



09 JAN, 2026

## Principles underlying energy star rating reform



The Star, Malaysia

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THE rollout by the Energy Commission of Malaysia's revised air-conditioner star rating framework, now in force from Jan 1, 2026 till Dec 31, 2029, should not be viewed as just a technical update. It is a deliberate institutional intervention designed to influence market behaviour, consumer decisions and household energy use over the long term.

This reform recalibrates the "rules of the game" that govern manufacturer innovation, retailer competition and household purchasing choices. When these rules change in a credible and predictable manner, behaviour adjusts – often seamlessly and without conscious deliberation.

Institutional theory informs us that behaviour does not change simply because information is available. It changes when regulation, norms and cognitive cues are aligned. Energy labels are effective precisely because they operate across all three.

At the regulatory level, strengthened Minimum Energy Performance Standards prevent inefficient air conditioners from entering the market by design rather than persuasion. Inefficient options are structurally removed, and behaviour is shaped by what is allowed.

Manufacturers respond through innovation, retailers adjust product offerings, and consumers internalise higher efficiency as the new normal. In this way, the reform does not ask Malaysians to care more about efficiency; it makes efficiency the path of least resistance.

Malaysia's experience with energy efficiency policy consistently shows that institutional design shapes behaviour more reliably than awareness campaigns alone. While public awareness of efficiency is rela-



tively high, purchasing decisions remain driven by price expectations, trust in labels and confidence in regulatory oversight.

When standards stagnate, labels lose signalling power. Consumers may still look for stars, but the distinction between products weakens. The 2026 reform directly addresses this risk. By tightening efficiency thresholds and redefining star categories in line with technological progress, the Energy Commission restores the integrity of the label. Once credibility is reinforced, behavioural change follows naturally.

From an institutional perspective, environmental benefits do not primarily arise from individual virtue; they emerge from repeated routine behaviour. When households consistently choose efficient air conditioners because inefficient models are no

longer available, labels remain credible and long-term electricity savings are visible, emissions reduction occurs automatically.

This explains why continuous improvement in efficiency standards delivers structural carbon reduction. The system no longer depends on environmental consciousness. Low-carbon behaviour becomes embedded in everyday consumption. Climate responsibility shifts from being exceptional to habitual.

The same logic applies to affordability. Households, particularly within the B40 and M40 income groups, tend to prioritise upfront purchase price while underestimating lifetime electricity costs. Without credible standards, this behavioural bias exposes consumers to appliances that appear cheaper initially but impose higher long-term expenses.

Strong institutions correct this bias. By narrowing performance gaps between products, removing inefficient low-cost options and standardising higher efficiency as the baseline, the policy locks households into lower operating costs by design. Over time, efficient appliances cease to be premium purchases. They become the economic norm.

Energy security also benefits from this institutional approach. While often discussed in terms of fuel supply or generation capacity, security is equally shaped by predictable demand behaviour. By improving appliance efficiency at scale, the 2026–2029 framework moderates electricity demand growth without requiring households to consciously reduce comfort.

Consumers use less electricity not because they restrain themselves, but because the technologies they adopt, guided by institutional design, deliver the same comfort with less energy.

What distinguishes the new star rating framework is not its ambition but its maturity. Rather than relying on short-term incentives or moral appeals, Malaysia is strengthening the institutional foundations that shape daily decisions.

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