



e-ASIA Workshop on “Greener Digital Cities”

Organized by

e-ASIA JRP Secretariat and

Japan Science and Technology Agency (JST), Japan

Supported by

Ministry of Science and Technology (MOST), Myanmar

Department of Science and Technology (DOST), Philippines

Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD)

Philippine Council for Health Research and Development (DOST-PCHRD)

Philippine Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD)

Agency for Science, Technology and Research (A*STAR), Singapore

National Research Council of Thailand (NRCT), Thailand

Nov 29 & Dec 1, 2021, Online



Overview



- **The “Field of Cooperation” in e-ASIA**
“Advanced Interdisciplinary Research towards Innovation”
- **34 Speakers**
2 for opening, 5 for keynote speeches from the governments, 21 for invited speeches from academia and industries, and 6 for closing comments from funding agencies
- **117 Participants**
117 participants including the 34 speakers from Indonesia, Japan, Malaysia, Myanmar, Philippines, Singapore, and Thailand



Background



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- ✓ *“Advanced Interdisciplinary Research towards Innovation” of e-ASIA has had “Intelligent Infrastructure” a subtitle since its start in 2013.*
- ✓ *Five joint projects by 15 teams in 6 countries have been adopted so far for Intelligent Infrastructure of transport, energy, and water.*
- ✓ *To emphasize the increasing global concern of “greener”, to generalize intelligent to digital, and to expand its scope beyond transport, energy, and water to “cities”, the term “greener digital cities” was invented and put on “Intelligent Infrastructure” as its goal.*



Objective



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To explore potential collaboration opportunities to prepare for the e-ASIA JRP's 11th joint call on “Greener Digital Cities” through

- ✓ learning smart city policies from the governments*
 - ✓ hearing project ideas from academia*
 - ✓ promoting collaborations of 3+ countries*
- prior to finalizing the call document.*



Opening Remarks



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HISANAGA Yukihiro

- ***Director, International Science and Technology Affairs Division, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan***



TAKEDA Haruo

- ***General Chair, e-ASIA Workshop on Greener Digital Cities***
- ***Program Officer, e-ASIA JRP, JST, Japan***
- ***Corporate Chief Engineer, Hitachi, Ltd.***





Keynote Speeches

by the Government of Japan, Philippine, and Singapore



TANAKA Kenji

Director, Counsellor, Cabinet Secretariat

(Infrastructure Export and Economic Cooperation), Japan



Enrico C. PARINGIT

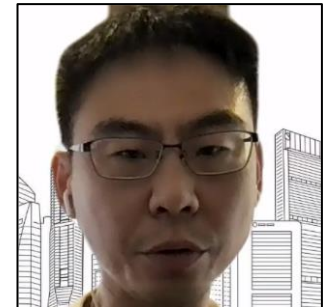
**Executive Director, Philippine Council for Industry, Energy and
Emerging Technology Research and Development, Philippines**



Zhongwen HUANG

Director, Design and Planning Lab,

Urban Redevelopment Authority of Singapore, Singapore





Keynote Speeches

by the Government of Myanmar and Thailand



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Daw Tin Tin Kyi

*Director, Urban Planning, Yangon City Development,
Myanmar*



Thanaruk Theeramunkong

*Fellow, the Royal Society of Thailand SIIT, Thammasat
University and the president of the AI Association of
Thailand, Thailand*





Session 1: Analysis and Modeling



Co-Chairs: Thanaruk Theeramunkong (Thailand) and Khin Mar Soe (Myanmar)

International standardization for GDC, evaluation of smart aging and quality of life in GDC, GDC and environment, importance of walk in GDC, GDC with agriculture for banana in Philippine and rice in Japan were discussed.

See details at https://www.the-easia.org/jrp/pdf/w17/agenda_of_the_workshop.pdf#page=2

