



## PERFORM ACHIEVE & TRADE(PAT) NEWS LETTER

### PAT Cell, Energy Management Centre-Kerala

#### Energy Management Centre (EMC)

Energy Management Centre (EMC)-Kerala, is working towards attaining energy efficiency in all sectors of economy. EMC is formulating and implementing energy conservation projects and programs. In compliance with the Energy Conservation Act-2001, Government of Kerala has designated EMC as the State Designated Agency (SDA) to enforce, regulate and coordinate the Energy Conservation Act in the state.

#### PAT Cell-EMC

The PAT Cell, under Resource Conservation & Management (RCM) Division of Federation of Indian Chambers of Commerce & Industry (FICCI) was established on 17th January 2022 in Energy Management Centre through BEE. The PAT Cell Team consists of an Energy

Manager and a Project Associate under a Team

Manager stationed at Tamilnadu SDA & Accredited Energy Auditor stationed at Karnataka SDA.

#### Head of SDA

- Dr. R. Harikumar, Director, EMC

#### Members of PAT Cell:

- Mr. Johnson Daniel - Nodal Officer (Head-NMEEE & DSM (EED), EMC)
- Dr. P. Dharmalingam - Team Manager
- Mr. Shashidhar Dhareshwar - AEA
- Mr. Renjith Raj R- EM
- Mr. Kaviudayanithi -LE
- Mrs. Anu Varghese - FE
- Mrs. Roopa Chandran-PA

#### List of Designated Consumers in Kerala

1. Travancore Cochin Chemicals Ltd
2. Malabar Cements Limited
3. BPCL (Bharat Petroleum Corporation Ltd) - Kochi Refinery
4. KSEBL (Kerala State Electricity Board Ltd)
5. Le Meridien
6. The Zuri Kumarakom Kerala

#### Resort & SPA

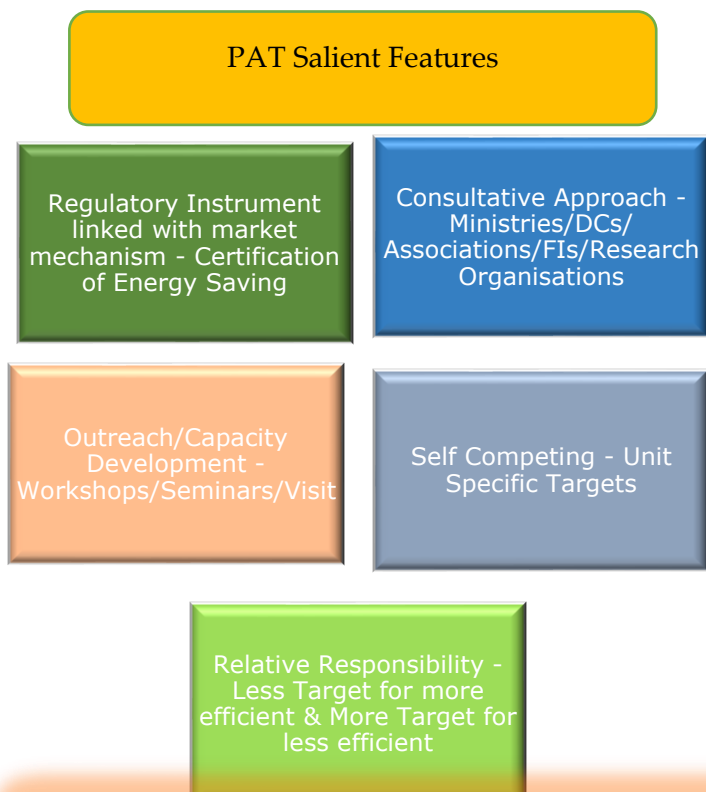
7. Leela Raviz Kovalam Beach Resort
8. Grand Hyatt Kochi Bolgatty Mulavukadu
9. Kochi Marriott Hotel,
10. Crowne Plaza Kochi, A Unit of KGA Hotels and Resorts Private Limited,
11. Holiday Inn Cochin Indroyal Hotels Pvt Ltd.
12. Cochin Special Economic Zone Authority (CSEZA)
13. Cochin Port Trust (CoPT)
14. Rubber Park India Private Limited (RPIL)
15. KINESCO Power & Utilities Pvt Ltd
16. Technopark
17. Thrissur Corporation Electricity Department
18. Infopark
19. Kannan Devan Hills Plantation (KDHP)Company Private Limited

#### List of Old DCs

- 1.NTPC Ltd- Rajeev Gandhi Combined Cycle Power Project, Kayamkulam
- 2.FACT- Udyogamandal Kochi

