CURRENT NEWS

மின் செய்திகள்

VOLUME XI, ISSUE 3 • MARCH 2026

A publication from

CAG 40 YEARS OF ACTION
Citizen consumer and civic Action Group

AVOID THESE COMMON ERRORS WHEN BUYING AN AC AND SAVE ON BILLS

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Summer is here, and staying cool isn't just a luxury; it is essential. Air conditioners (AC) have become a basic need due to Chennai's extreme heat and longer summers. However, with top brands offering multiple features, buying the right AC has become more confusing. A wrong choice may lead to high electricity bills and poor cooling.

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Residential ACs can be categorised into two types: Window ACs and Split ACs. The key distinction between them is that window ACs are a single unit, while split ACs consist of two separate units - one indoor and one outdoor. Split ACs function with lower noise levels and offer a wider range of models.

ACs can also be divided based on technology into inverter and non-inverter types. Inverter ACs are more energy-efficient, but they are expensive

How to buy an AC that saves both comfort and bills?

Buying an AC without checking the right specs can lead to high electricity bills, uneven cooling, and frequent breakdowns. Avoid these common mistakes, and follow these tips instead before buying your AC.

Choose the correct AC capacity:

Many people choose an AC without properly checking the room's size. An AC's size is determined based on the tonnage and room size. These factors are like two sides of a coin. A small AC can not cool the larger room despite running for a long time. A larger AC will cool the room quickly, and then switch off. The room will warm up again, needing the AC to start working again. This frequent on-off of the AC system is not recommended. Always match AC capacity (tonnage) to your room size.

Select the Correct AC Capacity (Tonnage):

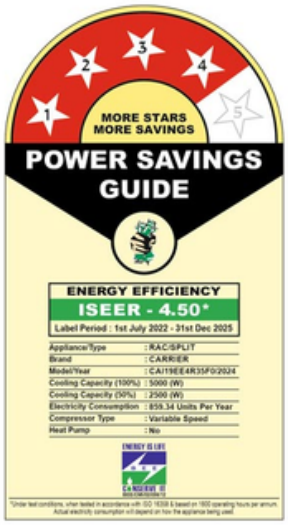
Choosing the wrong tonnage of AC can lead to poor cooling and increased electricity bills. Here is a split AC capacity guide by room size.:

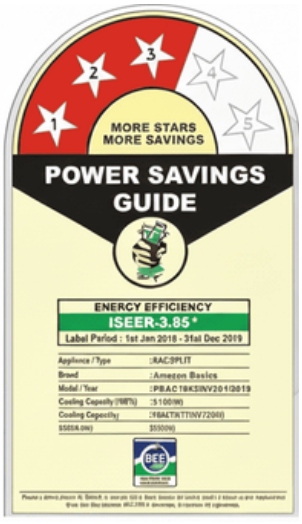
- 100 - 150 sq. ft. (Medium): 1.0 Ton to 1.2 Ton
- 150 - 200 sq. ft. (Large): 1.5 Ton
- 200 - 250+ sq. ft. (Extra Large): 2.0-2.5 Ton

Look for Star Ratings:

1. Price is important, but efficiency is also a key factor to consider. ACs with higher Bureau of Energy Efficiency (BEE) star ratings may have a higher upfront cost, but they can save a considerable amount on electricity bills over time. Always verify the BEE star rating - higher ratings indicate better energy savings.
    a. 3-Star AC: Lower investment and moderate efficiency.
    b. 4-Star AC: Slightly higher investment, with good efficiency and savings.
    c. 5-Star AC: Higher investment, but offers the highest efficiency and maximum savings.

For example, a 5-star rated AC can significantly lower your electricity costs compared to those with lower ratings.





Another important factor to look for on the Energy Star label is the annual electricity consumption. Compare the annual energy consumption (kWh) mentioned on the energy label to calculate operating costs.

Keep an eye on room conditions:

Direct sunlight, high ceilings, poor insulation, and the number of occupants all impact cooling efficiency. When selecting an air conditioning unit, it's important not to focus solely on room size; you should also take the room's environment into account. The overall condition of the room plays a significant role in how effectively it can be cooled.

