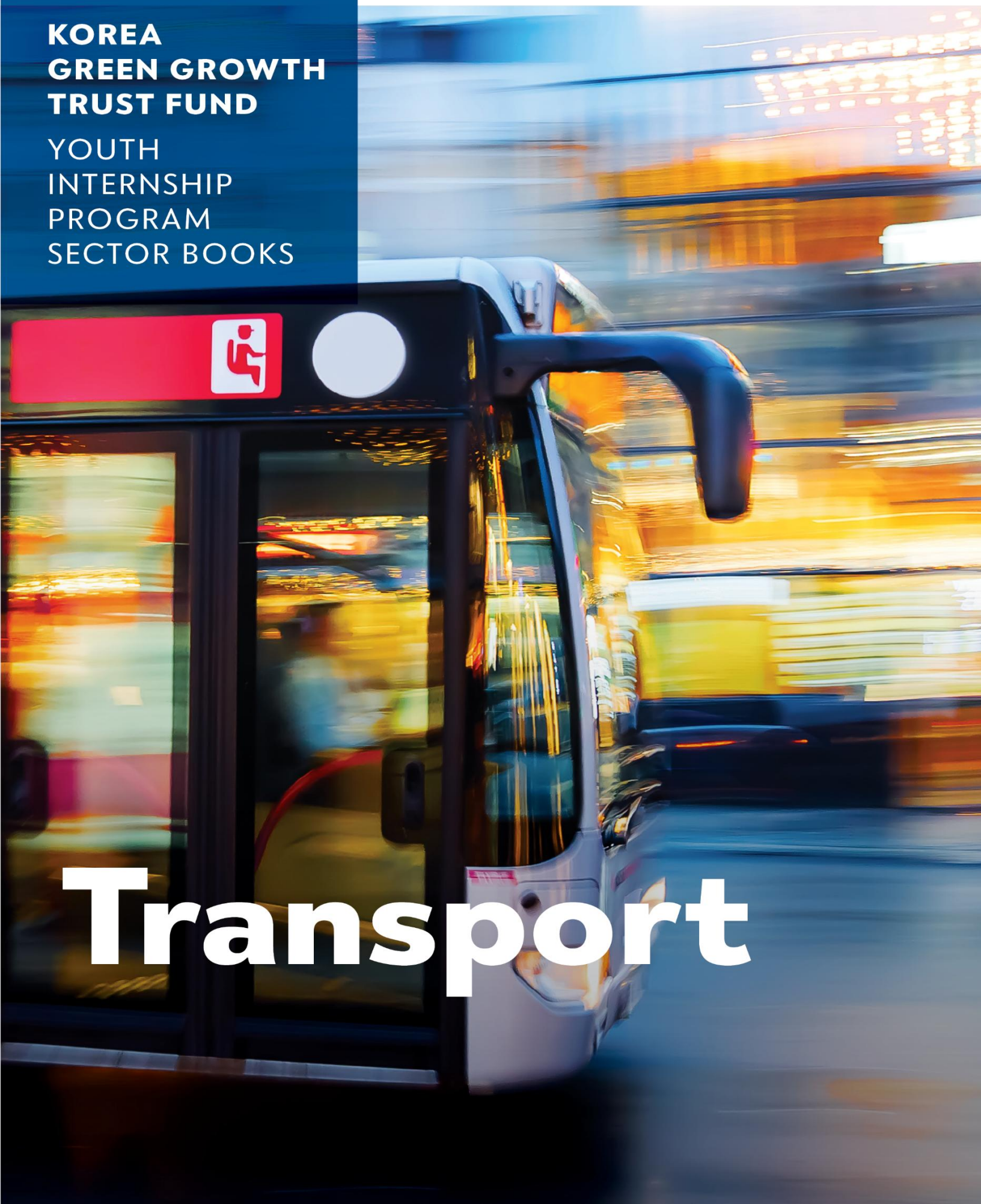
WORLD BANK GROUP

KOREA GREEN GROWTH TRUST FUND

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YOUTH INTERNSHIP PROGRAM SECTOR BOOKS



Transport

The original draft of this sectoral portfolio book was authored by the second internship cohort (**Ji Hyun Um, Seyon Koo, Iseo Choi, Geunhee Kim**) and later revised and updated by the third (**Jihye Kang, Sungbin Na**) cohort.

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Korea Green Growth Trust Fund (KGGTF)

Transport Portfolio Book

Introduction

The transport sector is a cornerstone of economic growth, social inclusion, and resilience. By connecting people to jobs, markets, healthcare and education, transport drives mobility, trade, and regional integration. Well-designed and sustainable systems are critical for reducing poverty and achieving inclusive growth while supporting the global transition to a low-carbon economy.

The World Bank Group is the world's largest provider of development financing for transport supporting countries build safe, efficient, and sustainable mobility systems. In FY25, the Bank approved 53 transport projects totaling $11.2 billion and is currently supporting 178 projects with $40.8 billion in commitments, representing about 10% of its active portfolio. Since FY17, $12.2 billion has been committed to sustainable and resilient actions across 178 projects, embedding climate co-benefits into all new transport initiatives.

Yet the sector faces mounting challenges. Transport is a major and growing source of global emissions while remaining highly vulnerable to climate risks. Roughly 1 billion people still live more than two kilometers from an all-weather road, with isolation strongly linked to poverty. Road crashes claim over 1.19 million lives annually, 93% of them in developing countries. Congestion, outdated infrastructure, and limited access to sustainable finance further hinder progress.

Key priorities moving forward include scaling up sustainable mobility solutions such as high-quality public transport, well-connected urban systems, and safe, non-motorized transport options. Expanding cleaner technologies, modernizing logistics systems, and strengthening links between farms and markets will be vital to achieving shared economic, social, and environmental goals. Building resilience against and integrating digital tools for smarter, more efficient transport networks are equally central to providing sustainable mobility for all.

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Korea Green Growth Trust Fund's Role

Why Korea?

Korea's transformation from aid recipient to global innovation leader is a powerful example of what bold vision and smart policy can achieve. Within a few decades, Korea rose from poverty to prosperity by leveraging science, technology, and human capital to fuel inclusive growth and sustainability. This journey—anchored in strategic policymaking and relentless innovation—offers a compelling blueprint for countries striving to leapfrog development challenges and build resilient, future-ready economies.

The Korea Green Growth Trust Fund (KGGTF) plays a catalytic role in shaping the future of sustainable transport. Its current portfolio includes 43 transport grants, with new initiatives added each year to reflect emerging priorities and opportunities. These grants have supported early-stage innovations and piloted digital solutions such as smart fare systems, mobile taxi platforms, sustainable logistics, and cleaner mobility strategies. By fostering regional knowledge exchange and channeling Korean expertise, KGGTF has helped scale investments in green transport. Looking ahead, the Fund continues to drive resilient, efficient, and digitally enabled mobility systems—supporting countries to deliver inclusive growth and align with global development goals.

Through KGGTF, Korea shares these lessons with the world—continuously expanding its portfolio each year to meet new challenges and opportunities. By connecting proven policies, cutting-edge technologies, and institutional expertise with World Bank teams and partner countries, KGGTF ensures Korea's experience remains a dynamic, growing resource for advancing sustainable transport and broader green growth solutions

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KGGTF Transport Strategic Priorities

KGGTF's early transport sector grants (2013–2017) focused on foundational objectives such as urban infrastructure planning, institutional diagnostics, and municipal capacity-building. These programs emphasized spatial planning, access to public services, and baseline transport infrastructure assessments and strategies that lay the groundwork for improved connectivity and inclusive development in rapidly growing urban areas.

Since 2018, the portfolio has expanded to address more complex and integrated priorities. Reflecting the urgency of resilience and the opportunities of digital transformation, newer grants support Transit-Oriented Development (TOD), digital mobility platforms, and sustainable logistics as pathways to more efficient, and environmentally sound transport systems.

This strategic shift aligns with global frameworks such as the Sustainable Development Goals (SDGs) and the World Bank's Green, Resilient, and Inclusive Development (GRID) approach. As client demand shifts toward innovative, scalable, and cross-sectoral transport solutions, KGGTF's evolving role positions it as a key enabler of smart and resilient urban transformation.

Current Priorities

KGGTF's transport portfolio is currently centered on advancing sustainable, climate-smart, and digitally enabled mobility systems. The following themes define the sector's strategic focus:

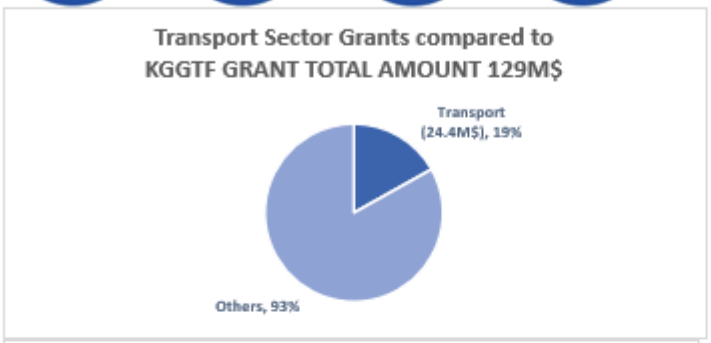
- **Green Urban Mobility**: Supports the expansion of electric vehicles (EVs), charging infrastructure, and enabling policy frameworks to reduce transport-related emissions and air pollution.
- **Transit-Oriented Development (TOD)**: Promotes land-use and transport integration that fosters compact, walkable cities with enhanced access to public transport and active mobility reducing car dependency and promoting inclusive urban regeneration.
- **Digital Transformation**: Invests in smart mobility platforms, real-time traffic management systems, and data-driven policy tools to improve service efficiency, inform planning, and enhance user experience.
- **Resilient Infrastructure Planning**: Embeds climate risk diagnostics and adaptive design into transport infrastructure projects, ensuring long-term durability and service continuity under climate stress.
- **Multi-Modal and Inclusive Accessibility**: Enhances integration between transport modes and prioritizes underserved communities, informal settlements, and gender-responsive design to improve equitable access to mobility.

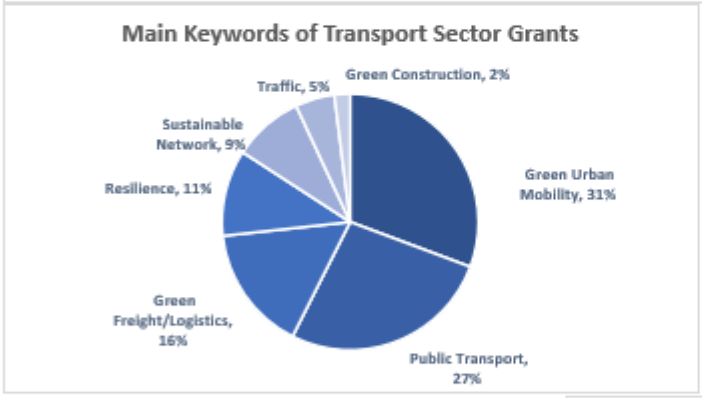
Together, these themes represent a forward-looking, system-wide approach that aligns with KGGTF's mission to foster green growth, enhance urban resilience, and scale innovation across developing countries.

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KGGTF Transport Portfolio Snapshot

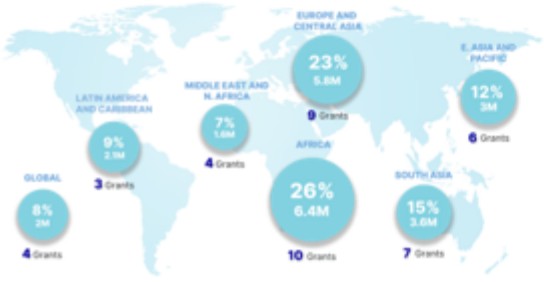


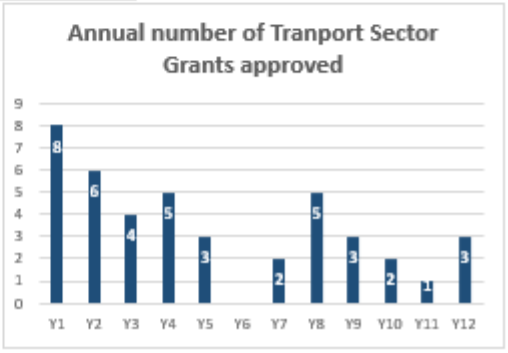




List of Client Countries / Region

Argentina
Armenia
Azerbaijan
Bangladesh
Belarus
Bhutan
Bosnia Herzegovina
Brazil
Cambodia
Colombia
East Africa
Egypt
Ethiopia
Georgia
Georgia
Ghana
Global
India
Indonesia
Kazakhstan
Kyrgyz Republic
Lao PDR
Lebanon
Malawi
Moldova
Mongolia
Morocco
Peru
Philippines
Poland
Sri Lanka
Sub-saharan Africa
Tanzania
Tunisia
Turkiye
Uganda
Ukraine
Uzbekistan
Vietnam
Western Balkans





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How KGGTF Supports Bank Teams

KGGTF transport grants have delivered concrete contributions across policy development, technical assistance, and pilot implementation. The portfolio highlights how the program helps close capacity gaps, support policy frameworks, and introduce scalable innovations for sustainable mobility.

