Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 30-May-2023 | Report No: PIDC36142

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Indonesia	P180270		Indonesia Local Service Delivery Improvement Project (P180270)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EAST ASIA AND PACIFIC	Mar 04, 2024	Jul 10, 2024	Urban, Resilience and Land
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of Indonesia	Ministry of Home Affairs	

Proposed Development Objective(s)

To build financial and institutional capacities for improving solid waste management services in select local governments in Indonesia.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	350.00
Total Financing	350.00
of which IBRD/IDA	350.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	350.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. Indonesia's high economic growth over the past two decades has been accompanied by a high rate of urbanization. Indonesia's GDP in 2021 was US$1.19 trillion, 3.7 percent higher than in the previous year.[1] While the economy slowed down during the COVID-19 pandemic, it rebounded a year later and surpassed the pre-pandemic levels. Indonesia's economic growth has been accompanied by rapid urbanization: 57 percent of the population now lives in urban areas as opposed to 42 percent in 2000, and it is projected that urban expansion will continue. While urbanization has contributed to rapid economic growth, it has also increased the stress on infrastructure and service provision in cities. The lag between economic growth and the availability of infrastructure is illustrated by the fact that while the country's economy grew by an average of 5.8 percent annually between 2000-2010, the infrastructure stock grew by only 3 percent annually.[2]

2. High urbanization, especially in coastal areas, to an increase in climate risks and vulnerabilities. Indonesia is the 16th largest economy in the world, but it is already the 10th largest emitter of greenhouse gases. As per World Bank Group's Country Climate and Development Report on Indonesia, its GHG emissions of 1,495 million metric tons of carbon dioxide equivalent (MtCO2e) annual average in 2018-20[3]. Indonesia's per capita emissions are 0.78 times the G20 average, and total emissions per capita have decreased by 29.7 percent from 2014 to 2019. GOI's Enhanced Nationally Determined Contribution (NDC) 2022 specifies that waste contributes 6.52 percent to Indonesia's GHG emissions, making it the third largest polluter after Land Use Change and Forestry (LUCF) including peat fires and energy.[4] In 2019, methane emissions from Indonesia were 280,950 kt of CO2 equivalent. Indonesia's methane emissions (excluding LULUCF: Land Use, Land Use Change and Forestry) increased by 180 percent between 1990 and 2019 to 232 MtCO2e annually, with a notable increase in the waste sector[5]. Climate change poses a significant threat to Indonesia, particularly to its coastal cities and low-lying areas. Rising sea levels, more frequent and intense storms, and other climate-related events can lead to significant economic and social losses. It is, therefore, essential for the country to take action to reduce its greenhouse gas emissions and adapt to the impacts of climate change.

3. Local governments play an essential role in providing local infrastructure and services, which are critically needed to boost competitiveness and sustainability. In 2000, the Government of Indonesia (GOI) took a significant step by decentralizing authority, political power, and financial resources directly to local governments (LG)[6], making them responsible for delivering key services and basic infrastructure.[7] After the Regional Autonomy Law No. 22/1999 was enacted in 2001, LGs were given the institutional responsibility for solid waste collection, transport, recycling, and

[1] https://data.worldbank.org/country/indonesia?view=chart
[2] https://www.worldbank.org/en/news/feature/2016/06/14/indonesia-urban-story
[3] The World Bank Group, Republic of Indonesia, (2023), Report: Country Climate and Development Report
[4] Republic of Indonesia, (2022), Report: Enhanced Nationally Determined Contribution, (2022) https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022_Enhanced%20NDC%20Indonesia.pdf
[5] Climate Transparency (2022), Indonesia, Report: "Climate Transparency Report: Comparing G20 Climate Action" https://www.climate-transparency.org/wp-content/uploads/2022/10/CT2022-Indonesia-Web.pdf
[6] Local governments (LGs) in this document refers to kotas and kabupatens.
[7] https://www.adb.org/publications/government-decentralization-program-indonesia

disposal. The process is still incomplete, with evident gaps in the capacity of the LGs to deliver quality services and infrastructure.

4. Improving local service delivery capacity, particularly in rapidly growing medium-sized, secondary cities would continue to be a significant step towards the comprehensive development of Indonesia. A mapping of Indonesian cities based on their expected size and GDP growth shows that by 2030, most of the cities will be medium-sized (2-5 million population), with economic growth expected to be above 7 percent per annum.[8] These medium-sized cities are the growth engines of the future and will play a crucial role in driving the country's economic development. However, they will also become centers for growing volumes of waste. Both waste volumes and per capita waste generation are projected to increase over time, driven by urbanization, economic development, and evolving consumption patterns. The trajectory of these cities will have critical implications for Indonesia's future and will require concerted efforts to build their capacities for improving their infrastructure and local service delivery.