For example, if a room receives excessive sunlight or has gaps in doors and windows, cool air may escape, causing the AC to work harder. Improving insulation, using thick curtains, and sealing windows can enhance cooling efficiency.

What to consider after buying an AC:

Prioritise your AC investment based on room size and usage:

Choosing the right AC is not just about capacity - it's also how often the room is used, how many people use it, and how long the AC runs. Your investment should reflect actual usage patterns, not just room size. If you need to decide on star rating based on your budget, then use the following points to guide your decision:

- 3-Star AC: Best for spaces with low usage and fewer occupants, where energy savings will be limited. Example: Bedroom with 100-150 sq. ft. where the 1-2 occupants are used for 1 to 3 hours/day. Lower upfront cost makes sense since the AC is rarely used.
- 4-Star AC: Suitable for spaces with moderate daily usage and variable occupancy. Example: Living room (150-200 sq. ft.), 3-5 occupants, used for 3 to 5 hours/day. Provides a balance between initial cost and running cost, ideal for intermittent use.
- 5-Star AC: Recommended for rooms with long operating hours and consistent usage. Example: Office (200-250+ sq. ft.), 5-8 occupants, used for 6 to 8+ hours/day. Higher efficiency significantly reduces electricity bills over time, making it cost-effective despite the higher upfront price.

Keep in mind the installation costs:

ACs, such as split ACs, require additional components during installation, including brackets, extra copper piping, and sometimes voltage stabilisers. These essential items must be factored into your budget.

Routine maintenance planning:

Every AC needs regular cleaning. Filters can get dirty, coils can collect dust, and refrigerant levels can drop. Some buyers think ACs require no upkeep, but this can lead to cooling issues and high repair costs. Enquire about maintenance needs before buying and include annual servicing costs in your budget. Regular maintenance is crucial for performance and reliability, so plan to service your AC at least once every three months. Factor in this cost when budgeting.

How to Calculate AC Electricity Consumption?

Determine the AC's Power Rating:

Locate the wattage of your AC, usually mentioned on the label or in the user manual. For example, a 1.5-ton AC typically uses around 1200 to 1800 watts.

AC Capacity (Tons)	AC capacity (Watts)	Electricity Consumption per hour (kWh)*
0.8 Ton	500 - 800 Watts	0.5 - 0.8 units
1.0 Ton	800 - 1,200 Watts	0.8 - 1.2 units
1.5 Ton	1,200 - 1,800 Watts	1.2 - 1.8 units
2.0 Ton	1,600 - 2,400 Watts	1.6 - 2.4 units
2.5 Ton	2,000 - 3,000 Watts	2 - 3 units

*The exact consumption also varies based on factors such as the temperature setting, fan speed, and ambient conditions

For example, if a household in Tamil Nadu consumes 490 units, the electricity bill is Rs. 1,742. However, if consumption increases by just 11 units, taking it to 501 units, the total bill can rise sharply to around Rs. 2,048. This is not because those extra 11 units are expensive on their own, but because crossing the 500-unit threshold pushes a larger portion of the total consumption into higher tariff slabs.

How to calculate daily usage (in units): A simple formula can monitor your electricity consumption.

$$\text{Daily Consumption (kWh)} = \frac{\text{Wattage} \times \text{Hours Used}}{1000}$$

For example, if a 1.5-ton AC operates for 2 hours/day, it would consume approx 3 units (kWh).

$$\text{Daily Consumption (kWh)} = \frac{1500\ \text{W} \times 2\ \text{Hours}}{1000} = 3\ \text{kWh or 3 units}$$

If the AC operates for one billing cycle (60 days), the total consumption can be calculated as daily consumption multiplied by the number of days. For example, a 1.5-ton AC operating for 2 hours daily over 60 days would consume 180 units.

$$\text{Electricity Consumption (kWh)} = \frac{1500\ \text{W} \times 2\ \text{Hours} \times 60\ \text{days}}{1000} = 180\ \text{kWh or 180 units}$$

How it will impact your electricity bill:

In Tamil Nadu, residential electricity tariffs follow a slab system. When consumption exceeds a certain threshold (e.g., 500 units), the per-unit rate increases significantly.