GDC: Greener Digital Cities





Session 2: Simulation and Optimization

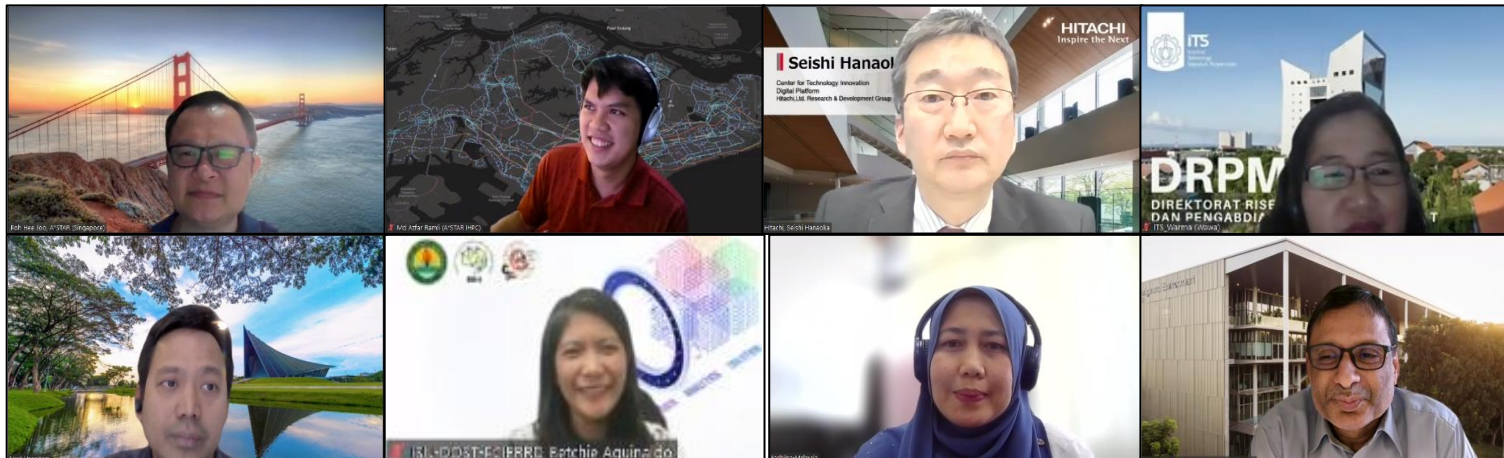


Chair: Poh Hee Joo (Singapore)

International standardization for GDC, evaluation of smart aging and quality of life in GDC, GDC and environment, importance of walk in GDC, GDC with agriculture for banana in Philippine and rice in Japan were discussed.

See details at https://www.the-easia.org/jrp/pdf/w17/agenda_of_the_workshop.pdf#page=3

GDC: Greener Digital Cities





Session 3: Implementation



Chair: INOI Hiroto (Japan)

Academia-Industry collaboration for GDC, EV infrastructure in GDC, air quality monitoring system for GDC, GDC and hydropower dam, resilient GDC against flooding, GDC with smart hydroponics, roles of Hawker Center in GDC.

See details at https://www.the-easia.org/jrp/pdf/w17/agenda_of_the_workshop.pdf#page=4

GDC: Greener Digital Cities

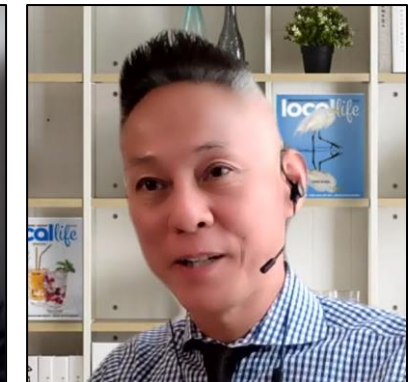
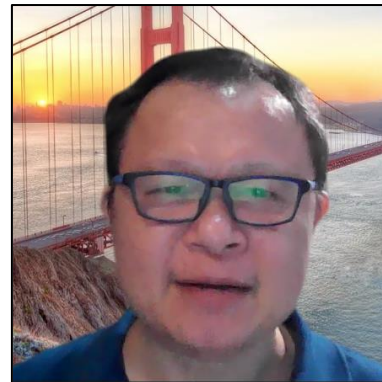




Closing Comments from Funding Agencies



- *Phyu Phyu Win, MOST, Myanmar*
- *Enrico C. Paringit, DOST-PCIEERD, Philippines*
- *Poh Hee Joo, A*STAR, Singapore*
- *Thanaruk Theeramunkong, NRCT, Thailand*
- *KOBAYASHI Osamu, JST, Japan*
- *KAWABATA Ken, e-ASIA JRP Secretariat*

