



Report and Recommendation of the President to the Board of Directors

PUBLIC

Project Number: 54428-001
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Proposed Loan Republic of Indonesia: Citywide Inclusive Sanitation Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 20 December 2023)

Currency unit	–	rupiah (Rp)
Rp1.00	=	\$0.000064
\$1.00	=	Rp15,505
\$1.00	=	¥143.84

ABBREVIATIONS

ADB	–	Asian Development Bank
AMDAL	–	Analisa Mengenai Dampak Lingkungan (environmental impact assessment)
BPPPSPAM	–	Badan Peningkatan Penyelenggaraan Sistem Penyediaan Air Minum (Agency for Improving the Implementation of Drinking Water Supply Systems)
DBO	–	design–build–operate
DGHS	–	Directorate General of Human Settlement
EIRR	–	economic internal rate of return
EMP	–	environmental management plan
FSM	–	fecal sludge management
FSTP	–	fecal sludge treatment plant
IEE	–	initial environmental examination
m ³ /day	–	cubic meter per day
MOU	–	memorandum of understanding
MPWH	–	Ministry of Public Works and Housing
O&M	–	operation and maintenance
PAM	–	project administration manual
PDAM	–	Perusahaan Daerah Air Minum (local water utility)
PPP	–	public–private partnership
RPJMN	–	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
SDG	–	Sustainable Development Goal
TA	–	technical assistance
UPTD	–	Unit Pelaksana Teknis Daerah (sanitation service operator)
WASH	–	water, sanitation, and hygiene
WWTP	–	wastewater treatment plant

NOTE

In this report, “\$” refers to United States dollars.

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PROJECT AT A GLANCE

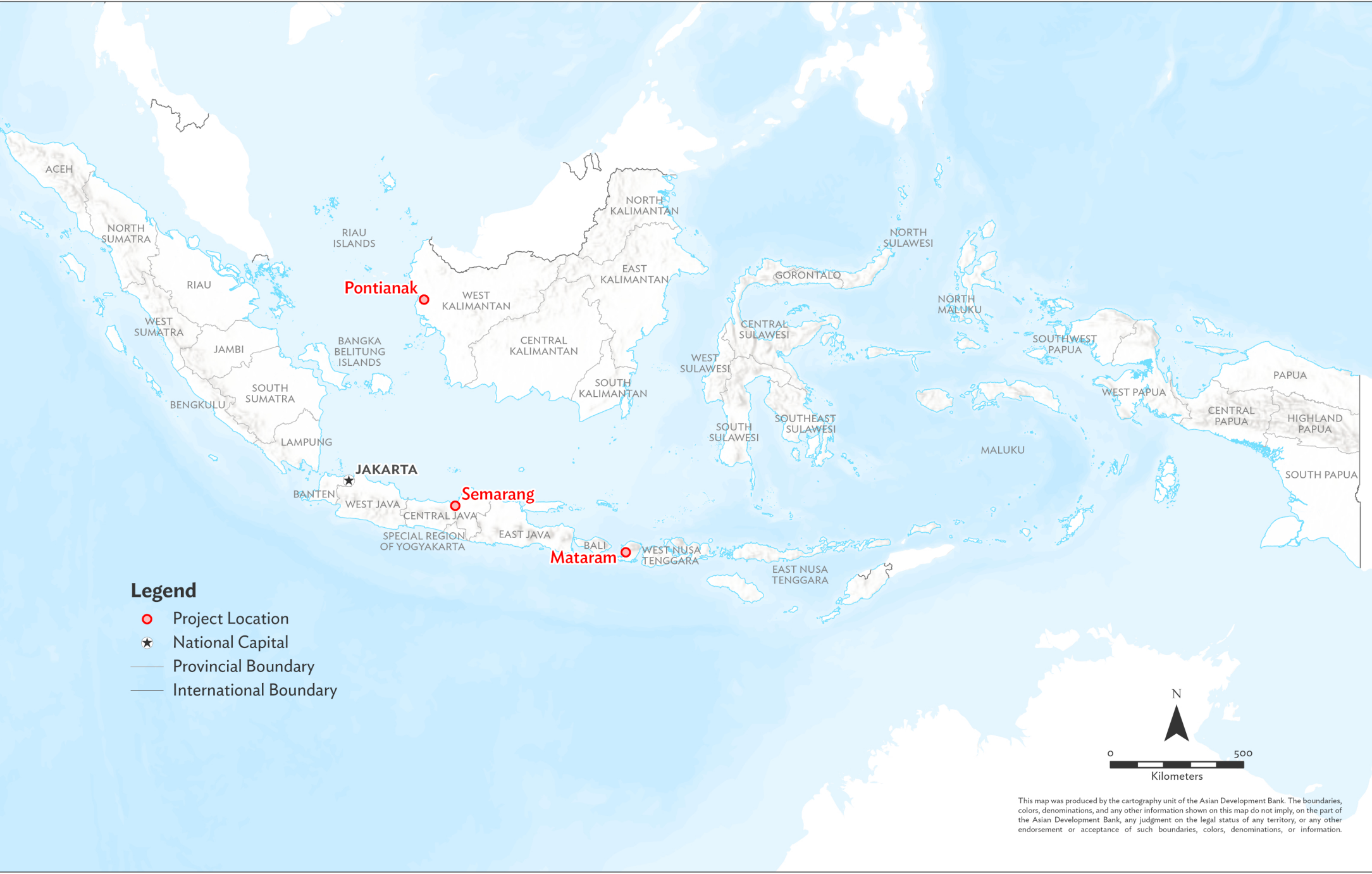
1. Project Data			
Project number	54428-001	Project name	Citywide Inclusive Sanitation Project
Country	Indonesia	Executing or implementing agency	Directorate General of Human Settlements, Ministry of Public Works and Housing
Borrower	Republic of Indonesia		
Sector office	Water and Urban Development Sector Office	Geographical location	Country
Sector	Water and other urban infrastructure and services	Subsector	Urban sanitation Urban sewerage
Country economic indicators	https://www.adb.org/Documents/Links/Docs/?id=54428-001-CEI	Portfolio at a Glance	https://www.adb.org/Documents/Links/Docs/?id=54428-001-PortAtaGlance
Operational priorities	OP1: Addressing remaining poverty and reducing inequalities OP2: Accelerating progress in gender equality OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability OP4: Making cities more livable OP6: Strengthening governance and institutional capacity	Sustainable Development Goals	SDG 5.4 SDG 6.2, 6.3 SDG 9.1 SDG 11.1, 11.6 SDG 13.1, 13.a
Lending modality	Project loan		
2. Financing			
ADB Financing		Amount (\$ million)	
Regular ordinary capital resources loan		419.60	
Cofinancing		Amount (\$ million)	
None		0.00	
Counterpart		Amount (\$ million)	
Government		30.55	
Total		450.15	
ADB Climate Financing			
ADB			
Adaptation		138.78	
Mitigation		203.53	
Cofinancing			
Adaptation		0.00	
Mitigation		0.00	
Total		342.31	
Currency of ADB Financing: Yen			
3. Climate Change			
Absolute GHG emissions (tCO ₂ e per year)		78746	
Relative GHG emissions (tCO ₂ e per year)		-20152	
Climate change risk on the project without adaptation measures		Medium	
4. Private Sector Development			
Private capital mobilized (\$):		0	