For example:
When the electricity consumption reaches 480 units, the estimated bill would be around ₹1,680. However, if you factor in the additional usage from running an AC, which accounts for 180 units, the total consumption rises to 660 units. This increase in usage significantly elevates the bill to approximately ₹3,440.

This shows how AC usage can push households into higher tariff slabs, significantly increasing electricity costs.

Tips to reduce your electricity bill:

1. Maintain the AC: Regular cleaning of filters, coils, and condenser units ensures efficient cooling and reduced energy consumption.
2. Use Timers and Smart Controls: Set timers to switch off the AC after a certain period or use a smart thermostat to adjust temperature settings automatically.
3. Improve Insulation: Seal gaps in windows and doors to prevent cool air from escaping, reducing the load on the AC.
4. Set Optimal Temperature: Keep the temperature between 24°C to 26°C for a balance of comfort and energy savings.
5. Use Curtains or Blinds: Block out direct sunlight during the day to reduce the cooling load on your AC.

Source: Cleaning the filter

Conclusion:

Buying the right AC is not just about cooling - it's about making a smart, long-term investment. By choosing the correct capacity, considering energy efficiency, and understanding usage patterns, you can ensure both comfort and cost savings. A well-informed decision today can help you avoid high electricity bills and inefficient cooling in the future.

CONSUMER FOCUS

The Appellant, a domestic consumer, found out in late 2024 that he had received two electricity bills - one in August and and one in October 2024 - that were vastly inconsistent with his historical consumption patterns: one for Rs. 65,793 and another for Rs. 30,000. Under normal circumstances, his bi-monthly bills typically ranged between Rs. 4,500 and Rs. 6,500. The Appellant contended that these high charges were logically impossible given his personal circumstances during that period. In September 2024, the Appellant had been admitted to the hospital. In the following months, he was frequently out of town, leaving his premises (apartment) mostly locked. Furthermore, he mentioned that only one of his three air conditioners was occasionally used, as the other two units were faulty and awaiting replacement. Therefore, he came to the conclusion that the charges were a result of administrative error or a faulty meter. Claiming these circumstances, he filed a formal complaint with the Assistant Engineer (AE) to check his meter.

The initial investigation by TNPDCL employees revealed a significant human error. The officials admitted to the Appellant that the assessor responsible for meter readings had entered incorrect meter readings because of the meter's inaccessible position. Despite the dispute, the Appellant paid the full amount of both exorbitant bills promptly to avoid any service disconnection. However, TNPDCL made no further attempt to fix the bill and solve the appellant's problem. The Appellant therefore filed a complaint with the Executive Engineer.

Based on this complaint, the Assistant Engineer inspected the premises on November 7 and November 17, 2024. During these inspections, the department downloaded the meter reading data directly from the meter's memory for analysis by the Meter Relay Testing (MRT) division. The first MRT report, issued on November 20, 2024, indicated that the meter was functioning properly, with no abnormalities in consumption recording, although it had a Real Time Clock (RTC) defect. Consequently, a new healthy meter was installed on November 27, 2024. Based on the report, the Assistant Engineer acknowledged that the manual entries in the consumer ledger for August and October 2024 were incorrect. Therefore, the Assistant Engineer mentioned that the difference between the data will be adjusted to the appellant's service connection.

Dissatisfied with the department's revisions, the Appellant filed a petition with the Consumer Grievance Redressal Forum (CGRF). During a hearing, the CGRF directed the Respondent officials to conduct a more comprehensive analysis of the meter data covering a full year to determine the true consumption pattern. This resulted in a second MRT report dated May 30, 2025, which provided a detailed comparison between the "As per downloaded data" and "As per consumer ledger" (manual entries).

