

Report of MoU

2021-2022

DEPARTMENT OF PHYSICS

In Collaboration with

Energy Management Centre (EMC)

Kerala

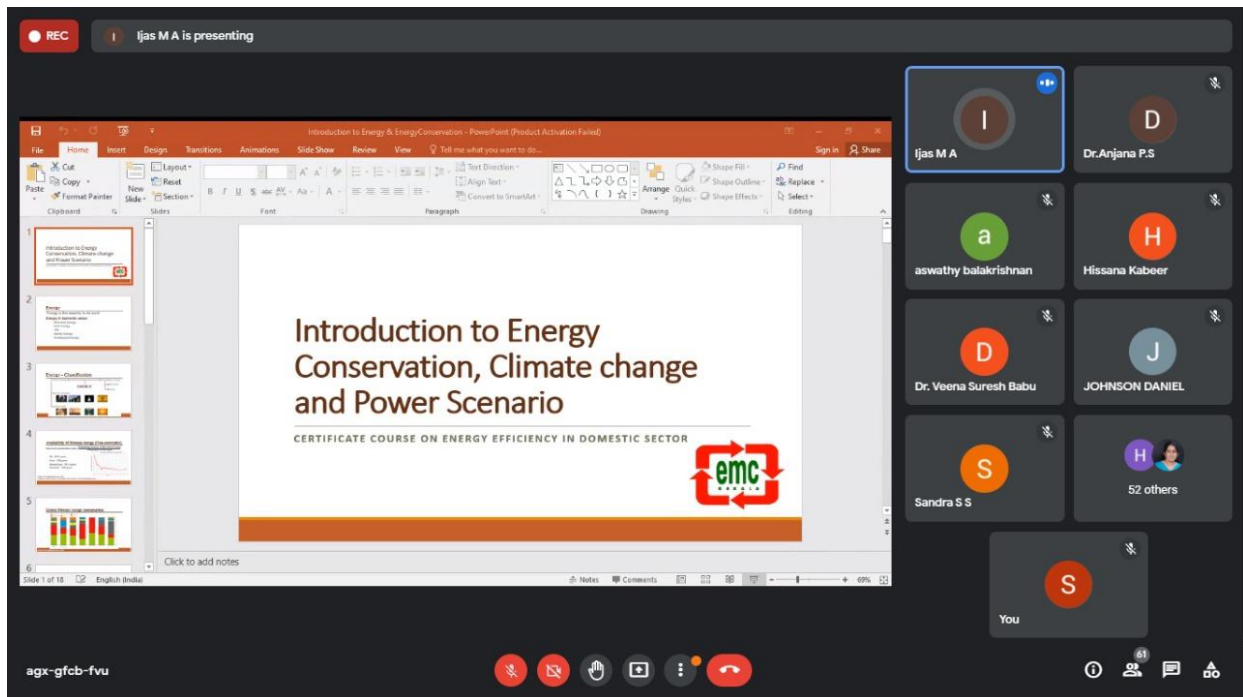
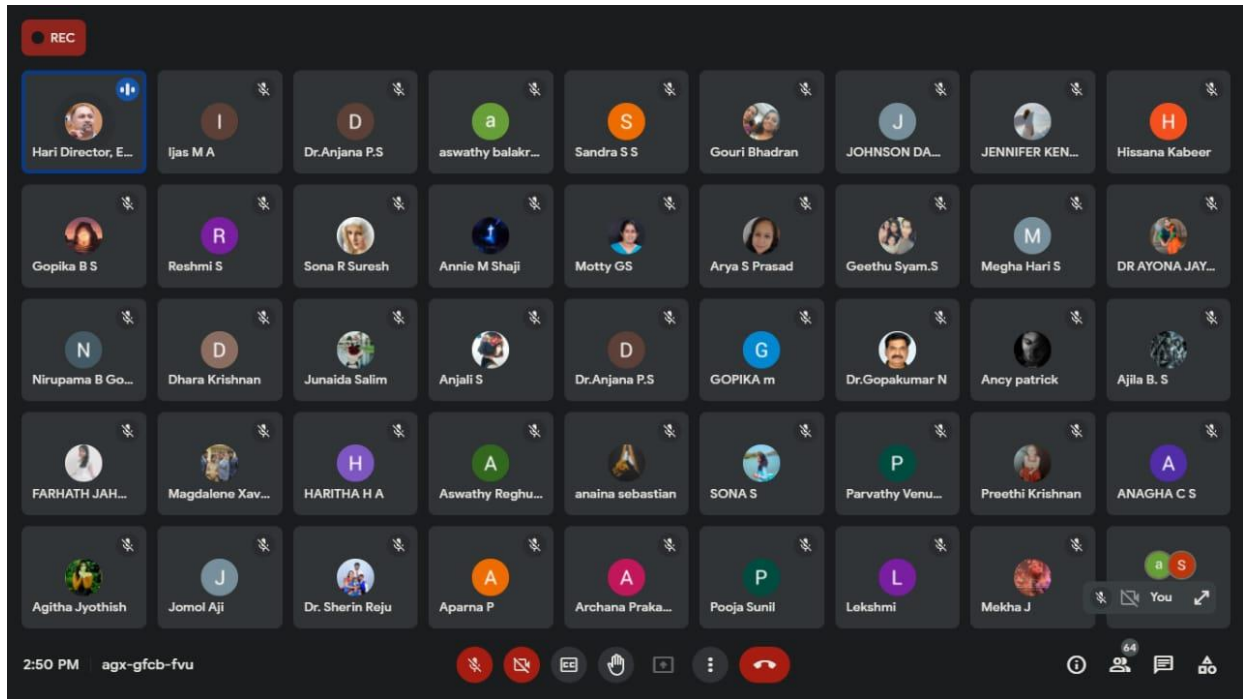
Signed on 15-09-2021

