

Report and Recommendation of the President to the Board of Directors

Project Number: 45366

October 2013

Proposed Loan Republic of Uzbekistan: Solid Waste Management Improvement Project

CURRENCY EQUIVALENTS

(as of 24 October 2013)

Currency unit - Uzbekistan Sum

SUM1.00 = 0.0004610\$1.00 = 2,168.97

ABBREVIATIONS

ADB – Asian Development Bank EA – executing agency

EMP – environmental management plan

IA – implementing agency

IEE – initial environmental examination
LARP – land acquisition and resettlement plan

MSW – municipal solid waste PIU – project implementation unit

SCNP - State Committee for Nature Protection

SLF – sanitary landfill facility
SPS – Safeguard Policy Statement
SWM – solid waste management

NOTE

In this report, "\$" refers to US dollars.

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PROJECT AT A GLANCE

1. Project Name: Solid Waste Management Improvement Project				2. Project Number: 45366-004									
3. C	ountry: Uzbeki	zbekistan 4. Department/Division:		Central and West Asia Department/Urban									
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				Total									69.0
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I. THE PROPOSAL

- 1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of Uzbekistan for the Solid Waste Management Improvement Project.¹
- 2. The project aims to provide an improved solid waste management (SWM) system in Tashkent, the capital city, to upgrade urban infrastructure and services. The project will develop a sanitary landfill that meets international standards, rehabilitate transfer stations, and modernize the waste collection and transfer fleet. It will build capacity in waste management and help formulate a national strategy on solid waste management.²

II. THE PROJECT

A. Rationale

- 3. Uzbekistan's robust economy, rising population, and accelerating urbanization are creating new development challenges. One is to replace aging infrastructure and dramatically improve municipal services, including SWM. Increasingly, urban expansion is exerting pressure on the living environment. Worsening pollution is causing environmental and health challenges for the nation's towns and cities and affecting their growth prospects.
- 4. Uzbekistan generates over 12,000 tons of municipal solid waste (MSW) daily or over 4 million tons annually. This generation rate is expected to accelerate to over 7 million tons annually by 2030, for a cumulative MSW amount over this period of about 100 million tons. Existing MSW collection services depend on aging and inefficient vehicles that collect MSW and transfer it directly to un-engineered and unsanitary dumpsites, where it is dumped and left exposed. In some cases, MSW is not collected by municipal systems at all, but instead is either burned or illegally dumped on vacant lots and waterways. Although rudimentary SWM systems exist in the major urban areas of Tashkent, they are poorly equipped to meet current and future demand. Elsewhere in Tashkent, MSW services are sporadic or nonexistent. Outside Tashkent, MSW recycling efficiency is extremely low, as formal environmental awareness and recycling programs are largely absent. In rural areas, MSW collection efficiency is estimated at less than 50%. Nationwide, illegal dumping causes considerable environmental damage to land, air, surface waters, and groundwater resources, as well as on the health and well-being of nearby populations.
- 5. National SWM challenges are fully recognized by the government, which recently mobilized significant resources to improve SWM services throughout the country. SWM improvement is consistent with the Asian Development Bank (ADB) country partnership strategy (CPS), 2012–2016 for Uzbekistan, which prioritizes replacing aging infrastructure and improving the quality, coverage, and climate resilience of SWM and other municipal services. SWM investments proposed in

² The Asian Development Bank (ADB) provided project preparatory technical assistance. ADB. 2011. *Technical Assistance to the Republic of Uzbekistan for Preparing the Solid Waste Management Improvement Project.* Manila.

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¹ The design and monitoring framework is in Appendix 1.

To put this in perspective, 100 million tons of MSW would cover Tashkent's 335 square kilometers to a depth of 60 centimeters.

⁴ The State Committee for Nature Protection counts 178 registered dumpsites throughout Uzbekistan and believes there are several hundred additional unregistered dumpsites.

Major investments nationwide in SWM equipment are provided through Presidential Decree 10.4. Recently, 138 waste collection vehicles were acquired for Tashkent's SWM system.

