

INTEGRATED SAFEGUARDS DATASHEET APPRAISAL STAGE

Report No.: (IDU will provide)

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I. Basic Information

A. Basic Data

Country: Morocco		Project ID: P121917	
		Additional Project ID (if any):	
Project Name: Municipal Solid Waste Carbon Finance Program			
Task Team Leader: Jaafar Sadok Friaa			
Estimated Appraisal Date: January 30, 2012		Estimated Board Date: (ERPA Signature) March 28, 2012	
Managing Unit: MNSUR		Lending Instrument: n/a	
Sector: URBAN			
Theme: Carbon Finance			
IBRD Amount (US\$m.):		0	
IDA Amount (US\$m.):		0	
GEF Amount (US\$m.):		0	
CPF Amount (US\$m.):		20 (estimated)*	
Other financing amounts by source:		0	
Borrower/recipient (US\$m.):		0	
Environmental Category:		A	
Is this a transferred project?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Simplified Processing	Simple <input type="checkbox"/>	Repeater <input type="checkbox"/>	
Is this project processed under OP 8.00 (Rapid Response to Crises and Emergencies)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

*The amount of financing shown in the table above is only an estimate, based on historical CER prices in the last twelve months, and does not prejudice the outcome of the price negotiation between FEC and CPF. The effective contribution of the CPF will depend on the final price structure negotiated between the parties to the Emissions Reductions Purchase Agreement.

B. Program Objectives

The objective of this program is to support Moroccan municipalities develop carbon assets in the MSW sector, and access the carbon market.

More specifically, the proposed program will: (i) support the development and registration of CDM program of activities (PoA); and (ii) allow the purchase of 2,000,000 Certified Emission Reductions (CERs), labeled in tons of CO₂-equivalent (tCO₂e), through an ERPA under the Bank-managed CPF.

These ERs will be generated through: (i) the avoidance of methane (CH₄) emissions from MSW landfills in Morocco, by promoting LFG capture and flaring, and/or electricity generation projects; and (ii) the reduction of carbon dioxide (CO₂) emissions through the displacement of fossil fuel-based electrical power generation.

C. Project Description

The proposed demand-driven Carbon Finance Program provides a framework under which any interested municipality, or group of municipalities, will be able to: (i) develop a CDM project in the municipal solid waste management sector according to CDM rules and eligibility criteria; and (ii) sell part of generated CERs to CPF as long as the CDM project meets the Bank safeguard policies.

Based on the progress made in implementing the PNDM (*Programme National des Déchets Ménagers*) – Landfill component, the proposed CF program will initially target municipalities and sites included in the first phase of the PNDM (2008-2012)¹. It is estimated that up to 16 LFG projects, including those of the main Moroccan municipalities included in the first phase of the PNDM, will join the program.

The program is expected to cover a total waste volume of approximately 3.38 million tons per year, representing more than 50% of municipal solid waste collected in urban areas. The emission reductions are on average estimated at 838,000 tCO₂e per year, amounting to 7.5 million tCO₂e over nine years (2012-2020)². The proposed ERPA will enable the Bank as trustee of CPF to purchase 2 million tCO₂e. These figures only take into consideration the LFG capture and flaring option³.

The first landfill to be included in the PoA is located in Oum Azza, approximately 15 km from the capital city of Rabat. This landfill receives on average 1,400 tons of municipal solid waste per day with an annual growth rate of 3%. The commissioning of the gas capture component of the project is expected in early 2012 and should generate over 1 million tCO₂e over the period 2012-2018 (first seven years, equivalent to the first CDM crediting period). Over the 2012-2020 program, Oum Azza will generate about 1.5 million tCO₂e.

With reference to CDM rules, the crediting period (CP) for the PoA is 28 years, starting in June 2012, the expected date for registration of the program. The crediting period for each CPA under the PoA is seven years, renewable twice. The starting date for the crediting period of each CPA is estimated on the basis of the commissioning date of the waste disposal activities in the new landfills, allowing for at least three years for preparation. This period is required: (i) to allow enough waste to pile up and start generating LFG; and (ii) to order, construct and install the LFG capture and flaring systems.

¹ The CDM portfolio was established on the basis of CPA projects identified by FEC during the preparation of the Program Idea Note (PIN) and updated taking into account the commissioning status of new landfills developed under the first phase of the PNDM (2008-2012).

² According to the current CPF structure, no commitment on CER purchasing can be made after end-2020.

³ The feasibility of the electricity generation option would need validation during flaring stage of the LFG delivery.