Duration : 4 Years (extendable on mutual consent)

Training Co- Ordinator : Dr. Anjana P S



An MoU has been signed with Energy Management Centre (EMC), Kerala and the Department of Physics, All Saints' College, Thiruvananthapuram on 15.09.2021. They have agreed to conduct a Certificate course on energy conservation, efficiency and management in order to help the Department of Physics to enhance its research and educational capabilities. Faculty and students from the department participated in various projects conducted by EMC and as part of this a certificate course on 'Energy Efficiency in Domestic Sector' for the interested students (second and third year) of All Saints' College on payment of a fee amount of Rs. 1000/- per student. The inauguration of the course was conducted on 27.07.2021. the students have undergone 30 hours training sessions were conducted in both online and offline mode (02.01.2021 - 20.12.2021), which included 19 hrs of theory sessions, 10 hrs of practical/hands-on sessions and one hour of examination for evaluation. The sessions were indeed a great platform for our students to develop an industry integrated awareness and meet the expectations on energy management. Classes were handled by eminent internal experts from EMC, as well as external faculties from various centres. As energy conservation is the practice of using less energy in order to lower costs and reduce environmental impact. With finite energy resources available on our planet, actively conserving energy when possible is beneficial individually and to our larger energy systems. Students were made aware of many simple ways by which they can save energy and save money at home. As part of this they were given training to adjust their day-to-day behaviors, replace the light bulbs, use energy efficient appliances, insulate their home, use natural light etc. Hand on training was also given to students to fabricate LED lights and Tubes. The final evaluation was also conducted and participation certificate was issued to all participants based on their attendance and assessment.



REC I Ijas M A is presenting

Global Primary energy consumption

Source: BP statistical review 2020

Click to add notes

Slide 5 of 18 English (India)

agx-gfcb-fvu

Participants:

- Ijas M A
- Dr.Anjana P.S
- aswathy balakrishnan
- Hissana Kabeer
- Dr. Veena Suresh Babu
- Sandra S S
- HARITHA H A
- 49 others
- You

REC I Ijas M A is presenting

Availability of Primary energy (Non-renewable)

Reserve to production ratio = $\frac{\text{Remaining reserve at the end of a year}}{\text{Production in that year}}$

- Oil - 53.3 years
- Coal - 133 years
- Natural gas - 55.1 years
- Uranium - 130 years

Source: BP statistical review 2014
Uranium 2018Resources, Production and Demand, OCED Publishing 2018

Click to add notes

Slide 4 of 18 English (India)

agx-gfcb-fvu

Participants:

