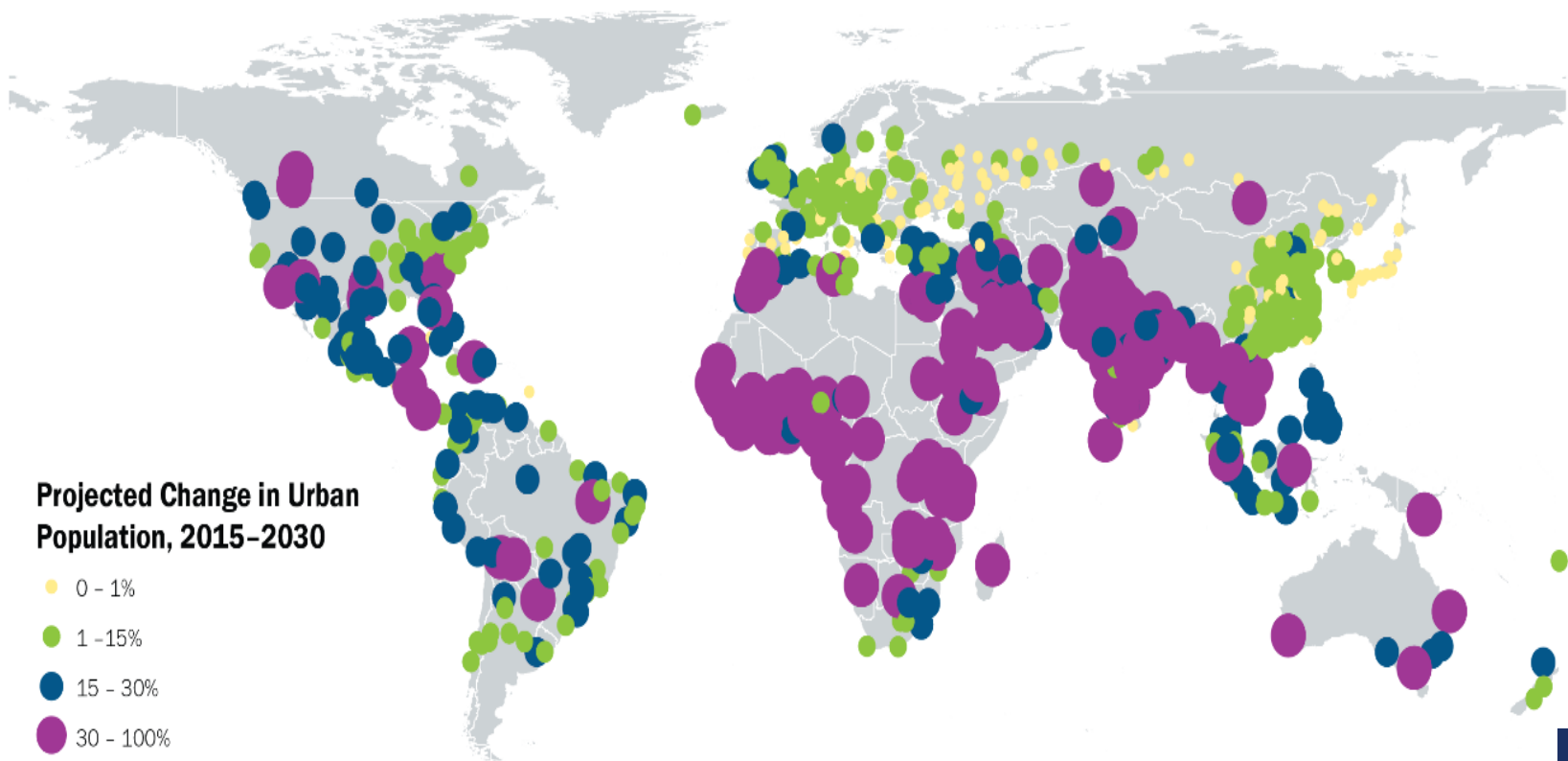




Regional Technical Assistance: Promoting Low-Carbon Development in Central Asia Regional Economic Cooperation Program Cities

Na won Kim, Senior Urban Development Specialist, ADB

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Why Low Carbon City?



