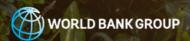


GREEN GROWTH

TRANSFORMING THE WORLD

SIXTH ANNUAL KOREA GREEN INNOVATION DAYS 2019

26-27 SEPT, 2019 SEOUL, REPUBLIC OF KOREA





www.wbgkggtf.org







The Korea Green Growth Trust Fund (KGGTF) is a partnership between the World Bank Group (WBG) and the Republic of Korea. Since it was established in 2013, the KGGTF has activated 132 grants in over 60 countries around the world.

Funded by the Ministry of Economy and Finance (MOEF) of South Korea, at a total of \$88 million USD through 2021, and managed by the World Bank Group, the trust fund supports results-driven programs that combine development goals with environmental and socio-economic sustainability.

To date over forty of these programs are linked to or support \$13 billion USD in World Bank lending and other co-financing facilities. Building on this success, the trust fund continues to work in collaboration with World Bank client countries to facilitate green growth programs across the urban, transport, ICT, energy, environment, water and climate sectors, with the important addition of agriculture in 2019. Many of its programs are multi-sector, integrating two or more sectors at both the planning and implementation stages. This provides opportunities that allow for cost savings, data collection, citizen engagement and new forms of transparency and governance.

Knowledge sharing and network building are an integral part of green growth implementation. Facilitating the sharing of green growth best practice and technical expertise through on-site learning, and through the development of practical learning tools is part of what makes the Korea Green Growth Trust Fund unique.

KGGTF at a Glance

MILLION FUND



SECTORS























URBAN TRANSPORT ENERGY ICT ENVIRONMENT CLIMATE WATER AGRICULTURE



From the Donor

만웰 드

We are proud of our strong partnership with the World Bank and the impact that is being created by the Korea Green Growth Trust Fund (KGGTF). By supporting new methodologies and technologies, investing in innovative approaches, and facilitating learning from around the world, KGGTF-funded activities are mainstreaming green growth through the World Bank's lending operations. To date KGGTF has supported 132 programs in the urban, transport, information and communication technology, energy, environment, water, and climate sectors. The fund has grown from US\$40 million to US\$88 million in support for World Bank Group programs through 2021 and to date has influenced \$13 billion in lending.

To facilitate our ability to support the dissemination of green growth knowledge, KGGTF delivers Technical Knowledge Exchange programs to countries seeking to learn about specific aspects of green growth. These on-site knowledge sharing programs offer World Bank operational teams and client countries the opportunity to meet directly with sources of green growth expertise at Korean ministries, institutes, multi-lateral organizations and private companies. As of June 2019, 50 such Technical Knowledge Exchange programs have brought almost 1000 World Bank staff and client country representatives together with 110 Korean entities to discuss hundreds of aspects of green growth policy and implementation.

Responding to the growing operational interest from World Bank client countries in furthering the technical learning and partnership opportunities with Korea on green growth, three new World Bank operational staff were located in the Korea office in April 2018 with a shared work program that builds on the strong technical knowledge dynamics between Korea, World Bank Global Practices, and client countries, leveraging the KGGTF as connector and facilitator. This new team will support the creation of meaningful opportunities for World Bank staff and client countries to learn from Korea's experiences with a wide range of green growth strategies in solid waste management, energy efficiency and land administration to name just a few.

We hope your experience at this sixth annual Korea Green Innovation Days provides many new opportunities for learning and engagement that will inform vital green growth investment for many months and years ahead.

Director Dongjoon Kim

Director of Development Finance Division Ministry of Economy and Finance (MOEF) Republic of Korea September 2019

