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Current News

மின் செய்திகள்

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How to Choose the Right Power Adapter for Mobile Phones ?

Mobile usage has exploded in recent times but the battery technology has not changed much thereby posing challenges. Nowadays battery life is becoming a serious challenge and creating damages to mobile phones. However, most of battery related problems can be overcome if the adapter to charge the battery is used in a proper manner. This also has implications on energy conservation, while promoting energy efficiency.

First point to be noted is that one should stick to the original adapter and battery which comes along with the phone. But in most cases this can't be possible we may need to replace our chargers for any reason. However, electricity consumers tend to use a variety of adapters. For example, most of the phones have the same micro USB charging port, therefore one tends to use any charger that fits the charging port which puts the battery at risk. Further, the charging point can be same but the chargers need not be the same. Also, different mobiles require different power requirements so a charger working well for a particular phone may not work good for another phone. To better understand, it is necessary to look at the four stage technicalities of a mobile charging technical process:

- Once the phone is connected the battery's voltage increases rapidly.
- The increase in voltage results in decreasing current from the charger.
- Once the battery is fully charged, the charger stops the incoming current.
- A standby mode where only a top-up charge is supplied when the battery drops below a specified voltage.

So the selected chargers should understand these stages and perform accordingly. The following are the things that have to be noticed while selecting a charger:

Voltage: Typically mobile chargers are built to take the normal current and adapt it to the needs of the mobile. All the details, like voltage and current levels, will be mentioned on a tiny label which is stuck on the charger. Different smartphones have different voltage requirements. In case if the charger's output voltage is higher than the requirement of the phone's battery then the battery may end up getting swollen thereby affecting the device. Conversely, suppose if the output voltage of the charger is too low then the charging time will be longer. For example, consider a charger with input voltage ranging between 100 V – 240 V, this means that we can use this charger in the normal household with the input voltage range between 100 V-240 V. In case, if it is connected to a charger from United States rated at 110 V in a wall socket which is at 240 V then it may end up blowing the charger. The next important thing to look for is the output voltage of the charger. Generally, a phone battery could charge at 4.2 V. It is advised to use a charger with an output voltage greater than 4.2 V. If a charger has voltage output of less than 4.2 V, then it cannot charge a 4.2 V battery.

Amperage: As a next step, one needs to look at the output amperage of the charger which means the maximum amount of current available for the phone to use. Consider a mobile phone that requires 0.7 A to charge, and if one is using a charger with 1A output current, then the phone will draw power up to 0.7 A. Suppose if we happen to use a 0.5 A charger to charge a phone that requires 0.7 A, then the phone will take a long time to charge and also will end up in overheating of the device and finally, to device failure.

Quality of Chargers: Quality chargers come with some certifications like CE, RoHS and MFI approvals, which ensure that the products are lead free and also the products have smart circuitry. Smart circuitry means that they can detect when the phone is fully charged and stop outputting voltage to it. In substandard chargers, such benefits are not present, and therefore, the risk of damaging the battery and phone are higher.

(*CONCLUDED*)

INSIDE THIS ISSUE:

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Tamil Nadu News

Chennai capable of creating 1.380 GW Solar Power: Study

Chennai has the potential to harness solar energy enough to reduce the demand by at least 20 per cent says a report by Greenpeace India and Gujarat Energy Research and Management Institute (GERMI). The report, titled 'Rooftop Revolution: Unleashing Chennai's Rooftop Potential' found that the total rooftop potential of the city was 1,380 Megawatts (MW) and that at least 46 per cent can come from residential areas.

As of today, the 'Grid Connected Rooftop and Small Solar Power Plants Programme', which encourages the installation of rooftop solar systems does not have enough takers or support in the country. "If deployment rates do not significantly increase, it is unlikely that India's rooftop solar target of 40GW by 2022 will be met. Chennai, by virtue of being a Tier-I city is representative of most locations in India from where the most demand of rooftop solar is likely to arise," the report said. At the same time, the Chennai Metropolitan Development Authority is required to make changes under the Tamil Nadu Town and Country Planning Act to make it mandatory for all multi-storeyed buildings to harness grid connected solar energy, which has not been implemented, yet. The per capita consumption, however, continues to grow at an exponential rate.

"Switching to solar will not only help Chennai reduce air pollution by bringing down its dependence on coal as a source of power, but also help policy makers, planners and installers in Tamil Nadu contribute to the India's overall rooftop solar PV goal of 40 GW by 2022, which is crucial for India's voluntary contribution to the Paris Agreement. We need the state government of Tamil Nadu to make it easy for residents of Chennai to adopt rooftop solar PV," said Pujarini Sen, Climate & Energy Campaigner, Greenpeace India.

