

2025 takeaways: Asia's energy flywheel, from rule-taker to rule-shaper

As 2026 begins, the energy transition in Asia is no longer a series of isolated experiments. It is a massive industrial flywheel that has finally overcome initial friction, with innovation in finance and financing tools seeing the region become a rule-shaper instead of a rule-taker. **Joseph Jacobelli** explains.

Three major themes and trends came out of the 20 or so conversations from the 'Asia Climate Finance' podcast in 2025. The global energy transition continued to shift from a policy-driven ambition to an economic inevitability during the year. The three themes and trends include the shift to climate tech, the development of Asia as a rule-shaper and not a rule-taker, and further innovation in finance and financing tools.

The first of the key dynamics shaping the discussion is an inevitable shift to low carbon climate tech being increasingly driven by economics, and not only by policy. The energy transition has historically been seen as a moral or political choice. In 2025, that narrative giving way to the cold reality of physics and economics became more apparent. The world is witnessing a fundamental 'ratchet effect': while geopolitical shifts or trade tariffs may cause temporary plateaus, the underlying momentum is now irreversible, chiefly because of the downward trending cost curves of many clean technologies.

The Conversation with Ember's Kingsmill Bond highlighted that the core of this shift lies in efficiency. Fossil fuel systems are remarkably wasteful: roughly two-thirds of their energy is lost as heat. The application of electricity and advanced electrical technologies, commonly referred to as "electrotech", is by contrast about three times more efficient. This efficiency gap is the primary engine of the transition. Investors are voting with their capital: in 2025, 90 per cent of all power-sector investment went to electrotech solutions, mainly solar and wind. Moreover, two-thirds of global energy system investment now targets the electrical "flow" rather than fossil "stocks".

This redefines energy security. Importing thermal coal or natural gas is a 'rental' model, a country must buy

fuel daily. If a supplier cuts it off, the lights go out. Buying a solar panel is 'buying' energy for several decades. Once built, the marginal cost of the energy is near zero, and becomes almost entirely predictable.

Mike Thomas of the Lantau Group emphasised, the world has now entered "Wave Two" of this transition. If "Wave One" focused on solar and wind, "Wave Two" is about system-level integration. For example, hyper-scale solar hybrid projects are surging in markets like the Philippines, projects such as Terra Solar Philippines combine massive solar arrays with battery storage, creating "packaged" power that competes directly with imported liquefied natural gas as semi-baseload energy. In cities like Hyderabad, solar and batteries could supply 65 per cent of firm power by 2030 at a competitive \$60/MWh. The "ceiling of the possible" is rising faster than deployment.

The second central force driving the 2025 narrative is about energy transition standards. The Global South was expected to follow standards set in Brussels or Washington for the past several decades. Now that era is ending. Asia is no longer a "rule-taker". It has become a "rule-shaper". The region accounts for half the world's population, half its energy consumption, and more than half of global emissions. Because Asia hosts the world's largest pipeline of transition projects, its standards are gradually becoming the global architecture for climate finance.

Pragmatism defines this Asian leadership. The ASEAN Taxonomy is a prime example: rather than copying the EU's framework, ASEAN members created a system that includes a credible "coal phase-out" pathway so as to reflect the reality of emerging markets still reliant on thermal coal but needing a rigorous path to net zero. Similarly, Singapore and Japan

are adopting International Sustainability Standards Board (ISSB) climate disclosures with local adaptations. Singapore has emerged as one of the world's earliest adopters of mandatory ISSB-aligned reporting. China's climate reporting standards, officially released in late 2025, adopted a methodology which is structurally aligned with that of ISSB (ISSB S2) as well. The standards are intended to be functionally equivalent, although they do add country specific double materiality and some extra materiality.

Asia is now the centre of gravity for scaling many clean energy technologies. The region's manufacturing might sets the global cost curve. In solar, for example, a company like JinkoSolar Holding ships over 100 GW of panels every year. This output from this single company dwarfs top manufacturers from two decades ago by over 40 times. Manufacturers in China now play a pivotal role in setting the marginal cost of solar equipment and, by extension, the price at which new solar energy comes onto the grid.

Regional collaboration is moving from technical planning to active power trading. The ASEAN power grid is evolving from a technical dream debated for decades, into a reality of cross-border electricity flows. This is visible in the Greater Mekong Subregion and Article 6 carbon market pilots, such as the agreement between Thailand and Switzerland. As global capital allocators seek to diversify portfolios and avoid policy uncertainty in North America, Asia is becoming the primary beneficiary of these "diversification flows".

The third dominant pattern from 2025 influencing the future landscape is financing and financial tools. The most significant barrier to the transition has always been the "financing gap". Asia requires hundreds of bil-

lions of dollars in annual infrastructure investment to meet its climate goals.

Public budgets and traditional bank loans cannot meet this alone. One of the many solutions emerging is the Public-Private-Philanthropic Partnership. In this model, philanthropic capital acts as the "tugboat" for the "tankers" of Multilateral Development Banks (MDBs) and private institutional investors – an excellent metaphor from Woochong Um, the new Chief Executive Officer of the Global Energy Alliance for People and Planet. Philanthropic funds are agile and can tolerate "first-loss" positions. By absorbing initial project risk, they "crowd in" commercial lenders who would otherwise stay on the sidelines.

In these structures, a public or philanthropic investor agrees to take a capped return. Any profit above that cap, flows to other private investors lifting their upside without increasing their downside risk. That kind of design can turn marginally bankable projects in markets such as Vietnam, Indonesia, and the Philippines into serious opportunities for global institutional capital. It is exactly the sort of approach platforms managed by firms like Brookfield are increasingly using across emerging markets.

