



MEDIA RELEASE

CLEANENVIRO SUMMIT SINGAPORE 2018: Smart technologies, novel environmental solutions and meaningful collaboration to transform tomorrow's cities

Minister Masagos hosts first Facebook LIVE panel discussion on tackling environmental issues amidst rapid urbanisation, bringing industry players across the region online together

Singapore, 22 May 2018 – Minister for the Environment and Water Resources, Mr Masagos Zulkifli, hosted the first Facebook LIVE panel discussion on environmental issues, themed "Optimising Smart Technologies for Novel Environmental Solutions" in a lead up to CleanEnviro Summit Singapore (CESS) 2018. Organised by the National Environment Agency (NEA), the panel discussion brought together governmental, business, civil societal and academic perspectives from across the environmental solutions ecosystem to weigh in on how new technologies and solutions can be leveraged to create sustainable environmental solutions for tomorrow. Please refer to **Annex A** for a photo of the morning's panel discussion.

2 The Facebook LIVE session gave attendees a prelude to the discussions and focus areas that will be explored at the upcoming CESS 2018. The 2018 event, themed 'Transforming Tomorrow's Cities with Clean Environment Solutions', serves as a global platform which will see industry and government leaders identifying, developing and sharing practical, replicable and scalable solutions to address environmental challenges in the context of the waste-water-energy nexus in tomorrow's cities.

3 In Minister Masagos' welcome address, he highlighted that the needs of tomorrow's cities are changing rapidly due to climate change and accelerated urbanisation – which are in turn, fueling the demand for cleaner and more sustainable solutions. As Singapore works towards becoming a Zero Waste Nation, a circular economy will allow us to recover as much as possible from our waste stream. Technology is central to enabling and driving value in the circular economy, and will play a key role in helping to mitigate complex challenges in an increasingly urbanised landscape.

4 "Just as we have successfully closed the water loop in Singapore, we will apply the circular economy to the waste and cleaning sector to help enable environmental services players make greater headway in the industry," said Mr Masagos. "While regulatory frameworks help in driving the adoption of impactful innovation in the industry, collective

action from stakeholders across the value chain is needed to effect sustainable change for cleaner urban environments."

Challenging the environment management norm

5 The Facebook LIVE panel discussion saw a diverse range of industry stakeholders explore emerging trends in technology and how players, local and overseas, are challenging the conventional approach to environment management. They included Mr Dalson Chung, Managing Director, CESS 2018, Prof Seeram Ramakrishna, Chair of the Circular Economy Taskforce, National University of Singapore, Ms Isabella Loh, Chairman, Singapore Environment Council (SEC) and Mr Jun Ogawa, Managing Director, JFE Engineering (Singapore).

6 The session kicked off with thoughts around emerging technologies in the industry – both from a local and international perspective. Waste management and recycling technologies for example, smart grids and sensors, automated multi-fraction machines to recover valuables from municipal solid waste into usable materials, sophisticated solutions in cleaning to improve productivity and upskill manpower and even the use of satellites for pollution control in cities were highlighted. Additionally, as countries globally invest in developing smart cities, the Internet of Things, blockchain technology, data analytics and cloud computing is expected to be utilised more widely to elevate solutions within the circular economy domain.

7 There are opportunities for greater mass adoption of such technologies and the sentiment echoed was that now is the best time for Singapore to lead the charge in the industry as there is great potential in driving the circular economy agenda. The combination of this market potential – both for corporations and start-ups – and the rise in green consumerism to create action from the ground up will move the needle in achieving a sustainable society for future generations.

8 "In Asia, Singapore is a hub for smart CleanTech test beds and solutions and it is through platforms like CESS that the drive to create optimised environmental solutions can be accelerated," said Mr Dalson Chung, Managing Director, CESS 2018. "In the face of challenges brought about by rapid urbanisation, it is critical to throw the spotlight on global best practices, to seek out meaningful collaboration across local and international stakeholders."

Highlights of CESS 2018

9 The fourth edition of CESS will be held from 8 to 12 July 2018, and is co-located with the World Cities Summit and the Singapore International Water Week. To tackle the complex range of environmental challenges tomorrow's cities face, this year's edition will see the introduction of three new focus areas – sustainable energy, pest management and pollution control – to the existing waste management and cleaning streams. It will also feature new high-level plenaries such as the Clean Environment Leaders' Summit (CELS) and the Leaders-Experts Forum (LEF), bringing together prominent speakers and subject-matter experts who will offer insights into the latest trends in environmental innovation and discuss best practices, strategies and technological solutions.

10 The City Solutions Singapore Expo and Innovation Pitch will also showcase the latest innovations in environmental technology and solutions, with key technologies and solutions from across Asia, Europe, the United States and beyond being exhibited. These include cutting-edge future and frontier technologies such as autonomous robotics, smart sensors, biomimicry, 3D eco printing and energy harvesting.

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About CESS

The biennial CleanEnviro Summit Singapore (CESS) is a global networking platform for thought leaders, senior government officials and policy makers, regulators and industry captains. Held from 8 to 12 July 2018, the fourth edition of CESS is built on the theme 'Transforming Tomorrow's Cities with Clean Environment Solutions', which will deep-dive into five streams: Waste Management, Cleaning, Pest Management, Sustainable Energy and Pollution Control. Indepth discussions and the sharing of best practices will be facilitated through business forums and high level plenaries, such as the Clean Environment Leaders Summit, Leaders-Experts Forum, Clean Environment Convention, and Clean Environment Regulators Roundtable. The City Solutions Singapore Expo and Innovation Pitch will showcase the latest innovations in environmental technology and solutions.

Organised by the National Environment Agency, Singapore, CESS 2018 is held in conjunction with the Singapore International Water Week and World Cities Summit.

For more information, visit www.cleanenvirosummit.sg.

About the National Environment Agency

Formed on 1 July 2002, the National Environment Agency (NEA) is the leading public organisation responsible for improving and sustaining a clean and green environment in Singapore. The NEA develops and spearheads environmental initiatives and programmes through its partnership with the People. Public and Private sectors. It is committed to motivating every individual to take up environmental ownership and to care for the environment as a way of life.

By protecting Singapore's resources from pollution, maintaining a high level of public health and providing timely meteorological information, the NEA endeavours to ensure sustainable development and a quality living environment for present and future generations.

ANNEX A



From (L-R) Professor Seeram Ramakrishna, Chair of the Circular Economy Taskforce, National University of Singapore; Mr Dalson Chung, Managing Director, CleanEnviro Summit Singapore; Ms Jessica Cheam, Editor, Eco-Business; Mr Masagos Zulkifli, Minister for the Environment and Water Resources; Ms Isabella Loh, Chairman of Singapore Environment Council; and Mr Jun Ogawa, Managing Director, JFE Engineering (Singapore) at the CleanEnviro Summit Singapore Facebook LIVE panel discussion sharing on emerging technologies in the industry.