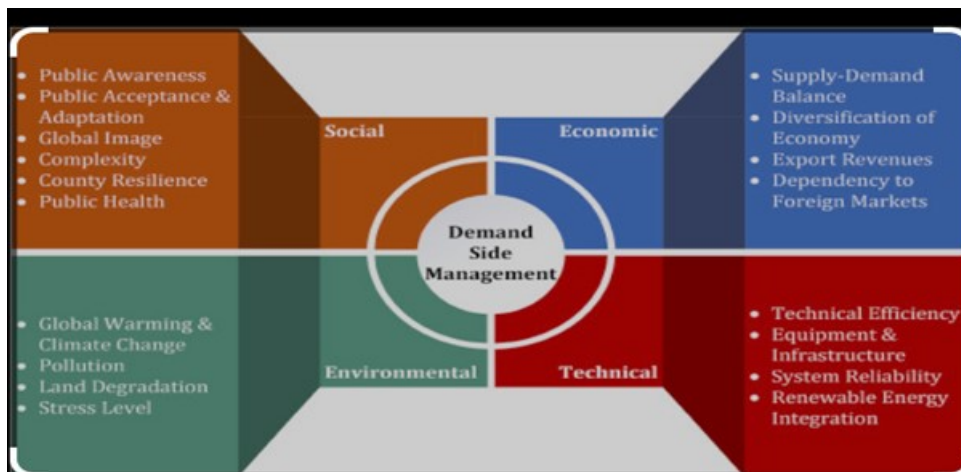


Energy Conservation is a way of life

KSEB, a publicly owned entity, supplies electricity to the consumers in Kerala. To meet 70% of the power demand KSEB purchases electricity from external sources, primarily comprising of thermal power, which has adverse impact to the environment. During the monthly meeting, the Chairman & Managing Director directed to initiate an Energy Education series to address misuse of electricity and started its implementation in November 2023.



CMD instructed the Public Relations Department to promptly raise awareness about Energy Conservation and its environmental importance among public. In response, the Public Relations Department began steps for energy education, including developing a roadmap for Demand Side Management (DSM).



The Public Relations Department prepared standees highlighting messages about energy conservation. It featured quotes on the importance of energy conservation from well-known personalities like Gandhiji, APJ Abdul Kalam, Nikola Tesla, and Albert Einstein. Additionally, animated videos were broadcasted through social media and WhatsApp to further spread the awareness. These standees were first exhibited at KSEB and then showcased at the Shivagiri Exhibition, Mukkam Fest, National College Thiruvananthapuram, and the International Energy Fest at Tagore Theatre to spread the message on Energy Conservation.



As part of the energy conservation campaign, awareness messages were sent to the public on daily basis for a month starting from 14th December 2023 "National Energy Conservation Day". On the same day, banners highlighting the importance of Energy Conservation were displayed at KSEB offices and all the staff participated in the Energy Conservation pledge. Directors and Chief Engineers took part in the Energy Conservation awareness campaign at Vydhyuthi Bhavan and led the pledge.

A discussion was held on 14th December regarding the capacity building program of Bureau of Energy Efficiency (BEE), and eventually an MoU between BEE, KSEB and EMC-Kerala was signed, as per the direction of the CMD. BEE contributed support of two professionals through PMA to KSEB and a special wing within the Public Relations Department was initiated to spread awareness on energy conservation and plan DSM measures.

Following are their major contributions:

- Provided support in preparing content for the DSM awareness campaigns.
- Prepared Detailed Project Reports (DPRs) for replacing inefficient conventional ceiling fans with energy-efficient BLDC fans. This fan program targets both domestic and commercial consumer categories.
- Discussions are ongoing with various BLDC fan manufacturers, including Luker, Polycab, V-Guard, Dewton, Crompton, Usha, and Atomberg, for participation in the BLDC fan program of KSEB.
- Base price quotes have been received from Luker, Dewton, Polycab, Crompton, and Atomberg, and forward discussions are taking place regarding these quotes.
- Documentation for vendor empanelment by KSEB is currently under preparation.

- Program document for the Net Zero Village program and DPRs for the Demand Response pilot program and the Awareness program are under preparation.

From January onwards we decided for a high voltage campaign to address the summer electricity demand. KSEB realize that every year 4 to 5 percent growth is added to our system. But we envisaged a 10 percent minimization through DSM activities. The aim was to make the consumers voluntarily reduce their electricity demand.

