



## 1. Project Data

<b>Project ID</b> P164260	<b>Project Name</b> Utility Efficiency & Quality Improvement		
<b>Country</b> Belarus	<b>Practice Area(Lead)</b> Water		
<b>L/C/TF Number(s)</b> IBRD-89650	<b>Closing Date (Original)</b> 31-Mar-2025	<b>Total Project Cost (USD)</b> 26,283,826.01	
<b>Bank Approval Date</b> 14-Jun-2019	<b>Closing Date (Actual)</b> 31-Mar-2025		
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>	
Original Commitment	101,000,000.00	0.00	
Revised Commitment	25,507,798.47	0.00	
Actual	26,283,826.01	0.00	
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## 2. Project Objectives and Components

### a. Objectives

The original Project Development Objective (PDO) as stated in the Loan Agreement (Schedule 1, page 5) and the Project Appraisal Document (PAD, page 1) was **“to improve the quality and efficiency of water and wastewater services, and support the introduction of regional solid waste management.”**

For the purposes of this IEG ICR Review, the PDO will be assessed as follows:

1. To improve the quality and efficiency of water and wastewater services



2. To support the introduction of regional solid waste management

**b. Were the project objectives/key associated outcome targets revised during implementation?**

No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

**Component 1: Improving water and wastewater services at the utility/service provider level (appraisal cost: US\$73 million; actual cost: not available as the team did not have the actual disbursement figures)** The component had the following three subcomponents: (a) supporting underperforming providers to improve their performance by establishing and implementing Utility Performance Improvement Plans (UPIPs); (b) supporting better performing providers for the creation of UPIPs, construction and modernization of water supply and sanitation (WSS) facilities; and (c) supporting top tier providers for infrastructural modernization, improving creditworthiness, and creating investment and financing plans, complemented by a pilot co-financing initiative to support their financial stability.

**Component 2: Strengthening utility performance (appraisal cost: US\$2 million; actual cost: not available).** Activities under this component included (a) piloting a data collection and management system in selected utilities and their subsequent participation in the Utility Benchmarking Program or the associated Danube Regional Benchmarking initiative; (b) adapting the Danube Learning Partnership (D-LeaP) curriculum and participating in capacity-building activities; and (c) participating in knowledge-sharing activities.

**Component 3: Enhancing solid waste management process in the country (appraisal cost: US\$25 million; actual cost: not available).** Activities under this component included (a) construction of the Polotsk/Novopolotsk Regional Sanitary Landfill; closure and remediation of the existing Polotsk landfill; development of detailed designs; and carrying out construction management and investment monitoring; (b) carrying out preparatory investment studies and construction of RLFs (other than those mentioned earlier); and (c) carrying out of sector development studies related to improving sector efficiency.

**Component 4: Project management (appraisal cost: US\$1.0 million; actual cost: not available).** This component financed travel, training, audits, and general consulting services to support the Project Coordinating Team (PCT), including technical assistance (TA) to help the PCT (a) execute project screening and prioritization, (b) conduct monitoring and evaluation (M&E) activities, (c) manage environmental and social safeguards, (d) provide training to PCT staff, and (e) conduct annual audits for the project and providers.

**e. Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project Cost.** The original appraised cost as stated in the PAD was US\$101 million, all of which was to be financed by the International Bank for Reconstruction and Development. The amount was revised to



US\$25.507 million due to the suspension of the project in March 2022. The actual amount disbursed was US\$26.283 million

**Borrower contribution.** There was no borrower contribution.

**Dates.** The project was approved on June 14, 2019. The effectiveness date was December 16, 2019. The project was initially scheduled to close on March 31, 2025, and the final closing/cancellation date remained the same.

**Other changes.** There were no changes to the project's PDO or components during implementation. However, on March 19, 2022, the World Bank suspended this project due to the deteriorating operational environment resulting from the cumulative impact of sanctions and restrictions, which caused an extraordinary situation that made it improbable that the project could be carried out in accordance with the respective agreements.

