MAINSTREAMING CLIMATE CHANGE IN THE NATIONAL LOGISTICS STRATEGY AND ROLL-OUT OF INTEGRATED LOGISTICS PLATFORMS

PIMS # - 5181

Final Evaluation Report

Evaluation carried out in the framework of the

GEF-Transport

Kingdom of Morocco

Starting date: April 2016
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Final evaluation report: Mainstreaming climate change in the national logistics strategy and roll-out of integrated logistics platforms

UNDP Project ID (PIMS)	5181
ATLAS ID (UNDP)	Project : 00094492; Award : 00087522
Date of the evaluation report	May 2021
Region and country covered by the project	National scope
Project implementing partner	*Ministère de l'Equipement, du Transport, de la Logistique et de l'Eau* (METLE)
Beneficiary of project implementation	METLE
Duration of the intervention	5 years and 4 months (initial duration 4 years, 1 year and 4 months extension)
Start date of intervention	12-23-2015
GEF Contribution (Grant)	2 274 429 USD
Co-financing (CEO Endorsement)	121 282 532 USD
Total project cost (CEO Endorsement)	123 556 961 USD
Evaluation Team Members	Alexandre Borde (International Expert)

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Table of contents

List of tables

List of illustrations

List of acronyms and abbreviations

AFOLU	Agriculture, Forestry and Other Land Use
AMDL	Agence Marocaine de Développement de la Logistique
AMEE	Agence Marocaine pour l'Efficacité Énergétique
ANP	Agence Nationale des Ports
BUR	Biennial Update Report
CC	Climate Change
CGEM	Confédération Générale des Entreprises du Maroc
CITEPA	Centre interprofessionnel technique d'études de la pollution atmosphérique
CNCC	Comité National du Changement Climatique
CNEDD	Charte nationale de l'environnement et du développement durable
CoPil	Comité de pilotage
Covid	Coronavirus disease
CTCC	Climate Change Technical Comittee
DKTI	Deutsche Klimatechnologie initiative
FT-CGEM	Fédération du Transport-Confédération Générale des Entreprises du Maroc
GC	Grand-Casablanca
GDP	Gross Domestic Product
GEF	Global Environment Facility (or FEM in french)
GHG	Greenhouse Gazes
GIZ	Gesellschaft für Internationale Zusammenarbeit
HS	Highly Satisfying
MS	Moderately Satisfying
METLE	Ministère de l'Equipement, du Transport, de la Logistique et de l'Eau
MFLZ	Multi-Flow Logistics Zones
MRV	Monitoring, Reporting and Verification
MW	Megawatt
M&E	Monitoring and evaluation
NAMA	Nationally Appropriate Mitigation Action
NAMA-DD	NAMA Document Design
NDC	Nationally Determined Contribution
OMCL	Observatoire Marocain de la Compétitivité Logistique
ONCF	Office National des Chemins de Fer
PCCM	Moroccan Climate Change Policy
PIR	Project Implementation Report
PMU	Project Management Unit
ProDoc	Project Document
PV	Photovoltaic
S	Satisfying
SAZ	Société d'Aménagement de Zenata
SNTL	Société Nationale des Transports et de la Logistique
TdR	Terms of reference
TIR	Transport International Routier
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

USD	American Dollar

Introductory synthesis and summary of the project evaluation

Summary table of the project

Project title: Mainstreaming climate change in the national logistics strategy and roll-out of integrated logistics platforms	
Management arrangement: NIM (National execution) PIF approval: 11.05.2013 04/01/2013 GEF CEO Endorsement: 05.12.2015 06/2015 Expected duration of the project (according to ProDoc): 48 months Signature of the ProDoc: 12/2015 Envisaged closing: 12/2019 Planned operational closure: May June 2021 Final evaluation written: 04/2021 Final evaluation submitted: 05/2021	
Planned budget (USD)	**Budget at project closure (USD)**
Total Budget: 123 556 961,00 USD GEF: 2 274 429,00 USD Total cofinancing: 121 282 532 USD In cash METLE: 7 955 000 USD AMDL: 3 300 000 USD CDG: 94 300 000 USD ONCF: 6 800 000 USD SNTL: 8 427 532 USD UNDP: 200 000 USD In kind METLE: 100 000 USD SNTL: 200 000 USD	Total budget: 92 244 289,25 USD (minimum) GEF: 2 474 429,00 USD Total cofinancing: 89 769 860,25 USD In cash: METLE: 7 955 000 USD AMDL: 4 819 470 USD SNTL: 8 427 532 USD UNDP: 359 801 USD in kind: METLE: 100 000 USD SNTL: 200 000 USD

Brief description of the project

Morocco has made an early and voluntary commitment to the process of combating climate change (CC), particularly in the area of mitigation, by implementing various activities and programs to reduce its emissions. The project, which was part of the national strategy for the development of logistics competitiveness, aimed to contribute specifically to one of the strategy's targets, namely the mitigation of 35% of CO_2 emissions from the road freight transport sector in Morocco, resulting from a rationalization of freight movements in the country. The project aimed to operationalize this target and to integrate CC considerations into this strategy and into the implementation of multi-flow logistics zones (MFLZ). The project focused primarily on the multi-flow logistics zones in the Grand Casablanca (GC) region and aimed to build a pilot approach containing various mitigation measures, with a view to replicating them in other logistics zones in different regions of the Kingdom of Morocco in the long term.

In addition to reducing CO_2 emissions from the freight sector, the project's main objective was to establish policy measures and mitigation actions to serve the replication of the strategy in all multi-flow logistics areas, the development of draft regulations for low-carbon development in the logistics sector, establishing government policies and financial incentives to promote investment in low-carbon development in the logistics sector, and also developing human capacity in the public, private and academic sectors to support low-carbon development in the sector.

Evaluation Rating Table

The evaluation of the project can be summarized in the following scoring table:

Table 1: Evaluation Rating Table

Criteria	Score	Comments
Implementation of the project		
Monitoring and evaluation	**HS**	The evaluation found the following monitoring and evaluation (M&E) activities: - a kick-off workshop on March 28, 2016 with representatives of the various stakeholders that presented the project, the baseline scenario, objectives, activities, monitoring indicators and the first annual work plan. - The realization of mid-year and annual reviews (ProDoc had planned quarterly reviews at the base) with Powerpoint supports on the progress of the project, the results, risks and recommendations for the future. - The realization of annual narrative reports describing the results according to the indicators and targets of the project, - the drafting of annual PIRs, - the completion of a first micro-evaluation in 2016 by the Cour des Comptes in conjunction with an audit of METLE and the Directorate for Strategy, Programmes and Transport Coordination - A financial audit conducted by the Cour des Comptes for the 2017 project year, - the completion of a financial audit report by the Cour des Comptes on May 31, 2018, - the late completion of a mid-term evaluation in February 2020. The M&E became more specific over the life of the project. Thus, points were added in the last reviews, taking into consideration the mid-term evaluation: - Problems encountered and solutions found - Lessons learned from the project - Modifications made to the project, i.e. adaptive management of the project Many documents were produced, which ensured a very good monitoring of the project, with quantified implementation rates made possible by the quality of the M&E system put in place (with activity performance indicators, for the implementation of the CTCC, GHG inventory, MRV system, modal shift survey, centralized data collection system).
UNDP Implementation	**HS**	UNDP's implementation, monitoring, and facilitation work was adequate throughout the project. The structure and implementation were appropriate, and UNDP's role as guarantor of this appropriateness was significant. The effectiveness of the collaboration was demonstrated by the successful implementation of the project. The monitoring was carried out in particular with the presence of a UNDP member at project meetings. The UNDP thus carried out a regular follow-up with the PMU and accompanied and supervised the activities and results of the project. In particular, it studied the progress of the project through mid-year and annual reviews and contributed to the drafting of PIRs each year to assess the risks, the achievement or non-achievement of the target objectives and the annual achievements.
METLE execution	**S**	Implementation by the Ministry of Equipment, Transport, Logistics and Water (METLE) has been satisfactory, thanks in part to the commitment shown by its members, but with some reservations. For example, the Steering Committee played a guiding and supervisory role throughout the project. The way the Steering Committee functioned was traditional and conservative. The strategic level of the committee could have been higher, especially with the participation of division heads or directors.

		To compensate for the lack of expertise in the field of climate change, the CTCC was created to provide perspectives for further mitigation but also adaptation actions in the future. However, it is crucial to continue the activities carried out by the CTCC within METLE. As METLE is a large ministry with compartmentalized projects, the CC dimension has allowed for a cross-cutting and integrated approach that allows for a paradigm shift.
Coordination between UNDP and other technical and financial stakeholders	**MS**	Collaboration between UNDP and other technical and financial partners involved in the funding and implementation of the project was effective once agendas and priorities were harmonized at the beginning of the project. UNDP also validated the annual work plan as well as the budget, the preparation of ToRs and the project deliverables. Thus, the other donors were kept informed of the project's progress throughout its duration and coordination efforts were made. Exchanges and effective collaboration were developed with the GIZ project (Deutsche Klimatechnologie initiative or DKTI - energy efficiency project which aimed to increase energy efficiency, particularly in the transport sector), in particular by capitalizing on the GIZ project through the Climate Promise initiative, which is part of the continuity of the GIZ project. This allowed for an in-depth analysis of the sector and the identification of actions and projects that were subsequently integrated into the revised NDC.
Project results		
Overall results	**S**	The final evaluation confirms the pioneering and innovative character of the project. Numerous concrete achievements were observed in the context of capacity building, development of tools and technical guides as well as innovative achievements for the country (centralised data collection system, national GHG inventory of road and rail fleets, development of a NAMA Transport). Despite an ambitious design and delays caused by the Covid pandemic, almost all target results were achieved. The replicability of the project and the willingness of the various partners to continue in this direction suggest that the GEF Transport project could become a model strategy for combating climate change in the logistics and transport sector. However, it seems essential to preserve the achievements. Although the results are satisfactory, it remains to be seen whether a multiplier effect of the project will subsequently be established at the initiative of METLE.
Relevance	**HS**	The project is very relevant and appears to be a pioneer in the fight against climate change in the transport sector in Morocco. Climate change integration aspects were still neglected by the sector's decision makers at the beginning of the project. Indeed, the project was one of the very first to focus on green mobility. The innovative nature of the project even led to the need for more in-depth thinking at the beginning, due to the lack of previous experience. This project has helped the Moroccan transport and logistics sector to move towards an energy transition by raising awareness of the importance of reducing GHGs in several trades (transporters, logisticians, etc.).
Effectiveness and efficiency	**S**	The expected results were achieved. This was a very ambitious, pioneering project, which has been successful. A NAMA Transport has been developed, which represents a great advance in the sector. The creation of the CTCC to provide institutional support is also a key element of this project. A GHG inventory in the logistics transport sector has been established. This is a very important step forward, as is the awareness of eco-driving. Despite its complexity and ambition, the project has been effective and efficient. If funding from the NAMA Facility has not been secured by 2020, funding should continue to be searched. The solar photovoltaic panels are on their way at the time of project close and the facility is expected to be operational in the fall of 2021. While there was a lack of expertise and knowledge in the area of climate change within the Monitoring Committee, this was overcome. It sometimes appears that there are other priorities for professionals, often small companies with only one or two trucks. It is therefore all the more important to raise their awareness in view of their limited resources. With regard to efficiency, the mid-term evaluation report highlighted a delay in the achievement of the results planned by the project, which seemed to be reduced in 2019 by the completion of certain activities. The value of the work accomplished was greater than the cost incurred by the project, which was a strength of the project. Co-financing from several partners was provided, including cash from METLE, AMDL, CDG, ONCF, and SNTL. The total implementation rate at the end of the project reached 76%, with 100% implementation for UNDP/GEF funding and 75% implementation for co-financing. Overall efficiency is therefore satisfactory.

		With regard to the human and material resources of the project, internally, the members of the PMU have been very involved throughout the project and have remained highly motivated and mobilized. The partners have maintained a relationship of trust with the team, which has helped in the successful implementation and monitoring of project activities. The PMU was able to take into consideration the observations of the different stakeholders during the 5 years. However, there is still a need for capacity building at the METLE level. Consultants and engineering firms were also mobilized to meet specific analysis needs. Shortcomings were noted at this level, which caused delays. Calls for tender were also postponed due to the lack of adequate skills at local level, and the lack of local institutions in the research sector led to the use of the expertise of the *Centre interprofessionnel technique d'études de la pollution atmosphérique* (CITEPA). Material resources could have been further strengthened for this project. Overall, the effectiveness and efficiency remain satisfactory. The results were achieved and the means available were well used to achieve the targeted results.
Country assimilation	**S**	Awareness-raising and consultation efforts were implemented throughout the project, which resulted in a strong desire for ownership of the project. The decision-making process that was put in place facilitated the involvement of the various project partners and their appropriation of the results. The partners thus benefited from a participatory approach and were often solicited. Some activities to maintain the benefits of this project would further support Moroccan ownership of the project. For example, for greater ownership, AMEE could make concrete its desire to acquire a simulator to replicate the eco-driving training in its platform in Marrakech. AMEE would also like to advocate for the integration of eco-driving as a prerequisite for obtaining a driver's license in general. The various studies and guides developed during the GEF Transport project were given to all partners, who will be able to use them as reference documents and solid data sources for their activities. It remains crucial for the appropriation of the centralized GHG system to feed the centralized system and to update the inventory data, while contextualizing them.
Durability	**S**	The activities proposed in this project presented measures with long-term benefits. Whether it is eco-driving, fleet renewal (with an average vehicle life of 12 years), improved maintenance, installation of solar PV panels, etc., the benefits and payoffs are long term and will not end with the end of the project's life cycle. The replication strategy on other platforms also contributes to the sustainability of the project's achievements. Thus, this project has raised awareness and made progress in climate change mitigation and adaptation in the logistics sector. Indeed, some of the regulatory measures developed may be subject to regulation, such as the obligation to be trained in eco-driving when passing the driving license. In addition, NAMA's activities will certainly have contributed to the move from Euro 4 to Euro 6 standards. The creation of a governance structure to coordinate the Equipment/Transport/Logistics sector at the Ministry level, called the Climate Change Technical Committee (CCTC), is a strong signal that allows for a sustainable impact on the sector in terms of climate change adaptation. With the same goal of meeting the climate challenges, a three-year Action Plan has been developed and will run until 2023. The work begun can therefore be continued within the CTCC, through the search for funding and the exploration of other actions in the sector. Sustainability is considered satisfactory provided that the CTCC is formally invested and that the ATP is validated at the investiture meeting scheduled for the end of June 2021. The results of the project are therefore likely to last, particularly thanks to the sensitization carried out and the establishment of the CTCC, provided that the functioning of this committee is confirmed. Also, finding funding remains essential to continue the activities and maintain the results of the project in the long term. The NAMA Transport was submitted to the 7th NAMA Facility call for proposals but was not selected. It will be reviewed, improved and resubmitted to the NAMA Facility.
Impact	**S**	The evaluation found that there is a before and after to the project. First of all, the creation of the CTCC within the ministry, the first ministry with this type of committee, represents good working conditions to be able to conduct other projects. Raising awareness of climate change among managers is indeed very important. Secondly, the eco-driving training has been deemed successful in terms of impacts. It is integrated in NAMA and in future NAMA applications to donors. 102 trainers have been trained in eco-driving, and the training can be duplicated. This will have an impact on fuel consumption and climate change mitigation in the medium to long term.

		In the longer term, if NAMA is realized, it could be a model and example for other platforms, given the work underway for the Zenata platform. The minimum expertise to be able to put together a NAMA funding application is developed and even if the first version of the NAMA application was not successful, a new application could be submitted in the short term. The project has also enabled progress to be made in updating the NDC, which now includes a transport dimension (revised NDC 2020/21), thanks also to the UNDP Climate Promise project, which capitalized on the GIZ project and carried out an in-depth study to assess the potential for reducing GHG emissions in the transport sector. Capacity building was carried out with training provided to METLE, CTCC and PMU on good management of low carbon development.
Covid-19 Impact	**N/A**	The project was impacted by Covid-19 and several activities had to be postponed. The course of the trainings changed, they had to be organized taking into account the context, and they were therefore done remotely. The deadlines of the calendar were postponed and the end of the project was therefore moved back a few months.

Summary of Findings and Lessons Learned

The GEF Transport project is a contextually relevant and highly innovative project for the transport and logistics sector. Climate change is an increasingly important issue for Morocco, which is experiencing rising temperatures, significant heat waves, and declining annual rainfall. Incentives to reduce GHG emissions are therefore a first response to these issues, particularly in the context of the revision of the Nationally Determined Contribution (NDC). Thus, the GEF Transport project has made it possible to implement a number of innovative activities in the sector, including a national inventory of GHGs from road and rail fleets, a centralized data collection system, a survey on road freight transport, training for trainers in eco-driving, the installation of 1 MW of PV panels on a logistics zone, work is underway and the plant is scheduled to be operational in September/October 2021 (written confirmation of the commitment to the start date has been requested from SNTL by the project coordinator), the drafting of a Transport NAMA and the establishment of a Climate Change Technical Committee (CTCC) within the MELTE. Capacity building actions have allowed a better understanding of climate change concepts in the transport and logistics sector. Local partners have been made aware of the role they can play in mitigating GHG emissions and are keen to continue this momentum. It is now important not to lose what has been achieved and to continue to raise awareness at all levels and increase interest, especially at the political level, in order to improve project implementation, stakeholder adaptability, and replication potential, and more generally, to address future climate challenges. Preservation of the project's achievements and capital is necessary to sustain the actions implemented and to integrate climate change more effectively into the national strategy.

Recommendations

Given the promising results obtained and particularly those that trace the exit and sustainability strategy, it seems important to recall that the impacts and consequences of the project are not necessarily immediate. Several recommendations are made here:

1) First, NAMA Transport was submitted to the NAMA Facility in September 2020 but the project was not selected. It seems appropriate **to improve the NAMA funding package and then resubmit it again** now that the groundwork has been laid. It is also recommended to **submit the NAMA funding proposal to other donors and to consider other resources** (such as the Green Climate Fund) to obtain funding. Indeed, NAMA is conditional on the replacement of old trucks with new ones through financial incentives such as grants. It is therefore important to apply. From the interviews, there is an increased need for more experience in putting together the

NAMA funding package and obtaining the funding. The climate finance trainings in May 2021 were beneficial from this point of view, as the concepts of climate finance and climate change adaptation and mitigation measures are not yet well understood. Long-term coaching would be useful to acquire the key concepts and thus improve the financing file already submitted to the NAMA Facility.

2) A second recommendation concerns **the expansion of the project to include passenger transport**, first by road but also by rail and air. Indeed, a project concerning passenger transport would be relevant. This could concern road travelers in the form of self-sharing electric cars or the provision of electric buses for the public transport of road travelers. Contacts have already been made by the PMU with GIZ, AFD, Mobilise Your City (MYC) and E3G. Opening up the scope would be more complex, however, as it would involve other ministries, such as the Ministry of the Interior for urban passenger transport.

3) A third recommendation concerns the CTCC, created by decision of the Minister. It is recommended not only **to formalize the CTCC's investiture but even to establish its role through the Decree**. This would make it possible to commit METLE and its partners. In addition, it is important to ensure that everything that has been put in place with the CTCC is operationalized. This implies the **formal validation of the Three-Year Action Plan with an operating budget to be provided by METLE** for its implementation as soon as possible. For the record, the METLE budget amounts to 4.38 billion euros ($5.34 billion) in 2021: allocating resources to the CTCC would have a very limited impact on the ministerial budget. While external support is not necessarily needed, it was requested several times during the final evaluation by different stakeholders.
   Acting on the investiture of the CTCC and organizing an investiture ceremony by mid-June 2021 are the first steps in this recommendation to ensure the continuity and sustainability of the project, and to capitalize on its achievements.

4) A fourth recommendation focuses on **better addressing the impacts of CC in the freight and logistics sector to improve its resilience through adaptation measures**. For example, increasingly frequent extreme heat is causing tarred roads to soften. This requires renovations using more durable materials. Rising temperatures also pose a threat to rail transport, due to thermal expansion, crushing and land subsidence. For ports, many climate change adaptation measures, including those to address rising seas and extreme heat, need to be rapidly implemented and incorporated into new construction and infrastructure design practices.

5) In addition, as noted above, although not included in the project, the SNTL has been concerned with energy efficiency, with a small budget set aside for this purpose. It is recommended to continue **to improve energy efficiency in the freight and logistics sector, especially in the cold chain, by implementing specific energy efficiency projects and actions,** such as training drivers of refrigerated vehicles in good practices for using cold.

6) The sixth recommendation is to **consolidate governance and continue capacity building efforts**. A National Climate Change Committee (CNCC) exists at the national level with sectoral representatives. This brings together different ministries, including now the METLE. It would be useful to continue capacity building at all levels. Political will is needed to carry out projects like this one and to continue the momentum without losing what has been done. Without political will and consolidation of achievements, the capital risks being impacted and the efforts made useless.

7) Finally, it is relevant to place the project in the health context of Covid-19. The transport sector has been affected by the health crisis, creating risks of infection, border restrictions or quarantine, as well as delays in delivery and possible theft of goods. Drivers and companies in the road sector have been severely affected by this pandemic and it is important to **take into account the lessons learned and the measures to adapt to such situations, in order to avoid repeating the same mistakes if the health situation were to deteriorate again** and to face the appearance of various hazards. Urgent measures will have to be taken to ensure that working conditions remain decent, that workers remain protected and that deliveries are not delayed. As a next step, it is recommended that transport and logistics workers receive the same protection as other essential service workers, including priority vaccination. Finally, the sector has many informal actors and situations, with vehicles operating outside of the national transport registry. About 80% of the staff is unregistered and therefore could not benefit from the 2,000 DH aid granted by the Moroccan government during the first three months of the crisis. It is therefore recommended that companies be made aware of the need to declare their employees.

1. Introduction

1.1. Context and rationale: Reminder of the context in the Kingdom of Morocco and aspects related to the integration of climate change in the national logistics strategy and in the implementation of logistics platforms in Morocco

1.1.1. Presentation of the country's characteristics

Geographical and climatic context

Morocco, a country in northwest Africa, is bounded on the north by the Strait of Gibraltar and the Mediterranean, on the south by Mauritania, on the east by Algeria and on the west by the Atlantic Ocean. The Moroccan coastline extends over 3,500 km. Morocco's geographical variety is rich: from peaks to plains and from the greenest vegetation to the most complete aridity. Longer and more frequent periods of drought and increasing water needs are being felt, and the country is therefore under pressure from a water context that is undergoing an accelerated trend of drying up of water[1] resources.

Indeed, due to its geographical position, Morocco is subject to great vulnerability to the effects of climate change (CC), accentuated mainly by the progression of the desertification phenomenon and the reduction of the potential of water resources. In order to face this challenge, Morocco has voluntarily committed itself to the implementation of adaptation and mitigation actions within the framework of an integrated, participatory and responsible approach.

