

The Energy Transition Opportunity in Emerging Markets



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The support of governments, lenders, corporations and independent developers is central to the growth of the energy transition from carbon to renewables in emerging markets (EM). At the forefront of this type of collective effort and progress is India. At Morgan Stanley's inaugural Sustainable Finance Summit, Eric Carlson, Head of Sustainability and Portfolio Manager, Emerging Markets Equity, at Morgan Stanley Investment Management (MSIM), spoke with Kedar Upadhye, CFO of ReNew, India's largest independent power producer in the renewable sector. The panel was moderated by Stephen Byrd, Head of Global Sustainability Research, MSIM.

Topics discussed include the economic benefits and investment opportunity set of the clean energy transition, the magnitude of India's commitment to renewables, upcoming innovative technologies, the role of renewables in energy security and potential headwinds to the energy transition in EM. Among the key takeaways are:

In EM, Government Support is Critical to Energy Transition Success; India is a Leader in This Regard.

The Indian government's commitment to renewables is ambitious. Current renewable capacity of India is about 180 gigawatt hours (GWH), and the government's goal is to scale capacity to 450 to 500 GWH by 2030. Sharing the government's vision (and a critical component to its success) are developers, the Indian state power companies, state central authorities and financing agencies, including banks. All are cognizant that this transition will bring substantial advantages in terms of not only decarbonization but also economic vitality – the forward spend of renewables is substantially cheaper than carbon – and energy security.

From Expanded Supply Chains to Critical Raw Materials, the Energy Transition Investment Opportunity Set in EM is Wide Ranging.

This relates not just to the transition to cleaner energy but also to enhanced energy security. Russia's invasion of Ukraine was a shock to the world, but it

AUTHOR

ERIC CARLSON

*Head of Sustainability &
Portfolio Manager Emerging
Markets Equity, Morgan Stanley
Investment Management (MSIM)*

brought energy security to the forefront. While both are large global emitters, China and India are also major players in decarbonization and rapidly building renewable capacity. Other EM countries may lag in domestic renewable development but are involved in alternative supply chains for developed markets, as global trade patterns shift, with notable policy support from the U.S. and European Union. This has opened opportunities for equipment suppliers in Northeast Asia, including Taiwan as a provider of semiconductors, energy storage system (ESS), and inverters, and Korea, for EV batteries. The magnitude of raw materials needed for the energy transition and energy security is vast. A lot of these critical materials, such as copper and lithium, are concentrated and mined in EM countries like Chile, Peru and Indonesia.

Nearshoring Trends Support Domestic Production.

This dynamic is occurring in EM and all over the world, helping to increase domestic renewable energy capacity and improve energy security. The Indian government, for example, has imposed high import duties to encourage domestic manufacturing and eased restrictions on its approved list of model manufacturers. It has also increased production incentives for solar modular suppliers and producers. Replacing oil imports with endogenous energy sources represents a big shift toward energy security not just for India, but also in Chile, Taiwan, Turkey, northeast Asia and other big energy importers.

Green Hydrogen and Other Innovative Technologies are Advancing.

New technologies like green ammonia and especially green hydrogen have gained a high level of interest among governments and certain industries, including shipping and the airlines. While the potential applications appear huge, green hydrogen – which is generated from renewable or low – carbon power – is an unproven area where developers have to weigh risk against the cost of capital. One way to allocate risk and capital costs is through strategic partnerships between investors and other parties with different skill sets in order to achieve not just production but commercialization of the product. In Chile, several utilities and other parties are interested in producing green hydrogen to ship green ammonia – which is derived from green hydrogen and can be used as a substitute for coal and to generate baseload electricity – to northern Asia and Japan.

Another area of innovation is distributed power. In less developed EMs, where governments are unstable or the grid development has been stagnant or very limited for a long time, distributed power offers a lot of opportunity for private sector and corporate entities.

Project Complexities and Multiple Players are the Biggest Potential Headwinds to the Energy Transition.

For independent power producers seeking to develop solar, wind or other renewable projects, considerable expertise is needed to execute a project. From signing a long-term purchase agreement to procuring equipment and land to organizing labor contractors, it can be difficult to organize and master all the components of the value chain. Financing and capital could present potential bottlenecks, although funding sources for high – quality projects are readily available from local banks and foreign sources. A certain amount of resistance to renewables can come from lagging, retrograde government policies or entrenched interests that oppose development. The government of South Africa, for example, has only within the last 12 months allowed grid – scale distributed solar to be executed. On the transport side, portability and infrastructure issues can be headwinds.

In sum, the fundamental backdrop for both the renewable energy transition and energy security in EM is quite bullish. The challenge is to find businesses that can deploy the necessary capital in profitable ways and overcome the kinds of barriers discussed earlier. Although progress varies across different EM regions, there is widespread recognition that renewable energy built to scale can be cheaper, more reliable than energy imports and cleaner than fossil fuels – and its development has tremendous backing from governments and private enterprise.

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Dubai: MSIM Ltd (Representative Office, Unit Precinct 3-7th Floor-Unit 701 and 702, Level 7, Gate Precinct Building 3, Dubai International Financial Centre, Dubai, 506501, United Arab Emirates. Telephone: +97 (0)14 709 7158).

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