Sectoral and Institutional Context

5. The Government of Indonesia (GOI) has set ambitious targets for the solid waste management (SWM) sector to reduce climate change impacts, improve urban environments and ensure public health. It aims to achieve the goal of 30 percent waste reduction and 70 percent waste handling by 2025, and zero waste by 2050 - 2060[9]. These targets are spelled out in the *Jakstranas* (National Solid Waste Management Policy and Strategy, *Kebijakan dan Strategi Nasional*) 2018-2025 issued as Presidential Regulation No. 97/2017. In 2019, they were further examined and adopted through the RPJMN (National Medium-term Development Plan, *Rencana Pembangunan Jangka Menengah Nasional*) 2020-2024, which also aims for urban areas to achieve a 20 percent reduction in waste generation and at least 80 percent collection and management of the remaining waste. GOI's Enhanced NDC targets on SWM 2030 call for intensified efforts to reduce the use of landfilling and achieve zero open burning, which will be a significant step towards sustainable waste management and the reduction of greenhouse gas emissions. In the Enhanced NDC, SWM is considered the third highest contributor (6.52 percent) to the GHG emissions of the country. To achieve these ambitious targets, the GOI is committed to develop a comprehensive strategy that includes, among others, improvement of policy, planning and service delivery as well as institutional capacities at the local level, along with a reduction of waste going to landfills by promoting the "reduce, reuse, recycle" (3R) approach, and waste to energy solutions.

6. In addition, the GOI targets 70 percent marine debris reduction by 2025 and has also launched the National Action Plan on Marine Debris in 2017 via Presidential Regulation No. 83/2018, which calls for efforts to control plastic waste leakage/marine debris and to raise awareness on the issue. Pollution entering marine and coastal systems is significant. It is estimated that between 0.27 to 0.59 million tons of waste enters the oceans every year through river flows[10]. The majority of ocean plastic - approximately 80 percent - originates from mismanaged waste on land.[11]

7. The GOI is cognizant of the importance of establishing robust SWM systems to reduce pollution of land, air and water bodies, and has developed regulatory and legal frameworks, policies, and strategies at the national level for

[8] https://www.asiagreen.com/en/news-insights/indonesia-s-second-tier-cities-on-the-move

[9] SystemIQ, Policy Studies on Waste Management, "Building Robust Governance and Securing Sufficient Funding to Achieve Indonesia's Waste Management Targets"

[10] According to the Indonesian Institute of Sciences (LIPI)

[11] Li, W. C., Tse, H. F., & Fok, L. (2016). Plastic waste in the marine environment: A review of sources, occurrence and effects. Science of the Total Environment, 566, 333-349.
Lebreton, L., Slat, B., Ferrari, F., Sainte-Rose, B., Aitken, J., Marthouse, R., … & Noble, K. (2018). Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic. Scientific Reports, 8(1), 4666.

sustainable waste practices. The most prominent law is the Waste Management Law No. 18/2008, known as the Law on Solid Waste Management, which establishes the foundation for improvements to the country's SWM system and service provision. According to its provisions, all open-dumping sites should have been closed by 2013 and all large cities should be exclusively sending their waste to sanitary disposal facilities. There are also plans to discontinue the issuance of permits for new landfill development in 2030, and achieve a full phase-out of landfills by 2050. The Low Carbon Development Indonesia (LCDI) framework, developed in 2021, promotes the reduction of GHG emissions from the waste sector through strengthened policy framework and standards towards circular economy (such as, end-of-waste criteria, green label products, and waste classification)[12].

8. SWM in Indonesia continues to encounter significant challenges, despite these ambitious targets. Indonesia produces between 30-40 million tons of waste annually, and this number is expected to increase by 45 percent over the next 12 years.[13] The waste generation is regionally lopsided, with 80 percent of the waste generated in Western Region and 19 percent in the Central Region.[14] Of the total waste generated, 60 percent is organic food waste, followed by 14 percent plastic waste, and 9 percent paper waste, while the remainder is comprised of metal, glass rubber, textiles, and others.[15] Waste collection rates are estimated at 70 percent[16] (a higher-end estimate based on an average of 172 of the 514 LGs that report official figures to the National SWM Platform Database, SIPSN). At least half of the generated waste is mismanaged i.e. dumped, buried or burned.[17,18] The rest of the waste is disposed in official disposal sites. While landfills in Indonesia are designed and constructed as sanitary landfills, they are not operated properly and the waste is placed there without compaction, cover and monitoring measures, primarily due to insufficient funding as well as other operational challenges.

9. The GOI has been undertaking ambitious infrastructure programs to address the gap in the SWM sector. Among the many interventions implemented by GOI, one of the recent and largest ones is a $1 billion national program that aims to reform waste management practices for about 70 participating cities, affecting about 50 million people. Implemented through Presidential Regulation No. 35/2018, the program is accelerating the development of waste-to-energy plants/ *Pembangkit Listrik Berbasis Sampah* or *Pembangkit Listrik Tenaga Sampah* (referred to as "PLTSa" projects) in 12 cities/regencies across Indonesia, of which only one which is under construction in Surabaya. The World Bank's "Improvement of Solid Waste Management to Support Regional and Metropolitan Cities Project (ISWMP)" is contributing to this national program, focusing on infrastructure investments for treatment and disposal. As part of their Green Infrastructure Initiative (GII), GIZ/ KfW are supporting the Coordinating Ministry for Maritime Affairs and Investment (CMMAI) in preparing a pipeline of projects with the objective of reducing GHG emissions, mostly through the development of six TPAs (landfills) located mainly in Java and Bali.