The second MRT report exposed the full scale of the assessor's negligence throughout 2023 and 2024. The data showed that for several months, specifically April, June, August, and October 2024 - the manual entries were drastically lower than the actual energy used. The most striking discrepancy occurred in June 2024, where the assessor had recorded a mere 10 units of consumption in the ledger, while the meter's internal memory recorded an actual usage of 2,530 units. This evidence established that the high bills received later in the year were not indicative of a sudden surge in usage but were the system "catching up" on units that had been consumed but not billed in previous months due to the assessor's "guessed" low entries. Following these scientific findings, the Respondent revised the billing for the period from April 2024 to December 2024 based on the downloaded data. This reconciliation revealed that the Appellant had been overcharged by Rs. 6,757, which the department then credited to his account as an advance.

The Appellant, however, remained aggrieved and filed an appeal with the Tamil Nadu Electricity Ombudsman. He argued that since the department admitted the manual readings were guesswork, the entire dataset should be considered unreliable. He requested that the bills be reassessed based on his historical average consumption rather than the meter's internal records, which he continued to believe were incorrect given his absence from the home.

Based on both parties' contentions during the hearing, the Ombudsman presented the following findings:

- Under Section 35 of the Evidence Act 1872, the MRT report is a valid entry in a public record made by public servants and is admissible as scientific evidence. Therefore, the MRT confirmed the meter was "healthy" and recording accurately. The RTC defect was a minor technical issue that did not affect the actual measurement of energy consumed.
- The Ombudsman concluded that the high billing was the result of a rectification of previous under-billing caused by the assessor's manual errors. For example, he highlighted the drastic discrepancies between the manual ledger entries and the actual downloaded data:
  a. June 2024: The assessor recorded only 10 units in the ledger, while the meter recorded an actual consumption of 2,530 units
  b. August 2024: The ledger showed 1,000 units, but actual consumption was 2,434 units
  c. October 2024: The ledger recorded 6,048 units, while actual consumption was 2,579 units.
- The Ombudsman further noted that the Appellant had failed to produce any documentary evidence, such as medical discharge summaries or travel tickets, to substantiate his claims of hospital stays or the premises being locked. A comparison of the ledger versus the downloaded data showed that the high bills of Rs. 65,000 and Rs. 33,000 were not for those specific months alone but represented accumulated readings that had been missed in previous months due to the assessor's errors
- While the Ombudsman noted that departmental action had already been initiated against the negligent assessor, it was determined that the Appellant was not entitled to average billing because actual, verified consumption data was available from the meter's memory

Based on the findings, the Ombudsman ordered in favour of the Respondent, confirming the CGRF decision. However, the Ombudsman further directed the Respondents that all future meter readings be taken accurately and recorded promptly to prevent such inconveniences to consumers and potential losses.

SOURCE: OMBUDSMAN CASE

NEWS FROM TAMIL NADU

Few days into summer, TN's peak power demand crosses 20,000 MW

With summer setting in and temperatures rising, Tamil Nadu's peak power demand has crossed the 20,000 MW mark for the first time in 2026, driven largely by increased use of air conditioners in households. The State's peak power demand touched 20,211 MW on Friday, compared with the all-time high of 20,830 MW recorded on May 2, 2024. The latest figure was also higher than last year's peak of 20,148 MW recorded on April 24. Officials said the projected peak demand for 2025 was 22,080 MW, but the actual demand remained lower due to favourable weather conditions. For this year, Tamil Nadu Power Distribution Corporation Ltd (TNPDCL) has anticipated the peak demand to reach 21,972 MW in April, slightly lower than last year's projected figure of 22,080 MW. However, officials noted that the power demand had already surged in the first week of March. Daily energy consumption reached 416.284 million units (MU), the highest so far this year, though it remained below the all-time high of 454.32 MU recorded on April 30, 2024. In 2025, the highest energy consumption of 446.213 MU was recorded on April 25. The increase in power demand coincides with forecasts of largely dry weather across the State. Meteorological Department officials had forecast maximum temperatures likely to remain above normal by 2 to 3 degrees Celsius in a few pockets of the State on March 7 and 8. "Hot and humid weather is likely to prevail over Vellore, Ranipet and Thiruvallur districts on March 7 and 8," an official said. Amid the rising temperatures and clear skies, solar power generation has also increased. TNPDCL absorbed 53.7 million units of solar power on Friday, the highest in a single day so far. The previous highest solar generation in a day in Tamil Nadu was 50.8 MU. Solar power generation peaked at 7,107 MW on Friday. Tamil Nadu has an installed solar capacity of 9,555 MW.

