



# MEDIA RELEASE FOR IMMEDIATE RELEASE

## CLEANENVIRO SUMMIT SINGAPORE CATALYST 2017: INDUSTRY 4.0 WILL ENABLE CAPABILITIES IN ENVIRONMENTAL SERVICES INDUSTRY

Circular economy a solution to ensure long-term viability of industries

**Singapore, 4 October 2017** – Minister for the Environment and Water Resources, Mr Masagos Zulkifli, opened the inaugural CleanEnviro Summit Singapore (CESS) Catalyst 2017 to more than a hundred and fifty participants including leaders and technology and service providers of the environmental services industry. Organised by the National Environment Agency (NEA), the first edition of the two-day by-invitation event was themed "Industry 4.0 – Circular Economy and Environment Perspectives". Please refer to **Annex A** for photos of the event.

2 In his opening speech, Minister Masagos emphasised the need to relook the industry's linear "take, use and dispose" economic model which generates large amounts of waste and pollutes the environment. Instead, through adopting circular economy strategies such as recycling, remanufacturing and refurbishing, resources can continue to be kept in use, thereby reducing waste generation and energy demand. Mr Masagos also noted that we are currently in the era of the fourth industrial revolution or Industry 4.0, characterised by an entirely new coming together of computers and automation, where cyber-physical systems operate autonomously.

3 "Smart infrastructure, more efficient waste-to-energy systems, and technology to improve productivity are just some of the benefits that Industry 4.0 can bring to the environmental services sector. The value of Industry 4.0 is derived from the integration of automation, data analytics, manufacturing and products in a way that delivers unique competitive advantages and unlocks new business and operating models. We should explore opportunities to embrace Industry 4.0 in the environment sector," said Minister Masagos.

### **Insightful Sessions for Participants**

4 CESS Catalyst 2017 brought together over a hundred and fifty environment leaders from seventeen countries who attended several sessions, including an 'In-Conversation' with renowned speakers. They include Dr Marcus Gover, CEO, WRAP UK and Dr Kamil Agi, President, CEO SensorComm who shared their insights in the Industry 4.0 revolution and its impact on today's businesses.

5 The discussions delved into the potential benefits of the Industry 4.0 revolution which are wide-ranging and extend to various stakeholders across the value chain. The sessions explored how business models across the environmental services industry can be reinvented through the integration of automation, data, analytics, manufacturing and products. In addition, resources that are renewable or sustainable will play a bigger role in the sustenance of a circular economy, which will enable a greater change in the way we live, and contribute towards sustaining a clean and liveable environment for all.

6 Participants of CESS Catalyst were also given insights into new innovative technology solutions during the Technology Exchange Programme. Technology providers were given a platform to highlight their capabilities and catalyse more opportunities for collaboration.

7 "By placing a strong focus on Industry 4.0 at our first CleanEnviro Summit Singapore Catalyst, we want to drive home the need for businesses in the environmental service industry to continually incorporate new innovative processes including integrating smart and intuitive technologies, especially in the face of increasingly complex challenges brought about by rapid urbanisation," said Mr Dalson Chung, Managing Director, CESS.

## Innovation Call for Pollution Monitoring Solutions

8 Under the Gov-PACT initiative, NEA and SPRING Singapore at CESS Catalyst 2017 jointly launched an innovation call to further improve Singapore's current pollution monitoring systems. The innovation call seeks proposals to address two pollution control problem statements: "Remote Real-time Low-cost Sensor-based System for Monitoring of Nitrogen Oxides (NOx) and Particulate Matter (PM) emissions from Diesel Vehicles", as well as "Odour Monitoring and Source Tracing of Odour Incidents caused by Industries". The innovation call is targeted at Singapore-registered companies, Institutes of higher learning and Research institutes.

9 More information on the innovation call can be found at http://www.nea.gov.sg/grantsawards/innovation-call-pollution-monitoring-solutions.

## CleanEnviro Summit Singapore 2018

10 CESS Catalyst 2017 leads up to NEA's biennial CESS, 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, Sustainable Energy, Pest Management and Pollution Control. In-depth discussions, and the sharing of global best practices will be facilitated through various activities, including the Clean Environment Convention and high level plenaries, Clean Environment Regulators Roundtable, and business forums.

#### For media enquiries, please contact:

Mr Dominic Seow Corporate Communications Tel: 6731 9214 / 9066 4418 Email: dominic\_seow@nea.gov.sg Ms Hazel Wee Corporate Communications Tel: 6731 9737 / 9877 3074 Email: hazel\_wee@nea.gov.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.

#### About Gov-PACT

One of the recommendations from the Committee on the Future Economy (CFE) is for the Government to use lead demand more systematically to support the development of promising industries, particularly where this supports our strategic national needs. Under Gov-PACT, agencies may embark on projects to obtain novel solutions which may be more manpower-lean, achieve cost savings, achieve quality improvements or meet new operational requirements. SPRING Singapore will work with the partner procuring agencies to craft suitable problem statements and find suitable SME partners for the projects. SPRING Singapore will also provide grant support directly to the local SMEs and startups who are selected by the procuring agencies, at various stages of product and solution development.



Minister for the Environment and Water Resources, Mr Masagos Zulkifli giving his welcome address at the inaugural CleanEnviro Summit Singapore Catalyst 2017



From (L-R) Moderator Prof Seeram Ramakrishna, Vice-President (Research Strategy), NUS together with CleanEnviro Summit Singapore Catalyst 2017 'In Conversation'

speakers Dr Kamil Agi, President, CEO, SensorComm and Dr Marcus Gover, CEO, WRAP U.K.