5. Safeguards			
Category	Environment:	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI
	Involuntary resettlement:	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI
	Indigenous peoples:	<input type="checkbox"/> A <input type="checkbox"/> B	<input checked="" type="checkbox"/> C <input type="checkbox"/> FI
6. Gender Equality			
Category	<input type="checkbox"/> GEN (gender equity theme)	<input checked="" type="checkbox"/> EGM (effective gender mainstreaming)	
	<input type="checkbox"/> SGE (some gender elements)	<input type="checkbox"/> NGE (no gender elements)	
7. Poverty Targeting			
Category	<input checked="" type="checkbox"/> General intervention	<input type="checkbox"/> Individual or household (TI-H)	
	<input type="checkbox"/> Geographic (TI-G)		

INDONESIA

CITYWIDE INCLUSIVE SANITATION PROJECT

Project Locations: Mataram, Pontianak, and Semarang



This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any other endorsement or acceptance of such boundaries, colors, denominations, or information.

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of Indonesia for the Citywide Inclusive Sanitation Project.

2. The project will support the Government of Indonesia in increasing access to climate-resilient, adequate, and safely managed sanitation services for about 2.5 million people in the cities of Mataram, Pontianak, and Semarang. The project will (i) improve and expand sanitation systems by constructing wastewater treatment plants (WWTPs), sewer networks, and household connections, and by enhancing existing fecal sludge management (FSM) facilities to build the project cities' resilience; (ii) strengthen the regulatory environment; and (iii) improve the institutional effectiveness of sanitation service operators regarding governance, digitalization, resilience, and asset management.

II. THE PROJECT

A. Rationale

3. **Economic outlook.** Before the coronavirus disease pandemic, Indonesia had grown at an average rate of 5.7% during 2003–2012 and 5.1% during 2012–2019. In 2020, the economy contracted by 2.1%. To mitigate the downturn, the fiscal deficit was widened in 2020 and 2021 and the central bank applied monetary loosening and directly purchased government bonds. The economy posted a broad-based growth of 3.7% in 2021. The recovery continued in 2022 with 5.3% growth, driven by exports. Growth is projected to be 5.0% in 2023 and also 2024 as solid prospects in domestic demand will compensate for slower exports due to weaker global demand. Bank Indonesia has raised its policy rate since late 2022 to stabilize the Indonesian rupiah, but the impact on growth is expected to be minimal.¹

4. **Sanitation services in Indonesia.** About 77% of households in Indonesia have access to sanitation (defined as having access to sanitation facilities that meet health standards, such as toilets with gooseneck pipes and a septic tank).² However, only 7% have access to safely managed sanitation (defined as safe disposal of excretion on-site and transport for treatment off-site).³ The predominant method of sanitation is through household septic tanks, which are desludged on an ad-hoc basis; the fecal sludge is then brought to a fecal sludge treatment plant (FSTP). Only 17 of the 98 Indonesian cities have centralized WWTPs, most with limited coverage and capacities.⁴ These facilities tend to have substantial operation and maintenance (O&M) issues due to improper design, poor technology selection, limited wastewater flow, and insufficient financial capacity of the operators. Limited access to sanitation services disproportionately affects public health, biodiversity, and overall economic and ecological security, threatening the resilience of climate-vulnerable coastal cities.⁵

5. **National policy framework and institutional arrangement.** The National Medium-Term Development Plan (RPJMN) 2020–2024 sets the targets of 90% of households having access to

¹ ADB. 2023. *Asian Development Outlook: Growth Upbeat, Price Pressures Easing*. Manila.

² As of 2023, Indonesia's total population is estimated at 278.7 million, of which about 56.6% live in cities. Source: Government of Indonesia, Central Bureau of Statistics (*Badan Pusat Statistik*). <https://www.bps.go.id/> (accessed on 4 September 2023).

³ Government of Indonesia. 2020. National Medium-Term Development Plan (RPJMN) 2020–2024. Jakarta. <https://www.bappenas.go.id/>. The current achievement of safely managed sanitation is 7.25%. Since the plan's target (15%) is not yet achieved, the government intends to set the same target in the 2025–2029 RPJMN.

⁴ Ministry of Public Works and Housing (MPWH). <https://pu.go.id/>.

⁵ Globally, 50% of child mortality is associated with unsafe water, inadequate sanitation, and poor hygiene (United Nations. *UN Water: Water, Sanitation and Hygiene*).

sanitation, of which 15% should have access to safely managed sanitation by 2024 (footnote 3). The strategic plan 2020–2024 of the Ministry of Public Works and Housing (MPWH) mandates that the climate resilience of cities be strengthened and identifies sanitation as a key pillar for doing so. The same mandate was used as a reference in selecting the project cities. Law number 9/2015 stipulates the Directorate General of Human Settlements (DGHS) under the MPWH to be the national regulator responsible for the (i) preparation of national sanitation policies, (ii) construction of sanitation facilities across provinces or in nationally strategic areas, and (iii) monitoring and evaluation of sanitation access targets. Sanitation assets developed by the DGHS will be handed over to the local governments upon completion, who will become the asset owners.

6. **Project cities.** Mataram, Pontianak, and Semarang were selected, after an assessment of 98 cities, based on criteria such as strong local government commitment, climate vulnerability and need to strengthen climate resilience (para. 8).⁶

7. **Sanitation services in the project cities.** Most households in the project cities have septic tanks (92.5% in Mataram, 98.7% in Pontianak, and 97.45% in Semarang), but these are often unlined and leaking. Desludging services are insufficient, and the FSTPs are in very poor condition.⁷ Because of inadequate and poorly designed facilities and the absence of citywide sewer systems and WWTPs, only a very small proportion of the urban population has access to safely managed sanitation: 5.5% in Mataram,⁸ 0.7% in Pontianak,⁹ and 3.0% in Semarang.¹⁰ Sanitation tariffs are limited to the desludging of septic tanks.¹¹

8. **Climate change impacts.** The project cities are all vulnerable to flooding. The latest incidents occurred in December 2023 in all three cities. Climate projections show increases in the intensity and frequency of heavy rainfall, which, along with rising sea levels, will increase flood risk. Given the poor condition of sanitation infrastructure, septic tanks in particular, floods will pollute groundwater and trigger outbreaks of diarrhea, cholera, and vector-borne diseases, among other environmental and health risks.¹² The increasing flood risk will exacerbate these impacts over time. Without an improved sanitation system, polluting events and their effect on public health, including the health of poor and vulnerable groups, will increase. This investment will result in considerable climate change mitigation through greenhouse gas reduction by applying choices of technology, which allow a more efficient wastewater treatment process that have been demonstrated to reduce emissions (footnote 32).

9. **City governments' financial capacity.** In 2022, the Ministry of Finance carried out fiscal capacity assessment of provincial, city, and district governments.¹³ Based on the local

⁶ Mataram is designated as a key national tourism destination (total population is 495,681 people in 2022); Pontianak is the capital of West Kalimantan, the third-largest province in Indonesia (total population is 658,685 people in 2022); and Semarang is the capital of Central Java connecting East and West Java (total population is 1,659,975 people in 2022). Mataram and Semarang are coastal cities while Pontianak is traversed by a river that connects to the sea.

