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Current News
மின் செய்திகள்

January, 2019

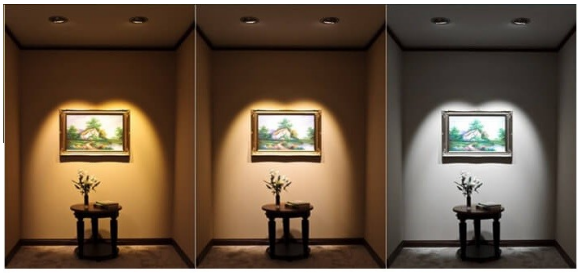
Do Energy Efficient LEDs affect our health?

(Part - 3)

How to choose LED bulbs?

Light Emitting Diode (LED) colour temperature is measured in kelvin (K), which ranges from 2700 K to 6500 K. The temperature does not mean the bulb is hot to touch. Higher kelvin (K) temperatures result in cooler colours while lower K temperatures indicate warmer colours. A study published in 2011 in the American Journal of Public Health found a 12% increase in eye diseases caused by exposure to bright, cool, fluorescent lights. The safe range of light is 2700 K to 3500 K (as colour temperature increases, emission of blue light also increases). The table below explains the temperature, type of light, and their uses.

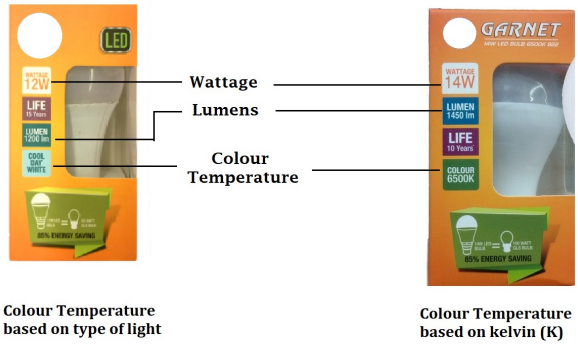
Temperature (in K)	Types of light	Uses
2700 to 3500	Warm white light	Living rooms, bedrooms, dining rooms
3500 to 4500	Natural white light	Basements, garages
5000 to 7000	Cool daylight (white)	Security lights, offices, retail locations, commercial and industrial applications



Figure—1

Figure - 1 shows the difference among different types of LED while Figure - 2 explains the factors to consider while buying an LED bulb. Some of the brands may mention the temperature range in kelvin e.g. 6500 K and others indicate the types of light e.g. cool daylight (refer above table)

While choosing an LED bulb, it is important to keep in mind the wattage while considering reduce in power consumption and also lumens for the desired amount of light. It is crucial to further review the temperature range or types of light (warm/cool) to ensure that health is not affected. To conclude, it is always better to choose an LED bulb that indicates warm light rather than cool daylights.



Figure—2

(Concluded)

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The Do-It-Yourself Energy Audit Series

For Household Consumers (Part - 2)

KEEP COOL, THE ENERGY EFFICIENT WAY

This edition of the DIY Energy Audit Series will provide household consumers with tips and tricks to meet their cooling needs at optimal levels of energy consumption.

II(A). Air-conditioners (ACs) are one of the biggest energy guzzlers among household cooling appliances. To find out how to use them efficiently, take the quiz below:

1. Do you know if your AC is energy efficient?

Look for the Bureau of Energy Efficiency's (BEE) star label, on the AC. The stars on the label indicate the efficiency of the appliance.

Takeaway: More the stars on the label, more efficient the appliance!

2. Which direction does the outdoor unit of your AC face?

When the outdoor unit of the AC is placed facing east or west, it gets exposed to direct sunlight. If the unit is exposed to direct sunlight, its workload increases and it consumes more energy.

Best Practice: Place the outdoor unit such that it faces north (or) south. This way exposure to direct sunlight on the unit is minimized, the appliance consumes lesser energy and performs more efficiently.

3. Do you clean your AC filters regularly?

When dirt builds up on the AC filters, the air handling unit in the AC is burdened and forced to work harder. This can significantly affect the cooling performance of your AC and increase its energy consumption.

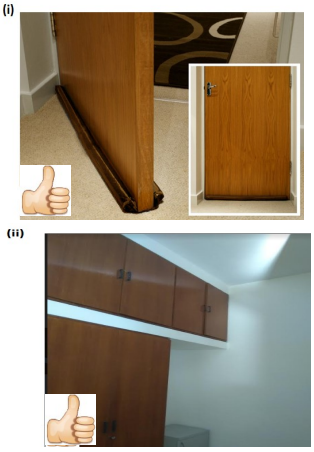
Best Practice: To maintain the cooling performance of your AC, clean it's filters regularly; preferably, once a month.

4. Do you maintain the temperature settings of your AC at optimal levels?

Setting your AC at low temperatures such as 16º C and 17º C does not cool your room faster. Instead, it could result in excessive cooling. The logic behind optimal cooling is quite simple: 'Lesser the difference between indoor and outdoor temperatures, lower the energy consumption.'

Best Practice: To ensure optimal cooling, maintain the temperature settings of your AC between 24º C and 25º C.