10. Current and past efforts in the sector have been focused on improving SWM infrastructure. To date, planning, financing and institutional capacities within the sector have received less attention and dedicated support. LGs are ultimately responsible for local service delivery, including SWM, as stated in the Regional Development Law No. 23/2014. However, the enabling environment for LGs to deliver waste services is significantly constrained. First, the waste

[12] World Bank. 2023. Indonesia Country Climate and Development Report (CCDR). © World Bank, Washington, DC.

[13] SystemIQ, Policy Studies on Waste Management, "Building Robust Governance and Securing Sufficient Funding to Achieve Indonesia's Waste Management Targets"

[14] Ministry of Environment & Forestry, Indonesia, 2021

[15] SystemIQ, Policy Studies on Waste Management, "Building Robust Governance and Securing Sufficient Funding to Achieve Indonesia's Waste Management Targets"

[16] https://sipsn.menlhk.go.id/sipsn/

[17] National Plastic Action Partnership (NPAP) report entitled "Radically reducing plastic pollution in Indonesia: A Multistakeholder Action Plan".

[18] KLHK data https://sipsn.menlhk.go.id/sipsn/, accessed on 7 June and 12 July 2021.

infrastructure and facilities are provided to LGs by the Ministry of Public Works and Housing (MPWH). This leads to a situation where LGs are "handed over" SWM assets without provisions regarding operations and maintenance, budgets and ability to finance operating costs, and institutional capacity to deliver the service. Over the years MPWH has invested in waste TPSTs (Integrated Waste Disposal Sites), TPS-3Rs (Reduce, Reuse, Recycle Waste Management Sites), and TPS (Waste Temporary Shelter Sites), but only 59 percent of the TPSTs and 55 percent of the TPS-3Rs built are reported to be operational.[19] Second, operational costs are high and there is a financing gap estimated at US$ 490-826 million (IDR 7-12 trillion) annually between 2017- 2025[20]. Without sufficient financing, assets remain idle and/or deteriorate quickly. Third, institutional capacity within LGs to plan, deliver services, and monitor performance of RWs and other operators remain weak. National government investments without local ownership, financing and proper operations and maintenance undermine the waste management system and ultimately lack sustainability. While the numerous national initiatives signal high commitment from GOI towards SWM and reducing pollution and climate impacts, the sector faces challenges due to weak enabling environment mainly related to SWM planning, financing, and institutions at the local levels.

11. Multiple SWM plans co-exist at the local level that are disconnected and do not add up to internally consistent planning tool to guide LGs. *Jakstrada* (Local Government Policy and Strategy, *Kebijakan dan Strategi Daerah*) is a policy document with a validity period of five years, outlining LG targets for reducing and handling household waste that cascades from the national-level *Jakstranas* (see para 5) issued by MOEF. The other is known as RIPS (SWM Master Plans, *Rencana Induk Pengelolaan Sampah*) is a detailed local level waste masterplan with a validity period of 10 or 20 years, covering governance, policy, finance, and most prominently SWM infrastructure, governed by MPWH. While Jakstradas are issued by all LGs in Indonesia, RIPS is only mandated in metropolitan and large cities due to the large budget and high level of technical expertise required at the local level to produce a RIPS. Other related plans such as the Local Sanitation Strategy (SSK, *Strategi Sanitasi Kota/Kabupaten*) are also in place. None of the mentioned plans (Jakstrada, RIPS, SSK) serve as a practical and achievable instrument with financing provisions and institutional mechanisms to support their implementation to meet local objectives and the national-level SWM service delivery targets. The plans face institutional fragmentation at the local level, as the Jakstrada is under the responsibility of the local Environment Agency (DLH) reporting to MOEF while RIPS falls under the responsibility of DLH or the local Public Works Agency (DPU) reporting to MPWH. The local budget allocation for all sectors, including SWM, is through a fourth planning document that has the highest statutory status, i.e., the RPJMD (Local Medium-term Development Plan, *Rencana Pembangunan Jangka Menengah Daerah*). RPJMDs fall under the responsibility of the Bappeda (Local Planning Agency) and cascade from national-level RPJMN (see para 5) governed by the Ministry of National Development Planning (Bappenas).

12. Operational financing is low and insufficient to cover recurrent costs. Typically, operating costs are financed mainly through a combination of fees and general municipal revenue. In Indonesia, both sources of financing are very low and insufficient. Some of the underlying factors include: (i) low sector priority for SWM in the local budgeting process (with an average of less than one percent of local budgets versus an average for low-middle income countries (LMICs) of 10 percent or more[21]); (ii) fragmentation of SWM institutional responsibilities across primary and secondary collection hindering the establishment of a single waste tariff to contribute to cost recovery (primary and secondary collection service is not integrated in terms of financing; there is an average household monthly tariff of US$1-2 to cover primary waste collection only); (iii) lack of waste fee being charged and collected by LGs (despite a national level regulation on waste tariff, fees are not charged by LGs due to the lack of technical capacity to determine and levy the charge). According to MOHA, most LGs have issued the Local Regulation (*Perda)* for waste tariffs. However, none of those LGs managed to