Rapid urbanization in Asia



Cities are the center of economic activities and human development



Not properly manage,

Pressure on energy and natural resources

Increase pollution and greenhouse gas (GHG) emissions

Destabilize climate and threaten ecosystems.



New model of growth is needed to continue sustainable growth

Objective of the Project and Principles of Low-Carbon City Planning

The project aims to support city governments in mainstreaming climate actions in city planning and investment plans/ 4 Outputs



Ambitious



Inclusive



Fair



Comprehensive and integrated



Relevant



Actionable



Evidence-based



Transparent and verifiable

Five Pilot cities

- **Output 1:** GHG data management systems assessment and enhancement.
- **Output 2:** Recommendation on low-carbon investment road maps

Changsha, Zhuzhou, & Xiangtan
The People's Republic of China



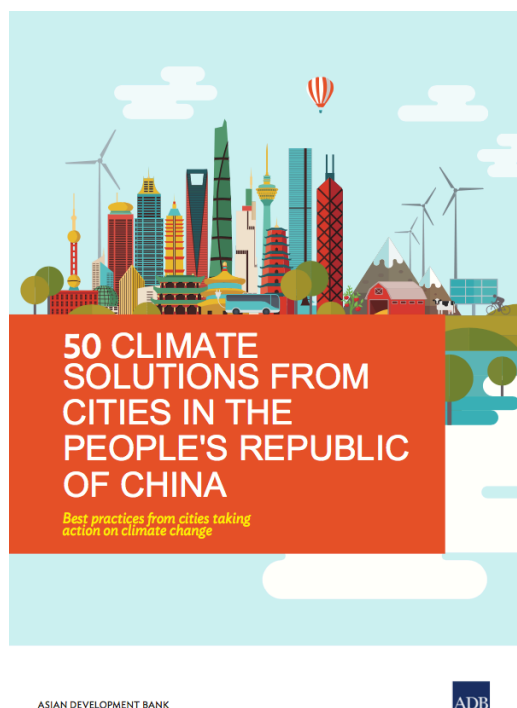
Nur-Sultan
Kazakhstan



Ulaanbaatar
Mongolia



CAREC Program Cities as whole



- **Output 3:** A source book on successful practices and measures on climate actions
- **Output 4:** Low-carbon city international forums for capacity building.





Pilot city Nur-Sultan

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Activities

- Low-carbon city planning training
- GHG inventory technical training
- City Assessment
- Low-carbon city roadmap
- Identification of priority low-carbon projects

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Low-carbon priority projects (i)

- Block heater technology demonstration



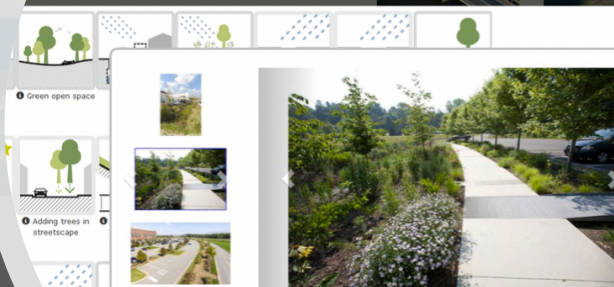
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Low-carbon priority projects (ii)

Climate resilient planning tool using Ecosystem-based adaptation measures

Adaptation measures



Bioswale
Bioswales are similar to bioretention cells in that they are depressed areas with overflow structures that collect, detain, infiltrate, and filter runoff. However, bioswales differ from bioretention cells in that they are also conveyance facilities (linear systems) that are greater in length than width. Due to their efficacy in filtering and removing pollutants from stormwater runoff, these features are commonly located adjacent to impervious areas that receive substantial amounts of automotive use such as parking lots or roadways. Depending on site constraints the construction of a bioswale can take several forms.

Bioswales provide filtration, infiltration, and detention of stormwater as a linear system.
Stormwater Capacity: 0.85 FT
Storage Capacity: 128 CF

Deposit-refund system for recyclables- assessment and recommendation



Building-based waste heat recovery for district heating



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THANK YOU

FOR YOUR ATTENTION