Socio-economic characteristics and the transport sector

The transport and logistics sector is one of the main drivers of the Moroccan economy. In 2018, the sector accounted for 6% of the country's GDP and 9% of the value of tertiary activities, and employs more than 500,000 people, i.e. 5% of the working population, including 6.6% in urban[2] areas. The sector includes road, air, rail, and maritime modes of land transportation.

The transportation sector is responsible for 15.95 million tons of CO_2 equivalent and 19.2% of the country's total emissions in 2014 (latest national GHG[3] emissions inventory).

Road transport is economically dominant, resulting in relatively high energy consumption and corresponding greenhouse gas emissions. The distribution of road fleets and their activity foreshadows the priority areas for GHG mitigation. This distribution of road vehicles highlights the importance of privately owned vehicles[4]. GHG emissions from light-duty vehicles represent about 40% of the sector's total emissions, and these vehicles use diesel fuel for the most part (73%).

The freight sector as a whole is critical to economic development. Being at the heart of various strategic sectors, freight represents a lever for improving the competitiveness of Morocco's trade, both domestic and foreign, and is a boon for job creation. The development of trade networks creates more needs for logistics management and requires the implementation of efficient services that meet the constraints of time, reliability and quality. These needs have

[1] https://unfccc.int/resource/docs/natc/marnc3.pdf
[2] https://unfccc.int/sites/default/files/resource/BUR2-Morocco.pdf
[3] https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/569701_Morocco-BUR2-1-BUR2-Morocco.pdf
[4] *Ibidem*

been accentuated in Morocco by the opening of trade, initiated by the country in the mid-1980s, and the conclusion of free trade agreements, at the bilateral or regional level, over the last decade[5].

1.1.2. Presentation of the transport sector in Morocco and development prospects

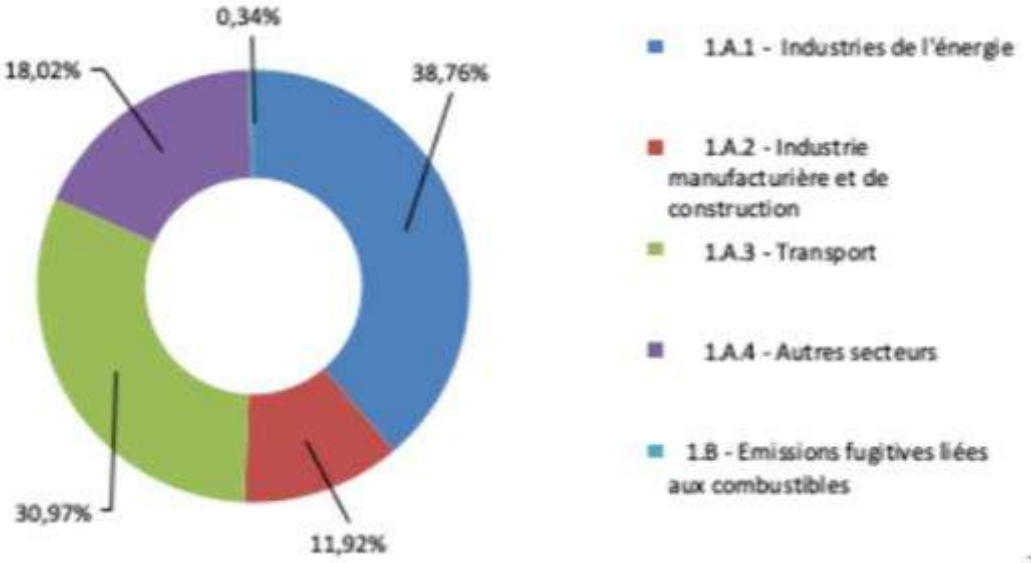
In Morocco, road freight is the main mode of transporting goods, accounting for 90% of transported flows, with a current fleet of about 120,000 vehicles. The table below shows the evolution of fuel consumption in the transport sector between 2005 and 2012[6] :

Table 2: Evolution of fuels consumption (excluding electricity) in the transport sector (in Tera joule (TJ))

Consommation du secteur de transport en TJ						Total	
Année	2005	2006	2008	2010	2012	Valeur	%
Transport aérien	2 461	2 787	3 234	3 746	3 382	15 609	1,8%
Transport routier	138 154	142 288	163 084	183 812	197 277	824 616	96,2%
Transport ferroviaire	520	520	390	390	390	2 210	0,3%
Transport maritime	2 809	2 811	3 018	3 086	2 949	14 673	1,7%
Total (TJ)	143 944	148 405	169 726	191 034	203 998	857 107	100%

The transportation sector as a whole accounted for approximately 28% to 31% of the energy sector emissions between 2012 and 2016. The exact 2016 sectoral breakdown can be seen in Figure 1 below.

Figure 1: Sectoral distribution of GHG emissions in the energy module in 2016[7]



Morocco is involved in reducing the effects of anthropogenic activities on the environment and the climate. This can be seen, first of all, through the signing of the United Nations Framework

[5] Source : Agence Marocaine de Développement des Investissements
[6] https://unfccc.int/resource/docs/natc/marnc3.pdf
[7] https://unfccc.int/sites/default/files/resource/BUR2-Morocco.pdf

Convention on Climate Change (UNFCCC) in 1992 and its ratification in December 1995. In addition, the country joined the Kyoto Protocol in January 2002, even before the text came into force in February 2005. Finally, Morocco ratified the Paris Climate Agreement on September 21, 2016. In addition, the country has developed nationally appropriate mitigation actions (NAMAs), which today cover the sectors shown in Figure 2 below.

Figure 2: NAMAS developed in Morocco[8]

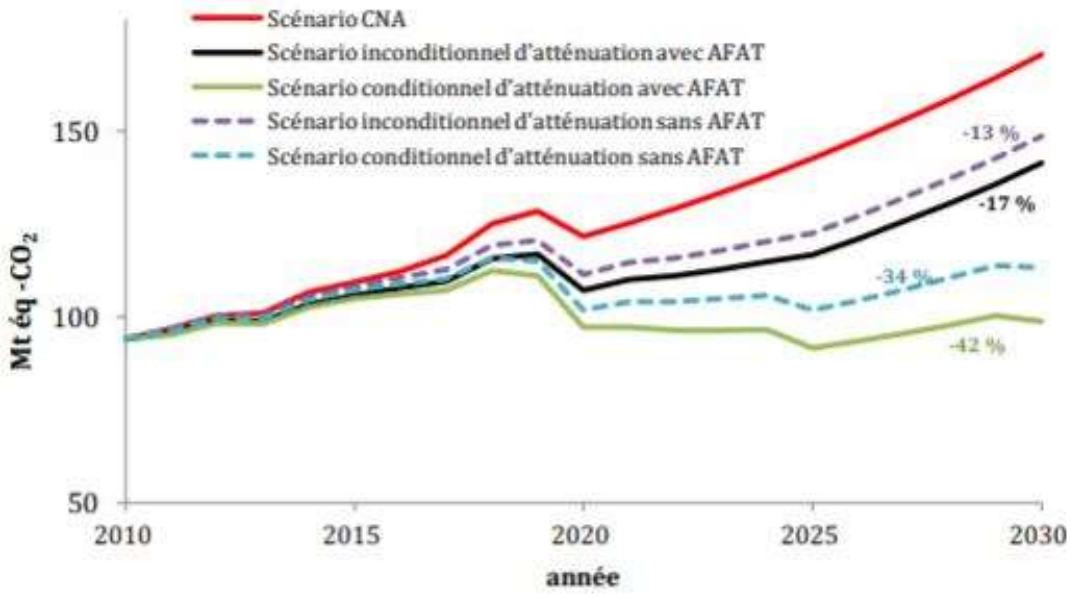
Climate change mitigation and adaptation measures are now more numerous, reflecting sectoral initiatives, supported by international donors.

Two other NAMAs are in the process of being validated, including the NAMA Transport produced during this project; indeed, it is thanks to this project that NAMAs now cover the transport sector.

In its first Nationally Determined Contribution (NDC), Morocco has committed to reducing its GHG emissions by 42% in 2030 compared to projected emissions for the same year under a business-as-usual (BAU) scenario. However, this level will only be achieved with the support of international financing. The unconditional target is a 17% reduction emissions from 2030, including Agriculture, Forestry and Other Land Use (AFOLU) activities[9]. The emissions trajectories for the mitigation scenarios are shown in Figure 3 below.

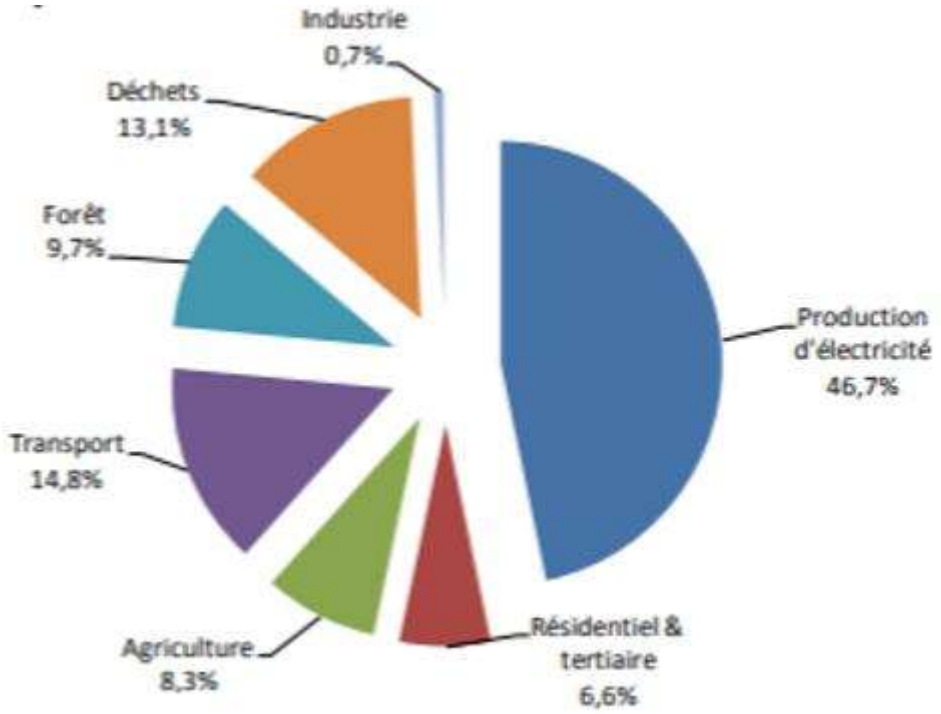
Figure 3: Emissions trajectories for the mitigation scenarios (with and without AFOLU)

[8] https://unfccc.int/sites/default/files/resource/BUR2-Morocco.pdf
[9] *Maroc – Contribution Prévue Déterminée au niveau National (CPDN) dans le cadre de la* CNUCC, CCNUCC, juin 2016, http://www4.unfccc.int/submissions/INDC/Published%20Documents/Morocco/1/Maroc%20CPDN%20soumise%20a%CC%80%20la%20CCNUCC%20-%205%20juin%202015.pdf.



Morocco's Second Biennial Update Report (BUR) under the UNFCCC projects a mitigation effort allocation of 14.8% for the transport sector in 2030 (see Figure 4 below).

Figure 4 : Distribution of mitigation effort in 2030[10]



The progress of mitigation actions in the transportation sector according to the second biennial report is summarized as follows:

[10] https://unfccc.int/sites/default/files/resource/BUR2-Morocco.pdf

Table 3: Progress of mitigation measures in the transport sector

Prime à la casse des véhicules de transport routier de plus de 20 ans : Il s'agit d'un programme de renouvellement du parc des transports routiers entre 2025 et 2030 en instituant des primes à la casse et au renouvellement des véhicules de transport routier de marchandises ayant au moins 20 ans d'âge et l'élargissement de ce programme pour l'ensemble des véhicules de transport routier.	Phase planification
Compétitivité logistique : Shift modal route vers rail : Il s'agit d'un programme qui vise la création de plates-formes logistiques multi-flux permettant la gestion rationnelle des flux de marchandises, l'optimisation d'intervention des modes de transport routier et ferroviaire en fonction de la nature de la marchandise et la minimisation la consommation en produits pétroliers.	Phase planification
Programme d'installation de centrales photovoltaïques dans les sites logistiques : Il s'agit du projet de construction de centrales solaires photovoltaïques, d'une capacité totale de 16 500 kWc sur les toitures des sites logistiques entre 2020 et 2030.	Phase planification
Amélioration de la maintenance et du contrôle technique des véhicules marchandises : Il s'agit de déployer des efforts de sensibilisation des opérateurs du secteur à la bonne maintenance et contrôle technique des véhicules en vue d'atteindre au moins 7% de réduction des émissions de GES. Cette mesure vise principalement le secteur formel en atteignant 20% de la flotte en 2019.	Phase planification

All of these measures have been established in parallel with the GEF Transport project and represent the bulk of GHG mitigation measures in the transport sector in Morocco.

In recent years, Morocco has experienced a sharp increase in emissions. Given the country's gradual economic growth, the goals of reducing its GHG emissions by 13% or even 32% are essential.

In order to reduce GHG emissions, Morocco has started with the evaluation of emissions. Indeed, several national inventories are carried out in the framework of national communications to the UNFCCC, including Morocco's third national communication in 2016 and the fourth in 2018. Morocco also prepared its first bi-annual report submitted to the UNFCCC in 2016, as well as its nationally determined expected contribution submitted to the UNFCCC in September 2016, consistent with Article 3 of the Paris Agreement. The update of the NDC is currently underway.

Thus, several projects have been put in place to significantly reduce the country's GHG emissions. More specifically, we can mention the implementation of tramways in the major cities of the kingdom, considered as one of the major projects to reduce GHG emissions in the transport sector. The use of public transport is encouraged to support a transition to less energy-intensive transport. The municipality of Marrakech has taken the decision to replace its conventional bus fleet with electric buses, with the objective of using zero diesel as of August 2017[11].

In addition, several actions and measures have been undertaken by METLE and aimed at mitigating GHG emissions from the transport sector and adapting its infrastructure to climate change, and low carbon development. The logistics sector has been the subject of a dedicated strategy, entitled "National Strategy for the Development of Logistics Competitiveness", among other things contributing to the reduction of 35% of CO2 emissions from the road freight transport sector, notably through the rationalization of the movement of goods throughout the Kingdom, and the improvement of the sector's performance. The implementation of this

[11] *Marrakech : Enfin, les bus électriques…*, Badra Berrissoule, L'economiste.com, le 11 août 2017, https://leconomiste.com/article/1016137-marrakech-enfin-les-bus-electriques.

strategy and the concretization of its emission reduction objective has been accompanied by the implementation of several initiatives, including the GEF Transport project, "integration of climate change in the national strategy for the development of logistics competitiveness and in the implementation of logistics platforms". The project aimed to integrate climate change considerations into this strategy and into the implementation of multi-flow logistics zones (MFLZs) and focused primarily on logistics zones in the Casablanca-Settat region. It has built a pilot approach containing various mitigation measures appropriate as a model NAMA project, with the intention of replicating it on other logistics zones in other regions of the Kingdom.

1.2. Objectives and scope of the Evaluation

Integration of climate change into the national strategy for the development of logistics competitiveness and the implementation of logistics platforms in Morocco

The objective of the project was to reduce GHG emissions in the logistics sector in Morocco, by developing the concept of low-carbon logistics, with an initial focus on the GC regional logistics scheme. The aim was to develop a pilot model based on a set of mitigation measures to be replicated in other LMAs in order to contribute to the overall objective of reducing CO2 emissions from road freight transport by 35% by 2020 compared to the 2009 baseline year.

The project has thus supported Morocco's efforts to reduce emissions from the freight sector and the various initiatives put in place. Indeed, the project examined the various policy instruments, measures and options for contributing to the reduction of emissions, taking into consideration the particularities of the sector, the insertion in the policy initiated by the country, and the various barriers that exist.

The project also aimed to strengthen the institutional and legal framework necessary for the implementation of the various activities and the pursuit of the various measures, including policy, regulatory and institutional framework for low-carbon development of the logistics sector in Morocco as well as for the development and implementation of a sectoral NAMA.

Reminder of the Terms of Reference and the methodology proposed by the consultants for the final evaluation mission

The UNDP office recruited in March 2021 an international consultant for the final evaluation of the project " Mainstreaming climate change in the national logistics strategy and roll-out of integrated logistics platforms ".

The objective of the final evaluation mission was to examine whether the project's objectives and intended results were achieved after five years of implementation, to identify factors that helped or hindered the project, to determine lessons learned, and to capitalize on this experience for other similar projects in the future. Recommendations to all project stakeholders are provided in this final evaluation report.

Specifically, the evaluation was able to:
(i) assess the status of the activities, (ii) estimate the extent to which the project achieved its objectives in terms of effects and impact, (iii) assess the adequacy of the means implemented to the objectives pursued, (iv) identify the implementation problems and assess the proposed solutions, (v) capitalize on the adjustments and/or reorientations of the activities, financing and working methods, (vi) propose mechanisms aimed at institutionalizing the project's achievements.

During the project evaluation mission, the consultants' tasks were as follows:

- Review of the project's basic documents, including the "project document" and its logical framework, as well as the project's annual reports;
- Analysis of the project's organization and institutional set-up, in order to assess its effectiveness and its degree of adaptation to the project's specificities and its natural and institutional environment;
- Assessment of the role and success of the project in mobilizing partners and target actors and the degree of their respective involvement in the implementation of project activities;
- Assessment of the progress made at the end of the project towards achieving the planned objectives, and analysis of the challenges;
- Review of the budget and financial management;
- Elaboration of relevant proposals and recommendations for an exit strategy for the project, addressing all identified issues.

In addition, the mission outlined and analyzed the interest and opportunity, if any, of a possible second phase of the project.

Scope

The final evaluation examines the project's performance against the expectations set out in the project's logical framework. It assesses the results against the criteria described in the Guidelines for Conducting Final Evaluations of UNDP-supported and GEF-funded Projects.

The scope of the evaluation is summarized as follows:

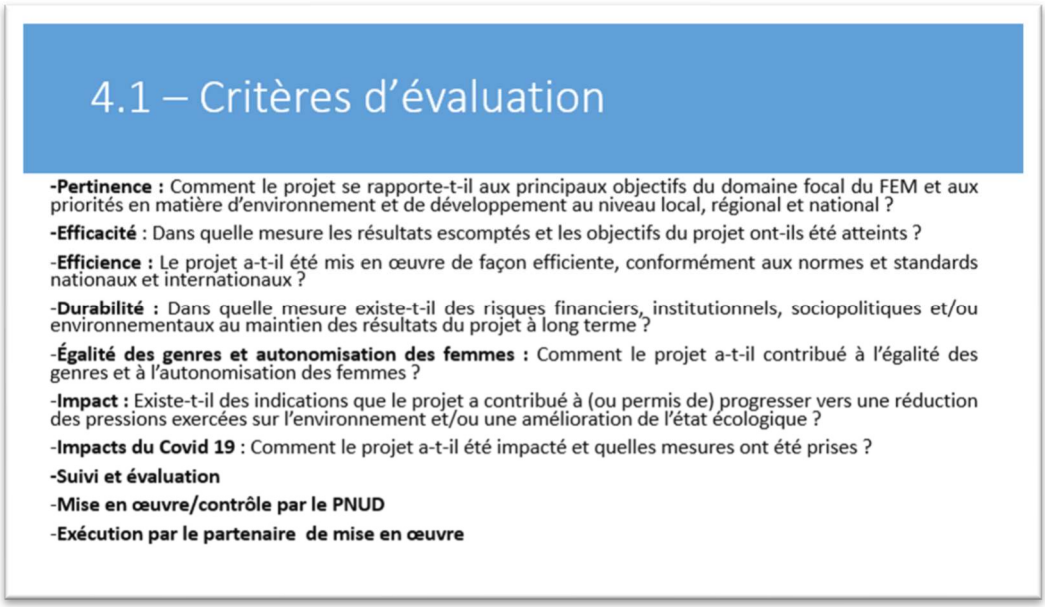
- Project design: the analysis focuses on consistency with priorities identified in national planning documents
- The institutional framework: the analysis will focus on the project's anchorage in the institutional framework, its governance with regard to its operation and its positioning in the government's overall system.
- The project's management results: This includes an assessment based on the criteria of relevance, effectiveness, efficiency, ownership by the country, sustainability and impact.

1.3. Methodology and scope

1.3.1. Preparation of the mission

The first stage was used to collect the necessary information, documents and data (methodological documents and reflections listed in the terms of reference), to prepare for the meetings with the main stakeholders and, more generally, to gain a good understanding of Morocco's position with regard to the challenges of integrating climate change into the logistics sector in Morocco.

This included the collection and bibliographic synthesis of the various documents available, as well as the preparation of a Powerpoint document (see the sample slides below) that was used during the interviews. This phase precedes the stakeholder interview phase.



1.3.2. Interviews: consultations and analysis of the first results of the final evaluation

At the end of the mission's preparation stages, the interviews serve to consult all of the project's stakeholders and to integrate the various elements useful for formulating recommendations regarding the assistance and development needs of the project being evaluated.

Interviews were conducted with stakeholders. These interviews took place from April 26, 2021 to May 12, 2021 with AMEE, several METLE Directorates, the *ANP*, the Department of Environment, SNTL, PMU, and NARSA (see Appendix D).

1.3.3. Finalising the report

The first draft of the report was prepared in May 2021 with the submission of a working paper to the National Project Coordinator. After interactions with stakeholders and final modifications, the first draft of the final evaluation report was submitted on May 27, 2021.

1.4. Data collection and analysis

Information was collected using the following appropriate tools:

- Document review: the consultant reviewed and sorted the most important documents to be consulted, to allow an applied exploitation of them:

Project management documents :

- *Prodoc*
- *Annual Work Plans (AWP)*
- *Steering Committee Report (CoPil)*
- *Combined expenditure reports (CERs)*
- *Mid-year and annual reviews*
- *PIR*
- *Mid-Term Evaluation Report ;*
- *Financial audit*
- *Project Management Unit (PMU) operating procedures*
- *Official reports for the validation of deliverables*
- *Co-financing letters*

Project technical documents:

- *Draft rules of procedure of the CTCC*
- *Three-year Action Plan 2021-2023 of the CTCC*
- *Draft CTCC operating charter*
- *Evaluation of the impact of the training of trainers in eco-driving*
- *Powerpoint: Initiative Entreprise Climat Maroc* - CGEM Evening debate on Transport, Logistics and CC: Challenges, risks and opportunities for companies[12]

- A diagnostic tool: the individual interview; this tool allowed stakeholders to express themselves on various aspects of the project such as effectiveness, sustainability, relevance, lessons learned and recommendations, etc.

1.5. Ethics and limitations of evaluation

The consultant has met the highest ethical standards and has signed the code of conduct (Appendix J). This evaluation is conducted in accordance with the principles set forth in the "Ethical Guidelines for the Evaluation of UNEG. The finalization of the report was done in two stages: i) the presentation of the first results of the evaluation in an intermediate document, including the results based on the usual evaluation criteria, and ii) after taking into account the comments, remarks, and other relevant information and data, the transmission of the final report.

