

# Integration of electric mobility with renewable energy in peri-urban and rural areas around cities in C?te d'Ivoire

Review PIF and Make a recommendation

## Basic project information

**GEF ID**

11042

**Countries**

Cote d'Ivoire

**Project Name**

Integration of electric mobility with renewable energy in peri-urban and rural areas around cities in C?te d'Ivoire

**Agencies**

UNIDO

**Date received by PM**

6/15/2022

**Review completed by PM**

6/22/2022

**Program Manager**

Patricia Marcos Huidobro

**Focal Area**

Climate Change

**Project Type**

MSP

**PIF****Part I ? Project Information****Focal area elements**

**1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** In Table A there are two lines, both tagged as CCM-1-1 under the CCM entry points. Please clarify whether this is an error and, if so, please update accordingly. Overall, it seems to us that the project would fit under the following entry points:

-CCM-1-1 Promote innovation and technology transfer for sustainable energy breakthroughs for decentralized power with energy usage;

- CCM-1-2 Promote innovation and technology transfer for sustainable energy breakthroughs for electric drive technologies and electric mobility; and

Agency Response The entry points have been updated accordingly (CCM-1-1 & CCM-1.2). Thank you.

**Indicative project/program description summary**

**2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.**

**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** Please clarify the following comments:

- Output 1.1.3. is expected to deliver a sectoral roadmap for improved energy performance in transport sector. However, it seems that the government already published a draft roadmap in 2019. Please clarify how the proposed roadmap would complement this draft roadmap.

- Output 2.1.1 shall be further elaborated, particularly providing more information on the activities expected under this output, and a explanation on the difference between the feasibility studies proposed and the studies to be developed during the PPG.

- Output 2.1.2 shall be further elaborated particular on the 5 selected cities and the reason for their selection. This information has been provided under section 1b on Project Map and Coordinates, but shall be moved to Output 2.1.2.

- Output 2.1.1. shall be tagged as Technical Assistance rather than Investment. Please in Table B create two rows for Component 2, one for the investment activities (i.e. Output 2.1.2) and a second one for the technical assistance activities (i.e. Output 2.1.1).

- Component 4 - M&E budget of \$120,000 at 8.2% of the project sub-total is higher than recommended threshold for projects of this size, which is 5%. Please consider reducing the budget to a more reasonable level.

Agency Response

Comment/answer to questions related to output 1.1.3: Clarifications have been included as below:

"This output will directly support the implementation of objectives of the Draft Roadmap for Sustainable Transport in Cote d'Ivoire and will provide specific recommendations with regards to improved energy performance in transport sector in value chains (e.g., refrigerated electric three-wheelers charged by mini-grids) in peri-urban and rural areas. The proposed roadmap will build upon existing institutional networks which have been established during the preparation of the Draft Roadmap for Sustainable Mobility to electrify the urban public transport. This output will present a strategy and concrete actions needed to electrify the peri-urban and rural areas in Cote d'Ivoire and will integrate itself in existing networks and ongoing activities to modernize the transport systems. It will ensure that deliverables developed under the project will be considered by relevant stakeholders."

Comment/answer to questions related to output: 2.1.1: Clarifications have been included as below:

"The project will provide technical assistance to e-mobility projects based on the results of the pre-feasibility studies that will be developed by the project execution entity and stakeholder consultations. Initial pre-feasibility studies to compare location, optimization and appropriate business models for the development of e-mobility infrastructure are discussed but the project execution entity together with other stakeholders will develop detailed feasibility studies during the PPG. The research will draw upon the initial feasibility study on various business models and build upon lessons learned from ongoing initiatives in Cote d'Ivoire (such as UNEP's project on e-mobility) to disseminate e-charging infrastructure. The Lead Executing Entity will work with researchers to replicate the best practices to peri-urban and rural areas."

Comment/answer to questions related to output 2.1.2: Clarifications have been included as below:

"The project will be implemented in Cote d'Ivoire (Annex A). Conceived as a demonstration project, the sites were chosen to have a good sampling and above all to reflect the diversity of the type of mobility in Ivorian peri-urban and rural areas connected with major cities. Peri-urban areas are zones of transition from rural to urban land located between the outer limits of urban and regional centres and the rural environment. Therefore, three groups of sites were selected, including the urban and peri-urban areas used by rural communities in:

- Abidjan, the economic capital and the most populated. The city of Abidjan is the main economic centre of the country, contributing about 60% of its GDP (implying an average GDP per capita 40% higher than the rest of the country) (World Bank, 2019). The very dense fleet consists overwhelmingly of motor vehicles with four or more wheels. The use of other means of travel, notably motorbikes, is fairly limited.