⁷ 3 desludging trucks in Mataram, 2 in Pontianak, 32 in Semarang. The city governments are responsible for increasing the number of desludging trucks or engaging the private sector to perform the desludging.

⁸ Government of Indonesia, Nusa Tenggara Barat Provincial Government. 2020. *Roadmap Gerakan Buang Air Besar Sembarangan Nol (BASNO) menuju Sanitasi Aman Nusa Tenggara Barat Tahun 2020–2023*. Mataram.

⁹ Government of Indonesia, Pontianak City Government. 2022. *Kota Pontianak Dalam Angka 2022*. Pontianak.

¹⁰ Semarang City Department of Health. 2022. *Profil Kesehatan Kota Semarang Tahun 2022*. Semarang.

¹¹ The tariffs per septic tank is around \$20 in Pontianak (Local Regulation No. 8/2020), \$11 in Semarang (Mayoral Regulation No. 18/2018), and \$8 in Mataram, depending on customer classification (Local Regulation No. 14/2011).

¹² Government of Indonesia, Agency for Improving the Implementation of Drinking Water Supply Systems (Badan Peningkatan Penyelenggaraan Sistem Penyediaan Air Minum [BPPSPAM]). 2021–2022. *2019 Performance of Water Supply Providers*. Jakarta. Only 33% of the population in Semarang, 51% in Mataram, and 82% in Pontianak are served by water utilities, implying high reliance on groundwater for water supply and a strong need for sanitation.

¹³ Ministry of Finance Regulation No. 193 (2022) regarding regional fiscal capacity mapping. The index is 1.599 for Mataram, 1.725 for Pontianak, and 1.916 for Semarang (medium range: 1.504–1.837; high range: 1.838–2.171).

governments' revenues and expenditures, it determined their financial capacity to take over and sustain assets financed by the central government and concluded that Mataram and Pontianak are cities with medium fiscal capacity, and Semarang is a city with high fiscal capacity.

10. **Lessons.** From 1972 until October 2023, the Asian Development Bank (ADB) has provided \$2.37 billion in financing for 94 project and technical assistance (TA) commitments in Indonesia's water and other urban infrastructure and services.¹⁴ The proposed project builds on several lessons from these interventions, such as the need to (i) secure more than 80% of the land for the project prior to project approval to avoid implementation delays,¹⁵ (ii) improve project readiness and use high-quality engineering designs to ensure that construction work and project implementation start promptly,¹⁶ (iii) allocate sufficient budget for house connections to ensure that the required minimum flow is met, (iv) reinforce community engagement to increase willingness to connect, (v) boost the capacity of the sanitation (wastewater) service operators to ensure proper use and maintenance of the assets, and (vi) combine wastewater and water supply services to ensure the financial sustainability of the facilities through cross-subsidies.¹⁷

11. **Strategic alignment.** The project is consistent with ADB's Strategy 2030,¹⁸ the Sustainable Development Goals,¹⁹ ADB's Water and Urban Sector Directional Guides, ADB's country partnership strategy, 2020–2024, for Indonesia,²⁰ ADB's Action Plan for Healthy Oceans and Sustainable Blue Economies, and the government's RPJMN 2020–2024 (footnote 3). Following the Joint Multilateral Development Bank Methodological Principles for Assessment of Paris Agreement Alignment of New Operations, the operation has been assessed as aligned with the goals of the Paris Agreement.

12. **Loan modality.** The project investment loan modality is suitable as the project has a clear scope, tangible outputs, and cost estimates for works and services (paras. 14–19).

13. **Development coordination.** ADB coordinates with the main stakeholders in urban water supply and sanitation, i.e., the MPWH and the National Development Planning Agency (Badan Perencanaan Pembangunan Nasional). ADB also participates in regular government-led sector working group meetings with development partners and through joint portfolio reviews. ADB has continuously held coordination meetings and discussions with other development partners during project preparation and will continue consultations during project implementation. Development partners currently working in the sanitation sector include the World Bank (strategy and policy support), the Japan International Cooperation Agency (development of Jakarta's sewerage system), and German development cooperation through KfW (solid waste management system). They are currently supporting the government to prepare similar projects to improve sanitation in additional cities in Indonesia.

¹⁴ ADB. 2023. [Member Fact Sheet \(Indonesia\)](#). Manila.

¹⁵ All WWTP sites in the three cities are owned by the city governments.

¹⁶ ADB. 2016. [Report and Recommendation of the President to the Board of Directors: Proposed Technical Assistance Loan to the Republic of Indonesia for the Accelerating Infrastructure Delivery through Better Engineering Services Project](#). Manila (Loan 3455-INO).

¹⁷ Independent Evaluation Department. 2015. [Annual Evaluation Review 2015. Lessons from Water Supply and Sanitary Projects](#). Manila: ADB; and Independent Evaluation Department. 2019. [Country Assistance Program Evaluation for Indonesia 2005–2018](#). Manila: ADB.

¹⁸ ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

¹⁹ United Nations. 2015. [Sustainable Development Goals](#). New York. The project aligns with Sustainable Development Goal (SDG) 5 on Gender Equality, SDG 6 on access to clean water and sanitation, SDG 9 on building resilient infrastructure, SDG 11 on creating sustainable cities and communities, and SDG 13 on climate action.

²⁰ ADB. 2020. [Country Partnership Strategy: Indonesia, 2020–2024—Emerging Stronger](#). Manila. The project is aligned with the strategy's focus areas of improving well-being and accelerating economic recovery.

B. Project Description

14. The project is aligned with the following impact: sanitation facilities improved and made inclusive to support the regional development policy of minimizing national disparities (footnote 3). The project will have the following outcome: access to inclusive, climate-resilient, adequate, and safely managed sanitation services in project cities improved.²¹

15. **Output 1: Sanitation services improved, expanded, and made climate-resilient.** The output is aligned with the citywide inclusive sanitation principle that means ensuring everyone has access to safely managed sanitation services by integrating sewerage and non-sewered systems. The project will finance the construction of four new climate-resilient WWTPs with co-treatment of fecal sludge, and about 200 kilometers of sewer networks.²² It will enable 90% of the population in project cities (households connected to the sewer network and those with septic tanks served by desludging operators) to have access to inclusive, climate-resilient, adequate, and safely managed sanitation. Climate risks, including heavy rainfall, surface water and coastal flooding, sea level rise, coastal erosion, and extreme temperatures, have been considered, and adaptation measures incorporated in project design. The project will strengthen the non-sewered systems and integrate city-based information and disaster management systems with the newly constructed sanitation facilities.²³

16. **Output 2: Regulatory environment strengthened.** The project will help improve the regulatory environment by (i) preparing O&M guidelines for sanitation facilities that are climate-resilient, gender-responsive, and inclusive; (ii) introducing wastewater tariffs and other measures (e.g., transfers or taxes) to ensure 100% O&M cost recovery and financial sustainability; and (iii) preparing guidelines for integrating the sewerage and non-sewered systems, including stakeholder mapping to foster a public–private partnership (PPP) environment conducive to private investment.²⁴

17. **Output 3: Institutional effectiveness improved.** The project will improve the delivery of sanitation (wastewater) services by strengthening the institutional capacity of service operators—Perusahaan Daerah Air Minum (PDAM)²⁵ in Pontianak and Semarang, Unit Pelaksana Teknis Daerah (UPTD)²⁶ in Mataram—to manage new wastewater systems and integrate them with non-sewered systems. This includes strengthening governance, mitigating fiscal impacts, improving performance through digital tools, and increasing awareness of the impacts of climate change on community and environmental health. Community awareness will be raised through gender-sensitive water, sanitation, and hygiene (WASH) activities.