⁶ ADB. 2012. Country Partnership Strategy: Uzbekistan, 2012–2016. Manila.

the country operations business plan (COBP), 2012–2014 for Uzbekistan align fully with the immediate objective of developing basic urban infrastructure to support economic growth.⁷

- 6. While recognizing SWM needs nationwide, the government has as its immediate priority rehabilitating Tashkent's SWM system. SWM demands in Tashkent are growing rapidly, as the city's population of 2.3 million currently generates over 0.5 million tons annually, an amount expected to increase to over 0.7 million tons annually by 2030, and with cumulative generation from 2013 to 2030 reaching more than 10 million tons. The current system has served the city since 2006 and needs immediate and complete rehabilitation to avert potentially serious service disruptions. Most of the city's 700 MSW collection points require restoration, its MSW collection and transfer vehicle fleets urgently require replacement, and its transfer stations require major overhauls. Tashkent's current practices to control dumping need to be replaced with modern sanitary landfilling that meets internationally recognized standards. Significant opportunities exist to introduce and expand waste minimization and recycling initiatives citywide, dramatically improve system operational efficiency, and strengthen the capacity of institutions involved in SWM service provision.
- 7. The Tashkent SWM system is operated and maintained by Maxsustrans, a chartered state unitary enterprise wholly owned by the Municipality of Tashkent (Municipality) and established pursuant to a 1988 decision and decree of the Municipality. With a staff of 1,969 personnel, 685 of them female, the company operates the entire municipal SWM system for the city's 11 districts and the adjacent city of Chirchik. This includes about 700 waste collection points, 329 waste collection vehicles, three transfer stations, a waste transfer fleet, and the Akhangaran disposal facility located to the southeast of the city. While Maxsustrans has been operating the SWM system since inception, its institutional capacity is weak (a detailed discussion in para. 23). The project will strengthen Maxsustrans' capacity in technical and administrative areas through a capacity development program.
- 8. The project fully supports the government's priority of improving Tashkent's SWM system through an investment package to accelerate waste minimization and recycling initiatives, upgrade and rehabilitate the city's MSW collection and transfer systems, and develop a new sanitary landfill facility (SLF) to serve the city at least until 2060. Concurrently, it will help the government to develop a national SWM strategy and investment program to guide national SWM sector improvements over the medium term. The project supports the government's recent proposals to progressively increase private sector involvement in SWM, reduce carbon emissions, and improve air quality.
- 9. This project is ADB's first investment in the SWM area of Uzbekistan. Nevertheless, lessons from previous ADB-assisted projects in Uzbekistan showed that turnover of project implementation unit (PIU) staff was high due to poor compensation and delays in salary payments, particularly by local governments. Therefore, the proposed ADB loan will finance such PIU expenditures and recurrent costs under the project.

B. Impact and Outcome

10. The impact will be an improved urban environment and quality of life for the residents of Tashkent. The outcome will be improved SWM services and management in Tashkent.

⁸ The government plans to prioritize assistance to the informal recycling subsector in Tashkent and is currently assessing innovative options to outsource waste collection to the private sector.

ADB. 2012. Country Operations Business Plan: Uzbekistan, 2012–2014. Manila.

C. **Outputs**

- Output 1: Rehabilitated and expanded solid waste management system in **Tashkent.** By project completion, it is expected that (i) transfer stations will be rehabilitated and an existing transfer station possibly closed, 9 (ii) 3 million tons of disposal capacity will be established in a landfill that meets international environmental standards, and (iii) 1,950 tons per day of disposal operational capacity will be established.
- 12. Output 2: Strengthened operational capacity. The project will develop the capacity of Maxsustrans and support sector improvements in three key areas: (i) waste minimization and recycling program development; (ii) the formulation of a parallel media and public awareness program about waste minimization and recycling; and (iii) operational and management support for SWM operations including a logistics study.
- 13. Output 3: National solid waste management strategy. The project will assist the government in developing, under the coordination of the State Committee for Nature Protection (SCNP), a national SWM strategy, including a sector investment program for 2014–2030.