[19] SystemIQ, Policy Studies on Waste Management, "Building Robust Governance and Securing Sufficient Funding to Achieve Indonesia's Waste Management Targets"
[20] Ibid
[21] World Bank. 2021. Bridging the Gap in Solid Waste Management: Governance Requirements for Results. © World Bank, Washington, DC.

benefit from the Perda because of the extremely low tariff rates of less than US$1 per month per household and weak enforcement. Taken collectively, these factors lead to a significant financing gap for operational expenditure (OPEX) and similarly for financing of investments or re-investments. There is a need to improve the financial sustainability of the sector by both increasing local budget allocations assigned to the sector, and through a gradual introduction of an integrated SWM tariff that would become a meaningful financial source for service delivery. The ongoing overhaul of Perda on local taxes and tariffs provides rare opportunities for setting a reasonable tariff for waste management as guided by the MoHA regulation No 7/ 2021. The tariff setting may also consider the monthly expenditure of poor households, of which the national average in 2022 was about US$130.

13. Currently SWM is not a "mandatory basic service" in Indonesia, which affects the priority of the sector both in terms of local incentives to deliver on targets, and the allocation of local budgets (APBD) for SWM. Since it is not classified as a "mandatory basic service", the SWM sector has lower priority in local budgeting processes compared to other designated mandatory basic services which must fulfil a minimum service standard (SPM) of budgetary allocation (such as health, education, and public works).[22] As a result, LGs allocate an average of less than one percent of their local budgets to SWM which is very low by international practice. Local studies in Indonesia recommend a minimum three percent of APBD for SWM[23]. The absence of sector designation as a "mandatory basic service" also weakens the local enforcement of SWM related laws, such as on dumping/burning waste.

14. SWM responsibilities are the responsibility of LGs. Primary collection is handled by community organizations under the auspices of LGs (known as RT/RW, *Rukun Warga/ Rukun Tetangga*). The DLH (Local environmental agency within the LG) is responsible for the transportation of waste from the TPS (temporary storage sites) to the treatment center (TPST) and/or landfill (TPA) and the management of the TPST/landfill itself. The primary collections of mixed waste at the household level and transfer to TPS stations are operated quasi-independently by the RT/RW. These RT/RW charge waste tariffs to households, however these tariffs are retained by the RWs and fund primary collection. There is no local level tariff in place to finance the cost of the rest of the waste chain up to disposal. Nearly all of Indonesia's waste tariff payments to RWs are manual cash-based payments collected door-to-door by the RT/RW, leading to payment volatility, lower tariff collection levels, and lack of financial transparency.

15. Institutional capacity to deliver SWM services is low; and there is low accountability. Most LGs in Indonesia deliver the SWM services directly through their DLH units. The majority of LGs do not separate the role of a waste operator with that of waste monitoring/regulator and hence, typically, the DLH both delivers the service and 'monitors itself'. In the case of RWs performing primary collection, LGs do not exercise oversight. Second, since there is no budget line designation (i.e., the SWM budget is lumped with the general local budget account), costs are not transparent and accountability remains low. International practices points to improved accountability when the operator/regulator functions are separated and where cost designation is made to distinguish between SWM and other expenditure items. In the case of RWs providing primary collection, the international experience points at better outcomes when there are contractual obligations with clearly assigned performance indicators. Capacity enhancement for LGs will be needed towards service delivery (technical and operational function), monitoring (regulatory function), oversight of RWs (contract management-like function), financial planning and cost execution. There are currently 10 existing SWM governance structures in Indonesia that can corporatize/professionalize SWM institutions (i.e., *KSM*, *BUMDes*, *BUMDes Bersama*, *Desa Adat*, *DLH/UPTD*, *BLUD*, *Koperasi*, *Yayasan*, *BUMD*, *private PT/CV*). Broadly these structures range from off-budget incorporated municipality-owned entities to on-budget municipal departments with some degree of independence. A small number of LGs in Indonesia that have succeeded in establishing corporatized/ professionalized

[22] Ibid

[23] SystemIQ, Policy Studies on Waste Management, "Building Robust Governance and Securing Sufficient Funding to Achieve Indonesia's Waste Management Targets"

SWM institutions have benefitted from financial autonomy for SWM, allowing the waste management budget to be independent from the local general account (APBD) revenue, detaching sector performance from political changes and decreasing dependency on individual leaders[24]. The approach offers the possibility to have performance/ service agreements between e.g. BLUDs and LGs with clear metrics linked to financing.

16. Waste segregation at source is a national aspiration, but implementation lags due to lack of incentives for behavioral change by both waste generators and waste collectors (RWs) as well as lack of sanctions/penalties for non-compliance. Government Regulation No. 81/2012 on Household Waste Management stipulates that waste produced at source needs to be segregated into a minimum of five categories: (i) dangerous and toxic waste; (ii) organic waste; (iii) reusables; (iv) recyclables; and (v) other categories. In practice, in most LGs, waste generated at source is not segregated and is collected as mixed waste. Currently, there is little incentive for households to segregate their waste, and sanctions are almost non-existent. *Ad hoc* and small-scale community communication campaigns exist on waste segregation, but they are limited in scale and their effectiveness is questionable. Often, even if the waste is segregated at source, it is mixed during collection and must be separated manually, if ever, at the processing facility. SWM infrastructure/ facilities in most LGs are currently not able to receive and make better use of pre-sorted waste. Segregating the waste at source into at least two streams – wet and dry – offers significant downstream opportunities for improved waste treatment and is a precondition towards moving up the "Waste Hierarchy" and towards circular economy.

