SIEWCast Season 3: Episode 3

Interview with Lim Han Kwang, CEO of Geneco and Deputy CEO of YTL PowerSeraya

Michelle Martin (Money FM 89.3) 00:00

This SIEWCast is brought to you by Singapore International Energy Week and MoneyFM 89.3 in partnership with Saudi Aramco. Welcome to a SIEWCast, I'm Michelle Martin. Today we learn of efforts to diversify Singapore's power mix with a hydrogen-ready combined cycle gas turbine, and how retail customers are being encouraged to make a difference to the environment as easily as they pay their electricity bills.

Singapore International Energy week is an annual platform where energy professionals, policy makers and commentators discuss best practices within the global energy space. In this series, I speak with visionary leaders on the transformative solutions they're helping spearhead.

Today, I speak with Mr. Lim Han Kwang, CEO of Geneco, and Deputy CEO at YTL PowerSeraya. Mr. Lim, welcome to the program, great to have you with us!

Lim Han Kwang (Geneco) 00:52

Hi, Michelle. Nice to be on the air.

Michelle Martin (Money FM 89.3) 00:56

Yes! YTL PowerSeraya has been investing significantly in green solutions. How does this strategy support Singapore's energy transition and also provide more sustainable options to consumers?

Lim Han Kwang (Geneco) 01:10

Yeah, Singapore has actually committed to a net zero target by 2050, and the electricity sector, which actually contributes 40% of the carbon emission, actually aims to achieve this target via our four switches approach: which is natural gas, solar, regional power import, and low carbon alternatives such as hydrogen.

So as YTL PowerSeraya, we are deeply committed to investing in greener solutions, to support the Singapore energy transition roadmap. And our investment in greener solutions, not only supports the Singapore energy transition goal, it also enables us to provide greener energy options for our customers. And in 2023, we have actually committed to invest over \$5 million to install an additional four megawatt peak of solar PV installation at our Pulau Seraya power station rooftop, bringing our total solar PV capacity to 5 megawatt peak. And this additional solar PV system actually can generate about 417 megawatts of power - enough to power about 1,265 four room HDB flats for a month.

And I think earlier this year, we were also awarded by the Energy Market Authority under the first request for proposal, under the centralized process framework, to develop a 600-megawatt hydrogen capable combined cycle gas turbine. As hydrogen does not emit carbon dioxide when it is being

combusted to generate electricity, our 800-million investment in this hydrogen ready combined cycle gas turbine will actually future proof Singapore and enable Singapore to switch to a low carbon alternative when the hydrogen is made available and economically viable. And as part of this SIEW 2024, we will also mark this key milestone by having our groundbreaking ceremony on 23rd of October. This will further reinforce our role in shaping a more sustainable energy landscape in Singapore.

Michelle Martin (Money FM 89.3) 03:10

A lot going on, many plans in the works. In the face of rising sustainability expectations, how is Geneco contributing to Singapore's sustainability goals through your innovative solutions and also your practices?

Lim Han Kwang (Geneco) 03:24

Geneco is actually the retail brand for YTL PowerSeraya, and we are currently the leading residential electricity retailer, serving over 165,000 households. And while we are also serving over 4,000 commercial and industrial customers. At Geneco, similarly, we are committed to driving Singapore's transition to a sustainable energy future by offering innovative and sustainable solutions to encourage our customers to adopt a greener lifestyle.

So we have actually introduced what we call the Power Eco Add-on, Singapore's first and only customisable green add-on that actually allows a customer to purchase even carbon credit or renewable energy certs to actually remove or avoid equivalent amount of carbon emission for their power consumption. And this Power Eco Add-on actually enables four room dwellers to make a tangible and environmental impact starting from as little as only \$1 per month.

So by opting to purchase carbon credit or renewable energy certs, actually, the customer is supporting green projects that can help to remove or even avoid the equivalent amount of carbon emissions for their power consumption. In this way, they are doing their part for the environment in their own way.

And also, additionally, our residential business operation is entirely paperless. We have no paper bills, and all payment must be via electronic means. We aim to replicate this paperless model to serve our small and medium enterprises in the next one to two years. So for Geneco, we'll continue to look into innovative and sustainable solutions to empower our customers in their journey towards a low carbon future.

Michelle Martin (Money FM 89.3) 05:11

Wow, making carbon credits accessible to the retail consumer and also going completely paperless in your operations. Fantastic to hear!

Can you share how Geneco is driving renewable energy adoption and the role some of these initiatives that you have in the works play, including that of renewable energy certificates, or RECs, in terms of supporting Singapore's green plan?

Lim Han Kwang (Geneco) 05:34

Yeah, so actually, in 2021, a survey was done by Accenture and the World Wildlife Fund of Singapore, and they have shown that Singaporeans actually do care for the environment. However, they find that there's a lack of options for them to do so. So I think with that in mind, we have introduced the Power Eco add-on.