- Yamoussoukro, the political capital, has much less traffic than Abidjan and there are major arteries and cycle tracks. The project will obtain from the government the provision of 50 km of paved road for the project (pedestrian and bicycle path). The demonstration will be carried out with two- and three-wheeled electric vehicles (mopeds, scooters, motorbikes) equipped with automatic payment applications and integrated GPS for geo-location and recording of journeys in order to collect data in self-service mode;

- Bouaké in the centre of the country and Korhogo much further north, and San Pedro, all of which are characterized by a massive presence of motorbikes. Traffic is generally fluid. In Bouaké, the demonstration phase will be carried out with a fleet of a combination of two-wheeled and three-wheeled (mopeds, two- and three-wheeled motorbikes) electric vehicles. Only two- and three-wheel vehicles will be used in Korhogo.

It should be noted that the cities of Abidjan, Yamoussoukro, Bouaké, San Pedro and Korhogo will host the matches during the Africa Cup of Nations tournament that Côte d'Ivoire will organise from June to July 2023. Over 1,000,000 participants are expected. The project could substantially contribute to the mobility of people and goods through zero-emission vehicles and non-motorised transport and thus reduce the ecological footprint of the event.

In peri-urban and rural areas of the cities of Abidjan, Yamoussoukro, Bouaké, San Pedro and Korhogo, 2&3 wheeler vehicles are the most common means of transportation, contributing to local air pollution and greenhouse gas emissions (GHG). Transitioning to electric 2&3 wheeler vehicles can help reduce GHG emissions while also increasing the socio-economic status of people in peri-urban and rural areas in Côte d'Ivoire.

Renewable energy systems can play a significant role in charging electric 2&3 wheeler vehicles, resulting in lower carbon emissions and increased renewable energy penetration in peri-urban and rural areas in Côte d'Ivoire. The project demonstration activities will focus on integrating electric 2&3 wheeler vehicles into off-grid photovoltaic systems. The project will provide solutions for clean electricity for charging batteries for electric 2&3-wheelers."

Comment/answer to questions related to output output 2.1.1 tagged as Technical Assistance: In Table B are created two rows for Component 2, one for the investment activities (Output 2.1.2) and a second one for the technical assistance activities (Output 2.1.1).

Comment/answer to questions related to component 4 - M&E budget: the budget for component 4 has been changed to USD 80,000, slightly above 5%. Based on experience, we have about 20,000 to 30,000 for the mid-term review and about 40,000 for the terminal evaluation; the USD 10,000 to 15,000 are used for monitoring purpose. The

amount deducted has been moved to the component 2 related to the investment activities.

**Co-financing**

**3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?**

Secretariat Comment at PIF/Work Program Inclusion  
6/27/2022 PM:

**Cleared.**

6/21/2022 PM:

**No.** Please note the co-financing provided by COPADEN & GROUPA3E if in-kind type of co-financing, then it shall be tagged as "recurrent expenses" rather than "investment mobilized". In addition, UNIDO \$20,000 grant shall be changed from "recurrent expenditures" to "Investment mobilized?". Please update accordingly.

**Agency Response**

Comment/answer related to the co-financing provided by COPADEN & GROUP A3E:  
The co-financing are now tagged as "recurrent expenses".

Comment/answer related to UNIDO's grant co-financing: change has been reflected.  
Thank you.

**GEF Resource Availability**

**4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes.**

Agency Response

**The STAR allocation?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/21/2022 PM:**

**Yes.**

Agency Response

**The focal area allocation?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/21/2022 PM:**

**N/A.**

Agency Response

**The LDCF under the principle of equitable access?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/21/2022 PM:**

**N/A.**

Agency Response

**The SCCF (Adaptation or Technology Transfer)?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/21/2022 PM:**

**N/A.**

Agency Response

**Focal area set-aside?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

N/A.

Agency Response  
**Impact Program Incentive?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

N/A.

Agency Response  
**Project Preparation Grant**

**5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes**, the PPG requested in within the allowable cap.

Agency Response

**Core indicators**

**6. Are the identified core indicators in Table F calculated using the methodology included in the corresponding Guidelines? (GEF/C.54/11/Rev.01)**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes**. At CEO Endorsement please provide a spreadsheet with the GHG estimations so they can be easily tracked.

Agency Response The spreadsheet with the GHG estimations will be indeed provided at the CEO Endorsement stage.