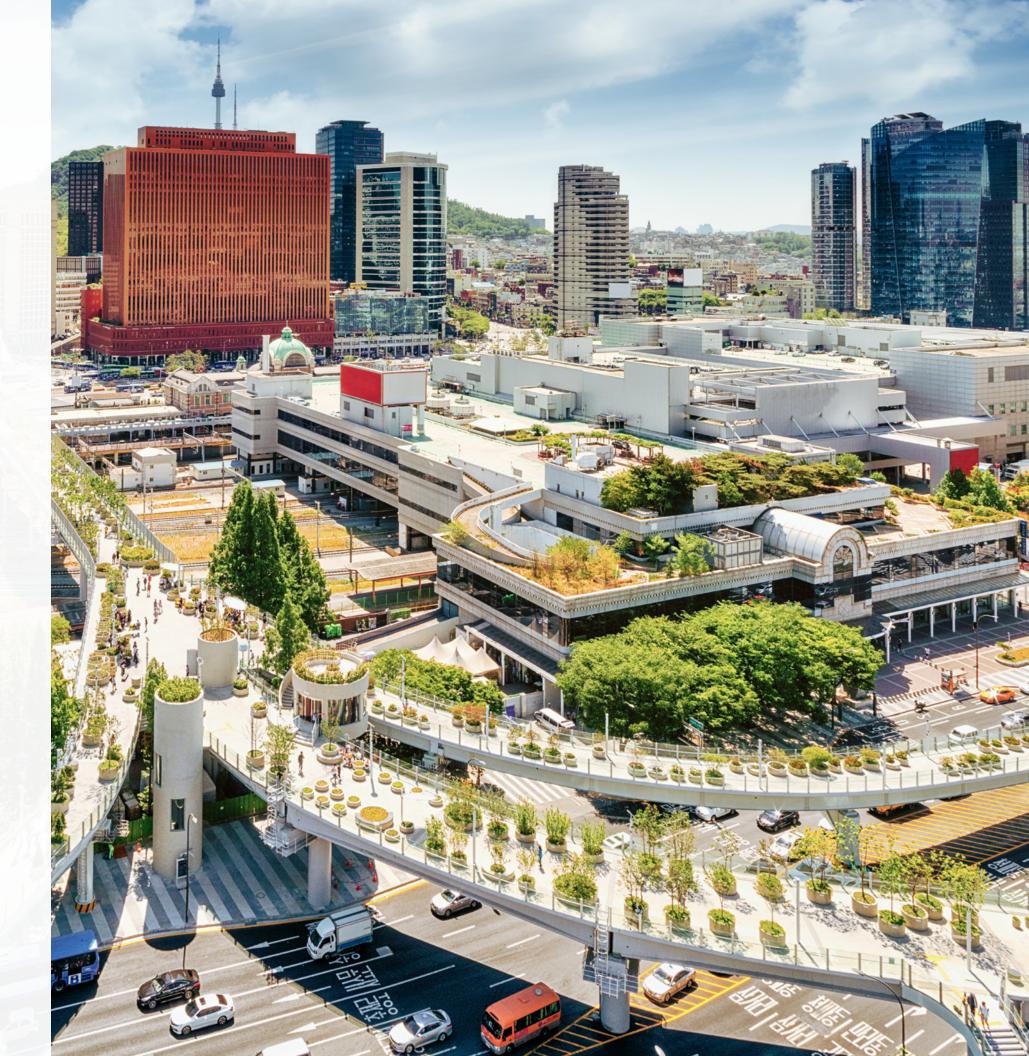
Korea's Green Growth Transformation

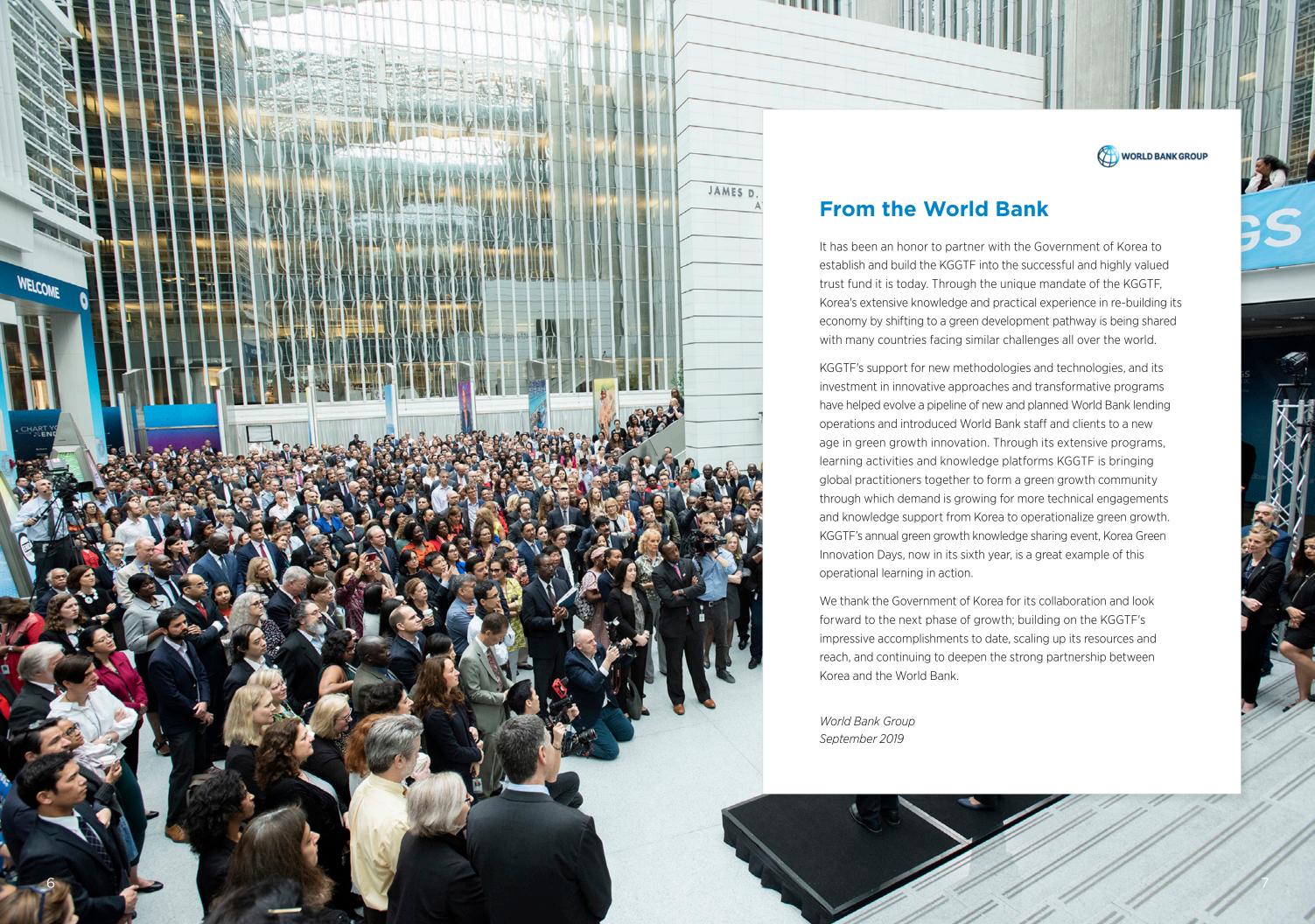
Over the course of fifty years, South Korea transformed from a poverty-stricken nation that had been devasted by war into a thriving developed nation whose economic development engine was linked to twenty-first century green growth principles and policies.

Korea's remarkable transition over several decades from the recipient of global aid to a strong, thriving economy and World Bank donor is an inspiring story. As a nation, South Korea's first-hand experience developing solutions across the agriculture, energy, environment, information and communication technology, urban, transport and water sectors is highly relevant for many developing countries facing similar challenges.

Korea's visionary leadership in green growth policies, integration of ground-breaking technologies, and long-term sustainable thinking is an inspiring story for governments around the world. Its first-hand experience implementing integrated, multi-sector solutions is highly relevant for countries working to design and implement robust green growth investments and build a sustainable future through green growth.





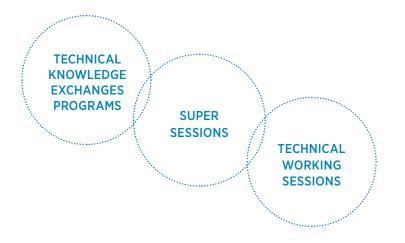


Korea Green Innovation Days

Implementing Ideas, Technologies and Solutions that are Transforming the World

Launched in 2014, Korea Green Innovation Days is the World Bank Group's annual flagship green growth knowledge sharing event organized and funded by the Korea Green Growth Trust Fund.

Once every year, the World Bank's leading experts in climate change and economic development, together with client country delegations and green growth practitioners from the Republic of Korea and around the world come together at Korea Green Innovation Days to share tangible examples and holistic, innovative approaches to achieving sustainable development.



KGID 2019 will provide you with the opportunity to:

LEARN how Korea, the World Bank, and many other countries are sharing and leveraging green growth technical knowledge globally.

EXAMINE the transformational power of green growth through Super Sessions and Working Sessions that focus on case studies, data and tangible results from KGGTFprograms and activities.

EXCHANGE technical and operational knowledge across multiple layers of green growth investment, gaining valuable insights from global colleagues implementing multi-sector green growth programs around the world.

NETWORK with a global community of technical experts, engage in dialogue on green innovation and implementation, and explore potential to collaborate long after the event.





The goal of KGID is to facilitate in-depth discussions on major issues surrounding green growth and long-term climate-smart development, and provide a platform for World Bank staff, client countries and green growth experts to share technical and operational knowledge.