### 3. Relevance of Objectives

#### Rationale

##### Country and sector context:

The Republic of Belarus, located in northeastern Europe, is a landlocked country bordered by Latvia, Lithuania, Poland, Ukraine, and Russia. It has a population of approximately 9.2 million, which is primarily urban and predominantly female. Following the dissolution of the Soviet Union, Belarus pursued limited economic liberalization, allowing growth in the private sector while maintaining significant state ownership, which led to strong GDP growth and substantial poverty reduction—particularly between 2003 and 2014, when it achieved the largest poverty decline in the Europe and Central Asia region. However, this progress was accompanied by rising external debt and heavy economic and energy dependence on the Russian Federation, which supplied the majority of the country's energy needs. The country's economy showed signs of recovery beginning in 2018 due to stability-oriented policies. However, issues such as foreign-currency debt, uncertainty over Russian energy policies, limited market reforms, and increasing climate-related risks—such as flooding, wildfires, and water scarcity—persisted. Belarus is heavily integrated with the Russian economy and is a presidential republic, with state ownership dominating the economy and limiting market mechanisms. These factors constrain fiscal flexibility and public investment in utilities and infrastructure. In addition, the increasing climate risks—such as flooding, wildfires, and water scarcity—are expected to further pressure the resilience of the economy and infrastructure.

Belarus has abundant water resources, but water quality and aging infrastructure remain serious challenges. At the time of project appraisal, despite having adequate availability, water quality was a concern for about 20 percent of the population due to excessive iron content leading to taste issues, health risks, material staining, and pipe blockages. Wastewater treatment infrastructure was insufficient, particularly downstream of industrial areas. The WSS sector, operated under the 1998 Water Code and managed by the Central Government and the Ministry of Housing and Utilities (MHU), struggled with fragmented service delivery, low residential tariffs, and ageing infrastructure that required urgent modernization – particularly in rural areas. To address this, the government planned gradual tariff increases, the development of a national Water Strategy to improve water security and efficiency through



2030, and prioritized improving drinking water quality through initiatives such as the Clean Water Program, which targeted universal access to high-quality drinking water by 2025. The solid waste management (SWM) sector also faced significant structural, environmental, and financial challenges, with services largely provided by municipally owned enterprises operating under centralized control, limited private participation, and low tariffs. Municipal solid waste collection covered both urban and rural areas, but disposal quality varied significantly, with most waste ending up in poorly controlled landfills. Around 3.7 million tons of municipal solid waste was generated annually (averaging 1.05 kg per person per day), and most of it was disposed of in over 156 primary landfills and 1,700 small rural sites with limited environmental controls and poor regulation. To address these issues, the project aimed to support the development of regionalized, more environmentally sound solid waste disposal services. This included the design and construction of the first regional sanitary landfill to address complex institutional, financial, and operational challenges and establish a scalable model.

### **Alignment with Government strategy:**

The project aligned with Belarus's long-term strategies on water security and solid waste management, including the Water Strategy up to 2030 and the National Strategy on Municipal Solid Waste and Recyclables Management for 2017–2035 and its associated State Program, which supported the Government's long-term objectives for environmentally sound and sustainable waste management.

### **Alignment with Bank strategy:**

The project was aligned with Belarus's Country Partnership Framework (CPF) for FY18–FY22 and directly supported Focus Area 1 by financing critical water supply, sanitation, and solid waste infrastructure and strengthening utility operations to improve efficiency, sustainability, and cost recovery. By enhancing utility performance, building government capacity to manage water and waste services, and improving the environment for financially viable service provision, the project also contributed to Focus Area 3, which emphasized the role of infrastructure in climate change management, economic growth, and human development. In addition, the project supported CPF's cross-cutting objective of evidence-based public decision-making by promoting greater access to and use of data through utility benchmarking activities.