Technical Assistance and Capacity Building

Grants have equipped government agencies and municipal authorities with the tools to design and implement evidence-based strategies for green transport. In India (K175), KGGTF supported the creation of a national freight decarbonization strategy, contributing to a new sectoral roadmap for the Ministry of Road Transport and Highways. In Mongolia (K177), technical support and policy guidance enabled Ulaanbaatar to launch its first Mobility-as-a-Service (MaaS) strategy improving public transit access in underserved areas.

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Case Example: On-Demand Transit Service to Improve the Accessibility of Ulaanbaatar's Vulnerable Population

Ulaanbaatar, home to nearly half of Mongolia's population, faces severe transport challenges. Rapid urbanization, weak public transport services, and vulnerability to flooding and other natural hazards have stretched the city's 1,300-km road network. Chronic congestion limited traffic safety measures, and disconnected infrastructure compound the problem. With 60% of residents living in peripheral districts without paved roads or reliable bus services, low-income and vulnerable groups are the hardest hit. Institutional weaknesses, limited evidence-based planning, and financial stress in the bus-dependent transit system further constrain the city's ability to respond.

To address these systemic issues, the KGGTF program *On-Demand Transit Service to Improve the Accessibility of Ulaanbaatar's Vulnerable Population* was launched to pilot innovative public transport solutions. Its goal: improve mobility access for residents in underserved areas by testing On-Demand Transit Services (ODTS) and laying the foundation for Mobility-as-a-Service (MaaS). Together these approaches worked to create a more integrated, customer-centric, and multimodal mobility system, one that advances economic opportunity and resilience.

Key Activities

- **Pre-Feasibility Study for ODTS**: Conducted quantitative demand analysis, financial viability assessments, and stakeholder engagement to select Songinokhairkhan district as the pilot area.
- **Mobility-as-a-Service (MaaS) Study**: Designed Ulaanbaatar's first MaaS framework, including data-driven models, passenger information systems, and integrated payment options informed by global best practices.
- **Public Transport Sector Reform Plan**: Updated strategies with actionable steps to improve affordability, safety, and service quality across the system.
- **Capacity Building and Knowledge Sharing**: Delivered four in-country training sessions for 50 participants, and trained city leaders through Korea Green Innovation Days (2022, 2024) and a Leaders in Urban Transport Planning workshop in Seoul (2023).
- **Partnership with Korea Transport Institute (KOTI)**: Leveraged Korean expertise to guide ODTS design, MaaS implementation planning, and broader transport policy reforms.

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Outcomes

A defining outcome of this initiative was its role in shaping the **Ulaanbaatar Sustainable Urban Transport Project (USUTP)**, a $100 million World Bank lending operation. The project now includes ODTS pilots in underserved districts and a citywide MaaS strategy, both directly informed by KGGTF-funded studies. By embedding these innovations into a major investment operation, the grant ensured alignment between new financing, institutional reforms, and technology adoption.

Beyond financing, the program strengthened Ulaanbaatar's institutional readiness to scale ODTS beyond initial pilots, adopt MaaS-based planning, and deliver resilient mobility for vulnerable communities. In doing so, the grant modernized urban transport strategies while advancing livability in one of Asia's fastest-growing, most climate-vulnerable cities.

Quotes

"Improving traffic conditions in Ulaanbaatar has become a top priority for the municipality and the Mongolian government. The project is designed to benefit all road users including vulnerable users such as pedestrians in Ulaanbaatar through reduced traffic congestion, improved road safety, and less disruptions from natural hazards." — Andrei Mikhnev, Former World Bank Country Manager for Mongolia

Innovation and Pilot Initiatives

KGGTF has supported the testing of frontier solutions that demonstrate how innovation can transform transport systems. Pilots have spanned digital mobility platforms, smart parking, and green maritime infrastructure. In Kazakhstan and Uzbekistan (K156), smart city pilots introduced e-ticketing, traffic monitoring, and digital mobility tools that have boosted service efficiency while reducing emissions and improving air quality. In Indonesia (K157), a green maritime initiative piloted low-/zero-carbon technologies and modern logistics in Eastern ports. Drawing on international best practices for port management, the program enhanced competitiveness, resilience, and sustainable economic growth.

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Case Example: Egypt Green Transport Master Plan and Data Management System

Cairo, home to 25% of Egypt's population and half of its GDP, ranks among the five most congested and polluted cities. Traffic alone drains an estimated 3.6% of national GDP in the Greater Cairo Metro Area. Despite significant investments in mass transit, rapid urbanization, rising motorization, and fragmented governance highlight the urgent need for an integrated transport strategy.

To meet this challenge, the Government of Egypt, with support from KGGTF, launched the *Egypt Green Transport Master Plan and Data Management System (DMS)*. The program aimed to drive digital transformation, strengthen coordination, and advance integrated mobility across Greater Cairo

Core objectives included:

Establishing an integrated data management system to guide planning, enhance governance, and attract private investment.

Developing a strategic Urban Transport Master Plan for Greater Cairo that embeds the latest technologies for resilience.

Key Activities

- **Transport Data & Modeling**: Consolidated public and private datasets, built a regional travel demand model, and mapped geographic, demographic, and socioeconomic mobility patterns.
- **Project Prioritization**: Identified climate-friendly and economically viable public transport investments, including Bus Rapid Transit (BRT) expansion and multimodal integration.
- **Preparatory Work**: Developed pre-conceptual designs, safeguards, and financial assessments to attract private investment.
- **Capacity Building**: Trained government staff on data collection, demand modeling, project design, and impact assessment.
- **Digital Dashboard**: Developed a prototype online dashboard with real-time information on traffic, bus schedules, and park-and-ride services to encourage shifts away from private car use.
- **Policy and Regulatory Support**: Provided analytics for Egypt's Country Climate and Development Report (CCDR), including the first nation's first transport carbon emissions model.

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Results and Policy Impact

The initiative directly shaped Egypt's sustainable transport program ahead of COP27. It supported the design of a Greater Cairo BRT system, informed vehicle retirement programs, and guided reforms such as low emission fleet adoption, road pricing, parking management, and streetscape upgrades for walking and cycling.

Partnerships

KGGTF partnered with the Korea Transport Institute (KOTI), Korean Energy Agency (KEA), and Green Technology Center-Korea (GTC-K) to bring Korean expertise in smart city planning and BRT operations. The UK's SPEIG also provided US$585,000 in co-financing. The program also strengthened the **Land Transport Regulatory Authority (LTRA)**, using Seoul's BRT as a case study.

Looking Forward

The groundwork laid by this program positions Egypt to scale green growth investment in urban mobility. New solutions such as **solar-powered EV charging stations** are under consideration, signaling Egypt's commitment to resilient and sustainable transport systems.

Leveraging Lending Operations

Transport grants have influenced the design and scale of World Bank lending operations through upstream diagnostics and technical assessments. In Rwanda, Kenya, Tanzania, and Uganda (K160), the program supported early-stage design and stakeholder engagement for four major WB lending projects totaling $925 million, including the Rwanda Urban Mobility Project and Kenya Urban Mobility Improvement Project. Similarly, the grant in India (K175) informed the Green National Highways Corridor Project (P167350) by identifying cost-saving, low-emission strategies in freight logistics.

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Case Study: Reviving Kolkata's Waterways: A Green Growth Approach to Inland Water Transport (Annual report 2024)

Kolkata, one of the world's most flood-prone cities, faces mounting risks from rising water levels and frequent cyclones. The devastation of Super Cyclone Amphan in 2020 underscored the urgency of building climate-resilient infrastructure. Despite being historically shaped by the Hooghly River, the city has long underutilized its riverfront and allowed its inland water transport (IWT) system to decline. At the same time, growing freight volumes at the Port of Kolkata have intensified congestion, air pollution, and pressure on the road infrastructure. In response, the Government of West Bengal identified revitalizing IWT as a strategic pathway to reconnect the city with its river while advancing resilience and sustainable mobility.

The program, *Reviving Kolkata's Waterways: A Green Growth Approach to Inland Water Transport*, sought to modernize the Hooghly River's IWT system by integrating climate resilience, low-carbon technologies, and urban upgrading. Its purpose extended beyond transport improvements—it aimed to transform the riverfront into a strategic asset that supports inclusive economic growth and environmental sustainability.

Key Activities

- **Climate-Resilient IWT Strategy**: Transitioned diesel fleets to hybrid vessels, minimized dredging, and integrated infrastructure resilient to floods and extreme weather.
- **Urban Upgrading Around Jetty Ghats:** Enhanced pedestrian access, waste management, and public transport connectivity, positioning jetty areas as hubs for commerce and social inclusion.
- **Data and Planning Tools**: Built a geospatial data platform and waterfront master plan to guide spatial planning and future investment.
- **Innovative Financing Models**: Designed PPP models to mobilize private capital for IWT infrastructure and freight services.
- **Capacity Building**: Trained vessel operators and port authorities in modern fleet management, technology adoption and sustainable operations.
- training needs to expand smart farming nationwide.

Outcomes

One of the program's most significant outcomes was shaping the $150 million World Bank *West Bengal Inland Water Transport, Logistics, and Spatial Development Project which* integrates IWT modernization with spatial planning to improve mobility, enhance climate resilience, and strengthen urban-riverfront connectivity across the Kolkata Metropolitan Area. The grant also influenced $105 million in World Bank

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lending and mobilized $45 million in co-financing, achieving a leverage effect of $262 for every $1 of KGGTF support.

Beyond transport infrastructure, the program established a waterfront master plan and investment framework that positioned the river as a vibrant, sustainable urban asset. By embedding hybrid vessel transition, riverfront upgrading, and PPP financing into lending operations, the project aligned financial resources with systemic reforms, ensuring lasting resilience and inclusivity.

The case of Kolkata demonstrates how climate risks can be transformed into opportunities for sustainable urban renewal. By integrating green growth strategies with innovative financing and strong institutional capacity, the program repositioned Kolkata's riverfront as a driver of mobility, resilience, and economic opportunity.

Promoting Cross-regional Learning

Through a range of knowledge exchange activities—including Leaders in Urban Transport Planning (LUTP) workshops, study tours to Korea, and technical collaborations—KGGTF has advanced peer learning on urban mobility, transit-oriented development (TOD), and climate-smart transport solutions. In East Africa (K160), study tours and workshops facilitated by KOTI and LUTP enabled institutional stakeholders from four cities to design context-specific transport reform. In Malawi (K159), Korean institutions partnered with local stakeholders to co-develop a national drone strategy, pioneering the use of green aerial delivery systems to improve healthcare logistics.

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Case Example: Green Mobility for Luang Prabang and Siem Reap Luang Prabang (Lao PDR) and Siem Reap (Cambodia)

Both of the UNESCO World Heritage cities, rely heavily on tourism, which contributes about 12% of national GDP in each country. Yet both cities face mounting pressures from rapid population growth, uncontrolled urban development, and heavy reliance on motorbikes and tuk-tuks. These vehicles contribute to congestion, emissions, and road safety risks that threaten residents' health, degrade urban livability, and diminish the attractiveness of heritage areas. Constraints on expanding infrastructure in historic districts, rising air pollution, and lack of pedestrian- and cyclist-friendly facilities exacerbate the challenges.

To address these issues, the program *Green Mobility for Luang Prabang and Siem Reap* supported the World Bank study to design a Green Mobility Vision and Investment Plan, while strengthening institutional capacity and policy frameworks. The initiative aimed to (i) create people-centric, integrated green mobility systems; (ii) reduce emissions and improve air quality through modal shift; (iii) preserve heritage and promote sustainable tourism; and (iv) establish robust institutional foundations for long-term mobility reform.

