

Success Stories

PUBLIC-PRIVATE PARTNERSHIPS

This series provides an overview of successful public-private partnerships in various infrastructure sectors, where IFC was the lead advisor.

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Solid Waste

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Maldives: Solid Waste

The Republic of Maldives, a nation consisting of over 1,000 coral islands in the Indian Ocean, is known for its white-sand beaches, pristine environment, and thriving marine ecosystem. But its waste management practices were threatening both the environment and its tourism industry—garbage was either dumped in the ocean or burned off with diesel fuel. To address this problem, the municipal government of Malé turned to IFC to introduce best practices in solid waste management, with participation from private-sector investors. The transaction closed in May 2011.

Tatva Global Renewable Energy (Maldives) Private Limited, an Indo-German consortium, won a 20-year concession to build and operate an integrated waste management system for the Greater Malé region. The transaction mobilized \$50 million in private investment that will improve waste collection, transportation and disposal; reduce marine and air pollution; and generate power through a 2.7MW waste-to-energy plant. The project will benefit 120,000 people, process up to 70 percent of the country's solid waste, and reduce annual greenhouse gas emissions by 16,000 tons.

The advisory work was supported by DevCo, the Public-Private Advisory Infrastructure Facility (PPIAF), and the South Asia Infrastructure Facility (SAIF). DevCo, a multi-donor program affiliated with the Private Infrastructure Development Group, is funded by the United Kingdom's Department for International Development, the Dutch Ministry of Foreign Affairs, the Swedish International Development Agency, and the Austrian Development Agency. SAIF is supported by the Netherlands-IFC Partnership Program.

BACKGROUND

Solid waste has become a serious environmental and social problem in the Maldives, an archipelago of over 1,000 islands in the Indian Ocean that is economically dependent on tourism. Waste is collected in an ad-hoc manner and dumped at the shore, disposed of in the ocean, or transported to Thilafushi Island, where it is burnt openly. This combination of dumping and open burning destroys the marine environment, pollutes the air, and puts the health of the country's 300,000 people at risk. As one official put it, the existing system has created a "waste bomb" that could devastate the country.

In 2008, the government of Maldives introduced a national solid waste management framework to address these issues. Recognizing that it lacked both funds and technical expertise, the government decided to turn to the private sector through a public-private partnership to introduce best practices in waste management at a reasonable cost and in an environmentally sustainable way.

This approach also supported the government's ambitious plan to fight climate change by making the Maldives the world's first carbon-neutral country by 2020.

IFC'S ROLE

IFC, the lead transaction advisor, helped the government develop an integrated waste management strategy and implementation plan for the entire country. To ensure a fair and transparent bidding process, IFC conducted a diagnostic review, identified strategic options, and conducted an environmental and social baseline study so that bidders would have the information necessary to design effective solutions. IFC also ensured that key stakeholders would have input, including citizens, local businesses, and resorts. Because bidders proposed widely different technologies, IFC required them to demonstrate solid experience in waste management and disposal, as well as commit to developing environmental management plans. Site visits of the final bidders were required to enable better comparisons of widely different technical proposals. Finally, IFC helped the government with its communications strategy so that the entire process would be transparent.

TRANSACTION STRUCTURE

The transaction was structured as a 20-year concession to build, operate and transfer an integrated waste management system. The total project cost was approximately \$1 million, including donor contributions, which generated an investment of \$50 million. The concessionaire will provide 100 percent of the required financing. At the end of the concession period, the government will either assume management of the waste management system or extend the operating period.

The concessionaire will be responsible for the collection, transportation, storage, recycling and treatment of solid waste for the country's prime waste generation geography. This includes the capital island of Malé, the three islands of Huluhullé, Hulhumalé, and Villingili, and the neighboring resorts, which in total generate nearly 60 to 70 percent of the waste in Maldives (around 300 tons of waste per day). A landfill and a treatment plant will replace the current method of open burning of waste at Thilafushi Island.

In order to ensure adherence to global environmental standards, the project will follow United States Environmental Protection Agency requirements.

BIDDING

Fifteen firms initially expressed interest in the project; three international firms submitted final bids. The concession was awarded to Tatva Global Renewable Energy (Maldives) Private Limited, an Indo-German consortium consisting of UPL Environmental Engineers Limited and Mittledeutsche Sanierungs-Und Entsorgungs Gesellschaft mBH. The award was based on both technical and financial considerations and took the environmental and social impact of the project into account. The consortium, the Maldives government and the Malé City Council signed the concession agreement in May 2009.

The consortium has proposed building a 2.7 MW waste-to-energy plant at the project island of Thilafushi to replace the diesel-based power generation on the island, saving nearly 12,000 tons of carbon emissions annually.

POST-TENDER RESULTS

- When the project is completed, IFC will have helped the Maldives promote private sector investment in the solid waste management sector by mobilizing capital worth \$50 million.
- The project will improve the solid waste management infrastructure and services in the catchment area for around 120,000 people, representing nearly 40 percent of the total population. The system will manage up to 70 percent of the nation's solid waste.
- The practice of dumping and burning waste on Thilafushi Island will cease, which will reduce air and marine pollution that has caused considerable degradation of the island's ecological system.
- 120 hectares of land on Thilafushi Island will be reclaimed and made available for other uses, such as an industrial park and possibly a port.
- The project supports the Maldivian government's goal to become a carbon-neutral country by 2020 while helping it comply with good global practices on the treatment and disposal of solid waste.