

# CESG 2022 Highlights



# About CleanEnviro Summit Singapore

Climate change, depletion of natural resources and rapid urbanisation are fuelling the demand for cleaner and more sustainable solutions. Besides initiating public and private partnerships to serve the international markets, Singapore plays a pivotal role as a hub for CleanTech test beds and solutions. Organised by Singapore's National Environment Agency (NEA) since 2012, the biennial CleanEnviro Summit Singapore (CESG) has been serving as a global networking platform for thought leaders, senior government officials, regulators and policy makers, and industry captains. Held from 17 to 21 April 2022, the fifth edition of the event was built on the theme, 'Towards Sustainable and Climate-Resilient Cities', and deep dived into five key areas:

- Waste as Resource
- Sustainable Energy
- Enhanced Hygiene Standards
- Climate Resilience
- Effective Pest Management

It was a week of dialogue and engagement at the Marina Bay Sands in Singapore, with government leaders and industry captains from all around the world coming together to address environmental challenges in tomorrow's cities. Delegates and participants discussed pressing and pertinent climate issues such as promoting circular economy frameworks, adopting climate resilient policies, and safeguarding public health standards, successfully building partnerships to bring about immediate action.

For more information on CESG, please visit our website at [www.cleanenviros Summit.gov.sg](http://www.cleanenviros Summit.gov.sg).



Speakers at CESG included (clockwise from left) *Mr Frederick Teo*, Managing Director, Sustainable Solutions, Temasek; *Dr Amy Khor*, Senior Minister of State, Ministry of Sustainability and the Environment, Singapore; *Prof Seeram Ramakrishna*, Chair, Circular Economy Taskforce; *Ms Grace Fu*, Minister for Sustainability and the Environment, Singapore; and *Mr Suresh K*, Director, Carbon Mitigation Division, National Environment Agency.



## Sharing by Distinguished Thought Leaders

Delegates from 65 countries and regions, including government officials, industry leaders, technical experts and youth environment leaders, met over three days at the Clean Environment Leaders Summit, Clean Environment Convention, Youth Environment Leaders Immersion Programme and other co-located events.



Concurrently, visitors of the Environment and Water Expo explored the plethora of environmental solutions, with over 300 exhibitors on-site, alongside the showcase of innovative projects at the NEA Innovation Pavilion.



---

# Conference Highlights

## Environment & Water Leaders Forum

18 April 2022

**Session Theme: Towards a Climate Resilient Future – Transforming Challenges into Opportunities**

Today, the existential crisis of climate change commands even more of our collective and immediate action. Burgeoning populations, coupled with the rise of urbanisation, have resulted in increased pressure on our finite resources and the need for clean water, sanitation and hygiene. This poses challenges to cities, governments and businesses. In this session, leaders shared their views on how organisations, riding on the wave of global changes, could capitalise on the sustainability challenges and transform them into opportunities.



Sharing their views on transforming sustainability challenges into opportunities, panelists of the Environment and Water Leaders Forum included (from left) moderator *Mr Ong Keng Yong*, Ambassador-at-Large, Ministry of Foreign Affairs, Singapore; *Dr Andrew Benedek*, Chairman and CEO, Anaergia; and *Ms Michèle Blom*, Vice Minister for Water Management, Ministry of Infrastructure and Water Management, Netherlands.





## Clean Environment Leaders Summit

18 April 2022

The Clean Environment Leaders Summit examined policies, innovations, ideas and international collaborations from a strategic standpoint, to address the environmental needs and challenges of growing cities. The plenaries focused on accelerating climate action and decarbonisation leading up to COP27, and resource resilience in the Asia Pacific.

Guest-of-Honour Ms Grace Fu, Singapore's Minister for Sustainability and the Environment, gave the opening address and spoke about how Singapore would continue to leverage global innovations to enhance sustainability and climate resilience.

### **Plenary 1: Accelerating Climate Action in the Race to Zero**



The first plenary gathered policy makers and their stakeholders to address the global challenges in our collective race to decarbonise. The leaders identified and discussed the critical success factors of accountability, alongside the synergies and trade-off of economic tools to drive carbon mitigation and adaptation. The plenary emphasised that it was imperative for governments and businesses to collaborate, and take urgent action to prevent irreversible damage to the environment.