Key Activities

- **Green Mobility Investment Plan Development**: Designed multimodal networks for medium- and long-distance trips, expanded cycling as a motorcycle alternative, and proposed connected walking networks. Investment needs were identified as over US$125 million for Siem Reap and about US$40 million for Luang Prabang in the first five years.
- **Analytical Tools for Decision-Making**: Applied a city-level index (benchmarking mobility, safety, health, and resilience), a street-level index (sidewalk continuity, crossings, shading, accessibility), and anonymized mobile geolocation data (trip patterns, OD analysis) to inform route and infrastructure planning.
- **Capacity Building and Knowledge Exchange**: Trained over 100 participants in Cambodia and Lao PDR; engaged 70 students from Cambodia's ITC and Techo Sen Institute, and from Lao PDR's PTTI, NUOL, and Souphanouvong University in online courses; held workshops for policymakers, youth, and trainees to raise awareness of green mobility benefits.
- **Study Visit to Korea**: Delegations visited Jeju's Smart Hub and Smart City Challenge, e-bus operators, and Seoul's Traffic Information Center to learn about e-buses, e-mobility, and smart transport systems, in partnership with Jeju Research Institute, KNR, TOPIS, Seoul E-Bus Operator, and KEXIM.
- **External Partnerships**: Collaborated with Korean partners as well as GGGI and CDIA to integrate global and regional expertise in mobility and urban planning.

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The program's influence extended beyond the two cities by shaping Green Mobility Strategies and Investment Plans for both Cambodia and Lao PDR, while informing World Bank country engagement and policy dialogue. It also provided an evidence-based methodology replicable for other UNESCO heritage cities grappling with growth, congestion, and climate challenges. Looking forward, Siem Reap is exploring an e-bus system through a PPP model, while Luang Prabang continues to improve pedestrian-friendly infrastructure under the CDIA framework.

Quote

"During the implementation of the study, we witnessed very strong interest and demand from counterparts to learn and use this knowledge to advance transport systems in their cities with green and sustainable mobility solutions. It is not only about reducing congestion in rapidly growing secondary cities, but it is about their future economic growth, reducing emissions and improving the well-being of their populations, protecting historical sites, creating more and better-quality jobs, and strengthening their competitiveness in regional tourism market." — Sadig Aliyev, Senior Transport Specialist, Program Leader

These diverse interventions illustrate how KGGTF transport grants bridge the gap between innovation and implementation. The portfolio's influence extends beyond technical outputs—fostering policy coherence, enabling institutional transformation, and catalyzing scalable, low-carbon mobility investments.

Notable Innovations and Delivery Methods

KGGTF's transport portfolio demonstrates a strong commitment to innovation and adaptive delivery methods, addressing the multifaceted challenges of mobility, resilience, and decarbonization. The grants leverage digital platforms, spatial planning tools, and policy innovations to accelerate green transport transformation while building institutional capacity across regions.

Notable Innovations

- **Digital Freight Optimization Platforms (India – K175)**: Developed a digital framework to decarbonize India's trucking sector by streamlining fragmented logistics networks. The platform supports freight efficiency and emissions reduction while reinforcing national infrastructure projects such as the Green National Highways Corridor.

- **Integration of E-Mobility into National Transport Planning (Colombia – K130)**: Supported the deployment of electric buses on BRT lines in Colombia's Aburrá Valley, including operator model analysis and EV charging strategy—positioning the region as a pioneer in low-carbon public transit in Latin America.
- **Transit-Oriented Development (TOD) Pilots (Sri Lanka – K229)**: Introduced TOD strategies in Kandy City through green corridors, multimodal terminals, and land-use integration. Korean expertise from KOTI and SUSA guided the design of smart, inclusive, and low-carbon urban growth.
- **GIS and Climate Vulnerability Assessments (Tanzania – K212)**: Applied GIS-based flood hazard mapping to railway planning along the Dar es Salaam–Isaka corridor, strengthening the Tanzania Railway Corporation's climate resilience and early warning capacity.

Types of Delivery Approaches

- **Knowledge Exchange Missions**: Facilitated study tours to Korea and peer-learning forums on topics such as TOD, e-mobility, and transport governance. These missions enabled government officials from countries like Tanzania and Ghana to contextualize Korean best practices in their own national systems.
- **Technical Assistance (TA)**: Delivered targeted expertise through diagnostic assessments, simulations, and infrastructure feasibility studies. TA efforts helped shape national EV strategies and institutional frameworks for climate-informed transport investment.
- **Pilot Project Design and Demonstration**: Supported early-stage implementation of innovations—such as smart city pilots in Almaty and Toshkent and green port planning in Indonesia—providing proof-of-concept models for replication and scale-up.
- **Regional Learning Platforms**: Convened global and regional trainings (e.g., LUTP workshops), developed online learning modules, and promoted cross-country dialogue through events co-organized with Korean institutions and global experts.

By combining cutting-edge technical solutions with adaptable delivery models, KGGTF enables client countries to pilot, localize, and scale climate-smart transport innovations. This dual emphasis on innovation and knowledge transfer enhances institutional readiness, supports policy reform, and accelerates the transition toward resilient, inclusive, and low-carbon mobility systems.

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Case Study: Unlocking Urban Mobility in Four East African Cities (AR 2024)

Rapid urbanization in East Africa has outpaced the development of sustainable mobility systems, leaving cities in Kenya, Rwanda, Tanzania, and Uganda with congested roads, poor transport infrastructure, and limited institutional capacity for integrated planning. Outdated policies and weak technical expertise have further constrained efforts to design safe, efficient, and inclusive urban transport strategies. With support from the Korea Green Growth Trust Fund (KGGTF), the region is now charting a new course to strengthen institutional capacity, promote sustainable mobility planning, and lay the groundwork for large-scale investments in public transport.

The program, *Unlocking Urban Mobility in Four East African Cities*, was designed to equip policymakers and practitioners with the tools and knowledge to overcome systemic barriers. Its purpose extended beyond transport modernization; it aimed to enhance connectivity, reduce congestion and emissions, and expand access to jobs and services for rapidly growing urban populations.

Key Activities

- **Leaders in Urban Transport Planning (LUTP) Workshop**: Trained more than 50 practitioners in Kigali, fostering knowledge exchange and peer learning across four cities.
- **Study Tour to Korea**: Exposed 10 high-level decision-makers to Korea's advanced transport systems, offering insights into integrated planning and governance models.
- **Technical Assistance for Projects**: Advanced the design of the Rwanda Urban Mobility Improvement Project and Kampala Urban Mobility Project, while extending support to Kinshasa's new BRT system.
- **Development of Technical Studies**: Produced an Urban Mobility Institutional Study, technical notes for the Kampala BRT project, and a traffic signal study that informed Kigali's dedicated bus lane.

The program's catalytic effect is already visible. The Rwanda Urban Mobility Improvement Project ($100 million) is scheduled for approval in FY25 and will improve mobility and job creation for over 1 million people in Kigali. In Uganda, the Kampala Urban Mobility Project ($150 million) is poised to move forward with KGGTF-backed technical foundations once Bank engagement resumes. Overall, $450,000 in KGGTF support has unlocked $239 million in lending and co-financing—equivalent to $222 for every $1 of grant support.

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K-Partners played a critical role in delivering these results. The Korea Transport Institute (KOTI) provided technical expertise in planning and policy design, while the Export-Import Bank of Korea (KEXIM) shared financing insights from major infrastructure projects. By combining Korean best practices with local needs, the grant strengthened institutional knowledge and created momentum for sustainable transport reforms.

The program's impact lies not only in the preparation of transformative projects but also in the empowerment of practitioners and decision-makers. By embedding knowledge exchange into lending pipelines, the grant ensured that financing is directly aligned with institutional reforms, accelerating the shift toward safe, efficient, and inclusive mobility in East African cities.

Quotes

"The KGGTF grant has played a critical role in helping East African cities develop strategic urban transport solutions by combining local insights with global best practices, especially from Korea." — Fang Xu, Senior Transport Specialist
"Learning from Korea's advanced transport systems has been invaluable in shaping the future of urban mobility in our cities." — High-Level Decision Maker, Rwanda

Collaboration with Korean Partners (K-Partners)

Key Institutions and Roles

KGGTF's transport sector portfolio has actively leveraged Korea's development experience and technical expertise through collaboration with key Korean partners (K-Partners). These institutions have contributed to shaping policy discussions, sharing best practices, and providing technical insights across various transport-related projects. The strong involvement of Korean agencies has helped bring forward Korea's success stories in areas such as Transit-Oriented Development (TOD), e-mobility deployment, and smart transport systems.

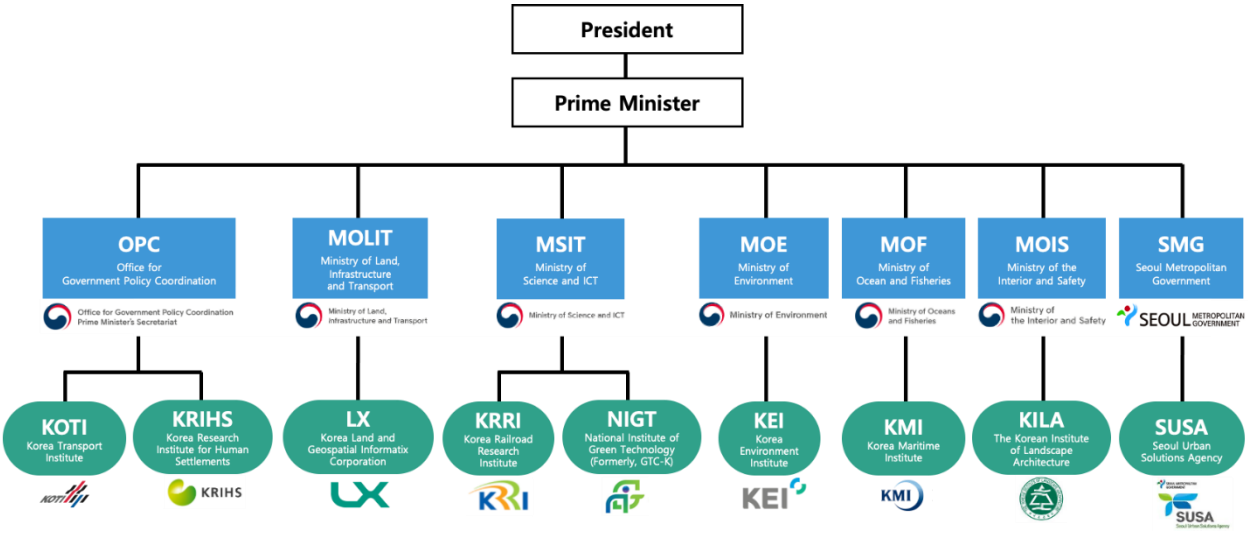
- **MOF (Ministry of Oceans and Fisheries of Korea)**: Supports infrastructure and human capital development for maritime transport, including sea training programs and port infrastructure planning in collaboration with developing countries.
- **MOLIT (Ministry of Land, Infrastructure and Transport):** Provides strategic guidance on national urban policy/smart city initiatives.

- **NIA (National Information Society Agency):** Specializes in digital infrastructure and smart transport systems, offering advisory support for digitalization strategies in mobility, including data platforms and smart traffic management.
- **KOTI (Korea Transport Institute):** An affiliated institution under MOLIT, it provides policy research, TOD planning frameworks, and technical knowledge on multi-modal integration and low-carbon mobility.
- **Seoul Metropolitan Government (SMG) / SUSA (Seoul Urban Solution Agency):** Shares operational experience and case studies on metro system planning, fare integration, and public transport optimization.
- **LH (Korea Land and Housing Corporation):** Contributes urban planning knowledge, especially around station-area development and integrated land use with transport planning.
- **KMI (Korea Maritime Institute)**: Promotes marine transport safety and tech capacity building through training center development and navigational aid system enhancement.
- **KR (Korea National Railway)**: Provides expertise in railway infrastructure planning, construction, and asset management, supporting knowledge exchange on rail network development, station-area planning, and operational safety standards.
- **KRRI (Korea Railroad Research Institute)**: Offers expertise in metro project feasibility and railway safety policy, supporting knowledge exchange on operational standards, accident reduction, and R&D in smart rail systems.
- **EX (Korea Expressway Corporation)**: Engages in highway safety management, smart road operation, and capacity-building initiatives to improve expressway systems using smart mobility technologies.

These collaborations have been crucial in enhancing the relevance and effectiveness of transport grants, ensuring that the lessons from Korea's development path are meaningfully adapted to diverse local contexts.