### **Previous World Bank Experience:**

At project appraisal, the World Bank had supported Belarus's water supply, sanitation, and solid waste sectors for more than a decade, building a strong partnership with the Government. It drew on experience from earlier water and sanitation projects and the Danube Water Program to guide infrastructure investments and utility reforms. The Bank focused on improving utility efficiency through an incentive-based framework aimed at long-term sustainability and creditworthiness. In SWM, it had provided eight years of technical assistance, supporting the National Strategy, piloting regional waste management, and improving waste treatment in Grodno. The project's World Bank financing was also expected to leverage additional funding from the European Investment Bank, in line with national solid waste policies and programs.

The PDO remained relevant throughout the project's duration until the World Bank suspended its entire program in Belarus in March 2022. There was a clear alignment between the project's development objectives and the country's and WB's strategies, and the project was strategically relevant. Overall the relevance of the PDO is rated as High.



## Rating

High

### 4. Achievement of Objectives (Efficacy)

#### **OBJECTIVE 1**

##### **Objective**

To improve quality and efficiency of water and wastewater services

##### **Rationale**

Theory of Change (TOC): The TOC developed in the PAD showed the causal linkages from inputs (activities) to outputs, and how these linkages ultimately lead to the achievement of the overall PDO and contribute to longer-term development outcomes.

The project aimed to improve the quality and efficiency of water and wastewater services through rehabilitating and modernizing WSS infrastructure; strengthening national sector planning, regulation, data collection, monitoring, and benchmarking systems; and implementation of utility performance improvement plans (UPIP's). A tiered performance-improvement ladder was embedded in the design: underperforming utilities were supported to develop and implement UPIPs as a foundation for institutional strengthening; better-performing utilities combined UPIP implementation with infrastructure modernization; and top-tier utilities received advanced support for large-scale upgrades, creditworthiness enhancement, and investment and financing planning, including pilot co-financing. These activities were expected to deliver upgraded WSS facilities, utilities with improved technical, financial and operational performance, and stronger performance monitoring and benchmarking systems. By linking infrastructure financing to demonstrated performance improvements, the project sought to incentivize institutional strengthening and safeguard the sustainability of investments. In turn, these outputs were expected to improve water quality, wastewater treatment and disposal, household access to WSS services, climate mitigation and adaptation through reduced flooding; and increased capacity to regulate and monitor sector performance. Over the long term, these outcomes were expected to contribute to better public health and environmental outcomes, greater climate resilience of beneficiaries, and more reliable, and sustainable service delivery in the WSS sector.

The critical assumptions for the TOC were not explicitly stated in the PAD or the ICR.

A few proposed key assumptions could include: (a) Government remains committed to WSS and SWM sector reforms during and after the project. (b) Utilities have the capacity and adequate financing to operate and maintain the new infrastructure, and user fees or public funding are enough to cover ongoing costs. (c) Lower performing utilities are adequately incentivized to prepare and implement performance improvement plans.

The TOC, was clearly articulated and the underlying causal linkages between project activities, outputs, outcomes, and PDO were mostly established.

##### **PDO Indicators:**



- A total of 5,833 people were provided with drinking water of satisfactory quality (as per national standards) and received at least 22 hours of service per day as a result of the project. This is negligible compared to the target of 150,000 people.
- Of the people that were provided with reliable water supply services, 51% of the beneficiaries were female as a result of the Project. Although the total number of beneficiaries was way below the target, the goal of a 53% female representation was nearly achieved.
- 353,500 people were provided with the required level of wastewater treatment, as per national standards for Biological Oxygen Demand (BOD). The target of 400,000 people was mostly achieved. This substantive achievement was mainly due to the completion of wastewater treatment plant rehabilitation contracts in two relatively large towns: Vitebsk (population 360,000) and Pinsk (population 130,000).
- Share of female beneficiaries receiving with the required level of wastewater treatment (as per national standards for BOD) as a result of the Project was 56%. The target of 53% female beneficiaries was exceeded.
- None of the utilities had prepared and implemented Utility Efficiency Improvement Plans (UIP). The target of 12 utilities preparing UIP was not achieved.