For that, we initially conducted a meeting with media persons of Radio, TV, Print and New media and assured their full cooperation. They demanded for daily news release for which we circulated daily 2 to 3 releases & updates and arranged Audio and Video bytes.



ദേശഭിമം. 08-04-2024

ഉയർന്ന വൈദ്യുതി ഉപയോഗം വൈദ്യുത വാഹന ചാർജിങ് സമയം ക്രമീകരിക്കണം: കെഎസ്ഇബി

നിരന്തരമായ വൈദ്യുതി ഉപയോഗം കാരണം കേന്ദ്ര വൈദ്യുത വാഹന ചാർജിങ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു. തിരഞ്ഞെടുത്ത സമയത്ത് വൈദ്യുത വാഹനങ്ങളുടെ ചൂട് തണുത്തു വരുന്നതിനായി രാത്രി സമയത്ത് ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു. കൂടുതൽ വൈദ്യുതി ഉപയോഗം കാരണം വൈദ്യുത വാഹനങ്ങളുടെ ചൂട് തണുത്തു വരുന്നതിനായി രാത്രി സമയത്ത് ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു.

മാതൃഭൂമി - 03-05-2024

ലോഡ് ഷെഡിംഗ് ഉടനീളം

ബന്ധിതമാണ് കേന്ദ്ര വൈദ്യുത വാഹന ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു. തിരഞ്ഞെടുത്ത സമയത്ത് വൈദ്യുത വാഹനങ്ങളുടെ ചൂട് തണുത്തു വരുന്നതിനായി രാത്രി സമയത്ത് ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു.

21 മുഴുവ്വ, 04-05-24

ഉരുകുന്ന ചൂട്, കുറയുന്ന വൈദ്യുതി ഉപഭോഗം

വീ.പി. ലിംഗൻ കുമാർ കോഴ്കുന്ന്. സമ്പന്നരായ ഉരുകുന്ന ചൂട് കാരണം വൈദ്യുതി ഉപയോഗം കുറയുന്നു. തിരഞ്ഞെടുത്ത സമയത്ത് വൈദ്യുത വാഹനങ്ങളുടെ ചൂട് തണുത്തു വരുന്നതിനായി രാത്രി സമയത്ത് ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു.

ദേശഭിമം - 29-4-24

വൈദ്യുതി ഉപയോഗം 5563 മെഗാവാട്ട്

തിരുവനന്തപുരം. സമ്പന്നരായ ഉരുകുന്ന ചൂട് കാരണം വൈദ്യുതി ഉപയോഗം കുറയുന്നു. തിരഞ്ഞെടുത്ത സമയത്ത് വൈദ്യുത വാഹനങ്ങളുടെ ചൂട് തണുത്തു വരുന്നതിനായി രാത്രി സമയത്ത് ചാർജിംഗ് സമയം ക്രമീകരിക്കണമെന്ന് കെഎസ്ഇബി അഭ്യർത്ഥിക്കുന്നു.



ജനയുഗം 29-04-2024

തണുക്കും, വൈദ്യുതി പാഴാക്കാതെ..

തിരുവനന്തപുരം: വൈദ്യുതി ഉപയോഗം കുറയ്ക്കാൻ എയർ കണ്ടീഷണർ സൂക്ഷ്മതയോടെ ഉപയോഗിക്കണമെന്ന് കെഎസ്ഇബി. ഏകദേശം 26 ഡിഗ്രി സെൽഷ്യസിൽ സജ്ജമാക്കുമ്പോഴാണ് എയർ കണ്ടീഷണറുകൾ ഏറ്റവും ഊർജ്ജക്ഷമതയുള്ളവയായി മാറുന്നത്. 26 ഡിഗ്രി സെൽഷ്യസ് തികെ ആളുകൾക്കും സുഖപ്രദമായ താപനിലയുടെ പരിധിക്കുള്ളിലാണ്.

ഇത് തണുപ്പും ഊർജ്ജ കാര്യക്ഷമതയും തമ്മിലുള്ള സതുലിതാവസ്ഥയെ സാധിപ്പിക്കുന്നു.