As I shared earlier, it's actually Singapore's first and only customizable green add-on for electricity plans. This option actually allows customers to purchase renewable energy certs, as well as carbon credit, to support green projects, to remove or avoid the equivalent amount of carbon emission for their power consumption in a way that is flexible, affordable, and impactful.

Why do we say the Power Eco Add-on is flexible? It's because as the customer, you can choose to cover 25%, 50%, 75% or even 100% of your power consumption. And actually, as a customer, you can always start with less than 100% cover, and then gradually increase your coverage to 100% anytime during your contract period. And Power Eco is also affordable, as I shared earlier, because customers in a typical four room, HDB flat can do so with as little as just \$1 more per month in their bill. So with this Power Eco add-on, I think we not only allow our customers to go green the way they want to do it, we are also providing an additional avenue for green project developers to secure additional revenue via the sale of RECs or carbon credit to improve their project economics.

So with more economically viable green projects being implemented in Singapore, this will definitely support the Singapore Green Plan 2030 and pave the way for Singapore to achieve a net zero emission target by 2050.

Michelle Martin (Money FM 89.3) 07:21

And on that note, what role does technological innovation play in YTL PowerSeraya and Geneco's strategy when it comes to sustainability. And how are you leveraging technology to reduce carbon emissions and also improve energy efficiency?

Lim Han Kwang (Geneco) 07:36

Technological innovation and advancement is a very integral part of our YTL PowerSeraya and Geneco sustainability strategy, because today, many of these green technologies are still nascent and not ready for commercial adoption.

So our new 600-megawatt hydrogen-ready combined cycle gas turbine is actually an example of how we have leveraged on a GE Vernova 9HA.01 H-class gas turbine technology that can operate at higher efficiency and also can burn up to 50% by volume of hydrogen blended with natural gas. And they have a technology pathway to reach 100% in the future.

Actually, technological development and advancement in areas like hydrogen production, and transportation, carbon capture and storage, as well as battery storage solutions, will play a very crucial role in shaping the path we will have to take in the future to reduce our emissions and to achieve our sustainability goal.

So the effects of climate change are becoming increasingly evident. I think with pricing temperature, we are seeing that the weather patterns are changing and disrupting the natural balance. So I believe that achieving net zero is a collective responsibility. And technological innovation will be the key to unlocking the potential of alternative low carbon solutions for the world.

Michelle Martin (Money FM 89.3) 08:58

Truly compelling! How does YTL PowerSeraya and Geneco's sustainability journey align with the theme for SIEW for 2024, which is "A Connected and Sustainable Energy World?"

Lim Han Kwang (Geneco) 09:11

I think the theme about "A Connected and Sustainable Energy World" reflects the urgency for us to modernise our power grid, enhance regional interconnectivity and enable greater cross border power trade.

So at YTL PowerSeraya, we set for ourselves a target of 60:30 which means that we want to reduce our emission by 60% in 2030, compared to our 2010 level. And we have actually embarked on this journey with the deployment of 5-megawatt peaks of solar installation, as well as investing in the construction of this 600-megawatt hydrogen capable combined cycle by the end of 2027.

Natural gas is actually one of the cleanest fossil fuels, and they will continue to be a dominant fuel for Singapore. So in the near-term, YTL will continue to explore initiatives on how we can improve the efficiency of this existing gas-fired plant, as well as the viability of carbon capture. I think YTL PowerSeraya is a wholly owned subsidiary of YTL Power International Berhad, which is listed on the Bursa Malaysia Exchange in Malaysia. So together with our shareholders, I think we are supportive of this, enhancing the regional connectivity to enable cross border power trade, and we are open for collaboration with any likeminded partners, to participate in any power importation projects from Malaysia to Singapore to realise "A Connected and Sustainable Energy World."

Michelle Martin (Money FM 89.3) 10:40

It's a great call of action for our listeners and businesses who are tuning in. This has been a SIEWCast. I'm Michelle Martin in conversation with Mr. Lim Han Kwang. Thank you so much for joining us!

Lim Han Kwang (Geneco) 10:51

Thank you, Michelle.

Michelle Martin (Money FM 89.3) 10:52

This has been a SIEWCast with me, Michelle Martin in conversation with Mr. Lim Han Kwang. He's CEO of Geneco and Deputy CEO at YTL PowerSeraya, as we explore the company's roles in Singapore's energy transition and their contributions to a greener, more sustainable future for us all.

Stay tuned for more great discussions on solutions for a sustainable energy future right here, on the SIEWCast. This SIEWCast is brought to you by Singapore International Energy Week and MoneyFM 89.3 in partnership with Saudi Aramco.