#### **Intermediate Indicators:**

- 22.5 kilometers (km) of water supply pipes were constructed/ rehabilitated. The target of 27.3 km was substantially achieved.
- Zero kilometers of wastewater collectors were laid/ replaced, not achieving the target of 40 km.
- A total of eight utilities with UIPs were prepared under the project. The target of 20 utilities was partially achieved (40%)
- None of the utilities achieved at least 10% average increase in energy efficiency. The target of 10 utilities was not achieved.
- None of the utilities achieved at least 10 % reduction in Non-Revenue Water (NRW), which is the difference between the volumes of system input and billed consumption (ICR, page 20). The target of 10 utilities was not achieved.
- No utility staff benefited from training to support performance improvement plans, not achieving the target of 800 staff being trained.
- No strategic sector documents/programs were prepared by the Government. The target of at least one sector document/program was not achieved.
- A National benchmarking system was established and was in use, as targeted.
- Around 20% of female staff were promoted as a total of annual promotions in participating utilities. The target of 35% female staff promotions was partially achieved.

Overall, the PDO indicator on “people provided with the required level of wastewater treatment as per national standards” saw substantive achievement and the target values for gender related indicators were mostly met. However, most other targets for both PDO and intermediate indicators were not achieved. This was mainly due to the suspension of the project and the termination of some of the associated sub-projects.

Hence, the project’s efficacy for achieving Objective 1 is rated Negligible.



**Rating**  
Negligible

## **OBJECTIVE 2**

### **Objective**

To support the introduction of regional solid waste management

### **Rationale**

Theory of Change (TOC): The project aimed to support the introduction of regional SWM through activities that included construction, procurement and operation of sanitary regional landfills and supporting supplemental regionalization equipment and infrastructure. These were expected to deliver outputs such as safe waste disposal treatment services and optimized waste transport. In turn, these would improve management of solid waste disposal in an environmentally sound manner and improved climate mitigation and adaptation through reduced impact of flooding and lower GHG emissions. Over the long term, these outcomes were expected to contribute to better public health and environmental outcomes, reduced climate emissions, and more sustainable SWM service delivery.

### **PDO Indicators:**

- None of the people were provided with environmentally sound solid waste disposal services as a result of the Project, not achieving the target of 237,000 people.

### **Intermediate Indicators:**

- No regional waste disposal sites were developed and operational. The target of 2 such sites being developed and brought into operation was not met.
- No landfill gas collection systems were developed and operational, not achieving the target of 2 such systems being developed.
- No leachate and runoff water management systems were developed and operational. The target of developing 2 was not met.
- No weighbridges for regional landfills were developed and operational, not achieving the target of 2.

None of the PDO or intermediate targets were achieved. The ICR reported some preparatory progress toward regional solid waste management, including studies and designs for three landfill investments. However, following project suspension and loss of World Bank financing, construction did not begin, and no solid waste management results were achieved.

Hence, based on the achievements toward Objective 2, the project's efficacy is rated Negligible.

**Rating**  
Negligible



## OVERALL EFFICACY

### Rationale

Given that the project only partially achieved its first PDO outcome and did not achieve its second PDO outcome, the overall efficacy is rated Negligible.

**Overall Efficacy Rating**  
Negligible

**Primary Reason**  
Low achievement

## 5. Efficiency

### Operational and Administrative Efficiency:

The Project had a sound design, and until its suspension, the implementation proceeded without any delays and in line with project implementation timeline.

