



In collaboration with



In partnership with

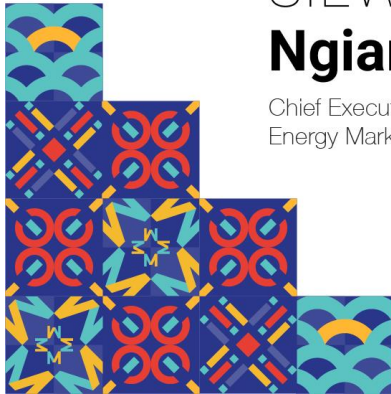


SIEWCast w/ **Ngiam Shih Chun**

Chief Executive,
Energy Market Authority of Singapore



Episode / 01



SPEAKERS

Ngiam Shih Chun, Chief Executive, Energy Market Authority, Rachel Kelly (Money.FM 89.3)

Rachel Kelly (Money.FM 89.3) 00:03

This new cast is brought to you by Singapore International Energy week and MoneyFM 89.3, in partnership with ExxonMobil. SIEW is an annual platform for energy professionals, policymakers and commentators to share best practices and solutions within the global energy space. Singapore aims to reach net zero by or around mid century, and as the city state commits to doing its part to tackle climate change. The energy sector plays a key role in reaching the country's targets. The energy market authority commissioned and released the energy 2050 committee report recently, which affirms the net zero feasibility for Singapore's power sector by 2050. And while there will be opportunities, there will also be challenges on the road ahead. To help shed some light on Singapore's future energy journey. We're joined by Mr. Ngiam Shih Chun, Chief Executive of the Energy Market Authority. Thank you so much for joining us today.

Ngiam Shih Chun, Chief Executive, Energy Market Authority 01:01

Thank you. Thank you very much for having me here.

Rachel Kelly (Money.FM 89.3) 01:03

Wonderful to have you with us. Now, the energy market authority has commissioned and released the energy 2050 committee report recently, which affirms the net zero feasibility for Singapore's power sector by 2050. So we hope you can help shed some light on that for us. What is Singapore's vision for charting the energy transition to 2050?

Ngiam Shih Chun, Chief Executive, Energy Market Authority 01:23

Singapore's ambition is to achieve net zero by or around mid century. And Singapore energy sector plays a very key role in this because some 40% of our emissions come from the power sector. So it's absolutely critical to the power sector decarbonises by 2050. The energy 2050 committee report said that it was technically feasible to achieve net zero by 2050 for the power sector. But one of the key things is that we have to bear in mind the energy trilemma, even as we decarbonise the power sector. So even if we bring in cleaner energy sources, we are going to ensure that it's stable and secure, and the cost of electricity remains affordable for Singaporeans.

Rachel Kelly (Money.FM 89.3) 02:04

That's key isn't it, cost. So with such a significant proportion coming from the energy sector, what is EMA doing to help Singapore achieve these goals?

Ngiam Shih Chun, Chief Executive, Energy Market Authority 02:14

So the energy market authority or EMA is using the four switches. And these are the natural gas, solar energy, regional power grids and low carbon alternatives. So first, on natural gas, it's the mainstay of our power system, some 95% of all the rest is generated from natural gas. It is the cleanest fossil fuel and a stable and secure supply of energy. So that's absolutely critical for energy transition. The second switch is solar energy. This is our most viable form of renewable energy, we don't have much wind or hydro or geothermal. And you know we have plenty of sun. So that's one of the key things that we are pressing very hard on, we are well on track to achieve our target of 1.5 gigawatt peak by 2025. But given our land constraints, and you know, the extensive cloud cover that we have, there are real limits to how much solar we can have. So even by 2050, with deployment of solar extensively, and the latest technology, not more than 10% of our energy mix can come from solar. So we have to look beyond our borders, and our neighboring countries have extensive renewable energy resources, we can work with our neighboring countries to develop that renewable energy resource. And to bring the share of that back to Singapore to help us decarbonise our power system. So our goal is to bring in 30% of electricity from the regional countries by 2035. That's about four gigawatts of electricity by 2035. And we are working with our partners to develop the technical and regulatory frameworks at this point of time. One example is the Laos, Thailand, Malaysia, Singapore power integration project. That's 100 megawatts of clean hydro from Laos. And that transited through Thailand, Malaysia, and finally to Singapore, that started in June this year. So that's really the start of something electricity trading projects that we're hoping to achieve. It's really the first multilateral project that spans four ASEAN member states, and is Singapore's first renewable energy imports. The first of many more, I hope.

Rachel Kelly (Money.FM 89.3) 04:25

We're speaking with Mr. Ngiam Shih Chun, Chief Executive of the energy market authority as part of a special series of SIEWCast brought to you by Singapore International Energy week, Money FM 89.3 in partnership with ExxonMobil. I'm sure with all of these projects in the pipeline, there are challenges ahead. What are some of the key challenges when it comes to reaching these targets for Singapore?