5. Have you checked your air-conditioned room for air leakages?



Air leakages through (i) gaps between the door and the floor, (ii) cracks on windows, (iii) open lofts and other structural gaps can be counter productive for air-conditioning. The gaps will not only release cool air out of the air-conditioned room; but, it will also allow warm air from outside the room and result in ineffective air-conditioning of your room.

Best Practice: (i) Seal gaps in doors and windows, if any (ii) Ensure that the lofts in the room have doors and they are shut when the AC is in use.

6. Are you looking to buy a new AC?

Here are some reviews, recommendations and best practices that can help you pick the most efficient one!

(to be continued)

Tamilnadu News

TANGEDCO power purchase bill could go up by Rs 2,000 crore in coming months

TANGEDCO's power purchase burden is likely to increase by around Rs 2,000 crore as the DISCOM has forecast a shortfall of around 1,500MW between February and May, till the wind season sets in. Annually, TANGEDCO signs short-term MoUs with private power generation companies for purchase of power. While the cost per unit was Rs 4.17 in the last two years, this year TANGEDCO has signed short-term MoUs at Rs 5.29 per unit.

"Every year, we purchase power from private power companies as well as NTPC through short-term MoUs to balance the deficit. A few years ago, the tariff used to be above Rs 5 per unit. We brought it down to around Rs 4 per unit in recent years. But this year, it has again gone up," said a senior TANGEDCO official. "The short-term purchase of power is likely to cost Rs 1,800- Rs 2,000 crore additionally to the DISCOM," said the official. "Even this year, the tariff per unit is only Rs 4.50 per unit, which is comparable to our own cost of generation in TANGEDCO thermal units. But this year's cost is excluding transmission and wheeling charges," said the official.

Apart from high demand from other states, shortage of coal at thermal units also adds to the trouble. "Coal shortage has hit power plants across the country this year and open market prices have been therefore ruling significantly higher this year. This is reflected in our short-term tender bids as well," said the official. As per the TANGEDCO website, the DISCOM purchased power from Shree Cement, Sembcorp Gayatri Power Ltd and DB Power Ltd in 2017 at Rs 4.20 per unit. This year, the DISCOM site has not put out names of companies from whom power is likely to be purchased.

Source: The Times of India, January 20, 2019

India News

DISCOMs' outstanding dues to power generators rise 24% to Rs 39,498 crore

Amid stress in the power sector, woes of electricity generating firms have increased further as their outstanding dues on state distribution companies (DISCOMs) rose to Rs 39,498 crore in October 2018, up 24.7 % from a year-ago levels, official data showed. "If the outstanding dues on DISCOMs of the past 60 days get added, the figures would rise to over Rs 50000 crore," a senior official of a thermal power company said.

In October 2017, the DISCOMs' dues to power-producing companies stood at Rs 31,676 crore, the data available on the PRAA (Payment Ratification and Analysis in Power Procurement for Bringing Transparency in Invoicing of Generators) website showed. The website was launched by the government in May last year to bring transparency in payments. DISCOMs of Uttar Pradesh (UP), Maharashtra, Telangana, Andhra Pradesh, Karnataka, Delhi and Tamil Nadu owe the major portion of dues to the power generating companies and take over 514 days or about 1 year and 4 months to make payments, the portal showed.

While UP tops the list with 537 days in making payments, Delhi takes 519 days and is followed by Maharashtra (518 days), Karnataka (517 days), Rajasthan (516 days), Tamil Nadu (515 days), Telangana (514 days) and Andhra Pradesh (514 days).

Outstandings of public sector thermal power companies amount to over 55 per cent of the total dues of Rs 39,498 crore on DISCOMs. This includes outstanding of NTPC at Rs 15,661.31 crore, NHPC at Rs 3,011.67 crore and Damodar Valley Corporation at Rs 1990.59 crore.

DISCOMs owe the most to Adani Power 5.92 % at Rs 6,878.94 crore, Bajaj Group-owned Lalitpur Power Generation Company Ltd at Rs 1,861 crore, GMR at Rs 1630.40 and Sembcorp Energy at Rs 1,712.32 crore among the private generators.

Source: Economic Times, January 13, 2019

Consumer Focus

Facts

The petitioner was using an energy meter for more than 15 years which was in good condition. During May 2015, EB officials had replaced the existing analog meter with a new digital meter free of cost. Later, EB officials contacted and informed him that the old meter was damaged and therefore, he had to pay Rs.2201 towards the cost of the defective meter + Rs. 75 as inspection charges. Contesting this, the petitioner filed a complaint before the CGRF.

Contentions

Petitioner

The petitioner contended that he had not touched the old meter and had not damaged the same. Hence, there was no reason for him to pay the charges.

Respondents

The respondents stated that while implementing the RAPDRP scheme, the analog energy meter was replaced with digital meter. Later, the analog meter was found to be defective. Hence, as per the TNERC Supply Code Clause 10(ii), the costs must be borne by the consumers.