## PAT Features & Scenario in Kerala

Perform Achieve & Trade scheme is a flagship program of Bureau of Energy Efficiency under the National Mission for Enhanced Energy Efficiency (NMEEE). NMEEE is one of the eight national missions under the National Action Plan on Climate Change (NAPCC) launched by the Government of India in 2008. PAT scheme is a market-based compliance mechanism to accelerate improvements in energy efficiency in energy intensive industries. The energy savings achieved by notified industries is converted into tradable instruments called Energy Saving Certificates (ESCCerts). The ESCerts after issuance by Bureau of Energy Efficiency can be traded at Power Exchange.



Sector	No. of DCs
Commercial	7
Petroleum Refinery	1
Chlor Alkali	1
Cement	1
DISCOMs	9
<b>Total</b>	<b>19</b>

PAT Cycle	No. of DCs
PAT Cycle - I	9
PAT Cycle - II	9
PAT Cycle - V	3
PAT Cycle - VI	5
PAT Cycle - VII	3
PAT Cycle - VIIA	8

### Recent Developments Under PAT Scheme

- PAT Cycle VII-A has been notified on 26<sup>th</sup> September, 2022. Total 8 number of DISCOMs were notified as DCs under this cycle in Kerala.
- BEE declared “floor price” (the minimum price at which the ESCERTS shall be traded in power exchange) for the trading of ESCerts as ten percent of the price of one MTOE of energy consumed. (Refer notification by MoP dated 30.08.2022)
- BEE also declared that the designated consumer who has been issued ESCerts during the current cycle may use them for the purpose of banking and the ESCerts issued shall remain valid till these ESCerts are sold. (Refer notification by MoP dated 30.08.2022)
- Form-D i.e., Compliance of Energy consumption Norms and Standards shall be submitted within 24 months from last date of submission of Form-A by DC to SDA with a copy to BEE (refer notification by MoP dated 30.08.2022)

## Conference of Parties CoP 27 – India's Statement at CoP-27

The 2022 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC, more commonly referred to as COP27, is the 27<sup>th</sup> United Nations Climate Change conference and is being held from 6 November to 18<sup>th</sup> November 2022 in Sharm El Sheikh, Egypt. It is taking place under the presidency of Egyptian Minister of Foreign Affairs Sameh Shoukry, with more than 90 heads of state and an estimated 35,000 representatives, or delegates, of 190 countries expected to attend. It is the first climate summit held in Africa since 2016

The conference has been held annually since the first UN climate agreement in 1992. It is used by governments to agree on policies to limit global temperature rises and adapt to impacts associated with climate change.

### **National Statement of India at CoP 27**

Our Hon'ble Prime Minister, Shri Narendra Modi, announced India's aim of achieving net zero emissions by 2070 at Glasgow. Within one year, India has submitted its Long-Term Low Emissions Growth Strategy indicating low carbon transition pathways in key economic sectors.

According to our 2030 climate targets, India updated its Nationally Determined Contributions in August 2022. We have embarked on far-reaching new initiatives in renewable energy, e-mobility, ethanol blended fuels, and green hydrogen as an alternate energy source.

India also seeks to foster strong international cooperation through action and solutions-oriented coalitions like International Solar Alliance and Coalition of Disaster Resilience Infrastructure, both of which were launched and nurtured by India.

India, home to 1.3 billion people, is undertaking this arduous effort, despite the reality that our contribution to the world's cumulative emissions so far is less than 4 per cent and our annual per capita emissions are about one-third of the global average.

At the heart of India's vision of a safe planet is a one-word Mantra – Lifestyle for Environment, that Prime Minister Modi set forth in our National Statement at COP26. Mission LiFE was launched by Prime Minister Modi in the presence of the UN Secretary General His Excellency Antonio Guterres, on 20<sup>th</sup> October 2022.

The world urgently needs a paradigm shift from mindless and destructive consumption to mindful and deliberate utilization. Humans are trustees of this planet earth. Humans must nurture it through sustainable lifestyles that optimize resource use and minimize waste.

As the world's most populous democracy and a vibrant emerging economy, India seeks to lead by example, and invites the global community to be a part of Mission LiFE for individual, family and community-based actions.

