Plenary Meeting

Venue： Ballroom, 3F, Intercontinental Yokohama Grand

Group Photo and Opening Session	
14：00	● **Group Photo** ● **Opening Speech** Ms. Fumiko Hayashi, Mayor, City of Yokohama ● **Keynote Speech** 1. Mr. Iwao Horii, Parliamentary Vice-Minister for Foreign Affairs, Japan 2. Mr. Yasuo Takahashi, Vice Minister for Global Environmental Affairs, Ministry of the Environment, Japan 3. Mr. Masamichi Kono, Deputy Secretary-General, OECD
Networking Break	
Roundtable Session 1	
15：00	Moderator Dr. Bindu N. Lohani, Special Advisor for Y-PORT Center/President, The Resources Center Panelists 1. Mr. Gil-Hong Kim, Senior Director concurrently Chief Sector Officer for Sector Advisory Service Cluster of the Sustainable Development and Climate Change Department, Asian Development Bank 2. Prof. Fumihiko Nakamura, Vice President, Yokohama National University 3. Dr. Alfonso Vegara, Special Advisor for Y-PORT Center/Founder and Honorary President, Fundación Metrópoli 4. Dr. Junichi Fujino, Programme Director, City Taskforce, IGES/Senior Researcher, Center for Social and Environmental System, NIES 5. Mr. Daniel A. Levine, Senior Officer, TDLC, World Bank Group
Roundtable Session 2	
16：00	Moderator Dr. Bindu N. Lohani, Special Advisor for Y-PORT Center/President, The Resources Center Panelists 1. Mr. Atsushi Koresawa, Director, Regional Office for Asia and the Pacific, UN-HABITAT 2. Ms. Lena Ng, Chief Investment Officer, Amata Corporation PCL 3. Mr. Takashi Otsuka, Director, Japan Office, ICLEI 4. Asian City (TBD)
Closing Session	
16：40	● **Closing Remarks** Dr. Kazuhiko Takeuchi, President, IGES ● **Student Speech** (Yokohama National University, Yokohama City University) ● **Declaration of the 6th Asia Smart City Conference**

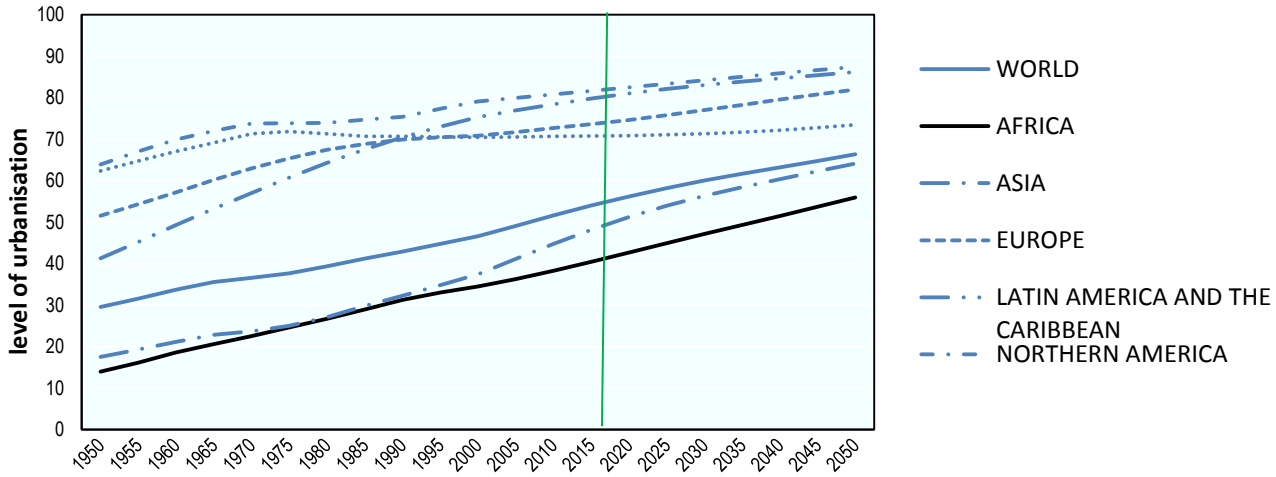
WHY "URBAN" GREEN GROWTH?