### Economic Efficiency:

At project appraisal, two representative subprojects—the reconstruction of the sewerage system in Zaslavl and the wastewater treatment facility in Slutsk—were selected for detailed financial and economic analysis, together accounting for about 28 percent (US\$28 million) of the US\$101 million World Bank–financed investment program and serving populations of roughly 15,500 and 61,000, respectively. Comprehensive financial and economic assessments for the WSS and SWM sectors estimated an economic net present value of US\$8.3 million and an economic rate of return of 10.2 percent, indicating that the project was economically viable. However, the project was prematurely suspended, with limited implementation progress and no access to operational or financial data, making it impossible to verify results or update the analyses for the ICR. Although project design was sound and implementation initially proceeded on schedule, the suspension ultimately rendered overall project efficiency negligible (ICR, paras 26,27)

Considering the above findings for both operational and economic efficiency, the overall efficiency is rated as Negligible.

### Efficiency Rating

Negligible

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

Rate Available?	Point value (%)	*Coverage/Scope (%)
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Appraisal	0	0 <input type="checkbox"/> Not Applicable
ICR Estimate	0	0 <input type="checkbox"/> Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

Relevance of Objectives is rated High, but both Efficacy and Efficiency are rated Negligible. Hence, the overall Outcome is rated Highly Unsatisfactory.

### a. Outcome Rating

Highly Unsatisfactory

## 7. Risk to Development Outcome

The project ended prematurely, with limited results, which included the completion of a few WSS contracts with some beneficiaries and the preparation of some UPIPs. The team did not have access to completed facilities, but based on prior World Bank experience, operation and maintenance of WSS infrastructure in Belarus is typically strong due to solid technical capacity. However, implementation of the project-supported UPIPs was unlikely to continue after suspension and therefore did not deliver the intended improvements in utility performance. (ICR, para 63)

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The project design was based on a thorough assessment of technical, financial, economic, institutional, and risk considerations, drawing on lessons from previous WSS projects. Appropriate sector specialists were engaged, ensuring strong technical quality. Adequate staff time and financial resources were allocated to support effective preparation and appraisal. The project was well aligned with the Belarus government sector priorities and CPF for FY18–FY22 and was supported by a strong partnership with the borrower. (ICR, para 58)

### Quality-at-Entry Rating

Satisfactory



## **b. Quality of supervision**

The project team included specialists in WSS, SWM, FM, procurement, and environmental safeguards, who worked collaboratively to maximize development impact. This was supported by adequate staff and budget resources. Although COVID-19 restrictions prevented site visits and in-person meetings during implementation, the team mitigated these constraints through frequent and effective virtual engagement. The Aide Memoires and ISRs were candid about reporting progress and the ISR ratings were realistic in measuring progress toward development objectives and implementation status (ICR, paras 59-61)

### **Quality of Supervision Rating**

Satisfactory

### **Overall Bank Performance Rating**

Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The M&E system and Results Framework were generally adequate to track progress toward the PDO. Responsibility for monitoring and reporting was with the Project Coordination Team (PCT), supported by trained staff from the Ministry of Housing and Utilities (MHU). The PCT verified the construction and operationalization of WSS and SWM infrastructure and the service providers were responsible for reporting performance data to the PCT and the MHU. This was intended to enable the timely identification of issues and the implementation of corrective actions by all stakeholders. The PCT consolidated project-level data and prepared semiannual progress reports for the World Bank. Building on systems used in earlier WSS projects, the approach functioned effectively. A midterm review was planned for March 1, 2024, to assess progress and recommend remedial measures, but it was not conducted due to the project's suspension.

### **b. M&E Implementation**

Until the project was suspended, the PCT regularly collected and reported data against the agreed indicators, comparing actual results with target values. However, there were shortcomings in M&E implementation. Initially, due to COVID-19 travel restrictions, the task team was unable to conduct site visits, and the PCT shared data with the task team virtually. Planned physical verification missions was deferred till the end of the pandemic, but that ultimately did not take place because the project was suspended in March 2022. The Mid-Term Review also could not be conducted as a result. Following project suspension, the Government did not respond to World Bank requests for project-related data or information, including those needed for the preparation of the ICR.

### **c. M&E Utilization**



As a result of project implementation being suspended prematurely, no data were used to inform decision-making, and a meaningful assessment of M&E utilization was not possible.