Relationship to CPF

17. The project is in line with the World Bank Group's Country Partnership Framework FY2021-2025 (CPF) for Indonesia, particularly with the first and second engagement areas. *Engagement Area I. Strengthen Economic Competitiveness and Resilience.* The project directly contributes to Objective 1.2 (Increase efficiency, equity and effectiveness of public spending) through improving revenue streams for SWM service delivery, both for public spending CAPEX and OPEX. *Engagement Area II. Improve Infrastructure.* The project also directly contributes to Objective 2.1 (Improve infrastructure provision and quality of service) through SWM infrastructure provision and enhancement of the quality of SWM service delivery, resulting in the contribution towards achieving CPF results indicator #11, People benefiting from new or improved access to urban and rural infrastructure services.

18. The project is consistent with the country's Enhanced Nationally Determined Contribution (NDC). In the latest NDC submitted to the United Nations Framework Convention on Climate Change (UNFCCC), the GoI is committed to reduce emissions by 31.9 per cent without conditions, and by 43.2 per cent with international assistance, against the business-as-usual scenario by 2030. GOI's NDC target to reduce the use of landfilling and become zero open burning by 2030 is a crucial step towards reducing greenhouse gas emissions. The targets of zero waste and zero mission by 2040-2050 are ambitious, but they reflect a commitment to circular economy principles and sustainable SWM practices. The project directly contributes to the NDC by supporting the policy reform in the SWM sector, focusing on improving LGs' capacity to provide quality SWM service delivery, which will eventually reduce waste generation and dumping waste into the landfill, reducing GHG emissions. The project is consistent with the Long-Term Strategy by supporting the implementation of strategy and financing of suitable SWM technologies, such as aerobic treatment for organic waste, 3R facilities, waste banks, Intermediate Treatment Facilities (ITF), composting, and waste-to-energy (W2E) facility.

[24] Ibid

C. Proposed Development Objective(s)

To build financial and institutional capacities for improving solid waste management services in select local governments in Indonesia.

Key Results (From PCN)

19. Achievement of the PDO will be measured by:

a. SWM categorized as a mandatory basic service by the end of the project
b. Number of participating LGs with increased financing for SWM
c. Number of participating LGs that have established an independent operator for SWM service delivery by the end of the project

20. Potential intermediate results indicators are:

Policy development support for national government

a. Amendment of MOHA regulation to add minimum service requirements (SPM) for SWM
b. Issuance of technical guidelines for Waste Tariff implementation
c. National guidelines for local SWM Plans (Jakstradas/ RIPS) updated
d. National SWM Platform Database (SIPSN) operational by end of project

Performance-based grants to LG for SWM service delivery

a. Number of participating LGs that accessed basic grants for improving SWM services
b. Number of participating LGs that accessed incentive grants for improving SWM services
c. Number of participating LGs that have issued Perdas (local regulations) for waste tariffs
d. Number of participating LGs with roadmaps developed for establishing an independent operator for SWM service delivery
e. Number of participating LGs that have updated their Jakstrada and RIPS
f. Number of participating LGs that establish performance-based contracts with community organizations for SWM primary collection services (to gradually phase and transition from single to double stream waste collection)
g. Number of participating LGs that establish regulations for source segregation
e. Number of participating LGs that issue an IEC program to improve SWM behavior
f. Proportion of waste diverted/minimized from landfilling in participating LGs

Project management

a. Grievances responded to and/ or resolved within the stipulated service standards for response times

D. Concept Description

21. **The objective of this project is to support LGs in Indonesia to improve the delivery of SWM services** through a two-pronged approach of **national level reforms and capacity building performance-based grants for LGs**. The focus will be on upstream activities of SWM that include waste generation, transport, transfer, recycling and intermediate treatment.

22. At the national level the project will support changes to the SWM policy framework for enabling service delivery improvements at the local level. As the nature of these interventions will be reform oriented, it is proposed to implement the national level activities through Performance-Based Conditions (PBCs). This approach would provide incentives for the national-level agencies to pursue key but challenging reforms. Due attention has been paid to be selective on reform areas where MOHA as the Executing Agency, and a champion for this project, has direct leverage towards its achievement. These reforms intend to provide enabling conditions for SWM improvements. However, since SWM is a fully devolved sector in Indonesia, most project activities will be targeted at the LG level. The project will do so by incentivizing LGs through performance-based grants (PBGs), where fiscal transfers will be conditional on LGs undertaking policy changes and reaching specific targets. The grants will be used by the LGs for implementing their Jakstrada/ RIPS. All program activities will be supported by technical assistance and capacity building at the national and LG levels.

