

Excellencies,

Ladies and Gentlemen,

Introduction

Good afternoon. This lunch celebrates our successes in the Year Towards Zero Waste. I would like to say a few words of thanks to everyone here today.

2 2019 has been an eventful year for sustainability and climate change. Globally, we witnessed a strong push for ambitious climate action at the UN Secretary-General's Climate Action Summit, and from ground-up movements across the world. At home, PM Lee set out Singapore's approach to understand, mitigate, and adapt to climate change at the National Day Rally, and at the UN Climate Action Summit the month after. Our youth also turned out for a climate rally to express their concern about climate change. Around the same time, we launched Singapore's inaugural Zero Waste Masterplan and enacted the Resource Sustainability Act, two key pillars to build a more sustainable and waste-free Singapore.

A Sustainable Future Demands Climate Action Today

3 Climate change is the defining long-term challenge which governments and societies all over the world must tackle today. Time is running out. Just this month, over 11,000 scientists declared that the world is in a "climate emergency". This is not an abstract statement. Bushfires have been ravaging New South Wales, causing human and wildlife casualties, and widespread property loss. Two weeks ago, Venice suffered its worst flooding in over 50 years, costing upwards of a billion Euros, not to mention damage to historic landmarks.

4 Singapore, too, is not spared from the impacts of climate change. We are already feeling the heat. Singapore has been warming at twice the average global rate; this year saw the hottest and driest August and September months on record. But we have also had record-breaking rainfall, such as on 8 January last year, when half of January's average rainfall fell in 4 hours. The impacts of climate change will only worsen in our lifetime. Some, like sea level rise, have already taken on a life of their own, and cannot be reversed in the foreseeable future even if the world completely stopped emitting greenhouse gases today.

5 The Singapore Government is working hard to lay a strong foundation to give future generations adequate resources and capabilities to tackle climate change. We are proud to have hosted the Scoping Meeting for the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) Synthesis Report last month. The AR6, which will be published in 2022, will guide global policy-making on climate change for the next decade. The new Climate Science Research Programme Office, to be set up under the Centre for Climate Research Singapore, will build up critical climate science capabilities across our local research landscape. And as PM Lee announced, we are embarking on plans to strengthen our coastal defences over many decades to protect Singapore against the rising seas.

6 We are pushing hard on climate mitigation. Recently, the Government doubled our solar deployment target, to at least 2 gigawatt peak by 2030. That will make up about 10 per cent of our peak daily electricity demand today. We are the first country in Southeast Asia to introduce a carbon tax, with no exemptions for any sector. We will spend more than the estimated \$1 billion in carbon tax revenues collected in the first five years, to help companies invest in energy- and carbon-efficient technologies.

7 We must improve our industrial energy efficiency to be on par with leading countries. For example, about 70 per cent of chilled water systems in industrial facilities systems today are not efficiently optimised. **Therefore, starting next year, NEA will set minimum energy efficiency standards (MEES) for chilled water systems in industrial facilities.** MEES will introduce baseline standards to help companies reduce their energy consumption by an estimated 245 gigawatt hours. This can help them save about \$37 million in energy costs a year by 2025, and avoid 100,000 tonnes of carbon emissions annually, equivalent to taking more than 21,000 cars off the road.

8 Singapore's efforts alone are not enough. The global community must reduce emissions to avert the worst impacts of climate change. I will be attending the UN Climate Conference or COP-25 in Madrid soon, and will bring a message on the need for strong and timely climate action, and signal Singapore's readiness to continue working with other countries to keep up the global momentum.

Zero Waste and Circular Economy a Key Pillar of Climate Action

9 Climate change demands a fundamental shift in what we do today. Everything we produce, consume and dispose of has an impact on our environment and climate. The 'take-make-throw' economy is unsustainable in an increasingly resource- and carbon-constrained world. But this dilemma also presents an opportunity to rethink how we deal with waste, and forge new paths for growth.