"This study tells us that our common citizens and householders have the power to herald the solar revolution in Chennai. Chennai has always been a city for arts, culture and the strong intellectuals. Landmarks in the city which have a sizeable solar power potential are all Mass Rapid Transit System (MRTS) Railway station roofs (3,582 kw), Metro station roofs (1696 kw), Bus depot roofs (938 kw) and the Chennai International airport (889 kw).

However, there is a long way to go. As of December 2017, only six of the 29 states in the country are complying with the centre's Renewable Energy Purchase Obligation (RPO).

Tamil Nadu has 10,639.44 MW of renewable energy installed in the state as of 2017 but lags behind in terms of RPO compliance at 81 per cent of the target.

Source: Deccan Chronicle, June 17, 2018.

India News

24 Degrees As Default AC Temperature: Centre's Proposal To Save Energy

Freezing temperatures inside when it is burning outside might soon be history as the power ministry has advised the manufacturers of air conditioners to keep the default setting of the cooling machines at 24 degrees Celsius saying that this will help save a lot of energy. The Bureau of Energy Efficiency (BEE), which carried out a study, recommended the default setting that could go up two notches to 26 degrees Celsius.

The proposal is part of the campaign initiated by the Ministry of Power that aims to save substantial amount of energy and also reduce greenhouse gas emissions.

Following an awareness campaign in the next six months and a survey to gather feedback, the ministry would consider making it mandatory. This will help save 20 billion units of electricity in one year alone, according to the power ministry. Explaining the rationale behind the recommendation, Union Power Minister RK Singh said that every one-degree increase in the temperature setting saves six per cent of electricity consumed. The normal human body temperature is approximately 36-37 degrees Celsius, but a large number of commercial establishments, hotels and offices maintain a temperature around 18-21 degrees Celsius forcing people to wear warm clothes or use blankets. This is actually wastage of energy. Some countries like Japan have put in place regulation to keep the temperature at 28 degrees Celsius," Mr. Singh said, according to news agency ANI. An advisory will be issued to manufacturers and establishments, including airports, hotels, shopping malls, offices and government buildings.

During a meeting, all major air conditioner manufacturers were advised to inform consumers through well-drafted labels about the impact of the optimum temperature setting both on their health as well as wallets. The attendees not only agreed, but also called it a "step in the right direction".

As per the findings of the Bureau of Energy Efficiency, the total connected load in India due to air conditioning will be 200 GW by 2030 going by the current market trends. This may further increase as only 6 per cent of households in the country are using air conditioners today.

India has seen a 15-fold increase in energy consumed for cooling since 1990, a recent report from International Energy Agency (IEA) pointed out.

Growing demand for air conditioners is one of the most critical blind spots in today's energy debate. Setting higher efficiency standards for cooling is one of the easiest steps governments can take to reduce the need for new power plants, cut emissions and reduce costs at the same time, Fatih Birol, executive director of IEA had said.

Source: NDTV, June 24, 2018.

Consumer Focus

FACTS

The petitioner stared that there is a risk of electrocution and fire Hazard to the residents at his premises due to a Coconut tree touching the HT line. But the HT line was laid in the past and now it is just above his house compound wall without considering the risk of electrocution and fire Hazard. The petitioner had received a letter from the AE stating that the TNEB cannot be held responsible for the risk of electrocution and fire hazards because of the tree. And so the petitioner has come to the forum in order to take appropriate steps to ensure their safety.

CONTESTATIONS

Appellant: After the complaint was made in CGRF the AE has visited the petitioner's house and informed him that soon they are going to provide southern side pole after that the electric lines would be away from the compound wall. The petitioner agreed to it but he wants sufficient gap between the pole and the compound wall.

Respondent: For the petitioner's letter, a notice was issued by considering the building is nearer to the EB line. During the power shutdown, the unsafe coconut tree branches were cut off in the presence of the petitioner. But for removing the HT line nearer to coconut tree to safe distance, as per the regulation, the consumer has to borne the estimate charges for the shifting. The same was informed to the appellant.

OBSERVATIONS AND JUDGMENT

By providing stud pole, the LT lines should be shifted away from the petitioner premises. After, shifting the Horizontal & Vertical clearances between HT, LT lines to building and HT, LT lines to ground should be as per norms of 58(2) of CEA regulations. This work should be completed within 15 days. The petitioner should maintain adequate clearance between coconut tree and lines, so as to avoid fire.