Download the KGID 2019 APP





Please download the KGID 2019 mobile app powered by WHOVA!

Using the KGID app, you can:

View the agenda, session details, event info and speaker bios to maximize your opportunities for learning and engagement

Preview attendee profiles, identify key contacts and reach out in advance to make connections

Receive real-time event announcements and important updates from the organizers

Engage in interactive event activities (real-time voting & live polls, session feedback, photo sharing)

Access session materials and PPT presentations

We hope you will take advantage of the global expertise convened at this year's event - listen, learn, ask, engage and above all share your own experiences so that we can work together to transform the world!

Thank you for contributing your experience and expertise to make KGID 2019 a driver of green growth action and transformation!

Five Things To Do At KGID

With a rich, interactive agenda and so many opportunities to learn and share green growth knowledge we know you'll be busy, but be sure not to miss out on event features that will enhance your experience and may benefit your work long after the event. Here are five must-dos...



Stop by the video interview booth in the lobby

because sharing stories on the challenges and successes of your own green growth program will benefit thousands of other green growth practitioners, especially those who didn't join us in Seoul this year.



Review the conference agenda in advance

and consider which Super Sessions and Working Sessions will provide the most actionable information for your work — and come prepared with questions!



Join us for Cultural Night

to experience an authentic Korean street market and enjoy the opportunity to network with others in the KGID global community.



Consider the KGGTF staff as a resource for learning more

about everything that takes place at KGID. If you miss a workshop or a session, or need contact information from presenters or Korean partners, just contact us via the app or email, and we'll do our very best to make the connection!



so we can keep in touch and share updates on green growth activities, knowledge products and upcoming events.

Leveraging Transformative Green Growth Knowledge through the World Bank Group Korea Green Growth Trust Fund

Green growth programs are complex by nature. To succeed, they require expertise from multiple disciplines—from financing to public policy to information technology. By successfully pioneering green growth principles to transform its economy, Korea has become a global leader in green growth policies and the integration of ground-breaking technologies to drive economic growth.

The World Bank, partnering with Korea, has developed a customizable Technical Knowledge Exchange modality to share valuable expertise with countries seeking to learn about specific aspects of green growth. These on-site knowledge sharing programs offer World Bank operational teams and country delegations' access to technical green growth expertise from Korean ministries, institutes, multi-lateral organizations and private companies.

The World Bank KGGTF portfolio provides many compelling examples of the how green growth knowledge and technologies developed in Korea and other countries can provide lessons to emerging economies looking to apply green growth strategies to wide-ranging development challenges.

Case study examples include programs located in the Latin America and Caribbean region, and the East Asia Pacific region that received

grant funding and technical support from KGGTF.

LATIN AMERICA CAMBODIA MYANMAR PHILIPPINES

CASE STUDIES

Green Growth through Green Infrastructure Construction

Working with client teams from Latin American countries, the World Bank's Environment & Natural Resources Global Practice participated in a Technical Knowledge Exchange program, and accessed expertise through direct connections with public research institutions and private companies in Korea. These opportunities provided country teams with first-hand green construction experience to support the creation of technical tools and capacity to implement green construction projects in country, including:

Meetings with government ministries including the Ministry of Land, Infrastructure and Transport (MOLIT) and the Ministry of Environment (MOE of the Republic of Korea), Think Tanks such as the Korea Institute of Civil Engineering and Building Technology, leading academics, and numerous experts from firms including Dohwa and Hyundai in the private sector. The key objective was to support the development of tools to improve government agencies' capacity to design, contract and construct environmentally sustainable infrastructure projects.

Some of the many areas of knowledge leveraged include:

- Development of IT tools to track environmental, health and safety (EHS) project data to assist governmental infrastructure projects with real-time project management.
- Creating automated systems and checklists for construction contractors, health and safety supervision, and inspectors to monitor performance.
- Data monitoring tools for project tracking and web based EHS reporting.
- Developing e-learning courses and subsequent capacity building activities for governmental agencies, the construction industry, SME's and local workers and product and service providers.
- Regulatory and policy approaches to integrating environmental sustainability into infrastructure design and the construction industry – from jobs and service providers to environmental sustainability management, etc.
- Sustainable infrastructure procurement.
- Materials, technologies and equipment (MTE) that can lead to more sustainable infrastructure development in low and middle-income countries.