SOURCE: DTNEXT, 08 MARCH,2026

NEWS FROM ACROSS THE COUNTRY

Time to shed obsession for coal as future lies in renewable energy

If we are to argue that India still lives in the dark ages, it wouldn't be an exaggeration. Nearly 60,000 villages still don't have any electricity connection. So far, the government's focus has been on electrifying only the main cities of the country while small towns and rural India gets a short shrift of the government's skewed power policy. But the transformation of the Indian power sector is not as tedious task as it is made out to be. First, since the existing power plants are overwhelmingly dependent on coal for producing electricity, a lot can be done to improve production of this fossil fuel. According to data provided by Coal India, 128 of its coal mines are waiting approval for stage - I clearance, while 50 coal mines are waiting for stage-II clearance. "In our country it takes almost seven years just for getting clearances. Getting hold of land may take another two years. How will we develop mines to meet the increasing demand for coal," asks SN Rao, CMD Coal India. According to Seshan Balakrishnan, director of infrastructure practice wing of Ernst & Young, the lack of funds for setting up distribution lines and tariffs not being revised in a timely manner have contributed to the current mess. "The state power distribution companies need to unbundle their sector by adopting models such as franchise or privatisation of the distribution utilities." Balakrishnan gives the example of the Maharashtra State Electricity Distribution Company that adopted the franchise model for distribution in its Bhiwandi circle. "The accumulated technical and commercial losses for the company in that area came down from above 50% to 20%. The franchise model can be extremely successful in small areas", he says. For the 12th plan the ministry of renewable energy has set a target of adding 30,000 MW capacity of which 15,000 MW is envisaged to come from wind power. If all this comes through, then India can finally emerge from the dark ages, resolve its power supply issues and also clean up the environment.

SOURCE: DNAINDIA, 11 MARCH 2026

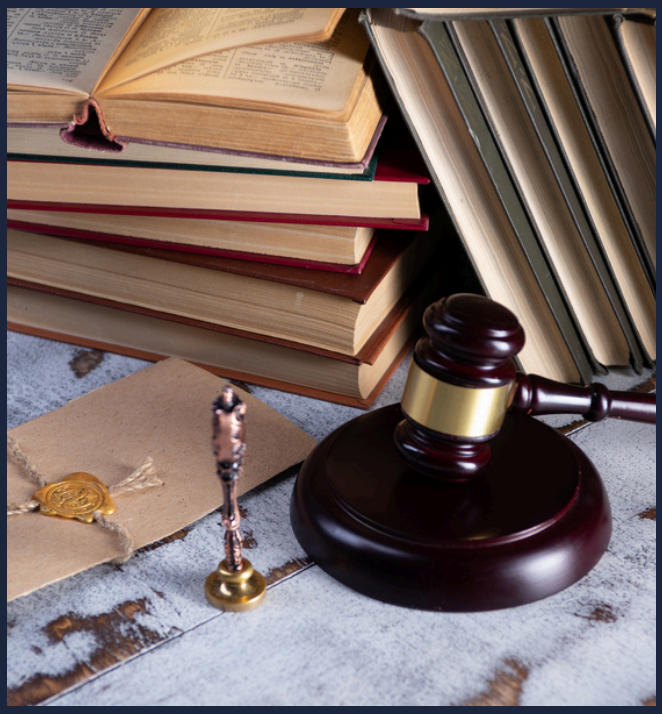
WORLD NEWS

Global 2025 power demand rose as EV, data centers grew, IEA Says

Global power consumption grew 3% last year, driven partly by fast-growing demand from electric vehicles and data centers, according to the International Energy Agency.

