

SIEWCast Episode 2 – EMA - Transcript



Michelle Martin (Money FM 89.3) 00:01

This SIEWCast is brought to you by Singapore International Energy Week and Money FM 89.3, in partnership with ExxonMobil. Welcome to another SIEWCast. I'm your host, Michelle Martin. SIEW, or the Singapore International Energy Week is an annual platform where energy professionals, policymakers and commentators exchange best practices and solutions within the global energy space.

It was back in 2021, when Singapore announced its plan to import up to four gigawatts of low carbon electricity by 2035. Singapore is now one gigawatt away from meeting that target. I'm speaking today with Ngiam Shih Chun, Chief Executive, Energy Market Authority, to find out where Singapore is in ongoing efforts to decarbonise our energy supply.

Ngiam Shih Chun (Energy Market Authority) 00:52

Thank you for having me, Michelle. Well, I would say that this year has been a really exciting year for the Singapore energy system. We started this year with conditional approval for one gigawatt of imports from Cambodia. Conditional approval means that the Energy Market Authority (EMA) thinks that it's commercially viable, technically viable, and it's got the support of the governments to import electricity. Then we followed it up just a couple of weeks ago with conditional approvals to five projects, amounting to two gigawatts of electricity imports from Indonesia. So, as you have mentioned, we are three gigawatts now, in our imports journey –just one gigawatt shy from a four gigawatt target by 2035.

Well, then again, earlier this year, we also put out the expression of interest for ammonia as well. And this is for an end-to-end solution for supply, power generation and bunkering. This will be a key step in our decarbonisation journey. We've got overwhelming interest from companies, and we will be making some announcements about what happened to the expression of interests soon. This year, In a research study done by Nanyang Technological University, we also discovered geothermal potential in Singapore. The research team dug a borehole and found out that the heat profile that borehole match

the academic studies, which means that there's actually geothermal potential in Singapore. So if all these developments materialise over the next few years, our energy landscape will be very different come 2035.

Michelle Martin (Money FM 89.3) 02:10

Can you talk a little bit about the efforts in the area of utilising hydrogen?

Ngiam Shih Chun (Energy Market Authority) 02:15

I think hydrogen is absolutely key in the decarbonisation journey. So, Singapore is alternative energy disadvantaged, we have done quite a bit of solar; we have literally covered almost all our rooftops with solar and we are today one of the most solar dense cities in the entire world. But there's a limit to how much solar we can bring in because of the limited land. So, we are talking about bringing in renewable energy resources from around the region. And that's why we're talking about electricity imports. But there's a limit to how much you can import; we can't import all our energy needs. And that's where hydrogen comes in, because it will enable us to decarbonise our power system, which depends almost wholly on natural gas at this point of time. So, our plan is to use hydrogen, to replace the natural gas in our power plants, and to build new power plants that can burn 100% hydrogen in time to come. And we will also be exploring other low carbon alternatives like geothermal, nuclear power, and other forms of low carbon alternatives that might emerge over time.

Michelle Martin (Money FM 89.3) 03:16

How is Singapore fostering international and regional collaboration?

Ngiam Shih Chun (Energy Market Authority) 03:21

Well, you're absolutely right. You know, the energy transition can't happen if each country operates on its own. It can only happen with regional and international collaboration. Some countries have plenty of renewable energy resources, and some don't, but they have financial resources. And there's a lot of opportunity for countries to work together for mutual benefit. Some countries have also developed further than others, and they have experiences and knowledge to share with others. So, Singapore has done our part in this – we have established the Singapore International Energy Week, a very successful platform for you know, energy leaders and companies to come together to share best practices. We have established workshops for energy leaders from around the region, such as the ASEAN ADB (Asian Development Bank) workshop on project financing for energy, as well as the Singapore-IEA (International Energy Agency) regional trading workshops.

There are also tangible forms of collaboration between the countries. So, the Lao PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP) is a really tangible form of power trading between Laos and Singapore across four ASEAN countries. This is really the first time power trading is taking place across so many ASEAN countries. It's very successful, and it's been going on for some time.

Michelle Martin (Money FM 89.3) 04:39

This SIEWCast is brought to you by Singapore International Energy Week and Money FM 89.3, in partnership with ExxonMobil. I'm speaking with Ngiam Shih Chun, Chief Executive, Energy Market Authority to find out where Singapore is in ongoing efforts to decarbonise our energy supply. How is Singapore partnering with the US?

Ngiam Shih Chun (Energy Market Authority) 05:04

The US and Singapore are close collaborators in the energy sphere. Singapore is the ASEAN coordinator for US collaborations. And we have been working very closely with the US on many different projects and fronts. So, we have been organising joint training programs with the US Department of Energy. We have signed Memorandum of Understanding with the US as well on energy collaboration. This has led to information exchanges, as well as visits between both countries. But importantly, we are embarking on a regional grid infrastructure study under IPEF Indo-Pacific Economic Framework for Prosperity. And this would help to map out the potential for regional cross border energy collaboration and trading. So this is a study which we are collaborating together with the US on. And we are working with other countries as well within ASEAN, to explore the potential for cross border electricity trading within this region.

Michelle Martin (Money FM 89.3) 06:02

So Singapore well on its way to seeing ASEAN's vision for a regional power network.

Ngiam Shih Chun (Energy Market Authority) 06:07

Oh, certainly, I think this is an idea that has come and really, you know, reached its maturity at this point of time. So this is an idea that has been talked about for many years. But I think recently, because of many of the plans for net zero commitments by the ASEAN countries, as well as I think this push towards getting to net zero by companies by individuals as well, that's really made it worthwhile for countries to talk about cross-border linkages, both for electricity trading as well as mutual support. So in the very recent ASEAN ministers of energy meeting in Bali, I think there was almost uniform support across all of the ASEAN ministers for ASEAN power grid.

Singapore is in a position where we have a high demand for zero carbon electricity. And there are countries around this region, which have plenty of resources, in terms of solar, in terms of wind or hydro, that can be exported to Singapore. This will help both Singapore decarbonise our power system, and also develop the renewable energy resources in the source countries. So not all that power will be sent to Singapore, it will also be developed for their own domestic needs as well. So this would help to improve the renewable energy resources, as well as develop production and supply chains of solar panels, as well as battery, energy storage solutions in other countries

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And produce a lot of jobs along the way, as well.

Ngiam Shih Chun (Energy Market Authority) 07:40

And that's the basis of the green economy. So plenty of potential for the entire region to grow, as we decarbonise together.

Michelle Martin (Money FM 89.3) 07:48

I want to pick up on a point you mentioned a while ago, and that is the Singapore International Energy Week or SIEW, what are the key highlights to expect at SIEW 2023?

Ngiam Shih Chun (Energy Market Authority) 07:58

Well, I think we'll all be looking forward to the SIEW keynote speeches. That's where we normally announce some of the key developments in the energy sector, as well as our plans for the years to come. So there will be some interesting announcements. I can't say too much now because I'll be giving too much away. But please tune in to SIEW; please attend as well. We will certainly be talking about plans to further decarbonise the energy sector, while ensuring energy security.

Michelle Martin (Money FM 89.3) 08:25

We've been discussing Singapore's strategies to enhance pathways for Asia and the globe for effective energy transition. Strategies which range from exploring low carbon alternatives to large scale power trading imports. I've been speaking with Mr Ngiam Shih Chun, Chief Executive of the Energy Market Authority. Tune in next time for another discussion on Energy Transitions Towards a Net Zero World. Until the next SIEWCast, I'm Michelle Martin.

Michelle Martin (Money FM 89.3) 08:54

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