CASE STUDIES

Sustainable Solid Waste Management in Cambodia, Myanmar, and The Philippines

Working with World Bank operational teams, officials in Cambodia, Myanmar, and The Philippines are tackling solid waste management challenges through policy reforms, regional advocacy approaches, innovative technologies, capacity building, and citizen engagement programs.

With funding from the World Bank Korea Green Growth Trust Fund, a customized Technical Knowledge Exchange program was designed for a high-level delegation to learn about strategies and technologies that have transformed Korea to a nation in which 80% of solid waste is recycled and the country is moving towards a circular economy. Government officials from Cambodia's Ministry of Economy and Finance, Ministry of Environment, Ministry of Public Works, Phnom Penh City Hall and Siem Reap City Hall traveled to South Korea for a week-long program of site visits and discussions on various aspects of solid waste management designed to give participants a deep dive into South Korea's enabling and regulatory framework for waste management; business models including public private partnerships (PPPs) for Solid Waste Management in Korea; state-of-the-art technologies being used and developed as part of urban planning and new city development; and management of a regional landfill.

The Technical Knowledge Exchange on Solid Waste Management included meetings with the Korean Ministry of Environment (MOE), think tanks, public corporations, the Seoul Metropolitan Government (SMG), and the Export Import Bank of Korea (KEXIM).

In particular, this Knowledge Exchange focused on the development and implementation of policy reforms in the Solid Waste Management sector, and covered multi-disciplinary areas of learning, including:

- Successful investment models to drive growth and financial sustainability in the sector.
- Approaches to improving solid waste collection services.
- Community mobilization and awareness creation.
- Incentives-based programs to improve waste collection.
- Activities that address the impact of mismanaged solid waste.
- Public education and communication campaigns to build broad understanding and support for new SWM programs.
- Development of integrated management information systems.





THURSDAY SEPTEMBER 26

KGID DAY 1



8:00-8:50am

Registration



9:00-9:05am

Green Growth
Transforming the World

9:05-9:15am

Opening Remarks: Ministry of Economy and Finance of the Republic of Korea

Hoe Jeong Kim, Deputy Minister, Ministry of Economy and Finance, Republic of Korea

9:15-9:25am

Welcome from the World Bank Group

9:25-9:40am

KGGTF: From Effect to Transformation

Eun Joo Yi, KGGTF Program Manager, World Bank Group



SUPER SESSION 1
Green Growth
Transformational Impact

World Bank Global Practice Leaders from across sectors will open KGID 2019 by presenting case studies with tangible results of how green growth programs are transforming cities, regions, and countries on the path to sustainable development.

10:40-10:55am

Coffee Break

Networking



10:55am-12:00pm

SUPER SESSION 2

Innovation Driving Transformational Business Models

This session will feature future transformational models and directions and two notable case studies, e-Mobility in the transport sector and City Planning Labs in the urban sector, as compelling illustrations of how technology and data-driven decision making can deliver better, more efficient, more climate-friendly policies and services.

12:00-1:00pm

Lunch

Networking



1:00-1:35pm

SUPER SESSION 3

Building Blocks of Transformation: Green Construction

This session will introduce the World Bank's new Environmental and Social Framework through a conversation with partners Dohwa Engineering Ltd. and KICT covering the "building blocks" of green construction, including: Policy and regulatory frameworks, data tools for environmental health and safety regulations, and procurement of sustainable materials, equipment and technology.

1:35-1:55pm

SUPER SESSION 4

KIND: Leveraging Financing Models for Green Growth

This session will introduce the Korean Overseas Infrastructure and Urban Development Corporation and provide examples of financing models for green growth.

1:55-2:30pm

Networking and Green Talks Booth



2:30-5:00pm

Working Sessions on 6th floor

Four Working Sessions will be held each afternoon. These will be highly interactive technical discussion forums based on sectors or technical areas, where green growth experts and practitioners can discuss critical issues indepth, find solutions to specific problems, and seek opportunities for collaboration. These sessions will run simultaneously, please choose one to attend each day.

→ See Next Page for Working Sessions

2:30-5:00pm

Parallel Business Meetings on 6th floor



5:10-5:30pm

SUPER SESSION 5

Drone Ecosystems:
African Drone Forum

In this session, Korea's Ministry of Land, Infrastructure and Transport (MOLIT) and the World Bank share engagement plans to support drone transportation ecosystems that are changing the landscape in rural areas.