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K-Partner Structure Chart



This multi-tiered collaboration model reinforces the effectiveness of KGGTF's transport grants by fostering knowledge transfer, policy alignment, and replicable innovation tailored to country-specific needs.

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Case Study: Smart Tanzania – Transforming Mobility Through Technology

By 2020, Tanzania had achieved lower middle-income country status, marking two decades of growth under the Tanzania Development Vision (TDV 2025). Yet rapid population growth, urban expansion, and climate change pressures demanded fresh solutions for sustainable mobility, service delivery, and urban planning. To address this, the KGGTF supported the *Tanzania Smart Services* program, focusing on UAVs, digital citizen engagement, and shared economy transport models to accelerate the country's transition toward a low-carbon, technology-driven economy.

The program had three core goals: Smart Mobility, Smart Services, and Smart Planning. Together, these initiatives demonstrated how digital technologies and innovative business models can be applied to transport, planning, and service delivery, while strengthening institutions and partnerships.

Key Activities & Achievements

- **Building UAV capacity**: Created an Organizing Committee uniting Tanzanian aviation, business, and science agencies; established Tanzania Flying Labs to train drone pilots and incubate four UAV-based companies.
- **Korea–Tanzania partnerships**: Collaborated with LX (Korea Land and Geospatial Informatix Corporation) and Korean drone experts to run technical workshops in 2016–17; prepared a Drone port PPP Concept Note.
- **Global knowledge sharing**: Hosted the first African Drone Innovation Symposium for Regulators (2018); signed MoUs with UNICEF, WEF, WFP, ICAO, IATA, CASSOA, Deloitte, and others to advance UAV-enabled services.
- **Smart planning support**: Piloted UAV use in surveying, cadastral mapping, flood risk assessment, and land-use planning—laying the foundation for evidence-based decision-making.
- **COVID-19 response**: Repurposed drones for contactless delivery and vaccine cold chain supervision, demonstrating their resilience in crisis contexts.

The ripple effect extended beyond Tanzania: the program catalyzed the Lake Victoria Challenge (2018, Mwanza), which gathered global innovators, regulators, and investors to propel drone-enabled services. This initiative evolved into the African Drone Forum (ADF), a multi-year platform to promote UAV technology for development and green growth across Africa.

By embedding cutting-edge drone and digital technologies into planning and service delivery, the initiative helped unlock new markets, build institutional capacity, and create youth employment opportunities. The Tanzania case illustrates how targeted

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KGGTF support can trigger regional innovation ecosystems around green and digital transformation.

Quotes

"The Lake Victoria Challenge is a catalyst for digital innovation in Mwanza and Tanzania that will lead to job creation for youth and impact industrialization while laying an enabling environment foundation for sustainable infrastructure." — Hon. John Mongela, Regional Commissioner of Mwanza.

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Case Study: Improving Public Transit and Sustainable Territorial Development in Bogotá

Bogotá, home to over 8 million people, contributes significantly to Colombia's GDP but faces extreme pressure from rapid urban growth. Ranked among the world's most congested cities, the average resident loses approximately 191 hours annually to traffic. While the TransMilenio Bus Rapid Transit (BRT) system serves 2.5 million passengers daily, the city struggled with fragmented bus operations, complex route systems, and a lack of integration with future rail infrastructure.

Core Objectives

Supported by a $650,000 KGGTF grant, the Government of Colombia launched this initiative to transition Bogotá's transport network toward green growth and multi-modal integration. The program focused on harmonizing the city's transit layers (BRT, zonal buses (SITP), and the upcoming First Metro Line) to increase efficiency and reduce the city's carbon footprint.

Key Activities

- ICT & Digital Transformation: Developed conceptual designs for an open-source information system and real-time databases to track BRT and zonal bus performance. Key efforts included simplifying bus routes, improving smart card utilization, and enhancing user engagement through crowdsourcing.
- Multimodal Integration: Designed the technical and financial parameters for re-tendering TransMilenio contracts (Phases 1 & 2) and the future integration of Bogotá's Metro Line One with the bus network to ensure a seamless, unified fare and operational structure.
- Resilient Territorial Planning: Formulated a regional Territorial Diagnosis and Information Database. This supported the creation of Land Use Plans (POTs) and institutional schemes that identify resilience-building investments and pathways for private sector participation in the Bogotá-Cundinamarca region.

Results and Policy Impact

The grant improved the efficiency, resilience, and competitiveness of Bogotá's public transport system by supporting intermodal planning and ICT-enabled operations. Through the deployment of smart card policies, route optimization, and improved

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integration of private operators and new modes such as the subway, the program enhanced multimodal coordination, fare structures, and financing mechanisms, contributing to reductions in congestion, safety risks, pollution, and emissions

Partnerships and Knowledge Exchange

The program leveraged Korean expertise from the Korea Transport Institute (KOTI) and the Seoul Institute, applying "Rosario Plan" lessons from Seoul to manage up-zoning and transit-oriented density in Bogotá. This was complemented by local collaboration with the Empresa Metro de Bogotá (EMB) and the Empresa Férrea Regional (EFR).

Conclusion

KGGTF's transport sector grants have played a catalytic role in promoting low-carbon, climate-resilient, and inclusive mobility systems. By advancing policy innovation, fostering regional knowledge exchange, and leveraging Korea's technical expertise, the portfolio has supported client countries in building sustainable transport systems aligned with global climate and development goals. These efforts have strengthened institutional capacity, enabled integrated planning, and facilitated the uptake of scalable transport solutions across diverse contexts.

Looking ahead, KGGTF will deepen its focus on:

- **Expanding digital mobility platforms and smart traffic systems** to enhance efficiency, reduce emissions, and inform data-driven decision-making
- **Integrating climate resilience into infrastructure design and planning** to safeguard connectivity in the face of increasing climate risks
- **Promoting inclusive, multi-modal transport systems** that address accessibility gaps and serve vulnerable populations
- **Strengthening collaboration with Korean partners** to adapt proven transport planning and financing models and scale locally driven innovations

Through these priorities, KGGTF will continue to support the transformation of transport systems into future-ready, equitable, and climate-smart enablers of sustainable development.

If you are interested in applying for KGGTF grant funding or would like support in identifying Korean expertise for your program, please contact the KGGTF team. We are here to help you co-design impactful solutions that deliver results on the ground.

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Annex 1. Total Grant List

Approval Year	K#	Grant Name	Country	Amount Approved by Donor	K-partner	Linked P-Code
2025	248	Public Transport Modernization and Electrification in the Philippines	The Republic of the Philippines	$700,000	SUSA	P180179
2024	231	Morocco & Tunisia: Smart, Integrated Ticketing and Data Management	Morocco, Tunisia	$600,000		P500964
2024	230	Accelerating Green Growth through Electric Mobility in Europe and Central Asia	Bosnia Herzegovina, Western Balkans and Turkiye	$600,000	SMG, SUSA	P510092
2024	229	Integrated Solutions for Green Urban Mobility and Smart City Planning to Improve Livability in Kandy City, Sri Lanka.	Sri Lanka	$600,000	KOTI, SUSA	P172342
2023	212	Development of ITS-led Tanzania Railway system strengthening climate resilient infrastructure based on GIS	Tanzania	$600,000	LX, KNR (under discussion)	P176682
2023	211	Smart Travel Demand Management Policies for Developing Green and Sustainable Transportation: Deep Dive in LAC cities	Argentina; Brazil; Colombia; Peru	$550,000	SMG, KWPF, KOTI, ITS Korea, SDI	P165300
2022	192	Developing a Green, Integrated and Smart Public Transit System in Kumasi	Ghana	$600,000	(KRIHS), (TOPIS), KEXIM, KOTI, SMG	P178767
2021	177	On-Demand Transit Service to Improve the Accessibility of Ulaanbaatar's Vulnerable Population	Mongolia	$400,000	KOTI, SMG, T-money, Cashbee	P178172
2021	176	INNOVATIVE GREEN SMART URBAN MOBILITY FOR BISHKEK, NUR-SULTAN	Georgia; Kazakhstan; Kyrgyz Republic	$1,000,000	SMG, SUSA	P175950
2021	175	Decarbonizing freight for a new era of resilient and efficient logistics in India	India	$999,999	KOTI, MOLIT	P167350
2020	160	Unlocking Urban Mobility in Four East African Cities		$450,000	MOLIT, KOTI	P176110
2020	159	Digital Skies in East Africa	Malawi	$450,000	KIAST, MOLIT	P171737
2020	158	Transforming urban transport to support green and resilient recovery - Leaders in Urban Transport Planning (LUTP)	Global	$500,000	KOTI	P176488
2020	157	Greening the Maritime Sector in Eastern Indonesia	Indonesia	$550,000	KMOF, KMI	P177571
2020	156	A TALE OF TWO SMART AND GREEN CITIES: INNOVATIVE SOLUTIONS FOR URBAN MOBILITY IN ALMATY AND Toshkent	Kazakhstan; Uzbekistan	$600,000		P176262
2019	143	Egypt Green Transport Master Plan and Data Management System to Support Digital Transformation of the Transport Sector and Intelligent Transport Systems	Egypt	$600,000	KOTI, KEI, GTC-K	P161986
2019	142	Green Mobility for Luang Prabang and Seam Reap	Lao PDR, Cambodia	$600,000	KOTI, SHRDC	P172593
2018	130	Piloting Electromobility in the Integrated Transport System of the Aburra Valley (Medellin, Colombia)	Colombia	$870,000	GTC-K, KOTI	P169735
2017	118	Improving Public Transit & Sustainable Territorial Dev in Bogota	Colombia	$650,000	KOTI, TOPIS, LH, SH	P165300
2017	117	Greener Transport Connectivity for the Six Eastern Partnership Countries	Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine	$960,000	MOLIT, KOTI	P165756
2017	116	Public Transport Development Strategy for Sustainable Urban Mobility in Hanoi	Vietnam	$550,000	Citynet, KOTI, SMG	P165439

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2016	102	Mainstreaming GHG Mitigation in Rail Freight and Developing Strategies for Sustainable Transport Infrastructure	Global	$500,000	KOTI, KRRI, KEI	P160976
2016	101	Towards Greener and More Efficient Logistics in Ukraine: An Integrative Approach	Ukraine	$700,000	Busan Metropolitan City, K-water, KMI, MOLIT	P160813
2016	100	Green Logistics Policy and Strategy for Uganda	Uganda	$500,000	KOTI, KRRI,KEI, KILA, KIFFA, KTA	P151606
2016	99	Resilience of the Ethiopian Roads Network	Ethiopia	$700,000	KOICA, KOTI, KRICCCS, KEC	P148850
2016	97	Kazakhstan Green Growth In Road Sector Through E-tolling	Kazakhstan	$700,000		P161313
2015	69	Intelligent Transport Systems and PPP in City Bus Systems for Indian Cities	India	$350,000	KOTI, MOLIT, SMG, IOCC	P132418
2015	68	Kolkata Metropolitan Transport Efficiency Improvement	India	$400,000	-	P155591
2015	67	Improving Urban Mobility Using Big Data Analytics	Indonesia, Philippines	$500,000	Korea National Information Agency, KOTI	P163706
2015	66	Smartcard Integration for Better Connected Public Transport System	India, Bangladesh	$400,000	MOLIT	P159782
2014	36	Green Transport Initiative	Bhutan	$300,000	KOTI	P156611
2014	35	Promoting the use of Green Construction Technology in Road Sector	India	$500,000	KICT	P124639
2014	34	Training Hub “Transportation for Green Growth”	Global	$500,000	KOTI	P160976
2014	33	Streets as Drivers of Green Growth and Urban Prosperity in Africa	Sub-Saharan Africa	$600,000	KOTI, SMG, SI, LX	P153835
2014	32	Developing skills to support transport and logistics	Uganda +	$400,000	KOTI, MOLIT, KILA	P152430
2014	31	Africa Sustainable Transport Forum	Sub-Saharan Africa	$1,000,000	KOTI	P168584
2013	21	Capacity Building for Leaders in Energy Efficient Urban Transport Planning	Global	$500,000	KOTI	P154030
2013	20	Sustainable Urban Transport for the City of Kyiv	Ukraine	$350,000		P152325
2013	19	East Asia & Pacific Green Transport ICT	Philippines	$400,000	KOTI	P149499
2013	6	Climate Change Adaptation in the Road Sector	Morocco	$200,000		P149570
2013	5	Implementing congestion reduction measures in Beirut	Lebanon	$200,000		P146691
2013	4	Georgia Green Freight Transport and Logistics	Georgia	$250,000	MOLIT, KOTI, MOF	P148812
2013	3	Piloting Sustainable and Green Urban Transport Solutions for Sub National Governments	Poland	$625,000	KOTI, KRIHS	P148489
2013	2	TA to promote integrated urban planning in Addis Ababa to foster green growth	Ethiopia	$1,100,000	KOTI, KRIHS	P147910