10 To produce and consume sustainably, we need to adopt a circular economy approach, where materials are retained and reused in the value chain for as long as possible. This complements and supports our climate agenda. Extracting fewer raw materials from the ground, designing products that last, and repurposing our waste all help to reduce emissions. This was why we designated 2019 as Singapore's Year Towards Zero Waste, reflecting our ambition to design waste and wastefulness out of our economy.

11 Singapore's Zero Waste Masterplan charts our strategies towards this future. We have set an ambitious target to reduce the amount of waste sent to the Semakau landfill by 30 per cent over the next 10 years. The Resource Sustainability Act supports the Masterplan, by providing the legislative framework to better manage our three priority waste streams of e-waste, packaging waste including plastics, and food waste.

12 Through science and technology, we have found a way to convert residue from waste incineration into useful construction material, which we call NEWSand. Like NEWater, NEWSand is born out of our drive to overcome constraint, and to create a precious resource from waste. NEWSand will help Singapore to close our waste loop, and extend the lifespan of Semakau. We have already developed provisional environmental standards, and tested possible uses for NEWSand in the lab. These standards are more comprehensive than those of other countries, given our unique circumstances as one of the few countries in the world to harvest urban stormwater on a large scale for consumption. Our scientists and engineers are being challenged to break new ground.

13 We will soon begin a field trial to assess the real-life performance of possible NEWSand materials. **I am happy to announce that NEA has awarded the field trial tender to 3 companies – Zerowaste Asia, Inashco and REMEX. Field trials will begin in the middle of next year along a section of Tanah Merah Coast Road.**

14 Another form of NEWSand is developed from “slag”, the by-product of the gasification of solid waste. **This form of NEWSand has already been used to construct a footpath at Our Tampines Hub. We will also be using it to pave a footpath right in front of the Environment Building along Scotts Road next year.**

15 We are looking at many more uses for NEWSand, including making benches! Just outside this banquet hall, you will see a 3D-printed bench made from NEWSand. It was fabricated by a Singapore company, Pan-United Corporation. We have the supply. We need your innovation. I encourage companies to work with us to create beauty from ashes, and make environmentally-sustainable and beautiful products with NEWSand.

16 The circular economy approach will open new frontiers for economic growth, even as we strengthen our climate and resource resilience. Take e-waste for example. Last month, TES Singapore announced a \$25 million investment to develop two facilities, one locally and another in France, to recycle lithium-ion batteries using proprietary technology. Apart from creating economic value for Singapore and solutions that we can export to the rest of the world, we also are creating higher-value jobs. By 2025, we expect about 30,000 people to benefit from transformation efforts in the Environmental Services industry, through skills upgrading and technology adoption.

Everyone Has to Take Action and Work Together

17 The Government can make the right policies, but we need the strong partnership of all stakeholders, including our partners here today, to take climate action and work together. This is a whole-of-nation effort.

18 **As the driver of economic growth, the private sector is key in our transition to a sustainable future.** Opportunities abound for low-carbon growth, today and in the long term.

19 One good example is Pan Pacific Hotels Group’s sustainability efforts, in particular, their participation in NEA’s “Towards Zero Waste Premises” innovation call. **The redeveloped Pan Pacific Orchard will reduce single-use plastics and strive to be zero-waste when it is ready in 2021.** Other new green initiatives, including the use of smart sensors in its Guestroom Energy Management System to improve energy efficiency and the use of a Food Waste Management System to reduce food waste, will also be introduced.

20 On 31 October, NEA and F&N Foods, supported by NTUC FairPrice, launched the “Recycle N Save” programme, which will place a total of 50 smart Reverse Vending Machines (RVMs) across Singapore by March 2020. **The response has been overwhelmingly positive. Since the launch of the first 10 RVMs, around 1,000 plastic drink bottles and aluminium drink cans have been collected from each machine daily!**

21 I am also heartened by NTUC and BreadTalk’s initiatives to trial a plastic bag charge to reduce excessive use of disposables. I encourage other supermarkets and retailers to follow suit.

22 **The financial sector plays a pivotal role in directing capital flows to sustainable projects, to meet the burgeoning demand for sustainable solutions.** MEWR is working with the Monetary Authority of Singapore (MAS) to support the growth of the sustainable financing industry.

