

**PROGRAM INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

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<b>Operation Name</b>	MA-SOLID WASTE SECTOR DPL3
<b>Region</b>	Middle East and North Africa
<b>Country</b>	Kingdom of Morocco
<b>Sector</b>	Urban: solid waste management (100%)
<b>Operation ID</b>	P127955
<b>Lending Instrument</b>	Development Policy Loan
<b>Borrower(s)</b>	Kingdom of Morocco
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**I. Country and Sector Background**

1. With increasing public awareness on quality of life, environmental protection and sustainable development, the municipal solid waste (MSW) agenda has become a national priority in the Kingdom. Since 2008, a 3-phase 15-year National Municipal Solid Waste Program (*Programme National des Déchets Ménagers* or PNDM) is being implemented aiming at supporting municipalities to cope with the requirements of the 2006 Solid Waste Law including the modernization of their MSW systems. The total cost of the PNDM is estimated at MAD 40 billion (comprising 33 percent for investment, 62 percent for operation, and 5 percent for technical assistance).

2. During the last few years, supported by the Bank and other partners, Morocco has made good progress in providing the necessary regulatory framework for establishing the foundations for integrated and affordable municipal solid waste management systems. Tangible results include:

- ✓ With the enactment of its first Solid Waste Law in 2006, Morocco benefits from a firm legislation to address the challenges of the sector through integrated solid waste management.

- ✓ With the establishment of the National Commission of the PNDM (CN-PNDM), there is now a well-ingrained and effective coordination of sector policies and government actions within the 15-year national municipal solid waste program.
- ✓ A result-oriented incentive mechanism is operational allocating national financial resources to support municipalities in establishing modern and integrated systems in line with the objectives of the PNDM. Financial sustainability of the sector requires, however, that improved services remain adequately funded beyond the PNDM time span.
- ✓ Governed by the “*Loi 54.05 sur la gestion déléguée*”, private sector participation (PSP) in the solid waste sector benefits from strong and continuous Government commitment. More than 90 cities have contracted private operators to provide street cleaning and waste collection services which benefit more than 66 percent of the urban population today (compared to 40 percent in 2006). In addition, the operation of all sanitary landfills is contracted to the private sector.
- ✓ An Environmental Impact Assessment (EIA) system consistent with international good practices is now fully operational, at the national and regional levels, and contributes to the mainstreaming of social and environmental dimensions in development activities.
- ✓ Substantial progress has been made towards PNDM objectives in terms of sanitary disposal practices and closing/rehabilitation of open dumpsites. Today more than 30 percent of MSW collected is being disposed of in sanitary landfills compared to less than 5 percent in 2006. And out of 220 open dumpsites, 21 sites are already closed and 64 are being rehabilitated.

3. These are significant results for the first phase of the PNDM (2008-2012), which is overall on track compared to the set targets. The Government acknowledged that continued and steady progress needs to be assured to achieve the objectives set for 2022 with focus on key emerging challenges which have been identified on completion of the first phase, including : a) Demand side of governance remains underdeveloped in the sector; b) Service quality, cost effectiveness and affordability are still suffering from weak managerial and technical capacity at the local level with potential risks on PSP sustainability; c) Medium-term financial sustainability of the MSW service mostly relies on the efficiency of municipal revenue management; d) Despite the improvement in municipal revenues, opportunities exist for optimizing the revenue potential of local taxes in Moroccan cities and diversifying service cost recovery mechanisms; e) There is no systematic monitoring and control of MSW facilities and their compliance with environmental regulations, standards and norms; and f) The PNDM set a 20 percent recycling goal for 2020 but has not been able to achieve concrete results yet, recycling being currently estimated at about 5 percent.

4. The reform of the MSW sector was reconfirmed as a national priority by the new January 2012 Government program. The sector reform is viewed as a core component of Morocco’s national sustainable development agenda and a key driver for improving the urban environment and service delivery. The new Government has also re-confirmed PNDM as the framework for policy coordination and governmental actions to technically and financially support municipalities – entities fully responsible for integrated MSW systems – in modernizing their MSW services.

## **II. Key development issues and rationale for Bank involvement**

5. There is a strong need to capitalize on the progress accomplished during the first phase to increase the impact of reforms and address emerging challenges. With the PNDM entering in its second phase (2013-2017), and a new context for municipal service delivery triggered by higher expectations on

governance and a new regionalization/decentralization agenda, key challenges include ensuring that key players at national, regional and local levels keep improving MSW service delivery while (i) promoting public access to service information in order to enhance social accountability of service providers and municipal administrations; (ii) strengthening the institutional and financial framework to professionalize investment planning, infrastructure development and service management, and sustain private sector participation; (iii) developing environmental control and monitoring to better support the compliance of MSW infrastructure and services with national regulations; and (iv) developing waste recycling activities in a manner that promotes income generation activities and works to include vulnerable groups whose livelihoods depend on waste picking. This requires a comprehensive and coordinated set of policy reforms in several key areas including sector governance, institutional and financial, and environmental and social dimensions.