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Annex 2. Grant Summary

K-248. Public Transport Modernization and Electrification in the Philippines

Grant Title	Public Transport Modernization and Electrification in the Philippines
Region	EAP
Countries	The Republic of the Philippines
Sector	Transport
Program Year	Year 13
Amount	$700,000
Status	Active
Program Goal	The objective of this grant is to strengthen the evolving vision, plans and priorities of the government for the development of the urban mobility sector in the Philippines. With a focus on the selected highly urbanized cities, the grant ais to accelerate the modernization and electrification of the public transport sector under Public Transport Modernization Program (PTMP) led by the Department of Transportation (DOTr) of the Government of the Philippine (GoP).
Key Result	Updating public transport route plans in two selected cities yields digitalized road network and public transport route data for the targeted cities, enabling targeted cities to establish digitalized public transport-land use planning and public transport service monitoring using GPS. It also contributes to technical recommendations report for improving the Local Public Transport Route Plans (LPTRPs) for two selected highly urbanized Cities, transforming public transport route plans in targeted cities with date-based transport demand-supply planning, paving ways for switching to service contract scheme. The summary report of the Knowledge Exchange events between DOTr/targeted cities and Korean expert agencies would have direct contribution to clients' institutional strengthening for localized public transport governance based on real world learnings from Seoul Metropolitan City. Developing contracting models to pilot performance-based gross service contract produces a technical report presenting the proposed gross-cost service contract with performance incentives, and international lessons when cities transition from franchise model to service contracting for urban public transport, directly contributing to the client's PTMP through piloting the performance-based gross cost service contracting in two cities. In addition, it also commits to a dissemination event of final publication featuring KGGTF brand and donor support, precisely contributing to the World Bank lending pipeline development to pilot the implementation of the proposed contracting model in targeted cities. Finally, knowledge product is disseminated to a wide public in the targeted cities with high visibility of donor contributions.

K-231. Morocco & Tunisia: Smart, Integrated Ticketing and Data Management

Grant Title	Morocco & Tunisia: Smart, Integrated Ticketing and Data Management
Region	MNA
Countries	Morocco, Tunisia
Sector	Transport
Program Year	Year 12
Amount	$600,000
Status	Active/ Approved in 2024
Program Goal	The program supports Morocco and Tunisia in developing integrated public transport fare and ticketing systems by guiding technology selection and establishing institutional frameworks to improve efficiency, user convenience, and sustainable urban mobility. Targeting national and local governments and transport operators in Casablanca and Tunis, it will help create policy frameworks for fare integration and implement interoperable ticketing across rail, bus, BRT, and tram systems. By enhancing institutional coordination and fare management, the initiative aims to deliver seamless, efficient, and inclusive public transport experiences in both cities.
Key Result	Conducted site visits and technical workshops with Seoul Urban Solutions Agency, Seoul Metro, and Korea Railroad to share expertise on Seoul's integrated smart ticketing systems and fare regimes. Produced diagnostic reports, technical frameworks, and functional specifications for Tunisia and Morocco, while facilitating study tours and stakeholder workshops to transfer Seoul's best practices and enhance regional capacity in smart urban mobility.

K-230. Accelerating Green Growth through Electric Mobility in Europe and Central Asia

Grant Title	Accelerating Green Growth through Electric Mobility in Europe and Central Asia
Region	ECA
Countries	Bosnia Herzegovina, Western Balkans and Turkiye
Sector	Transport
Program Year	Year 12
Amount	$600,000
Status	Active/ Approved in 2024
Program Goal	The program aims to contribute to decarbonization of the transport sector, reducing GHG emissions and air pollution from road transport, and developing financing opportunities for e-bus deployment in Bosnia and Herzegovina (BiH) and other lending high-potential countries across the ECA region with a regional approach that facilitates deployment of solutions and increases scale.
Key Result	Facilitated city and inter-city e-bus fleet renewal programs in the Western Balkans through knowledge exchange at the Green Transport Summit and CSF annual conference. Leveraged SMG and SUSA's expertise to demonstrate the feasibility and benefits of e-bus deployment, expanded access to World Bank funding instruments, and

	increased regional capacity to replicate South Korea's best practices in electrified public transport.

K-229. Integrated Solutions for Green Urban Mobility and Smart City Planning to Improve Livability in Kandy City, Sri Lanka.

Grant Title	Integrated Solutions for Green Urban Mobility and Smart City Planning to Improve Livability in Kandy City, Sri Lanka
Region	SAR
Countries	Sri Lanka
Sector	Transport
Program Year	Year 12
Amount	$600,000
Status	Active/ Approved in 2024
Program Goal	The program aims to enhance accessibility, efficiency, and safety for users at the Kandy Multimodal Transport Terminal by establishing an Action Plan for green urban mobility and smart city planning, emphasizing knowledge exchange, capacity building, and stakeholder collaboration. Supporting Sri Lanka's strategic priorities, it promotes sustainable and inclusive transport modes, Transit-Oriented Development, smart infrastructure, green urban design, and mixed-use zoning. Ultimately, the initiative seeks to improve Kandy's quality of life through sustainable mobility and integrated urban planning.
Key Result	Provided strategic solutions for integrated green urban mobility and smart city planning in Kandy City through KOTI's policy research and SUSA's expertise in mobility management and TOPIS. Organized workshops, knowledge exchanges, and study visits to Korea, enhancing government capacity, identifying priority interventions, and enabling access to green growth investments, fostering sustainable urban development and long-term partnerships with Korean institutions and global leaders.

K-212. Development of ITS-led Tanzania Railway system strengthening climate resilient infrastructure based on GIS

Grant Title	Second Tanzania Intermodal and Rail Development Program
Region	ESA
Countries	Tanzania
Sector	Transport
Program Year	Year 11
Amount	$600,000
Status	Active/ Approved in 2023
Program Goal	The program aims to strengthen the climate resilience, safety, and operational efficiency of Tanzania's Dar es Salaam–Isaka railway by utilizing GIS-based intelligent transport systems (ITS) for real-time data collection, flood hazard mapping, and risk assessment. As Tanzania's railway network serves six neighboring landlocked countries, the initiative addresses key challenges such as the lack of data and

	infrastructure vulnerability through predictive modeling and smart flood monitoring technologies. By conducting topographic and flood hazard analyses and promoting knowledge exchange with Tanzanian counterparts, the program supports disaster preparedness and sustainable railway operations across the region.
Key Result	The program enhances Tanzania's railway resilience by integrating GIS-based ITS tools and flood hazard mapping for the TRC network. Led by LX and KNR, it includes workshops, study tours, and a digitized GIS database to support planning and decision-making. Outcomes include improved climate resilience, modernized railway operations, and strengthened management capacity for sustainable infrastructure development.

K-211. Smart Travel Demand Management Policies for Developing Green and Sustainable Transportation: Deep Dive in LAC cities

Grant Title	Smart Travel Demand Management Policies for Developing Green and Sustainable Transportation: Deep Dive in LAC cities
Region	LAC
Countries	Argentina, Brazil, Colombia, Peru
Sector	Transport
Program Year	Year 11
Amount	$ 550,000
Status	Active/ Approved in 2023
Program Goal	The program promotes sustainable urban mobility in LAC cities—including Bogotá, Lima, São Paulo, Asunción, and Buenos Aires—by developing Travel Demand Management (TDM) strategies to enhance efficiency, reduce congestion, and foster green transport. It supports intelligent, city-wide TDM policies through Seoul policy benchmarking, parking management plans for Lima and Asunción, alternative public transport funding models for Bogotá and São Paulo, and data-driven mobility pilots in Buenos Aires. Through regional collaboration, workshops, and a dedicated TDM platform, the initiative builds institutional capacity, encourages private investment, and advances innovative mobility solutions across Latin American cities.
Key Result	Workshops with LAC city leaders facilitated knowledge exchange on urban transport innovation, smart ticketing, and public transport strategies. Led by KOTI, ITS Korea, and SMG, the program delivered TDM strategy reports, parking plans for Lima and Asunción, and technical studies on fare-free transport impacts. Outcomes support data-driven mobility policies and future sustainable transport investments in LAC cities.

K192. Developing a Green, Integrated, and Smart Public Transit System in Kumasi

Grant Title	Developing a Green, Integrated, and Smart Public Transit System in Kumasi
Region	AFR

Countries	Ghana
Sector	Transport
Program Year	Year 10
Amount	$ 600,000
Status	Active/ Approved in 2022
Program Goal	The program aims to improve mobility, safety, and accessibility along selected corridors, and improve planning capacity for sustainable urban growth in the Greater Kumasi Metropolitan Area.
Key Result	Facilitated LUTP training, a study tour to Korea, and capacity-building events to support Kumasi's urban transport development. Korean partners provided expertise on BRT planning, ITS design, TOD strategies, and green urban growth. Outputs include contributions to KUMAP components on BRT infrastructure, ITS development, policy formulation, and public transport industry training, strengthening Kumasi's integrated and sustainable urban mobility system.

K-177. On-Demand Transit Service to Improve the Accessibility of Ulaanbaatar's Vulnerable Population

Grant Title	On-Demand Transit Service to Improve the Accessibility of Ulaanbaatar's Vulnerable Population
Region	EAP
Countries	Mongolia
Sector	Transport
Program Year	Year 9
Amount	$ 400,000
Status	Active/ Approved in 2021
Program Goal	The program seeks to enhance Ulaanbaatar's urban transport by introducing Mobility as a Service (MaaS) and On-Demand Transit Service (ODTS) to improve accessibility and sustainability, particularly for low-income residents in the city's peripheral ger areas. Addressing traffic congestion, air pollution, and limited public transport, the grant will establish the city's first MaaS study and assess ODTS as a cost-effective solution. By integrating multi-modal transport and smart mobility technologies, the initiative supports post-COVID recovery, reduces reliance on private cars, and aligns with the World Bank's Mongolia CPF (2021–2025), the Sustainable Mobility for All initiative, and the Ulaanbaatar Sustainable Urban Transport Program, leveraging Korean and international partnerships to advance green, data-driven, and inclusive mobility systems.
Key Result	Facilitated workshops and training on green mobility, smart mobility, MaaS, and ODTS for Ulaanbaatar city officials and stakeholders. Korean experts provided technical solutions, policy strategies, and investment insights to support integrated mobility. Key outputs include the WB Mongolia MaaS Study Interim Report, a public transport reform strategy, and a pre-feasibility study with an implementation plan for piloting ODTS in Ulaanbaatar.

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K-176. INNOVATIVE GREEN SMART URBAN MOBILITY FOR BISHKEK, NUR-SULTAN

Grant Title	Innovative Green Smart Urban Mobility for Bishkek and Nur-Sultan
Region	ECA
Countries	Georgia; Kazakhstan; Kyrgyz Republic
Sector	Transport
Program Year	Year 9
Amount	$1,000,000
Status	Active/ Approved in 2021
Program Goal	The program aims to enhance urban mobility and reduce transport-related emissions in Central Asia, focusing on Bishkek and Nur-Sultan, through the implementation of smart, sustainable, and digital solutions.
Key Result	A study tour to Seoul supported officials from Bishkek, Nur-Sultan, and Tbilisi in learning smart city strategies and urban mobility solutions from SMG and SUSA. The program developed sustainable tariff reports, financial resilience plans, and smart city program pipelines, including pilot program definitions. It also created a BEB vs. diesel TCO comparison tool and shared lessons at international smart city events.

K-175. Decarbonizing freight for a new era of resilient and efficient logistics in India

Grant Title	(K175) Decarbonizing freight for a new era of resilient and efficient logistics in India
Region	SAR
Countries	India
Sector	Transport
Program Year	Year 9
Amount	$999,999
Status	Active/ Approved in 2021
Program Goal	The program aims to transform and decarbonize India's freight sector by engaging the trucking industry to create a multimodal, efficient, and connected logistics system. It seeks to promote public-private collaboration, develop industry models to analyze incentives and policy impacts, and map strategies for decarbonization through multimodal logistics, energy efficiency, alternative fuels, and digital solutions.
Key Result	Leveraged Korea’s expertise in logistics efficiency and public-private collaboration to modernize India’s trucking sector and support decarbonization. In partnership with KOTI, MOLIT, and MIT-CTL, developed a logistics ecosystem report, white paper on trucking sector decarbonization, and multimodal efficiency strategies. Conducted capacity-building events to enhance competitiveness, resilience, and sustainability in India’s freight and logistics systems.