## Key Highlights on the Energy Conservation Amendment Bills-2022

Sl. No.	Amendments	Features 1	Features 2
1	Carbon credit trading	The Bill amends the Energy Conservation Act, 2001 to empower the central government to specify a carbon credit trading scheme. Carbon credit implies a tradeable permit to produce a specified amount of carbon dioxide or other greenhouse emissions.	The central government or any authorised agency may issue carbon credit certificates to entities registered and compliant with the scheme.
2	Obligation to use non-fossil sources of energy	Designated consumers may be required to meet a proportion of their energy needs from non-fossil sources.	Failure to meet this obligation will be punishable with a penalty of up to Rs 10 lakh. It will also attract an additional penalty of up to twice the price of oil equivalent of energy consumed above the prescribed norm.
3	Energy conservation code for buildings	The Energy Conservation Code for buildings will also apply to office and residential buildings with a minimum connected load of 100 kilowatt or Contract load of 120KVA above.	This Bill empowers the state governments to lower the load thresholds.
4	Standards for vehicles and vessels	Energy consumption standards may be specified for vehicles and ships.	The failure to comply with standards will be punishable with a penalty of up to Rs 10 lakh. Non-compliance in case of vessels will attract an additional penalty of up to twice the price of oil equivalent of energy consumed above the prescribed norm. Vehicle manufacturers in violation of fuel consumption norms will be liable to pay a penalty of up to Rs 50,000 per unit of vehicles sold.
5	Composition of governing council of BEE	Composition of the governing council of BEE: The Act provides for the setting up of the Bureau of Energy Efficiency (BEE). The Bureau has a governing council with members between 20 and 26 in number.	The Bill amends this to provide that the number of members will be between 31 and 37. It increases the number of secretaries to 12. It also provides for up to seven members representing industries and consumers.

## Awareness Programmes for Designated Consumers

### 1. DC MEET 2022

A one-day state level meeting of Designated Consumers (DCs) was organized at Energy Management Centre (EMC) -Kerala on 29<sup>th</sup> June 2022. The objective of program was to review the progress of the ongoing PAT activities by the DCs and to know about the extent of support to be provided by for accomplishing the targets assigned to the DCs.

The programme started with inaugural ceremony on 29<sup>th</sup> June 2022 at 10.00 am. Dr. R. Harikumar, Director, EMC welcomed all the dignitaries on the dais, invited guests and registered participants to the program. Thereafter in the opening remarks he gave a short brief on the Energy efficiency financing scheme (Kerala State Energy Conservation Fund) available with EMC-Kerala.

Dr. P. Dharmalingam, Team Manager, PAT PMU Cell, FICCI also addressed the gathering and briefed the participants about technical sessions and benefits of energy conservation by various players. Session was made auspicious by the presence of following distinguished dignitaries.

- Dr. R. Harikumar, Director, EMC-Kerala
- Mr. Naveen Kumar, Sector Expert-Pulp & Paper, BEE
- Mr. Himanshu Chaudhary, Sector Expert-Iron & Steel, BEE
- Dr. P. Dharmalingam, Team Manager, PAT PMU Cell, FICCI
- Mr. A. M. Narayanan, Former Head, NMEE & DSM Division, EMC
- Mr. Shashidhar Dhareshwar, AEA, PAT PMU Cell, FICCI
- Mr. Johnson Daniel, Head, NMEE & DSM Division, EMC
- Mr. B.V. Subhash Babu, Registrar, EMC

Mr. Naveen Kumar handled the first session after the inaugural ceremony on the topic "Overview of PAT in India". In this session he

explained about PAT scheme, the roles, responsibilities and timelines for each activity under the scheme. He also discussed about the factors considered during the target setting methodology.

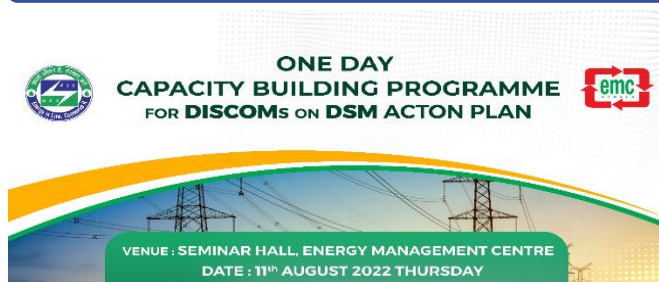
Mr. A.M. Narayanan discussed on the topic "DCs in Kerala and Overview". He elaborated the carbon footprint reduction achieved in Kerala with PAT cycle and also, he explained the social, economic and environmental dimensions in PAT scheme.

Energy Manager from the respective DCs presented the Status of PAT activities in their firm. They also explained the details of energy efficiency projects implemented in their organization. During the discussion after presentation, several doubts and queries raised were resolved. Energy managers from nine DCs presented their status.



