



# NEW HORIZON COLLEGE OF ENGINEERING

New Horizon Knowledge Park, Ring Road, Marathalli  
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC  
Accredited by NAAC with 'A' Grade. Accredited by NBA

DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING

**GREEN ENERGY CLUB**

**GUEST TALK ON**

**"ECO-BUILDING"**



VENUE: CTPS LAB

DATE: 6<sup>TH</sup> November 2019

Objective:

- To create awareness on Eco-Building System
- To cater knowledge on Green buildings

Activities:

- Presentation on Eco-Building System.
- Presentation on Green buildings
- Awareness on Go Green



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## GREEN ENERGY CLUB

# GUEST LECTURE ON ECO-BUILDING

BY : P TARUN KUMAR S  
(CHUBB ALBA UTC ECO ENERGY)



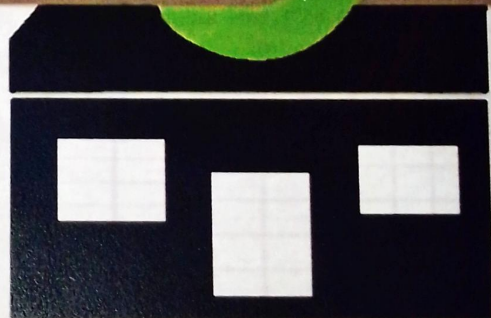
*Venue : CTPS LAB*

*Time: 10am-12pm*

*Date :6-11-2019*



Faculty Coordinator  
S Vinod Kumar

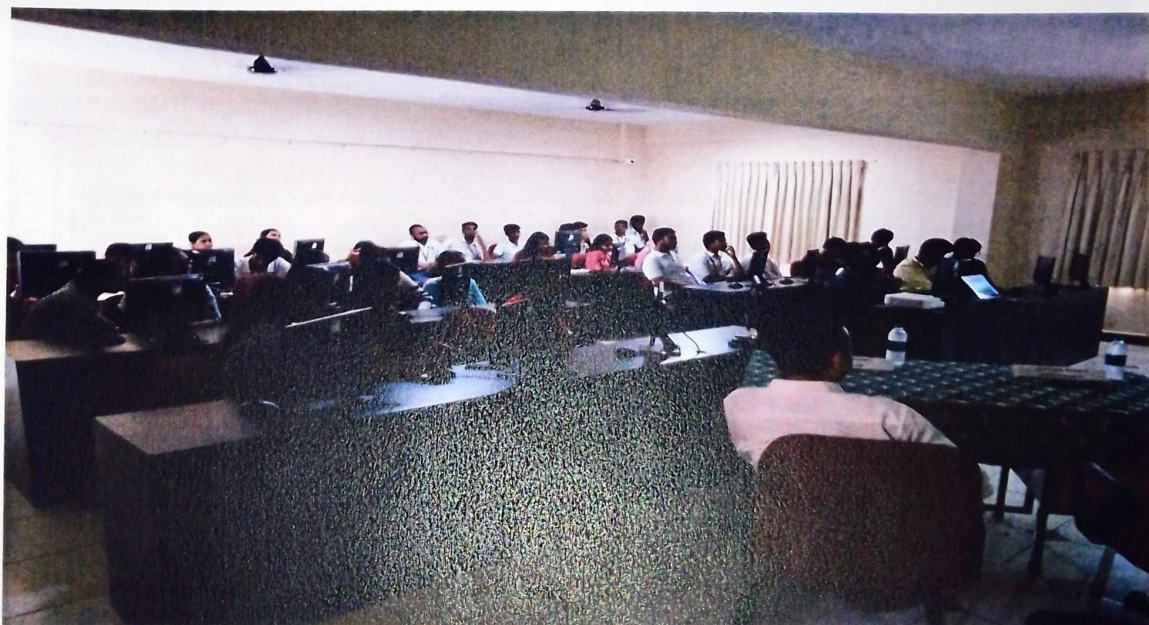


Student Coordinator  
Hitish G (President)  
Hemanth I (Secretary)



Felicitation of the Chief Guest **Mr. P. Tarun Kumar S, Associate Engineer,**  
**CHUBB ALBA UTC ECO ENERGY**

The Guest talk on Eco Building was held on 6<sup>th</sup> November 2019 which was organized by Green Energy Club Members. Many participants from Green Energy Club and students were participated. Our HOD Dr. Ramkumar & Faculty Co-Ordinator Mr. Vinod Kumar S welcomed the Chief Guest.