[12] https://iecm.cgem.ma/wp-content/uploads/2018/02/1_2-Pr%C3%A9sentation-projet-GEF-Transport-Conf%C3%A9rence-CGEM-du-2-mai-2017.pdf

The final evaluation was conducted in accordance with the guidelines, rules, and procedures established by UNDP and the GEF as outlined in the UNDP Evaluation Guidelines for GEF-funded Projects[13]. The content of the report is in accordance with the terms of reference given in the annex and additional comments provided by UNDP-GEF. The original version was written in French for validation.

The evaluator has protected the rights and confidentiality of informants, interviewees, and stakeholders by taking steps to ensure compliance with legal and other relevant codes governing data collection and reporting. The evaluator also ensures the security of information collected before and after the evaluation and follows protocol to ensure the anonymity and confidentiality of information sources where appropriate. Information and data collected as part of the evaluation process are used only for the evaluation and not for any other purpose.

There are context-specific factors to the final evaluation of the project that are as follows:

- The impossibility of conducting a field mission given the health context
- The previous point leads to tight deadlines to carry out the evaluation in view of the diversity of activities, the wealth of information available and work and the multiplicity of actors.
- Some activities are implemented at the end of the project, whose impact will be visible in the medium term, and for which there is therefore a lack of hindsight.

2. Project description and development context

The specific objectives of the project were to introduce the climate change dimension into the logistics sector in Morocco, to develop the concept of low-carbon logistics, with a focus on the Casablanca-Settat regional logistics scheme as a pilot model, and finally to develop GHG emission mitigation measures and promote their replication in other areas in Morocco.

2.1. Starting of the project and duration

The start of the intervention took place on December 23, 2015. The project had an initial planned duration of 48 months (4 years). However, several factors delayed the project:

- The confrontation of the project's intervention strategy with the realities on the ground demonstrated an ambitious approach in terms of objectives and expected results. The alignment of a set of preconditions for project implementation at the institutional, legal, and financial levels required more time.
- Covid disrupted the project's implementation schedule and delayed the completion of many of the planned activities: the training of CTCC members was postponed from May to September 2020, the implementation of technical cooperation actions with foreign partners, particularly European ones, could not be carried out given the magnitude of the pandemic and the closure of borders, the promotion of NAMA Transport including advocacy and participation in events on climate change and climate finance in Morocco and abroad could not be carried out, as well as the capacity-building action for METLE senior managers on climate governance and climate finance. Finally, work on the installation of a photovoltaic power plant at SNTL's logistics platform in Mohammedia could not be started on schedule.

[13] http://web.undp.org/evaluation/documents/guidance/GEF/UNDP-GEF-TE-Guide.pdf

The project was therefore extended by 1 year and 4 months, for a total duration of 5 years and 4 months (end of project in April 2021). The project was implemented with a delay, but this did not have a major impact on the project, except for a delay.

The course of the project was as follows:

Table 4: Project progress

Key project dates	
Approval of the PIF	11/05/2013
CEO Endorsement	05/12/2015
Signature of the Prodoc / Start of the intervention	12/23/2015
Kick-off workshop	03/28/2016
Expected date of the mid-term evaluation	03/31/2019
Actual date of the mid-term evaluation	02/06/2020
Field mission in Rabat	12/16/2019
Expected date of the final evaluation	01/31/2021
Actual date of the final evaluation	05/15/2021
Originally planned closure of the project	12/31/2019
Closure of the revised UNDP-GEF project	05/15/2021

2.2. Background and problems the project aimed to solve

The transportation sector is the third largest energy consumer in Morocco, after the residential sector and industry. The sector depends almost exclusively on petroleum products (99%), which must be imported entirely and weigh heavily on the country's trade balance. The Ministry of Mines, Energy, Water and Environment estimates that fuel imports for the transport sector alone account for 8% of Morocco's total imports. Although fuel prices are the highest in the region (due to a concerted effort by the government to reduce fuel subsidies), the vehicle fleet is growing rapidly - by 6 percent per year between 2002 and 2010 - with considerable potential for future growth. Commercial vehicles account for 27 percent of the total fleet, of which about 70,000 are freight vehicles. The road freight sector is fragmented and characterized by old vehicles (28 percent are more than 15 years old), which are often poorly maintained, overloaded, and poorly utilized. Logistics costs are estimated by the government to be 20% of national value added, placing a burden on businesses and consumers and contributing to an increase of 1.7 million tons of CO_2/year of greenhouse gas emissions.

In order to improve the competitiveness of the logistics sector by reorganizing and optimizing the flow of goods, the Ministry of Equipment and Transport recently developed a National Logistics Strategy.

The strategy set three specific goals to be achieved by 2015: to reduce the weight of logistics costs in GDP from 20% to 15%, to accelerate GDP growth from 3% to 5% through streamlining and improving regulation of the sector, and to reduce CO_2 emissions from road transport by 35% from 2009 levels. A central element of the strategy was the development of a nationwide network of 18 logistics hubs (multimodal freight centers) in 70 locations in 18 cities, located near major production/consumption areas and major transport infrastructure (ports, highways,

and railroads). These multimodal freight centers are an extremely efficient way to achieve sustainable freight development. Consolidation, where shipments with the same origin and destination are grouped together in one vehicle, can significantly reduce the number of vehicles used; efficiency is improved on the return trip by being able to transport products to the freight center instead of running an empty vehicle; goods transported by truck over long distances can be transferred to rail for more efficient transportation; and large trucks and trains can transfer their shipments to smaller trucks for deliveries in urban centers, reducing GHG emissions, congestion and noise.

The Grand Casablanca (GC) logistics hub, the first in the planned national network, accounts for nearly one-third of the network's total capacity, with the region accounting for 38% of Morocco's industrial capacity, 46% of its employment and 50% of its GDP, as well as the country's largest port. The Greater Casablanca logistics platform will be composed of 8 sites forming a belt around Casablanca (figure 5 below).

Figure 5: Map of the Greater Casablanca logistics platform

The largest site of the Grand Casablanca logistics platform is located in Zenata, on the eastern outskirts between Casablanca and Rabat. The Zenata platform was opened in 2010 and today occupies 328 ha dedicated to container storage and transportation, grain and general logistics outsourcing; planned additions include a bonded warehouse, customs, a business center and transit systems. The hub is being expanded to accommodate an additional 60,000 square meters of warehouse space for dry bulk and refrigerated storage. The platform acts as an "inland port", linked to the port of Casablanca via a dedicated 20 km road (under construction) that bypasses the city center and via existing highways. ONCF (Moroccan National Railways) wants to build a rail depot, so that freight transported by road from the port (and other locations) can be transferred by rail for long-distance transport. The site is managed by a consortium consisting of ONCF, the Société Nationale de Transport et de Logistique (SNTL), the Autorité Nationale des Ports (ANP) and the Caisse de Dépôt et de Gestion (CDG), an autonomous public institution whose mandate is to catalyze investment in strategic economic sectors.

The Zenata site of the Grand Casablanca Logistics Hub is located within a larger development project, Zenata New Town (Figure 6 below). Dubbed the "first Moroccan and African ecocity," this 1,830-hectare urban project was originally intended to accommodate 400,000 inhabitants and 130,000 jobs per year by 2030. The development of the new city of Zenata is done in stages, with the construction of the "first development zone" (PZD). With a total area of 480 hectares, the PZD will accommodate 160,000 inhabitants by 2022 and will include shopping centers, a hospital complex, hotels, offices and a multimodal interchange hub consisting of a tramway and an urban light rail (RER). The new city is being implemented under the government's SNAT policy (Schéma National d'Aménagement du Territoire) by the CDG.

Figure 6: Map of Zenata

The baseline is therefore made up of three components: the National Logistics Strategy, the GrandCasablanca Logistics Platform (including the Zenata site), and the Zenata New Town. All of them had significant climate change mitigation gaps that the GEF project is helping to fill.

2.3. Objectives at the time of formulation and expected results

When the project was formulated in 2014 and in the first half of 2015, the stated objective was to develop logistics competitiveness and the implementation of logistics platforms in Morocco. This was presented in the logical framework of the project, to recall:

Project development objective: To contribute to a 35% reduction in GHG emissions from road freight transport

Immediate project objective: To operationalise the mitigation potential of the National Logistics Strategy through the deployment of integrated logistics platforms by the government under a NAMA.

Main indicators:

1. Number of tons of CO_2 reduced
2. Amount of energy produced from renewable sources (MWh/year)

3. Availability of a system in place for the use of climate finance
4. Number of operators aware of the benefits of eco-driving, fleet renewal and improved vehicle maintenance

Component 1: Strengthening national environmental arrangements for green logistics

Result 1: Institutions, public policies and regulations are strengthened for the low-carbon development of the transport sector in Morocco

Specific indicators:

- Availability of an institution for integrating low-carbon development in freight
- Availability of policy measures and regulations to integrate low-carbon development into logistics
- Percentage of vehicles in the road fleet register with relevant GHG data

- Output 1.1: Institutional strengthening and capacity development of the Ministry of Equipment, Transport and Logistics and the newly created Moroccan Agency for the Development of Logistics (AMDL)
- Output 1.2: Climate change mitigation dimension of the National Logistics Strategy clarified and implemented for the development of a low carbon regulatory framework for the logistics sector
- Output 1.3: A road fleet profile and country-specific emission factors are developed for Moroccan transport modes (road and rail), and used for scenario development
- Output 1.4: An inter-ministerial committee is established to promote emission mitigation policies in the transport sector
- Output 1.5: Knowledge sharing and communication activities related to GHG mitigation solutions in the transport sector are implemented

Component 2: Comprehensive mitigation programme for the Grand Casablanca Integrated Logistics Platform developed as a NAMA

Outcome 2: The Casablanca-Settat LFA network is developed as a model project for nationally appropriate mitigation action (NAMA) under the NPS

Specific indicators:
- Availability of a GHG inventory and MRV system at the Casablanca-Settat logistics platform;
- Design of the Casablanca-Settat logistics platform as a NAMA model for replication in the 17 other platforms.

- Output 2.1: GHG inventory and MRV systems designed and implemented for "NAMA" purposes
- Output 2.2: A NAMA designed for the implementation of 5 priority components (eco-driving training, operator awareness, modal shift, Euro 4 vehicle compliance and 1.5 MW PV roof top installation).
- Output 2.3: A baseline for modal shift (road to rail) is developed as a mitigation tool to promote replication.
- Output 2.4: A replication strategy for the other 17 logistics platforms is developed, based on the Casablanca-Settat model
- Output 2.5: A "Nested NAMAs" roadmap is developed to couple the NAMA of the Casablanca-Settat regional logistics scheme with the NAMA of the new Zenata Eco-City ("NAMA city"), an initiative to foster mitigation synergies within a robust and consistent GHG inventory and MRV framework

Component 3: Implementation of emission reduction in a NAMA framework through targeted investments
Outcome 3: The mitigation measure (NAMA) is made operational through investments in upgrading logistics zones in the framework of the Casablanca-Settat Regional Logistics Plan

Specific indicator:

- Number of GHG reduction measures operational through project-facilitated investments in logistics platforms in the Casablanca-Settat region

- Output 3.1: Partial GEF funding for 4 mitigation interventions outlined in the Casablanca-Settat regional logistics plan (eco-driving training, operator awareness, Euro 4 vehicle compliance, and installation of 1.5 MW PV panels on roofs).

The final evaluation reviewed all the products produced and their impacts. The monitoring indicators were analysed from the baseline situation of the logical framework.

2.4. Core indicators established in the logical framework and targets

Logical framework monitoring indicators were established at the time of project formulation to monitor the progress of project implementation and measure the achievement of the set results. These were formulated according to the GEF monitoring and evaluation criteria, following the SMART approach, which stands for Specific, Measurable, Achievable, Relevant, Time-bound. The baseline status of these indicators was assessed at the start of the project and is presented below:

Table 5: Indicators and values

Indicators	Basic situation	End of project target
1.Number of tons of CO_2 reduced	8 856 tCO_2 BAU reduced by newly introduced vehicles benefiting from the current METLE funding programme and environmentally friendly SNTL vehicles (2016).	88 914 tCO_2
2.Amount of energy produced from renewable sources (MWh/year)	0	2 466 MWh/year
3.Availability of a system in place to monitor and report on progress in reducing GHG emissions in the road and rail transport sectors	0	A system is in place to report on progress in reducing GHG emissions in the road and rail transport sectors
4.Number of freight transport operators aware of the economic and environmental benefits of eco-driving, as well as of improved vehicle maintenance	0	About thirty operators sensitized (1 strategic workshop and about thirty drivers of transport companies sensitized (1 workshop organized in Mohammedia) A digital communication campaign on eco-driving and its dissemination to social media.
5. Availability of an institution capable of ensuring the integration of low carbon development in the freight sector.	0 : No specific institution dedicated to the monitoring and development of GHG policies in the transport sector.	A specific institution is being set up as a CC Technical Committee in the transport and logistics sectors at METLE level and its capacity is

		being strengthened in monitoring and policy making for low carbon development.
6Availability of policy measures and regulations designed to integrate low-carbon development in the logistics sector.	0 : No policy or mitigation measures to help achieve the 35% emission reduction impact.	Policy measures are developed to help achieve the 35% emission reduction impact.
7. Percentage of vehicles in the road fleet register with relevant GHG data.	No specific system for emissions monitoring or low-carbon development exists at present 0%.	1 GHG inventory completed At least 1 regulation on low-carbon development is developed in the freight sector in Morocco 100% of the road fleet register has GHG data
8. Availability of a GHG inventory and MRV system at the Casablanca-Settat (CS) logistics platform.	No: No GHG inventory or MRV systems.	GHG inventory and MRV systems designed and supported by the CS NAMA.
9.Availability of the CS logistics platform designed as a NAMA model for replication in the other 17 platforms.	0 NAMA-DD exists for the CS logistics platform.	The NAMA Design Document (NAMA-DD) is validated by the established monitoring committee and submitted under the cover of the Ministry of Energy, Mines and Environment (Department of Environment) to the UNFCCC NAMA register. A reference methodology for the modal shift from road to rail is developed and tested by METLE.
10.Availability of an innovative "Nested NAMA Roadmap" framework is developed to link the CS Logistics Hub NAMA to the Zenata Eco-City NAMA ("City NAMA"), an initiative of Zenata.	0: No "Nested NAMAs" framework is developed	Validation of the roadmap for the development of the "NAMA nested" by the established monitoring committee.
11.Number of GHG reduction measures operationalised through project-facilitated investments in GC logistics platforms	0 MW of PV installed on the roofs of the Zenata site warehouses 5 trainers from approved training centres benefit from eco-driving training for trainers. 70% of SNTL's vehicles are less than 5 years old	1 MW of PV are acquired and installed on the Zenata site 102 trainers benefit from eco-driving training 1,450 bonuses are awarded for the renewal of goods transport vehicles

2.5. Key stakeholders

The project was funded by GEF and co-financed by METLE, AMDL, CDG, ONCF and SNTL. The GEF partner agency for the project was UNDP. UNDP acted as the executing agency in charge of project management, monitoring, evaluation and quality assurance. Local consultants and contractors (NGOs, private sector, etc.) were recruited by the PMU project team and by UNDP, in consultation with the project partners.

Table 6: Stakeholder overview

Stakeholders	Presentation and role in the project
METLE	**Project leader and designer of the pilot and integrated measure of the Casablanca-Settat Regional Low Carbon Logistics Scheme** This is the main body responsible for managing the transport sector in Morocco. METLE develops and implements, within the framework of the laws and regulations in force, the government's policy in the road, port, rail, air and maritime sectors. METLE has been the focal point of this project, as it is responsible for the consolidation of data within the national registers. The Ministry has also assisted in the discussion and coordination of policy, regulatory, fiscal and economic reforms needed to stimulate the development of GHG reduction actions in the freight sector. METLE led the process of knowledge sharing and communication around activities related to GHG mitigation solutions in the transport sector.
AMDL	**Key partner for the promotion of green logistics in Morocco** AMDL is the arm of the State for the implementation of the national logistics strategy. It is a public institution with legal personality and financial autonomy acting under the supervision of the State. Within the framework of the project, the AMDL ensures the coordination at the national level of actions to improve logistics competitiveness around specific projects such as logistics zones. Alongside the public authorities concerned, AMDL contributes to the encouragement of operators active in the field of logistics activities and their involvement in the implementation of training plans in this area and the monitoring of the performance and efficiency of logistics services. The Agency is also involved in the elaboration of legislative and regulatory proposals to promote the national offer in the logistics sector and organise the profession.
SNTL	**Pilot partner for the installation of a photovoltaic power plant at SNTL's logistics platform in Zenata** The *Société Nationale des Transports et de la Logistique* (SNTL) is the largest provider of road freight transport services in Morocco. Replacing the Office National des Transports in 2007, SNTL has become one of the main providers of logistics services at national level. Within the framework of the project, SNTL is involved in the design and implementation of certain activities, including training on eco-driving and the installation of PV panels.
ONCF	**Coordination of the modal shift from road to rail** The rail freight sector is characterised by the presence of a single operator: the Office National des Chemins de Fer (ONCF). This is a Moroccan public establishment in charge of the operation of the country's railway network structured around 6 poles, including a pole dedicated to freight and logistics. This operator manages the rail transport of passengers and goods. Within the framework of the project, the ONCF plays an important role in the implementation of a mechanism to promote the modal shift from road to rail in the freight sector and its replication in the logistics platforms.
ANP	**Key partner in the implementation of NAMA transport in the Casablanca-Settat region** The National Ports Agency (ANP) is one of the main partners at the national level that can support the implementation of actions related to the modal shift from road to rail and sea. It is a key actor in the implementation of the NAMA transport in the Casablanca-Settat region.

Departement of the Environnement	**Technical support for the GHG inventory and the design of the national measure** The Department of the Environment provided essential technical support during the project, particularly with regard to the GHG inventory carried out. It also supported the design of the national measure.
FT-CGEM	**Partner for the promotion and integration of climate change in the transport and logistics sectors** The National Federation of Road Transport (FT-CGEM) was created on 10 June 1993 to contribute to the development of the transport and logistics sector and defend the interests of its members. A member of the CGEM, the FNTR brings together 20 national organisations involved in the transport and logistics of people and goods by the various modes of transport at the urban, national and international levels. Within the framework of the project, and as a representative of the private sector, the FT/CGEM will be involved in the design of the legal, fiscal and economic instruments, and also in ensuring the necessary involvement of the private sector in the implementation of certain activities.
CDG-Développement et société d'aménagement de Zenata	**Partner in the transition to green logistics** CDG is a financial institution, established as a public institution in 1959. Its main mandate is to catalyse investment in strategic economic sectors. Its central role is also to receive, hold and manage savings resources which, by their nature or origin, require special protection. CDG is involved in the main structuring projects of Morocco and is today the first institutional investor of the Kingdom and a major actor of the national economy. Through its subsidiary, the *Société d'Aménagement de Zenata (*SAZ), CDG is piloting the project of the new eco-city of Zenata, which is part of a vast development plan in Morocco in terms of urbanisation. Indeed, SAZ is the pilot and project manager of this project. Through its role in the development of the new city of Zenata through SAZ, CDG plays an essential role in this project, particularly with regard to the coupling of the NAMA of the GC to the NAMA of the new city of Zenata. CDG also plays a leading role in future logistics platforms, with the potential for proportional replication.
AMEE	**Technical support for the development of energy efficiency actions in the transport and logistics sectors** The *Agence Marocaine de l'Efficacité Energétique* (AMEE) implements the Moroccan government's policy to reduce energy dependency through the promotion of energy efficiency. In the framework of this project, AMEE provided technical support for the development of energy efficiency actions.

3. Findings

3.1. Project design and formulation

3.1.1. Logical framework and results analysis

The logical framework of the project results is presented in Annex B of this document. The analysis is done component by component and focuses on the impacts and sustainability of the actions undertaken, as well as on the ownership of the project results by the beneficiaries. The structure defined by the project document is reliable, since it is based on a logical division between three components: a capacity building component (component 1), a component for the development of the ZLMF network as a model project (component 2) and a financial component on investments (component 3). The breakdown of the specific project objectives within the results framework would have been a plus.

The immediate objective of the project was "to operationalize the mitigation potential of the National Logistics Strategy through the deployment of integrated logistics platforms by the government under a NAMA". This is a concrete and ambitious goal. The specific objective is formulated in a verifiable manner supported by three indicators, each with a baseline and a target. The indicator can be considered "SMART" (Specific, Measurable, Appropriate, Realistic, and Time-bound).

Table 7: Specific objective indicators and evaluator's comments

Indicators	Assessment of the SMART nature of the indicators
1. Number of tonnes of CO_2 reduced ***Baseline:*** *8,856 tCO_2 BAU reduced by newly introduced vehicles benefiting from the current METLE funding programme and environmentally driven SNTL vehicles (2016).* ***Target:*** *88,914 tCO_2 reduced*	The indicator is SMART
2. Amount of energy produced from renewable sources (MWh/year) ***Baseline****: 0* ***Target****: 2,466 MWh/year*	The indicator is SMART
3.Availability of a system in place to monitor and report on progress in reducing GHG emissions in the road and rail transport sectors ***Baseline:*** *0* ***Target:*** *Yes: A system is in place to report on progress in reducing GHG emissions in the road and rail transport sectors*	The indicator is SMART and detailed.
Number of freight transport operators aware of the economic and environmental benefits of eco-driving and improved vehicle maintenance. ***Baseline:*** *0* ***Target****: About 30 operators aware (1 strategic workshop and about 30 drivers of transport companies aware (1 workshop organised in Mohammedia))* *A digital communication campaign on eco-driving and its dissemination to social media.*	The indicator is SMART, the evaluation method is well defined.

The project planned to achieve three outcomes presented in section 2.3 of this document. These outcomes were specific but ambitious given the pioneering nature and timeframe of the project. Each outcome is associated with indicators that allow for clear monitoring and

evaluation of the degree of achievement of these outcomes. There are several indicators for each outcome and these are specific.

Table 8: Results and dedicated indicators, and comments

Results	Indicators	Comments
Result 1: Institutions, public policies and regulations are strengthened for the low-carbon development of the transport sector in Morocco	1.1 Availability of an institution capable of ensuring the integration of low-carbon development in the freight sector. 1.2 Availability of policy measures and regulations designed to integrate low-carbon development in the logistics sector. 1.3 Percentage of vehicles in the road fleet register with relevant GHG data.	Clear and precise expected results and relevant related indicators.
Result 2: The Casablanca Settat MFLZ network is developed as a model project for nationally appropriate mitigation actions ("NAMA") in the framework of the national logistics strategy	2.1 Availability of a GHG inventory and MRV system at the Casablanca-Settat (CS) logistics platform. 2.2 Availability of the CS logistics platform as a NAMA model for replication in the 17 other platforms. 2.3 Availability of an innovative "Nested NAMA Roadmap" framework is developed to couple the CS Logistics Hub NAMA with the Zenata Eco-City NAMA ("City NAMA"), an initiative of Zenata.	Ambitious result, with precise indicators on the different stages of development of the network.
Result 3: The NAMA is made operational through investments in upgrading logistics zones in the framework of the Casablanca Settat Regional Logistics Plan	3.1 Number of GHG reduction measures operationalised through project-facilitated investments in GC logistics platforms	Ambitious result and relevant and accurate indicator.