- Ijas M A
- Dr.Anjana P.S
- aswathy balakrishnan
- Hissana Kabeer
- Dr. Veena Suresh Babu
- JOHNSON DANIEL
- Sandra S S
- 52 others
- You

Certificate course on Energy Efficiency in Domestic Sector
Course Details
Session timings 2:30 PM

Topics			Resource Person
Theory Session(19 Hrs)	Day 1 05/08/2021	Introduction to Energy & Energy Conservation, Climatic Change and Power Scenario (1 hour)	Ijas M A
		Introduction to Energy Management, EC Act 2001 and related policies (2 hour)	Sarath Krishnan S
	Day 2 06/08/2021	Electricity Tariff (1 hour)	Rajeev K R
		Energy Efficiency in Lighting System (2 hour)	Tomson Sebastian
	Day 3 09/08/2021	Energy Efficiency in Fans and Air Conditioners (2 hour)	Aneesh Rajendran
	Day 4 10/08/2021	Energy Efficiency in Cooking (2 Hour)	Anoop Surendran
	Day 6 11/08/2021	Energy Efficiency in Refrigeration system (1 hour)	Ijas M A
		Energy Efficiency in Pumping (1 Hour)	Ijas M A
	Day 7 27/11/2021	Renewable Energy (1.5 Hour)	Ijas M A
		Electrical Safety (1.5 Hour)	Aneesh Rajendran
	Day 8 04/12/2021	Go Electric Campaign (2 Hours)	Aneesh Rajendran
		Home energy audit (2 Hours)	External faculty

1. Practical Session			
Practical Session(10 Hrs)	<ul style="list-style-type: none"> • Maintenance of LED Bulbs and Tubs, fancy lamps and energy efficient domestic appliances 	Dates shall be scheduled later	
Assessment for certification	1 Hour Examination		

Student List

Sl No	Name	Semester
1	Aswathy.B	UG S3
2	Archana PJ	UG S3
3	Devi Kangan BS	UG S3
4	Gopika M	UG S3
5	Preethi Krishnan	UG S3
6	Annie M	UG S5
7	Gouri Bhadran	UG S5
8	Gowri Nair A S	UG S5
9	Nirupama B Gonsalvez	UG S5
10	Reshmi S	UG S5
11	Sandra S S	UG S5
12	Adheena I Sivan	UG S5
13	Anju S	UG S5
14	Aswathy Reghunath	UG S5
15	Geethu Syam S	UG S5
16	Magdalene Xavier	UG S5
17	Sona Mariyam Shyju	UG S5
18	Sona S	UG S5
19	Soorya Sunil	UG S5
20	Gourikalyan MS	UG S3
21	Shalini RD	UG S3
22	Alpha xavier	UG S3
23	Hissana K	UG S3
24	Farahat Jahan	UG S5
25	AKHNA S J	UG S5
26	Junaida S	PG S3
27	Aparna P	PG S3
28	Lenitta Raj M	PG S3
29	Ancy Patrick	PG S3
30	Heeba R P	PG S3
31	Anagha C S	PG S3
32	Arsha S	PG S3
33	Jomol Aji	PG S3
34	Lekshmi M J	PG S3

Sample Certificate

CERTIFICATE

This is to certify that **Mr. / Ms.**Adheena I Sivan, DC II Physics..... has successfully Completed certificate course on **Energy Efficiency in Domestic Sector** conducted by Energy Management Institute under Energy Management Centre - Kerala in Association with All Saints' College.

23.12.2021
Thiruvananthapuram

Director
Energy Management Centre – Kerala



Energy Management Centre – Kerala
Thiruvananthapuram



All Saints' College
Thiruvananthapuram

CERTIFICATE

This is to certify that **Mr. / Ms.**Farhath Jahan, DC III Physics..... has successfully Completed certificate course on **Energy Efficiency in Domestic Sector** conducted by Energy Management Institute under Energy Management Centre - Kerala in Association with All Saints' College.

23.12.2021
Thiruvananthapuram

Director
Energy Management Centre – Kerala



Energy Management Centre – Kerala
Thiruvananthapuram



All Saints' College
Thiruvananthapuram