Participants at CTPS Lab

# WHAT WE HAVE LEARNT: -

- ❖ Eco energy and its importance for the society
- ❖ Customized solutions in the Eco-building for safety and comfort of the people
- ❖ Building automation services (HVAC, Refrigeration, fire safety solutions and security)

**PETCO**  
Where the pets go.

**Global Inputs**

Outside Temp	69.3 °F
Outside Humidity	57.2 %
Indoor Humidity	52.8 %RH
Indoor Temp	74.5
Outside Light	LIGHT
15 Min Demand	14.7 kW
Phase	PHASE OK
CO2	482.9 ppm

**Unit Zone Supply**

RTU 1	Sales_1	74.30 °F
RTU 2	Sales_2	73.10 °F
RTU 3	Sales_3	73.10 °F
RTU 4	Sales_4	74.50 °F
RTU 5	Grooming	72.30 °F
Vestibule		67.9 °F
Wellness		74.0 °F
Receiving		70.4 °F
Fish Freezer		-39.3 °F
Grm Humid		51.76 %RH

**Lighting**

- Employee Lights:
- Customer Lights:
- Stock Lights:
- Aquarium Lights:
- Grooming Lights:
- Signs:
- Security Lights:

Outdoor Light Setpoint: 25.0  
Security Armed: Disarmed  
Security Alarm: OK  
Outdoor Light Level: 291.9

**Outdoor Light Setpoint Adjust**

**Load Settings**

**Main HVAC**

Petco 1553 Madison, MS  
12-Oct-19 9:22 AM CDT

**Novar System Configuration**  
Petco 596 Escondido, CA  
29-Sep-19 8:38 AM PDT

**Global Input Configuration** | Site Configuration | Global/Group Overrides | Executive Configuration | Audit History | Checkout Overrides

**Checkout Tools**

**HVAC**

RTU	Name	Zone Temp	Supply Temp	Setpoint	Fan	Active Stages	Damper	Status
RTU01	Sales01	74.0 °F	71.0 °F	78.0 °F		Closed	Idle	Idle
RTU02	Sales02	75.0 °F	70.0 °F	78.0 °F		Closed	Idle	Idle
RTU03	Sales03	75.0 °F	64.0 °F	78.0 °F		Closed	Idle	Idle
RTU04	Sales04	75.0 °F	59.0 °F	78.0 °F		Closed	Idle	Idle
RTU05	Sales05	74.0 °F	71.0 °F	78.0 °F		Closed	Fan On	Fan On
RTU06	Sales06	76.0 °F	68.0 °F	78.0 °F		Closed	Fan On	Fan On
RTU07	Grooming07	72.0 °F	59.0 °F	74.0 °F		Closed	Fan On	Fan On
RTU08	Grooming08	71.0 °F	72.0 °F	74.0 °F		Closed	Fan On	Fan On

**Warning: Use of Overrides should be by Authorized Novar Trained Personnel Only**

**Checkout Test Ovr**   **HVAC Ovr**

OAT: 81.0 (ok) @ 16  
OA RH: 43.1 %RH (ok) @ def

Override Selection:

Reset Trigger:

**Supervisor Join**

**Lighting**

Zone	Name	Command
LT501	Employee	ON
LT502	Stocking	ON
LT503	Customer	ON
LT504	Aquarium	OFF
LT505	Grooming	ON
LT506	Signs	OFF
LT507	Security	OFF
LT508	Vestibos	ON