5:30-5:45pm

Reflections on Day 1

5:45-6:00pm

Wrap-up and Announcements

6:00-8:00pm

KGID 2019 Day 1 Dinner Reception and Cultural Night

→ See Pages 20-21 for Cultural Night

WORKING SESSIONS

THURSDAY SEPTEMBER 26



2:30-5:00pm



Integrated Coastal Zone Management

In many countries, economic activity and population are concentrated in coastal areas. Despite the natural advantage of coastal regions connecting land and sea and the strategic potential for development that this represents, these regions are most often mismanaged. World Bank operational teams and Korean experts will share challenges and solutions from multiple countries on coastal zone management.

DISCUSSION WILL INCLUDE

- Integrated coastal zone management including tourism, fisheries, ports and shipping industries.
- The way forward towards a sustainable Blue Economy.

MODERATORS

Nina Doetinchem, Sr. Natural Resources Management Specialist, WBG

Martin Heger, Economist, WBG



Sustainable Production in Industrial Parks

The Eco-Industrial Park (EIP) is a not a new concept in the industrialized world. It promotes sustainable production and helps maximize the use of finite resources. Regardless of the benefits that EIPs bring there are limitations when applying EIPs in emerging economies. This session will stimulate discussion on operationalizing EIPs.

DISCUSSION WILL INCLUDE

- Required regulatory, fiscal and institutional reforms to operationalize EIPs nationwide.
- Human resources, capacity and skills needed to operationalize EIPs nationwide.
- Strategies to promote sustainable manufacturing at EIPs and engage with private operational firms.

MODERATORS

Sinem Demir, Operations Officer, WBG

Ahmad Imran Aslam, Environment Specialist, WBG

Four Working Sessions will be held each afternoon. These will be highly interactive technical discussion forums based on sectors or technical areas, where green growth experts and practitioners can discuss critical issues in-depth, find solutions to specific problems, and seek opportunities for collaboration. These sessions will run simultaneously, please choose one to attend each day.



Urban Public Spaces as a Transformative Instrument for Inclusive Green Growth

Urban public space improvements are closely linked with a city's development agenda including its economic, social and environmental goals and strategies. In addition to green spaces in cities, they can be focal areas for accelerated economic activity in some cases. In this session case studies will present concrete evidence of the impact that public spaces can have on their surrounding areas and cities. Global experience of using public spaces to meet urban challenges will be shared, with cases from South Asia and Korea.

DISCUSSION WILL INCLUDE

- Value and impact of urban public spaces.
- Use of physical city assets such as streets, open spaces and public buildings.
- Approaches for convincing policymakers, residents and stakeholders of the potential benefits of urban public spaces.

MODERATORS

Andre Bald, Lead Urban Specialist, WBG



Future of Public Transport in Cities

Successful cities rely on efficient transportation. Establishing the correct policies and incorporating new technologies can encourage citizens to use public transit which can boost future investment and economic growth. This session will look at a number of case studies on public transport challenges and future directions for Colombia, Panama, Medellin and Seoul.

DISCUSSION WILL INCLUDE

- Public transport challenges and solutions.
- Electric bus operations and considerations for future investment.
- The rise of the hydrogen economy and its impact on mobility.

MODERATORS

Claudia Lopez Rodriguez,

Transport Specialist, WBG

Felipe Targa, Sr. Urban Transport Specialist, WBG

KGID DAY 1 : Thursday, September 26

CULTURAL NIGHT

Experiencing a Seoul Street Market

No trip to Seoul is complete without a visit to one of the city's traditional street markets where visitors can shop for everything from electronics and clothing to traditional handicrafts, and sample local delicacies from street food vendors.

On Thursday 26 September, we bring the market to you! Join us to experience an authentic Seoul street market complete with shopping and authentic local food.



A variety of traditional **Korean comfort foods** and beverages



Korean handicrafts and handmade items for sale



A traditional Hanbok costume exhibit where you can take photos in traditional Hanbok garb!





"Hanbok" is a collective term for traditional Korean clothing. It can be classified into ceremonial and everyday dress and is still worn today for festivals, celebrations, ceremonies and national holidays.

Hanbok is characterized by vibrant colors and simple lines without pockets. The hanbok is typically defined as having 'Eight Beauties': Structure, Form, Creativity, Harmony, Color, Nature, Empty space, and Personal character.