Cities as drivers of economic growth

Cities are critical drivers of national growth and play a disproportionate role in national economic performance. A country's productivity is, in large part, determined by the productivity of its cities. Large urban agglomerations account for over 50% of total GDP while taking up less than 5% of total surface area. Cities are hubs of innovation, productivity, employment, goods and service providers – with spill over effects generated streaming into surrounding regions.

It is projected that the world's urban population will increase from 4 billion in 2015 to 6.3 billion in 2050, and to around 9 billion by 2100, corresponding to close to 85 per cent of the projected total population. Developing regions such as Asia and Africa are expected to drive the rate of urbanisation with their rising urban explosions (Figure 1). Nations stand to benefit from the urbanisation to achieve economic prosperity and quality of life in cities.

Figure 1. Urbanisation by region



Source: UNDESA, 2015

Acute environmental challenges that cities are largely responsible

Though urbanisation and rising economic prosperity brings about tremendous benefits, it also creates complex challenges which need to be properly managed. It is unsettling to realise that the environmental performance has not matched the positive economic and social achievements city inhabitants have experienced. The negative externalities on the environment associated with the rapid urbanisation, such as congestion, air and water pollution, and the loss of ecosystems in cities, must thus be urgently addressed. World cities alone are responsible for about 67% of energy use and 71% of greenhouse-gas (GHG) emissions. Africa's PM10 levels between 2008 and 2015 reached 119µg/m^3, which was higher than the world average (85µg/m^3) and far above the World Health Organisation guideline (20µg/m^3). Vulnerability to climate change in cities is likewise on the rise, placing threats on livelihoods, infrastructure and human life.

These clearly point out that cities must play a strong role if global targets are to be achieved as stipulated in the Paris Climate Agreement and the Sustainable Development Goals (SDGs).

Achieving sustainability through urban green growth

Decoupling their positive economic growth from negative environmental impacts has become imperative so as to enjoy a long-term sustainable development path. Urban green growth has emerged as a promising policy option, as it advances a growth model capable of creating synergies between environmental, social and economic objectives (Figure 2). It is important to highlight that urban green growth policies could also address inclusiveness as part of efforts to promote sustainable development.

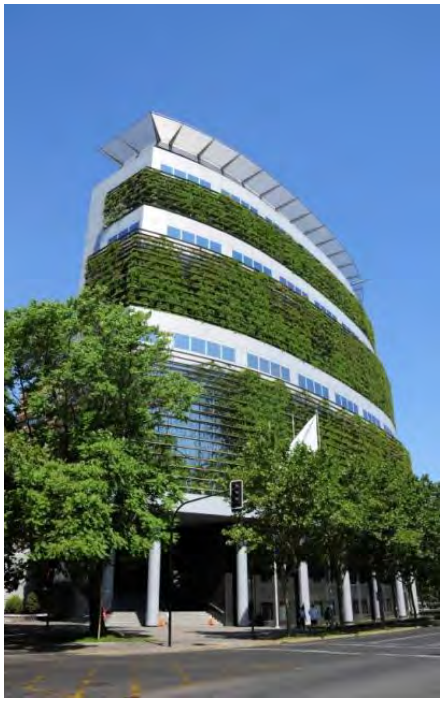
Urban green growth also reflects the ambitions of the New Urban Agenda, adapted at the United Nations Habitat III Conference and provides a means of achieving the SDGs especially the Goal 11. It also acknowledges that urban areas can tremendously contribute to reducing global GHG emissions in line with the Paris Climate Agreement.

Figure 2: Potential synergies created by urban green growth

	Efficiency	Equity	Environmental Sustainability
Economic policies	**Sustained growth**	Economic reforms may increase equity	Green growth policies can improve sustainability
Social policies	Social cohesion can increase efficiency (e.g. trust, security knowledge)	**Social cohesion**	Inequality can be reduced without environmental harm (e.g. Replace fuel subsides with transfers)
Environmental Policies	Green growth policies can boost innovation and efficient resource use	Environmental degradation tends to hit disadvantaged groups more	**Environmental sustainability**

Source: OECD (2014) OECD Regional Outlook.

