

Scaling Out Sustainable Solid Waste and Wastewater Management in Lao PDR, Phase II



Project Location:	Lao PDR
Project Period:	Oct, 2023 - Jun, 2028 (58 months)
Project Funding:	USD 10.5 million
Theme:	Waste Management, Planning, Investment
Project Code:	LA18

Partner Organizations



Project Summary

The project is improving the environmental management of cities and provinces to deliver enhanced urban services in Lao PDR. This includes establishing decentralized waste collection services, constructing integrated resource recovery centers and decentralized wastewater treatment systems, and rehabilitating a fecal sludge treatment plant. The project also supports the integration of principles of green growth and green cities into the 10th National Socio-Economic Development Plan (NSED) at provincial and national levels, the building of capacity, and origination and mobilization of green investment for cities. The project is led by the Ministry of Planning and Investment, with the Ministry of Public Works and Transport, and delivered with support from GGGI and the Korea International Cooperation Agency (KOICA).

Project Objectives



Improve capacity for green growth planning and green investment



Strengthen sustainable solid waste and wastewater management and the circular economy



Create green jobs and strengthen green enterprise for long-term sustainable economic growth

Strategic Approach

- **Designing locally-appropriate technical solutions** – The project adopts solutions for wastewater and solid waste management that are customized for Lao cities.
- **Strengthening regulatory frameworks and investment** – The project focuses on supporting the enhancement of regulatory frameworks, strategic plans, and investment pipelines.
- **Capacity building and awareness raising** – The project provides capacity building programs for government officials and carries out awareness raising campaigns through community engagement and promotional activities.



Recycled plastic waste is traded in Vientiane
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Municipal waste collection in Vientiane
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Decentralized Wastewater Solution Treatment Plant in Pakse
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Investment Mobilization for Green Cities

With GGGI's support, the Government of Lao PDR is establishing a Green City Investment Project Pipeline for targeted provinces and identifying the priority sectors and projects for investment

Under the framework of the 10th National Socio-Economic Development Plan, a comprehensive pipeline for investments in green cities is being formulated. For selected projects, GGGI will support the execution of pre-feasibility studies, project documentation and investor engagement, in order to mobilize at least USD 75 million into infrastructure for green cities.

Context and Background

Lao PDR has been experiencing rapid urban population growth, urban densification and expansion, and the uneven distribution of economic development. This has led to challenges in terms of urban environmental management and the provision of adequate, sustainable and inclusive urban services to urban communities. In particular, many urban communities lack adequate services for solid waste, wastewater management and sanitation. These untreated wastes end up flowing into local rivers, waterways and soils or burned on the edges of town..



Recognizing the need to invest in sustainable cities, the Government of Lao PDR has prioritized green growth within the National Socio-Economic Development Plan.

However, critical gaps persist in delivering urban services:

- **Low waste collection rates** - This leads to illegal dumping and burning of waste. Only 51% of households in Vientiane Capital receive waste collection services.
- **Inadequate solid waste management systems** - Many urban areas lack a formal recycling system, source separation mechanisms, and waste-to-resource facilities.
- **Inadequate wastewater treatment systems** - This leads to contamination and disease, as only three cities in the country operate wastewater treatment facilities.
- **Insufficient investment in green cities** - While policy targets are in place, securing funding for green cities projects remains challenging.



Project Outcomes and Results

The project promotes green cities in Lao PDR through support to four provinces, namely Vientiane Capital, Champassak Province, Vientiane Province, and Savannakhet Province. Green growth planning, capacity and investment are being strengthened, and solid waste and wastewater management systems in selected cities are being improved.

4 provincial plans
with green cities principles integrated



USD 75 million
mobilized for green cities infrastructure



3 municipal composting facilities
designed and constructed in Vang Vieng and Vientiane Capital



12,300 urban residents
receiving municipal waste collection services



4 wastewater treatment systems
designed and constructed in Pakse City and Kaysone Phomvihane



4,500 urban residents
with household connections to newly built sewerage network



12,000 tons
of accumulated waste recovered and recycled



30 - 37%
of solid waste and wastewater generated in cities sustainably treated