Ngiam Shih Chun, Chief Executive, Energy Market Authority 04:50

I think one of the key challenges again goes back to the energy trilemma. So even as we bring in all these cleaner energy sources, we have to ensure that Energy Security is not affected, and costs remain affordable. So one example is solar energy. Costs have come down, production costs have come down across the world, and it's commercially viable at this point in time. However, because of the intermittent energy that it produces, as cloud cover passes through solar panels, the power could drop suddenly. It's necessary for the power system to ensure that remains stable. We need energy storage solutions for that, that comes with a cost. So we've got to balance the overall cost of the system, while ensuring that there is a clean energy supply and stable energy supply as well. The other challenge, of course, is manpower and talent. As with every other sector, this is a new area that we're moving into, we've got to make sure you've got the right people, the right skills, the technologies, they're bringing in new areas, we require people with the right skill sets and talent. And to that end, we are working with institutes of higher learning, the companies and unions to help develop the skills to attract and retain this talent within the sector.

Rachel Kelly (Money.FM 89.3) 06:07

Okay, yeah. So that said, I mean, while there were challenges, it sounds like there are also a lot of opportunities on the road ahead.

Ngiam Shih Chun, Chief Executive, Energy Market Authority 06:16

Oh certainly. I mean, all these new technologies and new energy sources will be new areas of growth for our companies. We do expect new businesses to be set up that will enable us to tap on these new energy sources. We do expect companies to work closely with the institutes of higher learning to bring in technologies, we see a lot of potential in terms of upgrading our electricity power grid, to enable that to be smarter and cleaner over time.

Rachel Kelly (Money.FM 89.3) 06:44

And you mentioned a number of international projects to bring energy here to Singapore, perhaps you can share with us more about the importance of international cooperation to reach our shared goal of reducing emissions.

Ngiam Shih Chun, Chief Executive, Energy Market Authority 06:57

Certainly, climate change is a global challenge. No single country can achieve its decarbonisation goals on its own. Some countries have plenty of renewable energy resources, others have the technology and others have financing. So we've got to all work together to solve global problems and to stay on the decarbonisation pathway. For Singapore, we'll be working closely with our partners, both in capability development, so training, and bring up upskilling various people across the region that will develop the renewable energy sector, and we will also be working with our bilateral partners on potential renewable energy trading projects, and to build up the ASEAN Power Grid project as well.

Rachel Kelly (Money.FM 89.3) 07:39

Now, you mentioned an important quote during your speech to launch Singapore International Energy Week this year and you said that according to the International Energy Agency, IEA, the definition of energy security is becoming broader and more dynamic as compared to the past. But looking forward,

let's talk about the relevance of this year's Singapore International Energy Week theme, a resilient and sustainable energy future sustainable, I think being a very key word there. What's the relevance - talk to us about why this theme, this year?

Ngiam Shih Chun, Chief Executive, Energy Market Authority 08:10

Well, the theme of SIEW, the Singapore International Energy Week this year is a sustainable and resilient energy future. And that reflects, I think, the greater impetus now as countries are accelerating towards a green energy future. So following from COP26 last year, many countries are increasing and accelerating their plans to decarbonise their economies. At the same time, countries are grappling with the energy crisis that's ongoing. So at SIEW this year we are going to have dialogues about how countries can work together to achieve cleaner, more sustainable, and secure and resilient energy sources during this energy transition, while balancing the energy trilemma. We'll also discuss how policies, technology, and financing can come together to help accelerate this pathway towards a decarbonised future, as well as the economic opportunities that companies would have during this energy transition.

Rachel Kelly (Money.FM 89.3) 09:12

So what's the key highlight for you for this year's SIEW? What are you looking forward to most?

Ngiam Shih Chun, Chief Executive, Energy Market Authority 09:17

Well, this year will be the 15th anniversary of the Singapore International Energy Week. It's a real milestone, we've come a very long way since then, understand that you were there the very first Singapore International Energy Week as well. And I think over the years, SIEW has witnessed many of the key transitions and changes - both in the global energy landscape as well as the Singapore energy landscape. And this year SIEW will be no different. We will again be celebrating many of our achievements, as well as the exciting plans that we have for the energy future coming up

Rachel Kelly (Money.FM 89.3) 09:49

For the first time as well, you're having the inaugural Singapore IEA ministerial roundtable titled energy security in a low carbon world. A lot to look forward to this year.

Ngiam Shih Chun, Chief Executive, Energy Market Authority 09:58

Yes. So the Singapore-IEA ministerial forum will be a key opportunity for decision makers from around the world to come together to talk about some of the key challenges that they face and to share these plans and to develop ideas that enable us to work together towards a greener and cleaner future.

Rachel Kelly (Money.FM 89.3) 10:17

Wonderful. We're very much looking forward to this year's event. Thank you so much for taking the time to speak with me today.

Ngiam Shih Chun, Chief Executive, Energy Market Authority 10:21

Thank you very much, Rachel.

Rachel Kelly (Money.FM 89.3) 10:22

We've been speaking with Mr. Ngiam Shih Chun, Chief Executive of the Energy Market Authority. This SIEWCast is brought to you by Singapore International Energy Week and Money FM in partnership with ExxonMobil.