23. Currently most of the waste in Indonesia comes as single stream (mixed). Project activities will therefore focus initially on **waste minimization in a single stream**, diverting and minimizing waste from landfills. The project will provide support to LGs for the safe disposal for mixed waste, such as through Refuse Derived Fuel (RDF) facilities, which is also a high GOI priority. This will be a transitional solution, while systems for **waste segregation in dual streams** are established by the end of the project, which is expected to take some time to mature both in terms of behavior change aspects affecting the quality of waste streams and operational performance. The dual stream collection (wet and dry) is a basic yet important step for better waste management and widens options for various conversion technologies to treat waste safely and efficiently.

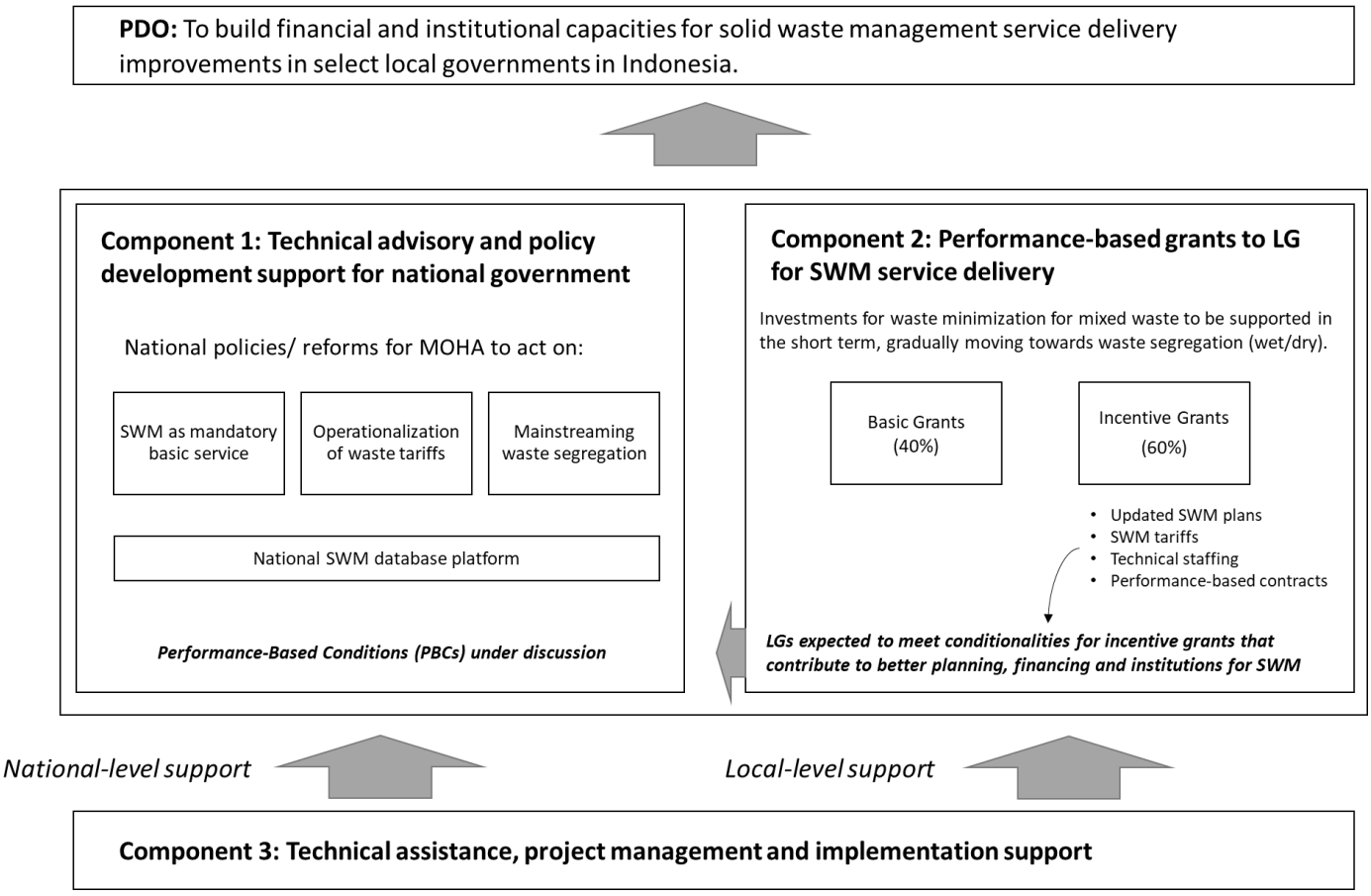

Figure 1. Project's Conceptual Framework

24. The proposed project is complementary to the ongoing Bank ISWMP that is being implemented by the MPWH. Due to the operational mandates of MPWH as its executing agency, ISWMP invests more in the downstream cycle of the SWM system chain and finances large-scale waste infrastructure investment, including TPSTs. The proposed project will complement the need for LG-based interventions through enabling national level reforms to raise the profile of SWM and by providing technical assistance and capacity building support at the local level to improve the planning and financing capacities of cities towards SWM provision. In terms of investments, the LG grants will focus primarily on upstream activities aimed at waste minimization and diversion, such as source segregation, collection, sorting, composting and community-based public education on behavior change. ISWMP operates in 15 of the 514 LGs in Indonesia and the proposed project is not expected to have geographic overlap with it.