The project framework anticipated 11 products distributed around the three components, as presented in Section 2.3 of this document. Most of the products were clearly described but were very ambitious for several reasons:

- Their complexity (operationalizing NAMA Transport was complex),
- Their need for significant financial resources (e.g. multi-flow logistics zones, fleet renewal),
- The need for a revised legal framework (e.g. eco-driving),
- The realization of pilot actions in the field (e.g. photovoltaic panels on the roofs of the Zenata warehouses impacted by SNTL's internal difficulties),
- Their link with very ambitious projects (the NAMA linked to the eco-city of Zenata for example).

3.1.2. Assumptions and risks

At the time of formulation, project assumptions and risks were identified. These included

Policy and regulatory risks: The development and implementation of the national logistics strategy has been significantly delayed. As a result, in 2020, it was recommended that the proposed low-carbon policy options and regulatory improvements be negotiated with the private sector before submission to the government approval process. In addition, the lack of a national regulatory framework on “net metering” was identified as a risk.

The risk of low commitment to the project: Limited stakeholder engagement in data collection and validation of NAMA-DD was mentioned, due to a lack of skills and awareness, and was considered at the mid-term review as an adoption risk. The AMDL, which had only recently been created, was in a transitional phase and was building its working teams, which required time for all of its staff to become familiar with the various issues and themes, necessary in order to increase its capacity to coordinate the implementation of the various logistics strategy projects.

Financial risks: A lack of interest from private banks to participate in the road fleet renewal system was presented as a financial risk. In addition, there was a risk that private road haulage companies would resist participating in mitigation measures such as improved vehicle maintenance but also eco-driving training. Indeed, private sector transport companies, and in particular small companies, saw this as additional costs associated with fleet and driver improvement measures.

Economic risks: The potential occurrence of dry spells in the climate affects the agriculture sector as a key driver of the national economy.

Environmental risks: The renewal of the fleet will make the old models obsolete. These will present a risk of greenhouse gas leakage and potentially of environmentally unfriendly disposal.

Another risk was **the potential for replication** of the project on other platforms. Indeed, if the other logistics zones planned by the remaining regional schemes were not realised, this could hinder the replication potential of the project.

The lack of adequate and reliable market data to facilitate the monitoring of project impacts and the planning of new policy measures was a risk to be taken into account.

Lack of low-carbon development capacity in the sector to carry out the project and support the mainstreaming of its results. One of the main risks to the development of this concept was the commitment of partners to the implementation of the MRV system. Indeed, due to the high atomicity of the sector, some data remained unknown and the quality of the available information was not always reliable and optimal. The commitment of the various partners at this level was an essential link in the implementation of the MRV system and the assurance of

monitoring the elements that were fundamental to the success of the project. Fiscal risks were also present, notably with regard to the lack of interest from private banks to support the road freight fleet renewal plan, the lack of fiscal incentives available for structuring the informal sector, etc.

It would have been relevant to add a risk related to the over-ambitious nature of the project, pointing out that the support from project resources and government resources, as well as the expertise and time allocated to the project, would then prove to be insufficient to implement the changes required by the project strategy.

3.1.3. Planning for stakeholder participation

The project document (ProDoc) provided an analysis of the stakeholders that could be included in the project, their capacities, and the support they could provide for the planned activities. At the time of project formulation:

- There was little coordination among institutions
- The different institutions were willing to interact more
- The capacities of the institutions needed to be strengthened in the area of climate change.

This assessment allowed, in a second step, the cooperation with these stakeholders, with the institutions and with the private sector. For each of the partners identified in the project document, the objectives and modalities of the future collaboration were proposed.

The PMU was set up within METLE, and charged with managing the implementation of the project under the direct supervision of the National Project Director and the Steering Committee. The Steering Committee was responsible for overseeing the implementation of the project activities, coordination with other ministerial departments and institutions.

The ProDoc also detailed the roles and responsibilities of the Steering Committee, the PMU, and the Monitoring Committee.

In practice, these working groups were well established and allowed for cooperation among stakeholders and coordination among the various institutions. A participatory approach was used throughout the project.

3.1.4. Links between the project and other strategies and plans in place

In addition to the commitment of the stakeholders, it should be recalled that the project's objective was fully in line with the government's efforts and the various strategies and plans in place. At the top of the list is the national logistics strategy which targets a 35% reduction in CO_2 emissions from road freight transport.

The project also responded to the national vision in terms of combating climate change announced in the Moroccan Climate Change Policy (PCCM). The project thus fitted into the economic and environmental pillars of the PCCM vision, which focused on 1) the

implementation of a green and inclusive economy and 2) the integration of the environment into the core concerns of socio-economic and territorial development. In addition to this policy, the project was fully consistent with a number of national strategies and plans, including the National Plan for Combating Global Warming (PNRC) and the 2014 Green Investment Plan.

The project was in harmony with the UNDAF, in particular Goal 5 on environment and sustainable development which has four outcomes:

- Output 5.1: Key stakeholders are supported to align national and sectoral strategies with the Charte nationale de l'environnement et du développement durable (CNEDD);
- Output 5.2: Territorial development plans and projects in target areas are implemented, taking into account the provisions of the CNEDD;
- Output 5.3: Capacities for developing and coordinating CC mitigation and adaptation strategies and programmes and for managing natural and technological risks are developed and strengthened;
- Output 5.4: The capacities of key actors to access the fund are strengthened to support the operationalization of the CNEDD.

More specifically, the actions carried out by the project were aligned with national strategies and programmes, namely:

- Fleet renewal: the fleet renewal programme launched by the Ministry in 2008 (1,791 renewal premiums and 865 scrapping premiums over the period 2008-2018), for a total amount of €31.10 million. 31.10 million. This programme has benefited more large transport companies and less small transporters due to the restrictive eligibility.
  In this context, the 'truck renewal' action proposed in NAMA is a continuation of METLE's initiative to improve the efficiency of vehicles older than 20 years through subsidies for the purchase of a new truck.
- Eco-driving: the driver training programme, in partnership with METLE and the industry, has developed a professional training course, including environmental safety, for interested drivers to obtain a professional driver's licence (professional driver's card). The vehicles concerned are: vehicles with an authorised gross vehicle weight exceeding 3,500 kg; the transport of goods for hire or reward or for own account; breakdown vehicles.

Two types of training were offered:

1. Minimum Initial Qualifying Training (FQIMO): The administration issues a professional driver's card to those who have successfully completed the Minimum Initial Qualifying Training (Article 40 of the Highway Code);
2. Compulsory Continuous Training (FCO): Any holder of a professional driver card must follow, every five (5) years, for the renewal of this card, continuous training during the last year of this period, (Article 41 of the Highway Code).

The current legal framework concerns safety and rational driving and does not include eco-driving. As eco-driving is currently optional, only a few professional drivers have been trained in eco-driving (339 drivers have been qualified under the AMDL PME Logis programme and a pool of 102 trainers trained under the GEF-Transport project).

In this context and based on the analysis of the legal and regulatory texts governing professional driving in Morocco and the international experiences brought closer to the context of the country, a draft revision of the annexes N° VI, IX and X of the decree n° 2713-10 of 23 December 2010 relating to professional driving as amended on 11 July 2019, has been drawn up, within the framework of the GEF-Transport project, in close consultation with the stakeholders (DAAJ, DTTL, sector professionals), to make eco-driving training compulsory for professional road transport drivers.

According to NARSA, the Road Safety Academy, the large road safety and education centre is being built in Benslimane (Casablanca-Settat Region) with a budget of 14.54 million euros. This centre will be equipped with 3 simulators, one of which will be dedicated to eco-driving training for goods transport. In terms of training equipment, NARSA had already financed the acquisition of 3 simulators, for a total cost of 1.3 million euros, to equip 3 public institutes among 8 centres specialised in road freight transport of the Office de Formation Professionnelle de Technologie (OFPPT), namely in Tangiers, Casablanca and Agadir.

Energy Efficiency: The National Strategy of Energy Efficiency by 2030 entrusted to AMEE has as an objective the reduction of final energy consumption by 25% in 2030 and of which the transport sector constitutes the major lever with a reduction ambition of 20% by 2030.

3.2. Implementation of the project

3.2.1. Adaptive management

Regarding the adaptive management of the project, a major effort was undertaken to adapt the project activities to the constraints of the local context and to the objectives of improving project performance. From the third year on, the reasoning was done by thematic axis rather than by product. Several activities were synergized to pool efforts and encourage complementarities. Some activities were revised to reduce redundancies, other objectives were lowered because they were too ambitious in terms of time and local context; this is notably the case of the activities related to NAMAs linked to the ecocity, where the initial objective of producing 1.5 MW of PV was lowered to 1MW. A reorientation of the project was also carried out at the methodological level, for the realization of the GHG inventory: the IPCC (Intergovernmental Panel on Climate Change) approach was to be used at the beginning and finally the UNDP accepted the COPERT V (Computer Program to calculate Emissions from Road Transport) approach, carried out by CITEPA, which proved to be more suitable for the project, and which allowed to refine the data for the calculation of the emission factor for each kWh produced in the freight sector. This was a much appreciated adaptation during this project.

Finally, the project eventually moved towards a national NAMA Transport, whereas it was originally intended only to develop a Casablanca-Settat NAMA. The Casablanca-Settat region should serve as a model for the national NAMA, and reinforce the long-term sustainability of the GEF Transport project.

3.2.2. Project management and effective stakeholder participation

The ProDoc presented in detail the articulation of the different stakeholders in the project. The role and responsibilities of the different entities were specified. There was some resistance at the beginning of the project because of its innovative nature and its strategic sectoral issues with partner institutions. However, a consensus was finally reached following sensitization efforts that led to a convergence of interests. All partners seem to be satisfied with their involvement in the project and mention a participatory approach and a strong sense of ownership. Institutional partners benefited from capacity building on climate change and the project encouraged them to continue in this direction.

The project management structure was also presented in the ProDoc, including

- **The Steering Committee**: this includes the Directorate of Road Transport and Safety (DTRSR) and the Moroccan Agency for Energy Efficiency (AMEE) ; 5 meetings of the Steering Committee have been organized: March 28, 2016, March 28, 2017, March 8, 2018, February 11, 2019 and February 25, 2020;
- **The National Project Director**: this position has been occupied by Jamal Radan and then by Adil Bahi from May 21, 2019;
- **The Monitoring Committee**: thematic monitoring committees have been set up, as well as a steering committee. About 30 meetings of the Monitoring Committee have been held.
- **The Project Management Unit**: the PMU has been very professional throughout the project, very involved and has made a lot of effort to federate the different actors of the project.

On the technical and strategic levels, the project partners were well involved and were able to take ownership of the project properly. However, there was a lack of efficiency due to the presence of a large number of partners involved at the technical and operational level, especially during meetings that could have contributed more constructively to the deliverables if they had not been organized only as a formality. Finally, in 2020:

- AMEE wanted to acquire a simulator for eco-driving and launch training sessions in the Marrakech platform,
- AMEE wanted to integrate the technical prerogatives in the new buildings for the installation of PV panels,
- The SNTL wanted to continue its commitment to the green economy, particularly through the construction of platforms in line with the requirements of reducing GHG,
- The ONCF wanted to support the strengthening of piggybacking and modal shift.

3.2.3. Financing the project

The initial total budget for the project was USD 123,656,961: USD 123,656,961, with a GEF contribution of USD 2,474,429, a METLE contribution of USD 7,955,000, an AMDL contribution of USD 3,300,000, a CDG contribution of USD 94,300,000, an ONCF contribution of USD 6,800,000, and a SNTL contribution of USD 8,427,532.

The planned GEF/UNDP budget was spent as programmed. The pace of disbursements was delayed but respected in view of the planned activities.

Table 9: Amounts allocated by co-financing sources in USD

Designation	Amount of the contribution in USD	Description of the contribution		
Total resources required	123 556 961	GEF: 2 274 429,00 USD Total cofinancing: 121 282 532 USD In cash METLE: 7 955 000 USD AMDL: 3 300 000 USD CDG: 94 300 000 USD ONCF: 6 800 000 USD SNTL: 8 427 532 USD UNDP: 200 000 USD In kind METLE: 100 000 USD SNTL: 200 000 USD		
Total allocated resources	92 244 289,25 (minimum)	GEF: 2 474 429,00 USD Total cofinancing: 89 769 860,25 USD In cash: METLE: 7 955 000 USD AMDL: 4 819 470 USD CDG: N/A ONCF N/A SNTL: 8 427 532 USD UNDP: 359 801 USD in kind: METLE: 100 000 USD SNTL: 200 000 USD		
GEF	2 274 429,00			
Co-financings				
METLE	7 955 000,00	Development of a road connection for the ZENATA logistics zone.	Work in advanced stages of completion	Budget used
AMDL	3 300 000	– Market studies ; – Structuring of projects related to the first logistics zones in the different regions of the Kingdom; – Studies on the structuring of urban logistics, which contributes directly to result 2 of the Project	Realized	Budget used
CDG	94 300 000,00	Contribution to the development of the mobility of the ecological city of ZENATA.	The development of the city is underway, but the development of mobility has not been completed. An ecological footprint calculator simulator developed	? access to information is difficult to assess
ONCF	6 800 000,00	– Rail transport of containers along the Casablanca-Marrakech link with a dry port in Marrakech acting as an integrated bimodal service terminal (rail/road); – Rail transport of containers along the Casablanca-Tangiers link with a dry port in Tangiers as an integrated bimodal service terminal (rail/road)	The connections are made. The expropriation of land for the construction of the logistics platforms has been completed. Negotiations with operators are underway, depending on market supply and	Budget used

		– Rail transport of containers along the Casablanca-Fez link with a dry port in Fez as an integrated bimodal service terminal (rail/road).	demand for the size of the PL.	
SNTL	8 427 532,00	– Contribution of USD 2,727,532 for the acquisition and installation of 1.5 MW photovoltaic panels on the Zenata site; – Contribution of USD 5,700,000 for the development of a road connection for the ZENATA logistics zone.	1,153,458 (source: contract for the work awarded to the contracting firm). 5,611,672: work in progress	In use
PNUD	200 000	Contribution to project management	200,000 allocated mainly to project management costs (salaries of the project team).	Budget used
Other funding (in kind)				
METLE	100 000,00	Contribution to Project Output 1 "Institutions, public policies and regulations are strengthened for the low-carbon development of the transport sector in Morocco".	173,017: provision of premises for the project team including electricity, water, internet, cleaning service, and contribution of PMU members on a part-time basis to the implementation of the project, services offered by the Directorate of Information and Communication Systems for the supervision of the installation and deployment of the applications developed by the project and the management of their access to designated users.	Budget used
SNTL	200 000,00		200,000: provision of training rooms and equipment and contribution to the implementation of the communication campaign dedicated to eco-driving organised by the project.	Budget used
Total Cofinancing	**121 282 532,00**			

The analysis of the expenditure summary table below confirms an overall disbursement rate of 100% as of 16 May 2021, however, this rate varies according to the funding sources (UNDP/GEF: 100%, co-financing 75%).

Table 10: Total budget at completion by 30 June 2021 and level of expenditure

Source of funding	Amount allocated	Amount committed	*Implementation rate*
UNDP/GEF	2 274 429	2 474 429	100%
Cofinancing	121 282 532	89 769 860,25	75%
Total (USD)	123 556 961	92 244 289,25	76%

3.2.4. Monitoring and evaluation: initial design and implementation

The ProDoc established a monitoring and evaluation framework for the project. The monitoring and evaluation requirements were mostly met during this project.

These include:

- A start-up workshop on March 28, 2016 with representatives of the various stakeholders (public institutions, private sector, transport sector professionals) This workshop allowed for the presentation of the project, its objectives and activities as well as the annual work plan. The operationalization of the CoPil has thus taken place.
- The realization of semi-annual and annual reviews (the ProDoc had planned quarterly reviews) with detailed Powerpoint presentations on the project's progress, results, risks and recommendations for the future.
- The realization of annual narrative reports describing the results according to the indicators and targets of the project
- The drafting of annual PIRs
- The realization of a micro-evaluation in 2016
- A financial audit conducted by the Court of Auditors for the 2017 project year
- The drafting of a final report in 2018
- A mid-term evaluation in February 2020 (this was delayed)

The follow-up could have been more precise by adding documentation in the reports concerning in particular:

- Problems encountered and solutions found
- Lessons learned from the project
- Changes made to the project, i.e., adaptive management of the project

These points were added in the last reviews, taking into consideration the mid-term evaluation. A lot of documentation was produced which ensured a good follow-up of the project. At the time of the mid-term evaluation, the total implementation rate of the project was around 75%, with several important activities finalized in 2019 (establishment of the CTCC, GHG inventory, MRV system, modal shift survey, centralized data collection system).

3.2.5. Coordination between UNDP, other implementing partners and the implementing partner

UNDP was the quality assurance body for this project.

UNDP regularly monitored the PMU and accompanied and supervised the project's activities and results. In particular, it reviewed the progress of the project through Steering Committees, mid-year and annual reviews and contributed to the drafting of the PIR each year to assess risks, the achievement or non-achievement of target objectives and annual achievements.

UNDP also validated the annual work plan as well as the budget, the preparation of the ToR and the project deliverables. It also attended the CoPil meetings. A procedural process allows UNDP to be transparent and accountable, although this may take some time for partners to adjust.

In addition, exchanges and effective collaboration have been developed with the GIZ project (Deutsche Klimatechnologie initiative or DKTI - an energy efficiency project that aimed to increase energy efficiency, particularly in the transport sector), notably by capitalizing on the GIZ project through the Climate Promise initiative, which is a continuation of the GIZ project.

However, the desire to coordinate with the GIZ energy efficiency project in Morocco (DKTI) did not succeed, in particular because of the attitude of GIZ. This project aimed to increase energy efficiency, particularly in the transport sector, and coordination could have helped to capitalize and strengthen efforts.

3.2.6. Cross-cutting aspects: nature of the beneficiaries and gender mainstreaming

Gender sensitivity was generally respected during this project, although the freight transport sector remains very male-dominated in Morocco. Out of 102 trainers trained in eco-driving, 4 women were trained.

However, gender balance was respected in the various project bodies and workshops. The CTCC also respects gender balance, with one woman playing a central role and one man acting as a substitute, or vice versa. 50% of the women in the PMU have benefited from capacity building on climate change, and 40% of the members of the project's thematic monitoring committees are women.

3.1. Results of the project

The results of the project evaluation were derived from stakeholder consultations and a literature review. In parallel to these consultations, the evaluation focused on the analysis of the results in the form of deliverables.

3.1.1. Overall results

The project document, as originally developed, is ambitious and corresponds to the country's concerns. The final evaluation of the project shows that the majority of the results were achieved. Some activities were implemented effectively and led to very satisfactory results, while others were delayed.

The review of available documents and interviews with stakeholders highlighted the following results in terms of successes and failures of the activities implemented by the project.

a) Evaluation of results and outputs

Objective: Operationalize the mitigation potential of the National Logistics Strategy through the deployment of integrated logistics platforms by the government under a NAMA

Indicator	End of project targets	Level actually reached
1. Number of tons of CO_2 reduced	88 914 tCO_2	Greenhouse gas emissions reduced by 22,922 tCO2 for the PV solar plant, and by 113,517 tCO2 for the eco-driving measures. This figure is 30% higher than expected, given the active and increased participation in training. If NAMA is implemented: - 18,322 tCO2 for fleet renewal - 872 756 tCO2 for modal shift - 491,373 tCO2 for improved maintenance and technical control of freight vehicles
2. Amount of energy produced from renewable sources (MWh/year)	2 466 MWh/an	The photovoltaic power plant is under construction and is expected to be operational in September 2021. The photovoltaic power plant is under construction and the costing can only be done after it is operational (expected in September 2021). The figure 2466 MWh/year is estimated on the basis of the study.
3. Availability of a system in place to monitor and report progress in reducing GHG emissions in the road and rail transport sectors	Yes: A system is in place to report progress in reducing GHG emissions in the road and rail transportation sectors	Developed, installed and functional system.
4. Number of freight transport operators aware of the economic and environmental benefits of eco-driving, as well as of the improvement of vehicle maintenance.	About thirty operators sensitized (1 strategic workshop and about thirty drivers of transport companies sensitized (1 workshop organized in Mohammedia)) A digital communication campaign on eco-driving and its dissemination to social media.	About thirty operators sensitized (1 strategic workshop and about thirty drivers of transport companies sensitized (1 workshop organized in Mohammedia)) A digital communication campaign on eco-driving and its diffusion to social media.

COMPONENT/OUTCOME 1: Institutions, public policies and regulations are strengthened for low-carbon development of the transport sector in Morocco

Indicator	End of project targets	Level actually reached
5.Availability of an institution capable of ensuring the integration of low-carbon development in the freight sector.	Yes: A specific institution is being established as the CC Technical Committee in the transport and logistics sectors at the METLE level and its capacity is being strengthened in monitoring and policy making for low carbon development.	The CC Technical Committee was established by decision of the Minister on May 20, 2020, and its members were appointed and trained. In addition, a workshop to support the operationalization of this committee, organized during the period from 7 to 9 April 2021 and its work was devoted to: • The pre-validation of the rules of procedure of the CTCC; • Pre-validation of the CTCC's operating charter;

		• The preparation of the working and governance tools of the CTCC; • The development of the three-year work plan 2021-2023; • The proposal of the CTCC's operating budget and potential funding resources.
6. Availability of policy measures and regulations designed to integrate low-carbon development in the logistics sector.	Yes: Policy measures are developed to help achieve the 35% emission reduction impact.	Policy measures are proposed following a feasibility study. A regulatory, institutional, and financial framework for the promotion and implementation of these measures to mitigate GHG emissions in the Moroccan freight sector has been proposed, delivered, and validated.
7. Percentage of vehicles on the road fleet register with relevant GHG data.	1 GHG inventory completed At least 1 low-carbon development regulation is developed in the freight sector in Morocco. 100% of the road fleet register has GHG data.	The GHG inventory is completed in 2017 and has enabled the development of the centralized system (MRV). This inventory is updated for the years 2018 and 2019 and its results are available to designated and trained users. Policy schemes and measures for GHG emissions mitigation in the freight sector in Morocco have been developed and validated. These schemes were developed based on the results of a feasibility analysis of prioritized measures for GHG emissions mitigation in the freight sector in Morocco conducted under the project. A draft revision of Annexes N° VI, IX and X of the decree n° 2713-10 of December 23, 2010 relating to professional driving as amended on July 11, 2019, has been developed in close consultation with stakeholders to make eco-driving training mandatory for professional road transport drivers. 100% of the road fleet register has GHG data.