6. The Government of Morocco acknowledges that the reform of the MSW sector is still young and results achieved during the first phase of the PNDM, in a multi-stakeholder environment, are still fragile. Thus, it requested the continued involvement of the Bank team over the second phase to benefit from the Bank's global knowledge, technical assistance and neutral convening power in a sector where three ministries are to be coordinated. Besides, the new decentralization context offers great opportunities to anchor the medium term sustainability of the MSW sector, impossible to ensure with only one operation.

7. Bank support to the municipal solid waste sector in Morocco is among the core activities of the Bank's Country Partnership Strategy (CPS 2010-13), in support of its second and third pillars "service delivery to citizens" and "sustainable development in a changing climate", while contributing significantly to the CPS cross-cutting "governance" theme.

### **III. Proposed Objective(s)**

8. The objective of this second programmatic series (DPL 3&4) is to support the Government's efforts to improve the economic, environmental and social performance of the municipal solid waste sector.

### **IV. Operation Description**

9. The proposed Third Municipal Solid Waste Sector DPL (DPL3) is the first in a proposed programmatic series of two operations which supports the Government's policy reform in the MSW sector. This series builds on the first programmatic series of two operations delivered respectively in 2009 and 2011 and responds to the 2012 Government's request to help consolidating the achievements of the first phase of their PNDM.

10. Building on the momentum gained under the first phase of the Government reform program, the second phase of the program (the Program) aims at consolidating the achievements and addressing emerging challenges, while taking advantage of the constitutional reform. More specifically, the Program focuses, over the next five years, on four areas of reform:

- a. Strengthening governance of the sector, and particularly **demand-side governance**, by improving accountability of service providers, increasing sector transparency, ensuring open access to information, and providing citizens and civil society with new and effective opportunities for engagement and "voice".

- b. Enhancing **institutional and financial sustainability of the services** through support to LGs in professionalizing their integrated MSW systems, mobilizing their fiscal potential, introducing waste fees (*redevance*) as a complement to the current main funding of MSW services through municipalities' general budget obligations, and consolidating the enabling environment for private sector participation.
- c. Upgrading the country's **environmental monitoring and control system** through the development of the legal, institutional and regulatory frameworks, capacity building within the Environment Department, and inter-agencies coordination which would ensure proper and regular inspection and control of MSW facilities.
- d. **Developing financially viable and socially inclusive recycling value chains** through the introduction of eco-taxes on plastic packaging, establishment of a well governed system to manage eco-tax revenues, development and support to recycling/income generating activities, and social integration of vulnerable groups (specifically waste pickers) in the sector with attention being paid to women.

## V. Financing

11. The proposed operation is a Development Policy Loan (DPL) in an amount of EUR 100 million (equivalent to US\$130 million). The DPL will be disbursed in a single tranche upon effectiveness. The DPL is designed to provide budget support and to sustain the implementation of the reform program in the solid waste sector.

## VI. Institutional and Implementation Arrangements

12. The Ministry of Economy and Finance will be the loan recipient. The same arrangements that have been put in place for the first operation will apply for the proposed operation, including the following implementation and coordination mechanisms:

13. The CN-PNDM will be responsible for the coordination, review, and evaluation of the solid waste sector reform program and the PNDM. The National Commission is led by the Ministry in charge of Environment and includes representatives of the Ministry of Economy and Finance, Ministry of Interior, Ministry of General Affairs and Governance, and Fund for municipal infrastructure (*Fonds d'Équipement Communal* or FEC). The National Commission will, in particular, ensure progress reporting and schedule management, action documentation, inter-ministerial coordination, and proactive corrective action on non-progress actions. The National Commission will also be responsible for communication with the Bank supervision team.

14. The Program Management Unit established within the General Directorate of Local Governments (DGCL) in the Ministry of Interior will be in charge of day-to-day management of the PNDM.

## VII. Benefits and Risks

15. The supported Government's program focus on the following four reform areas: (i) strengthening governance, and particularly demand-side governance, through improved accountability of service providers, transparency, public access to information, and citizen engagement; (ii) improving institutional and financial sustainability of the sector by professionalizing integrated municipal solid waste planning

and service delivery and diversifying municipal sources of revenues; (iii) upgrading the country's environmental monitoring and control system; and (iv) developing financially viable and socially inclusive waste recycling value chains.

