Ecofin Editorial:
The role of renewables in global energy security

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Matt Breidert
Senior Portfolio Manager and Managing Director - Listed Sustainable Infrastructure & Energy Transition

The obvious question that comes to mind right now when considering energy security is how Europe and other big importers of Russian oil & gas are going to manage and where energy supplies will come from. We need to consider too, though, how smaller emerging economies handle this. These types of countries have power demand growth of 4-8% per year and must figure out how to fund that. Coal is generally off the table – few populations anywhere are amenable to expanding its use in their backyard.

The prospect of importing a lot of liquid natural gas (LNG) is unattractive to many less developed countries because it can make them somewhat addicted to foreign energy – negating the point of pursuing energy security – and, of course, it costs a lot of money. It is also disadvantageous from a macroeconomic perspective because GDP accounts specifically for import and export figures; if you start to become a large importer of energy, that's a negative for your country's GDP, current account and cash reserves. Add to that the premium prices in the market as big players like Europe and China continue to buy up much of the LNG available out there. What do these countries do? **For these smaller economies, one of the few options available and still relatively cost competitive is renewables.**

Despite the inflationary forces we have seen this year, which have pushed the cost of construction of new renewables projects higher, without a doubt, their cost is still significantly lower compared to any of the alternatives. And then of course, renewables have a 100% decarbonized footprint. So, from our perspective, **we would expect many countries to reinvigorate domestic regulatory frameworks around integrating more and more renewables as fast as possible.**

As a result, we're quite bullish on the global map for renewables demand; it is a **very economically rational way to grow your energy supply.** The only problem is that renewables are an intermittent resource and in many parts of the world the grids are not yet very stable or well developed, and so you're going to need a complementary asset as a backup or base load to improve the integrity of the grids and to enable growth. Nevertheless, these countries could begin to satisfy their growing power demand domestically with less cash leaving the country to purchase energy. This means that renewables are likely to continue to be the dominant growth source for electricity around the world, as has been the case for the last three years. Renewables do represent the lion's share of capital expenditures in new power generation growth globally.

In the U.S., it's a different picture because the Build Back Better plan failed to pass for a host of reasons, and it is unclear if we will see any kind of comprehensive energy bill anytime soon. Without visibility on the regulatory framework for future renewables projects, it becomes difficult for developers to invest capital because they cannot quantify the underlying cost structures. A lot of people don't want to build a project today if it's going to be subsidized tomorrow. So, **we need to clear the decks in the U.S. and get a regulatory, legal or legislative framework pushed forward** so that there's visibility and understanding about how the system is meant to work.

The last key takeaway for energy security and the impact for renewables is that we **need a lot more domestic manufacturing and production capacity built around the world.** In the U.S., there is an ongoing investigation by the Department of Commerce into the possibility that China has been circumventing tariffs on solar panels coming into the United States, and this has contributed greatly to a pervasive "wait and see" approach by developers and, consequently, a sharp decline in installation activity for large-scale renewables in the U.S. this year so far. The circumvention issue is one we have had on our radar and we have been engaging with our portfolio companies to make sure they have highly diversified supply chains on solar, rather than just relying on a couple of Asian sources. This issue looks like it may be resolved shortly as the Biden administration is expected to announce that there will be a two-year new tariff exemption on solar panels from Southeast Asia. This removes some near-term uncertainty and allows the resumption of new solar projects while buying some time for more U.S. domestic supply chains to be put in place.

We are already seeing examples of this in India which is requiring much more local content for the build-out of renewables assets. India wants to own more of the value chain, and that makes perfect sense. China reported a $4.1 billion export surplus in solar just for the month of March; that means a circa $50 billion a year export market and they have an 80% market share.[1] It is not sustainable to underwrite the world's growth in renewables development with so much of the money on the equipment side going to China. At some point, that model will break. Thus, **it is a key ESG risk, or key business risk, to be solved with diversification of supply, and we would expect many more manufacturing facilities for renewables to be built around the world in the next three years.**

[1]Source: China Photovoltaic Industry Association (CPIA).