23 The Green Investments Programme recently launched by MAS will place up to US\$2 billion in public market investment strategies with a strong green focus, to foster the growth

of green financing capabilities in Singapore. We will also harness the power of Fintech to spur the development of innovative green finance solutions. I urge financial institutions and businesses to tap these opportunities to power the next era of sustainable growth.

24 Civil society and businesses have a crucial role to play in educating the public and galvanising collective action. I am grateful for our 3P partners' strong support throughout our Year Towards Zero Waste.

25 In June, 59 partners supported the launch of NEA's "Say YES to Waste Less" campaign, covering more than 1,600 premises, to reach out to consumers at key touchpoints and encourage them to reduce the use of disposables.

26 I am heartened by the energy and passion of the community. **We set up the 'Towards Zero Waste Grant' this year, and it has supported 270 ground-up initiatives that drive waste reduction and recycling.** Among them was youth interest group Project bECOME's Bread Without Bags initiative, which encourages customers to bring their reusable containers and bags to buy bread. The initiative reached out to more than 20 bakery brands to try out a bring-your-own (BYO) scheme at their stores. Another example is the Swapathon event organised by Swapaholic Pte Ltd, where participants swapped pre-loved clothing and accessories with one another. **Together with our partners, we have engaged more than 670,000 people in Zero Waste initiatives this year.**

27 **This year, we also ramped up our engagement efforts in a new way,** to tap the unique strengths, experiences and ideas of all Singaporeans. In September, we convened our first ever Citizens' Workgroup on #RecycleRight, to find ways to improve household recycling in Singapore. There was strong interest from the public – we received over 300 applications to join the Workgroup. From these, about 50 Singapore residents of diverse ages and backgrounds were selected. Notably, some of the Workgroup members did not recycle actively but still chose to join us. This reflects the growing public commitment to take climate action. Many Workgroup members are here today, and I thank you for your efforts.

28 I am encouraged by the range of ideas you have developed. As shared by SMS Dr Amy Khor last Saturday, we will work with you to take them forward. We will continue on this journey with you, to co-create solutions to environmental challenges, and build a sustainable Singapore together.

Conclusion

29 At the launch of the Year Towards Zero Waste in January, I drew an analogy to redwoods, which stand tall because their roots are intertwined, giving them collective strength. More than ever, Singaporeans are united on the need for climate action. By working together, the seeds we have planted can take root, and future generations can reap a bountiful harvest.

30 Some of our youth leaders are here with us today. You have told us that the future is here and now, and there is no time to lose. We agree. This is why we are working with you to drive change. MEWR has been partnering the National Youth Council (NYC) and youth leaders from various sectors, including NGOs such as Zero Waste SG, Singapore Youth for Climate Action and LepakInSG. Over the past year, we have benefited from your perspectives, passion and energy. **We will continue to partner and empower our youth to build a more environmentally-conscious Singapore.** We have many educators among us today too. I hope that our young people will be inspired by you to contribute to our sustainable future.

31 This event marks the close of the Year Towards Zero Waste. But it does not end here. In fact, it will pave the way for next year's theme. **Carrying on the momentum on climate action across all domains, we will focus on the Singapore Food Story in 2020.** We have an ambitious vision — to produce 30 per cent by 2030 of our nutritional needs in Singapore. We will work with all stakeholders to encourage Singaporeans to grow and eat local. As a start, some of the food served for lunch today is locally sourced. We look forward to hearing your ideas on how we can do this.

32 Let me conclude. Climate change is a multi-generational challenge, with devastating effects that respect no geographical boundaries. In the face of such a threat, we can give in to despair, or use it to transform things fundamentally for the better. Singapore's DNA has always been to resolutely face the challenges – be it combating a potential water crisis, or overcoming a global recession. With long-term planning, robust scientific research and innovation, and importantly, the partnership of all Singaporeans, I am confident we can turn the climate challenge into new opportunities, and ensure the continued happiness and prosperity of our future generations.

33 I invite you to work with us to forge a vibrant, climate-resilient and sustainable future. Thank you.

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