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Clean tech opportunities for emerging economies under a Trump presidency

Key points:

- A US slowdown in the deployment of and investment in clean technologies presents an opportunity for countries such as China, Brazil and India to capture its market share.
- Clean technology accounts for 10% of global GDP growth and the global market for six key technologies - solar PV, wind turbines, EVs, batteries, electrolysers and heat pumps - is set to reach over USD 2 trillion by 2035.
- Many Global South countries are rapidly deploying renewables and already have a higher share of solar and wind in their electricity generation than the US. Renewable infrastructure in the Global South is simpler, more easily scaled and has shorter lead times than fossil fuel infrastructure.
- China is already the global leader in the manufacturing of clean tech and has announced enough clean technology capacity to supply all of the demand in the Global South. The impact of a Trump presidency for China is mixed, it could benefit from a potential reduced US' market share of clean technologies, but is set to face prohibitive tariffs on its exports to the US market.
- Other countries may benefit from US backpedalling. Brazil pulled in USD 35 billion in energy transition investment in 2023, ranking sixth globally, and India could flip from being a net importer of clean technologies to net exporter by 2035.

Growing global market for clean tech

The re-election of Donald Trump as president of the US may significantly slow the deployment of clean technologies in the country. During the election campaign, he committed to scrap offshore wind projects, rescind any unspent funds under the Inflation Reduction Act, overturn rules on car pollution limits and has considered ending tax credits for purchasing electric vehicles (EVs). Many countries could benefit from the US stepping back from the race for clean technology leadership.

Clean technology accounted for 10% of global GDP growth in 2023, and the global market for six key clean technologies - solar PV, wind turbines, EVs, batteries, electrolysers and heat pumps - is forecasted to reach over <u>USD 2 trillion by 2035</u> - a 186% increase from 2023. Global trade in clean technologies is set to reach <u>USD 575 billion by 2035</u> – around 50% more than the value of global trade for natural gas currently. The supply of these technologies is a growth opportunity that many countries stand to capture.

The Inflation Reduction Act (IRA) in the US has attracted over USD 200 billion in investment in clean energy, electric vehicles and batteries. Some manufacturers, such as Swedish battery maker Northvolt, chose the US to operate in to take advantage of these IRA subsidies Indian manufacturers such as Vikram Solar are also planning to set up factories in the US to gain from the tax benefits under the IRA. BNEF estimates that over USD 40 billion in investments for announced factories are underway in the US for 2025.² However, if certain IRA benefits are removed, this investment is at risk.

Opportunities for emerging economies

Risks and opportunities for China

China is already the global leader in manufacturing clean energy technologies, accounting for 70% of the market for six key clean technologies. China's clean tech exports are set to exceed USD 340 billion by 2035, equivalent to the oil export revenues of Saudi Arabia and the UAE combined in 2024 so far. Despite China's strong position in the clean tech market, the implications for a Trump presidency are unclear. China could stand to benefit by being able to capture market share from US producers and exporters. However, Trump has pledged to introduce a 60% tariff on all Chinese imports and 100% on EVs, which could lead to a reduction in China's GDP of 0.68%.

Other emerging and developing economies

The global rollout of renewables, which will help meet growing power demand across the Global South and reduce dependencies on fossil fuel imports, is likely to continue under a Trump presidency.

Renewable energy potential in the Global South is 400 times greater than fossil fuel production, compared to 50 times in the Global North. Many countries in the Global South are already rapidly shifting to renewables – <u>Jordan, Uruguay, Namibia, Palestine and Chile</u> have all increased the share of solar and wind in their electricity generation at "remarkably high rates," according to the World Resources Institute. Solar and wind accounted for 83% of electricity demand growth in the Global South in 2023, and many countries already have a higher share of solar or wind in their electricity generation than the US. For many Global South countries, the deployment of renewables is simpler, more easily scaled and has shorter lead times than the roll out of fossil fuel infrastructure. The upfront cost of renewable infrastructure is also becoming less of a barrier for many countries - RMI found that solar will have lower upfront costs than coal in Vietnam from 2024 and in India from around 2027.

The US and other Global North countries bore the high costs of developing many green technologies, meaning that many Global South countries can roll these technologies out at lower costs. In addition, unlike the US, many Global South countries do not have large legacy fossil fuel infrastructure, which can slow down the build out of renewable infrastructure. While <u>US tariffs and regulations</u> limit the country's access to renewable imports from China, many Global South countries benefit from these cost-effective

¹ BNEF (2024), [2H 2024 India Renewables Market Outlook], available via BloombergNEF, accessed

² BNEF (2024), [BNEF's Guide to the US Election], available via BloombergNEF, accessed 6/11/2024.

imports. China has also announced enough clean technology capacity to supply all of the demand in the Global South.

Brazil

Brazil is in a strong position to benefit from the US potentially stepping back from the clean technology market. The Latin American country ranked <u>sixth in the world for investments</u> in energy transition in 2023, drawing in USD 35 billion to the sector. It also ranked third for new solar and wind capacity globally.³ Brazil's national development bank, BNDES, is the world's lead renewables finance arranger, having arranged USD 36.4 billion in investment over the last two decades.⁴ Brazil has favourable conditions for wind turbine manufacturing, and produces 5% of global wind turbine blades today. Exports of these components could increase sixfold by 2035 under a net-zero scenario, and Brazil has a USD 1.3 trillion opportunity between now and 2040 to scale its low-carbon energy supply investments, according to BNEF.5

India

India also stands to become a key player in the clean technology race, particularly in the face of a US withdrawal. If the global clean energy transition accelerates, India could move from being a net importer to net exporter of clean technologies in 2035, with exports worth USD 30 billion a year. In the first half of 2024, USD 11.5 billion was raised for the clean energy sector in India, with USD 13 billion raised over the same period in 2023. Capital raised to build new wind power projects continues to grow to feed clean power demand from corporations.6

Clean tech race will continue

The clean technology race is set to continue under a Trump presidency. However, if the US backtracks on clean energy investments and rolls back policies such as tax credits for EVs, the US may lose its position as a clean tech leader. This may open up opportunities for countries such as China, Brazil and India to increase their market share in the production of key green technologies. Investors with headquarters in foreign countries account for over 45% of clean energy manufacturing investment announcements under the IRA - totalling around USD 58 billion. Japanese and Korean companies account for some of the largest foreign investments in technologies such as batteries and EVs. Any attempts to repeal parts of the IRA may encourage international investors to turn their attention elsewhere - a potential opportunity for emerging economies.

³ BNEF (2024), [Brazil Transition Factbook], available via BloombergNEF, accessed 4/11/2024.

⁴ BNEF (2024), [Brazil Transition Factbook], available via BloombergNEF, accessed 4/11/2024.

⁵ BNEF (2024), [Brazil Transition Factbook], available via BloombergNEF, accessed 4/11/2024.

⁶ BNEF (2024), 2H 2024 India Renewables Market Outlook: Onward and Upward, available via BloombergNEF, accessed 4/11/2024.