ECC Voice

பொதுமக்களுக்கு ஓர் மகிழ்ச்சியான செய்தி

புதிதாக மின் இணைப்பு தேவைப்படும் பொதுமக்கள் எளிமையான முறையில் மின்இணைப்பு பெறவும், காலதாமதம் மற்றும் லஞ்சத்தை

தவிர்க்கும் பொருட்டும் தமிழ்நாடு மின் உற்பத்தி மற்றும் மின் பகிர்மான கழகம் இணையதளம் வாயிலாக மின் இணைப்பு வழங்கும் திட்டம் நடைமுறையில் உள்ளது. www.tangedco.gov.in என்ற மின்வாரிய இணையதள முகவரி முலம் பொதுமக்களே நேரடியாக விண்ணப்பித்து மின்வாரிய சேவைகளை பெறலாம். புதிய வீட்டு மின்இணைப்பு, தற்காலிக மின் இணைப்பு, தொழிற்சாலை மின்இணைப்பு, வர்த்தக மின்இணைப்பு, கூடுதல் மின்பழு தேவை உள்ளிட்ட அனைத்து மின்வாரிய சேவைகளையும் இந்த இணையதள முகவரியில் பொதுமக்கள் தங்கள் இடத்தில் இருந்தே நேரடியாக பெறலாம்.

புதிய மின் இணைப்பு கட்டண விபரம்

ஒருமுனை மின் இணைப்பு Single Phase	வீடு - TF-1A(Domestic)	Rs.1600
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	தற்காலிக இணைப்பு - TF –VI (Temporary)	Rs.1600
மும்முனை மின் இணைப்பு Three Phase	வீடு - TF-1A(Domestic)	Rs.6850
	கடை - TF – V (Commercial)	Rs.6250
	தொழிற்சாலை - TF – IIIB (Industrial) 5.0 HP	Rs.7070
	தற்காலிக இணைப்பு TF –VI (Temporary)	Rs.6850

மீட்டர் போர்டு இடமாற்றம் Meter Board Shifting	RS.335
விகதபட்டி மாற்றம் Tariff Change	Rs.125
வயர் மாற்றம் Wire Change	Rs.135
பெயர் மாற்றம் Name Trans-fer Fees	Rs.200

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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

Current News

Global solar forecasts lowered as China cuts support policies

China's unexpected move to slash incentives for solar power has sent stocks into a free fall and prompted analysts to lower forecasts for global installations this year amid expectations that a glut of excess panels would send prices tumbling.

China announced on June 1 changes to the subsidies that has underpinned its rise to become the world's largest solar market in recent years.

IHS Markit, a market research firm, was preparing to lower its global solar installation forecast for this year by between 5 and 10 gigawatts, or up to 9 percent, analyst Camron Barati said. The impact in China, which accounts for half the global market, could be up to 17 GW, the firm said.

Another market research firm, Wood Mackenzie, said on Wednesday that China's capacity additions would likely be about 20 GW lower than it had expected.

An oversupply of cheap Chinese-made panels that had been destined for domestic projects will help boost demand for solar in other countries and sop up some of the demand lost in China, IHS said.

There will be a stressful environment for pricing in the near term," Barati said. "Something like this certainly has global ripples."

In April, IHS Markit forecast 2018 global installations would hit a record 113 GW, with 53 GW coming from China alone. China is also the world's largest producer of solar panels.

But the Asian nation last week said it would not build any more solar power stations in 2018 and cut its feed-in tariff subsidy, which guarantees a certain price for power.

Solar investors reacted by selling off stocks. The MAC Global Solar index is down 7 percent this week. Chinese panel makers Canadian Solar Inc, JinkoSolar Holding Co Ltd and Yingli Green Energy Holding Co Ltd have been hit, as well as U.S. panel makers SunPower Corp and First Solar Inc.

JMP Securities analyst Joe Osha slashed his rating on First Solar shares to "underperform" on Wednesday and cut his price target to $46 from $87.

The Trump administration's 30 percent tariffs on solar imports will help support prices in the United States, Osha said, but added that First Solar is seeking to do more business overseas and pricing everywhere could get very competitive.

"No business is insulated from market reality," he said.

Source: Energy World, June 07, 2018.

Publications/Regulations

- Scaling Rooftop Solar: Powering India's Renewable Energy Transition with Households and DISCOMs, 2018, June 2018, Click here.
- Renewables 2018: Global Status Report, May 2018, Click here.

Renewables 2018: global status report

Population Without Access to Electricity, by Region or Country—2010-2016