FRIDAY SEPTEMBER 27

KGID DAY 2



8:30-9:00am

Coffee, Networking & Pre-scheduled meetings



9:00-9:05am

Welcome to Day 2

9:05-10:05am

SUPER SESSION 1

National Green Growth Policy Transformation Stories

Korea's Committee on Green Growth will present results from the past 10 years' green growth policy, and insights on future direction, with introductory remarks from the Prime Minister's Secretariat's Office for Supporting Green Growth. The World Bank will share stories from Colombia. Vietnam and Laos as they transition to green growth strategies.

OFFICE FOR SUPPORTING GREEN GROWTH, OFFICE FOR GOVERNMENT POLICY COORDINATION. PRIME MINISTER'S SECRETARIAT, REPUBLIC OF KOREA

Jinnam Kim, Director General, Office for Supporting Green Growth, RoK

COMMITTEE ON GREEN GROWTH, REPUBLIC OF KOREA

Yujin Lee, Committee on Green Growth, RoK

WORLD BANK GROUP

Christophe Crepin, Practice Manager, East Asia Pacific, World Bank Group

10:05-10:35am

SUPER SESSION 2

Window to the Future: **Long-Term Green Growth Investment Methodologies** and Impact

This session will examine macro-economic applications of the World Bank's Decision Making Under Deep Uncertainty (DMDU) methodology, and results from its application to water sector pilot projects.

10:35-10:50am

Coffee Break

Networking



10:50-11:30am

SUPER SESSION 3

World Bank Partnerships Connecting and Leveraging the World Bank Korea Office (Songdo)

Case studies will demonstrate the importance of effective partnerships for accessing and



11:30am-12:30pm

SUPER SESSION 4 Looking Ahead:

Transformation on the Horizon

Operational teams will share their vision and plans for recently launched projects in coastal management in Tunisia and Morocco, rooftop solar in Turkey, and industrial energy efficiency in Vietnam, highlighting the innovative technologies and citizen engagement strategies supporting them.

12:30-1:30pm

Lunch

Networking



1:30-2:15pm

SUPER SESSION 5

Transformation in **Your Own Words**

Client teams share insights and progress with KGGTF grant activities and green growth investments as they yield learnings and results.



2:30-5:00pm

Working Sessions on 6th floor

Four Working Sessions will be held each afternoon. These will be highly interactive technical discussion forums based on sectors or technical areas, where green growth experts and practitioners can discuss critical issues in-depth, find solutions to specific problems, and seek opportunities for collaboration. These sessions will run simultaneously, please choose one to attend each day.

→ See Next Page for **Working Sessions**



5:10-5:20pm

Closing Remarks: Next Steps for Continual Growth & Transformation

5:20-5:30pm

Wrap Up and Thanks

5:30pm

Group Photograph

5:30-7:00pm

Cocktail Reception

2:30-5:00pm

Parallel Business Meetings on 6th floor

leveraging Korean knowledge, technology and investment to support ambitious green growth plans.

WORKING SESSIONS

FRIDAY SEPTEMBER 27



2:30-5:00pm



Smart Water Management in Latin America

Clean water is vital for all living things. Many countries experience difficulty securing water due to the impact of extreme climate conditions. This session will focus on World Bank water projects in the Latin America & Caribbean region, and the common and distinctive challenges facing the region.

DISCUSSION WILL INCLUDE

 How Korea's experience may be relevant, and its possible application to the Water GP's operations.

MODERATOR

Rita Cestti, Practice Manager, Latin America and Caribbean Water Unit. WBG



Geo-Spatial Data & Land Management

Clear land management, cadastral mapping and land ownership registration form a foundational basis for economies to develop. However, registering and managing this information can be challenging. Use of geo-spatial information can reduce the inefficiencies related to land use and contribute to the efficient use of land.

DISCUSSION WILL INCLUDE

- Future capacity building possibilities for Kosovo, Pakistan & Myanmar.
- Social and economic benefits of using geospatial information, and how such benefits can be measured.
- Data Governance and Inter-Agency Coordination, at municipal and national levels.

MODERATORS

Paul Scott Prettitore, Sr. Land Administration Specialist, WBG

Gayatri Singh, Sr. Urban Development Specialist, WBG Four Working Sessions will be held each afternoon. These will be highly interactive technical discussion forums based on sectors or technical areas, where green growth experts and practitioners can discuss critical issues in-depth, find solutions to specific problems, and seek opportunities for collaboration. These sessions will run simultaneously, please choose one to attend each day.