THE OECD GREEN CITIES PROGRAMME



Launched in 2010, *the OECD Green Cities Programme* assesses how urban green growth and sustainability policies can contribute to improve the economic performance and environmental quality of metropolitan areas, and thus enhance the contribution of urban areas to national growth, quality of life and competitiveness. The program has three main elements:

- **Green City Case Studies**

Case studies examine policies and governance practices that pursue green growth in urban areas. Each study provides an analysis of key environmental and socio-economic trends, including international benchmarking with OECD metropolitan regions, and an assessment of the greening challenges and opportunities to be exploited in different sectors (*e.g.* land-use and transportation, buildings, renewable energy, waste and water services), followed by concrete policy recommendations.

In the first phase of the Programme, four city-level studies were carried out between 2010 and 2012: Stockholm (Sweden), Kitakyushu (Japan), Chicago (United States) and Paris/Ile-de-France (France), as well as two national level studies of China and Korea. These studies inform the synthesis report *Green Growth in Cities*, published in May 2013.

As the second phase, the Programme then expanded its scope to include rapidly growing cities in Southeast Asia, culminating in the *Urban Green Growth in Dynamic Asia (UGGiDA)* project. Launched in 2013, the *UGGiDA* explores how to promote green growth in cities in Southeast Asia, examining ways to promote greening and competiveness. The main aim is to assist Southeast Asian cities to improve environmental performance in cities and enhance urban quality of life, as well as to increase the institutional capacity to achieve green growth. Five Southeast Asian cities were selected for the project: Bangkok (Thailand), Iskandar (Malaysia), Hai Phong (Viet Nam), Bandung (Indonesia) and Cebu (Philippines). The synthesis report, *Urban Green Growth in Dynamic Asia*, was published in 2016 and summarises key findings of the case studies.

➢ Environmental Indicators for OECD Metropolitan Regions

The OECD has defined metropolitan and urban areas in member countries so as to enable cross-country comparisons of urban sustainability trends, including the development of indicators of urban density, land use, forest ecosystem, urban emissions and air quality.

The Programme makes use of these metropolitan environmental quality indicators and collects additional environmental quality data in each of the case studies cities as available on: public transit use and travel time, impact on quality and extent of urban services (*e.g.* quality of and access to transportation, open space and public services), local environmental quality (*e.g.* air, water, and waste generation), and local resource consumption (*e.g.* residential, industrial and transport energy consumption, water use, and extent of built environment). The OECD assesses the comparability of this additional data to enable cities benchmark and monitor their green growth performance.

➢ Knowledge Sharing

Knowledge sharing can bring benefits to all the stakeholders through peer learning on an equal footing. Cities and national governments, in particular, could mutually learn from different practices, and therefore better address the urgent need to develop urban green growth policies and to implement them.

Since 2013, The Urban Green Growth in Dynamic Asia (*UGGiDA*) project conducted knowledge sharing at three dimensions: among cities; between national and subnational governments; and between governments and institutions for development co-operation. Five workshops were conducted sequentially in each of the five case study cities in 2014-15. Hearing from other local experiences on successful policy initiatives could provide cities with useful knowledge to take concrete action.

OECD Knowledge Sharing Workshop in Bangkok, Thailand (August 2014)

A GREEN GROWTH STUDY FOR YOUR CITY AND REGION?

The OECD provides support for countries, cities and regions in both OECD member and non-member countries which wish to develop/review their urban green growth policies. It will provide:

- International benchmarking of the performance of cities and regions, comparative analysis on urban green growth policies followed by concrete policy recommendations.
- Knowledge sharing activities (workshops, seminars, etc.) among cities, national government and other key partners and peers, in order to exchange practices and knowledge, identify solutions to common challenges; find inspiration and network for further co-operation.

CONTACT INFORMATION

Tadashi MATSUMOTO
Project Manager, Urban Green Growth/Knowledge Sharing
Centre for Entrepreneurship, SMEs, Local Development and Tourism, OECD
tadashi.matsumoto@oecd.org

More information on OECD's work on Urban Green Growth can be found at:
www.oecd.org/greencities

Thematic Meeting (1 Wastes and Sludge Treatment) Results of discussion

1. Remarkable ongoing, emerging efforts toward Smart City Development

- There is no shortage of best available technologies in waste water and solid waste treatment.
- Various efforts have been made (reuse of treated water and sludge, roadmap and feasibility study, integrated approach)
- Sensor and GPS in use.
- Advanced WtE technology can deliver better environmental performance over the regulation.