C. Value Added by ADB

18. The project will finance critical sewer networks and WWTPs that will complement the existing non-sewered systems in the project cities. Sewerage and non-sewered systems will be integrated under a citywide inclusive sanitation principle. ADB's support is a catalyst for the

²¹ The design and monitoring framework is in Appendix 1.

²² One in Mataram (8,000 m³/day), two in Pontianak (12,000 m³/day each), and one in Semarang (25,000 m³/day).

²³ The central government has a budget allocation for septic tank construction or upgrades called sanitation special allocation fund (dana alokasi khusus), which will be transferred to the city governments.

²⁴ By extending the O&M contracts for WWTPs (e.g., 5 years or more, where possible) and establishing fecal sludge collection and transport contracts.

²⁵ A local government-owned company managing water supply services. At least 51% of the shares are owned by the local governments and the rest can be owned by the private sector.

²⁶ Local governments' technical working unit.

expansion of resilient, inclusive, and sustainable sanitation services in other cities. In the project cities, ADB's knowledge and experience will help create climate- and financially resilient operators to ensure the long-term sustainability of sanitation services. Climate risk and vulnerability assessments were carried out for each city, and recommendations on how to increase their climate resilience have informed the project design and scope. This can provide a model for other projects in Indonesia.

D. Summary Cost Estimates and Financing Plan

19. The project is estimated to cost ¥66,387.41 million (Table 1). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).²⁷ The major expenditure items are civil works and equipment for the sanitation treatment and management systems, and consulting services.

Table 1: Summary Cost Estimates

Item	Amount ^a (¥ million)	Amount (\$ million)
A. Base Cost^b		
1. Output 1: Sanitation services improved, expanded, and made climate resilient	54,679.47	370.76
2. Output 2: Regulatory environment strengthened	1,061.86	7.20
3. Output 3: Institutional effectiveness improved	530.93	3.60
Subtotal (A)	56,272.26	381.56
B. Contingencies^c	8,149.78	55.26
C. Financial Charges During Implementation^d	1,965.38	13.33
Total (A+B+C)	66,387.41	450.15

Note: Numbers may not sum precisely because of rounding.

^a Excludes exempted taxes and duties of ¥5,910.61 million (\$40.08 million) and other in-kind contributions as the government follows the cash basis of accounting.

^b In-mid 2023 prices as of 14 September 2023.

^c Includes physical and price contingencies and a provision for exchange rate fluctuation.

^d Includes interest, commitment, and other charges on all financing sources.

Source: Asian Development Bank estimates.

20. The government has requested a regular loan of ¥61,882.61 million (\$419.60 million equivalent) from ADB's ordinary capital resources to help finance the project.²⁸ The loan will have an 18-year term, including a grace period of 7.5 years; an interest rate determined in accordance with ADB's Flexible Loan Product; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan agreement. Based on the straight-line method, the average maturity is 13 years, and there is no maturity premium payable to ADB.

21. The summary financing plan is in Table 2. ADB will finance the expenditure on works and goods—e.g., construction of WWTPs with co-treatment of fecal sludge, sewer networks and connections, consulting services, compensation costs,²⁹ training—as well as contingencies.³⁰ The government will contribute ¥4,504.80 million for land acquisition, and for running costs and

²⁷ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

²⁸ ¥147.48 = \$1.00 as of 29 November 2023 (the currency exchange rate being used during the loan negotiation).

²⁹ The city governments have already acquired land through negotiated settlement in most cases, all of which in compliance with ADB's Safeguard Policy Statement (2009). The ADB loan will finance compensation for the economic displacement of affected households that previously cultivated the land and therefore losing income. ADB. 2012.

³⁰ The utilization of contingencies will be prioritized to finance additional number of connections.

financial charges during implementation. The government will also provide in-kind contributions in the form of taxes and duties (through tax exemptions), staff salaries, and office space.

Table 2: Summary Financing Plan

Source	Amount (¥ million)	Amount (\$ million)	Share of Total (%)
Asian Development Bank			
Ordinary capital resources (regular loan)	61,882.61	419.60	93.2
Government of Indonesia	4,504.80	30.55	6.8
Total	66,387.41	450.15	100.0

Source: Asian Development Bank estimates.

22. Climate mitigation is estimated to cost ¥30,016.20 million and climate adaptation is estimated to cost ¥20,466.66 million. ADB will finance 100% of both mitigation and adaptation costs. Details are in the Climate Change Assessment.³¹

E. Implementation Arrangements

23. The DGHS of the MPWH is the executing agency. The implementing agencies for the project are the DGHS' provincial units (Balai Prasarana Permukiman Wilayah). A central project management unit and local project management units in the three cities will coordinate project implementation in cooperation with other city agencies. The implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 27).

Table 3: Implementation Arrangements

Aspects		Arrangements	
Implementation period	29 February 2024–31 December 2029		
Estimated completion date	31 December 2029		
Estimated loan closing date	30 June 2030		
Management			
(i) Steering committee	National Development Planning Agency (BAPPENAS) (chair); MPWH, Ministry of Finance, Ministry of Health, and Ministry of Home Affairs (members)		
(ii) Executing agency	DGHS, MPWH		
(iii) Implementing agencies	Provincial unit of DGHS (Balai PPW) in Central Java Provincial unit of DGHS (Balai PPW) in West Kalimantan Provincial unit of DGHS (Balai PPW) in West Nusa Tenggara		
(iv) Management unit	Two types of management units will be set up: a central project management unit and an LPMU in each of the three cities. The LPMUs will be chaired by Bappeda (regional planning agency) and will establish a coordination committee consisting of representatives of public works, housing, health, education, environment, and other related agencies.		
Procurement	Open competitive bidding (internationally advertised)	9 contracts	¥40,105 million
	Open competitive bidding (nationally advertised)	4 contracts	¥9,922 million
Consulting services	QCBS (90:10) for the recruitment of a national project management consultant and a project implementation support consultant	4 contracts Person-months to be determined when finalizing the draft TOR	¥3,702 million
	CQS for small assignments like a survey or a rapid assessment.	Number of contracts and person-months to be determined during implementation	

³¹ Climate Change Assessment (accessible from the list of linked documents in Appendix 2).