Observation/Judgement

CGRF observed that the consumer was intimated and therefore he had to pay Rs.2276 towards the cost of the defective meter.

ECC VOICE

சேலம் மாநகராட்சி 46 வது வட்டம் சீரங்கன் தெருவை சேர்ந்த திரு.ஜீ.அருண் என்பவர் குகை, சீரங்கன் தெருவில் உள்ள தெரு விளக்கு கடந்த ஒரு மாதமாக எரியவில்லை என்றும் இதனால் இந்த பகுதி மக்களுக்கு இரவில் போதிய வெளிச்சம் இல்லாமல் இருப்பதாகவும், இருட்டில் சிரமப்படுவதாகவும் சேலம் மின் நுகர்வோர் மையத்தில் புகார் தெரிவித்தார்.

சேலம் மின் நுகர்வோர் மையத்தின், மின் ஆலோசகர் திரு.முத்துசாமி அவர்களின் ஆலோசனைப்படி, கொண்டலாம்பட்டி மண்டலத்தில் உள்ள சேலம் மாநகராட்சி அலுவலகத்தில் திரு. அருண் அவர்களின் புகார் தெரிவிக்கப்பட்டது.

இந்த புகாரின் அடிப்படையில் சேலம் மாநகராட்சி கொண்டலாம்பட்டி மண்டல அலுவலகத்தில் இருந்து சேலம் 46 வது டிவிஷன் சீரங்கன் தெருவில் உள்ள தெரு விளக்கு கம்பத்தில் LED விளக்கு பொருத்தப்பட்டது. திரு. அருண் அவர்கள் சேலம் மின் நுகர்வோர் மையம் மேற்கொண்ட நடவடிக்கை காரணமாக தெரு மின் கம்பத்தில் LED விளக்கு விரைவில் பொருத்தப்பட்டது என்று நன்றியினை தெரிவித்தார்.

- ECC சேலம்(9994941050)

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Citizen consumer and civic Action Group

Citizen consumer and civic Action Group (CAG) is a non-profit, non-political and professional organization that works towards protecting citizen's rights in consumer and environmental issues and promoting good governance processes including transparency, accountability and participatory decision making.

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World News

Germany to shield consumers from rising electricity prices

Germany is planning to protect consumers and manufacturers from the impact of abandoning cheap coal-fired power, which Berlin is looking to ditch for environmental reasons, according to a government body's draft paper. The Coal Commission, which is tasked with organizing the exit from coal, said in a 133-page draft document seen by Reuters that companies and private households should be spared from heavy price increases. The commission consisting of politicians, researchers and lobbyists is expected to adopt the paper on January 2019, when it will also decide on the shutdown date for the last coal-fired power plant in Germany.

According to the draft, fees for the use of electricity grids should be reduced for both industry and private consumers and operators of coal-fired power stations should receive compensation for early closure. "The Commission assumes that in the negotiations with the operators of lignite-fired power plants the entire planning period up to 2030 will be settled by mutual agreement."

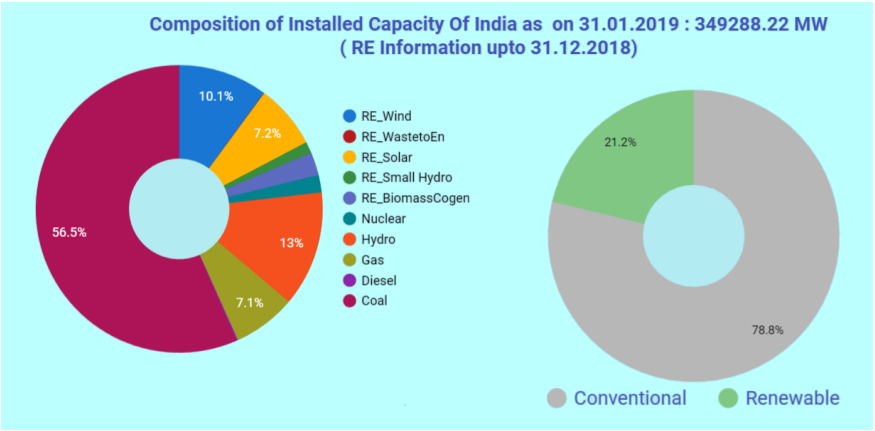
While no figures are mentioned, the commission suggests that the compensation for operators should be based on payments made for similar cases in the past. Utilities have already received around 600 million euros ($682.02 million) per GW to idle plants and put them into a strategic reserve.

"The necessary funds must be made available by the state to finance the recommended measures. There will be no surcharge on electricity prices," the paper says. The entire phase-out is to be reviewed again in 2023, 2026 and 2029 with a view to security of supply, prices, climate protection and structural change. **Source:** Economic Times, January 23, 2019

Publications / Regulations

- Technical specifications for 12 W white LED based solar street lighting system. January, 2019
- Instructions for implementation of Approved models and manufacturers of Solar Photovoltaic Modules (Requirements for compulsory registration) Order, 2019. January, 2019

Composition of Installed Capacity of India



Source: Central Electricity Authority (CEA), January 2019