**Project/Program taxonomy**

**7. Is the project/program properly tagged with the appropriate keywords as requested in Table G?**

Secretariat Comment at PIF/Work Program Inclusion

**6/21/2022 PM:**

**Yes.**

Agency Response

**Part II ? Project Justification**

**1. Has the project/program described the global environmental/adaptation problems, including the root causes and barriers that need to be addressed?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.** To be further elaborated at CEO Endorsement.

**6/21/2022 PM:**

**No.** Kindly address the following comments:

- The PIF explains that there are currently 6 dams under construction in Cote D'Ivoire, which will help the country transition towards a cleaner grid and therefore a cleaner electric mobility transport. However, the PIF does not provide information on the current electricity grid mix in the country, and by when the current dams are expected to be start operation. Also, please confirm whether the five selected cities are connected to the grid. If not available at PIF, this information can be provided at CEO Endorsement.

- The project does provide information on the expected projection growth of 2&3 wheelers in the country. In addition, information on the current percentage of 2&3 wheelers within the overall transport sector in Cote d'Ivoire would help the reader

understand the need to focus on this type of transport. If not available at PIF, this information can be provided at CEO Endorsement.

#### Agency Response

Cote d'Ivoire has the advantage to already promote renewable energy in the project since it is well placed in producing clean energy from its 6 dams in service, namely Ayam? 1 (20 MW), Ayam? 2 (30 MW), Kossou (147 MW), Taabo (210 MW), Buyo (165 MW) and recently Soubr? (275 MW) and will benefit from the ZEV project implementation in term of GHG emissions reduction. This will help the country transition towards a cleaner grid and therefore a cleaner electric mobility transport.

These information and data will be further elaborated during the PPG phase. The information of the assessed current electricity grid mix in the country, their adoption to the project activities and their integration with electric 2&3 wheelers will be further explored and shared at the CEO Endorsement.

#### **2. Is the baseline scenario or any associated baseline projects appropriately described?**

Secretariat Comment at PIF/Work Program Inclusion

**6/21/2022 PM:**

**Yes.**

#### Agency Response

**3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.** Issues on the complementarity with the UNEP project, the proposed business/financial model for the project and deployment of RE technologies will be further elaborated at CEO Endorsement.

**6/21/2022 PM:**

**No.** Please address the following comments:

- Overall, there are a lot synergies between this project and the UNEP national child Project GEF ID10302 Integrated, Sustainable and Low Emissions Transport in Cote

d'Ivoire (<https://www.thegef.org/projects-operations/projects/10302>) under the GEF Global Programme to Support Countries with the Shift to Electric Mobility. The proposed project does mention collaboration and coordination with the UNEP project, however, the PIF shall provide further information on how the two projects complement each other. For instance, the proposed project focus on 2&3 wheelers in peri-urban and rural areas, while the UNEP project has a broader scope.

- Identification synergies and potential areas of overlaps between the proposed project and the UNEP national child Project GEF ID10302 Integrated, Sustainable and Low Emissions Transport in Cote d'Ivoire shall also be further analyzed at CEO Endorsement. For instance, Would the roadmap to be delivered under Component 1 be built on the strategy to be developed under component 1 of the UNEP project 10302 (which was endorsed in June 2021 and is already under implementation)? Also, how the proposed project would benefit from Component 3 of the UNEP project i.e. "the Government of Cote d'Ivoire adopts financial incentives and technical standards to promote investments in low-carbon electric mobility in public transport?".

- The objective of Output 2.1.2 is to operationalization of innovative and highly replicable pilot sites following a predefined set of criteria promoting ZEV in peri-urban and rural areas to demonstrate private sector driven business models for future upscaling. However, it is not clear how and when the private sector driven business models would be assessed and identify. Would this be as part of the PPG phase or as an activity within Output 2.1.2? This shall be further elaborated in the PIF, as this would have a impact on the sustainability and potential for scaling up. Also, would the project further engage with the financing sector in the identification and potential roll out of a business model for the development of EM in the country?

- The PIF states that the project will increase deployment of renewable energies (solar, wind, etc.). From the PIF it is not clear how the project would contribute towards this. Please clarify and further elaborate if need be. For instance, in each of the 5 cities identified, would this be done through PV solar panels or connection to the grid?

- See also comments to the proposed alternative scenario under Part I, Point 2 (components under Table B).