25. A detailed list of eligible investments will be developed during project preparation. Preliminary discussions with MOHA indicate that the project may finance investments all the way until small-scale TPSTs that do not require full-scale Environmental Impact Assessments (EIAs, referred to as AMDALs in Indonesia). (The focus of ISWMP is on large-scale TPSTs onwards up to disposal stage.) This threshold on the size of the TPSTs is aligned with GOI standards: the larger scale facilities are procured by the MPWH (which is the Executing Agency for ISWMP) whereas the smaller scale facilities can be procured by LGs (see Component 2 below for eligible investments), governed by the MOHA (which is the proposed EA for this project). The project will strengthen the role of LGs in the provision of SWM services in at least two ways: (i) by direct procurement of small-scale infrastructure by LGs, which is an important step in moving away from the traditional

model of MPWH procuring infrastructure and providing it to LGs in the form of asset transfer; and (ii) demand-based LG participation, explained below.

26. Assessment and management of mitigation and adaptation risks. The eligible SWM infrastructure investments that will be developed under the project are part of an integrated SWM system and considered universally aligned. In general, the investments will be focused on upstream SWM service delivery, which will boost waste segregation, composting, and material recovery, reducing waste going to landfill, which is one of the major GHG emission source in the SWM sector. For some LG, the project may finance collection and transport of mixed waste as part of an integrated SWM system. These activities will be considered moderate risk but will still lead to lower GHG emissions by ensuring collection of mixed waste that will be further processed through the MRF or RDF facilities, among others. To reduce the risks, the project investments will be anchored to SWM plans that will become the prerequisite to the grants. Without acceptable SWM plans, LGs will not receive the funding for the investments. Climate hazards are unlikely to have a material impact on the operation, considering that the infrastructure investments are focused on the upstream section of the value chain, a robust climate risk screening for all municipal solid waste management activities being financed through the operation to assess their vulnerability to risks from climate hazards. The SWM plans will also be strengthened with climate risk considerations to ensure the resiliency of the built infrastructures. Project activities meet the adaptation, mitigation, and resilience goals, and are thereby considered "low-risk". The proposed project is expected to be aligned with the objectives of the Paris Agreement on both mitigation and adaptation. The proposed project activities have been assessed on their consistency with the objectives of the Paris Agreement and the specific country pathway toward low greenhouse gas (GHG) emissions and climate resilient development are aligned.

27. Demand-driven LG participation. A demand-driven LG selection process is being put in place and will be based on a performance-based structure to ensure ownership of the participating LGs. Approximately 25-45 LGs will be part of the project, including both cities and regencies. As a first step, MOHA has conducted a screening based on a suite of criteria (population size, waste generation volume, overlap with similar programs, Mayor/ Regent commitment, fiscal capacity of LGs, etc.) Following this, a process of shortlisting will take place, which is designed to minimize implementation risk and to ensure the achievement of the project objectives. This includes: (i) Signing an Expression of Interest (EOI) by the Mayor/Regent to join the project, committing to undertake a package of reforms and comply with several results as a condition to access the grants; (ii) proven commitment for SWM sector (e.g., Adipura[25] awards, APBD budget allocation for SWM beyond national average, etc.); and (iii) proven fiscal capacity to prefinance grants (Hibah). Once the project has been approved and the list of participating LGs finalized, the participating LGs will need to sign a Memorandum of Understanding (MoU) that will stipulate the rights, responsibilities, and required compliance with World Bank fiduciary and safeguards requirements, to be fulfilled by the participating LGs for accessing the grants (see Component 2 below).

Component 1: Technical advisory and policy development support for national government (US$50 million)

28. This component will provide technical support for national-level policies, regulations, and data platform needed as the basis for improved SWM service delivery at the local level and better monitoring at the national level. MOHA as the Executing Agency deemed as the "parent" of all LGs in Indonesia has direct influence over LG service delivery performance and budget allocation, and can impose standards, sanctions, obligations towards its Mayors (for *kota*/cities) and Regents (for *kabupaten*/regencies), backed also by its ability to approve/provide guidance towards LG sector priorities, budget plan and spending. MOHA is also the only line Ministry that have a direct access to all 514 LGs in

[25] Awards issued by MOEF dedicated to a cities that shows good performance of sustainable environmental management. Three levels exist: Adipura Gold, Adipura, and Adipura Certificate, in order of excellency.

Indonesia. To ensure effective implementation of this component, due attention has been paid to be selective on reform areas where MOHA as the Executing Agency, and a champion for this project, has direct leverage towards its achievement, and is squarely aligned with the MOHA institutional mandate. Since the focus of this component is to undertake national-level policy reforms to enable SWM service delivery improvements at the local level, it is proposed to finance this component (or parts of it) through PBCs to provide strong incentives for reform.