Even though the M&E design was broadly adequate, there is no adequate evidence to assess the M&E implementation and utilization due to the project suspension. Hence, the M&E is rated as Modest.

## M&E Quality Rating

Modest

## 10. Other Issues

### a. Safeguards

**Environmental Safeguards.** The project was assigned Environmental Category “A”, and triggered four safeguard policies, including Environment Assessment OP/BP 4.01, Involuntary Resettlement OP/BP 4.12, Pest Management OP/BP 4.09, and Projects on International Waterways OP/BP 7.50. A Resettlement Policy Framework was prepared to guide site-specific Resettlement Action Plans (RAPs), and the project applied relevant World Bank Group Environmental, Health, and Safety Guidelines for waste management and water and sanitation. Most investments involved rehabilitation within existing original boundaries and design parameters, with minimal expected impacts on transboundary water flows. In line with OP/BP 7.50 requirements, the World Bank carried out the riparian notification process at the Government’s request, and all notified riparian countries expressed full support for the project. (ICR, para 54)

**Social Safeguards:** Despite being rated Satisfactory at suspension in 2022, the project’s social safeguards performance faced challenges, including limited verification of land-use screening and preparation of site-specific RAPs. COVID-19 restrictions, the absence of an in-country social safeguards specialist, and the inability to conduct site visits constrained effective monitoring. The World Bank recommended stronger documentation, dedicated social safeguards capacity, and better dissemination of the Grievance Redress Mechanism, but these actions were not implemented before portfolio suspension. (ICR, para 55)

### b. Fiduciary Compliance

#### **Financial Management (FM):**

All required FM arrangements were established and functioned effectively. Qualified financial staff at Belcomtechinvest, including a chief accountant and an FM specialist, managed FM and disbursement activities. Project accounts were maintained separately in automated accounting systems with regular data backups. Interim financial reports and annual audited financial statements were submitted on time and met acceptable quality standards, with no FM issues identified. Overall, while the project’s financial management performance was rated Satisfactory, with overall FM risk remaining Moderate throughout. (ICR, para 56)

#### **Procurement:**



The PCT had sufficient staff with experience in World Bank procurement procedures and no major procurement-related delays or payment issues occurred during implementation. One complaint was recorded in the Systematic Tracking of Exchanges in Procurement (STEP) system and addressed appropriately. Procurement performance was rated Moderately Satisfactory throughout the project. Procurement risk remained Substantial due to the complexity of the planned civil works and related contracts. (ICR, para 57)

**c. Unintended impacts (Positive or Negative)**

No unintended impact is reported by the ICR.

**d. Other**

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**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Unsatisfactory	Highly Unsatisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Modest	Given project suspension, it was not possible to assess the M&E implementation and utilization.
Quality of ICR	---	Substantial	

**12. Lessons**

Even though the project could not be implemented due to factors beyond the control of the World Bank and the borrower, its innovative focus on utility performance improvement and regional sanitary landfill development remains technically sound and potentially replicable in other countries pursuing similar reform objectives. One of the key lesson learned is as follows:

**Strong systems to verify implementation are essential to ensure that projects are carried out as planned.** The use of in-country specialists or third-party monitoring arrangements is essential, particularly where local practices diverge from World Bank policy requirements or where such requirements are sensitive. Greater reliance on digital tools and virtual technologies can also strengthen supervision and verification, especially during prolonged disruptions such as the COVID-19 pandemic, and should be planned and budgeted for at appraisal.



### **13. Assessment Recommended?**

No

### **14. Comments on Quality of ICR**

The ICR provides a clear and detailed overview of the project's achievements. Given the difficulty of obtaining data following the project suspension, the report is candid about its inability to verify some of the results on the ground. Despite these challenges, it presents sufficient evidence and analysis to assess the project's overall performance.

Overall, the ICR's quality is Substantial.

#### **a. Quality of ICR Rating**

Substantial