Electricity demand grew around 2.3 times faster than total energy demand in 2025, according to the IEA's Global Energy Review released Monday. Demand from EVs and data centers grew at 38% and 17% respectively, but industry, household appliances and commercial buildings remained the main growth drivers. "In advanced economies, electricity demand expanded by a robust 1.6% year-over-year, with particularly strong growth in the United States," it said. "Data centers accounted for around 50% of total electricity demand growth in the US, with additional growth coming from the residential, industry and transport sectors." In China too, electricity demand growth was strong, but greater efficiencies and slightly lower cooling demand kept it below 2024 levels, the report said. Overall, global energy demand growth slowed to 1.3%, slightly behind the previous decade's average. Solar was the largest contributor to growth in global energy supply for the first time in 2025, according to the IEA. "Solar PV accounted for over a quarter of all of the world's energy demand growth – more than any other source," IEA Executive Director Fatih Birol said in the report. Natural gas took the second-largest share at 17%. Global oil demand rose by 0.7%, aligned with IEA projections, reflecting the continued growth of electric vehicles, which trimmed demand for road fuels. Coal use in China fell with the addition of greener energy, while demand for the dirty fuel increased in the US as high natural gas prices drove gas-to-coal switching in electricity generation. Still, the rate of coal demand growth slowed in 2025. Battery storage was the fastest-growing power sector technology in 2025, with roughly 110 gigawatts of new capacity added.

SOURCE: THEHINDUBUSINESSLINE, 08 MARCH 2026



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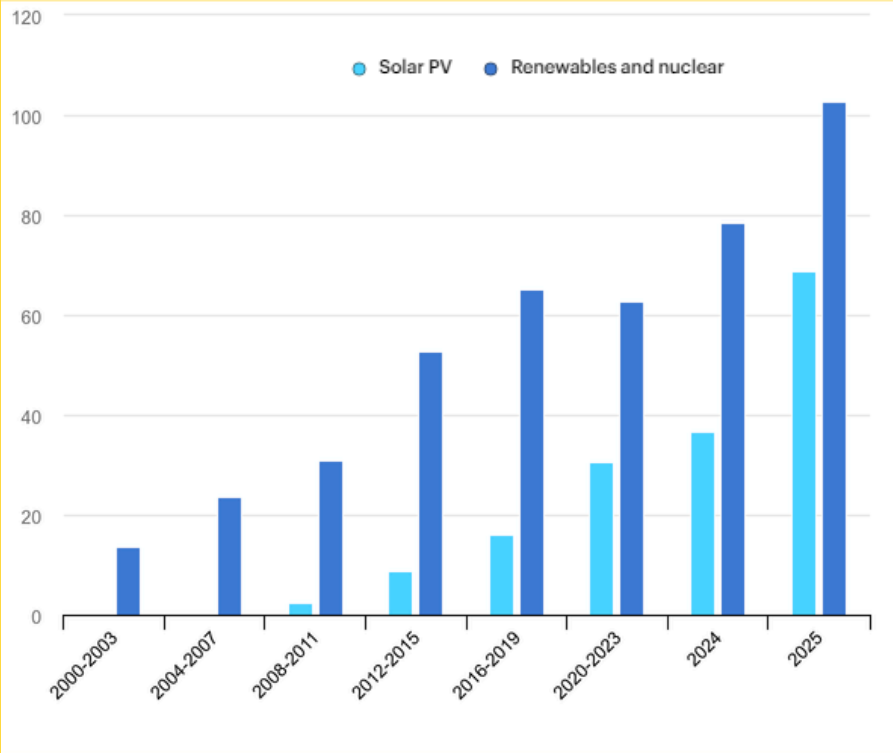
SHARE OF ANNUAL CHANGE IN ELECTRICITY GENERATION FROM RENEWABLES AND NUCLEAR, AND FROM SOLAR PV



SOURCE: IEA

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