16. Some expected benefits and impacts of the proposed programmatic series include:

- Citizens have access to national SW policy information, have much improved access to municipal level MSW projects and performance information, and have new and effective opportunities to provide feedback on service delivery;
- MSW services are financed adequately over the medium term and municipalities are able to plan, develop, and manage MSW infrastructures and services;
- A more conducive enabling environment is in place for sustainable and value-for-money public private partnerships in MSW service delivery;
- MSW facilities do not harm the environment as they are environmentally controlled and inspected regularly according to international good practices;
- Solid stream of revenues is generated, formal jobs and small and medium enterprises created, and less waste disposed in sanitary landfills because of the implementation of an efficient recycling value chain;
- Urban population has access to professionalized integrated MSW services.

17. Overall, the team does not see any major sector related risks given the strong commitment of the new Government to the second phase of the reform. In addition, opportunities are offered under recent constitutional reform, particularly in terms of governance, regionalization, sustainable development, and social inclusion and would contribute to effective implementation of the identified policy measures. However, three types of risks have been identified: (i) Macroeconomic risks; (ii) Limited willingness and capacity of LGs to implement the tools created by supported policy measures; and (iii) Lack of governance and capacity to manage eco-tax revenues efficiently.

## VIII. Poverty and Social Impacts and Environment Aspects

### *Poverty and Social Impacts*

18. **The poverty and social impacts of the policies supported by the new DPLs are expected to be positive.** Citizens at large, including especially vulnerable groups such as waste pickers (of whom women are a significant proportion), are likely to benefit from the policy measures supported through the programmatic series; waste collection and disposal systems will become increasingly efficient, resulting in significant improvements -- in terms of hygiene, health, reduced pollution and scenic benefits -- for all citizens.

19. The pilot Citizens' Report Card undertaken revealed that citizens are widely concerned about the health and pollution effects of sub-standard waste collection; the policy reforms and program actions by supporting the modernization of MSW systems, will be directly responding to these concerns. The DPLs are also expected to have positive benefits for vulnerable groups. Residents of the very high density slum neighborhoods will benefit significantly from improved waste collection and disposal practices. And, importantly, the vulnerable who work as informal waste pickers (of whom women are a significant proportion) will benefit from the provision of basic equipment for, and training on, safe waste-picking and sorting practices. They will also benefit from the expanded and improved income-generating opportunities resulting from the introduction of recycling across the sector -- the PSIA projects that these benefits will be substantial, both in terms of increased job opportunities and in terms of increased earnings. Waste pickers will also benefit from improved waste sorting infrastructure which will be

provided. Female waste pickers are likely to derive significant benefits given that the eco-tax will finance targeted training and capacity building to strengthen their comparative advantage in the MSW sector.

20. An addendum to the two previous Poverty and Social Impact Assessments (PSIA) undertaken shows that introduction of an eco-tax which will fund sustainable recycling is likely to have a largely positive socio-economic impact, including on vulnerable groups associated with the sector. The eco-tax will be levied on commercial entities which manufacture recyclable products in the country, import finished recyclable products, and/or import raw materials used in producing the recyclable products. Initially, the eco-tax will be applied only to plastic products (plastic bottles, bags, plastic wrapping, etc.) and will be levied at a rate of 2.5 percent and the tax revenues will be managed by the National Environmental Fund following a 5 year business plan. The PSIA addendum estimates that the eco-tax is likely to have a limited impact on the import of raw materials and on the import of finished and semi-finished goods (in the range of -2.2 percent). The eco-tax is expected to lead to a slight (0.10 percent) increase in local production of these materials and to a very limited (0.017 percent) reduction in local consumption of these products. The estimated impact on revenues of local producers of plastic is +2.6 percent. A considerably larger increase in revenues is estimated for the sector actually using the recycled goods, amounting to around 6.5 percent in 2013-2016 and 6.9 percent in 2016-2023. The impact on public finances resulting from the loss of VAT from reduced imports of finished and raw products will be an initial dip in the first period followed by a rise in the second period.

21. The eco-tax is expected to have only a very small and indirect impact on individuals and small service providers by way of passed-on costs from larger plastic producers. However, these very small and indirect impacts are expected to be fully mitigated through the recycling of plastic products and the consequent economic returns. Moreover, it is planned that the eco-tax will finance infrastructure for sorting of recyclables, thus avoiding any additional pressures on existing municipal budgets.

22. The PSIA addendum notes that the benefits to citizens and small service providers will be in the form of a cleaner, more hygienic, and visually attractive environment with reduced pollution. These issues are, according to the findings of the Citizens' Report Card on Household Solid Waste Management, accorded a very high level of importance by citizens. Indeed, residents even of slum neighborhoods express a strong interest in, and support for, recycling and a significant percentage (27 percent) say they personally would be willing to pay a tax to support recycling.