2. Major needs and challenges in Asian Cities

- Specific and cost effective technology is needed.
- Government procurement system limits adoption of new technologies; Capacity to evaluate technology is crucial.
- The budget is limited.
- Leadership and setting the targets and goals is needed.
- Social system to adopt tipping fee and segregation at the point; stakeholder participation.

3. Suggested Actions for Asian Cities toward Smart City Development

- Strong leadership and commitment of government.
- Integration of smart technology in project design.
- Explore PPP, Joint venture, direct rending to finance capital intensive investment.
- Improve procurement; lifecycle cost and DBO contract.

Thematic Meeting (2 Energy & Transportation)
Results of discussion

1. Remarkable ongoing, emerging efforts toward Smart City Development

- Climate change and responsive city.
- Collaborate with Japanese companies as well as with Yokohama City.
- Geopolitical situation
- Japanese experience to coordinate among the sectors is good to see

2. Suggested Actions for Asian Cities toward Smart City Development

- City to people collaboration People first.
- Balance
- Design, implement and manage
- Collaboration
- Finance

Thematic Meeting 3 (Use of ICT & Big Data)
Results of discussion

1. Remarkable ongoing, emerging efforts toward Smart City Development

- Many Asian cities started applying ICT & Big Data utilization for their intelligent urban solutions. As a powerful tool and mechanism, it helps enhancement of understanding of city with scientific evidence, and provide opportunities for solutions, such as mobility, energy, health, education, public security, disaster management, and transparency etc.
- Some local governments started providing a platform for various authorities, the private sector and citizens for better access to big data and accelerating innovation. Also, several local government in alliance in greater urban areas have started joint work for combining and compiling data, which would help common issues across boundaries (such as flooding and traffic)
- Technology suppliers have helped standardizing data sets and tailor-making them for optimal use for specific needs of cities. Experiences with disaster preparedness, crime prevention, as well as power supply and distribution demonstrated how they can apply technologies and data base specifically to needs of cities.

2. Major needs and challenges in Asian Cities

- Development of a strategic master plan and road map may be a key to provide a ground design for multiple stakeholders to take coordinated actions. It may help policy maker to understand what and how to utilize ICT & Big Data for smart city solutions.
- Barriers may often exist in regulation. For better utilizing ICT& Big data, national and local authorities need to provide an appropriate legal framework. Also there are concerns about affordability and information security.
- There are growing needs for data science education to harness future who understand multi-discipline approaches to urban issues with flexible solutions.

3. Suggested Actions for Asian Cities toward Smart City Development

- Cities may wish to consider collaboration work with surrounding cities/municipalities across geographical and administrative boundaries, by establishing a coordinating body.
- For technology supplier, defining and prioritizing actions by local governments are helpful for propose possible solutions that are suitable to their specific needs.
- Networking should be further accelerated among multiple stakeholders, including local governments, national authorities, technology suppliers, citizens, and beneficiaries of application of ICT & Big Data. Also city-to-city cooperation for realizing innovation is expected.

Thematic Meeting 4 (Japan's Experiences – Toward Further Collaboration / Co-creation With Countries)
Results of discussion

1. Remarkable ongoing, emerging efforts toward Smart City Development

- Japan's Experience of "Creative Reconstruction" , "localized city development" , "Planning" deliver direct support to sustainable city development needs in Asian countries.
- Optimization, Diversity in usages of renewable, advanced energy technology contributes to low-carbon, sustainability and resilience of city development.
- Action for developing local networks, international cooperation hubs are ongoing

2. Major needs and challenges in Asian Cities

- Partnership
- Finding on-the-ground needs and developing localized solution for strengthen city-to-city collaboration
- Quality of infrastructure
- Promotion of Successful SDGs goals achievement
- Re-Carbonation (Paris Agreement)

3. Suggested Actions for Asian Cities toward Smart City Development

- Changes in roles of City, International organization and Government body
- Further Collaboration of multilateral cooperation from different stakeholders
- "Connection" such as partnership, network, framework is key to achieve SDGs in Cities

