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Expanding the renewables market: how the merchants can be attracted

Merchants

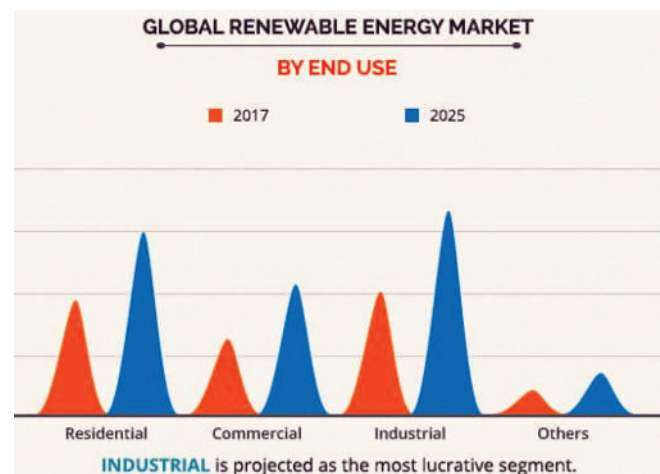
A merchant is a person who trades in commodities produced by other people, especially one who trades with foreign countries. Historically, a merchant is anyone who is involved in business or trade. Why merchants are necessary. When a producer expands his or her production base, he or she realizes that every activity including production has to be specialized and requires attention. To him or her, the knowledge of distant market becomes obscure and someone specializing in trading becomes important to expand the trade. So in other words, during early and underdeveloped markets the producers can reach to the buyers but as the market expands, the merchants become important. Merchants have operated for as long as industry, commerce, and trade have existed. The status of the merchant has varied during different periods of history and among different societies. In modern times, the term merchant has occasionally been used to refer to a business person or someone undertaking activities (commercial or industrial) for the purpose of generating profit, cash flow, sales, and revenue utilizing a combination of human, financial, intellectual and physical capital with a view to fuelling economic development and growth.

There are generally two types of merchants possible in the renewables market. A wholesale merchant who operates in the chain between the producer and retail merchant, typically dealing in large quantities of goods. In other words, a wholesaler does not sell directly to end-users. Some wholesale merchants only organize the availability of goods rather than move the goods themselves.

A retail merchant or retailer who sells merchandise to end-users or consumers (including businesses), usually in small quantities. A shop-keeper is an example of a retail merchant.

Why in the renewables?

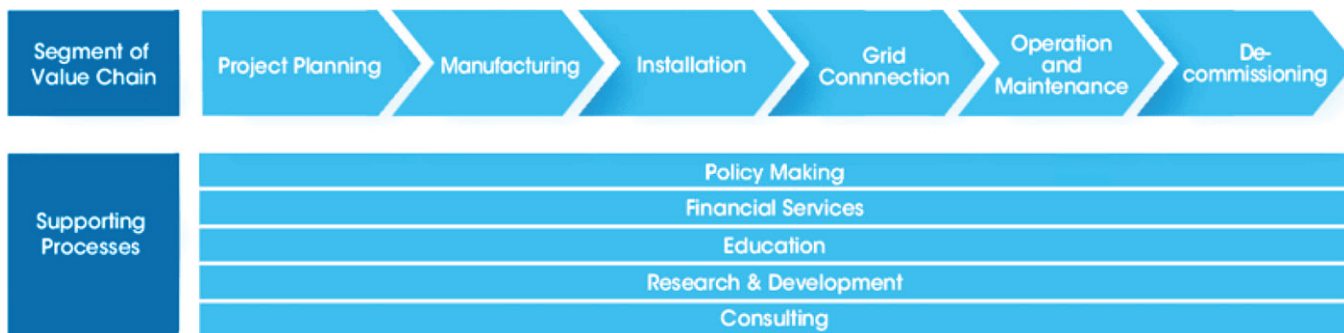
In recent decades, renewable electricity generation has been subsidized to encourage investment. This has resulted in the rapid expansion of renewable electricity generation, accompanied by technology advances that have allowed a



constant lowering of construction and operating costs. Moreover, energy pioneers willing to take on construction and technology risks could benefit from stable cash flows during operation. In turn, regulators, faced with having to adjust and revise a complex scheme of feed-in tariffs constantly, adopted a more market-driven approach. They introduced auctions whereby the bidder with the lowest electricity price would win the development rights for a certain location. Fierce competition ensued, with prices dropping by as much as 50 to 80 per cent from 2015 to 2018. The role of the merchants remained limited – but this is changing rapidly.