ഈ താപനിലയിൽ, എയർകണ്ടീഷണർ ഇൻഡോർ അന്തരീക്ഷം തണുപ്പിക്കാൻ കഠിനമായി പ്രവർത്തിക്കേണ്ടതില്ല, ഇത് ഊർജ്ജ ഉപഭോഗം കുറയ്ക്കുന്നു.

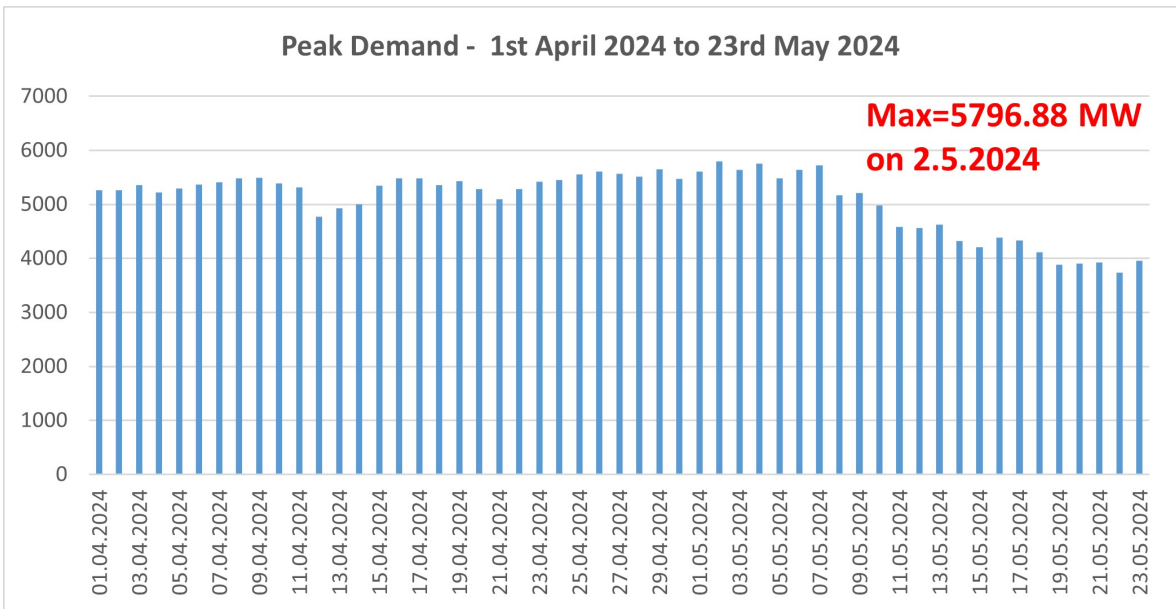
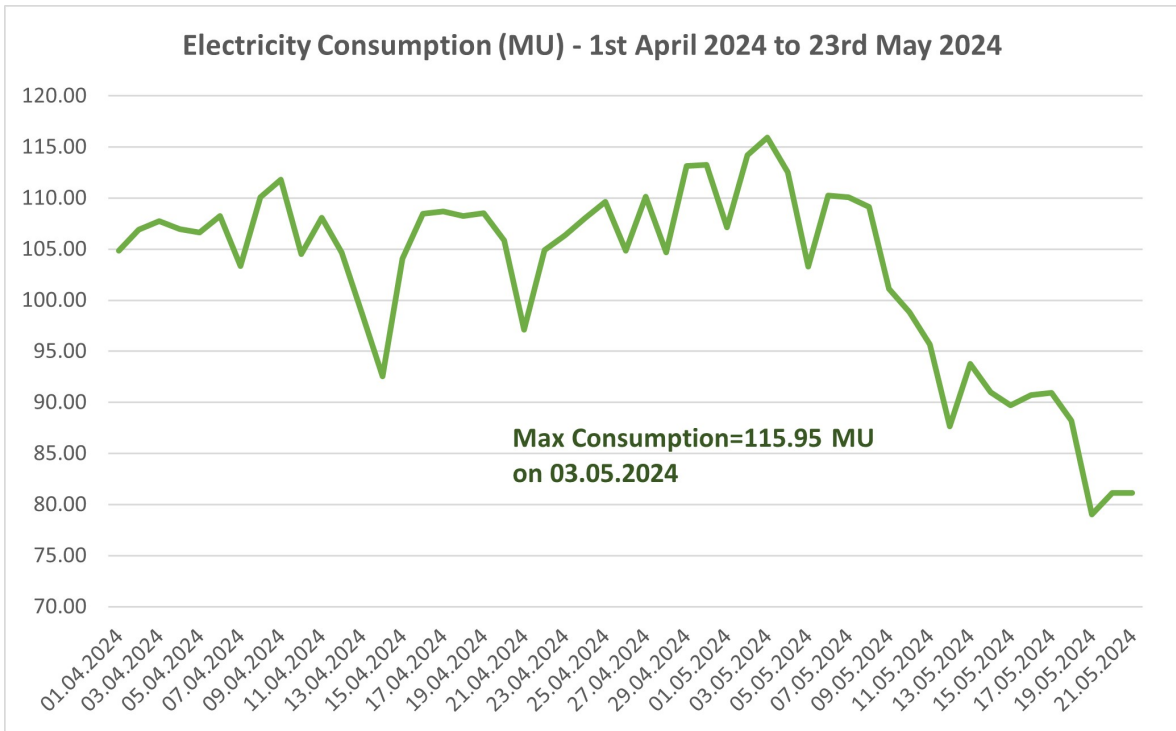
കൂടാതെ, തെർമോസ്റ്റാറ്റ് 26 ഡിഗ്രി സെൽഷ്യസായി സജ്ജീകരിക്കുന്നത് അമിതമായ തണുപ്പിനെ തടയുന്നു. ഇത് ഊർജ്ജം പാഴാക്കലും ഉയർന്ന വ്യൂട്ടിലിറ്റി ബില്ലുകൾ വരുന്നതും തടയുന്നു. കൂടാതെ, എയർ കണ്ടീഷണിങ് സിസ്റ്റങ്ങൾ സാധാരണയായി ഈ താപനില പരിധിക്കുള്ളിൽ മികച്ച രീതിയിൽ പ്രവർത്തിക്കാൻ രൂപകല്പന ചെയ്തിട്ടുള്ളതാണ്.