Mr. B.V. Subhash Babu explained the energy efficiency financing schemes in Kerala. Also, he elaborated the financial assistance from Kerala State Energy Conservation Fund (KSECF) on revolving basis for both Public and Private sectors. During the presentation, a few DCs showed their interest in this scheme.

### 2. CAPACITY BUILDING PROGRAMME FOR DISCOM



ONE DAY  
CAPACITY BUILDING PROGRAMME  
FOR DISCOMs ON DSM ACTON PLAN

VENUE : SEMINAR HALL, ENERGY MANAGEMENT CENTRE  
DATE : 11<sup>th</sup> AUGUST 2022 THURSDAY





A one-day capacity building programs for DISCOMs on DSM Action Plan was organized by EMC-Kerala on 11<sup>th</sup> August 2022 at EMC Seminar Hall, Thiruvananthapuram. The Hon'ble Minister for Electricity, Shri. K. Krishnankutty inaugurated the capacity building program. The objective of program was to carry out load management programme, development of DSM action plan and implementation of DSM activities in their respective areas.



Dr. R Harikumar, Director, EMC welcomed the participants. Sessions were handled by Shri. S. P. Garnaik, Lead (EE) and Clean Finance Specialist, GGGI, New Delhi, Shri. A.M Narayanan, Former Head, Energy Efficiency Division, EMC, Shri. Narayankumar Sreekumar, Shakti Sustainable Energy Foundation, Mr. Rajeev Kharyal, General Manager, Head-Customer Service, Tata Power and Mr. Sandeep Sharma, Head of Group, Tata Power.



Shri. A. M. Narayanan handled the first session after the inaugural ceremony on the topic “DSM - Significance & Enablers”. In this session he explained about the major benefits and challenges of electricity demand side management in the context of the national and state electricity systems.



Shri. S.P. Garnaik, discussed on the topic “Designing a Utility Based DSM Program for Kerala focusing on implementation, business models, financing mechanisms, and challenges etc.”. He elaborated how to design a Utility Based DSM Program for Kerala and possible challenges associated with that. He also pointed out the success of UJALA has reinforced stakeholder confidence in the promise of DSM and re-established the Utility DSM market potential.

## DC Visit during M&V Audit

On July 15<sup>th</sup> July 2022, the PAT Cell team of EMC visited M/s Zuri Kumarakom Resorts and Spa covered under PAT Cycle-V to witness M&V audit conducted by the team CEEP (Centre for Energy Environment and Productivity)

During the visit PAT cell team of EMC met with EmAEA engaged in PAT M&V of the DC, top management, Energy Manager and Chief Engineer of the organisation and also had discussion on PAT scheme and EC Act 2001 requirements.

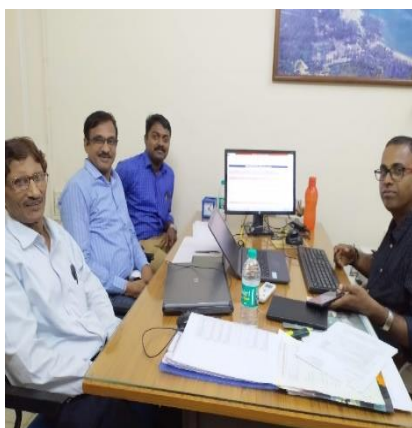
On 27<sup>th</sup> and 29<sup>th</sup> July, PAT Cell team of EMC visited M/s Leela Raviz Kovalam and M/s Le-Meridien respectively comes under PAT Cycle-V to witness M&V Audit conducted by the team M/s MCJ Energy Engineers Pvt. Ltd.



