conferring Awards and Commendation Certificates.

LARGE & MEDIUM SCALE CONSUMERS	
Rajiv Gandhi Combined Cycle Power Projects (NTPC)	Award
Hindustan News Print Limited	Commendation
Innovative Foods Ltd.	Commendation
Wayanad Dairy, MRCMPU Ltd	Commendation

SMALL SCALE ENERGY CONSUMERS	
Rubek Ballonns Pvt Ltd	Commendation

ENERGY CONSERVATION PROMOTERS	
Sri Sathyasai Orphanage Trust	Award
Hrithasena, Podavoor, A.V.P. School	Commendation
Unni Ammayambalam	Commendation
K.C.Baiju	Commendation

BUILDINGS	
Cochin International Airport Ltd	Award
BSNL Telephone Exchange, Kannur	Commendation

Their efforts in energy conservation are detailed in the Annexure-1

For details:

Director,
Energy Management Centre Kerala
Sreekariyam
Thiruvananthapuram-17

LARGE & MEDIUM SCALE ENERGY CONSUMERS

BEST PERFORMANCE AWARD

RAJIV GANDHI COMBINED CYCLE POWER PROJECT, KAYAMKULAM

Energy Saving: Electricity : 8.4 MU Thermal 2908 Tons of Oil

Energy saving measures are

- Gravity feeding of Cooling Tower make up pump
- Reservoir Bypass Line and new strategy for running of Makeup Water Pumps
- Variable Frequency Drive Installed In LT Drives
- Optimization of Off-line and On-line Compressor water wash system in Gas Turbine
- Cooling Tower fill replacement and Cooling Tower Fan Blade Angle Change
- Priority operation of equipments based on online monitoring
- They could maintain a heat rate of 1963.43 kCal/kWh

LARGE & MEDIUM SCALE ENERGY CONSUMERS

COMMENDATION CERTIFICATE

HINDUSTAN NEWSPRINT LIMITED, KOTTAYAM

Energy Saving: Electricity :3.3 MU, Thermal 160 Ton of Oil & 5500Tons of Coal

Energy saving measures includes

- Usage of 6800 MT Wood fines and 1100 MT of DIP/ETP Sludge (Process waste) as fuel in FBC boilers
- Usage of 475 MT wood fines (process waste) in limekiln to partially substitute furnace oil
- Optimization of pulp mix ratio by reducing the percentage of CMP Pulp by 5% and increasing DIP share by 5%
- Replacement of 37 kW motor of CP HD Pump with 15kW
- Installation of variable frequency drive for Re -Winder trim fan
- Replacement of conventional motors with Energy efficient motors

LARGE SCALE ENERGY CONSUMERS

COMMENDATION CERTIFICATE

INNOVATIVE FOODS LIMITED, ALAPPUZHA

Energy Saving: Electricity: 0.72 MU (Electricity)

Some of their Energy saving measures include

- Replacement of 165HP Ammonia system with 50HP R404A system for 500MT cold store
- Replacement of an efficient shell tube condenser with Alfa Laval make PHE for the blast freezer
- Automation of Compressor Loading/Unloading system
- Energy saver for the Lighting system
- Replacement of 40W twin tube lights with 28W in the processing hall & in

offices

LARGE & MEDIUM SCALE ENERGY CONSUMERS

COMMENDATION CERTIFICATE

MILMA WAYANAD DAIRY, WAYANAD

Energy Saving: Electricity: 0.004MU (Electricity) 1.8Tons of oil

Some of their Energy saving measures are

- Fuel switching –from furnace oil to fire wood.
- Replacement of existing homogenizer with energy efficient homogenizer
- Installation of UPS for milk pouch filling machine
- Installation of solar water heater
- Installation of air ventilator
- Installation of VFD for ID fan
- Replacement of incandescent lamp with CFL

SMALL SCALE ENERGY CONSUMERS

COMMENDATION CERTIFICATE

RUBEK BALLOONS PVT LTD, ERNALULAM

Some of their Energy saving measures are

- Delivery Pressure Optimization in compressed air line
- Reduction of Compressor room temperature by installing Turbine Air Ventilator
- Energy saving through production optimization