Aspects	Arrangements		
	Individual consultant recruitment through ICS or SSS as needed and justified during implementation		
Retroactive financing and/or advance contracting	Advance contracting will be applied to consulting service packages and a few civil works packages in Pontianak and Semarang. Disbursements for these advance contracting packages will only be made once the project is effective. Retroactive financing is not applicable.		
Disbursement	Disbursement of the loan proceeds will follow ADB's <i>Loan Disbursement Handbook</i> (2022, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, Balai PPW = Balai Prasarana Permukiman Wilayah, BAPPENAS = Badan Perencanaan Pembangunan Nasional, CQS = consultant qualifications selection, DGHS = Directorate General of Human Settlement, ICS = individual consultant selection, LPMU = local project management unit, MPWH = Ministry of Public Works and Housing, QCBS = quality- and cost-based selection, SSS = single-source selection, TOR = terms of reference.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

24. The project will complement existing sanitation facilities in the project cities. This includes the construction of (i) four climate-resilient WWTPs to treat the wastewater for safe discharge into the environment (footnote 22),³² and (ii) about 200 kilometers of climate-resilient sewer networks and connections that will serve 70% of the population in the network coverage area.³³ The basic engineering designs for the WWTPs and the detailed engineering designs for the sewer networks are in place. The city governments signed a memorandum of understanding (MOU) with the DGHS affirming their commitment to finance targeted house connections and to allocate sufficient budget for O&M. To ensure the timely installation of connections, (i) the project will carry out extensive community engagement campaigns throughout project implementation to ensure community buy-in, and (ii) the contractors will execute various sewer network packages in parallel; this includes assigning separate working teams to install the connections in tandem with the installation of the main sewer in the area. Multiple design measures were taken to increase the climate and disaster resilience of the sanitation assets: (i) elevated structures to protect WWTPs against future flood levels, (ii) drainage systems to absorb future stormwater volumes at the WWTP locations, and (iii) a breakwater wall to protect against high tides and flooding.

25. **Capacity to manage services.** PDAMs are the proposed operators in both Semarang and Pontianak, while in Mataram UPTD is the proposed operator.³⁴ The capacity of the operators will be built with robust training under outputs 1 (as part of the WWTP contracts), 2, and 3. In addition, a TA (Water Organization Partnerships for Resilience) will facilitate knowledge sharing by organizing a twinning program with experienced sanitation service implementers and operators such as Indah Water Konsortium Sdn Bhd, Malaysia.³⁵ A TA from the Water Resilience Trust Fund under the Water Financing Partnership Facility will also be sought to help strengthen the

³² The WWTP in Mataram will have aerobic biological process (ABP) and conventional activated sludge (CAS) technology, while in Pontianak and Semarang the WWTPs will have moving bed biofilm reactor (MBBR) technology.

³³ The sewer networks will serve 8 villages in 3 subdistricts in Pontianak; 7 villages in 2 subdistricts in Mataram; and 13 villages in 4 subdistricts in Semarang.

³⁴ Government of Indonesia, BPPSPAM. 2020. *2019 Performance Water Supply Providers*. Jakarta. BPPSPAM assesses all Indonesian PDAMs based on their financial status, quality of service delivery, operational efficiency, and human resources management. Based on this assessment, PDAM Mataram is not financially healthy as the total overall score is below the baseline at 2.8, while both PDAMs in Pontianak and Semarang are deemed healthy—the overall scores are 3.88 for Tirta Khatulistiwa Pontianak and 3.38 for Tirta Moedal Semarang.

³⁵ ADB. 2022. [Technical Assistance Subproject Report for Mainstreaming Water Resilience in Asia and the Pacific Subproject 4: Water Organization Partnerships for Resilience](#). Manila (TA 6994-REG).

cities' information systems and integrate them with the newly built sanitation facilities to act as climate-related early warning systems.

B. Economic Viability and Financial Sustainability

26. Financial and economic analyses were prepared. The rationale for government involvement is sound because the project focuses on the provision of sanitation services, which are not considered profitable by the private sector.³⁶ The assets to be built under the project are estimated to benefit about 2.5 million people beginning in 2029. The net present values and economic internal rates of return (EIRRs) using a 9.0% prescribed test hurdle rate were calculated for each city and for the whole project in line with the applicable ADB guidelines.³⁷ Estimated project benefits are (i) avoided earning loss because of sick days caused by water-borne disease, (ii) avoided medical treatment costs for water-borne disease, and (iii) consumers' willingness to pay for improved sanitation management using the benefit transfer approach. The estimated EIRRs are 9.4% (Mataram), 9.0% (Pontianak), 15.5% (Semarang), and 12.8% (overall project), indicating economic viability. Sensitivity analysis found that the baseline EIRR remained robust against key downside risks. In addition, the project remains viable after testing for scenarios arising from the project's climate financing.³⁸

27. The results of the financial analysis confirm that the projected tariffs are inadequate to cover the O&M costs of the new sewerage systems, leading to a substantial risk to the project's financial viability. The cash flow analysis shows projected annual O&M shortfalls up to 2039 for Mataram and Pontianak, and up to 2031 for Semarang. The three local governments have committed to subsidies to finance the projected O&M shortfalls. To ensure financial sustainability, the project will prepare a road map to full, tariff-based, O&M cost recovery. It will also implement measures such as cross-subsidies, and a unified billing system. This will minimize the financial burden on poor households, including households headed by women.

C. Sustainability

28. The project is aligned with the current RPJMN (2020–2024) and is likely to be aligned with its successor (footnote 3). The project outputs are structured in accordance with the citywide inclusive sanitation principle, for which it will improve and expand both systems (sewered and non-sewered) in parallel not to leave anyone behind, and that the project cities' resilience and public health will be sustained despite climate change and disasters. The MOU signed by local governments and the DGHS confirm that the city governments will allocate sufficient budget to cover the O&M requirements, which may include a combination of tariff, transfer, and tax. The MOU enables the preparation of city regulation as the legal basis for the budget support to the PDAMs. Several cities in Indonesia have successfully used this mechanism.

D. Governance

29. **Financial management.** The pre-mitigated financial management risk of the project is rated *moderate* since the assessment found that (i) the financial management staff of the DGHS requires support because of their workload, (ii) a comprehensive project financial management manual is lacking, and (iii) the implementing agencies have limited experience with ADB projects.

³⁶ Financial Analysis and Economic Analysis (accessible from the list of linked documents in Appendix 2).

³⁷ ADB. 2017. [Guidelines for the Economic Analysis of Projects](#). Manila.

³⁸ ADB. 2015. [Economic Analysis of Climate-Proofing Investment Projects](#). Manila.

To mitigate the risk, it is proposed to (i) engage financial management consultants; (ii) build the capacity of project staff for financial management, disbursement, and accounting; and (iii) prepare a project financial management manual.

30. **Procurement.** The pre-mitigation procurement risk is rated *high*. Strategic procurement planning for the project identified procurement risks and mitigation measures and determined the most appropriate procurement arrangements for the various project elements.³⁹ Procurement will follow the ADB Procurement Policy (2017, as amended from time to time) and the Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The DGHS expressed its commitment to carry out advance procurement for the project, which will start upon completion of the loan negotiation. Under TA for Support to the Preparation of the Citywide Inclusive Sanitation Project (Subproject 9), ADB will help the DGHS in preparing the advance procurement.⁴⁰

31. **Value for money.** Value for money will be delivered by (i) bundling the contracts into 13 civil works packages, taking into account project readiness, market capacity, and potential delays in implementing large contracts; (ii) adopting open competitive bidding with international and national advertising for civil works packages; (iii) applying the design-and-build contract modality to all WWTP packages; and (iv) using e-procurement systems for efficiency.

