



# OCBC to help devt of viable green hydrogen ecosystem



**KUCHING:** OCBC Bank (Malaysia) Berhad, a leading financial institution pioneering multiple award-winning sustainable financing solutions, has positioned itself to contribute to the development of green hydrogen, taking cognisance of the challenges faced by the industry which is still in its nascent stage.

OCBC Malaysia head of investment banking and managing director Tan Ai Chin, in an interview with The Borneo Post, highlighted that despite green hydrogen being the missing ingredient in the decarbonisation of hard-to-abate industries, the commercial viability of a holistic green hydrogen ecosystem remains a major hurdle to drive greater adoption of clean energy.

At the same time, a robust demand supported by market-driven pricing which provides greater transparency needs to be established to create liquidity in the green hydrogen market, she noted.

"The current production cost for green hydrogen is significantly higher than that of grey or blue hydrogen.

"Because of the high costs, the issue now is how will demand be able to match up to pay for the cost-based price to meet the required return of the project promoters," she said.

Other challenges faced in promoting green hydrogen energy include the complexities in storage, transportation and the efficiency and capacity of electrolyser production to meet the demand given the multitude of large-scale projects that has been planned all over the world, she added.

"As financiers, we have to look at the entire value chain in the development of green hydrogen to structure a project financing solution.

"Investments into related infrastructure facilities including



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renewable energy plant being a key feedstock for production of green hydrogen, other types of chemical production plant for green hydrogen derivatives such as ammonia and methanol, as well as the pipelines, storage and transportation facilities taking into consideration the highly inflammable nature of hydrogen, are also critical to facilitate a fully integrated solutions to end users."

Tan stressed that holistic infrastructure development, facilitative policy framework from government and creating robust demand ecosystem are vital in the development of green hydrogen value chain to promote economies of scale in production.

"I think learning from the solar, wind and hydro power plant projects, the renewable energy industry went through the same evolution when still at its nascent stage and it takes time for the industry to reach its mature stage before the production costs can go down to make it commercially viable."

She said given the prevailing project risks including lack of visibility on demand, unclear regulation and the supply chain constraint, OCBC Bank noticed that the required capital was not flowing in at the scale needed, which resulted in much lower number of projects having reached commercial operations vis a vis the numerous mega

headlines of such projects being announced by various countries.

"In terms of projects that have been announced so far, most of them are supported via public private partnerships structure whereby the government is there to provide the policies needed and the infrastructure required.

"Some of the government support measures included investment production tax credit and demand side incentives, amongst others.

"The Sarawak government is obviously at the forefront in initiating and facilitating such projects through collaborations and the big mega projects are actually embarked on with reputable and financially strong conglomerates from Japan and South Korea."

For example, Tan listed out the H2ornbill and H2biscus hydrogen projects as being undertaken in partnership between SEDC Energy and a few renowned Japanese and Korean conglomerates.

"We truly admire the efforts taken by the Sarawak government under the astute leadership of Premier Datuk Patinggi Tan Sri Abang Johari Tun Openg to facilitate all these groundbreaking and innovative ways on how to meet a net zero future."

She said Sarawak is blessed with abundant stable natural resources such as water, solar, wind and biomass that could facilitate hydrogen production at a lower cost than many other countries in the region.

Furthermore, Tan said 'boxing' and identifying derisking mechanisms to manage the various risks involved in the development of green hydrogen amongst a group of financiers including export credit agencies, multilateral and development financial institutions and commercial lenders are necessary to facilitate a comprehensive financing package.

Building upon this, she added: "One of the main concerns for the financiers, which involves technology risk, can be effectively mitigated by encouraging direct participation from technology providers as mezzanine/hybrid equity partners."

She said this strategic involvement ensures that they

have a 'skin in the game', ensuring these technology providers are not just paid for the delivery of the equipment but they are paid along the way once the project reaches its completion and commercial operation.

She added that construction of such projects on a turnkey basis by a reputable and creditworthy contractor with a proven track record are also essential to mitigate the project delivery risk.

"I think the role of OCBC Bank is really to leverage on our extensive network to bring all these parties together to form a consortium of lenders to look at financing these projects in a holistic manner.

"So, in a way, for green hydrogen to take off at a large scale and to make it business as usual like what is happening to the solar and wind plants, all components of the value chain need to work together from infrastructure to storage and transportation as well as technological advancements, so that the bottleneck issues can be removed."

Tan also explained financial institutions are aware of their commitment to meet environmental, social and governance (ESG) related requirements and external consultants will have to be brought in to review whether the projects financed fulfil emissions targets and international criteria to advocate for a truly 'carbon free' business.

"Of course, we have regulators governing us and we are also self-conscious to make sure that we are 'Doing Well by Doing Good' as well.

"So, environmental risk is very important and we need to address that, and to ensure that we address and eliminate green-washing risk."

Thus, Tan said OCBC Bank believes the financial industry has a role to play by working closely with all stakeholders for a coordinated climate action approach.

OCBC Bank (Malaysia) Berhad is the exclusive financial institution partner for the Asia Pacific Green Hydrogen Conference and Exhibition 2024, which kicks off today at Borneo Convention Centre Kuching and runs until June 12.