ENERGY CONSERVATION PROMOTERS

BEST PERFORMANCE AWARD

SRI SATHYA SAI ORPHANAGE TRUST, THIRUVANANTHAPURAM

Some of their energy conservation measures include

- Biogas plant for cooking application in canteen
- Solar Street lighting system
- Solar Water Heater:-
- Usage LED/ CFL lamps for 95% of its total lighting requirements.
- Steam Cooking Vessels in canteen for cooking application

ENERGY CONSERVATION PROMOTERS

COMMENDATION CERTIFICATE

HARITHASENA, AVP SCHOOL, PODAVOOR, KASARGOD

Podavoor Upper primary school is located at the remote area of Kayoor Chemeni grama panchayath of Kasargod district. Out of 171 students from class 1 to 7, 80 students of UP section take part in *Haritha sena* programs. In 2012-13 1 *Haritha Sena* conducted a project called '*Nalekithiri Oorjam*' an energy conservation program with the support of Kerala State Electricity Board(KSEB), Kudumbasree and Rotary Club. An energy survey was conducted in 447 households and the

analysis revealed that 447 houses there are 1270 filament bulbs still being used. With the help of KSEB, entire 1270 bulbuses were replaced with CFLs.

ENERGY CONSERVATION PROMOTERS

COMMENDATION CERTIFICATE

Shri. UNNI AMMAYAMBALAM, THIRUVANANTHAPURAM

Unni Ammayambalam is a Post Graduate in Malayalam Literature. He is now working in as a language teacher in, Sarvodaya Vidyalaya, Nalanchira. As a language teacher he had given importance in imbuing the significance of energy conservation in children through creative and visual medias..

His energy conservation campaigns included

- Production and distribution of energy conservation pamphlets
- Rallies involving students
- Story and Poetry competition on energy conservation
- Energy conservation books like *Urjasamrakshana Kathal*

ENERGY CONSERVATION PROMOTERS

COMMENDATION CERTIFICATE

SHRI. K.C BAIJU, ALAPPUZHA

Shri. K.C Baiju is a Sub Engineer in Kerala State's electricity Board. He had developed around 30 new engineering gadgets and technologies. Most of them are in the Electrical safety and Energy Saving fields. His innovations include Automatic Railway Gate, Smart Helmet for electrical safety, Bricks using Plastic Waste, Magic broom – a special cleaning tool, Electricity from rice porridge, Smart alert for vehicles, Automatic Light Control, Electric Line Supply Analyzer & Monitor, Road Outer Layer Tar Melting And Bonding technology etc.

He had been conducting several energy conservation inspiration / awareness classes, seminars etc for general public; students, Self Help Groups, various institutions etc. and he had designed many posters, flex boards and special greeting messages for inspiring or promoting energy conservation. Also he had written many articles and poems in various leaflets related with energy conservation awareness.

BUILDINGS

BEST PERFORMANCE AWARD

COCHIN INTERNATIONAL AIRPORT LIMITED, COCHIN

Energy Saving: Electricity: 0.27 MU (Electricity)

Some of their Energy saving measures are

- Installation of 100 kWp solar PV plant
- Replacement of existing chillers with Energy efficient chillers
- Installation of VFD for all major AHUs
- Innovative restructuring of pumps and piping circuits for increasing overall

plant efficiency

- Installation of Variable Refrigerant Flow (VRF) units
- Light pipes and transparent sheet used for Duty Free godown for utilizing natural lighting

BUILDINGS

COMMENDATION CERTIFICATE

BSNL TELEPHONE BHAVAN, KANNUR

Energy Saving: Electricity: 0.154 MU (Electricity)

Some of their commendable energy saving measures are :

- Rationalization of Inverter capacity
- Reduction in heat gain to air conditioned area by avoiding bottom feeding and reducing conditioned area
- The practice of keeping the spare equipment cards in the switching equipment of D Tax Exchange stopped, plugging out the spare cards
- Energy savings by not utilizing the lights in the area which became vacant due to re-arrangement of AC plants and Exchange equipment
- Energy savings by de-commissioning 2no split type A/C unit in MDF room to bring the temperature to human comfort level instead of equipment cooling level
- GI roof covering provided above Terrace floor reduced load on Package/ Split AC condensers and also reduced heat load of Air conditioning plants