### **Plenary 2: Together in Circularity – Being Resource Resilient in Asia-Pacific Cities**

Plenary 2 brought together an esteemed line-up of policy-makers, industry captains and key opinion leaders to discuss how Asia-Pacific cities would have to embrace circularity to achieve resource resilience. The panellists discussed how COVID-19 and resulting supply chain disruptions had highlighted the importance of innovative solutions that helped achieve circularity. The panel agreed that ultimately, a continuous process of education and engagement between stakeholders was what led to true resource resilience.



# Conference Highlights

## Clean Environment Convention

19 – 20 April 2022

The Clean Environment Convention convened industry professionals and technical experts to network, and exchange ideas on the latest solutions and best practices for environmental needs and challenges.



The Convention included the following tracks:

## Sustainable Energy and Energy Efficiency 19 April 2022

In an increasingly carbon-constrained world, embarking on an energy transition journey is crucial, and would require the right policies and low carbon technologies in areas such as energy efficiency and renewable energy. Speakers spoke about the use of biomass and solar energy to approach net zero emissions, Singapore's energy transition journey, and Singapore's three-pronged approach to promote industrial energy efficiency.



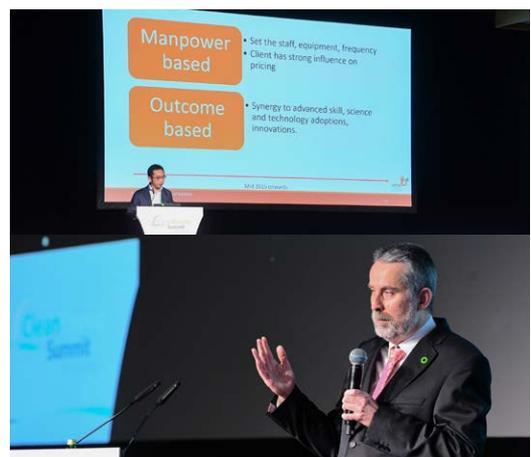
## Resource Sustainability 19 April 2022

Focusing on innovative solutions and business models for the circular economy, this track explored the latest solutions and best practices to achieve sustainable production, consumption and waste resource management. Speakers talked about their strategies to shift to sustainable fuels, how waste streams could be used to accelerate

decarbonisation, and the critical role standards and a well-established ecosystem play in enabling sustainable waste management.

## Advancing Public Hygiene – Pest Management in an Urban Environment and Environmental Cleaning and Disinfection 20 April 2022

Highlighting the important roles science and technology play in the transformation journey of the cleaning and pest management sectors, this track spotlighted the innovative approaches to improve public hygiene standards, alongside increasing productivity and efficiency. Key issues discussed included the challenges and solutions in managing pests ranging from cockroaches to bedbugs, innovations in tackling mosquito-borne diseases, and collaboration with stakeholders to establish high standards in the cleaning and facilities management industries.



---

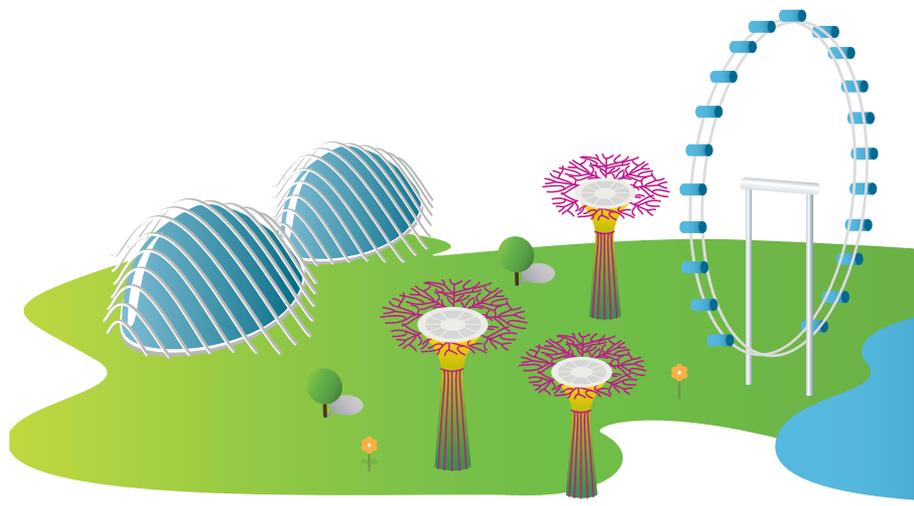
# Youth Environment Leaders Immersion Programme



The inaugural Youth Environment Leaders Immersion Programme was a new platform for youth leaders in the environmental landscape. More than 50 participating youth leaders were taken on exclusive guided tours of the Expo, to learn more about the Environmental Services industry and the career options available.