അവയുടെ കാര്യക്ഷമതയും പ്രകടനവും ഇത് വർദ്ധിപ്പിക്കുകയും ചെയ്യുന്നു.



Daily releases on various issues related to energy conservation and importance educated public and paved way to success stories in DSM.

- ❖ Media helped significantly and they took our DSM initiative as a social responsibility on themselves. They did not carry a negative news and everyone cross-checked with KSEB Public Relations Department.
- ❖ Modified 2 Adult films casting Manju Warriar, Anoop Menon and Jayaram on energy awareness and shared through social media. Manorama news and Lulu Mall displayed these videos for public reach out free of charges.
- ❖ We initiated a campaign in all offices of KSEB and other government establishment to ensure the essential electrical appliances like fans, lights, etc. are 'Switched OFF' after office hours / when not required.
- ❖ Social Media Campaigns were done to disseminate awareness and promote no cost energy saving measures.
- ❖ Support of public in response to the request for reducing the demand were acknowledged and messages appreciating their contribution were given on days when there were decrease in the Peak Demand.
- ❖ Print, Video and Audio media shared awareness on energy with great importance and it was accepted by the public at large. How we were able to withstand the summer and the reduction in the consumption of electricity thereafter validates the effectiveness of our campaign. These activities were carried out without any financial liabilities.



Along with Public Relations, Planning department also actively participated in the DSM Activities.

More Insights on Demand Side Management - 2024 Activities in KSEBL

The state was going through a harsh summer of 2024 (March) when the electricity demand has touched 102 million Units (MU) a day and peak of 5076 MW. During any given day, the electricity demand in Kerala is highest between 7 pm and 12 pm and situation could be mitigated only through the concerted effort of the consumers by voluntarily reducing their electricity demand.

To overcome this unusual increase in demand, it was decided to roll out Demand Side Management activities effectively across Kerala.