Output 1.1: Institutional strengthening and capacity building of METLE and AMDL.

Institutional strengthening has been developed, notably with the creation of the Climate Change Technical Committee (CTCC). A regulatory, institutional and financial framework to promote the implementation of GHG mitigation measures has been validated.

Output 1.2: Climate change mitigation dimension of the National Logistics Strategy specified and implemented for the development of a low-carbon regulatory framework for the logistics sector.

A CC governance framework has been developed, with the creation of an Equipment/Transport/Logistics Climate Mission within the Ministry's General Secretariat and the creation of the CTCC. Management and governance tools have been developed and mechanisms and instruments for mitigating GHG emissions in the freight sector in Morocco have been validated.

Output 1.3: A road fleet profile and country-specific emission factors are developed for the Moroccan transport modes (road and rail), and used for scenario development.

A GHG inventory of the road and rail freight fleets was developed. A decision support tool "centralized data collection system for road and rail fleets and calculation of their GHG emissions" has been developed and is operational.

Output 1.4: A technical committee on climate change in the transport and logistics sectors at the METLE level is being set up to promote emission mitigation policies in these sectors.

The Climate Change Technical Committee has been set up and allows for the sustainability of the integration of CC in the planning process. The Minister has approved its creation and the appointment of its members. This allows for consistency between the achievements initiated by the GEF-Transport project and those of METLE, as well as promoting their replication. It also facilitates access to climate financing opportunities, particularly for the implementation of the NAMA developed.

Output 1.5: Implementation of knowledge sharing and communication around activities related to GHG mitigation solutions in the transport sector.

A GEF-Transport project web platform was developed, as well as a project presentation brochure; 3 issues of Newsletter were shared. In 2017 and 2018, institutional brochures were developed and shared and an institutional film capitalizing on the project was produced. Finally, a press announcement was developed and circulated in 3 newspapers: La Vie éco, l'Économiste, Sabah. Communication and knowledge sharing around the activities related to GHG mitigation solutions in the transport sector were thus well achieved.

COMPONENT/OUTCOME 2: The Casablanca Settat MFLZ network is developed as a model nationally appropriate mitigation action ("NAMA") project within the framework of the national logistics strategy.

Indicator	End of project targets	Level actually reached
8. Availability of a GHG inventory and MRV system at the Casablanca-Settat (CS) logistics platform.	Yes: GHG inventory and MRV systems designed and backed by the CS NAMA.	GHG inventory and MRV system designed and supported by the Transport-Logistics NAMA.

9.Availability of the CS logistics platform designed as a NAMA model for replication in the other 17 platforms.	Yes: The NAMA Design Document (NAMA-DD) is validated by the monitoring committee established and submitted under cover of the Ministry of Energy, Mines and Environment (Environment Department) to the UNFCCC NAMA registry.	The Transport-Logistics NAMA Design Document is validated by the established monitoring committee.
10.Availability of an innovative "Nested NAMA Roadmap" framework to couple the CS Logistics Hub NAMA with the Zenata Eco-City NAMA.	Yes: A reference methodology for modal shift from road to rail is developed and tested by METLE. Validation of the roadmap for the development of the "Nested NAMA" by the established monitoring committee.	The reference methodology for the modal shift from road to rail has been developed. The web application was developed and installed on the METLE server. The validation of the roadmap for the elaboration of the "nested NAMA" by the monitoring committee was not instituted due to the non-collaboration of the partner (CDG): difficulty to access the data.

Output 2.1: GHG inventory and MRV systems designed for "NAMA" purposes.

A methodology was developed and validated for the collection of data needed to profile road and rail freight fleets in 2017. A national survey was then conducted, followed by the national GHG inventory in 2018 using the COPERT 5 method for the road fleet and the carbon footprint for the rail fleet. Finally a centralized system for collecting data from the road and rail fleets and calculating their GHG emissions was developed, installed, and is thus functional since August 2019.
Therefore, the GHG inventory and MRV systems designed for "NAMA" purposes have been successfully completed.

Output 2.2: A NAMA designed for the implementation of 5 priority components (eco-driving training, operator awareness, modal shift, Euro 4 vehicle compliance, and 1 MW PV rooftop installation).

A roadmap for the preparation of the NAMA was developed and shared with the project partners. The NAMA concept note has been developed.
However, funding from the NAMA facility was not accepted at the end of the project.

Output 2.3: A baseline for modal shift (from road to rail) is developed as a mitigation tool to support replication.

A baseline methodology for modal shift from road to rail has been developed, the application has been developed.

Output 2.4: A strategy for replicating the NAMA CS model project on the other 17 logistics platforms at the national level is developed.

The delay in the implementation of the national logistics strategy (14% completion rate over 10 years) and the lack of visibility have prevented the development of a replication strategy for the NAMA model project for the 17 platforms planned under the national strategy.

Nevertheless, replication is implicit in the NAMA document. The actions in the NAMA are national in scope and are being implemented in the Casablanca-Settat Region (CSR) as a pilot project for the implementation of the NAMA. The RCS alone accounts for nearly 59% of these emissions to be avoided, or 3.5 million tons of CO_2.

Output 2.5: A "Nested NAMAs" roadmap is developed to couple the CS Regional Logistics Scheme NAMA with the NAMA for the new Zenata Eco-City ("City NAMA"), an initiative to foster mitigation synergies within a robust and consistent GHG inventory and MRV framework.

The roadmap for harmonizing the Design of a "Nested NAMA" framework has not been developed. The implementation of the new Zenata Ecocity project was delayed, in part due to a lack of collaboration from the partner (CDG Capital): there were difficulties in accessing data to analyze the relevance of the roadmap development to the Zenata Ecocity project's level of progress.

COMPONENT/OUTCOME 3. The mitigation measure ("NAMA") is made operational through investments in upgrading logistics zones within the framework of the Casablanca Settat Regional Logistics Plan

Indicator	End of project targets	Level actually reached
11. Number of GHG reduction measures operationalized through project-facilitated investments in GC logistics platforms	1 MW of solar PV are acquired and installed at the Zenata site 102 trainers benefiting from eco-driving training 1450 premiums are awarded for the renewal of goods transport vehicles	The photovoltaic power plant is under construction (a delay was caused by SNTL). 102 trainers benefited from eco-driving training in 2017 An impact evaluation was conducted in 2021 (9811 drivers trained by trainers who benefited from the training provided by the GEF-Transport project) and its results were shared with the partners. 1,450 bonuses are awarded for the renewal of freight vehicles (a verification is underway with the relevant management to confirm this figure and have evidence to delay the evolution over the GEF-Transport project period).

Output 3.1: Partial GEF funding for 4 mitigation interventions outlined in the regional SC logistics plan:

- *Eco-driving training*

- *Awareness raising for operators*
- *Installation of 1 MW of PV panels on roofs*
- *Support for vehicle compliance with the Euro 4 standard*

102 trainers have been trained in eco-driving, and work has begun on the installation of 1 MW of PV on the Zenata site. The panels are not yet installed on the roofs at the end of the project, but the work is in progress.

b) Evaluation of field activities and capacity building

A field mission took place from the 16th to 20th of December, 2019 in Rabat to meet with key project stakeholders. This mission made it possible to collect and document a large amount of information on the successes and difficulties encountered, the results achieved and the project's perspectives. Individual interviews were conducted, as well as a focus group in order to collect information and write the mid-term evaluation report.

The interviews conducted for this evaluation confirmed the satisfaction of the project partners with their involvement in the project and the capacity building from which they benefited. Indeed, capacity building actions have been carried out with the organization of 3 training sessions allowing institutional partners and beneficiaries to upgrade their skills and support them in playing their role in GHG mitigation. A training session dedicated to METLE's resource persons and its partners allowed the training of 100 people, including 11 women. This training contributed to a better understanding of climate change concepts and approaches, as well as their integration in the transport and logistics sector. A study tour was conducted in France for the same purpose by 16 beneficiaries, including 6 women, and 102 trainers were trained in eco-driving.

c) Communication effort and follow-up evaluation

The production of numerous communication supports such as a web platform for the project, a visual identity with a logo, a print and digital press campaign as well as the distribution of two issues of a newsletter were significant contributions to the progress of the project. In addition, an institutional film of the project has been developed. The visibility of the project and the reinforcement of its identity were thus well supported thanks to various communication actions. On the whole, the external communication of the project results could have been slightly more sustained, in order to share the project, its results and its progress with a large audience.

Regarding internal communication, stakeholders reported good communication within the project thanks to the sharing of deliverables and the involvement of the CoPil in the project. However, the flow of information could have been further improved internally by sharing the current results of the project with all the stakeholders, who were not necessarily informed throughout the project of its progress.

d) Conclusion on implementation

Lessons learned and challenges identified

The project was a pioneer in the transport and logistics sector and the ministry needs to build its capacity in climate change-related areas. The project identified some gaps in this area, particularly in terms of building funding applications. The creation of the CTCC will help to build this capacity and continue to do so after the project. It is indeed important to capitalize on the achievements of this project and to continue the reinforcement of skills. The originality and innovative nature of the project are sufficiently successful to serve as an example.

One of the main factors of success has been the good management and adaptability throughout the project. The different stakeholders benefited from a participatory approach. The formation of different thematic committees allowed the different partners to participate in numerous meetings, which led to the successful completion of a large number of activities. The partners remained motivated and involved in this pioneering project throughout the 5 years.

One of the main difficulties of this project was the installation of the photovoltaic panels in the Zenata platform. The problems causing the delay in the implementation of the PV panels were mainly related to land and financial allocation difficulties.

Finally, one of the main obstacles to the success of the project activities was Covid, which caused delays and interruption of several activities.

3.1.2. Relevance

In general, the project's general objective, specific objectives, and effects were compared and contrasted with the needs or problems of the beneficiary populations as reflected in the development policies and strategies of the Kingdom of Morocco, the UNDP, the GEF, and the MDGs/ODGs.

The following can be noted: The transport sector is a major emitter of GHGs in Morocco. The project is very relevant and appears to be a pioneer in the fight against climate change in the transport sector in Morocco. The integration aspects of climate change were still neglected by the decision makers of the sector at the beginning of the project. Indeed, the project is very innovative and is one of the very first green mobility projects. The innovative character even led to the need for further reflection at the beginning. This project has helped the Moroccan transport and logistics sector to move towards an energy transition by raising awareness of the importance of reducing GHGs among several trades (transporters, logisticians, etc.).

This criterion is rated **HS (Highly Satisfying)**.

3.1.1. Effectiveness & Efficiency

The **effectiveness** analysis seeks to show whether the intended results of the project have been achieved.

The expected results were achieved. This was a very ambitious, pioneering project, which was effective and successful. A NAMA Transport was developed, which represents a great

advance in the sector. The creation of the CTCC to provide institutional support is also a key element of this project. An inventory of GHGs in the logistics transport sector has been established. This is a very important step forward, as is the awareness of eco-driving.

Despite its complexity and ambition, the project was effective and efficient. If funding from the NAMA Facility has not been secured by 2020, funding should continue to be sought. The solar PV panels are being delivered at the time of project close and the installation is expected to be operational in the fall of 2021 at the Mohammedia warehouse. The PV panels will cover approximately 15,000m² of BIPV flat roofs, and additional panels could be added soon, given the high utility of this installation.

While a lack of expertise and knowledge in the area of climate change was noted within the Monitoring Committee, this was overcome. It sometimes appears that there are other priorities for professionals, often those from small companies with only one or two trucks. It is therefore all the more important to raise their awareness in view of their limited resources.

With regard to efficiency, the mid-term evaluation report highlighted a delay in the achievement of the results planned by the project, which seemed to be reduced in 2019 by the completion of certain activities. The value of the work accomplished was greater than the cost incurred by the project, which was a strength of the project. Co-financing from several partners was provided, including cash from METLE, AMDL, CDG, ONCF, and SNTL. The total implementation rate at the end of the project reached 76%, with 100% implementation for UNDP/GEF funding and 75% implementation for co-financing. The overall efficiency is therefore satisfactory.

The analysis of **efficiency** was thus made by comparing the results obtained with the means used. These means can be of three types:

- Human resources;
- Material resources; and
- Financial resources.

Concerning the human and material resources of the project, internally, the members of the PMU were very involved throughout the project and remained highly motivated. The partners have maintained a relationship of trust with this team, which has helped in the successful implementation and monitoring of the project activities. The PMU was able to take into consideration the observations of the different stakeholders during these 5 years. However, as noted above, there is a lack of expertise in the field of climate change and there is still a need to strengthen skills in order to be more effective in the future. Consultants and engineering firms were also mobilized for this project to meet specific analysis needs. However, deficiencies were noted at this level, which caused delays later. Indeed, a study on regulatory devices was of insufficient quality and had to be reworked.

Calls for tender were also postponed due to the lack of adequate skills at the local level; the lack of a local institution in the research sector led to recourse to the expertise of a French entity, CITEPA. The human resources and in particular the level of expertise of the local entities could have been strengthened for this project.

Overall, the effectiveness and efficiency remain satisfactory. The results were achieved and the means at disposal were well used to reach the targeted results.

This criterion is rated **HS (Highly Satisfying)**.

3.1.1. Country assimilation

Awareness-raising and consultation efforts were implemented throughout the project, which resulted in a strong desire for ownership of the project. The decision-making process that was put in place facilitated the involvement of the various project partners and their appropriation of the results. The partners thus benefited from a participatory approach and were often solicited.

Some activities to maintain the benefits of this project would further support Moroccan ownership of the project. For example, to increase ownership, AMEE could make concrete its desire to acquire a simulator to replicate the eco-driving training in its platform in Marrakech. AMEE would also like to advocate for the integration of eco-driving as a prerequisite for obtaining a driver's license in general. The various studies and guides developed during the GEF Transport project were given to all partners, who will be able to use them as reference documents and solid data sources for their activities. In order to ensure that the centralized GHG system is properly appropriated, it remains crucial to feed the centralized system and to update the inventory data, while contextualizing them.

This criterion is rated **S**.

3.1.1. Durability of the project

The activities proposed in this project presented measures with long-term benefits. Whether it is eco-driving, fleet renewal (with an average vehicle life of 12 years), improved maintenance, installation of solar PV panels, etc., the benefits and payoffs are long term and will not end with the end of the project's life cycle. The replication strategy on other platforms also contributes to the sustainability of the project's achievements.

Thus, this project has raised awareness and made progress in climate change mitigation and adaptation in the logistics sector as a whole. Indeed, some of the regulatory measures developed will be subject to regulation, such as the obligation to be trained in eco-driving when passing the driving license. In addition, NAMA's activities will certainly have contributed to the move from Euro 4 to Euro 6 standards. The creation of a governance structure to coordinate the Equipment/Transport/Logistics sector at the Ministry level, called the Climate Change Technical Committee (CTCC), is a strong signal that allows for a sustainable impact on the sector in terms of climate change adaptation.

With the same goal of meeting the climate challenges, a three-year Action Plan has been developed and will run until 2023. The work started can therefore be continued within the CTCC, through the search for funding and the exploration of other actions in the sector.

The results of the project are therefore likely to last, particularly thanks to the sensitization carried out and the establishment of the CTCC. However, finding funding remains essential to continue the activities and maintain the results of the project in the long term. A file was submitted with the aim of being financed by the NAMA facility, but no action has been taken for the moment.

This criterion is rated **S**.

3.1.1. Impact

The evaluation found that there is a before and after project. First of all, the creation of the CTCC within METLE, the first ministry with this kind of committee, represents good working conditions to be able to conduct other projects. Raising awareness of climate change among managers is indeed very important. Secondly, the eco-driving training has been deemed successful in terms of impacts. It is integrated in NAMA and in future NAMA applications to donors. 102 trainers have been trained in eco-driving, and the training can be duplicated and repeated. This will have an impact on fuel consumption and climate change mitigation in the medium to long term.

In the longer term, if NAMA is realized, it could be a model and example for other platforms, given the work already done for the Zenata platform.

The minimum expertise to be able to set up a NAMA project is developed and even if the first version of the NAMA was not successful, a new application could be submitted in the short term.

The project has also allowed for progress in updating the NDC, which now includes a transportation dimension. Indeed, in the NDC update, transportation-related objectives will likely be addressed, such as the objective of providing large urban areas with high-capacity public transportation using renewable energy, or establishing a Taxi Fleet Renewal Program. In addition, many mitigation actions in the transportation sector would be mentioned, such as the transition to the Euro 6 standard or the adoption of good eco-driving practices. This would be a significant impact of this project.

Finally, capacity building was carried out at the end of the project, with training in good low-carbon development management. Modules included: climate change issues, climate finance, results-based management (for the CTCC), the ETL (energy transport logistics) sector in the face of the climate crisis, financing mechanisms for adaptation and mitigation projects on the ETL sector.
The recipients of the trainings were as follows:

- CTCC training from May 17 to 21, 2021
- PMU training from May 20 to 26, 2021
- Training of senior METLE officials on May 29 and June 5, 2021

The training actions are carried out within the framework of a partnership between the GEF-Transport project and the EHTP (Hassania School of Public Works) / Public Establishment under the Ministry.

These trainings allow to fill the technical gaps that existed in the field of climate change in the transport sector, and it is necessary to continue to raise the level so that the skills are well acquired.

This criterion is rated **S**.

COVID-19 impact :

The project was impacted by Covid and several activities had to be postponed. The course of the trainings changed, they had to be organized taking into account the context, and they were therefore done at a distance. The deadlines of the calendar were pushed back and the end of the project was therefore moved back a few months.

The delay due to Covid affected the following activities:

- The training of CTCC members was postponed and the study tour abroad was cancelled
- The implementation of technical cooperation actions with foreign partners (especially European ones) could not be carried out due to the closure of the borders
- The promotion of NAMA transport including advocacy and participation in events on climate change in Morocco and abroad could not be achieved
- The capacity building action for METLE senior staff on climate governance and climate finance could not be realized
- The installation of a photovoltaic power plant at the SNTL logistics platform in Mohammedia has been delayed

3.1.2. Extension and replication approach

The project allowed for effective sharing of knowledge and lessons learned from the project. This was done through the creation of a website for sharing information, best practices, and the results achieved by the project.

A strong replicability characterizes the project, especially for the replication of GHG mitigation measures in other areas of Morocco, or the replication of the NAMA model project in the 17 other logistics platforms.

The replication strategy would build on the experience in the KM hub and expand the concept of developing NAMAs related to these hubs to the national level. The replication strategy has been delayed but is still implicit in the NAMA document. Replication may only occur in a later phase, given the status of the replication strategy at the end of the project. This would lead to significant results in terms of emission reductions and also in terms of the organization of the logistics sector as a whole.

The installation of 1 MW of solar PV panels on the roofs of warehouses has important replication effects, as it is the first large-scale installation of photovoltaic roofs in the logistics sector of the BIPV type.

In addition, a NAMA proposal was submitted on September 20, 2020 to the NAMA Facility, which is an important step forward, although the proposal has not been selected at this time. Although not intended for the project, stakeholders and SNTL in particular have been concerned about energy efficiency in the transportation sector. An extension in this direction could allow for the implementation of specific energy efficiency projects that are relevant and interesting for the stakeholders.

Emerging countries, characterized by intermediate performance logistics, present overall opportunities for the development of freight, a sector that represents a fundamental pillar of economies. Given the importance of this sector and the interest of several GEF program countries in logistics development, this project provides a basis for the implementation of similar projects.

Finally, replication at the national level can greatly contribute to reducing existing barriers to low-carbon development in the logistics sector, including weaknesses in the regulatory and fiscal framework. This replication will strengthen the overall framework of the sector and allow for consideration of climate change impacts not only at the KM platform but at the national level, thus contributing to the implementation of the logistics strategy.

In terms of lessons learned, the originality as well as the pioneering nature of the project presents a significant success and innovative aspect, to serve as an example and "best practice". That said, it is both necessary and interesting to analyze the project's shortcomings and failures in order to identify potential barriers to replication of such an initiative. This evaluation report and its recommendations would therefore benefit from being disseminated to partners and other stakeholders.