23. The eco-tax will also, very importantly, have positive socio-economic benefits for vulnerable groups associated with the sector, such as informal waste pickers, of whom a sizeable percentage are women. Tax revenues used to establish appropriate sorting and recycling facilities will improve the working condition of the waste pickers considerably and productivity gains made in the recycling sector, will lead to increased and higher income generating opportunities for the waste pickers. The PSIA estimates that the earnings of waste pickers would increase by around 11 percent each year, to about MAD 225 per day in 2023 as a result of the changes and programs introduced with the eco-tax.

24. The PSIA addendum also considers the impact of user fees which were introduced under the law 28-00. The PNDM had planned for a gradual introduction of user fees beginning at a rate of 2 percent between 2008-2012, rising to 9 percent between 2012 and 2017, and further increasing to 18 percent between 2018 and 2023. However, the user fees for the 2008-2012 phase of PNDM amounted to only 0.5 percent and Casablanca was the only municipality to introduce them, which it did in the industrial, tourism, commercial and service sectors. User fees were not applied to households.

The PSIA addendum reports that the introduction of user fees for commercial and service entities will have important, and positive, equity implications. This is because the non-payment of user fees by

commercial and service entities results in a distributional distortion, in that large waste generators are, in effect, subsidized by households, including poorer households. Hence, the implementation of user fees on commercial and service entities will have important re-distributional effects, particularly when the revenues garnered are used to support other municipal services, including social services.

25. The PSIA addendum gathered and analyzed the impacts, fairly positive, of the program of reform supported by the proposed programmatic series on gender issues. The program of reform is expected to contribute to; (i) foster women's voice through CRCs and its gender disaggregated questionnaire analysis; and (ii) reduce disparities in income-generation in recycling activities

#### *Environment Aspects*

26. The supported reform including the retained prior actions of DPL3 are expected to have significant positive impacts on the environment, forests and natural resources, as they play an important role in improving governance, ensuring the institutional and financial sustainability, strengthening the monitoring and control and introducing recycling activities in the MSW sector. The proposed operation has been specifically designed to address environmental issues and builds on the progress of the previous two operations to enhance their positive effect on the environment. Indeed, no supported prior action has a significant adverse effect on the environment, forests, or natural resources. The implementation of the first phase of the reform program has already allowed significant improvements in the country's environmental regulatory and institutional framework. The EIA system is now fully operational at both national and regional levels. The increasing complexity of the waste management systems and ever-higher environmental protection targets, however, increase the challenge of optimizing the solid waste management strategies and policies.

27. In the context of the proposed series, improving governance in the MSW sector would enable all stakeholders to know the "rules of the game" in advance that would apply to all the MSW projects in an equitable and transparent manner including the environmental rules and regulations, and their applications in this sector. Ensuring financial and institutional sustainability is key to environmental sustainability as introducing market based instruments in the form of eco-taxes to improve the efficiency of resource use, improves the environmental performance of the MSW sector; ensures environmental compliance and aims at changing behavior in the long term. Strengthening the monitoring and control system will ensure the compliance of the SWM facilities with the applicable environmental laws and legislation, which should lead to improved economic and environmental performance of MSW facilities. Waste valorization and recycling activities will also have several positive environmental implications including reducing solid waste content, improving the life of MSW facilities, and lowering energy consumption and associated greenhouse gas emissions related to processing of raw materials. A potential adverse impact could be the establishment of large recycling enterprises. This can be addressed by preparing an EIA and developing appropriate mitigating measures for the health and safety of the workers.

28. Morocco has the appropriate environmental management capacity to address the potential adverse effects in the solid waste sector. A Safeguards Diagnostic Review (SDR) for the solid waste sector was conducted in 2011 in the context of the preparation of Morocco's MSW carbon finance operation. The Equivalence Analysis of the SDR showed that the laws, regulations and governing investments and activities in the solid waste sector in Morocco are generally consistent with international good practices related to environmental assessment. The acceptability assessment in terms of guidelines, monitoring and enforcement and provision of human and technical resources is generally acceptable provided the gap filling measures are implemented. These gaps filling measures call for the disclosure of the environment assessment studies and the strengthening of the monitoring and enforcement systems through the formal adoption of the procedures for monitoring and control and the provision of additional staff for inspection.

These measures have been addressed in the third reform area related to monitoring and control (theme C of the DPL).

**IX. Tentative financing**

Source	IBRD
Borrower	Kingdom of Morocco
Amount	EUR 100 million (eq. USD 130 millions)

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