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Distinguished guests

Ladies and Gentlemen

Introduction

A very good evening to everyone. It is a great honour for me to be invited back by NTU to this year's Singapore Sustainability Symposium. NTU has set its sights on making sustainability one of the defining characteristics of the university, which is both a bold and a noble objective that my ministry naturally, fully supports. On one front, its aspiration is to make NTU the greenest university campus in the world. On another, initiatives like cutting edge research work, which the NTU President has mentioned, research work particularly in water and environment, as well as initiatives like this symposium will make NTU a research and thought leader in the field.

2. NTU's aspirations fit in very well with the positioning that Singapore as a country is also building itself towards. Why is this so? What are the reasons that Singapore wants to be a leader in sustainability? Let me share 3 key reasons with you.

3. Firstly, it is because we had the good fortune that one of the foremost thinkers on environmental sustainability was our founding Prime Minister, Mr Lee Kuan Yew, and we are building on the strong foundation of values that he laid down. With the reflections that followed events 3 weeks ago still fresh in our minds, we need no reminder that it was Mr Lee Kuan Yew who insisted on a clean and green Singapore 50 years ago, way before being green was fashionable in the world. Among many other things, it was also he who moved away from coal fired power plants to clean up the air and pushed hard to clean up the then really filthy waters of our major waterways. It was he who planted trees and ensured that old parks were protected and new ones built. Of course, Mr Lee did not pursue being green as an ideology or as a dogma. He did it because he saw the great value in it - political, economic and social – to being clean and green, and was prepared to pay a price in the short term to pursue it. So, first and foremost, Singapore aims to be sustainable because it is an integral part of our identity.

4. Secondly, Singapore strives for sustainability because we are a small low-lying island with no natural resources and vulnerable to climate change; in other words, we see no better choice, perhaps even no other choice. There is only one city of less than 800 square kilometres. If any part of Singapore is polluted, all Singaporeans will suffer. If any part of Singapore over-consumes, we will suffer the consequences everywhere. If the climate changes, especially if it gets warm and the sea levels rise, no part of Singapore will be able to carry on life as per normal.

5. Of course, we could throw up our hands and say that there is little difference we as a tiny little consumer of resource, can do about global problems like climate change, and perhaps even demand that others solve the problem, but that would not be like the Singaporean action-oriented way that we approach things. We are used to believing that no one owes us a living, so we have to make our own way as best we can.

6. Thirdly, Singapore is moving towards sustainability because we believe we will reap the rewards for doing so. In other words, we believe that there is a virtuous cycle between sustainability and economic growth. We believe this because we have experienced it over the last 50 years as we moved from Third World to First. As our quality of life has gone up, more investments have come in because it reinforces business confidence and makes it a choice location for foreign businessmen and executives. This pathway is however, not an easy one to forge, as there are many more cities where economic growth comes at a price of compromising environmental performance and quality of life for its inhabitants. I think this pathway is the governance magic and Mr Peter Ho is the expert and you can ask him during the panel discussion. We believe that Singapore can and will continue to be different, and that we can have our cake and eat it too!

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Overview of the Sustainable Singapore Blueprint

7. Let me now move on to talk about the Sustainable Singapore Blueprint or SSB for short. My Ministry published the first edition of the SSB in 2009 to chart our strategies for sustainable growth. It was our first attempt to bring together everything that our government was doing to make Singapore environmentally friendly and resource efficient.

8. The 2009 SSB outlined plans for a “Lively and Liveable” Singapore, one that Singaporeans love and are proud to call home. SSB 2009 set out targets for 2030 and recommendations to build and maintain a quality living environment, and to ensure that we make efficient use of our resources. The areas covered in the blueprint at that time, included energy, water, waste management, air quality, parks and waterways. We have made good progress towards these targets in the 5 years since then.

9. At the same time, our city has become denser and land constraints have become more pressing. The world’s understanding of our vulnerability to climate change has also advanced. Hence when we decided to work on the latest SSB, we knew that the coverage has to be even wider and the measures even more holistic. In particular, we would have to integrate the economic dimensions more closely and make our approach more encompassing. We also aimed to involve many more people outside of government in its formulation, especially in terms of its vision and aspirations. The result is SSB 2015.

10. PM Lee Hsien Loong launched SSB 2015 in November last year. This 2015 edition outlines our 3-part national vision for “A Liveable and Endearing Home”, “A Vibrant and Sustainable City” and “An Active and Gracious Community”. To achieve this vision, we developed 5 themes that we believed that Singaporeans could identify with.

11. I will just briefly run through 3 of these key themes in the remainder of my speech.

“Eco-smart” Endearing Towns

12. Let me start with our theme of building “eco-smart” endearing towns, where our homes will be smart and green. Why we want our towns to be eco-smart is self-evident, but beyond that we want our towns to be endearing to its residents, so they will not just be cold and efficient, but also warm and engaging. We aim to inject sustainability into the general environment of towns, into the design of every precinct and into every individual home.

