Interview with Commodities People (14 Feb 2024)

1. Could you start by giving us an overview of the REC market in Singapore and the Asia Pacific region, and how this might differ from what you see in other parts of the world?

- a. Singapore
 - For Singapore, the RECs market is characterised by low supply and high demand, leading to high prices for RECs relative to other countries.
 - Supply is low due to the island-state's land and resource constraints to build renewable energy infrastructure.
 - To resolve the low supply issue, Singapore Standard, or SS673 was introduced in 2021 to allow Singapore businesses to procure overseas RECs. Our Founder and CEO, Jen Wee, was one of the main contributors to the development of SS673.

b. APAC

- For the APAC region, in general, there are many underdeveloped power and renewable energy markets, where Power Purchase Agreements are not possible as their power markets are not liberalized.
- In these countries, corporates face challenges in procuring renewable energy directly from suppliers and thus, have to rely directly on RECs to meet their renewable energy needs.
- c. We believe that the proliferation of RECs in the emerging economies will mimic the growth of developed economies, with vibrant markets for both electricity and RECs that trade across national boundaries. For example, we are working with many partners in Southeast Asia towards an integrated "ASEAN grid" once power crosses borders, certifications will become necessary instruments of trade.

2. How do you see the market for RECs developing in the years ahead?

- The RECs market is growing very fast in recent times. Over the last few years, the number of RECs issued and retired has doubled each year.
- This is driven by strong concern of climate change and pressures on corporates to reduce their carbon footprint.
- RECs, being factual and "ex-post" (ie only issued after energy is produced), also sidesteps many of the controversies that plague carbon credits.
- Looking forward, at COP28, more than 120 nations pledged to triple the global supply of renewable energy to at least 11,000 GWh. As such, the supply of RECs is expected to grow significantly over next few years.
- On the demand side, all listed companies are now required to calculate and disclose their Scope 1 and 2 emissions, which will now become new KPIs that they have to manage. We believe more and more companies will start to manage their emissions footprint, as well as that of their supply chains, starting with Scope 2.
- Regulators are also starting to implement rules around embedded emissions of products, like Europe's Carbon Border Adjustment Mechanism. We believe fact-based certificates like RECs have a clear and important role to play in the decarbonization and traceability of supply chains.
- Finally, as mentioned earlier, as the percentage of renewables in a grid starts to increase, it would make a lot of sense for national grids to start integrating into regional ones for stability.

3. What do you see as the key roadblocks to the development of effective markets for RECs and how do we resolve these challenges?

• There are three main challenges to the development of effective markets for RECs.

- First education and awareness. Most participants, especially in Asia, are more familiar with carbon credits and simply unaware of this instrument. However, one great thing about our business is that once our clients are educated about the use and merits of RECs, they never go back to carbon credits for their Scope 2 needs. We need more business leaders and KOLs to endorse the use and legitimacy of RECs.
- Second the standardization and implementation of logical rules. GOs (European RECs) have been around for around 2 decades, and there are many lessons we can draw upon. The I-REC standard, in its 10th anniversary, is already the pre-dominant standard in emerging markets, and they are a set of very sensible rules that national regulators can recognize and adopt very quickly, without having to go through another 20 years of experimentation. Clarity and harmonization of rules (especially cross-border) will help accelerate the adoption of this highly versatile instrument, which can also be a very powerful tool for policy makers to achieve specific goals.
- Finally reducing friction in the process. Globally, less than 10% of all installed renewables capacity is registered for RECs issuance. One reason is the lack of awareness mentioned above, but another reason is the friction involved in asset registration. This is where REDEX has played a critical part in helping the RECs Registries digitize and streamline their processes, so that the "tap can be opened". With our API integration with the I-REC Registry, it is now a seamless process to move RECs into our platform for trading.
- We have also aligned with the Registries to enable a shortened way to register small, distributed rooftop solar devices, a first in the world. It is projected that more than half of China's growth in PV assets in the next 5 years will come from rooftops – so the long tail is a very fat one. We are the first to have a breakthrough in monetizing these assets for RECs.

4. What other developments can we expect from REDEX in the coming months?

- REDEX will be expanding into new markets in Latin America and the Middle East later this year, with the help of our Series A investors Aramco Ventures and Fotowatio Renewable Ventures (FRV).
- We recently launched our REConnect mobile app in Singapore, which enables a simplified, DIY registration process for rooftop solar systems. Residential and commercial property rooftop solar asset owners can now monetize their RECs in a simple way. We expect to roll-this out to Asia and the rest of the world in 2024.
- We are also working with a few partners on CBAM-related pilots, showcasing a logical and simple way of attaching RECs to products that will be shipped to Europe with zero Scope 2 emissions.