D. **Investment and Financing Plans**

14. The project is estimated to cost \$76.0 million equivalent (Table 1). The cost includes physical and price contingencies, taxes and duties, and interest and other charges during implementation.

Table 1: Project Investment Plan (\$ million)

Iter	n	Amount ^a
Α.	Base Cost ^o	
	Development of the Akhangaran sanitary landfill	31.31
	Rehabilitation of Tashkent's SWM system	29.40
	Project management and capacity development	4.96
	Subtotal (A)	65.67
B.	Contingencies	8.83
C.	Financing Charges During Implementation ^d	1.50
	Total (A+B+C)	76.00

^a Includes taxes and duties of \$5.82 million to be financed by the government.

^c Physical contingencies are computed at 10% for civil works, vehicles, and equipment; 5% for consulting services; and zero for lump-sum estimates. Price contingencies are computed at 1% on foreign exchange costs and 9%-12% on local currency costs, and they include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Includes interest and commitment charges. Interest during construction for ADB loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity premium of 0.1%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

The government has requested a loan of \$69.0 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility. 10 a commitment charge of 0.15% per year

⁹ The government will decide whether to close an existing transfer station after a logistics study is completed.

b In mid-2013 prices.

¹⁰ The interest includes a maturity premium of 10 basis points. This is based on the loan terms and the government's choice of repayment option and dates.

(with the interest and other charges during construction to be capitalized in the loan), and such other terms and conditions set forth in the draft loan and project agreements.

16. The government will relend the loan of \$69.0 million to Maxsustrans under a subsidiary loan agreement on terms and conditions satisfactory to ADB. Except as ADB may otherwise agree, the terms of relending under the subsidiary loan agreement will be substantially in accordance with the loan from ADB to Uzbekistan. A condition to ADB loan effectiveness is that the subsidiary loan agreement is first executed and legally binding upon both parties. The financing plan is in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources	69.00	90.79
Government	7.00	9.21
Total	76.00	100.00

^a Government contribution is as follows: (i) Ministry of Finance \$5.82 million in taxes and duties; (ii) Maxsustrans \$1.16 million for land acquisition and resettlement; and (iii) Maxsustrans \$0.02 million for contingencies.

Source: Asian Development Bank estimates.

E. Implementation Arrangements

17. The Municipality is the executing agency (EA) for outputs 1 and 2, and SCNP for output 3. Both EAs will be responsible for monitoring and evaluating project activities and outputs, including monitoring compliance with safeguard requirements and preparation of review reports. Maxsustrans will be the implementing agency (IA) responsible for day-to-day project implementation and will report to the Municipality and SCNP. The EAs will report quarterly to the government's Interministerial council for cooperation with development partners on implementing investment projects. All procurement under ADB financing will be undertaken by the PIU in accordance with ADB's *Procurement Guidelines* (2013, as amended from time to time). All consultants to be financed by ADB loan will be engaged according to ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual.¹¹

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¹¹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 3: Implementation Arrangements

Aspects	Arrangements			
Implementation period	April 2014–December 2018			
Estimated completion date	31 December 2018 (loan closing on 30 June 2019)			
Management				
(i) Oversight body	An interministerial council for cooperation w	ith internationa	l financial	
	institutions and development partner organi			
	implementing large and strategically import			
(ii) Executing agencies	Tashkent Hokimiyat (Municipality) for output		the State	
	Committee for Nature Protection for output	3		
(iii) Key implementing	Maxsustrans			
agency				
(iv) Implementation unit	PIU within Maxsustrans			
Procurement	International competitive bidding	5 contracts	\$50,319,000	
	National competitive bidding	13 contracts	\$6,445,000	
	Shopping	To be		
		determined		
Consulting services	(i) Consultants for the executing	Individual	\$865,000	
	agencies	consultants		
	(ii) Consultants for the PIU	Firm	\$2,606,000	
	(iii) Design and supervision of landfill	Firm	\$2,351,000	
	(iv) Design and supervision of community	Firm	\$294,000	
	collection points			
	(v) Capacity development program:	Firm	\$1,450,000	
	national strategy, waste minimization			
	and recycling, media and public			
	awareness, transport logistics study,			
operation and maintenance support				
	(vi) Two contracts for audit consultants	Firm	\$40,000	
Retroactive financing				
and/or advance contracting				
Disbursement				
	Disbursement Handbook (2012, as amende			
	detailed arrangements agreed upon between the government and ADB.			