13. Future towns built by our development agency, HDB will be designed and built with sustainability in mind, such as by minimising the heat island effect, having treatment that promotes air flow and natural ventilation, and greenery that keeps temperatures as low as possible. At the precinct level, there will be solar panels to power the common facilities and rainwater harvesting systems in order to recover water for general washing.

There will also be other sustainable features in every block, like lifts which regenerate energy from their motion, and LED lighting with motion sensors. Inside the home, there will be energy and water efficient appliances, and smart meters to manage resources better.

14. For existing towns, the HDB GreenPrint programme being applied to Yuhua in Jurong will become the prototype for how older towns can also be made eco-smart and endearing. While some design features cannot be retrofitted, many of the other features can. By providing such a living environment, we want to encourage all Singaporeans to adopt the “eco-smart” lifestyle – where living in harmony with and caring for the environment is the natural thing to do.

Towards a Zero Waste Nation

15. Let me move next to the theme of becoming a Zero Waste Nation. Waste management is an ongoing challenge for Singapore. Becoming a “zero waste nation” is a tall order because we generate a lot of waste and continue to do so at an unbelievable rate. Last year, we generated about 7.5 million tonnes of waste, this is after the removal of recycled waste, which is 50 percent more than 10 years ago. This trend is placing exacting demands on our waste infrastructure and limited land. Already, we have to expand our incineration capacity with one new incineration plant by 2018 and another Integrated Waste Management Facility (IWMF) beyond 2020. If this trend continues, our only landfill, which is Semakau Landfill, will run out of space in 20 years’ time.

16. Under the SSB 2015, we are aiming to revitalise our national recycling efforts to attain a national recycling rate of 70 percent and a domestic recycling rate of 30 percent by 2030. Currently, about 60 percent of waste generated in Singapore is recycled and the remainder is either incinerated at the waste-to-energy plants or landfilled directly.

17. To become a Zero Waste Nation, we are working towards achieving a Singapore where no food or material is wasted and everything is reused and recycled wherever feasible. To make this happen, we are improving recycling infrastructure with a view to changing behaviour and adopting a more targeted approach towards tackling waste streams with low recycling rates.

18. HDB has already announced that it will put recycling chutes into every new HDB block and pneumatic waste conveyance systems into larger precinct developments. We are discussing with private developers how to do the same for all private residential projects. As for waste streams, several are being targeted. One of the most immediate is electronic-waste. As a first step, NEA is forming a national voluntary e-waste recycling partnership programme that will bring together stakeholders from the entire value chain, from producers to retailers to recyclers, to raise awareness and improve the recycling infrastructure.

19. Food waste is also another waste stream that we are aiming to tackle more immediately. We estimate that about 10 percent of all waste generated is food waste and that less than 15 percent of food waste is recycled. If there is interest in this topic, we can take it up during the panel discussion.

A Leading Green Economy

20. The last theme that I want to share a little bit about is our quest to be a Leading Green Economy. By that we mean that we want not only to have a dynamic green sector in our economy, but also that every part of our economy should become progressively greener. We want to set the example not just in the first but also the second. In terms of the green sector, we hope to make Singapore a test-bed for smart and sustainable urban solutions. These help make our city greener which is highly desirable in its own right, but the expertise can also be profitably shared with other cities in the region and beyond. The Government is collaborating with the private sector and research institutions to raise our capabilities in domains such as water, energy, mobility and other urban solutions. We aim to make a virtue out of our constraints, as what we have been doing for water.

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21. Since 2006, the National Research Foundation has committed \$470 million to discover innovative water solutions for Singapore and to catalyse the development of the water industry. Several technology and manpower development programmes have been established by this platform, including the \$185 million Incentive for Research and Innovation Scheme which supports basic and applied research in areas such as seawater desalination and membrane efficiency. As a result of these programmes, Singapore is recognised today as a global leader in water R&D (which NTU also plays a significant part in), and the industry that is built around it is growing. Besides water, we are also building other industry clusters centred on clean technologies, increasing solar power adoption, investing in environmental research and supporting test beds to better position ourselves in all these green sectors.

22. In terms of greening the rest of our economy, we have made a strong start with buildings. We have the world's first sustainability standard for buildings in the tropics and our target is to have 80% of our buildings become green buildings by 2030 from 25% today. We are also aiming for a green port, green transport and of course green manufacturing. We are investing research funds in these areas, the biggest being the \$50+m in the green building innovation fund.

Conclusion

23. The Sustainable Singapore Blueprint sets out a vision that was developed from the ground up. It is also clear that this vision is not one that the Government can achieve on its own. For it to be realised, positive behavioural change must reach to every corner of Singapore. This vision requires many of us to work together to bring it to fruition – it needs an “Active and Gracious Community”, itself one of the key themes of the SSB.

24. Stakeholders and contributors such as social scientists, architects, engineers and entrepreneurs will play an important part in this work. Discussions at the symposium can therefore make an important contribution. Our collective wisdom and experiences will bring us closer towards our goals we set out. I look forward to a fruitful and meaningful discussion with all of you. Thank you.

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