The activities discharged towards accomplishing DSM Initiative 2024 are as follows:

The proposed Demand Side Management (DSM) are listed below-

1. The domestic consumers may be urged to shift the use of equipment like pump sets, washing machines, geezers & water heaters, induction cookers etc. to solar hours; e-Vehicle users also may be prompted to charge the vehicles in this fashion.
2. To save energy, consumers may be requested to set the temperature setting of air conditioners above 25 degrees. Use of BLDC fans, energy efficient lighting and electrical equipment's may be encouraged. Details of energy saving and reduction in bills may be specified.
3. Energy Conservation Measures may be strictly ensured in Government Offices.
4. Functioning hours of offices may be staggered to the extent possible, to minimize the energy requirement during peak demand hours.
5. Government and Commercial consumers may be requested to minimize the illumination and lighting load during peak hours.
6. The industrial consumers working on shifts may be requested to align their usage pattern to off-peak hours.
7. Agricultural consumers are provided electricity at subsidized rates, and they may be requested to use pump-sets only during solar hours.
8. Electrical section office level local advisory committee meeting may be convened by including members of local body, convenor of energy security mission, representatives of commercial and industrial entrepreneurs, residents' associations etc. as invitees for creating awareness about Demand Side Management and to arrange circle level training for the concerned officers.
9. PRO shall prepare pamphlets, organize campaigns for an awareness to the consumers about DSM and arrange study materials specifying the present power requirement of the State, power purchase cost, etc. for the presentation in Local Advisory committee meeting.
10. Promotion videos by celebrities exhorting the need for energy conservation may be telecast in TV Channels/FM etc.

Meeting Convened

1. Director level meeting to discuss on DSM Initiate was held on 06.03.2024 and it was decided to initiate DSM Drive by 15th Mar 2024.
2. Chairman & Managing Director addressed the Deputy Chief Engineers on 12.03.2024 and directed to initiate DSM drive by involving all employees.
3. Meeting with representatives of all the Trade Unions, Officers Associations and Pensioners Associations to discuss the DSM Activities was convened on 21.03.2024.
4. Online Review Meeting with Deputy Chief Engineers convened on 21.03.2024.
5. Hon Electricity Minister has convened a meeting on 02.05.2024 to discuss about the prevailing Power Crisis and immediate actions to be taken.
6. Online review meeting was convened by Hon Electricity Minister on 09.05.2024.

Actions initiated by KSEBL

- The Chairman and Managing Director issued Proceedings on 12.03.2024, for assigning responsibility of various Districts/Circles to the Directors and Functions which includes monitoring of DSM Activities. (Order No. 109/2024(CMD/107/Nodal Officers/2024 dated 12.03.2024). Responsibilities assigned to the Directors attached as Annexure 1
- Letter with proposals for DSM activities was submitted to the Additional Chief Secretary, Power, Gok on 13.03.2024.
- Office Order (CMD) No.431/2024(CP/PLG/AE2/DSM), TVPM dated 21.03.2024 on Demand Side Management (DSM) Activities across Kerala- was issued. (Attached as Annexure 2)
- DO letter dated 25.03.2024 was given to the Chief Secretary, Gok for implementing DSM activities in all Govt Departments across Kerala.
- A circular on 'Power Crisis in Kerala' dated 03.05.2024 was issued to all the staff in KSEBL for immediate action. Circular is attached as Annexure 3.
- A google sheet was circulated among all Electrical Circles with direction to update the DSM activities. The following activities were conducted as on 22.05.2024 by various KSEBL offices across Kerala.
 - Classes/ Meetings arranged - 2489 (Nos)
 - Local Advisory Meetings Conducted - 480 (Nos)
 - Message snippets aired in Cable TV/FM Radio/News Media - 2567 (Nos)
 - House /Industry/ Shop campaigns - 45291 (Nos)
 - Notice Distributed/ Front office campaign – 184645 (Nos)
 - Mic Announcements done - 521 (No of sections)
 - DSM Messages posted in Public/Consumer WhatsApp groups/social media - 14669 (Nos)

Actions initiated at Government level

- The Additional Chief Secretary, Power Department has issued a Circular to all the Heads of Departments and all departments in Government Secretariat including finance and law on 11.04.2024 for implementing DSM activities across all departments.
- Circle wise action taken report on the decisions taken during the meeting convened by Hon Electricity Minister on 02.05.2024, was submitted to government on 07.05.2024.
- The Additional Chief Secretary (Power) has given instructions to Principal Secretaries of Industries Department, Local Self Government Department, Agriculture Department and Water Resource Department on 07.05.2024 to reduce the power usage during peak hours.

Sum up

Energy Conservation is a way of life. We are thankful to all who actively participated in Energy Literacy and Conservation Campaign. If we continue the efforts and succeed in much needed behaviour change, we will march towards Sustainable living collectively.