4. Conclusions, recommendations and lessons learned

Table 11 : Final evaluation results

Criteria	Score	Comments
Implementation of the project		
Monitoring and evaluation	**HS**	The evaluation found the following monitoring and evaluation (M&E) activities: - a kick-off workshop on March 28, 2016 with representatives of the various stakeholders that presented the project, the baseline scenario, objectives, activities, monitoring indicators and the first annual work plan. - The realization of mid-year and annual reviews (ProDoc had planned quarterly reviews at the base) with Powerpoint supports on the progress of the project, the results, risks and recommendations for the future. - The realization of annual narrative reports describing the results according to the indicators and targets of the project, - the drafting of annual PIRs, - A first evaluation in 2016 for UNDP-Morocco of the GEF-Transport project's implementing partner: the Directorate of Strategy, Programs, and Transport Coordination (METLE) by the Cour des Comptes, - A financial audit conducted by the Cour des Comptes for the 2017 project year, - the completion of a financial audit report by the Court des Comptes on May 31, 2018, - the late completion of a mid-term evaluation in February 2020. The M&E became more specific over the life of the project. Thus, points were added in the last reviews, taking into consideration the mid-term evaluation: - problems encountered and solutions found - Lessons learned from the project - modifications made to the project, i.e. adaptive management of the project Many documents were produced, which ensured a very good monitoring of the project, with quantified implementation rates made possible by the quality of the M&E system put in place (with activity performance indicators, for the implementation of the CTCC, GHG inventory, MRV system, modal shift survey, centralized data collection system).
UNDP Implementation	**HS**	UNDP's implementation, monitoring, and facilitation work was adequate throughout the project. The structure and implementation were appropriate, and UNDP's role as guarantor of this appropriateness was significant. The effectiveness of the collaboration was demonstrated by the successful implementation of the project. The monitoring was carried out in particular with the presence of a UNDP member at project meetings. The UNDP thus carried out a regular follow-up with the PMU and accompanied and supervised the activities and results of the project. In particular, it studied the progress of the project through mid-year and annual reviews and contributed to the drafting of PIRs each year to assess the risks, the achievement or non-achievement of the target objectives and the annual achievements.
METLE execution	**S**	Implementation by the Ministry of Equipment, Transport, Logistics and Water (METLE) has been satisfactory, thanks in part to the commitment shown by its members, but with some reservations. For example, the Steering Committee played a guiding and supervisory role throughout the project. The way the Steering Committee functioned was traditional and conservative. The strategic level of the committee could have been higher, especially with the participation of division heads or directors. To compensate for the lack of expertise in the field of climate change, the CTCC was created to provide perspectives for further mitigation but also adaptation actions in the future. However, it is crucial to continue the activities carried out by the CTCC within METLE. As METLE is a large ministry with compartmentalized projects, the CC dimension has allowed for a cross-cutting and integrated approach that allows for a paradigm shift.
Coordination between UNDP and other technical and financial stakeholders	**MS**	Collaboration between UNDP and other technical and financial partners involved in the funding and implementation of the project was effective once agendas and priorities were harmonized at the beginning of the project. UNDP also validated the annual work plan as well as the budget, the preparation of ToRs and the project deliverables. Thus, the other donors were kept informed of the project's progress throughout its duration and coordination efforts were made. Exchanges and effective collaboration

		were developed with the GIZ project (Deutsche Klimatechnologie initiative or DKTI - energy efficiency project which aimed to increase energy efficiency, particularly in the transport sector), in particular by capitalizing on the GIZ project through the Climate Promise initiative, which is part of the continuity of the GIZ project. This allowed for an in-depth analysis of the sector and the identification of actions and projects that were subsequently integrated into the revised NDC.
Project results		
Overall results	**S**	The final evaluation confirms the pioneering and innovative character of the project. Numerous concrete achievements were observed in the context of capacity building, development of tools and technical guides as well as innovative achievements for the country (centralised data collection system, national GHG inventory of road and rail fleets, development of a NAMA Transport). Despite an ambitious design and delays caused by the Covid pandemic, almost all target results were achieved. The replicability of the project and the willingness of the various partners to continue in this direction suggest that the GEF Transport project could become a model strategy for combating climate change in the logistics and transport sector. However, it seems essential to preserve the achievements. Although the results are satisfactory, it remains to be seen whether a multiplier effect of the project will subsequently be established at the initiative of METLE.
Relevance	**HS**	The project is very relevant and appears to be a pioneer in the fight against climate change in the transport sector in Morocco. Climate change integration aspects were still neglected by the sector's decision makers at the beginning of the project. Indeed, the project was one of the very first to focus on green mobility. The innovative nature of the project even led to the need for more in-depth thinking at the beginning, due to the lack of previous experience. This project has helped the Moroccan transport and logistics sector to move towards an energy transition by raising awareness of the importance of reducing GHGs in several trades (transporters, logisticians, etc.).
Effectiveness and efficiency	**S**	The expected results were achieved. This was a very ambitious, pioneering project, which has been successful. A NAMA Transport has been developed, which represents a great advance in the sector. The creation of the CTCC to provide institutional support is also a key element of this project. A GHG inventory in the logistics transport sector has been established. This is a very important step forward, as is the awareness of eco-driving. Despite its complexity and ambition, the project has been effective and efficient. If funding from the NAMA Facility has not been secured by 2020, funding should continue to be searched. The solar photovoltaic panels are on their way at the time of project close and the facility is expected to be operational in the fall of 2021. While there was a lack of expertise and knowledge in the area of climate change within the Monitoring Committee, this was overcome. It sometimes appears that there are other priorities for professionals, often small companies with only one or two trucks. It is therefore all the more important to raise their awareness in view of their limited resources. With regard to efficiency, the mid-term evaluation report highlighted a delay in the achievement of the results planned by the project, which seemed to be reduced in 2019 by the completion of certain activities. The value of the work accomplished was greater than the cost incurred by the project, which was a strength of the project. Co-financing from several partners was provided, including cash from METLE, AMDL, CDG, ONCF, and SNTL. The total implementation rate at the end of the project reached 76%, with 100% implementation for UNDP/GEF funding and 75% implementation for co-financing. Overall efficiency is therefore satisfactory. With regard to the human and material resources of the project, internally, the members of the PMU have been very involved throughout the project and have remained highly motivated and mobilized. The partners have maintained a relationship of trust with the team, which has helped in the successful implementation and monitoring of project activities. The PMU was able to take into consideration the observations of the different stakeholders during the 5 years. However, there is still a need for capacity building at the METLE level. Consultants and engineering firms were also mobilized to meet specific analysis needs. Shortcomings were noted at this level, which caused delays. Calls for tender were also postponed due to the lack of adequate skills at local level, and the lack of local institutions in the research sector led to the use of the expertise of the Centre interprofessionnel technique d'études de la pollution atmosphérique (CITEPA). Material resources could have been further strengthened for this project. Overall, the effectiveness and efficiency remain satisfactory. The results were achieved and the means available were well used to achieve the targeted results.

Country assimilation	**S**	Awareness-raising and consultation efforts were implemented throughout the project, which resulted in a strong desire for ownership of the project. The decision-making process that was put in place facilitated the involvement of the various project partners and their appropriation of the results. The partners thus benefited from a participatory approach and were often solicited. Some activities to maintain the benefits of this project would further support Moroccan ownership of the project. For example, for greater ownership, AMEE could make concrete its desire to acquire a simulator to replicate the eco-driving training in its platform in Marrakech. AMEE would also like to advocate for the integration of eco-driving as a prerequisite for obtaining a driver's license in general. The various studies and guides developed during the GEF Transport project were given to all partners, who will be able to use them as reference documents and solid data sources for their activities. It remains crucial for the appropriation of the centralized GHG system to feed the centralized system and to update the inventory data, while contextualizing them.
Durability	**S**	The activities proposed in this project presented measures with long-term benefits. Whether it is eco-driving, fleet renewal (with an average vehicle life of 12 years), improved maintenance, installation of solar PV panels, etc., the benefits and payoffs are long term and will not end with the end of the project's life cycle. The replication strategy on other platforms also contributes to the sustainability of the project's achievements. Thus, this project has raised awareness and made progress in climate change mitigation and adaptation in the logistics sector. Indeed, some of the regulatory measures developed may be subject to regulation, such as the obligation to be trained in eco-driving when passing the driving license. In addition, NAMA's activities will certainly have contributed to the move from Euro 4 to Euro 6 standards. The creation of a governance structure to coordinate the Equipment/Transport/Logistics sector at the Ministry level, called the Climate Change Technical Committee (CTCC), is a strong signal that allows for a sustainable impact on the sector in terms of climate change adaptation. With the same goal of meeting the climate challenges, a three-year Action Plan has been developed and will run until 2023. The work begun can therefore be continued within the CTCC, through the search for funding and the exploration of other actions in the sector. Sustainability is considered satisfactory provided that the CTCC is formally invested and that the ATP is validated at the investiture meeting scheduled for the end of June 2021. The results of the project are therefore likely to last, particularly thanks to the sensitization carried out and the establishment of the CTCC, provided that the functioning of this committee is confirmed. Also, finding funding remains essential to continue the activities and maintain the results of the project in the long term. The NAMA Transport was submitted to the 7th NAMA Facitity call for proposals but was not selected. It will be reviewed and improved and resubmitted to the NAMA Facility.
Impact	**S**	The evaluation found that there is a before and after to the project. First of all, the creation of the CTCC within the ministry, the first ministry with this type of committee, represents good working conditions to be able to conduct other projects. Raising awareness of climate change among managers is indeed very important. Secondly, the eco-driving training has been deemed successful in terms of impacts. It is integrated in NAMA and in future NAMA applications to donors. 102 trainers have been trained in eco-driving, and the training can be duplicated. This will have an impact on fuel consumption and climate change mitigation in the medium to long term. In the longer term, if NAMA is realized, it could be a model and example for other platforms, given the work underway for the Zenata platform. The minimum expertise to be able to put together a NAMA funding application is developed and even if the first version of the NAMA application was not successful, a new application could be submitted in the short term. The project has also enabled progress to be made in updating the NDC, which now includes a transport dimension (revised NDC 2020/21), thanks also to the UNDP Climate Promise project, which capitalized on the GIZ project and carried out an in-depth study to assess the potential for reducing GHG emissions in the transport sector. Capacity building was carried out with training provided to METLE, CTCC and PMU on good management of low carbon development.
Covid-19 Impact	**N/A**	The project was impacted by Covid-19 and several activities had to be postponed. The course of the trainings changed, they had to be organized taking into account the context, and they were therefore done remotely. The deadlines of the calendar were postponed and the end of the project was therefore moved back a few months.

Summary of Findings and Lessons Learned

The GEF Transport project is a contextually relevant and highly innovative project for the transport and logistics sector. Climate change is an increasingly important issue for Morocco, which is experiencing rising temperatures, significant heat waves, and declining annual rainfall. Incentives to reduce GHG emissions are therefore a first response to these issues, particularly in the context of the revision of the Nationally Determined Contribution (NDC). Thus, the GEF Transport project has made it possible to implement a number of innovative activities in the sector, including a national inventory of GHGs from road and rail fleets, a centralized data collection system, a survey on road freight transport, and training for trainers in eco-driving, the installation of 1 MW of solar PV panels on a logistics zone, work is underway and the plant is scheduled to be operational in September 2021 (written confirmation of the commitment to the start date has been requested from SNTL by the project coordinator), the installation of 1 MW of PV panels on a logistics zone, the drafting of a NAMA Transport and the establishment of a Climate Change Technical Committee (CTCC) within the MELTE. Capacity building actions have allowed a better understanding of climate change concepts in the transport and logistics sector. Local partners have been made aware of the role they can play in mitigating GHG emissions and are keen to continue this momentum. It is now important not to lose what has been achieved and to continue to raise awareness at all levels and increase interest, especially at the political level, in order to improve project implementation, stakeholder adaptability, and replication potential, and more generally, to address future climate challenges. Preservation of the project's achievements and capital is necessary to sustain the actions implemented and to integrate climate change more effectively into the national strategy.

Recommendations

Given the promising results obtained and particularly those that trace the exit and sustainability strategy, it seems important to recall that the impacts and consequences of the project are not necessarily immediate. Several recommendations are made here:

1) First, NAMA Transport was submitted to the NAMA Facility in September 2020 but the project was not selected. It seems appropriate to **improve the NAMA funding package and then resubmit it again** now that the groundwork has been laid. It is also recommended to **submit the NAMA funding proposal to other donors and to consider other resources** (such as the Green Climate Fund) **to obtain funding**. Indeed, NAMA is conditional on the replacement of old trucks with new ones through financial incentives such as grants. It is therefore important to apply. From the interviews, there is an increased need for more experience in putting together the NAMA funding package and obtaining the funding. The climate finance trainings in May 2021 were beneficial from this point of view, as the concepts of climate finance and climate change adaptation and mitigation measures are not yet well understood. Long-term coaching would be useful to acquire the key concepts and thus improve the financing file already submitted to the NAMA Facility.

2) A second recommendation concerns **the expansion of the project to include passenger transport**, first by road but also by rail and air. Indeed, a project concerning

passenger transport would be relevant. This could concern road travelers in the form of self-sharing electric cars or the provision of electric buses for the public transport of road travelers. Contacts have already been made by the PMU with GIZ, AFD, Mobilise Your City (MYC) and E3G. Opening up the scope would be more complex, however, as it would involve other ministries, such as the Ministry of the Interior for urban passenger transport.

3) A third recommendation concerns the CTCC, created by decision of the Minister. It is recommended **not only to formalize the CTCC's investiture but even to establish its role through the Decree**. This would make it possible to commit METLE and its partners. In addition, it is important to ensure that everything that has been put in place with the CTCC is operationalized. This implies **the formal validation of the Three-Year Action Plan with an operating budget to be provided** by METLE for its implementation as soon as possible. 4.38 billion ($5.34 billion) in 2021: allocating resources to the CTCC would have a very limited impact on the ministerial budget. While external support is not necessarily needed, it was requested several times during the final evaluation by different stakeholders.
   Acting on the investiture of the CTCC and organizing an investiture ceremony by mid-June 2021 are the first steps in this recommendation to ensure the continuity and sustainability of the project, and to capitalize on its achievements.

4) A fourth recommendation focuses on **better addressing the impacts of CC in the freight and logistics sector to improve its resilience through adaptation measures**. For example, increasingly frequent extreme heat is causing tarred roads to soften. This requires renovations using more durable materials. Rising temperatures also pose a threat to rail transport, due to thermal expansion, crushing and land subsidence. For ports, many climate change adaptation measures, including those to address rising seas and extreme heat, need to be rapidly implemented and incorporated into new construction and infrastructure design practices.

5) In addition, as noted above, although not included in the project, the SNTL has been concerned with energy efficiency, with a small budget set aside for this purpose. It is recommended **to continue to improve energy efficiency in the freight and logistics sector, especially in the cold chain**, by implementing specific energy efficiency projects and actions, such as training drivers of refrigerated vehicles in good practices for using cold.

6) The sixth recommendation is **to consolidate governance and continue capacity building efforts**. A National Climate Change Committee (CNCC) exists at the national level with sectoral representatives. This brings together different ministries, including now the METLE. It would be useful to continue capacity building at all levels. Political will is needed to carry out projects like this one and to continue the momentum without losing what has been done. Without political will and consolidation of achievements, the capital risks being impacted and the efforts made useless.

7) Finally, it is relevant to place the project in the health context of Covid. The transport sector has been affected by the health crisis, creating risks of infection, border restrictions or quarantine, as well as delays in delivery and possible theft of goods.

Drivers and companies in the road sector have been severely affected by this pandemic and it is important to **take into account the lessons learned and the measures to adapt to such situations, in order to avoid repeating the same mistakes if the health situation were to deteriorate again** and to face the appearance of various hazards. Urgent measures will have to be taken to ensure that working conditions remain decent, that workers remain protected and that deliveries are not delayed. As a next step, it is recommended that transport and logistics workers receive the same protection as other essential service workers, including priority vaccination. Finally, the sector has many informal actors and situations, with vehicles operating outside of the national transport registry. About 80% of the staff is unregistered and therefore could not benefit from the 2,000 DH aid granted by the Moroccan government during the first three months of the crisis. It is therefore recommended that companies be made aware of the need to declare their employees.

5. Annexes

Annex A: Terms of reference for the final evaluation

AVIS DE RECRUTEMENT D'UN CONSULTANT INDIVIDUEL

IC 01-03-2021 Date : 04 mars 2021

Termes de référence (TdR) pour l'évaluation finale du projet « Intégration du changement climatique dans la stratégie nationale de développement de la compétitivité logistique et dans la mise en œuvre des plateformes logistiques »

1. INTRODUCTION

Conformément aux politiques et procédures de suivi et d'évaluation du PNUD et du FEM, tous les projets de moyenne ou grande envergure appuyés par le PNUD et financés par le FEM doivent faire l'objet d'une évaluation finale (EF) à la fin du projet. Les présents termes de référence (TdR) énoncent les attentes associées à l'EF du projet de grande envergure intitulé
« Intégration du changement climatique dans la stratégie nationale de développement de la compétitivité logistique et dans la mise en œuvre des plateformes logistiques » N°5181 et mis en œuvre par le Ministère de l'Equipement, du Transport, de la Logistique et de l'Eau (METLE). Le projet a démarré le 28 mars 2016 et se trouve actuellement dans sa 6eme année de mise en œuvre. Le processus d'EF doit suivre les directives décrites dans le document « Directives pour réaliser les évaluations finales des projets appuyés par le PNUD et financés par le FEM » (insérer le lien hypertexte).

2. CONTEXTE ET SITUATION DU PROJET

Au Maroc, le fret routier représente le principal mode de transport des marchandises, assurant ainsi 90% des flux transportés, avec un parc actuel d'environ 120.000 véhicules et connait une forte croissance de l'ordre de 6% annuellement, et ce au cours des cinq dernières années. Pour le fret ferroviaire, le volume de marchandises transportées a atteint 31,7 millions de tonnes à fin 2015.

En 2011, la consommation énergétique des véhicules routiers de transport de marchandises a représenté 27,4% de la consommation énergétique totale dédiée au secteur des transports3, qui constitue le premier consommateur énergétique, avec plus de 40% de la consommation finale du pays, estimée à 5,3 Mtep en 2014 et considéré comme principale source des émissions des Gaz à effet de serre (GES). A elle seule, la logistique génère 1,7 million de tonnes de CO2 par an.

Dans ce contexte, le Maroc s'est engagé dans la voie de réduction de ses émissions, en commençant par leur évaluation. En effet, plusieurs inventaires nationaux sont réalisés dans le cadre de ses communications nationales à la CCNUCC, notamment au niveau de la troisième datant de 2016 et la quatrième en cours d'élaboration. Il a également élaboré son premier rapport biannuel soumis à la CCNUCC en 2016, sa contribution prévue déterminée au niveau National, et récemment sa contribution déterminée au niveau national, soumise à la CCNUCC en septembre 2016, en cohérence avec l'article 3 de l'Accord de Paris.

Dans le cadre de cette dynamique, plusieurs actions et mesures ont été entreprises par le METLE visant l'atténuation des émissions des GES du secteur des transports et l'adaptation de son infrastructure au changement climatique, et le développement à faible carbone. Le secteur de la logistique a fait l'objet d'une stratégie dédiée, intitulée « stratégie nationale de développement de la compétitivité logistique », visant entre autres la contribution à la réduction de 35% des émissions du CO2 du secteur de transport routier de marchandises, et ce à travers notamment la rationalisation de la circulation des biens dans tout le Royaume, et l'amélioration des performances du secteur.

La mise en œuvre de cette stratégie et la concrétisation de son objectif de réduction des émissions a été accompagnée par l'implémentation de plusieurs initiatives, notamment le projet GEF-Transport « intégration du changement climatique dans la stratégie nationale de développement de la compétitivité logistique et dans la mise en œuvre des plateformes logistiques », dont la mise en œuvre est pilotée par le METLE, en partenariat avec le Programme des Nations –Unies pour le Développement (PNUD) et l'appui financier du Fonds pour l'Environnement Mondial (FEM).

Le projet GEF-Transport aspire à intégrer les considérations du Changement Climatique dans cette stratégie et dans la mise en œuvre des zones logistiques multi-flux (ZLMF), et se concentre principalement sur les zones logistiques de la région de Casablanca-Settat. Il projette

également de construire une démarche pilote contenant diverses mesures d'atténuation appropriée en tant que projet NAMA-modèle, dans une perceptive de sa réplication sur les autres zones logistiques dans d'autres régions du Royaume.

Le budget total du projet est de 123.556.961 USD financés par le FEM, le PNUD et le gouvernement (respectivement ; 2.274.429 USD, 200 000 USD, 121.082.532 USD). L'Agence de mise en œuvre du projet est le METLE. Ce projet ayant une durée de 4 ans a été lancé au mois de mars 2016 et a bénéficié d'une extension d'une année et puis d'une prolongation additionnelle de 4 mois.

Les entités de gouvernance et de gestion du projet GEF-Transport sont comme suit :

- Le Comité de Pilotage : ce comité est responsable des décisions relatives à l'orientation stratégique du projet. Il se réunit au moins une fois par an ou en tant que de besoin. Toute question liée à la mise en œuvre, ou tout changement relatif à la conception ou à la portée du projet, devront être discutés par le comité de pilotage.

- L'Unité de Gestion de Projet (UGP) **:** cette unité est instaurée au sein du METLE, et a pour mission principale la gestion de la réalisation du projet GEF-Transport, sous la supervision directe du Directeur National du Projet (DNP) et du Comité de Pilotage. Le DNP est nommé par le METLE pour assurer la supervision et fournir les orientations de la mise en œuvre du projet. L'UGP est composée d'un Coordonnateur National responsable de la gestion opérationnelle du projet à plein temps, assisté par une assistante administrative et financière et des cadres supérieurs relevant du METLE. L'UGP est chargée, conformément aux responsabilités qui incombent à chacun de ses membres.

- Les Comités thématiques de suivi du projet : ces comités sont mis en place pour assurer la concertation avec les partenaires lors de la préparation des termes de référence des activités inscrites dans le plan de travail annuel approuvé par le comité de pilotage, et lesuivi de leur mise en œuvre.

- L'Assurance Qualité du projet : La surveillance opérationnelle quotidienne est assurée par le PNUD par le biais de son bureau de Rabat, et le contrôle et les orientations stratégiques par le Conseiller technique régional du PNUD/FEM responsable du projet.

La gestion quotidienne du Projet est effectuée par une Unité de gestion du projet (UGP) basée au ministère sous l'autorité générale du DNP. Des comités thématiques ont été mis en place pour le suivi des activités.

Les parties prenantes sont représentées par le METLE, l'Agence Marocaine du Développement Logistique, l'Observatoire Marocain de la

Compétitivité Logistique, la Société Nationale des Transports et de la Logistique, l'Office National des Chemins de Fer, l'Agence Nationale des Ports, le Département de l'Environnement, l'Agence Marocaine de l'Efficacité Energétique, la Fédération du Transport et de la Logistique, la Caisse de Développement et de Gestion et la Société d'Aménagement de Zenata.

Une évaluation mi-annuelle de recadrage du projet a été conduite en plusieurs missions pour recentrer les activités du projet sur les résultats attendus. Le projet contribue à la réalisation des ODD 7, 13 et 17 et initie l'intégration des changements climatique dans le secteur du fret routier et ferroviaire.

Les facteurs sociaux, économiques, politiques, géographiques et démographiques critiques ont été analysés et pris en compte fur et à mesure de l'avancement du projet pour créer un environnement favorable à sa mise en œuvre. .

Par ailleurs et au vu du contexte de la pandémie COVID-19, et malgré les mesures de confinement, le projet a poursuivi ses activités à distance moyennant des canaux de communication digitale vu que la majorité des activités se rapportent à la finalisation des actions lancées.

3. OBJECTIF DE L'EF

Le rapport d'EF doit évaluer la réalisation des résultats du projet par rapport à ce qui était prévu et tirer des leçons qui peuvent à la fois améliorer la durabilité des bénéfices de ce projet et contribuer à l'amélioration générale de la programmation du PNUD. Le rapport d'EF encourage la responsabilité et la transparence, et évalue l'étendue des réalisations du projet.

Cette évaluation devra permettre de :

b. apprécier l'état de réalisation des activités,
c. estimer dans quelles mesures le projet a atteint ses objectifs en termes d'effets etd'impact,
d. juger de l'adéquation des moyens mis en œuvre aux objectifs poursuivis,
e. identifier les problèmes de mise en œuvre et apprécier les solutions proposées,
f. capitaliser les aménagements et/ou réorientations des activités, de financement etdes méthodes de travail.
g. proposer des mécanismes visant l'institutionnalisation

des acquis du projet. Elle a pour mandat :

1. L'examen des documents de base du projet, notamment le « document du projet » et son cadre logique ainsi que les rapports annuels du projet ;
2. L'analyse de l'organisation du projet et de son montage institutionnel, afin de juger de son efficacité et de son degré d'adaptation aux spécificités du projet et à son environnement naturel et institutionnel ;
3. L'appréciation du rôle et succès du projet dans la mobilisation des partenaires et des acteurs ciblés ainsi que le degré de leur implication respective dans la réalisation des activités du projet ;
4. L'évaluation du progrès enregistré à la fin du projet envers la réalisation des objectifs
prévus, et l'analyse des défis ;
5. L'examen du budget et de la gestion financière ;
6. L'élaboration de propositions et recommandations pertinentes pour une stratégie de sortie du projet, portant sur tous les enjeux identifiés. Par ailleurs, la mission esquissera et analysera l'intérêt et l'opportunité, le cas échéant, d'une éventuelle seconde phase du projet (deuxième tranche de financement).