32. **Private sector participation.** PPP in Indonesia's sanitation landscape is limited to FSM; no PPP involves wastewater management. An ADB study found that private sector participation in wastewater services generally involves a design–build–operate (DBO) model.⁴¹ However, insufficient wastewater tariffs and a low chance of full cost recovery in Indonesia deter private players from getting involved in this segment. In addition, the government has no experience in managing DBO contracts for sanitation projects and deems the risk of applying them too high. Nonetheless, the project will facilitate and strengthen private sector involvement, as represented by the PDAMs, which are considered semi-private entities. The project will also create a PPP environment that is conducive to achieving financial sustainability and will allow the private sector to get involved in the future (footnote 24).

33. **Anticorruption measures.** ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the DGHS. The specific policy requirements and supplementary measures are described in the PAM (footnote 27).

E. Poverty, Social, and Gender

34. **Poverty targeting.** The project is classified as *general intervention* for poverty targeting. It will improve access to sanitation for 2.5 million people across the three cities. Targeted interventions include pro-poor and social inclusion design features to ensure that the poor and vulnerable communities benefit from improved sanitation services.

³⁹ Strategic Procurement Plan (accessible from the list of linked documents in Appendix 2). The procurement strategy was guided by ADB. 2022. *Strategic Procurement Planning: Guidance Note on Procurement*. Manila (July).

⁴⁰ ADB. 2023. [*Technical Assistance Subproject Report for the Republic of Indonesia: Sustainable Infrastructure Assistance Program Phase II, Subproject 9: Support to the Preparation of the Citywide Inclusive Sanitation Project*](#). Manila (TA 10133-INO).

⁴¹ Outline Business Case for Jakarta Sewerage Zone 8 (2018), supported through ADB. 2012. [*Technical Assistance for Supporting Regional Project Development for Association of Southeast Asian Nations Connectivity*](#). Manila (TA 8240-REG).

35. **Gender equality.** Women are underrepresented in WASH operations, and less than 20% of women are employed in water utilities.⁴² Women's participation in consultations on development planning is below 20% in Pontianak and Semarang, and below 21% in Mataram. The project is classified as *effective gender mainstreaming*, and a gender action plan was prepared.⁴³ The project's gender equality features include the formulation of policies regarding poor households and households headed by women, women's participation and employment opportunities, capacity building, and collection of sex-disaggregated data. The project will address the following issues: (i) health risks because of poor sanitation facilities, low awareness among women and men of sanitation and community hygiene practices; and (ii) underrepresentation of women in WASH operations, as well as local governments' lack of understanding of gender and gender mainstreaming. Women will benefit directly from improved sanitation, and better consultation and participation in sanitation planning and management.

F. Safeguards

36. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.⁴⁴

37. **Environment (category B).** The MPWH has overseen the preparation of the required national environmental impact assessments (AMDALs),⁴⁵ and three initial environmental examinations (IEEs), 14 corresponding environmental management plans (EMPs), and two environmental compliance audits for associated sludge cake disposal facilities⁴⁶ in accordance with ADB's Safeguard Policy Statement and with government laws and regulations. These were disclosed on ADB's website. The AMDALs, IEEs, and EMPs were prepared based on feasibility studies and basic engineering designs for the WWTPs, and detailed engineering designs for the sewerage networks. National environmental clearance has already been secured for all subprojects. Community and stakeholder consultations were conducted at all sites while preparing the AMDALs and IEEs, and a grievance redress mechanism was defined for each subproject. Potential risks and impacts identified for each subproject are expected to be short-term, localized, site-specific, and reversible.⁴⁷ Good construction practices as proposed in the AMDALs and EMPs can avoid, minimize, or mitigate to an acceptable level the potential

⁴² PDAM Tirta Khatulistiwa Pontianak: 91.5% men and 8.8% women. PDAM Tirta Moedal Semarang: 83.0% men and 17.0% women (as of December 2021).

⁴³ Gender Action Plan (accessible from the list of linked documents in Appendix 2).

⁴⁴ ADB. 2009. [Safeguard Policy Statement](#). Manila.

⁴⁵ Indonesian Ministry of Environment and Forestry Regulation No 4/2021 lists the businesses and/or activities that require an environmental impact assessment (AMDAL in Indonesia) for category A or B projects; this includes the development of central domestic wastewater treatment installations and supporting facilities that serve more than 50,000 people or have a domestic wastewater treatment capacity of more than 5,000 m³/day.

⁴⁶ Initial Environmental Examination: Mataram; Initial Environmental Examination: Pontianak; and Initial Environmental Examination: Semarang (accessible from the list of linked documents in Appendix 2). Six EMPs (covering 2 WWTPs and 4 sewer line packages) and one environmental compliance audit for the landfill and FSTP for Pontianak; six EMPs (covering 1 WWTP and 5 sewer line packages) for Semarang; and two EMPs (covering 1 WWTP and 1 sewer line package); and one environmental compliance audit for the landfill and FSTP for Mataram have been prepared. As for sludge cake, in Mataram and Pontianak, the treated and dried sludge will be disposed of at the existing landfill and/or can be used for agriculture. Since the operation of the landfill is outside the project scope, an environmental compliance audit was prepared for landfills. For Semarang, the sludge will be stored on-site (up to 2 years) until the new regional landfill is built and/or can be used for agriculture. The option for anaerobic digestion to produce biogas was initially considered in Pontianak, but the limited space available and the proximity to residential areas prohibited its implementation.

⁴⁷ Potential temporary environmental impacts include closure of roads, disrupted access to properties and local businesses, increase in dust concentration and noise levels, sediment runoff, solid waste generation and disposal, and occupational and community health and safety. Longer-term impacts associated with WWTP and FSTP operation and sludge cake disposal sites include odor and pollution risks.

environmental risks and impacts. The EMPs will be included in the bidding documents, and the contractors will prepare site-specific EMPs, and site-specific health and safety management plans that will need to be approved by the provincial implementing agencies, with the support of the project implementation support consultant before civil works can commence.

38. **Involuntary resettlement (category B).** Two resettlement plans for Pontianak and Semarang, and one due diligence report for Mataram were prepared in accordance with ADB's Safeguard Policy Statement and government laws and regulations.⁴⁸ These were disclosed on ADB's website. Meaningful consultations were conducted, and a grievance redress mechanism was defined for each subproject. The project will acquire land (residential and government-owned) causing permanent physical and economic displacement of 19 households (71 affected people). Of these, 15 households were found to be severely affected—3 need to relocate from their primary residence, and 12 will lose access to more than 10% of their productive land. Twelve households are considered vulnerable. All land was acquired via negotiated settlement at a cost appraised by independent valuation based on market rates, in line with ADB's Safeguard Policy Statement. Affected households will be compensated through a combination of replacement housing, cash, and allowances to mitigate the losses and ensure the restoration of livelihoods. The documentation will be updated, approved by the government, and cleared by ADB, and included in the bidding documents. All compensation and allowances must be fully paid prior to the contract award. The project may utilize loan proceeds for compensation in the event of a gap in the amount of the compensation by the time of the contract award. Appropriate construction techniques will minimize disturbances, and contractors will be responsible for repairing any damage during construction. No permanent impact is anticipated to arise from construction. Temporary impacts will be assessed thoroughly, and significant impacts that cause loss of income may be compensated through the loan proceeds.

