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Mr Edwin Khew, Chairman,
Sustainable Energy Association of Singapore;

Mr Michael Dreyer,
Vice President Asia Pacific, Koelnmesse;

Distinguished guests;

Ladies and gentlemen,

A very good morning.

Introduction

1 I am pleased to be here today at the opening of the Clean Energy Expo Asia 2010, which is part of the Singapore International Energy Week.

Opportunities in Climate Change

2 Energy has been and will continue to be a key driver of our modern global economy.

Turning the decade, we are faced with multiple challenges in meeting this need such as dwindling energy supplies and surging global energy demand in tandem with economic development and rising aspirations.

3 Complicating matters further, we have to balance our thirst for energy with the need to avert serious impacts on the global climate.

Just this year, we have witnessed several instances of extreme weather events occurring worldwide, from heavy rains in various parts of Asia to the heat-wave in Russia.

Scientists are warning us that the occurrence of such extreme weather events will become more frequent and climate change is a key contributing factor.

As the international community grapples with the challenge of mitigating carbon emissions to avert the worst impacts of climate change, there will be a growing need to increase deployment of clean energy and energy efficiency technologies to meet global energy demand.

4 On a more positive note, countries are recognising that investing in sustainable development practices prepares them for a carbon-constrained future and opens up new economic opportunities.

A recent HSBC report estimates that the market for low-carbon and energy efficient

technologies is about US\$740 billion currently, and expects the market to triple to US\$2.2 trillion by 2020.

Even in their most bearish scenario, the market is expected to at least double to US\$1.5 trillion by 2020.

5 It is timely to hold the Clean Energy Asia Expo this year as it builds on the momentum of last year's inaugural event.

This Expo brings together leading international and regional experts from the public and private sectors to discuss opportunities in clean energy, energy efficiency, and sustainable development in the Asia-Pacific.

I am encouraged that the number of exhibitors in the fair has also doubled, from 71 last year to over 150 exhibitors this year.

I am confident that the Expo will help to catalyse investments in clean energy and energy efficiency, and thus put Asia-Pacific economies on a more sustainable pathway.

Singapore's Response to the Global Energy Challenge

6 Singapore's geographic location and small size have placed severe constraints on the use of alternative energy.

We do not have large tracts of land for solar or wind farms, nor do we have access to geothermal or hydropower. We are entirely dependent on fuel imports for powering our economy.

Improving energy efficiency is thus our key strategy towards climate change mitigation and sustainable development.

Being energy efficient also improves air quality, reduces energy costs for consumers and companies, and enhances economic competitiveness.

By 2030, our goal is to reduce our energy intensity (per dollar GDP) by 35% from 2005 levels and we will achieve this target through an optimal mix of measures including standards, incentives and education.

7 However, despite our constraints, we are not turning a blind eye to the clean energy sector. In fact, we view the Clean Energy industry as a strategic growth area for Singapore.

Earlier this year, the Singapore Economic Strategies Committee recommended that energy research, development, and demonstration, or energy RD&D, be made a national priority.

The Committee also recommended that Singapore should aim to have 5% of peak

electricity demand supplied from renewable energy sources by 2020.

8 In this regard, Singapore has allocated some \$350 million for initiatives in clean energy, with the aim of growing the share of Singapore's GDP from the Clean Energy sector to S\$1.7 billion and to generate 7000 jobs by 2015 .

Apart from creating higher value activities and quality jobs, such research activities will lay the foundations for Singapore's transformation towards a smart energy economy, enhance energy security and contribute towards the continued growth and development of Singapore in a more sustainable manner.

9 Singapore's first major investment in energy research, development, and deployment was in 2008, with the establishment of the Solar Energy Research Institute of Singapore, or SERIS in short.

SERIS focuses on industry-oriented research in novel solar technologies, as well as customising existing solar technologies to better suit tropical regions.

Through research collaborations with industry leaders such as the Renewable Energy Corporation and Trina Solar, SERIS is developing cutting-edge solutions in the field of solar energy conversion.

10 In June this year, the Energy Research Institute at the Nanyang Technological University was opened.

The S\$200 million institute will be staffed by 250 research scientists and engineers, with a broad ambit emphasising research areas that have strong industry relevance and commercialisation potential.

These include energy storage, wind and marine renewable energy technologies, green and smart buildings, and fuel cells.

11 Singapore also recently launched the National Innovation Challenge in September.

The Challenge, which has endorsed funding of S\$1 billion over the next 5 years, seeks to harness the multi-disciplinary research capabilities residing in Singapore to develop impactful and innovative solutions to the large and complex challenges facing Singapore.

These challenges include energy resilience, environmental sustainability, and urban systems. The first National Innovation Challenge is "Energy Resilience for Sustainable Growth", which aims to develop cost-effective energy solutions that will be ready for deployment within the next 20 years.

These solutions will help Singapore improve its energy efficiency, reduce its carbon emissions, and increase energy options.

12 Our efforts and investments in developing a robust clean energy ecosystem are paying off.

Recognising Singapore's expertise in semiconductor technology, strong support for manpower development, commitment to research and development, and easy access to emerging markets, the Renewable Energy Corporation chose Singapore from over 200 sites to develop one of the world's largest integrated solar manufacturing plants.

This S\$2.6 billion facility will be officially opened by Prime Minister Lee Hsien Loong tomorrow, on the 3rd of November.

Urban Solutions- Singapore as a Living Lab

13 These various initiatives complement our broader aim to position Singapore as a reference city for the development and demonstration of sustainable urban solutions.

More than half of the world's population are now city-dwellers and this trend is swiftly rising.

By 2025, we expect 16 out of 27 megacities in the world to be in Asia.

14 With global urbanisation and its associated challenges, Singapore hopes to play a role in helping other cities to overcome the challenges of resource constraints and sustainable development.

Through close collaboration between our government agencies and companies, we are positioning Singapore as a Living Laboratory where companies can create, demonstrate and commercialise cutting-edge urban solutions in areas like clean technologies, green buildings, smart grids, and clean transportation before scaling up for the rest of the world.

Conclusion

15 In conclusion, the development and deployment of clean energy is essential if the world is to address the serious threat of climate change.

We are at the threshold of a significant opportunity for companies and countries to take a leading role in the clean energy sector.

Singapore, within our own constraints, is happy to be a part of the ongoing search for pragmatic and workable solutions to meet the global energy challenge.

16 I wish you all a productive conference ahead.

Thank you.

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