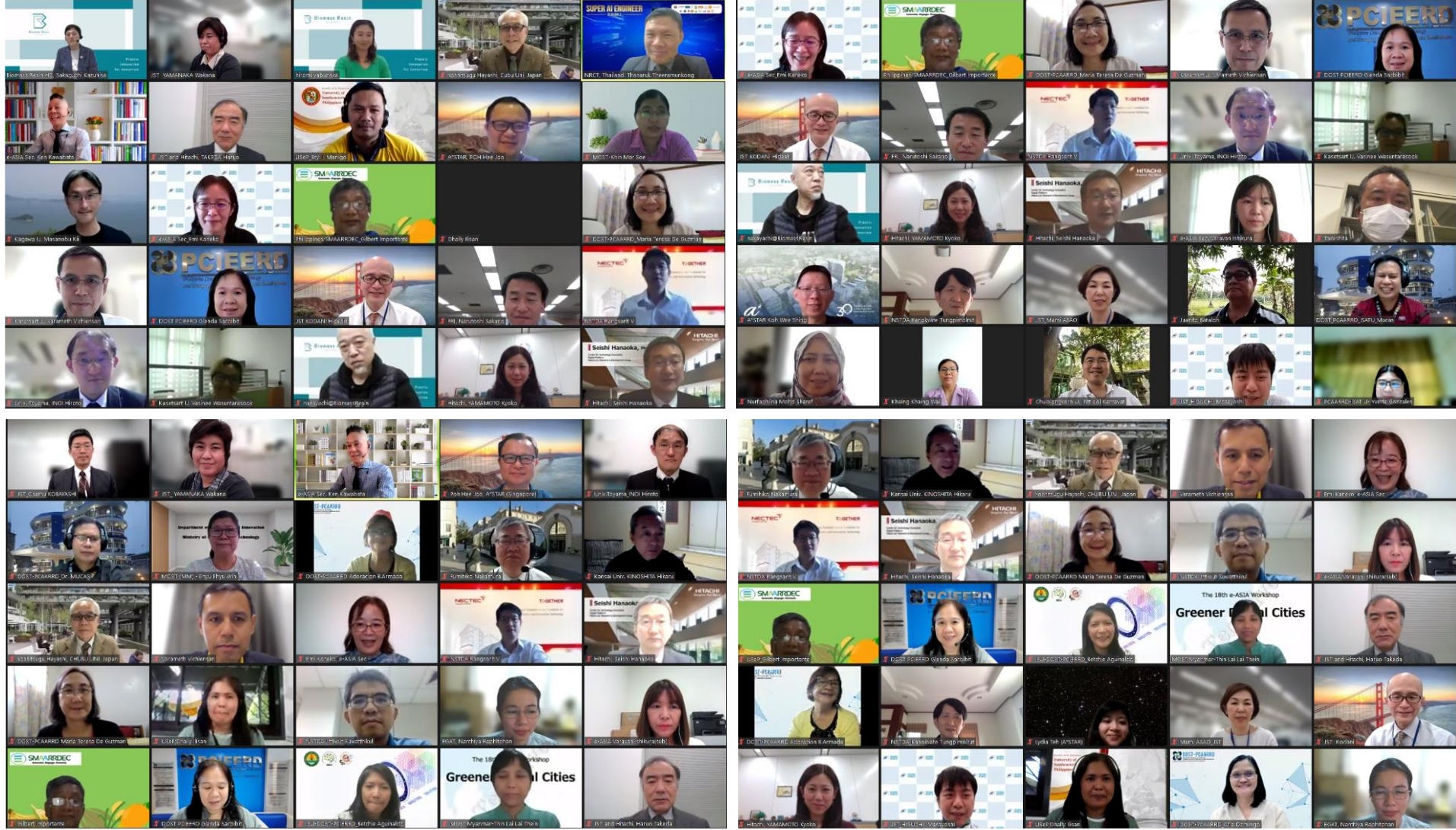




Conclusion



- *Learned smart city policies from the governments, heard project ideas from academia and industries, promoted collaborations of 3+ countries, got comments from the funding agencies, sufficiently enough to finalize the call document of the e-ASIA JRP 11th joint call on “Greener Digital Cities”.*
- *In terms of technology, the call will be on (1) analysis and modeling of natural and social environment surrounding the infrastructure in the real world, (2) optimization of the models in the cyber world, (3) implementation of the optimal solution in the real world.*
- *In terms of application, it will be on intelligent infrastructure for (a) transport, (b) energy, (c) water, (d) healthcare, (e) food or agriculture, (f) waste, (g) data communication, (h) fintech, (i) combination of all or some of (a)-(h).*



Photos taken in the Session 1-3 and in the Closing Session