K-160. Unlocking Urban Mobility in Four East African Cities

Grant Title	Unlocking Urban Mobility in Four East African Cities
Region	AFR

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Countries	Kenya, Rwanda, Tanzania, Uganda
Sector	Transport
Program Year	Year 8
Amount	$450,000
Status	Active/ Approved in 2020
Program Goal	The program aimed to assist four East African cities—Kigali, Kampala, Nairobi, and Dar es Salaam—in advancing urban transport reforms and investments essential for safe, resilient, and sustainable economic development. The program will focus on establishing a knowledge network through in-depth needs assessments and consultations with these cities, along with a series of four workshops. It will also facilitate the sharing of South Korea's urban mobility experiences. To support the transition to modern transport systems in East Africa, a dedicated platform will be designed and developed, and pilot programs will be implemented and evaluated in all four cities. Additionally, a policy note on urban accessibility in East Africa will be published and disseminated at a minimum of two events, including transport conferences. Finally, technical assistance will be offered by international experts to address short-term bottlenecks faced by participants.
Key Result	Conducted workshops, study tours, and training with KOTI, MOLIT, and LUTP to improve urban mobility in Kigali, Kampala, Nairobi, and Dar es Salaam. Developed BRT designs, traffic signal plans, and green growth strategies. Enhanced capacity-building and fostered collaboration among East African cities, influencing $925M WB lending for sustainable, climate-resilient transport programs across the region.

K-159. Digital Skies in East Africa

Grant Title	Digital Skies in East Africa
Region	AFR
Countries	Malawi
Sector	Transport
Program Year	Year 8
Amount	$450,000
Status	Active/ Approved in 2020
Program Goal	The program aims to enhance Malawi's health supply chain and pandemic resilience by adopting autonomous drone services, promoting decarbonization, and improving logistics for critical goods, while implementing a National Strategy and Digital Skies Roadmap to ensure inclusive and sustainable delivery solutions.
Key Result	Engaged with Malawi’s African Drone and Data Academy to advance drone-based green supply chains and logistics solutions. Hosted joint

	webinars with the Africa Drone Forum sharing insights from Malawi and DRC. With KAIST and MOLIT, developed policy recommendations, a roadmap for drone applications, training programs, and partnership agreements to scale sustainable drone operations across Africa.

K-158. Transforming urban transport to support green and resilient recovery - Leaders in Urban Transport Planning (LUTP)

Grant Title	Transforming urban transport to support green and resilient recovery - Leaders in Urban Transport Planning (LUTP)
Region	Global
Countries	Global
Sector	Transport
Program Year	Year 8
Amount	$500,000
Status	Closed/ Approved in 2020
Program Goal	The program is to build capacity in select client countries on sustainable urban transport development including green and resilient approaches to climate change mitigation and adaptation as well as natural hazard and public health crises.
Key Result	Conducted LUTP workshops and trainings with KOTI, SMG, ADB, and global partners to promote sustainable urban transport. Shared strategies on reducing GHG emissions, adopting e-mobility and non-motorized transport, and enhancing resilience to climate change and epidemics. Developed case studies, learning modules, and online programs to build capacity, improve efficiency, and foster green growth-oriented transport systems worldwide.

K-157. Greening the Maritime Sector in Eastern Indonesia

Grant Title	Greening the Maritime Sector in Eastern Indonesia
Region	EAP
Countries	Indonesia
Sector	Transport
Program Year	Year 8
Amount	$550,000
Status	Active/ Approved in 2020
Program Goal	The program aims to promote inclusive green growth in Indonesia's maritime sector by identifying opportunities and providing recommendations for sustainable practices in port infrastructure, logistics, vessels, and fisheries. It seeks to enhance economic growth, job creation, and post-pandemic recovery while integrating climate change resilience, disaster preparedness, and decarbonization into the design of proposed World Bank-funded programs and national policy dialogues. As Eastern Indonesia has high dependency on port infrastructure, which is identified to be the major energy consumer, waste generator, and

	greenhouse emissions contributor, this program will support in identifying opportunities and exchanging best practices, including from Korea.
Key Result	Conducted webinars, workshops, and study tours with KMI and KMOF to share Korean best practices on greening maritime transport and integrated, climate-resilient port development. Produced a Maritime Connectivity Study assessing RoRo ferry services in NTT and North Maluku to improve productivity, reduce logistics costs, and drive inclusive economic growth, while enhancing resilience and sustainability in Indonesia's maritime sector.

K-156. A Tale of Two Smart and Green Cities: Innovative Solutions for Urban Mobility in Almaty and Tashkent

Grant Title	A Tale of Two Smart and Green Cities: Innovative Solutions for Urban Mobility in Almaty and Tashkent
Region	ECA
Countries	Kazakhstan; Uzbekistan
Sector	Transport
Program Year	Year 8
Amount	$600,000
Status	Closed/ Approved in 2020
Program Goal	This program aimed to define digital solutions to reduce transport-related emissions and improve urban mobility in Almaty and Tashkent by developing a post-COVID-19 mobility response strategy, creating smart solutions with viability analysis, roadmaps, and smart city pilot programs, and facilitating knowledge exchange.
Key Result	Facilitated smart city knowledge exchange through study tours, trainings, and international events, engaging Seoul Metropolitan Government and SUSA to share expertise in urban mobility systems. Produced Smart City Pilot Reports for Almaty and Tashkent, outlining smart transport strategies like e-ticketing, smart parking, bicycle sharing, and traffic monitoring. Supported post-COVID resilience planning for safer public transport, promoted green mobility solutions such as EVs and non-motorized transport, and enhanced competitiveness by reducing congestion and improving air quality. Established groundwork for future urban mobility investments despite discontinued WB lending programs.

K-143. Egypt Green Transport Master Plan and Data Management System to Support Digital Transformation of the Transport Sector and Intelligent Transport Systems

Grant Title	Egypt Green Transport Master Plan and Data Management System to Support Digital Transformation of the Transport Sector and Intelligent Transport Systems
Region	MNA

Countries	Egypt
Sector	Transport
Program Year	Year 7
Amount	$ 600,000
Status	Closed / Approved in 2019
Program Goal	To establish a Data Management System (DMS) that underpins Egypt's Green Transport Master Plan, supports digital transformation, and enables intelligent transport systems in Greater Cairo. By leveraging big data, GIS, and smart mobility solutions, the program aims to reduce congestion, cut GHG emissions, and enhance resilience, while fostering transparency, competitiveness, and private sector engagement in sustainable urban transport.
Key Results	Established a Data Management System (DMS) within the Ministry of Transport, providing real-time dashboards to inform both planners and users on traffic, congestion, and mobility options. An Urban Transport Master Plan for Greater Cairo was developed, incorporating smart mobility solutions, renewable energy integration, and intelligent transport systems to guide future investments. Economic, financial, and environmental appraisals of intervention proposals were conducted, offering evidence-based policy recommendations. In parallel, institutional capacity was strengthened through targeted training and workshops, in collaboration with Korean partners such as KOTI, KEA, and GTC-K, ensuring data-driven decision-making and enabling long-term, climate-smart transport planning.

K-142. Green Mobility for Luang Prabang and Seam Reap

Grant Title	Green Mobility for Luang Prabang and Seam Reap
Region	EAP
Countries	Lao PDR, Cambodia
Sector	Transport
Program Year	Year 7
Amount	$ 600,000
Status	Closed / Approved in 2019
Program Goal	To support Luang Prabang (Lao PDR) and Siem Reap (Cambodia) in designing and implementing green mobility strategies that preserve their UNESCO World Heritage value while addressing rising congestion and motorization. The program promotes walkability, non-motorized transport, and sustainable mobility planning, ensuring inclusive growth, improved urban livability, and climate resilience through innovative solutions and knowledge exchange with Korean partners.

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Key Results	Produced diagnostic reviews of mobility patterns, green mobility strategies, and priority NMT investments, including bikesharing and pilot cycling corridors. Delivered workshops leveraging Korean best practices (KOTI, SHRDC, SNU), and facilitated participatory consultations at city and provincial levels. Strengthened institutional capacity of municipal authorities and local universities, enabling evidence-based decision-making, financing options, and long-term resilience against motorization, unplanned transport growth, and climate risks.

K-130. Piloting Electromobility in the Integrated Transport System of the Aburra Valley (Medellin, Colombia)

Grant Title	Piloting Electromobility in the Integrated Transport System of the Aburra Valley (Medellin, Colombia)
Region	LAC
Countries	Colombia
Sector	Transport
Program Year	Year 6
Amount	$ 870,000
Status	Closed / Approved in 2018
Program Goal	To pilot BRT Line 1 and 2 electric bus services in Medellín's Aburrá Valley (SITVA) and provide recommendations for creating a new bus operator, advancing Colombia's shift toward low-carbon, resilient urban transport. The program aims to cut GHG emissions, reduce fossil fuel dependency, and strengthen institutional capacity, positioning SITVA as a regional model for sustainable electromobility.
Key Results	Delivered pilot electric bus corridor with operational performance monitoring, developed procurement and bidding documents, and identified power sector and regulatory barriers. Produced institutional restructuring and capacity-building strategies, enabling SITVA to integrate EV infrastructure sustainably. Knowledge sharing with Korean partners (KOTI, GTC-K) and global networks (WRI, ICCT, C40, SLoCaT) informed policy reforms and supported future lending, ensuring sustainable scaling of Colombia's electromobility transition.

K-118. Improving Public Transit & Sustainable Territorial Dev in Bogota

Grant Title	Improving Public Transit & Sustainable Territorial Dev in Bogota
Region	LAC
Countries	Colombia
Sector	Transport
Program Year	Year 5

Amount	$ 650,000
Status	Closed / Approved in 2017
Program Goal	To strengthen Bogotá's public transport and regional development by integrating TransMilenio BRT, SITP buses, and Metro Line One through ICT-enabled planning, smart card systems, and multimodal coordination. The program aims to reduce congestion, emissions, and travel time while enhancing user engagement, resilience, and regional master planning, drawing on Korea's experience to link green growth with urban competitiveness.
Key Results	Developed ICT-enabled transit planning and user information systems, optimized BRT and SITP operations, and advanced multimodal integration with Metro Line One. Produced technical and financial models for concession reforms, improved fare policies, and piloted smart card enhancements. Regional master plan linked transport with land use, supported resilience, and informed a $70M World Bank lending program, with strong collaboration from KOTI and Seoul partners.

K-117. Greener Transport Connectivity for the Six Eastern Partnership Countries

Grant Title	Greener Transport Connectivity for the Six Eastern Partnership Countries
Region	ECA
Countries	Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine
Sector	Transport
Program Year	Year 5
Amount	$ 960,000
Status	Closed / Approved in 2017
Program Goal	To support Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine in advancing sustainable transport connectivity by assessing multimodal networks, identifying green policy measures aligned with NDCs, and piloting innovative financing tools. The program aimed to reduce GHG emissions, improve freight and passenger mobility, and strengthen resilience while positioning the region as a competitive logistics hub connecting Europe and Asia.
Key Results	Developed a multi-modal assessment model and user-friendly simulation tool to evaluate connectivity and the impacts of green transport policies. Produced policy recommendations to align transport strategies with NDC commitments and explored innovative financing instruments to mobilize investment. In collaboration with MOLIT and KOTI (Korea), EIB, EBRD, and ADB, the program built regional planning capacity, prioritized greener modal shifts, and laid the foundation for a more efficient, competitive, and resilient logistics network across the EaP region.

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K-116. Public Transport Development Strategy for Sustainable Urban Mobility in Hanoi

Grant Title	Public Transport Development Strategy for Sustainable Urban Mobility in Hanoi
Region	EAP
Countries	Vietnam
Sector	Transport
Program Year	Year 5
Amount	$ 550,000
Status	Closed / Approved in 2017
Program Goal	To strengthen Hanoi's Urban Transport Master Plan by advancing sustainable, accessible, and resilient public transport systems—metro and BRT—that reduce GHG emissions, alleviate congestion, and improve citizens' access to jobs and services. The program aimed to maximize the social, economic, and environmental benefits of future transport investments.
Key Results	Delivered a network-wide accessibility analysis to identify the highest-impact mass transit corridor and optimize bus route integration. Strengthened decision-making for prioritizing metro/BRT investments while fostering PPP engagement and international collaboration with CityNet, KOTI, and Seoul Metropolitan Government. Outcomes included improved planning capacity, enhanced urban resilience to climate risks, and greater competitiveness through green growth transport strategies, positioning Hanoi for long-term sustainable mobility.