ADB = Asian Development Bank, PIU = project implementation unit.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

- 18. The project includes developing a SLF in accordance with international standards to improve SWM in Tashkent. The SLF will have the potential to progressively expand to serve Tashkent province over the long term. The proposed SLF is a stand-alone facility with a service life span to 2060. It is designed to be self-sustainable with its initial development phase providing 5–7 years of service, which will provide ample time for the government to decide on SWM in Tashkent over the longer term while being assured of an operational system in the interim. The 30-hectare site was selected after an extensive survey.
- 19. The project includes the necessary upgrading and refurbishment of the entire MSW collection and transport system in Tashkent. Collection points will be equipped with suitable waste bins and the capacity to collect and segregate recyclable materials. Outdated collection

vehicles will be replaced with more efficient collection vehicles, significantly reducing operation and maintenance costs. A full logistical assessment of truck movement will ensure that an effective transport logistics system is in place. Transfer stations will be equipped with improved infrastructure and electro-mechanical components for compaction and control, and existing transfer vehicles will be replaced.

B. Economic and Financial

- 20. The economic viability of the project was assessed from the national perspective on the benefits of maintaining an improved SWM system for Tashkent. This includes constructing a new SLF at Akhangaran, built and operated according to accepted international standards, and support for waste segregation and recycling over an economic life of 25 years. The project is economically viable, as the economic internal rate of return of 17.4% in the base case exceeds the assumed economic opportunity cost of capital of 12.0%. Sensitivity analysis shows the economic internal rate of return more sensitive to increased capital costs than to increased operation and maintenance costs or reduced benefits from recycling.
- 21. Financial analysis, conducted from the perspective of Maxsustrans, the organization responsible for SWM in Tashkent, shows that the project is financially viable, with a financial internal rate of return of 6.8%. This compares favorably with the estimated weighted average cost of capital of 1.2%. The financial analysis assumes that the capital expenditure is necessary to ensure that Maxsustrans can continue to operate as a going concern, with benefits valuated as the revenue generated using current tariffs. Improved efficiency is assumed from the rehabilitation and rationalization of the SWM system supported through the PIU and capacity development funded by the project. Sensitivity analysis shows that the profitability of Maxsustrans is relatively robust against increased capital investment costs and operation and maintenance costs but sensitive to reduced revenue. The company's ability to increase tariffs with the consent of the central government and the Municipality should enable it to maintain sufficient profitability in the future to meet its operating expenditure and provide for capital asset renewal.

C. Governance

- 22. The government's public administration reform program is evolving through a number of phases: (i) reducing state influence in the economy; (ii) reducing command elements in the administrative system; (iii) restructuring government agencies; (iv) transitioning to market mechanisms with the gradual phasing out of the planned system of public service provision; and (v) making government activities more transparent. Nevertheless, governance remains an issue.
- 23. In the legislative, regulatory, and policy framework, new or evolving laws and decrees tend to overlap and become complicated. The lack of integration undermines enforcement and framework effectiveness, and thus its coordination. ¹² Institutional weaknesses weaken communication between key financial and line ministries, and skills training is needed to improve organizational ability to provide efficient public services. The government's financial management reform program 2007–2018 has yet to be fully implemented and financial management remains largely centralized. Responsibility for preparing and implementing capital investment and recurrent budgets is divided. As the public procurement system is regulated by several laws, directives, and measures, it lacks clarity, transparency, and coordination. A major obstacle to transparent

¹² ADB. 2011. *Uzbekistan-Consolidated Governance Risk Assessment and Risk Mitigation Plan Covering National Level and the Energy, Urban and Transportation Sectors*. Manila.

