

The primary engine of decarbonisation is markets, not ministers

A new book has added a voice to a growing consensus: the energy transition is today driven by economics, not ideology. **Joseph Jacobelli**

The commentary “Iran: accelerating the energy transition” (*The Energy Industry Times*, April 2026) argued that the Iran conflict has become an unlikely catalyst for the transition to net zero, the green shift, despite all its disruption to global energy markets. ‘Powering the Unstoppable Green Shift: How Policy and Finance Transform Business to Lead Climate Action’ (Routledge, 2026) builds directly on that idea. Net zero is no longer a political aspiration. It is an economic inevitability.

The book traces the relationship between policy, finance, and business,

with corporations at the heart of execution. Real-world cases anchor every claim, illustrating that decarbonisation is not a cost to be absorbed but a competitive strategy for long-term value creation. The green shift is the defining investment opportunity of the century, and it is already under way, with or without political consensus behind it.

For too long, the energy transition was framed as a virtuous but costly state project, built on subsidies and political will. That framing is obsolete. Decarbonisation has crossed a turning point. It is no longer a policy

ambition that markets are being asked to finance. It is an economic reality that markets are acting on. The distinction matters enormously. Policy can be reversed. Prices cannot be “uninvented”.

Public policy still plays a role. It provides the initial spark that opens a market, sets a standard, or de-risks a first mover. But once the economics take hold, the engine runs on its own. The transition is self-sustaining not because governments have held firm, but because the cost curves have moved beyond the point of return.

The most powerful evidence lies in the Levelised Cost of Electricity (LCOE), the cost per unit of output over a project’s lifetime. Between 2010 and 2023, the LCOE of mainstream clean energy technologies declined 63 to 90 per cent. Renewables are no longer merely cleaner than fossil fuels. In most of the world, they are cheaper. Across Asia Pacific, solar has already displaced thermal coal as the least expensive source of electricity, with production costs expected to run 32 per cent below coal by 2030.

Cost competitiveness does not need political support to sustain itself. The notion that clean energy is a luxury for wealthy nations is being dismantled on the ground. In Pakistan, farms and factories are installing rooftop solar not out of climate conviction but as a hedge against rising fossil fuel prices. Pure economic self-interest

drove that decision. Once clean energy is the cheaper option, the transition moves forward on its own, regardless of political conditions.

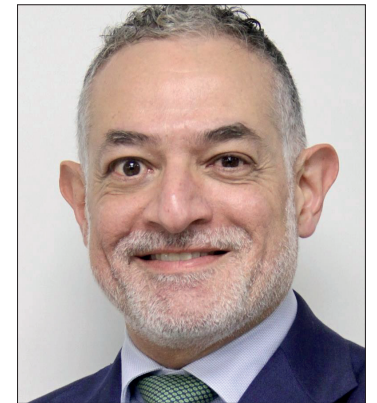
The energy transition is effectively a capital exodus triggered by the collapse in value of fossil fuel assets. While the 90 per cent fall in clean-technology LCOE acts as a potent market “pull”, the “push” of stranded assets – the physical holdings whose investment value can no longer be recouped and must be written-off – has become the primary driver of capital flight. As the global fossil fuel market, currently valued at over \$7 trillion, faces a slow unwinding, the financial sector is pricing in a hard reality: unmitigated climate change is not merely an environmental threat but a direct erosion of “potential output,” permanently degrading the foundations of global capital stock and Total Factor Productivity.

The arithmetic of this transition is brutal: the Climate Policy Initiative estimates that while \$266 trillion in climate finance is required by 2050, it represents the only viable hedge against \$2328 trillion in total losses projected under a business-as-usual trajectory. With Swiss Re warning of a \$23 trillion annual hit to global GDP, decarbonisation has shifted from a policy ambition to a fiduciary duty. Financial institutions are not retreating from fossil fuels as a result of political persuasion; they are executing a retreat from assets that are becoming worthless, whether or not a specific government has strong net zero legislation in place.

The old objection that renewables are too intermittent to be reliable is losing ground fast. Battery storage is transforming electricity into a tradable commodity, and in 2024, average lithium-ion pack prices dropped below \$100/kWh, making electric vehicles cost-competitive with combustion engines. Markets competed that threshold into existence. Shenzhen has fully electrified its fleet of 16 500 buses and 22 000 taxis across a city of 18 million people, proving the commercial case at scale. When Google or Amazon invest in Small Modular Reactors (SMRs) to power their AI infrastructure, they are following a logic of energy security and price stability. These are chiefly commercial decisions.

One critical insight from the book, however, is that even a weak signal from the state is now sufficient for business and capital to act. A decade ago, clean energy needed sustained policy support to be viable. Falling technology costs, the growing risk of stranded assets, and the competitive pressure of market-driven deployment have together created a momentum that political volatility can slow but cannot stop. A government can withdraw a subsidy, repeal a target, or abandon a multilateral commitment. It would find it difficult to raise the cost of solar back above coal. It cannot restore the investment case for assets the market has already decided to strand.

The debate about whether to pursue the transition is largely over, not



Jacobelli: Cost competitiveness does not need political support to sustain itself

because the politics have been resolved but because the economics have moved on without them. For policymakers, the task is no longer convincing the market to act, as it is already acting. The task now is removing the bottlenecks slowing it down. The 80 million km of grid upgrades required globally represent a serious obstacle, and without them, clean energy assets risk becoming stranded for want of connection rather than want of demand. Governments that focus on infrastructure, planning reform, and grid investment are working with the market.

For investors, vague commitment must give way to specific contractual terms that make projects genuinely bankable. Capital follows certainty, and the economic case is now strong enough to provide it.

The green shift is unstoppable because it has become the most competitive economic choice available. The \$7 trillion global fossil fuel economy is being dismantled and rebuilt not by ministers issuing declarations but by the unsentimental pursuit of long-term value. Those who read the decarbonisation landscape as a map of business opportunity rather than a regulatory burden will define the century. The economics have spoken. Policy may influence the pace. It no longer sets the direction.

Joseph Jacobelli, head of single-family office Bourne Impact Capital, brings 35+ 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*.

Levelised Cost of Electricity (2024 USD/MWh)			
	2010	2024	Change
Solar PV	417	43	-89.7%
CSP	402	92	-77.1%
Onshore wind	113	34	-69.9%
Offshore wind	208	79	-62.0%

Source: IRENA (2025), *Renewable Power Generation Costs in 2024*, International Renewable Energy Agency, Abu Dhabi.

Renewable power generation costs in 2024 (extract)

Decarbonisation is now powered by the cold arithmetic of the balance sheet.

Renewables are now the cheapest energy source.
Between 2010 and 2023, the cost of mainstream clean energy technologies **plummeted by 63% to 90%.**

Markets lead while ministers follow.
Investors are moving capital because the **numbers work**, not because they are waiting for a green light from governments.

The massive cost of climate inaction.
A **\$266 trillion** investment in climate finance would mitigate over **\$1,200 trillion** in projected economic losses.

Fossil fuels are becoming stranded assets.
Financial institutions are retreating from coal and oil to avoid the hard calculus of obsolescence and devalued infrastructure.

Fix the grid to enable growth.
The primary constraint is now infrastructure; **80 million kilometres** of grid upgrades are required to connect clean assets.

The economic inevitability of the green shift. The energy transition is effectively a capital exodus triggered by the collapse in value of fossil fuel assets
Source: Joseph Jacobelli