K-102. Mainstreaming GHG Mitigation in Rail Freight and Developing Strategies for Sustainable Transport Infrastructure

Grant Title	Mainstreaming GHG Mitigation in Rail Freight and Developing Strategies for Sustainable Transport Infrastructure
Region	Global
Countries	Global
Sector	Transport
Program Year	Year 4
Amount	$ 500,000
Status	Closed / Approved in 2016
Program Goal	To mainstream GHG mitigation into rail freight and transport infrastructure by developing tools, strategies, and best practices that enable governments and the World Bank to integrate sustainability into railway planning, construction, and operations. The program aimed to accelerate a modal shift toward environmentally friendly rail transport and strengthen the resilience and efficiency of global railway systems.

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Key Results	Developed a GHG estimation and mitigation tool, piloted on Eurasian railway lines, and updated the World Bank Railway Toolkit to integrate sustainability planning. Produced reports and best practice guidelines on low-carbon railway construction and operations, supported by KOTI, KRRI, and KEI. The program enhanced institutional capacity across Central and South Asia, Turkey, and Europe, informing Bank lending in sustainable railways. Outcomes included reduced fossil fuel dependency, lower transport costs, congestion relief, and strengthened resilience of railway systems against climate and economic risks.

K-101. Towards Greener and More Efficient Logistics in the Ukraine: An Integrative Approach

Grant Title	Towards Greener and More Efficient Logistics in the Ukraine: An Integrative Approach
Region	ECA
Countries	Ukraine
Sector	Transport
Program Year	Year 4
Amount	$ 700,000
Status	Closed / Approved in 2016
Program Goal	The program aimed to establish a sustainable logistics strategy for Ukraine by optimizing cleaner transport modes such as waterways, while enhancing the efficiency and environmental performance of roads and railways. It sought to reduce GHG emissions, strengthen institutional capacity, and promote integrated urban and freight transport planning to align with the country's green growth agenda.
Key Results	Delivered a national sustainable logistics action plan supported by regulatory assessments, logistics cost analysis, and benchmarking of green corridors. Produced detailed evaluations of public transport and freight flows in Odessa, resulting in an integrated city–port logistics strategy. Established a Logistics Committee and conducted knowledge exchange with Busan Metropolitan City, K-water, KMI, and MOLIT, reinforcing institutional capacity. The program improved multimodal efficiency, reduced congestion and emissions, and provided resilience against climate and economic disruptions, laying the foundation for greener and more competitive logistics in Ukraine.

K-100. Green Logistics Policy and Strategy for Uganda

Grant Title	Green Logistics Policy and Strategy for Uganda
Region	AFR
Countries	Uganda

Sector	Transport
Program Year	Year 4
Amount	$500,000
Status	Closed / Approved in 2016
Program Goal	The program aimed to support Uganda in developing a green logistics policy and strategy to reduce GHG emissions, modernize its logistics sector, and enhance competitiveness by lowering transport costs. It sought to incentivize sustainable technologies, introduce regulatory reforms, and create a framework that aligns with green growth principles for long-term development.
Key Results	Conducted diagnostics of Uganda's logistics system, engaged stakeholders, and produced reports, an action plan, and a guidance note on green logistics policy. Established a pilot framework for GHG reduction and efficiency improvements, serving as a model for other WB programs in Africa and South Asia. Collaboration with KOTI, KRRI, KEI, KILA, KIFFA, and KTA provided methodologies, railway expertise, and industry insights, while WB and IFC ensured technical alignment, positioning Uganda's logistics sector for greener, more competitive growth.

K-99. Resilience of the Ethiopian Roads Network

Grant Title	Resilience of the Ethiopian Roads Network
Region	AFR
Countries	Ethiopia
Sector	Transport
Program Year	Year 4
Amount	$700,000
Status	Closed / Approved in 2016
Program Goal	The program aimed to support Kazakhstan in designing and implementing an electronic tolling (e-tolling) strategy to enhance transport efficiency, financial sustainability, and environmental resilience. It sought to introduce modern tolling mechanisms to reduce congestion, generate sustainable revenue for road maintenance, and cut vehicle emissions, contributing to Kazakhstan's long-term green growth in the transport sector.
Key Results	Delivered financial and environmental cost-benefit analyses of e-tolling options, reviewed tariff policies, and developed an institutional and legislative framework to guide implementation. Provided action plans, procurement strategies, and technical specifications to operationalize

	the system. The program improved efficiency and competitiveness by enhancing mobility and lowering logistics costs, while promoting resilience through sustainable financing for climate-resilient road networks. Knowledge-sharing with Korea Expressway Corporation, MOLIT, and KOTI ensured transfer of best practices in tolling technologies and road management.

K-97. Kazakhstan Green Growth In Road Sector Through E-tolling

Grant Title	Kazakhstan Green Growth In Road Sector Through E-tolling
Region	ECA
Countries	Kazakhstan
Sector	Transport
Program Year	Year 4
Amount	$700,000
Status	Closed / Approved in 2016
Program Goal	To support Kazakhstan in developing and implementing a National E-tolling Strategy that enhances transport efficiency, generates sustainable revenue for road maintenance, and reduces environmental impacts. By introducing modern tolling technologies and regulatory frameworks, the program aims to strengthen trade logistics, improve mobility, and build a more resilient and competitive transport system aligned with green growth principles.
Key Results	The program delivered comprehensive technical assistance, including financial and environmental cost-benefit analyses of tolling options, institutional and legislative reviews, and preparation of action plans for implementation. It helped design tariffing policies, technology specifications, and procurement strategies, while building the capacity of Kazakh institutions to manage the system. In collaboration with Korean partners such as KEC, MOLIT, and KOTI, the initiative provided knowledge exchange and practical insights, leading to improved road efficiency, reduced emissions, stronger resilience against climate risks, and enhanced competitiveness of Kazakhstan's logistics and trade corridors.

K-69. Intelligent Transport Systems and PPP in City Bus Systems for Indian Cities

Grant Title	Intelligent Transport Systems and PPP in City Bus Systems for Indian Cities
Region	SAR
Countries	India
Sector	Transport

Program Year	Year 3
Amount	$350,000
Status	Closed / Approved in 2015
Program Goal	The program aimed to enhance the efficiency and sustainability of India's urban bus systems by promoting Intelligent Transport Systems (ITS) and Public-Private Partnerships (PPP). It sought to address rapid urbanization and congestion in cities like Kolkata by integrating diverse public transport modes and introducing low-carbon, technology-driven solutions. The goal was to build institutional capacity, improve service delivery, and create replicable models for sustainable, inclusive urban mobility across Indian cities.
Key Results	Strengthened capacity of officials from nine Indian cities through workshops, study tours, and technical mentoring, leading to greater awareness and adoption of ITS and PPP models in bus operations. Developed replicable good practice frameworks in program planning, ICT-enabled service delivery, and innovative contracting for sustainable urban transport. Collaboration with KOTI, MOLIT, SMG, and CENTIOS provided global expertise, while World Bank and MoUD support linked the initiative to a $9.2M lending program, fostering scalable low-carbon mobility solutions nationwide.

K-68. Kolkata Metropolitan Transport Efficiency Improvement

Grant Title	Kolkata Metropolitan Transport Efficiency Improvement
Region	SAR
Countries	India
Sector	Transport
Program Year	Year 3
Amount	$400,000
Status	Closed / Approved in 2015
Program Goal	The program aimed to improve urban mobility and reduce congestion in the Kolkata Metropolitan Area (KMA) by integrating diverse public transport modes, adopting low-carbon strategies, and promoting smart urban planning. It sought to create a sustainable and livable city through multimodal connectivity, bus reforms, pricing policies, and land-use planning, while building institutional and technical capacity for long-term green growth.
Key Results	Developed an integrated mobility plan, institutional delivery model, and feasibility studies for capital improvements, along with an urban regeneration plan for Howrah. Improved multimodal connectivity reduced travel times and boosted productivity across KMA. The low-

	carbon transport strategy identified investment priorities that informed a World Bank lending program. Partnered with WRI to deliver technical expertise on green transport planning, supporting sustainable urban development and enhancing KMA's competitiveness and environmental resilience.

K-67. Improving Urban Mobility Using Big Data Analytics

Grant Title	Improving Urban Mobility Using Big Data Analytics
Region	EAP
Countries	Indonesia
Sector	Transport
Program Year	Year 3
Amount	$500,000
Status	Closed / Approved in 2015
Program Goal	The program aimed to reduce traffic congestion and its environmental, economic, and social costs in East Asia Pacific cities by leveraging big data analytics. Using crowd-sourced information from mobile taxi applications, it sought to provide real-time traffic flow insights to optimize signal timing, improve planning, and support sustainable urban mobility. The initiative emphasized cost-effective, data-driven solutions to lower emissions, improve fuel efficiency, and enhance transport equity for the urban poor.
Key Results	Developed and piloted algorithms for travel time, fuel use, and GHG emission analysis, expanding proof-of-concept systems from Cebu to Manila with potential replication in Jakarta and Ho Chi Minh City. Released open traffic datasets with privacy safeguards and improved ICT tools for traffic monitoring. Collaborated with KOTI and NIA Korea to apply expertise in big data and traffic control, alongside local agencies in the Philippines, Indonesia, and Vietnam. The program demonstrated measurable reductions in congestion impacts and catalyzed new ICT lending and advisory engagements across the region.

K-66. Smartcard Integration for Better Connected Public Transport System

Grant Title	Smartcard Integration for Better Connected Public Transport System
Region	SAR
Countries	India, Bangladesh
Sector	Transport

Program Year	Year 3
Amount	$400,000
Status	Closed / Approved in 2015
Program Goal	The program aimed to advance sustainable urban mobility in India, Bangladesh, and Bhutan by developing integrated smartcard payment systems across multiple public transport modes. By addressing fare system incompatibility, the initiative sought to improve travel efficiency, reduce operational costs, and align transport services with green growth principles and urban development planning.
Key Results	Conducted regional research on ticketing systems, analyzed smartcard technologies, and collected international case studies to inform pilot design. Produced technical guidelines and policy recommendations that supported India's MoUD initiative for a nationwide common mobility card, enabling seamless travel across cities and modes. Collaborated with MOLIT (Korea) to transfer expertise on integrated fare systems, with support from GPOBA and AusAID. Though the linked lending was dropped, the program provided a blueprint for large-scale smartcard integration in South Asia's transport sector.

K-36. Green Transport Initiative

Grant Title	Green Transport Initiative
Region	SAR
Countries	Bhutan
Sector	Transport
Program Year	Year 2
Amount	$300,000
Status	Closed / Approved in 2014
Program Goal	The program aimed to support Bhutan in advancing green and inclusive urban transport in Thimphu by reducing dependence on fossil fuels, cutting emissions, and enhancing energy efficiency. Through electric vehicle (EV) adoption, improved public transport, and non-motorized mobility solutions, the initiative sought to strengthen resilience, promote smart investments, and improve competitiveness while aligning with Bhutan's carbon-neutral development goals.
Key Results	Delivered policy studies and a 10-year EV roadmap, including feasibility assessments for charging infrastructure and fiscal impacts. Introduced low-emission buses and developed strategies for an inclusive public transport network with walking and cycling linkages. Strengthened institutional capacity through training and

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	knowledge sharing. Collaborated with KOTI and Korea Grid/Utility, along with ADB and UNDP, to transfer expertise and support scaling. The program reduced fuel dependency, enhanced urban mobility, and promoted Bhutan's competitiveness and tourism through green transport solutions.

K-35. Promoting the use of Green Construction Technology in Road Sector

Grant Title	Promoting the use of Green Construction Technology in Road Sector
Region	SAR
Countries	India
Sector	Transport
Program Year	Year 2
Amount	$500,000
Status	Closed / Approved in 2014
Program Goal	The program aimed to promote sustainable road construction in India by introducing green construction technologies and innovative materials to reduce emissions, conserve resources, and strengthen climate resilience. By piloting low-cost, locally available materials and scaling up their adoption, the initiative sought to modernize rural transport infrastructure, generate green jobs, and align India's national road programs with long-term green growth objectives.
Key Results	Created a repository of innovative road technologies and piloted green construction methods—such as quarry waste, fly ash, and low-cost concrete—on national road programs. Secured agreements with stakeholders to mainstream these practices into program manuals, leading to their adoption in at least 10% of roads under NHIIP, PMGSY, and RRSMP. Collaborated with the Korea Institute of Construction Technology (KICT) to integrate Korean expertise. The program reduced costs and emissions while generating rural green jobs, strengthening India's road sector resilience and competitiveness.