Renewable Energy and Energy Efficiency

The world has experienced energy breakthroughs – costs related to renewables, battery storage and energy integration have decreased and are now viable, economical options. Recent projects including shared power systems between neighboring countries, smart grids, and solar panels on residential rooftops demonstrate how countries can decrease energy costs and transition towards energy independence and sustainability, using these new tools to create highly tailored energy solutions. This session will explore energy transformation and financing mechanisms for improved energy efficiency.

DISCUSSION WILL INCLUDE

- Renewable energy integration.
- Energy efficiency project financing mechanisms.

MODERATORS

Almudena Mateos Merino, Sr. Energy Specialist, WBG

Jari Vayrynen, Sr. Energy Specialist, WBG



African Drone Forum: Unlocking Drones for Development in Africa

Lake Victoria's basin and islands are home to over 30 million people – the most densely populated rural area in the world. Accessing remote islands and communities with vital health supplies and urgent goods can be very challenging due to extreme rugged terrain and limited road networks. Mobilizing cargo drones as a new mobility and delivery paradigm has tremendous potential to alleviate supply chain burdens and facilitate faster delivery of goods and services to communities. This session will introduce African Drone Forum (ADF) formerly known as Lake Victoria Challenge (LVC), led by the World Bank.

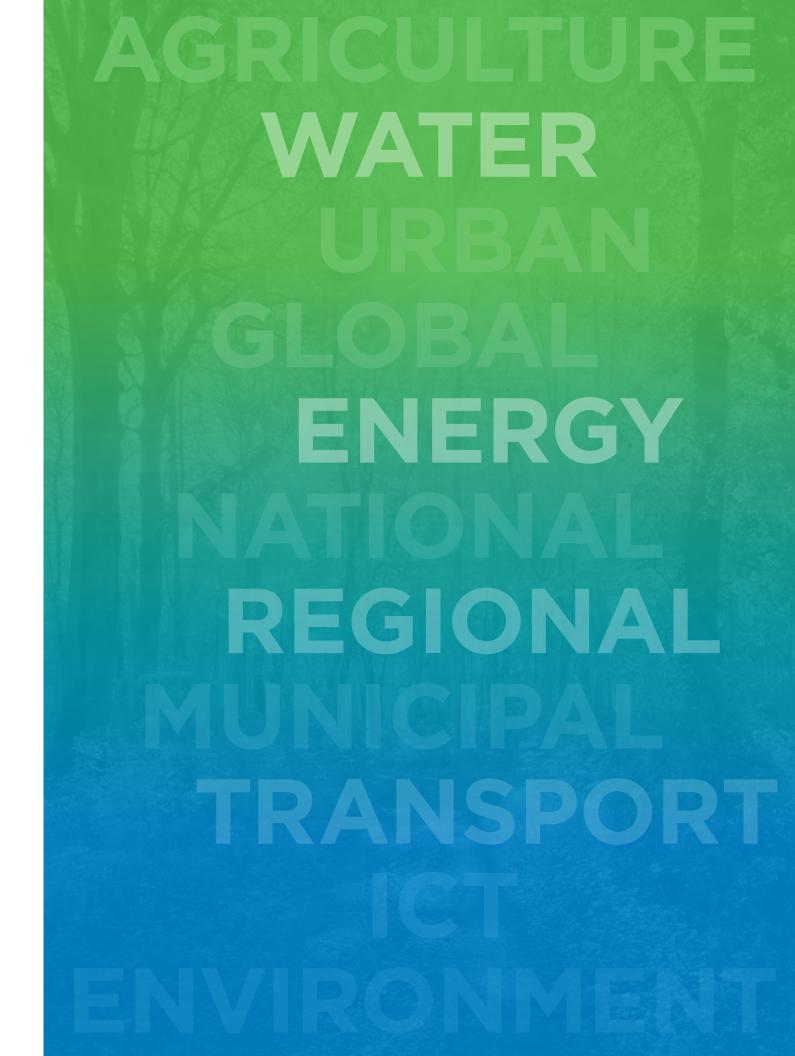
DISCUSSION WILL INCLUDE

- The challenges and advantages of private firms entering the African drone market.
- How the private sector can participate in the ADF and other upcoming opportunities in Africa.

MODERATOR

Edward Charles Anderson, Sr. Disaster Risk Management Specialist, WBG









KGGTF is committed to sharing technical knowledge and first-hand experience of implementing integrated green growth solutions that contribute to sustainable development and shared economic prosperity.

To learn more about us visit **www.worldbank.org** and for enquiries about grant applications please contact the Country Management Unit at your local World Bank office **www.worldbank.org**.