En particulier, dans le cas du projet GEF-Transport, les aspects suivants seront examinés :

- Evaluer le degré d'appropriation du projet et ses objectifs par les différents catégoriescibles ;
- Dégager et approcher les changements induits par le projet ;
- Faire ressortir l'impact du projet ;
- Evaluer l'impact du projet ;
- Evaluer le degré d'intégration du projet dans les programmes et projets sectoriels des partenaires institutionnels ;
- Analyser et évaluer la performance de la démarche et interventions du projet qui est à caractère institutionnel et novateur pour le secteur des transports et l'atteinte résultats escomptés.
- Pertinence et l'adaptation ou non des indicateurs du suivi et de l'évaluation choisis aussi bien au contexte de mise en œuvre qu'aux exigences du document du projet ? Dans quelle mesure la batterie de critères retenus répond et expriment les effets et les impacts aussi bien spécifiques que globaux du projet ?
- Statuer sur le système de S&E que le projet a mis en place durant sa durée, ainsi que les enseignements à tirer pour les autres projets.
- L'évaluation de l'impact induit par le projet dans la zone pilote et des différents chantiers ouverts et engagés par le projet avec les différents bureaux d'assistance technique en vue de mesurer l'évolution du projet et d'approcher le degré d'atteinte des objectifs prévus et de l'impact et

effets éventuels sur les changements et modes opérés chez les populations ciblées et les partenaires institutionnels impliqués.

- Evaluer l'impact de la pandémie du COVID-19 en termes de calendrier d'exécution, d'interventions sur le terrain, de mobilisation des parties prenantes et des conditions économiques et sociales des bénéficiaires.

4. APPROCHE ET MÉTHODOLOGIE DE L'EF

Les approches méthodologiques à adopter doivent permettre une mise en œuvre efficace de l'évaluation, y compris les directives de sécurité, des revues documentaires approfondies, l'utilisation prioritaire des consultants nationaux et le recours par les évaluateurs à des réunions et des entretiens virtuels avec les parties prenantes. Ces méthodologies et approches, ainsi que toutes les limitations rencontrées pendant le processus d'EF, doivent être détaillées dans le rapport initial d'EF et le rapport final d'EF

Le rapport d'EF doit ainsi fournir des informations fondées sur des données factuelles crédibles,fiables et utiles.

L'équipe de l'EF doit examiner toutes les sources d'information pertinentes, y compris les documents élaborés pendant la phase de préparation (tels que le FIP, le plan de lancement du PNUD, la Procédure de détection des risques environnementaux et sociaux du PNUD/PDRES), ledocument de projet, les rapports de projet, dont les RMP annuels, les révisions du budget du projet, les rapports sur les enseignements tirés, les documents stratégiques et juridiques nationaux et tout autre matériel que l'équipe juge utile pour étayer cette évaluation. L'équipe de l'EF doit examiner les indicateurs de base/outils de suivi de référence et à mi-parcours du domaine focal du FEM, soumis au FEM au moment de l'approbation du directeur et aux étapes de mi-parcours, ainsi que les indicateurs de base/outils de suivi qui doivent être complétés avant le début de la mission d'EF sur le terrain.

L'équipe de l'EF doit suivre une approche participative et consultative garantissant une implication active de l'équipe projet, des homologues gouvernementaux (le point focal opérationnel du FEM), des partenaires de mise en œuvre, du bureau de pays du PNUD, du conseiller technique régional, des bénéficiaires directs et d'autres parties prenantes.

La participation des parties prenantes est indispensable à la réussite de l'EF. Cette mobilisation doit consister en des entretiens avec les parties prenantes qui assument des responsabilités liées au projet, à savoir entre

autres le PNUD, le GEF, le METLE, les partenaires impliqués, les experts et les consultants clés dans le domaine concerné, les bénéficiaires du projet, etc,. En outre, l'équipe de l'EF est censée effectuer des missions sur le terrain à la plateforme logistique de Zenata à la ville de Mohammedia ou une centrale photovoltaïque pilote est en cours de mise en place avec un financement partiel du projet.

La conception et la méthodologie spécifiques de l'EF devraient ressortir des consultations entre l'équipe de l'EF et les parties susmentionnées quant à ce qui est approprié et réalisable pour atteindre le but et les objectifs de l'EF et répondre aux questions d'évaluation, compte tenu des contraintes de budget, de temps et de données. L'équipe de l'EF doit utiliser des méthodologies et outils tenant compte du genre et veiller à ce que l'égalité des sexes et l'autonomisation des femmes, ainsi que d'autres questions transversales et les ODD, soient intégrées dans le rapport

d'EF.

L'approche méthodologique finale, y compris le calendrier des entretiens, les visites sur le terrain et les données à utiliser dans l'évaluation, doit être clairement exposée dans le rapport initial d'EF et fera l'objet d'une discussion approfondie et d'un accord entre le PNUD, les parties prenantes et l'équipe de l'EF.

Toutefois, une certaine souplesse sera permise pour permettre à l'équipe d'évaluation de déterminer les meilleurs outils et méthodes de collecte et d'analyse des données. Par exemple, les TdR peuvent suggérer d'avoir recours à des questionnaires, des visites sur le terrain et des entretiens, mais l'équipe d'évaluation doit pouvoir revoir cette approche en concertation avec le responsable de l'évaluation et les principales parties prenantes. Ces modifications de l'approche doivent être convenues au préalable et reprises clairement dans le rapport initial d'EF.

Le rapport final doit décrire l'ensemble de l'approche adoptée pour l'EF et la justification de cette approche en rendant explicites les hypothèses sous-jacentes, les défis, les forces et les faiblesses concernant les méthodes et l'approche de l'évaluation.

S'il n'est pas possible de se rendre dans le pays ou de se déplacer à l'intérieur du pays pour la mission d'EF, l'équipe de l'EF doit élaborer une méthodologie tenant compte de cette situation et prévoir de procéder à l'évaluation à distance et de façon virtuelle, en ayant notamment recours à des méthodes d'entretien à distance et à des revues documentaires approfondies, à l'analyse de données, à des enquêtes et à des questionnaires d'évaluation.Ce point doit être détaillé dans le rapport initial d'EF et convenu avec l'unité mandatrice.

Si tout ou partie de l'EF doit s'effectuer de manière virtuelle, il convient de tenir compte de la disponibilité, de la capacité ou de la volonté des parties

prenantes d'être interviewées à distance. En outre, leur accès à Internet ou à un ordinateur peut poser un problème, car de nombreux interlocuteurs gouvernementaux et nationaux peuvent travailler depuis chez eux. Ces limitations doivent être reflétées dans le rapport final d'EF.

Si la mission de collecte de données sur le terrain n'est pas possible, alors les entretiens pourraient s'effectuer à distance par téléphone ou en ligne (Skype, Zoom, etc.). Les consultants internationaux peuvent travailler à distance avec le soutien sur place des évaluateurs dans la mesure où ces derniers sont capables d'intervenir et de se déplacer en toute sécurité. Aucune partie prenante, aucun consultant ou membre du personnel du PNUD ne saurait être mis en danger et la sécurité est la priorité absolue.

Une courte mission de validation peut être envisagée si elle est jugée sans risque pour le personnel, les consultants et les parties prenantes, et si le calendrier de l'EF le permet. De même, des consultants nationaux qualifiés et indépendants peuvent être recrutés pour conduire l'EF et les entretiens dans le pays, si leur sécurité est garantie.

5. PORTÉE DÉTAILLÉE DE L'EF

L'EF doit évaluer la performance du projet par rapport aux attentes énoncées dans le cadre logique/de résultats du projet (voir l'Annexe A des TdRs). Elle doit évaluer les résultats par rapport aux critères décrits dans les Directives pour la réalisation des évaluations finales des projets appuyés par le PNUD et financés par le FEM (voir http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy-FRENCH.pdf).

La portée de l'EF doit détailler et inclure les aspects du projet qui seront couverts par l'EF, comme le calendrier, ainsi que les principales questions d'intérêt pour les utilisateurs que l'équipe d'EF doit aborder.

La section du rapport d'EF sur les constatations doit couvrir les sujets énumérés ci-dessous.
Une présentation complète du contenu du rapport d'EF est fournie en Annexe C des TdR.

Les critères nécessitant une notation sont marqués d'un astérisque (*).

Constatations

i. <u>Conception/élaboration du projet</u>

- Priorités nationales et appropriation par le pays
- Théorie du changement
- Égalité des sexes et autonomisation des femmes
- Mesures de protection sociale et environnementale

- Analyse du cadre de résultats : logique et stratégie du projet, indicateurs
- Hypothèses et risques
- Enseignements tirés des autres projets pertinents (par exemple, dans le même domainefocal) incorporés dans la conception du projet
- Participation prévue des parties prenantes
- Les liens entre le projet et d'autres interventions au sein du secteur
- Modalités de gestion

ii. Mise en œuvre du projet

- Gestion adaptative (modification de la conception du projet et des produits du projet aucours de la mise en œuvre)
- Participation réelle des parties prenantes et accords réels de partenariat
- Financement et cofinancement du projet
- Suivi et évaluation : conception à l'entrée (*), mise en œuvre (*) et évaluation globale du S&E (*)
- Partenaire de mise en œuvre (PNUD) (*) et agence d'exécution (*), contrôle/mise en œuvre globale du projet et exécution (*)
- Gestion des risques, y compris les Normes environnementales et sociales

iii. Résultats du projet

- Évaluer les réalisations et les résultats par rapport aux indicateurs en rendant compte du niveau de progrès pour chaque objectif et indicateur de résultat au moment de l'EF et en notant les réalisations finales
- Pertinence (*), Efficacité (*), Efficience (*) et réalisation globale du projet (*)
- Durabilité : financière (*), sociopolitique (*), du cadre institutionnel et de la gouvernance(*), environnementale (*) et probabilité globale de durabilité (*)
- Appropriation par les pays
- Égalité des sexes et autonomisation des femmes
- Questions transversales (réduction de la pauvreté, amélioration de la gouvernance, atténuation des changements climatiques et adaptation à ceux-ci, prévention des catastrophes et relèvement, droits fondamentaux, renforcement des capacités, coopérationSud-Sud, gestion des connaissances, volontariat, etc., selon les cas)
- Additionnalité du FEM
- Rôle de catalyseur / Effet de réplication
- Progrès vers l'impact

Principales constatations, conclusions, recommandations et enseignements tirés

- L'équipe de l'EF doit inclure un résumé des principales constatations dans le rapport d'EF. Les constatations doivent être présentées sous

forme d'énoncés de faits fondés sur l'analyse des données.

- La section sur les conclusions est rédigée à la lumière des constatations. Les conclusions doivent être exhaustives et équilibrées, largement étayées par les preuves et s'inscrire dans la logique des constatations de l'EF. Elles doivent mettre en avant les forces, les faiblesseset les résultats du projet, répondre aux principales questions de l'évaluation et donner des pistes de réflexion pour l'identification et/ou la résolution des problèmes importants ou desquestions pertinentes pour les bénéficiaires du projet, le PNUD et le FEM, y compris les questions relatives à l'égalité des sexes et à l'autonomisation des femmes.
- Le rapport doit présenter des recommandations concrètes, pratiques, réalisables et à l'attention des utilisateurs cibles de l'évaluation concernant les mesures à adopter ou les décisions à prendre. Les recommandations doivent être spécifiquement étayées par des preuves et liées aux constatations et aux conclusions relatives aux questions clés traitéespar l'évaluation.

- Le rapport d'EF doit également comprendre les enseignements qui peuvent être tirés de l'évaluation, y compris les meilleures pratiques concernant la pertinence, la performance et le succès, qui peuvent fournir des connaissances acquises à partir de circonstances particulières (les méthodes de programmation et d'évaluation utilisées, les partenariats, les leviers financiers, etc.) applicables à d'autres interventions du FEM et du PNUD. Lorsque c'est possible, l'équipe de l'EF doit inclure des exemples de bonnes pratiques concernant la conception et la mise en œuvre du projet.
- Il est important que les conclusions, les recommandations et les enseignements tirés du
rapport d'EF intègrent l'égalité des sexes et l'autonomisation des femmes.
- Le rapport d'EF comprendra un tableau de notations d'évaluation, comme présenté ci-dessous :

Tableau 2 des TdR : Notations d'évaluation pour le projet (« Intégration du changement climatique dans la stratégie nationale de développement de la compétitivité logistique etdans la mise en œuvre des plateformes logistiques»

Suivi et évaluation (S&E)	**Note[5]**
Conception du S&E à l'entrée	
Mise en œuvre du plan de S&E	
Qualité globale du S&E	
Mise en œuvre et exécution	**Note**
Qualité de la mise en œuvre/du contrôle du PNUD	
Qualité de l'exécution par le partenaire de mise en œuvre	
Qualité globale de la mise en œuvre/exécution	
Évaluation des résultats	**Note**
Pertinence	

Efficacité	
Efficience	
Note de la réalisation globale du projet	
Durabilité	**Note**
Ressources financières	
Socioéconomique	
Cadre institutionnel et de gouvernance	
Environnementale	
Probabilité globale de durabilité	

6. CALENDRIER

La durée totale de l'EF sera d'environ (25-30) jours ouvrables en moyenne sur une période desix semaines à compter du (16 mars 2021). Le calendrier provisoire de l'EF est le suivant :

Calendrier	Activité
(13/03/2021)	Clôture des candidatures
(16/03/2021)	Sélection de l'équipe de l'EF
(17 et 19/03/2021)	Période de préparation de l'équipe de l'EF (communication des documents de projet)
(22-23/03/2021)	Examen des documents et préparation du rapport initial d'EF
(24-25/03) 02 jour	Finalisation et validation du rapport initial d'EF – au plus tard audébut de la mission d'EF
(29/03- 09/04) (10 jours)	Mission d'EF : réunions avec les parties prenantes, entretiens,visites sur le terrain, etc.
(13/04/2021)	Réunion de clôture de la mission et présentation des premières constatations – au plus tôt à la fin de la mission d'EF
(13/04-22/04/2021) (6 jours)	Préparation du projet de rapport d'EF
(23/04/2021)	Diffusion du projet de rapport d'EF pour commentaires
(26/04/2021)	Intégration des commentaires sur le projet de rapport d'EF dans la piste d'audit et finalisation du rapport d'EF
(29/04/2021)	Préparation et publication de la réponse de la direction
(29/04/2021)	Atelier de clôture avec les parties prenantes (facultatif)
(29/04/2021)	Date prévue de l'achèvement de l'ensemble du processus d'EF

Il peut être envisagé une extension de délai si l'évaluation est retardée d'une manière ou d'uneautre en raison de la COVID-19.

Les options pour les visites de sites doivent figurer dans le rapport initial d'EF.

7. ÉLÉMENTS LIVRABLES DANS LE CADRE DE L'EF

#	Élément livrable	Description	Calendrier	Responsabilités
1	Rapport initial d'EF	L'équipe de l'EF précise les objectifs, la méthodologie et le calendrier de l'EF	Au plus avant lamission d'EF : (23/03/2021)	L'équipe de l'EF soumet le rapportinitial à l'unité mandatrice et à la direction du projet
2	Présentation	Premières constatation s	Fin de la missiond'EF : (09/04/2021)	L'équipe de l'EF présente ses constatations à l'unitémandatrice et à la direction du projet
3	Projet de rapport d'EF	Projet de rapport complet conformément aux *directives de l'AnnexeC des TdR)* avec les annexes	Dans la semaine suivant la fin de la mission d'EF : *(23/04/2021)*	L'équipe de l'EF soumet le projet derapport à l'unité mandatrice ; il est ensuite révisé par le CTR, l'unité coordinatrice du projet et le PFO FEM
5	Rapport final d'EF* dans lesdeux versions Française et Anglaise + piste d'audit	Rapport final révisé et piste d'audit de l'EF dans laquelle l'EFdétaille comment il aété donné suite (ou non) aux commentaires reçus dans le rapport final d'EF *(voir le modèle en Annexe H des TdR)*	Dans la semaine suivant la réception des commentaires surle projet de rapport : *(26/04/2021)*	L'équipe de l'EF soumet les deux documents à l'unitémandatrice

*Tous les rapports finaux d'EF seront soumis à une analyse de la qualité effectuée par le Bureauindépendant d'évaluation (BIE) du PNUD. Pour plus de détails sur l'analyse qualité des évaluations décentralisées réalisée par le BIE, veuillez consulter la section 6 du Guide d'évaluation du PNUD.

8. DISPOSITIONS RELATIVES À L'EF

La responsabilité principale de gérer l'EF incombe à l'unité mandatrice.

L'unité mandatrice dece projet d'EF est le bureau de pays du PNUD.

L'unité mandatrice passera un contrat avec les évaluateurs et s'assurera que l'équipe de l'EF disposera en temps utile des indemnités journalières et des facilités de voyage dans le pays. L'équipe projet sera chargée de prendre contact avec l'équipe de l'EF afin de lui fournir tous les documents nécessaires, préparer les entretiens avec les parties prenantes et organiser les visites sur le terrain.

L'unité mandatrice et l'équipe du projet apporte le soutien pour l'organisation de réunions virtuelles/à distance en cas de besoin. L'unité mandatrice devra fournir une liste mise à jour desparties prenantes et de leurs coordonnées (téléphone et courriel) à l'équipe du projet.

9. Profil de L'évaluateur

Un évaluateur indépendant conduira l'EF – ayant l'expérience des projets et des évaluations dans d'autres région. L'évaluateur sera responsable de la conception générale et de la rédaction du rapport d'EF et de la coordination de la mission. L'expert sera chargé d'évaluer les tendances naissantes concernant les cadres réglementaires, les allocations budgétaires, le renforcement des capacités, de travailler avec l'équipe projet pour définir l'itinéraire de la mission d'EF, etc.).

L'évaluateur ne peut pas avoir participé à la préparation, la formulation, et/ou la mise en œuvredu projet (y compris la rédaction du Document de projet), ne doit pas avoir effectué l'évaluation de ce projet et ne doit pas avoir de conflit d'intérêts en relation avec les activités liées au projet.

L'évaluateur sera sélectionné sur la base des compétences suivantes :

1/ Expert International (Chef de mission)

Éducation

- Diplôme master en Evaluation/Environnement/Développement Durable ou tout autredomaine étroitement lié ;

Expérience

- Expérience récente dans les méthodologies d'évaluation de la gestion axée sur lesrésultats ; (au moins 2 références)
- Expérience dans le domaine des changements climatiques, le transport durable ou ledéveloppement durable ; (au moins 2 références)
- Expérience professionnelle dans l'évaluation des projets financés par le FEM ;(au moins1 référence)
- Expérience professionnelle d'au moins 10 ans dans l'évaluation des projets de développement ;
- Compréhension avérée des questions liées ;

- Excellente aptitude à la communication ;
- Une expérience dans l'évaluation de projet dans le système des Nations Unies sera considérée comme un atout.
- Une expérience dans la mise en œuvre d'évaluations à distance sera considérée comme un atout.

Langue

- Maîtrise de l'anglais et le français à l'écrit et à l'oral

10. CODE DE DÉONTOLOGIE DE L'ÉVALUATEUR

L'équipe de l'EF est tenue de respecter les normes éthiques les plus élevées et de signer un code de conduite à l'acceptation de la mission. Cette évaluation sera menée conformément aux principes énoncés dans les « Directives éthiques pour l'évaluation » du GNUE. L'évaluateur doit protéger les droits et la confidentialité des informateurs, des personnes interrogées et des parties prenantes en prenant des mesures pour assurer le respect des codes juridiques et autres codes pertinents régissant la collecte et la communication des données. L'évaluateur doit également assurer la sécurité des informations collectées avant et après l'évaluation et respecter des protocoles visant à garantir l'anonymat et la confidentialité des sources d'information lorsque cela est prévu. Par ailleurs, les informations et les données recueillies dans le cadre du processus d'évaluation doivent être utilisées uniquement pour l'évaluation et non à d'autres fins sans l'autorisation expresse du PNUD et de ses partenaires.

11. MODALITÉS DE PAIEMENT

- Versement de 20 % du paiement après la présentation satisfaisante de la version finale du rapport initial d'EF et après approbation de l'unité mandatrice ;
- Versement de 40 % du paiement après la présentation satisfaisante du projet de rapport d'EF à l'unité mandatrice ;
- Versement de 40 % du paiement après la présentation satisfaisante du rapport final d'EF et après approbation de l'unité mandatrice et du CTR (via les signatures sur le formulaire d'approbation du rapport d'EF), et une fois soumise la piste d'audit de l'EF.

Critères à remplir pour émettre le paiement final de 40 %

- Le rapport final d'EF comprend toutes les exigences énoncées dans les TdR de l'EF et suit les directives relatives à l'EF ;
- Le rapport final d'EF est rédigé clairement, organisé de façon

logique et il estspécifique au projet concerné (le texte n'a pas été copié et collé à partir d'autres rapports d'évaluation à mi-parcours) ;
- La piste d'audit inclut les réponses et les justifications de tous les commentaires recensés.

*En raison de la situation actuelle et des implications de la COVID-19, un paiement partiel peut être envisagé à hauteur du temps investi dans la production du livrable dont il n'a pu assurer la fourniture complète en raison de circonstances échappantà son contrôle.

12. PROCESSUS DE PRÉSENTATION DES CANDIDATURES

L'évaluateur sera évalué en fonction d'une combinaisons techniques et financiers.

Phase 1 : Evaluation technique des offres

L'évaluation technique sera effectuée sur la base des critères suivants :

Critères	Notation
Méthodologie	40
Note méthodologique proposée **Non conforme** : Incohérente ou non conforme aux TdRs ou omission d'un élément essentiel qui touche à la substance des TdRs(mauvaise compréhension) (0 point) ; **Simple** : Reprend de manière très simple les termes de référence (15 points) ; **Améliorée** : Bon niveau de détail, innovation et valeur ajoutée, pertinence del'approche présenté Conforme aux TDRs, détaillants la consistance avec bonnecompréhension de l'ensemble des missions et apportant une valeur ajoutée(Enrichissement ou nouvelle propositions pertinentes) (40 points) ;	40
Profil Chef de la mission	60
Diplôme master en Evaluation/Environnement/Développement Durable ou toutautre domaine étroitement lié ;	10
Expérience récente dans les méthodologies d'évaluation de la gestion axée sur	10

mandatrice, l'unité des services d'achat et le bureau d'appui juridique seront également informés afin qu'une décision puisse être prise quant à la rétention ou non du paiement de tout montant qui pourrait être dû à l'évaluateur ou aux évaluateurs, à la suspension ou à la résiliation du contrat et/ou au retrait du contractant concerné de toutes les listes

pertinentes. Pour plus de détails, voir la Politique du PNUD en matière de contrat individuel :

https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Individual%20Cont ract_Individual%20Contract%20Policy.docx&action=default

les résultats ; (au moins 2 références)	
Expérience dans le domaine des changements climatiques, le transport durable ou le développement durable ; (au moins 2 références)	20
Expérience professionnelle dans l'évaluation des projets financés par le FEM ;(au moins 1 référence)	10
Expérience professionnelle d'au moins 10 ans dans l'évaluation des projets de développement ; <10 ans : 0 points >10 ans : 10 points	10
Total	100

Important : Seront systématiquement éliminées à l'issue de cette phase toutes les offres ayant obtenu :

→ Une note technique inférieure à la note technique minimale de 70 points.