39. **Indigenous peoples (category C).** Due diligence indicated that the project will not directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples, nor does it impact any territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as an ancestral domain or asset.

G. Summary of Risk Assessment and Risk Management Plan

40. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.⁴⁹

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigation Measures
Low willingness of the community to be connected to the system and slow increase in the number of connections financed by the city budget	DGHS and implementing agencies, supported by the national project management consultant and project implementation support consultant, as well as the city governments, will conduct public campaigns and community consultations to reach targeted beneficiaries. Extensive community outreach programs, social mobilization support, and household connections are included in the project. Connections for 70% of the population in the sewer network coverage area will be financed by the project. Local governments and implementing agencies have agreed to ensure annual budgets and incentive mechanisms to encourage additional connections. MOUs were signed between DGHS and city governments, affirming city governments' commitment to the project, including sufficient annual city budget for the expansion of connections. DGHS will closely monitor the realization of city

⁴⁸ Due Diligence Report: Mataram; Resettlement Plan: Pontianak; and Resettlement Plan: Semarang (accessible from the list of linked documents in Appendix 2).

⁴⁹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Risks	Mitigation Measures
	governments' commitment under the MOUs. The contingency budget of the loan will be prioritized to be utilized for the construction of additional connections.
Inadequate number of financial management staff with full understanding of, or experience in, ADB requirements and procedures ^a	The executing agency will provide sufficient financial management resources for the project and ensure that the implementing agencies are staffed adequately as soon as the loan is signed. Training and capacity-building activities, including training on ADB's financial management and disbursement policies and procedures, are to be delivered to staff involved in project implementation as soon as the loan becomes effective, and regularly throughout implementation. Consultants will be recruited to support project financial management in both the CPMU and the three implementing agencies, ensuring proper project-related budgeting, implementation, monitoring, and reporting. At least four financial management consultants are needed to support the CPMU and the implementing agencies.
Insufficient revenue from wastewater tariffs creates shortfalls in O&M costs, leading to poor service delivery.	A full O&M cost recovery road map will be prepared to anticipate potential shortages. It will include a combination of tariff, tax, and transfers. DGHS already signed MOUs with each of the local governments to ensure adequate allocation of budget to meet full O&M costs.
Low competition in bidding for sewerage packages	Bids will be invited through widely accessible international and national advertisements

ADB = Asian Development Bank, CPMU = central project management unit, DGHS = Directorate General of Human Settlements, MOU = memorandum of understanding, O&M = operation and maintenance.

^a The CPMU was established in October 2023. The implementing agencies are not fully staffed, which makes it difficult to assess the qualifications and capacity of financial staff during the loan fact finding in July 2023. Implementing agencies' staff also have limited experience in implementing ADB projects.

Source: Asian Development Bank.

IV. ASSURANCES

41. The government and the MPWH have assured ADB that the implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and loan documents. The government and the MPWH have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement.

V. RECOMMENDATION

42. 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 ¥61,882,608,000 to the Republic of Indonesia for the Citywide Inclusive Sanitation Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's Flexible Loan Product; for a term of 18 years, including a grace period of 7.5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Masatsugu Asakawa
President

9 January 2024

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with			
Sanitation facilities improved and made inclusive to support the regional development policy of minimizing national disparities (National Medium-Term Development Plan 2020–2024) ^a			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
Outcome Access to inclusive, climate-resilient, adequate, and safely managed sanitation services in project cities improved	By 2030: a. At least 2.5 million people have access to adequate, safely managed, and resilient sanitation services ^b (2023 baseline: NA) (OP 2.1.4)	a. Project performance monitoring reports (NPMC, quarterly); supporting database from project cities; Asian Development Bank loan mission reports; and project completion report	R: Delay in institutional setup because the proposed operators have limited experience in managing full sanitation facilities, including wastewater systems.
Outputs 1. Sanitation services improved, expanded, and made climate resilient	By 2029: 1a. Four WWTPs with co-treatment of fecal sludge and a combined capacity of about 57,000 cubic meters per day constructed and operational in accordance with applicable national standards and climate resilience criteria ^c (2023 baseline: 0) (OP 1.3.1, OP 3.2.5, OP 3.3.1, OP 4.1.2) 1b. City-level information and disaster management systems strengthened, able to include gender-responsive early warning system, integrated with the newly constructed sanitation facilities ^d (2023 baseline: NA) (OP 4.3.1, OP 3.2.4) 1c. At least 200 kilometers of climate-resilient sewer networks constructed ^e (2023 baseline: 0) (OP 1.3.1, OP 3.2.5) 1d. Road map for upgrades of fecal sludge management systems developed with gender-responsive, ^f climate, and	1a. Project construction records and project performance monitoring reports (NPMC, quarterly) 1b. Project progress reports (NPMC, quarterly) 1c. Project construction records and project performance monitoring reports (NPMC, quarterly) 1d. Project progress reports (NPMC, quarterly)	R: Failure to operate the WWTPs properly during initial years of operation and lack of O&M budget result in poor service delivery.

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
2. Regulatory environment strengthened	<p>disaster resilience measures (2023 baseline: NA) (OP 4.3.1)</p> <p>2a. Sanitation O&M guidelines with consideration of climate resilience and GESI-responsive measures adopted^g (2023 baseline: NA) (OP 2.3.2, OP 3.2.2, OP 4.2.1, OP 4.3.1, OP 6.2.1)</p> <p>2b. Wastewater tariffs and other measures (e.g., transfers or taxes) for 100% O&M cost recovery established for sanitation services in project cities^h (2023 baseline: NA) (OP 4.2.2)</p> <p>2c. Guidelines for integration of sewered and non-sewered systems, including mapping of stakeholders, developedⁱ (2023 baseline: NA) (OP 4.3.1)</p>	<p>2a. Sanitation O&M guidelines (project cities)</p> <p>2b. Draft regulations on tariff setting (PISC, project cities)</p> <p>2c. Guidelines for integration of on-site and off-site systems (project cities)</p>	R: Insufficient revenue from the wastewater tariff results in funding shortfall to cover the O&M costs, leading to poor level of service.
3. Institutional effectiveness improved	<p>3a. Role of utility operators expanded in project cities to include wastewater management (2023 baseline: NA) (OP 4.1.1)</p> <p>3b. At least 50% of participants in sanitation awareness training are women and report increased awareness of safely managed sanitation, hygiene, and health (2023 baseline: NA) (OP 4.3.2)</p> <p>3c. At least 20% of wastewater operator staff who reported to have increased knowledge</p>	<p>3a. Updated mandate of the operators in project cities</p> <p>3b. Water supply, sanitation, and hygiene plans and public relation campaigns (NPMC and PISC, quarterly)</p> <p>3c. Project progress reports, training records, employment records</p>	R: Delay in institutional setup because the proposed operators have limited experience in managing full sanitation facilities, including wastewater systems.