スマートな都市開発会議

Tokyo Development Learning Center

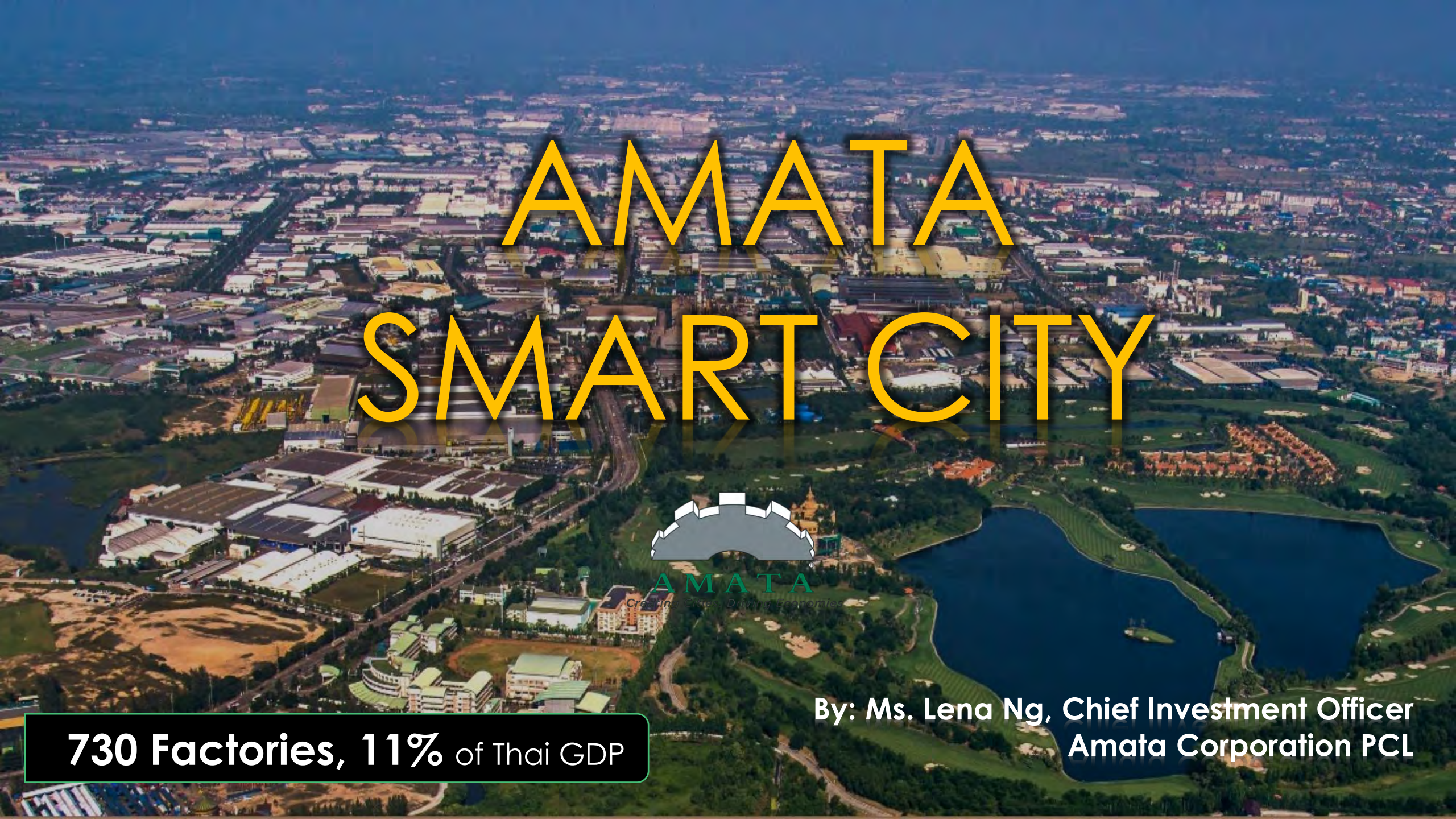
Smart Urban Development Conference

Data Informed Approaches for Competitive, Livable, and Sustainable Cities

ADB ASIAN DEVELOPMENT BANK

Government of Japan

WORLD BANK GROUP
Social, Urban, Rural & Resilience

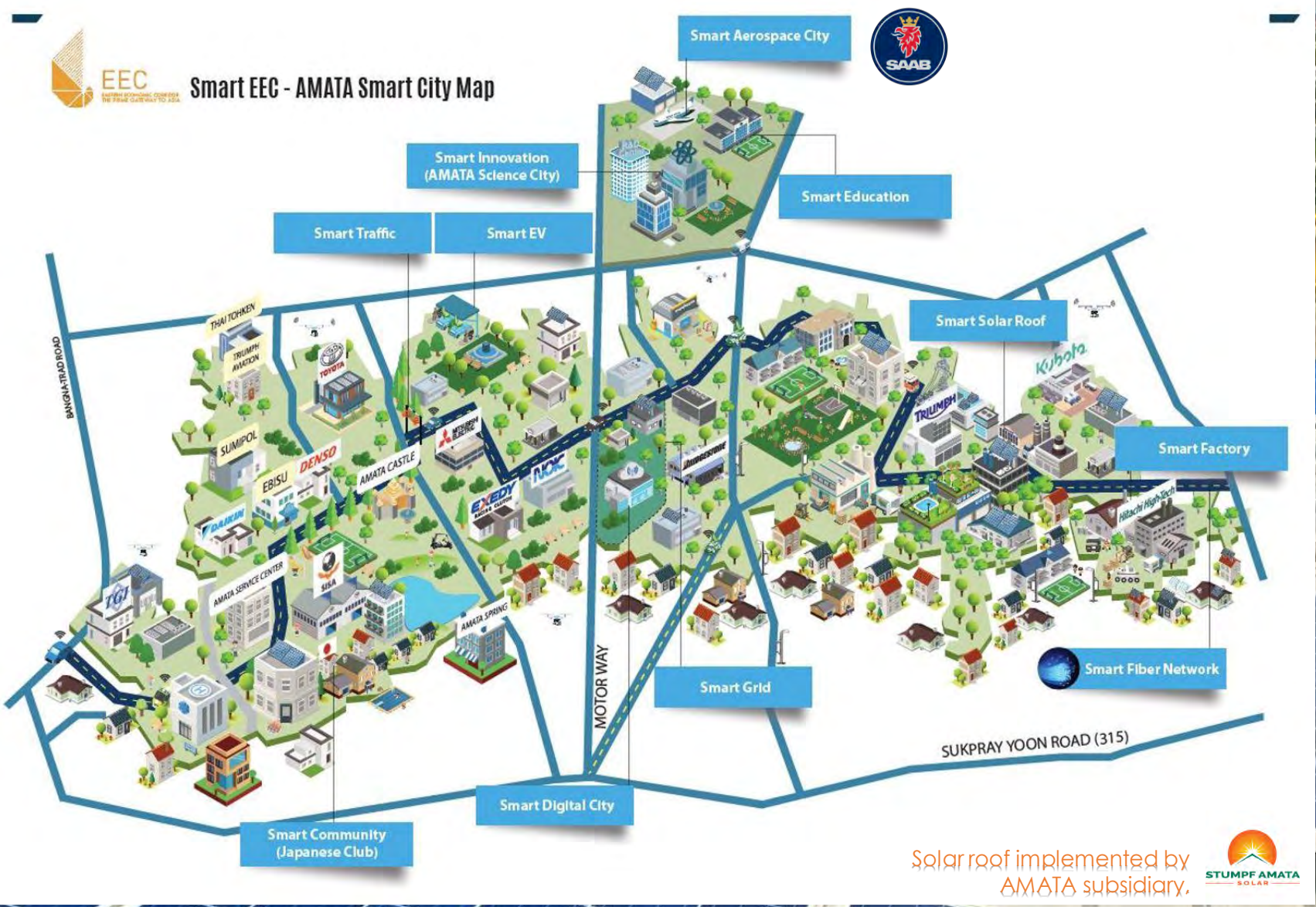

AMATA
SMART CITY
AMATA
730 Factories, 11% of Thai GDP
By: Ms. Lena Ng, Chief Investment Officer
Amata Corporation PCL

GOAL

- **Developed Land**: 400 square kilometers
- **Population**: 0.8-1 million
- **GDP**: 60-80 billion dollars

AMATA Smart City Statement

AMATA Smart City vision is to be **a self-reliant, energy-efficient city with renewable energy sources** and sustainable environmental management.



Solar roof implemented by AMATA subsidiary, STUMPF AMATA SOLAR

1000+
DELEGATES
250+
POLITICAL LEADERS

ONE GOAL

CLIMATE SUMMIT OF LOCAL AND REGIONAL LEADERS

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