**Unit Heaters**: No Unit Heater Units

**Exhaust Fans**

Zone	Name	Command
EF01	Wellness	ON

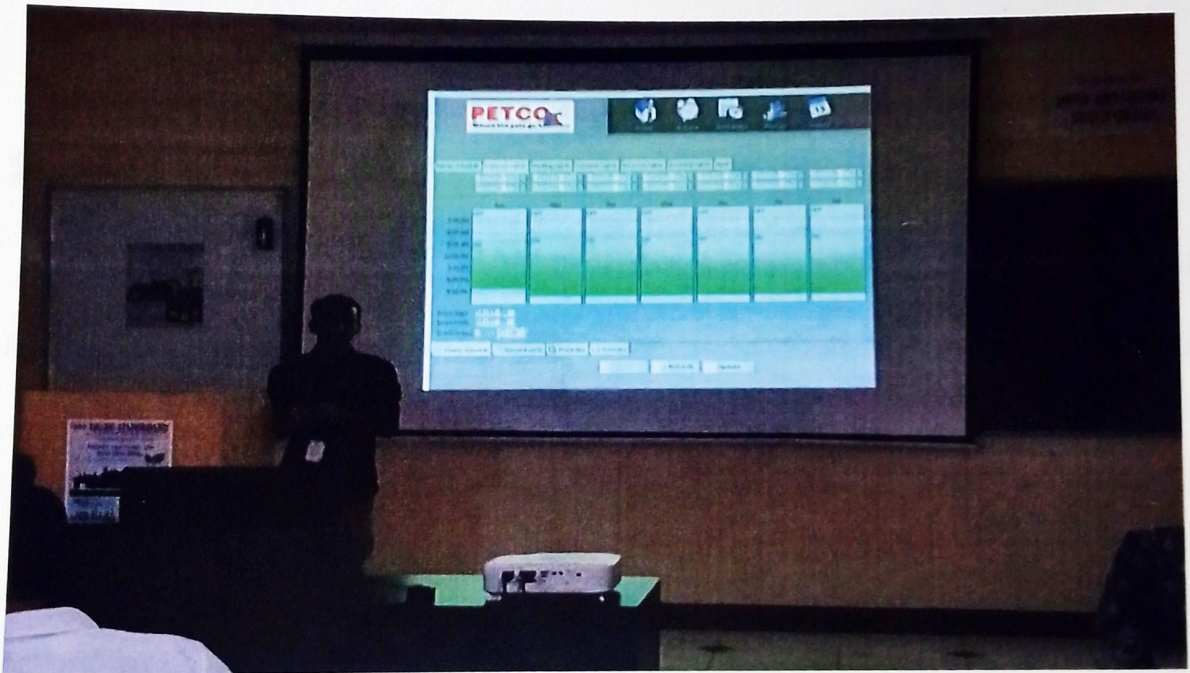
**Miscellaneous**: No Miscellaneous Loads

**Verification Reports**

- Report Name
- Alarm Config (Enabled)
- Alarm Configuration
- Comm Alarm Config
- Control Entity List
- Datalogs (Enabled)
- I/O Points (All)
- Module Comm Loss
- Points In Alarm
- Points In Fault
- Points In Override
- RTU Setpoints
- Schedules

## Key Areas covered

1. Intelligent building management system (IBMS)
2. Efficiency & Maintenance of Eco-Building.
3. Comfort & safety.
4. Losses occur in HVAC
5. Utilization of electrical energy.
6. Energy conservation.
7. Fire alarm system
8. Cctv and security systems



Presentation on Eco-Building.

The session was very interactive with our chief guest. The chief guest also gave excellent informative information about the Eco Building Automation. He also shared the working experience in CHUBB ALBA UTC ECO ENERGY.



### CONCLUSION: -

We gained excellent practical information regarding ECO-BUILDING from a Application engineer. Also, we understood the terminologies and applications that is served in BMS industries to the society

Report By



YASHVANTHA P

3<sup>rd</sup> SEM 'A' /EEE

New Horizon College of Engineering