D. Project Location and Salient Physical Characteristics Relevant to the Safeguard Analysis

The program will purchase emission reductions from landfill gas projects developed by Moroccan municipalities located throughout the country. Only sanitary landfills supported under the PNDM will be considered.

E. Environmental and Social Safeguards Specialists on the Team

Mr. Hocine Chalal, Lead Environmental Specialist, MENA Regional Safeguards Adviser
Mr. Andrea Liverani, Senior Social Development Specialist
Mr. Mohammed Bekhechi, Legal Environment Expert

F. Safeguard Policies Triggered

In recognition of the newly updated national EIA system in Morocco, the Bank and the Government have agreed that EIAs for landfills selected under the Program will be carried out on the basis of the Moroccan system⁴. To that effect, a Safeguards Diagnostic Review (SDR), consistent with OP 4.00 related to Piloting the Use of Country Systems approach for Safeguards has been prepared and disclosed to analyze the equivalence and acceptability of the Moroccan system, and to identify the required gap filling measures. This SDR describes the applicable legal and regulatory framework, as well as the mandates, responsibilities and roles of institutions and stakeholders involved in EIA processes, outcomes and monitoring. In keeping with the requirements of OP 4.00, the SDR reviewed the current institutional arrangements for EIAs and more generally for environmental management. Finally, the SDR describes how, in practice, the applicable procedures and guidelines are applied in the SW sector. Minor differences with internationally accepted principles and practices have been identified and adequate gap filling measures agreed upon between the Bank and the implementing agency.

The team has reviewed the social impacts of the proposed operation and concluded that no land acquisition will be necessary for those landfills from which CERs will be generated. Also, it was decided with the implementing agency and government authorities that:

- The program will finance only those CERs generated from landfills for which the land is fully owned by the operating agency and will not accept projects for which the land tenure has not been settled or for which there are pending contentious claims.
- The program will not accept projects for which a social plan would not have been prepared and agreed upon. These social plans will address the issue of potential job losses by municipal employees (in case the private sector is contracted to take over MSW management) as well as the issue of waste pickers who risk losing their lodging and/or sources of livelihood if they lose access to landfills.

The matrix below summarizes the safeguard policies triggered for the proposed CF Program.

⁴ This review was facilitated since the Bank already had good knowledge of the Moroccan system through the preparation of a 2009-2010 SDR in the context of the Oum Errbia Sanitation Project.

Safeguard Policies Triggered <i>(please explain why)</i>	Yes	No	OP/BP 4.00
Environmental Assessment (OP/BP 4.01)			X
Natural Habitats (OP/BP 4.04)		X	
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)		X	
Physical Cultural Resources (OP/BP 4.11)		X	
Indigenous Peoples (OP/BP 4.10)		X	
Involuntary Resettlement (OP/BP 4.12)		X	
Safety of Dams (OP/BP 4.37)		X	
Projects on International Waterways (OP/BP 7.50)		X	N/A ⁵
Projects in Disputed Areas (OP/BP 7.60)		X	N/A

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. *Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:* The proposed Carbon Finance Program will not finance any infrastructure but will purchase part of the Carbon Emission Reductions generated through investment to be undertaken by CDM project developers. All CDM projects eligible under this program will consist of equipping sanitary landfills with LFG recovery systems (flaring and/or energy generation). Given the nature of such CDM projects, neither major safeguard issues nor irreversible impacts are foreseen.

2. *Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:* The CDM program will offer several environmental benefits. The destruction of LFG will improve the quality of the local and global environment, and contribute to Morocco's climate change mitigation efforts. In particular, the program will result in: (i) the reduction of GHG emissions; (ii) the reduction of air pollution arising from landfills; (iii) the control of safety hazards and public health risks associated with municipal waste disposal in open, uncontrolled dumps; (iv) the minimization of LFG migration and associated risks of fires and explosions in landfill neighboring areas; and (v) the displacement of fossil fuel from electricity generation by the use of renewable source, namely biogas from municipal waste.

The CDM program will offer several social benefits. The main expected social benefits of the proposed CF Program are: (i) quality of life improvement for the concerned communities; (ii) capacity-building for the development of clean technology projects in Morocco; (iii) awareness raising in sustainable development practices; and (iv) creation of short- and long-term employment opportunities to install, operate and maintain LFG systems.

Considering the activities envisioned, CDM projects will be confined to the physical boundary of the targeted sanitary landfill and the LFG collection and usage system.

