BCG

Weekly Brief

September 06, 2023

A Blueprint for the Energy Transition

The energy transition has been a prominent topic of conversation among CEOs, governments, and other stakeholders for years. But last month, amid unprecedented heat waves, wildfires, and droughts, I joined a CEO meeting where the sense of urgency was at an all-time high. At the same time, many admitted to being simply overwhelmed by the complexity and scale of the energy transition and how to navigate its inherent risks and tradeoffs.

As a global community, we are not moving fast enough to reduce emissions and adapt to a changing climate. Though technological innovations emerge constantly, progress remains too slow to solve fundamental challenges. This is because:

- The transition to green energy sources must occur three times faster than any prior transition—such as that from coal to oil and other hydrocarbons.
- Unlike past transitions, renewables must replace traditional energy sources, not only meet additional demand.

- Only one half of the $37 trillion investments needed by 2030 has been committed—and much of that is contingent on healthy returns.
- As we shift from extracted to manufactured energy, few companies are prepared for higher upfront investments, higher transportation and storage costs, and greater energy price volatility.

The energy transition is as much a demand as it is a supply problem. As the authors of BCG's new report, A Blueprint for the Energy Transition, point out, the technologies to increase energy efficiency, decarbonize the power supply, and electrify carbon-powered activities are largely available. Other technologies, such as low-carbon hydrogen and carbon capture, are close to being commercialized.

We have the tools to reach net zero but not the policies, proven business cases, and capabilities necessary to massively accelerate the pace of progress. The energy industry cannot conquer this challenge alone.

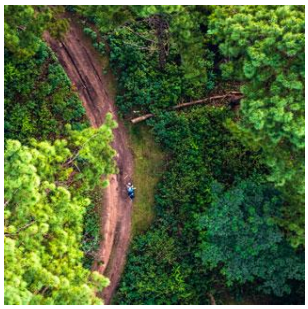
- **Governments can do more** to close the funding gap, incentivize private investment, and ensure a just transition for those at risk of being left behind, especially those in lower- and middle-income countries who did not cause the carbon crisis but are suffering its consequences.
- **Large energy consumers,** such as industrial goods companies, can ensure that conversion, transmission, and distribution infrastructure is in place to access low-carbon energy.
- **Financial institutions** need to integrate carbon into their decision-making and risk calculations. They should also identify sound investments in networks and other shared infrastructure, such as the electrical grid, to encourage the development of low-carbon production.

We know far more than we did five years ago about what we need to do to solve the energy transition. We have proven technologies and a willingness to commit many trillions of dollars to the cause. We need more money, but also something money can't buy: the willingness to try and the confidence that we can do this.

Until next time,

Christoph Schweizer
Chief Executive Officer

Further Reading



A Blueprint for the Energy Transition

Achieving net zero will require driving an energy transition with unprecedented speed. That transition promises to have far-reaching implications.

READ MORE

People Make the Difference in Green Transformations

Companies committed to becoming

sustainable find that it can be a struggle to marshal their organization and people behind that goal.

READ MORE

Climate Finance Needs a Push. Asset Owners Can Supply One.

Trillions of dollars are needed to achieve the goals of the Paris Agreement. Private-market investments present near-term opportunities for climate-focused investors to drive change.

READ MORE