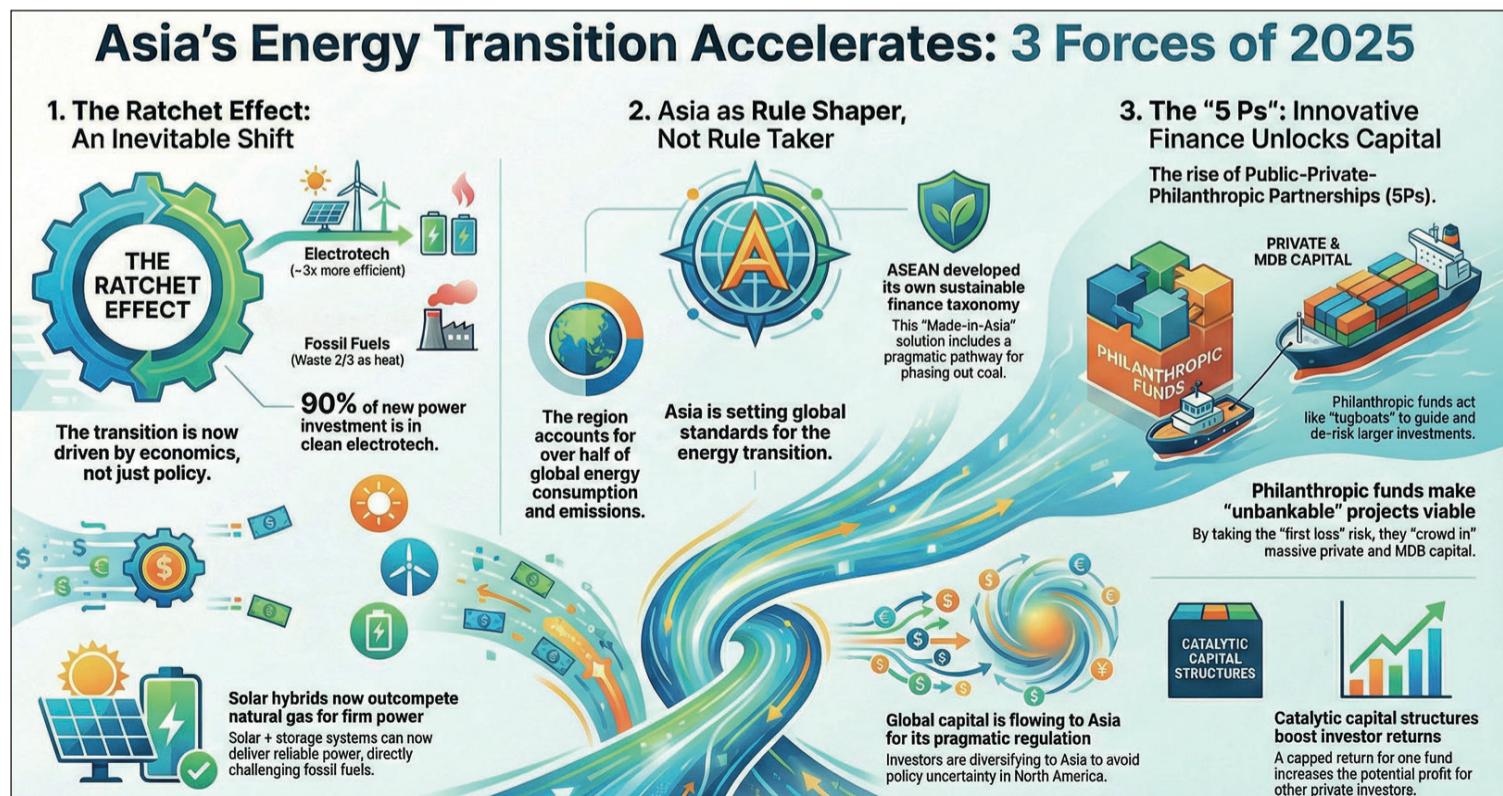
This is not about charity. It is about what people in the industry call additivity, an Asia Climate Finance podcast guest from Brookfield stressed. Additivity means leaving the system you invest in clearly better than when you found it, which in practice means actually building new assets. It is about adding new capacity, not just buying existing plants for someone else.

Development Finance Institutions (DFIs) like British International Investment are also using mezzanine debt and guarantees to bridge the gap. Mezzanine debt is particularly important for Southeast Asian sponsors, as it provides capital without diluting ownership.

Many of the experts in the Asia Climate Finance conversations concluded that there is no shortage of capital in the Asia Pacific region. The challenge has been creating a "linear, predictable deal flow" of bankable projects. Through sophisticated blended finance structures, we are finally seeing the "linearisation" of these opportunities.

As 2026 begins, the energy transition in Asia is no longer a series of isolated experiments. It is a massive industrial flywheel that has finally overcome initial friction. The combined momentum of physics-based efficiency, Asian rule-shaping, and catalytic blended finance has created a trajectory that is impossible to halt. The "train has truly left the station". Those who recognise the efficiency of the new system will prosper; those who cling to the old fossil "rental" model will become laggards in the new global economy.

Joseph Jacobelli, Head of single-family office Bourne Impact Capital, brings 30+ years in energy markets. He champions sustainable finance through his 'Asia Climate Finance Podcast' and writings like his second book, 'Powering the Unstoppable Green Shift'.



Asia's energy transition accelerates: the three forces of 2025. Source: Joseph Jacobelli, 'Asia's Three Forces for Energy Transition' (Infographic, Google NotebookLM, January 7, 2026).