29. ***Sub-component 1.1: Technical support for national level policies.*** This activity will finance technical assistance to update or develop national policies and regulations that are necessary for the improvement of SWM service delivery at the local level. A detailed description of activities under this sub-component is provided in Annex 1. This sub-component will support: 1) revision of the Local Government Law No. 23/2014 to categorize SWM as a mandatory basic service (which include key steps such as the development of the formal *nasakha akademik* (academic paper) to substantiate the need for change, stipulation of minimum service requirements: SPM, etc.); 2) development of technical guidelines under the MOHA ministerial regulation to provide sufficient guidance to LGs to stipulate the adequate level of tariffs and an efficient collection mechanism to operationalize the MOHA Ministerial Regulation No. 7/2021 on Waste Tariff Calculation Guideline); and 3) development of a national implementation regulation to strengthen the enforcement of waste segregation at the local level, combined with national-level community campaigns that provides a framework for local-level campaigns. (see Annex 1)

30. ***Sub-component 1.2: Investment on national SWM database platform.*** This activity will support the improvement of the national SWM database platform, the SIPSN[26] initiated by MOEF, to support a simpler methodology for data collection and data entry for lower capacity LGs coupled with the development of associated guidelines. This will help ensure SIPSN to serve as a more comprehensive database and will allow the project to use the SIPSN as an M&E system to measure various LG-level progress on SWM.

Component 2: Performance-based grants to LG for SWM service delivery (US$250 million)

31. Component 2 will finance support to improve coverage and quality of SWM local services, particularly upstream activities for waste minimization and waste segregation, through PBGs that will incentivize institutional reforms through financial allocations that LGs will get over and beyond their current budgetary allocation for the sector. The eligible menu of potential investments must be aligned with the LGs Jakstrada and RIPS (SWM plans). The PBGs can finance both capital and operational expenses linked to the SWM plans of LGs and subject to a list of positive/negative investments to be worked out during project preparation. A preliminary list of eligible activities has been identified, along with exclusion criteria and a long list of eligible investments. These will be discussed and refined during project preparation. (see Annex 2)

32. **Criteria for PBGs**. The PBG system will consist of two tiers, as shown in the table below, along with the preliminary eligibility criteria. These would be refined during project preparation. The project will fund an estimated 25-45 participating LGs. Under the current loan size, the average grant to each participating LG (both basic and incentive) will approximately be US$1-2 million per year depending on the needs, size, and achievement of each LG.

Grant allocation	Eligibility criteria
1. Basic Grants (40%)	Upon signature of MoU

[26] As of 2022, only 172 out of 514 LGs have entered data. Accessible via: https://sipsn.menlhk.go.id/

2. Incentive Grants (60%)	15% grants on fulfilling each of the following conditions: - LG approves an updated Jakstrada and RIPS linked to RPJMD - LG establishes a SWM tariff - Hired two technical staff for SWM - LG signed performance-based contracts for SWM service

Table 1. Performance-Based Grants Distribution

33. Grant cycle. Details on the grant allocation process will be outlined in a PBG manual that will form part of the Project Implementation Manual (PIM). Grant proposals will be reviewed and approved by, among others, MPWH and MOHA. Eligibility criteria will be verified by an independent verification agency. Activities to be financed by the grants will be identified in the LGs' SWM plans at the beginning of the project and validated on an annual basis. Annual verification will also be undertaken to ensure compliance with technical, fiduciary and safeguards aspects.

34. On-granting mechanism. The PBGs are likely to be channeled to the participating LGs through an on-granting through the DAK Hibah mechanism, which has been utilized in numerous projects (including the World Bank's Water Resources and Irrigation Sector Management Program, WISMP). This on-granting mechanism is still evolving in line with the new regulations from the 2022 fiscal decentralization law. Based on recommendations from the MOHA-led grant verification team, the Ministry of Finance (MOF) will disburse funds to LG treasuries.

Component 3: Technical assistance, project management and implementation support (US$ 50 million)

35. Component 3 will provide technical assistance, project management and implementation support to all project activities at both national and local levels. At the national level it will provide support to the central ministries in charge of passing key level reforms to enable SWM service improvements at the local level. At the local level, it will provide support for policy and institutional reforms as well as technical assistance and capacity building activities to execute all grant-financed activities.

36. ***Sub-component 3.1: National-Level support.*** This sub-component will finance a five-year National Management Consultancy (NMC) support for the national-level PIUs to both support the national level reforms and oversee the implementation of the national program. It will include contract supervision, financial and technical audit, oversight on the inclusion of environmental and social safeguards aspects (including citizen engagement and grievance redress mechanism), and monitoring and evaluation. It will also include training and capacity building activities for national-level authorities involved in the project.

37. ***Sub-component 3.2: LG-Level support.*** This sub-component will finance the costs of Local Management Consultancies (LMCs) for all participating LGs (e.g., grouped by region) to support the implementation of the program at local levels. It will include contract supervision, financial and technical audit, oversight on the inclusion of environmental and social safeguards aspects (including citizen engagement and grievance redress mechanism), monitoring and evaluation etc. The LMCs will also provide technical support for the implementation of the PBG. The LMC would support the SWM sector reform by providing technical assistant for: i) the development of *Jakstrada* and RIPS (SWM Plans); ii) the establishment of institution that separate operator-regulator role for SWM service delivery; iii) the implementation of waste tariff, as well as iv) supporting detailed planning and engineering design of the proposed local investments. The technical support for the development of the SWM plans will be a critical elements for the implementation of the PBGs at the local level since the proposed investments will be tied to the SWM plans.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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