K-34. Training Hub "Transportation for Green Growth"

Grant Title	Training Hub "Transportation for Green Growth "
Region	Global
Countries	Global
Sector	Transport
Program Year	Year 2
Amount	$500,000
Status	Closed / Approved in 2014

Program Goal	The program aimed to build government capacity to design and evaluate sustainable transport systems that reduce emissions, energy use, and social costs while enhancing mobility and access. By introducing green transport methodologies and analytical tools, it sought to avoid "lock-in" to high-pollution modes, align transport planning with Rio+20 commitments, and support policy shifts toward inclusive, low-carbon urban mobility.
Key Results	Developed five training modules and trained 350 high-level decision-makers through seven sessions and three regional stock-taking seminars. Introduced new ex-ante evaluation methods that quantified external benefits such as reduced congestion, pollution, and GHG emissions. Collaborated with KOTI and MOLIT to integrate Korean expertise in demand analysis and emissions planning. The program mainstreamed green growth principles into transport policy evaluation, influencing program portfolios and financing strategies across client countries.

K-33. Streets as Drivers of Green Growth and Urban Prosperity in Africa

Grant Title	Streets as Drivers of Green Growth and Urban Prosperity in Africa
Region	AFR
Countries	Sub-Saharan Africa
Sector	Transport
Program Year	Year 2
Amount	$600,000
Status	Closed / Approved in 2014
Program Goal	The program aimed to improve pedestrian access and connectivity in African cities, recognizing walking as a critical mode for 40–60% of urban trips. By integrating pedestrian planning into transport systems, it sought to enhance safety, reduce travel time, and improve access to socio-economic services, particularly for vulnerable populations. The initiative supported green growth and sustainable prosperity through people-centered street design in Dar es Salaam, Kampala, Abidjan, and Gaborone.
Key Results	Developed assessment criteria and city-specific improvement plans for pedestrian environments, piloted maintenance and upgrade measures, and produced a final guidance report with lessons learned. Enhanced local capacity to mainstream pedestrian planning into transport strategies. Collaborated with KOTI, Seoul Metropolitan Government, Seoul Institute, and LX to share Korean best practices in pedestrian-oriented development, ITS applications, and urban design. The program advanced inclusive, safe, and sustainable urban mobility in four African cities.

K-32. Developing skills to support transport and logistics

Grant Title	Developing skills to support transport and logistics
Region	AFR
Countries	Uganda
Sector	Transport
Program Year	Year 2
Amount	$400,000
Status	Closed / Approved in 2014
Program Goal	The program aimed to improve Uganda's competitiveness in transport and logistics by addressing skills gaps, establishing national occupational standards, and integrating green practices into training. By aligning workforce development with industry needs, it sought to enhance efficiency in the logistics sector, support inclusive job creation, and strengthen Africa's capacity to manage resource-based growth sustainably.
Key Results	Established national occupational standards for key logistics trades, assessed training providers, and piloted improvements in Dar es Salaam. Identified Technical and Vocational Institutes to deliver targeted training, and developed a regional methodological framework to align skills supply with market needs. Collaborated with KOTI, MOLIT, and KILA to integrate Korean expertise, laying the foundation for job-creating growth and improved efficiency in Uganda's transport and logistics sector.

K-31. Africa Sustainable Transport Forum

Grant Title	Africa Sustainable Transport Forum
Region	AFR
Countries	Sub-Saharan Africa
Sector	Transport
Program Year	Year 2
Amount	$1,000,000
Status	Closed / Approved in 2014
Program Goal	The program aimed to support African cities in developing sustainable transport systems that enhance connectivity while promoting green growth, inclusivity, and resilience. By sharing tools, policies, and international best practices, the initiative sought to help countries design low-carbon transport strategies, reduce vehicle emissions, and mobilize funding in alignment with global commitments such as Rio+20.
Key Results	Organized Africa's first High-Level Conference on Sustainable Transport and facilitated adoption of a continental Action Plan

	endorsed by Regional Economic Communities. Supported pilot programs, policy reforms, and training programs, including toolkits on non-motorized transport and diesel emissions. Collaborated with KOTI, UNEP, and SSATP to integrate Korean expertise and global best practices. The program improved institutional capacity across multiple countries, mobilized financing partnerships, and embedded sustainable transport into African regional and national policies.

K-21. Capacity Building for Leaders in Energy Efficient Urban Transport Planning

Grant Title	Capacity Building for Leaders in Energy Efficient Urban Transport Planning
Region	Global
Countries	Global
Sector	Urban
Program Year	Year 1
Amount	$500,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to strengthen leadership capacity for sustainable urban transport by equipping policymakers with the skills, knowledge, and collaborative platforms needed to design low-carbon, inclusive, and efficient mobility systems. By integrating problem-solving, system design, and knowledge exchange, the initiative sought to address congestion, air pollution, and energy use while supporting urban economic growth and public well-being.
Key Results	Delivered three international workshops and developed eight case studies and three self-study modules, building leadership capacity in action learning and urban transport planning. Established a collaborative platform for continuous knowledge exchange and outreach in English, French, and Spanish, enabling peer-to-peer learning across regions. Strengthened global institutional capacity to design sustainable transport solutions and embedded green transport principles into policy and practice for rapidly urbanizing cities.

K-20. Sustainable Urban Transport for the City of Kyiv

Grant Title	Sustainable Urban Transport for the City of Kyiv
Region	ECA
Countries	Ukraine
Sector	Transport
Program Year	Year 1

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Amount	$350,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to support Kyiv in addressing severe urban transport challenges by strengthening public transport, modernizing traffic management, and enhancing institutional capacity. By aligning with the City Development Strategy, the initiative sought to reduce congestion, improve air quality, and increase economic competitiveness through sustainable and integrated mobility solutions.
Key Results	Conducted transport system assessments and benchmarking, delivering policy recommendations to improve public transit and traffic management. Developed an integrated city traffic management scheme and strengthened planning capacity within Kyiv's administration. Collaborated with city agencies and operators such as Kyivpasstrans and Kyiv Metropolitan, laying the foundation for sustainable urban mobility reforms to reduce congestion, improve air quality, and support the city's long-term competitiveness.

K-19. East Asia & Pacific Green Transport ICT

Grant Title	East Asia & Pacific Green Transport ICT
Region	EAP
Countries	Philippines
Sector	Transport
Program Year	Year 1
Amount	$400,000.00
Status	Closed / Approved in 2013
Program Goal	The program aimed to strengthen sustainable urban transport in the Philippines by using ICT to improve road safety data collection, sharing, and analysis. Through an open-source accident data management platform, it sought to enhance transport planning, reduce accidents, cut emissions, and build institutional and academic capacity for evidence-based decision-making in urban mobility.
Key Results	Developed and scaled an open-source road accident data platform, enabling real-time information sharing and analytical tools for traffic management and safety planning. Trained agencies and universities through e-learning and regional open data events, embedding data-driven approaches into transport policy. Collaborated with KOTI to transfer knowledge on ICT-based transport solutions, positioning the Philippines as a regional example of integrating green ICT for safer and more efficient mobility.

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K-6. Climate Change Adaptation in the Road Sector

Grant Title	Climate Change Adaptation in the Road Sector
Region	MNA
Countries	Morocco
Sector	Transport
Program Year	Year 1
Amount	$200,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to strengthen Morocco's road sector resilience to climate change by assessing vulnerabilities of critical road sections and providing cost-effective technical solutions. Through climate risk analysis, adaptation measures, and green transport options, the initiative sought to embed climate resilience into road planning, rehabilitation, and maintenance, ensuring long-term sustainability and supporting Morocco's green growth agenda.
Key Results	Delivered a vulnerability assessment of a critical road section and produced technical recommendations, including engineering drawings, slope stabilization, hydraulic revisions, and vegetation use for resilience. Informed revisions of road design and maintenance practices to integrate climate adaptation. The program demonstrated the feasibility of climate-resilient road measures, providing a model for national application and strengthening Morocco's capacity to mainstream resilience into transport infrastructure.

K-5. Implementing congestion reduction measures in Beirut

Grant Title	Implementing congestion reduction measures in Beirut
Region	MNA
Countries	Lebanon
Sector	Transport
Program Year	Year 1
Amount	$200,000
Status	Closed/ Approved in 2013
Program Goal	The program aimed to address severe traffic congestion in Beirut by studying its busiest transport corridor and proposing solutions to improve traffic flow, energy efficiency, and reduce GHG emissions. By informing authorities' mass transit plans and offering practical pricing and policy recommendations, the initiative sought to create

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	a foundation for sustainable urban mobility and inclusive transport reforms.
Key Results	Produced a comprehensive study of the Beirut–Tabarja corridor with costed recommendations for traffic flow and access improvements. Developed pricing and tariff strategies for multiple transport modes, accounting for social impacts on vulnerable groups. Although the linked lending program was dropped, the analytical outputs informed policy discussions on future mass transit development and congestion reduction measures, providing a baseline for Lebanon's sustainable urban transport planning.

K-4. Georgia Green Freight Transport and Logistics

Grant Title	(=Georgia Green Freight Transport and Logistics
Region	ECA
Countries	Georgia
Sector	Transport
Program Year	Year 1
Amount	$250,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to support Georgia in developing a national strategy for freight transport and logistics that promotes modal shift from road to rail, expands multimodal corridors, and reduces transport-related emissions. By introducing green logistics solutions and investment planning, the initiative sought to strengthen connectivity, improve trade competitiveness, and align Georgia's freight sector with sustainable green growth strategies.
Key Results	Developed Georgia's first national strategy for green freight transport and logistics, including an investment program for multimodal corridors, logistics centers, and container terminals. Strengthened institutional capacity to design fiscal and pricing measures that incentivize modal shift to rail and reduce emissions. Collaborated with KOTI to integrate Korean best practices in sustainable freight and logistics, enabling Georgia to advance low-carbon connectivity and regional trade efficiency.

K-3. Piloting Sustainable and Green Urban Transport Solutions for Sub National Governments

Grant Title	Piloting Sustainable and Green Urban Transport Solutions for Sub National Governments
Region	ECA
Countries	Poland

Sector	Transport
Program Year	Year 1
Amount	$625,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to strengthen subnational governments in Poland in managing sustainable urban transport by promoting energy-efficient systems, integrated fare structures, and improved inter-municipal coordination. By leveraging international best practices, especially from Korea, the program sought to optimize public transport performance, reduce CO2 emissions, and align Polish cities with EU climate and energy guidelines for greener mobility.
Key Results	Developed subnational transport strategies and fare integration frameworks that improved public transport management and energy efficiency in Polish cities. Facilitated national conferences and pilot studies that advanced CO2 emission accounting and performance-based planning. Collaborated with KOTI and KRIHS to transfer expertise on energy-efficient transport systems, linking Polish and Korean research institutions. The program strengthened local capacity, reduced CO2 emissions, and positioned Polish cities for long-term sustainable urban mobility.

K-2. TA to promote integrated urban planning in Addis Ababa to foster green growth

Grant Title	TA to promote integrated urban planning in Addis Ababa to foster green growth
Region	AFR
Countries	Ethiopia
Sector	Transport
Program Year	Year 1
Amount	$1,100,000
Status	Closed / Approved in 2013
Program Goal	The program aimed to strengthen Addis Ababa's capacity for sustainable urban development by revising and implementing its Master Plan with a focus on transport. By providing technical assistance, knowledge exchange, and international best practices, the program sought to promote green, efficient, and inclusive urban growth, improve public transport planning, and prepare investment-ready programs that address rapid urbanization challenges.

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Key Results	Supported revision of Addis Ababa's Master Plan with green transport strategies, traffic management, and TOD integration, enabling sustainable urban mobility. Enhanced institutional capacity through training, workshops, and a Seoul study tour, fostering awareness among policymakers and technical staff. Collaborated with KRIHS and KOTI to transfer expertise on sustainable transport systems. The program informed new transport policies and mobilized investment opportunities, embedding green growth principles into Addis Ababa's urban planning framework.

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