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procurement has been the process of verifying the prices of winning tenders. Approval of the national plan for fighting corruption is pending. A risk assessment and risk management plan has been prepared for the project to mitigate the negative impact of these issues.

- 24. A financial management assessment concluded that the Tashkent municipal administration and Maxsustrans currently satisfy ADB's financial management requirements. The city administration and Maxsustrans have satisfactory financial management capability to (i) record required financial transactions and balances; (ii) provide regular and reliable financial statements and monitoring reports; (iii) safeguard financial assets; and (iv) submit the required financial documents to auditors with arrangements acceptable to ADB.
- 25. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the Ministry of Finance, SCNP, the Municipality and Maxsustrans. The specific policy requirements and supplementary measures are described in the project administration manual.

D. Poverty and Social

26. By upgrading Tashkent's SWM system, the project will respond to the immediate SWM needs of the 2.32 million residents of the city. This will address existing unsanitary conditions brought about by SWM inadequacies in Tashkent and thereby improve health, hygiene, and sanitation conditions for all city residents, including the poor and socially excluded. Women, who are mainly responsible for household waste management, will benefit from cleaner collection points and more regularized waste pickup services. Support for increased household recycling in the form of collection point bins, media campaigns, and the development of a waste reduction and recycling strategy will improve the incomes of collection point operators and extend the useful life of the new SLF. The project will provide training through women's committees and neighborhood representatives in waste recycling practices and promotion. The involvement of national and municipal women's committees in the development of recycling strategies and media campaigns will enable these organizations to deliver these messages to their communities. Local labor regulations prohibit exploitive labor practices, including the use of child labor. There are no labor issues in the SWM sector. The project loan documents include covenants on adherence to core labor standards.

E. Safeguards

27. **Environmental safeguards.** The project is category B for environment in accordance with ADB's *Safeguard Policy Statement* (SPS) 2009. An initial environmental examination (IEE) was prepared in accordance with the SPS and government guidelines. The IEE includes the environmental audit compliance report for existing facilities, and an environmental management plan (EMP) including corrective actions for existing facilities. The IEE shows the potential environmental impacts of the project include (i) dust emissions from construction of the SLF, transfer stations and garages; (ii) the potential generation of odors; (iii) the potential attraction of vermin; (iv) noise from increased vehicular traffic, construction, and mechanical equipment such as pumps and compressors; and (v) associated occupational health and safety hazards. Such impacts are manageable, and the EMP has properly addressed them. The corrective measures required for existing facilities recommended by the environmental audit compliance report have been incorporated into the EMP. Public consultation on the IEE findings was conducted on 11

¹³ The financial management assessment followed ADB's Guidelines for the Financial Governance and Management of Projects Financed by ADB (2002). The instrument used for assessment was ADB's standard financial management assessment questionnaire.

April 2013. The IEE was disclosed on the ADB website on 7 August 2013. Under Uzbekistan legislation,¹⁴ the project is category 1, requiring that a statement of the ecological expertise be obtained from SCNP.¹⁵ Maxsustrans has agreed to ensure that the EMP and all corrective measures for existing facilities are strictly implemented, and during project implementation the PIU will have an environmental specialist responsible for overseeing EMP implementation. Maxsustrans will designate a unit within its organization to handle all environmental concerns of SWM, including the implementation of the EMP, implementation of any corrective measures for existing facilities, and closure of existing facilities as necessary.