⁵ OP/BP 7.50 and OP/BP 7.60 are not eligible for piloting under OP 4.00.

3. *Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts: N/A*

4. *For those safeguards to be addressed through OP/BP 4.00, characterize in general terms the extent to which borrower systems are equivalent to the Objectives and Operational Principles of OP 4.00, Table A1. For those safeguards to be addressed through conventional OP/BPs, identify the reason for the decision to not apply OP 4.00 (e.g. absence of equivalence and/or acceptability report).*

The Safeguard Diagnostic Report (SDR) prepared for this program analyzed the legislation for environmental impacts in detail and confirmed the conclusions of the previous SDR prepared and discussed with Moroccan stakeholders for the Oum Er Rbia Sanitation Project. The SDR prepared for this program highlighted a substantial qualitative shift of the Moroccan system. Furthermore, for the MSW landfill projects included in the program, the State Secretary for Water and Environment (*Secrétariat d'Etat Chargé de l'Eau et de l'Environnement*, SEEE) has developed comprehensive EIA guidelines and made significant progress toward enhancing the public consultation process. In order to fulfill the requirements of OP 4.00 and ensure the equivalence between the Bank safeguards and the Moroccan EIA system for this program, SEEE has been asked to approve the EIA guidelines for MSW landfill projects and improve the procedures for public consultations. The Bank reviewed these guidelines in April 2011 and evaluated them as satisfactory. In order to improve them further, and achieve the full equivalence, the Bank asked SEEE to elaborate on their operationalization. Moreover, the Bank asked to ensure that the EIA of each MSW landfill should document the public consultation undertaken both during EIA preparation and before its approval by the competent authorities.

5. *Describe measures taken by the borrower to address safeguard policy issues to identify any significant gap-filling measures necessary to fulfill the conditions for application of OP 4.00. Provide an assessment of borrower capacity to plan and implement the measures described:*

The Safeguards Diagnostic Report included a detailed analysis of the regulatory and institutional framework for EIA in the SW sector. Most of this framework has been successfully enhanced following the approval of the PNDM. Results to date are significant and are certainly due to a clear and strong Government commitment, supported by the Bank through a programmatic series of two SW DPLs. The challenge for the near future is to ensure the sustainability of such improved framework as well as a robust practice. The SDR identified minor gaps to ensure such sustainability and described suitable gap filling measures. Such measures are related mainly to the need for improving public consultations and adopting sound procedures to monitor environmental impacts.

The measures to fill the gaps identified in the SDR are fully integrated in this program. FEC, as the implementing agency of the program, will have the responsibility to ensure their implementation and to report regularly to the Bank within the framework of the ERPA signed with the CPF. More specifically, in order to fill the gaps of the current EIA system in Morocco, FEC has committed to taking the following measures.

Gap filling measures for the equivalence of the Moroccan system with OP 4.00

- (i) SEEE will approve the guidelines to prepare the EIAs for the MSW landfill projects included in the program, following the results of the SDR; and
- (ii) the final EIA report for each MSW landfill project will document the public consultation process undertaken both during EIA preparation and before its approval by the competent authorities.

Gap filling measures for the acceptability of the Moroccan system with OP 4.00

- (i) Prepare a study, complementary to the EIA developed by the operator of the Oum Azza landfill, detailing the impact of the projected collection and flaring of landfill gas [a full EIA will be prepared as soon as the project developer decides to proceed with electricity generation using the landfill gas collected]. Such a study should be evaluated by the EIA national committee;
- (ii) cover the social dimension of each project, both in general terms as well as with specific reference to the CDM component (*methane capture* and flaring or use to energy generation), analyzing the impact on the quality of life of potentially affected groups (e.g., local residents, workers, waste pickers);
- (iii) FEC should adopt a formal procedure to review CDM project applications, regarding the compliance of these applications with the requirements of the Moroccan EIA system. Moreover, FEC should set up an in-house service to assist the applicants (municipality or operator) ensuring they have addressed regulatory requirements as well as above gap filling measures, as applicable, through the EIAs they will submit; and
- (iv) SEEE should adopt a formal procedure to track and monitor the impacts in each landfill project, based on the format described in the SDR.

6. *Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, including the Safeguard Diagnostic Review (SDR) with an emphasis on potentially affected people:*

A public consultation took place on June 29, 2011, in Rabat with the participation of 80 representatives from concerned governmental entities, local authorities and municipalities, NGOs, consulting firms, and the private sector. The consequent feedback was incorporated into the final SDR. The final SDR was posted on the FEC website and by the Bank InfoShop for public disclosure, respectively, August 19, 2011, and August 26, 2011.