Les offres techniques seront évaluées sur la base de leur degré de réponse aux Termes de

Phase 2 : Analyse financière comparative des offres

A l'issue de cette phase, chaque offre financière sera dotée d'une note (F) sur 100 :

La note 100 sera attribuée à l'offre valable techniquement et la moins disant. Pour les autresoffres, la note sera calculée au moyen de la formule suivante :

$$F = 100 * \frac{Pmin}{P}$$

P : Prix de l'offre

Pmin : Prix de l'offre valable techniquement et la moins disant.

Phase 3 : Analyse technico-financière :
Les notes techniques (T) et financières (F) obtenues pour chaque candidat seront pondéréesrespectivement par les coefficients suivants :

- 70% pour l'offre technique

 30% pour l'offre financière

N = 0,7 * T + 0,3 * F

Le candidat qui recevra la notation technico-financière la plus élevée sera retenu pour effectuerla consultation.

Présentation recommandée de la proposition :

a) **Lettre de confirmation d'intérêt et de disponibilité** à l'aide du modèle fourni par le PNUD ;
b) **CV** et **Notice personnelle** (Formulaire P11) ;
c) **Brève description de l'approche de travail/proposition technique** indiquant les raisons pour lesquelles la personne estime être la mieux placée pour réaliser la mission attribuée, et méthodologie proposée indiquant de quelle manière elle abordera et réalisera la mission attribuée (1 page max)
d) **Proposition financière** indiquant le montant total tout compris du contrat et de tous les autres frais de déplacement associés (billet d'avion, per diem, etc.), en répartissant les coûts à l'aide du modèle joint au modèle de Lettre de confirmation d'intérêt. Dans le casoù un candidat travaillerait pour une organisation/entreprise/institution et prévoirait la facturation par son employeur des frais de gestion relativement à la procédure pour qu'il soit mis à la disposition du PNUD en vertu d'un accord de prêt remboursable (RLA), le candidat devra le signaler ici et s'assurer que tous les frais associés sont compris dans la proposition financière soumise au PNUD.

Tous les documents associés à la candidature devront être envoyés à l'adresse (13, Avenue Ahmed Balafrej Souissi Casier ONU, Poste Rabat-Chellah 10 000 Rabat Morocco) dans une enveloppe cachetée portant la référence suivante « Consultant pour l'évaluation finale du Projet « **Intégration du changement climatique dans la stratégie nationale de développement de la compétitivité logistique et dans la mise en œuvre des plateformes logistiques»** ou par courrier électronique à l'adresse suivante UNIQUEMENT : registry.ma@undp.org d'ici au *13 mars 2021 à 16 h).* Les candidatures incomplètes ne seront pas examinées.

Critères d'évaluation de la proposition : seules les propositions conformes aux critères seront évaluées. Les propositions seront évaluées selon une méthode combinant plusieurs notations – où la formation et l'expérience dans des fonctions similaires compteront pour 70 % et le tarif proposé comptera pour 30 % la note totale. Le contrat sera attribué au candidat qui obtiendra la meilleure note combinée et aura accepté les conditions générales du PNUD.

13. ANNEXES DES TDR

Liste des annexes

- Annexe A des TdR : Cadre logique du projet/de résultats
- Annexe B des TdR : Dossier d'informations sur le projet, soumis à l'examen de l'équipede l'EF
- Annexe C des TdR : Contenu du rapport d'EF
- Annexe D des TdR : Modèle de matrice de critères d'évaluation
- Annexe E des TdR : Code de conduite du GNUE applicable aux évaluateurs
- Annexe F des TdR : Échelles de notation de l'EF
- Annexe G des TdR : Formulaire d'approbation du rapport d'EF

Annex B : Logical framework

	Indicateur	Ligne de base	Cibles Fin du Projet	Source de vérification	Risques et hypothèses
Objectif du projet Pour opérationnaliser le potentiel d'atténuation de la Stratégie Nationale de la logistique grâce au déploiement des plates-formes logistiques intégrées par le gouvernement dans le cadre d'une NAMA.	Nombre de tonnes de CO_2 réduites	8.856 tCO_2 BAU réduites par les véhicules nouvellement introduits bénéficiant du programme actuel de financement du METLE et des véhicules de la SNTL conduits écologiquement (2016).	88 914 tCO2	Rapports de suivi du projet et évaluation finale Calcul et suivi réalisés grâce aux méthodes développées de calcul de CO_2	Les risques économiques : poursuite de la crise économique internationale et son impact sur l'économie marocaine ; apparition éventuelle des périodes de sécheresse climatique qui peuvent influer le secteur de l'agriculture en tant que moteur essentiel de l'économie nationale. Les risques financiers : L'approvisionnement en ressources financières nécessaires pour développer les plateformes logistiques, de subventionner le système de renouvellement de la flotte et d'offrir des incitations appropriées pour professionnaliser le secteur informel.
	Quantité d'énergie produite à partir des sources renouvelables (MWh/an)	0	2466 MWh/an	Données SNTL Communication nationale au CCNUCC et BURs.	
	Disponibilité d'un système en place pour faire le suivi, le reporting des progrès en matière de réduction des émissions de GES dans les secteurs du transport routier et ferroviaire.	0	Oui : Un système est en place pour faire le reporting des progrès en matière de réduction des émissions de GES dans les secteurs du transport routier et ferroviaire	METLE : Système centralisé de collecte de données des flottes routière et ferroviaire de transport de marchandises et de calcul de leurs émissions de GES mis en place au niveau METLE.	
	Nombre d'opérateurs de transport de marchandises conscients des avantages économiques et environnementaux de l'éco-conduite, du ainsi que de l'amélioration de la maintenance des véhicules.	0	Une Trentaine d'opérateurs sensibilisés (1 atelier stratégique et une trentaine de conducteurs des sociétés de transports sensibilisés (1 atelier organisé à Mohammedia) Une campagne de communication digitale à l'éco-conduite et sa diffusion aux médias sociaux.	Compte rendus des réunions et ateliers Rapport bilan-impact de la campagne de communication digitale. Rapport d'évaluation de l'impact à froid de la formation des formateurs à l'éco-conduite.	

	Indicateur	Ligne de base	Cibles Fin du Projet	Source de vérification	Risques et hypothèses
Résultat 1 Les institutions, les politiques publiques et les réglementations sont renforcées pour le développement à faible carbone du secteur du transport au Maroc	Disponibilité d'une institution capable d'assurer l'intégration du développement à faible carbone dans le secteur du fret.	0 : Aucune institution spécifique dédiée au suivi et à l'élaboration des politiques de GES dans le secteur des transports.	Oui : Une institution spécifique en cours de mise en place en tant que Comité Technique CC dans les secteurs du transport et de la logistique au niveau du METLE et ses capacités sont renforcées en matière de suivi et d'élaboration des politiques pour un développement à faible carbone.	Rapports d'activités, suivi et évaluation finale.	L'obtention du soutien et des ressources nécessaires par l'AMDL et l'OMCL leur permettant de jouer pleinement un rôle dans le développement à faible carbone du secteur des transports Retard dans le développement et la mise en œuvre de la stratégie logistique nationale. La négociation des options politiques à faible carbone proposées et l'amélioration de la réglementation du secteur privé avant soumission pour le processus d'approbation gouvernemental Difficulté d'accès aux données pertinentes auprès des opérateurs pour l'estimation des GES générées par la flotte.
	Disponibilité des mesures et règlements politiques conçus pour intégrer le développement à faible carbone dans le secteur de la logistique. Pourcentage des véhicules inscrits dans le registre de la flotte routière avec des données pertinentes sur les GES.	0 : Aucune mesure politique ni mesure d'atténuation pour contribuer à l'atteinte de l'impact des 35% de réduction des émissions. Aucun système spécifique au suivi des émissions ni au développement à faible carbone n'existe à ce jour 0 %.	Oui : Des mesures politiques sont élaborées pour contribuer à l'atteinte de l'impact des 35% de réduction des émissions. 1 inventaire des GES réalisé Au moins 1 règlement—sur le développement sobre en carbone est élaboré dans le secteur du fret au Maroc-	Rapports, PV et compte rendus des réunions et des ateliers. Rapport de l'inventaire Projet de cadre réglementaire, institutionnel et financier permettant la mise en œuvre des dispositifs politiques et mesures retenues pour l'atténuation des émissions des GES dans le secteur du fret au Maroc.	
			100% du registre de la flotte routière possède des données sur les GES.	Système centralisé de collecte de données des flottes routière et ferroviaire de transport de marchandises et de calcul de leurs émissions de GES opérationnel.	
Résultat 2 Le réseau des ZLMF de Casablanca-Settat est développé en tant que projet-modèle de mesure d'atténuation appropriée au	Disponibilité d'un inventaire des GES et d'un système MRV au niveau de la plateforme logistique de Casablanca-Settat (CS).	Non : Aucun inventaire de GES ni systèmes MRV.	Oui : Inventaire des GES et systèmes MRV conçus et adossés à la NAMA de CS.	Rapports de suivi du projet et évaluation finale. Inventaire des GES et système MRV de la NAMA CS.	Engagement des parties prenantes dans la collecte des données et la validation de la NAMA-DD. Examen et validation des NAMAs proposées (cadres NAMAs CS par le comité de suivi institué-	

niveau national ("NAMA") dans le cadre de la stratégie nationale de la logistique.	Disponibilité de la plateforme logistique de CS conçue comme étant un modèle NAMA pour une perspective de réplication dans les 17 autres plateformes.	0 NAMA-DD existe pour la plateforme logistique de CS.	Oui : Le Document de conception de la NAMA (NAMA-DD) est validé par le comité de suivi institué et soumis sous couvert du Ministère de l'Energie, des Mines et de l'Environnement (Département de l'Environnement) au registre NAMA de la CCNUCC. Oui : Une méthodologie de référence pour le transfert modal de la route vers le rail est développée et testée par le METLE.	Document de la NAMA-DD de CS PV de validation du document de la NAMA - DD Lettre d'envoi du document de la NAMA - DD	Retard dans le développement et la mise en œuvre de la Stratégie Logistique Nationale.
	Disponibilité d'un cadre novateur " feuille route de NAMAs imbriquées" est développé pour coupler la NAMA de la plateforme logistique de CS à la NAMA de l'éco-ville de Zenata (« NAMA ville »), une initiative de Zenata.	0 : Aucun cadre "NAMAs imbriquées" n'est développé	Validation de la feuille de route pour l'élaboration de la « NAMA imbriquée » par le comité de suivi institué.		Retard dans le développement de la NAMA de l'éco-ville de Zenata (« NAMA ville ») pour des raisons liées à la conjoncture économique. Indisponibilité des données pertinentes pour l'élaboration de la feuille de route la « NAMA imbriquée ».
Résultat 3 La mesure d'atténuation ("NAMA") est rendue opérationnelle à travers des investissements de mise à niveau des zones logistiques dans le cadre du Plan Régional de la logistique de Casablanca-Settat	Nombre des mesures de réduction des GES opérationnalisées grâce à des investissements facilités par le projet au niveau des plateformes logistiques du GC	0 MW de PV installés sur les toits des entrepôts du site de Zenata 5 formateurs des centres agrées des formations bénéficient des formations des formateurs à l'éco-conduite. 70% des véhicules de la SNTL sont moins de 5 ans	1 MW de PV sont acquis et installés sur le site de Zenata 102 formateurs bénéficiant des formations à l'éco-conduite. 1450 primes sont attribuées pour le renouvellement des véhicules de transport de marchandises	Procès-verbal de réception des travaux et de mise en exploitation de l'énergie produite Liste de présence des formateurs aux formations de l'éco-conduite Document justificatif de l'octroi de la prime. Rapports annuels du programme de subvention pour le renouvellement de la flotte	Manque d'un cadre réglementaire national sur le net metering Lenteur des procédures d'attribution des subventions pour le renouvellement de la flotte L'engagement du secteur privé, principalement le secteur informel, en la mise en œuvre des mesures d'atténuation

Annex C: List of people interviewed

Date	Ministry/Organism	Name	Department
Tue 04/13/21	UNDP	Amal NADIM Rachid BENABBOU	Head of the Environment, Energy & Climate Change Unit National project coordinator
Mon 04/26/21	AMEE	Mohamed MAKAOUI Abdallah RHARBAOUI	Head of the Energy Efficiency Division and Deputy Director of ER&EE Head of the Transport Department
Thu 04/29/21	METLE : Direction des Affaires Techniques de la Relation avec la Profession	Mahdi KHARROUJ	Head of the Risk Prevention Department
Fri 04/30/21	PMU	Zahraa OUACIFI Halima LESSIQ Hicham MOUEFFAK	Head of the Strategy Division Head of the Strategic and Multisectoral Studies Department Project manager
Mon 05/03/21	Département de l'Environnement	Abdelghani BOUCHAM	Head of the Climate Change Department and National Coordinator of the GHG Inventory System
Mon 05/03/21	SNTL	Brahim MAFTAH Abderrahim BENDELLA	Project manager
Tue 05/04/21	METLE : Direction des Transports Terrestre et Logistique	Karim BENAMARA	Head of Vehicle Regulation, Sustainable Mobility and Innovation
Wed 05/05/21	NARSA (Agence Nationale de la Sécurité Routière)	Bilal DAFA	Head of Strategy, Studies and Research Department

Thu 05/06/21	ANP	Abdellah EL WATIK	Ex-director of the ANP
Fri 05/07/21	PMU	Rachid BENABBOU	National project coordinator

Annex D: Evaluation question matrix: evaluation criteria with key questions, indicators, data sources and methodology)

Questions des critères d'évaluation	**Indicateurs**	**Sources**	**Méthodologie**
Pertinence : comment le projet se rapporte-t-il aux principaux objectifs du domaine focal du FEM et aux priorités en matière d'environnement et de développement au niveau local, régional et national ?			
La conception est-elle logique et cohérente ?	− Qualité de l'information contenue dans le document de projet − Concordance des objectifs du projet avec la politique de lutte contre le réchauffement climatique du Maroc − Existence d'une réelle prise en considération des PP concernées pendant la conception de projet	− Document de projet (ProDoc) − Formulaire d'identification de projet (PIF) − Axes de la politique de lutte contre le changement climatique du Maroc − PP stratégiques − Membres de l'UGP − Personne-ressource du PNUD	− Collecte et documentation des informations (veille technologique) − Analyse de documents et interprétation − Entretiens one-to-one et FG avec les PP concernées − Entretien avec l'UGP − Concertation avec le PNUD
La stratégie du projet est-elle le moyen le plus efficace d'atteindre les résultats escomptés ?			
Le projet est-il pertinent par rapport aux priorités et aux plans nationaux pour le développement sectoriel du pays ?			
Efficacité : dans quelle mesure les résultats escomptés et les objectifs du projet ont-ils été atteints ?			
Quel est le taux des réalisations du projet sur les plans quantitatif et qualitatif ? Dans quelle mesure le respect de la planification a-t-il été assuré ?	− Respect des objectifs du projet fixés − Qualité du cadre logique et de ses indicateurs − Niveau d'atteinte	− ProDoc − Plans de travail annuels − Rapports annuels − Procès-verbaux du CoPiL	− Analyse de documents et interprétation − Analyse de données − Entretiens one-to-one et FG avec les

Les résultats actuels du projet ont-ils contribué à la réalisation des objectifs immédiats du projet ?	des résultats escomptés − Application effective des approches du projet − Niveau de changement apporté aux bénéficiaires	− PIR − Outils de communication − Comptes-rendus liés aux ateliers réalisés − Outils études techniques et développés − PP stratégiques et opérationnelles − Membres de l'UGP	PP concernées − Entretien avec l'UGP
Quels facteurs ont empêché ou facilité la réalisation des objectifs du projet ?			
Est-ce que les bénéficiaires cibles prévus ont été atteints ?			
Efficience : le projet a-t-il été mis en œuvre de façon efficiente, conformément aux normes et standards nationaux et internationaux ?			
Quels sont les résultats ou effets obtenus par rapport aux moyens matériels, financiers et humains mis en œuvre, conformément aux normes requises ?	-utilisation des fonds alloués au projet	-documents financiers -CDR	-analyse des documents -entretiens avec l'UGP
Quels sont les résultats ou effets obtenus par rapport au cycle de vie du projet ?			
Durabilité : dans quelle mesure existe-t-il des risques financiers, institutionnels, sociopolitiques et/ou environnementaux au maintien des résultats du projet à long terme			
La gestion des risques du projet a-t-elle été appropriée et à jour ?	− Niveau d'ancrage et d'appropriation du projet d'un point de vue local et national − Présence de perspectives de développement et de renforcement du projet au niveau des PP	− Procès-verbaux du CoPiL − Rapports annuels − PIR − Module ATLAS de gestion des risques − Leçons apprises	− (veille technologique) − Analyse et interprétation − Entretiens one-to one et FG avec les PP concernées − Entretien avec
Quelle est la probabilité qu'il n'y ait pas de ressources financières disponibles après la fin de l'aide du			

GEF ?	− Disponibilité des fonds nécessaires pour le maintien et la durabilité des acquis du projet − Présence d'un cadre juridique et une gouvernance en faveur de la durabilité du projet	issues du projet − Concertation des PP stratégiques et opérationnelles − Membres de l'UGP − Personne-ressource du PNUD	l'UGP − Concertation avec le PNUD
Existe-t-il des risques sociaux ou politiques susceptibles de menacer la durabilité des réalisations du projet ?			
Les cadres juridiques, les politiques, les structures de gouvernance et les processus présentent-ils des risques qui pourraient menacer la durabilité des bénéfices du projet ?			
Existe-t-il des risques environnementaux qui pourraient menacer la durabilité des réalisations du projet ?			
Égalité des genres et autonomisation des femmes : comment le projet a-t-il contribué à l'égalité des genres et à l'autonomisation des femmes ?			
Les questions du genre sont-elles intégrées à la conception du projet ?	− Nb. de femmes ayant été impliquées ou bénéficiées des activités du projet	-revues annuelles - pp stratégiques	-analyse des documents -entretien avec les PP
Impact : existe-t-il des indications que le projet a contribué à (ou permis de) progresser vers une réduction des pressions exercées sur l'environnement et/ou une amélioration de l'état écologique ?			
Quels sont les changements notés pouvant être attribués au projet GEF-Transport ?	-niveau de changement apporté au projet	-revues annuelles et mi-annuelles -pp stratégiques	-analyse des documents -entretien avec les pp
Quel est le niveau de satisfaction et d'appropriation des outils, des équipements et	-niveau d'appropriation des outils et équipements mis en place par le projet		

infrastructures mis en place pour le projet aux besoins des bénéficiaires ?			
Impacts du covid 19 : comment le projet a-t-il été impacté et quelles mesures ont été prises ?			
Le Covid a-t-il causé des retards ou l'annulation de certaines activités ?	-retard des activités du projet -nombre d'activités annulées liées au covid	-rapports annuels	analyse des documents

Annex E: FE rating scale

Notations pour les résultats, l'efficacité, l'efficience, le S&E, la mise en œuvre/le contrôle, l'exécution, la pertinence	Notations pour la durabilité :
6 = Très satisfaisant (TS) : dépasse les attentes et/ou aucune lacune 5 = Satisfaisant (S) : répond aux attentes et/ou aucune lacune ou lacunes mineures 4 = Moyennement satisfaisant (MS) : répond plus ou moins aux attentes et/ou lacunes mineures 3 = Moyennement insatisfaisant (MI) : un peu en dessous des attentes et/ou lacunes importantes 2 = Insatisfaisant (I) : très en dessous des attentes et/ou lacunes majeures 1 = Très insatisfaisant (TI) : graves lacunes Évaluation impossible (EI) : les informations disponibles ne permettent pas de procéder à l'évaluation	4 = Probable (P) : risques négligeables pour la durabilité 3 = Moyennement probable (MP) : risques modérés pour la durabilité 2 = Moyennement improbable (MI) : risques importants pour la durabilité 1 = Improbable (I) : risques élevés pour la durabilité Évaluation impossible (EI) : l'incidence attendue et l'ampleur des risques pour la durabilité n'ont pas pu être évaluées

Annex F: Training Programme Capacity Building of the GEF-Transport Project Management Unit in May 2021

ROYAUME DU MAROC
MINISTERE DE L'EQUIPEMENT, DU TRANSPORT, DE LA LOGISTIQUE ET DE L'EAU

GEF TRANSPORT

المملكة المغربية
وزارة التجهيز والنقل واللوجستيك والماء

Renforcement des capacités de l'Unité de Gestion du Projet GEF-Transport/ Unité Technique Climat en matière de la bonne gestion de développement à faible carbone

Programme

du 20 au 26 mai 2021 (9h -16h30) Centre d'Accueil et des Conférences - Rabat

20 mai	**Module 1 : Finance climat** - Revue des dépenses publiques du Maroc en matière de CC ; - Finance Climat ; - Les instruments, les mécanismes et les modalités de la budgétisation publique des CC.	M. Adil Youssfi, Directeur de 4 Way Consulting
21 mai	**Module 2 : Mécanisme de financement des projets d'adaptation et d'atténuation des effets de CC sur les secteurs de l'ETL** - Rappel des mécanismes internationaux de la Finance Climat : o Différentes sources internationales du financement climatique ; o Principales sources internationales de financement climatique au Maroc ; o Sources nationales de financement climatique-Focus sur le FVC ; - Exercices pratiques et études de cas.	Mme Maribel Hernandez (Puteaux) *Willis Towers Watson-France*
24 mai	**Module 3 : Planification et Changement Climatique** - Planification et CC – volet opérationnel - Montage de projets en CC. *(Exposé + Travail de groupe + Cas pratiques).*	M. Adil Youssfi, *Directeur de 4 Way Consulting*
25 & 26 mai	**Module 4 : Développement bas carbone dans les secteurs du transport et de la logistique** - Enjeux du Transport, Développement Durable, Energie et Emissions ; - Stratégie "éviter" et "transférer" dans le transport de personnes : outils, interventions et cas d'exemple ; - Stratégie "éviter" et "transférer" dans le transport de marchandise : outils, interventions et cas d'exemple ; - Stratégie "améliorer" : interventions outils, interventions Transport & Logistique durable et cas d'exemple Efficacité des modes et énergies alternatives.	M. Abdellatif Touzani

Ministère de l'Equipement, du Transport, de la Logistique et de l'Eau

Projet GEF-Transport
Direction Générale de la Stratégie, des Ressources et des Affaires Techniques et Administratives
Quartier administratif B.P. 597 Rabat-Chellah

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