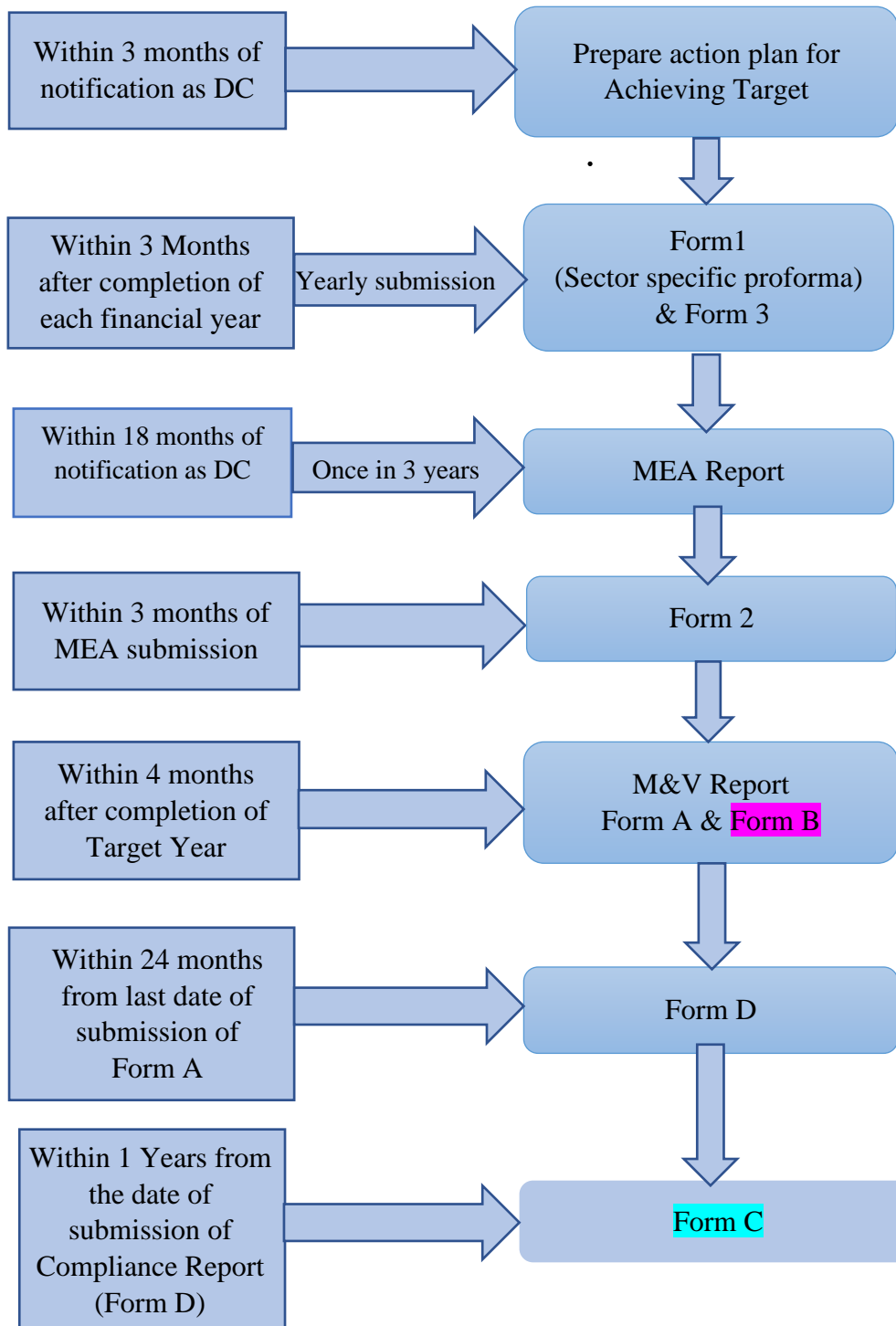
PAT Cell Team with M/s CEEP, the EmAEA engaged in PAT M&V audit of M/s Zuri Kumarakom Resort and Spa




PAT Cell Team with M/s MCJ, the EmAEA engaged in PAT M&V audit of M/s Le Meridien & M/s Leela Raviz



## TIMELINE FOR PAT DOCUMENT SUBMISSION



 Submit copy to DC & BEE by EmAEA

 Submit copy to BEE by EmAEA

\*All other forms are submitted to SDA with a copy to BEE



## -----Upcoming Events-----

PAT Awareness program for DISCOMs in January (tentative)

Investment Bazaar in January (tentative)

## -----RESOURCES-----

PAT User Manual for DCs

PATNet User Manual for SDA

PATNet Portal

BEE Website

Press Information Bureau Government of India-Ministry of Power

---For PAT Scheme related Queries, you may Contact---

❖ Roopa Chandran  
Project Associate  
PAT Cell - EMC  
Kerala  
Mobile-9496819819  
[pa.kerala@ficci.com](mailto:pa.kerala@ficci.com)

❖ Kaviudayanithi  
Legal Expert  
Mob No.9600646448  
[le.tn@ficci.com](mailto:le.tn@ficci.com)

❖ Anu Varghese  
Financial Expert  
Mob  
No.9600144676  
[Fe.tn@ficci.com](mailto:Fe.tn@ficci.com)



EMC - Kerala, Department of Power, Government of Kerala, [www.keralaenergy.gov.in](http://www.keralaenergy.gov.in)