Social Safeguards

The projects to be considered in this program will not entail negative social impacts as per OP 4.12 because they will take place on sites or facilities having satisfied the screening criteria as set forth in the PNDM program. For instance, the landfill projects likely to benefit from this carbon finance program are the projects that would have been supported by the PNDM program and, as such, that would have satisfied the following pre-conditions:

- Submission of a full EIA, based on ToRs that have been reviewed by the Bank and that include, in particular, proper consultation with concerned stakeholders.
- Submission of a social inclusion plan taking into account potential job losses by individuals previously working in the solid waste management department of the municipalities, as well as livelihoods of waste pickers.
- No land acquisition will be required for the implementation of the target CDM projects.

As an illustration of how these aspects are taken into consideration, the example of the Rabat Oum Azza Landfill is useful. This landfill, managed by the company Pizzorno, has established a partnership with a group of waste pickers who used to operate under very appalling conditions in the old landfill of Akreuch. This partnership, established through the intermediation of an NGO, has allowed the waste pickers to organize themselves as a cooperative and operate a sorting

facility provided to them by the company Pizzorno located on the premises of the new landfill. The waste pickers have, so far, been able to improve significantly their revenue, occupational health and safety conditions related to their occupation and their overall quality of life.

B. Disclosure Requirements Date

Safeguard Diagnostic Review (Equivalence and Acceptability Report):	
Dates of "in-country" consultation and disclosure	Consultation on June 29, 2011, and Disclosure on August 19, 2011
Date of submission to InfoShop	August 26, 2011
For category A projects, date of distribution of the PID to the Executive Directors	The proposed program is not a lending operation. According to CF operations guidelines, it will not be submitted to Board for approval
If in-country disclosure of any of the above documents is not expected, please explain why: N/A	

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [] X	No []	N/A []
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?			
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?			
OP/BP 4.00 – Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank-Supported Projects			
Did the Quality Assurance and Compliance Unit (QACU) and the ESSD and International Law Practice Group (LEGEN) review and approve the Safeguard Diagnostic Review report?	Yes [X]]	No []	N/A []
OP/BP 4.04 - Natural Habitats			
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [] X	No []	N/A []
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?			
OP 4.09 - Pest Management			
Does the EA adequately address the pest management issues?	Yes [] X	No []	N/A []
Is a separate PMP required?	Yes [] X	No []	N/A []

If yes, has the PMP been reviewed and approved by a safeguards specialist or Sector Manager? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?			
OP/BP 4.11 – Physical Cultural Resources			
Does the EA include adequate measures related to physical cultural resources?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on physical cultural resources?			
OP/BP 4.10 - Indigenous Peoples			
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?			
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit?			
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Sector Manager review and approve the plan/policy framework/process framework?			
OP/BP 4.36 – Forests			
Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
Does the project design include satisfactory measures to overcome these constraints?			
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?			
OP/BP 4.37 - Safety of Dams			
Have dam safety plans been prepared?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?			
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?			
OP 7.50 - Projects on International Waterways			
Have the other riparians been notified of the project?	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?			
What are the reasons for the exception? Please explain:			
Has the RVP approved such an exception?			
OP 7.60 - Projects in Disputed Areas			
Has the memo conveying all pertinent information on the international aspects of the project, including the procedures to be followed, and the recommendations for dealing with the issue, been prepared	Yes [<input type="checkbox"/>] X [<input type="checkbox"/>]	No [<input type="checkbox"/>]	N/A [<input type="checkbox"/>]

Does the PAD/MOP include the standard disclaimer referred to in the OP?	
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [X] No [] N/A []
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Public consultation held June 29, 2011, and French version SDR disclosed on August 19, 2011
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [X] No [] N/A []
Have costs related to safeguard policy measures been included in the project cost?	N/A
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes

D. Approvals

Submitted by:	Name	Date
Task Team Leader:	Mr. Jaafar Sadok Friaa	January 11, 2012
Environmental Specialist:	Mr. Gaël Grégoire	January 11, 2012
Social Development Specialist:	Mr. Colin Scott	January 11, 2012
Additional Environmental and/or Social Development Specialist(s):		
Approved by:		
Regional Safeguards Coordinator:	Mr. Hocine Chalal	January 11, 2012
Comments:		
Sector Manager:	Mr. Franck Bousquet	January 11, 2012
Comments:		