The youths also exhibited their sustainability projects and discussed key issues on zero waste, green citizenry and sustainability during a Fireside Chat with Singapore's Minister for Sustainability and the Environment, moderated by Ms Pek Hailin, recipient of NEA's EcoFriend Award 2019.





---

## Key Announcements at CESG 2022

CESG 2022 paved the way for a wide range of initiatives and partnerships that would push new sustainability frontiers and open the door to potential environmental business opportunities. These included:

Unveiling of Hyperscale, Asia's inaugural waste-tech accelerator programme for startups by StartupX, in partnership with National Environment Agency and Enterprise Singapore, which aims to spur sustainable innovation in the areas of plastic, electronic and mixed waste, and help waste-tech ventures scale their innovations globally.

---

Supply agreement between six building owners in Tampines Town Centre, Singapore, and SP Group for the installation and operation of district cooling technology. The first such sustainable solution to be implemented in a brownfield development in Singapore, the technology will help the town centre reduce its carbon emissions by 1,359 tonnes annually and save more than 2,800,000 kilowatt-hour of energy annually.

---

Discussions of business opportunities worth approximately S\$45 billion in the areas of waste management, cleaning robotics, and climate risk mitigation.



# Facts at a Glance



**>15,000**  
Attendees



**43**

Speakers



**300**

Exhibitors



**65**

Countries & Regions

- AFGHANISTAN
- ALGERIA
- ANGOLA
- AUSTRALIA
- AUSTRIA
- BAHAMAS
- BAHRAIN
- BANGLADESH
- BELGIUM
- BRUNEI
- CAMBODIA
- CANADA
- CHINA
- COLOMBIA
- DENMARK
- EGYPT
- FINLAND
- FRANCE
- GEORGIA
- GERMANY
- GREECE
- HONG KONG SAR
- INDIA
- INDONESIA
- IRELAND
- ISRAEL
- ITALY
- JAPAN
- KENYA
- KOREA, SOUTH
- LAOS
- MALAYSIA
- MALDIVES
- MEXICO
- MONGOLIA
- MOZAMBIQUE
- MYANMAR
- NAURU
- NEPAL
- NETHERLANDS
- NEW ZEALAND
- NORWAY
- PAKISTAN
- PHILIPPINES
- PORTUGAL
- QATAR
- ROMANIA
- RWANDA
- SAO TOME & PRINCIPE
- SAUDI ARABIA
- SINGAPORE
- SLOVAK REPUBLIC
- SOUTH AFRICA
- SPAIN
- SRI LANKA
- SWEDEN
- SWITZERLAND
- TAIWAN
- THAILAND
- TIMOR-LESTE
- TURKEY
- UNITED ARAB EMIRATES
- UNITED KINGDOM
- UNITED STATES
- VIETNAM



We would like to express our heartfelt thanks to our sponsors, strategic partners, exhibitors, delegates, and trade visitors for making CESG 2022 a resounding success.

# Acknowledgements

## FOUNDING SPONSORS



## PLATINUM SPONSORS



## GOLD SPONSORS



## CORPORATE SPONSORS



## STRATEGIC PARTNERS



## SUPPORTING ORGANISATIONS



## HELD IN



## SUPPORTED BY



## ENDORSED BY



## IN SUPPORT OF



# Get in Touch

**Join our mailing list to be among the first to know about the next edition of CESG. See you at CESG 2024 in Singapore!**

[www.cleanenvirosummit.gov.sg](http://www.cleanenvirosummit.gov.sg)

For more information, please contact:

**CleanEnviro Summit Singapore Secretariat**

c/o Experia Events Pte Ltd  
Singapore Changi Airport Terminal 2  
Level 3 #038 - 017  
Singapore 819643

Email: [info@cleanenvirosummit.sg](mailto:info@cleanenvirosummit.sg)  
Tel: +65 6542 8660  
Facebook: [@CleanEnviroSummitSingapore](https://www.facebook.com/CleanEnviroSummitSingapore)  
Twitter: [@CESsingapore](https://twitter.com/CESsingapore)

For sponsorship and exhibition opportunities, please contact:

Email: [info@cleanenvirosummit.sg](mailto:info@cleanenvirosummit.sg)  
Tel: +65 6595 6318

ORGANISED BY



EVENT ORGANISER



IN CONJUNCTION WITH