- 28. The project component on strengthening operational capacity will not have any physical footprint, so no environmental impact is expected. This component will nevertheless include capacity development for Maxsustrans, including environmental management for the project. The preparation of a national SWM strategy will take into account the environmental aspect of SWM.
- 29. **Social safeguards.** The project is category B for involuntary resettlement in accordance with the SPS, as the construction of the SLF requires acquisition of 49.9 hectares of land, including 19.9 hectares of agricultural land, and affects one farmer with nine agricultural workers. A land acquisition and resettlement plan (LARP) was prepared in accordance with the SPS and relevant government legislation and requirements. Consultations with affected farmers and workers and Yangi Hayot Users Association (the local community organization owning the irrigation canal) were conducted during LARP preparation. ¹⁶ During the consultation with affected people on 11 December 2012, a summary of the draft LARP was discussed. The LARP was disclosed on the ADB website on 7 August 2013. Maxsustrans will work closely with local municipality and land cadaster agency to implement the LARP. As the closure of the existing dumpsite will affect 80–100 unauthorized waste pickers, Maxsustrans will implement a livelihood improvement program, the cost of which is included in LARP implementation costs.
- 30. LARP implementation is estimated to cost \$870,000, which will be covered by the government. The Municipality and Maxsustrans will be responsible for implementing the LARP. Notice to proceed shall not be given to any contractors until the LARP has been fully implemented.
- 31. The project area has no group of people who maintain a separate cultural or social identity from mainstream Uzbekistan society that would classify them as ethnic group, ethnic minority, or indigenous peoples as described in the SPS. Therefore, in accordance with ADB's SPS, the project is category C with regard to indigenous peoples.

F. Risks and Mitigating Measures

32. Major project risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan. The project does not have any unusual technical risks. The project's integrated benefits and impacts are expected to outweigh costs and risks.

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¹⁴ National legislation of the Republic of Uzbekistan on Ecological Expertise enacted in 2000.

¹⁵ Prior to construction and prior to operation, the statement of ecological expertise will be obtained from SCNP. These statements basically contain requirements and recommendations for construction, operation, and monitoring ecological aspects of the projects.

At least four consultations with affected people and relevant parties were carried out from November 2012 to December 2012.

¹⁷ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 4: Summary Risks and Mitigating Measures

Risks	Mitigating Measures
Inadequate PIU procurement capacity	The Municipality establishes the PIU and recruits a project management consultant, who will assist the PIU in managing project implementation. The PIU includes positions for international and national procurement specialists. Observations and recommendations recorded in the procurement capacity assessment are implemented.
Delays in procurement	Close communication and dialogue with the Ministry of Finance and MFERIT ensure adherence with procurement plans and timetable. Continual dialogue with MFERIT by the EAs, individual consultants, and the PIU occurs during bidding. A procurement monitoring system is established with deadlines and responsibilities set for each stage of procurement.
Lack of involvement of civil society organizations	The Municipality has already involved and engaged with stakeholders during project formulation. Advertisements shall specify that civil society, nongovernment organizations, and interested people may attend bid openings.
Poor quality of design standards	The project has incorporated international best practices. The EAs and IA ensure appropriate and high quality design standards.
Poor management and internal and external audit polices	Relevant provisions of ADB's Anticorruption Policy (1998, as amended to date) are included in the loan and project agreements and the bidding documents. Maxsustrans and SCNP shall perform an interim audit of project activities. Maxsustrans' accounts will be externally audited.

ADB = Asian Development Bank, EA = executing agency, IA = implementing agency, MFERIT = Ministry for Foreign Economic Relations Investment and Trade, PIU = project implementation unit, SCNP = State Committee for Nature Protection.

Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

- 33. The government, SCNP, the Municipality and Maxsustrans have assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.
- 34. The government, SCNP, the Municipality and Maxsustrans have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

V. RECOMMENDATION

35. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$69,000,000 to the Republic of Uzbekistan for the Solid Waste Management Improvement Project, from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

30 October 2013

Takehiko Nakao President

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanism	Assumptions and Risks
Impact Improved urban environment and quality of life for the residents of Tashkent	By 2025 Households served by the SWM system maintained at 100%	Maxsustrans annual reports	Assumption The government implements the SWM strategy for improving SWM services
	SCNP certified that atmospheric, surface, and subsurface emissions comply with international standards	SCNP environmental monitoring and statistics Ministry of Health public health monitoring and statistics	
Outcome Improved SWM services and management in Tashkent city	By 2019 Households served by the SWM system maintained at above 95% (approximately 645,500 households; 2013 baseline = 604,500) Households segregating MSW increased from about 25% in 2013 to about 90% Disposal of 100% of MSW accords with international standards of environmental protection (approximately 1,950 tons per day; 2013 baseline = 0)	Maxsustrans annual reports EA/IA project completion report	Risk Inefficient collection and transport routing and schedules
Outputs 1. Rehabilitated and expanded SWM system in Tashkent	By 2018 Two transfer stations rehabilitated and one possibly closed a 3 million tons of disposal capacity established that meets international environmental standards 1,950 tons per day of disposal and operational capacity established	Maxsustrans annual reports Project progress reports prepared by Maxsustrans EA project performance management system reports	Risk Institutional weaknesses in coordination between key financial and line ministries
Strengthened operational capacity	By 2018 At least 90% of households actively	Project progress reports prepared by Maxsustrans	Assumptions Institutional capacity is

	A campaign to raise awareness of waste segregation reaches 90% of households, with the participation of female members of households Maxsustrans' management and operations improved, including a 20% reduction in cost per ton of waste disposal The MSW collection system started to use a geographic information services database and other information technology, with 80% of trips monitored by the system	Quarterly and annual community surveys Audited financial statements of Maxsustrans	upgraded. The implementing agency is properly staffed to effectively deliver, operate, and manage operations
3. National SWM strategy	By 2016 The strategy document submitted to the government for endorsement	Consultant's final report	

Activities with Milestones

1. Rehabilitated and expanded SWM system in Tashkent

- 1.1 Recruit and mobilize design and supervision consultants (Q1 2016).
- 1.2 Award first civil works contract (Q3 2016).
- 1.3 Award all project contracts (Q1 2017).
- 1.4 Procure and operationalize vehicles and equipment (Q2 2018).
- 1.5 Complete all construction (Q4 2018).

2. Operational capacity strengthened

- 2.1 Recruit EA consultant support (Q2 2014).
- 2.2 Prepare annual work plans, personnel scheduling, budgets, and procurement plans by December of each year starting in 2014.
- 2.3 Recruit PIU consultants to improve the three key operational areas (Q1 2015).
- 2.4 Submit consultant's report and outputs, as per the agreed schedule (2015–2018).
- 2.5 Initiate capacity development, especially training for operation and maintenance (Q3 2015).
- 2.6 Conduct media and public relations program assistance (to Q4 2016).

Inputs

ADB (OCR Loan): \$69.0 million Government: \$7.0 million

Activities with Milestones	Inputs
3. National SWM Strategy	•
3.1 Carryout component to develop the national SWM	
strategy (Q1 2016).	
3.2 Prepare the draft national SWM strategy document (Q4	
2016).	

ADB = Asian Development Bank, EA = executing agency, IA = implementing agency, MSW = municipal solid waste, PIU = project implementation unit, SCNP = State Committee for Nature Protection, SWM = solid waste management.

a The government will decide whether to close an existing transfer station after a logistics study is completed.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=45366-004-3

- 1. Loan Agreement
- 2. Project Agreement
- 3. Sector Assessment (Summary): Solid Waste Management (Uzbekistan)
- 4. Project Administration Manual
- 5. Contribution to the ADB Results Framework
- 6. Development Coordination
- 7. Financial Analysis
- 8. Economic Analysis
- 9. Country Economic Indicators
- 10. Summary Poverty Reduction and Social Strategy
- 11. Initial Environmental Examination
- 12. Risk Assessment and Risk Management Plan

Supplementary Documents

- 1. Detailed Economic Analysis
- 2. Land Acquisition and Resettlement Plan