

# SUCCESS STORIES

## HOW A SUSTAINABLE SOLID WASTE MANAGEMENT PROJECT IS CHANGING THE CAPITAL CITY OF LAO PDR



▶ **A series of pilot projects is helping authorities in Vientiane, Lao PDR resolve some of the city's chronic problems with waste management.**

The country's government is pursuing long-term goals to ensure sustainable and green infrastructure development and has adopted national strategies to transition to green growth.

This comes as Lao PDR has seen rapid economic growth and urbanization in recent years, accompanied by growing consumption and generation of waste.

Solid waste disposal and treatment is underdeveloped with only a handful of landfill sites in the country, including one in Vientiane. There is no formal recycling system and a lack of access to proper waste treatment and disposal facilities, which mean many people simply burn, bury or dump rubbish wherever they can.

To try and combat this, in 2019, the 'Wastewater and Solid Waste Treatment Capacity Building Project for City

Environment Improvement in Laos' project in Vientiane was officially launched. The project aims to tackle some of these problems by increasing waste collection rates while promoting waste-to-resource opportunities and using organic waste as a source for bio fertilizers, among others.

*"As much as 70% of households are not using the waste collection services in Vientiane. This project will help to increase the waste collection rate and reduce open dumping and burning of rubbish. We can collect more waste and convert it into a resource. It will also improve the environment as organic waste will be diverted from landfill sites,"* says Director General of the Vientiane City Office for Management and Services (VCOMS), Bounchanh Keosithamma.

GGGI, which has been working with local authorities on green city policies and projects, helped secure funding of USD 6.5 million for green city development projects – of which waste management is one - from the Korean government through the Korea International Cooperation Agency (KOICA).

As Shomi Kim, GGGI's Senior Green Cities Analyst in Lao PDR, explains, the project is two-fold – giving policy advice and working with city authorities to help improve and introduce legislation on waste, and also run pilot projects implementing concrete measures to try and help with waste collection, source separation and waste recovery.

*“Waste recycling is a big challenge in the city. There is no municipality-led system nor collection mechanisms in place to encourage waste separation, so people often just put everything into one bag and all waste is mixed, both at businesses and homes. (...) Another big problem is the waste collection services. There are very low collection rates – around just 30% - because the collection fee is high and the service cannot reach houses in peri-urban areas of the city, people choose not to use collection services. So, this leads to illegal dumping and burning of waste,”* says Kim.

With GGGI support, the Lao government has rolled out three pilot projects to help provide access to collection services for people.

GGGI is using its funding to deploy push carts and small trucks in Vientiane to collect waste, which will be able to go to areas in the city where people do not usually have any real access to collection while ensuring the separated collection of dry and wet waste.

Another project is focused on introducing organic waste recovery from businesses, such as restaurants, hotels and vegetable markets. The VCOMS service provider - will collect organic waste separately using bio-degradable bags from these businesses and then sell it on to a local bio-fertilizer firm.

The third project is aimed at increasing recycling in Vientiane. While an informal recycling sector exists where some people go door to door to collect recyclable materials, currently they do not collect glass bottles because the bottles have low financial value.

However, GGGI managed to find a firm which buys glass bottles for recycling and is planning to set up multiple glass collection points, for example in schools.

The group will also supply any extra facilities needed for the projects, such as special bins for food waste, collection containers for glass, and supply training to local influencers in collaboration with other development partners such as GIZ.

The pilot projects, which will operate in the Sikhottabong district of Vientiane, will run over the next four years. During the initial stages of the roll out, the projects will be monitored, and then in the third year, an upscaling of the most successful of those projects will be initiated. The decentralized waste collection service with a focus on source separation is expected to shift the traditional approach of “collect-and-dump” to a model of “Circular Economy” in

Vientiane as it will create more opportunities for resource recovery once it's scaled up at the city level.

Kim believes that GGGI's work, while it may require time and persistent efforts, will help make the city's waste management system more sustainable.

*“What we are definitely hoping will happen is that our involvement on policy based on the lessons learned from the pilot initiatives will help solve the problem with low collection rates at scale. (...) We are one of few countries that work on the upstream side of the waste value chain to ensure the sustainable management of waste. We hope that the pilot projects will provide a good example on source separation and resource recovery to the authorities that they can adopt it for the rest of the city, and also as an example of financially sustainable schemes. (...) Our goal is also to empower the local government to independently develop and continuously implement these financially sustainable waste management systems once GGGI is no longer involved,”* she says.

The city's government is very encouraged by the project, pointing out that it will help not just the local environment, but the economy as well.

*“This will not just help solve serious issues with waste in the city, but it will also help create jobs. We don't know yet exactly how many jobs this will help create, but in my opinion, it will be a lot,”* says Mr. Keosithamma.

Keosithamma adds: *“It could also serve as an excellent example of its kind. I think the project will be a role model and repeated in many cities across Laos.”*

GGGI says that the project, which is due to run until 2024, will see around 20,000 people gain new access to adequate waste collection services while 30 TPD of organic waste generated in the city will be recovered. It also expects to create new jobs and improved employment opportunities for informal waste pickers.