Another important thing is that the merchants bring investment in the production, to ensure the supply of the merchandise. The time and capital investment a merchant can bring to the producers has been long established and actually resulted in the development of economics, trade, business and competition.

Auctioning schemes are allowing “zero bids” whereby the developer is no longer guaranteed a minimum electricity price. Several subsidy-free projects, such as the solar photovoltaic and onshore projects in Spain and multiple offshore projects in Germany and the Netherlands, have been announced and are under development. While these projects have benefited



Renewable energy value chain

from favourable site conditions and economies of scale, this change in the renewables marketplace indicates that the industry is transitioning into the next phase of market integration in which governments will abandon subsidies and developers will be fully exposed to wholesale prices

Management

Traditionally, capital over expenditure and construction delay have been the largest risk factors in renewables projects. In the case of subsidy-free renewables projects, however, the risk from merchant price exposure is significant (for example, up to two to four times greater than the construction risk) and can be as high as 20 to 40 per cent of capital expenditure in value at risk. So the cost of capital in the producer's side will increase as the production increases and the investment will also be borne by the merchant (s).

To manage merchant risk, developers and investors should consider an additional risk buffer. This often takes the form of an increase in the minimum expected rate of return. For example, an increase in the minimum expected rate of return of 150 to 250 basis points translates to an additional risk buffer of approximately 20 to 30 per cent of capital expenditure. Managing the merchant price risk could therefore be a key enabler for offering competitive bids. Those players who cannot drive down capital expenditure or operating cost could compete successfully by off-loading their merchant risk and driving down the size of their risk buffer.

Companies that want to go clean

Once the subsidy is gone, the renewables sector will have to look beyond their retail customers for the simple reason: more sale means better flexibility and cost adsorption in the value chain. Till date, the most popular transaction type for dealing with long-term merchant risk has been the corporate power-purchase agreement (PPA). Several companies, most notably Google (which has a renewables capacity of more than three gigawatts), have fulfilled their pledges to become carbon neutral by securing numerous long-term PPAs (those lasting

more than ten years). Yet there is likely to be a blockage in demand if renewables grow at the pace currently forecast. As a case, for example, that for the bid-winning projects to be fully subsidy free in the future, 40 per cent of the total B2B consumption in Germany would need to be covered by long-term PPAs.

Dominance of buyer's market

Bearing this in mind, the market pricing of individual projects already reveals the typical characteristics of a buyers' market, with discounts of 15 to 35 per cent compared to calendar-forward prices. In emerging markets, such as Spain, the buyers of PPAs tend to be sophisticated commercial and trading players; this strongly suggests that they see commercial arbitrage opportunities—or, put simply, overpricing of merchant risk.

As industrial and B2B counterparties will only be able to absorb a limited amount of the expected long-term merchant risk volume, the participation of traders and intermediaries, financial institutions, and long-term investors is required. Power traders and intermediaries (risk takers) can absorb long-term merchant risk. Such players take on risk to benefit from high-risk premiums.

So long the ground looks green!

Financial put option hedges offered by banks are quite common in the United States. However, banks demand high-risk premiums, which are overcompensated by the soon-to-be discontinued tax credits. Long-term financial investors, such as pension funds or insurance companies, are always on the lookout for alternative asset classes. So far, they have focused on regulated energy and infrastructure assets. However, they have lately shown a willingness to scale up on long-term investments that are exposed to merchant risk, provided the respective risk premiums are paid. As the scale and markets grow in the renewables, the participation of traders and intermediaries, financial institutions, and long-term investors will required be required for the supply and sustenance of the market.