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
	from training delivered by the project are women (2023 baseline: NA) (OP 2.1.1; OP 3.2.2)	(NPMC and PISC, quarterly)	
Key Activities with Milestones <ol style="list-style-type: none"> Sanitation services improved, expanded, and made climate resilient <ol style="list-style-type: none"> Award all contracts for sewer networks and WWTPs by Q1 2025 Construct sewer networks (including the pilot connection) by Q4 2028 Construct WWTPs by Q4 2028 Complete assessment of and recommendation on city-level information system to include climate and disaster management systems by Q4 2027, integrated with new facilities' management system, and implemented by the cities by Q4 2029 Complete assessment of and upgrade recommendations for the improvement of non-sewered sanitation systems by Q4 2026 for implementation by the cities Regulatory environment strengthened <ol style="list-style-type: none"> Prepare sanitation O&M guidelines by Q4 2028 Prepare a draft wastewater tariff by Q4 2028 Prepare guidelines for integration of sewered and non-sewered systems by Q4 2026 Institutional effectiveness improved <ol style="list-style-type: none"> Official assignment of the operators by Q3 2024 Complete public campaign throughout the project implementation period (up to Q4 2029) Provide training to the operators by 2029 <p>Project Management Activities</p> <p>Launch bidding process for project management support consultants by Q1 2024</p> <p>Award contract and mobilize project consultants by Q3 2024</p> <p>Establish project performance management system by Q4 2024</p> <p>Complete safeguards activities and resettlement compensation by Q2 2024</p> <p>Implement safeguards measures and gender action plan and submit semiannual project progress reports, safeguards monitoring reports, and GESI action plan reports throughout project implementation</p> <p>Inputs</p> <p>Asian Development Bank: ¥61,882.61 million (loan)</p> <p>Government of Indonesia: ¥4,504.80 million</p>			

GESI = gender equality and social inclusion, NA = not applicable, NPMC = national project management consultant, OP = operational priority, O&M = operation and maintenance, PISC = project implementation support consultant; Q = quarter, R = risk, WWTP = wastewater treatment plant.

^a Government of Indonesia. 2020. *National Medium-Term Development Plan 2020–2024*. Jakarta.

^b Government of Indonesia. 2020. *National Medium-Term Development Plan 2020–2024*. Jakarta. The Government of Indonesia makes a distinction between “adequate sanitation” (having access to sanitation facilities that meet the health standard, such as a toilet with goose neck pipe and septic tank) and “safely managed sanitation” (safe disposal of excretion on-site, and transport and treatment off-site). Inclusive sanitation means integration of the sewered and non-sewered system. The efforts to make the sanitation facilities climate resilient are part of output 1. The project will enable 90% of the cities' population (households connected to the sewer system and households with existing septic tanks served by desludging operators) to have access to inclusive, climate-resilient, adequate, and safely managed sanitation. The remaining 10% of the population will be covered by the government's programs as part of the government's contribution.

^c The applicable national standards and climate resilience criteria are those set out in section 6 of the bidding document (employer's requirement).

^d Existing disaster-related early warning systems in the cities make use of various hydrometeorological data as input. The project consultants will make recommendations on how to determine and prepare sanitation-related actions in response to early warnings provided by the systems. For example, following an early warning of heavy rainfall and flood risk in a specific area, the operators will desludge the septic tanks in that area to minimize the risk of groundwater

pollution caused by flooding. In addition, the existing early warning system related to health will be integrated into wastewater quality monitoring. The monitoring will provide early warning signs of the presence of disease within a community. Wastewater sampling can help assess the risks of a disease becoming more prevalent and will allow prompt implementation of measures to prevent or control its spread. A gender-responsive early warning system will ensure that different roles and responsibilities of men and women within families and communities are accounted for in ensuring access to disaster warnings. Technical assistance from the Water Resilience Trust Fund under the Water Financing Partnership Facility will be sought to support the implementation of this output indicator.

- ^e Includes connections that can cover 70% of the population in the sewer network's service coverage area.
- ^f The roadmap will include population data disaggregated by sex, age, poverty, and disability to map vulnerability. It will set out effective strategies for fecal management, taking into account the different roles and approaches that men and women have in this regard.
- ^g GESI-responsive measures mean addressing the different situations, roles, needs, and interests of women in the O&M activities, such as institutional awareness and commitment to promoting women's representation in O&M activities, equal opportunities and compensation for women, capacity building to manage gender issues, and implementation and communication strategies to inform women to participate equitably in O&M activities.
- ^h Women and vulnerable households are prioritized to access subsidized monthly wastewater tariff.
- ⁱ Mapping of stakeholders means capturing existing private sector roles and assessing their possible expansion in the sanitation landscape.

Contribution to Strategy 2030 Operational Priorities

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2). In addition to the OP indicators tagged in the design and monitoring framework, this operation will contribute results for OP 2.4.1 Timesaving or gender-responsive infrastructure assets and/or services established or improved (number) OP 4.3.2 Government officials with increased capacity to design, implement, monitor, and evaluate relevant measures (number)

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRLPs/?id=54428-001-3>

1. Loan Agreement
2. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services (Urban Sanitation)
3. Project Administration Manual
4. Financial Analysis
5. Economic Analysis
6. Summary Poverty Reduction and Social Strategy
7. Risk Assessment and Risk Management Plan
8. Contribution to Strategy 2030 Operational Priorities
9. Climate Change Assessment
10. Gender Action Plan
11. Initial Environmental Examination: Mataram City Subproject
12. Initial Environmental Examination: Pontianak City Subproject
13. Initial Environmental Examination: Semarang City Subproject
14. Due Diligence Report: Mataram Subproject
15. Resettlement Plan: Pontianak Subproject
16. Resettlement Plan: Semarang Subproject

Supplementary Documents

17. Consultation and Participation Plan
18. Climate Risk Assessment: Mataram City
19. Climate Risk Assessment: Pontianak City
20. Climate Risk Assessment: Semarang City
21. Strategic Procurement Plan
22. Financial Management Assessment
23. Detailed Financial Analysis
24. Environmental Management Plan: Mataram Sewer Line
25. Environmental Management Plan: Mataram WWTP
26. Environmental Management Plan: Pontianak CWIS 01 RPH
27. Environmental Management Plan: Pontianak CWIS 02 RPH
28. Environmental Management Plan: Pontianak CWIS 03 Martapura
29. Environmental Management Plan: Pontianak CWIS 04 Martapura
30. Environmental Management Plan: Pontianak CWIS 05 WWTP Nipah Kuning
31. Environmental Management Plan: Pontianak CWIS 06 WWTP Martapura
32. Environmental Management Plan: Semarang CWIS 01 WWTP
33. Environmental Management Plan: Semarang CWIS 02 Trunk Main
34. Environmental Management Plan: Semarang CWIS 03 Sewers
35. Environmental Management Plan: Semarang CWIS 04 Sewers Semarang Tengah and Semarang Selatan
36. Environmental Management Plan: Semarang CWIS 05 Sewers East Semarang
37. Environmental Management Plan: Semarang CWIS 06 Sewers Genuksari
38. Paris Agreement Alignment Assessment for Direct Financing Operations