## Agency Response

Comment/answer to the point related to synergies with other projects notably the UNEP national child Project GEF ID10302: the proposed project will create synergies with other relevant initiatives such as the mentioned UNEP national child project "Integrated, Sustainable and Low Emissions Transport in Cote d'Ivoire", under the GEF Global Programme to Support Countries with the Shift to Electric Mobility. Synergies will also be created with other UNIDO's initiatives such as the project "Promoting Renewable Energy-Based Grids in Rural Communities for Productive Uses in Cote d'Ivoire". The

government and the wider renewable energy and development sectors can benefit from strengthened dialogue, experience-sharing and communication with regard to leveraging renewable energy to secure improved energy access and spur socio-economic development.

During the PPG phase, the baseline projects list will be further assessed and finalised.

Comment/answer to the point related to the identification synergies and potential areas of overlaps between the proposed project and the UNEP national child Project GEF ID10302 Integrated, Sustainable and Low Emissions Transport

Further elements related to this have been provided within the documents, indicating notably that:

"While the UNEP project is focusing on the broader e-mobility framework at the national level, the proposed project will focus more on the introduction of 2&3 electric wheelers in peri-urban and rural areas. The project will conduct a feasibility study on technical/economic opportunities for the electrification of 2&3 wheelers in peri-urban and rural areas around 5 cities in Cote d'Ivoire and will provide the financing mechanism to introduce and scale-up e-mobility. The proposed project would benefit from Component 3 of the UNEP-GEF project i.e. "the Government of Cote d'Ivoire adopts financial incentives and technical standards to promote investments in low-carbon electric mobility in public transport?."

Comment/answer related to the objective of output 2.1.2:

Due to high upfront costs in e-mobility, especially for batteries, it will be difficult to sell EVs directly at full price to the majority of customers in Cote d'Ivoire, where cash income is limited. The proposed project, will closely work with the private sector and explore several business models such as managing the batteries with a pay-per-use model.

Financial and technical constraints makes improving rural infrastructure and transport services challenging. Enabling road access in peri-urban and rural areas in Cote d'Ivoire would further help to boost farmers' income by providing market linkage to the nearest town or city, thus improving food security.

During the PPG phase, the project will further engage with financial institutions such as banks, microfinance institutes and other credit institutions in order to enable technological innovation, encourage change in consumer behavior, and enable business model experimentations.

Comment/answer related to the deployment of renewable energies: Cote d'Ivoire's abundance of solar energy makes PV charging stations the preferred choice for rural EVs. Clarifications on the deployment of this RE and other identified renewable energies (SHP, hydro, wind, etc.) will be further assessed during the PPG phase. In

general terms, communications and knowledge activities will support and complement the deployment efforts.

Comment/answer related to the proposed alternative scenario under Part I, Point 2 (components under Table B): this has been reflected in the PIF.

**4. Is the project/program aligned with focal area and/or Impact Program strategies?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** Please note that objective 3 of the CCM strategy refers to the support provided by the GEF to recipients countries with regards to their reporting obligations under the UNFCCC. As such, this project is not directly contributing to Objective 3, and suggest to remove this point. Also, please try to focus particularly on the entry points under Objective 1 which have been incorporated in Part A of the PIF.

Agency Response

The reference to the objective 3 has been removed. Thank you.

Entry points under objective 1 will be further developed and informed during the PPG phase.

**5. Is the incremental/additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?**

Secretariat Comment at PIF/Work Program Inclusion

**6/21/2022 PM:**

**Yes.**

Agency Response

**6. Are the project/s/program?s indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?**

Secretariat Comment at PIF/Work Program Inclusion

**6/21/2022 PM:**

**Yes.**

Agency Response

**7. Is there potential for innovation, sustainability and scaling up in this project?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.** Information on the most suitable business model will be further elaborated at CEO Endorsement.

**6/21/2022 PM:**

**No.** Please address the following comments:

- From the PIF it is not clear the innovative features of the proposed project, particularly when compared to UNEP national child project ID10302. The PIF states that one of the innovative features of the project is the deployment of EM pilots. However, please clarify what it is innovative on these pilots when compared to other pilots projects.

- As mentioned in Part II, Point 3 above, information with regards to the identification and assessment of a viable private sector-led business model is currently missing. Further information on the business model selection would help assess the potential for sustainability and scaling up of the project.

Agency Response

Comment/answer related to the innovative features:

Elements have been added to the PIF to highlight the innovative features. This includes elements such as:

"One of the innovative features of the project is that EV companies could consider investing in homegrown-product innovation to design or tailor EVs (e.g., refrigerated electric two & three-wheelers charged by mini-grids) for local needs and conditions in peri-urban and rural areas. Developing an electric 2&3 wheeler that is both durable and capable of carrying a spare battery may be required to meet the needs of the drivers. Local vehicle assemblers may also invest in national and regional supply chains by manufacturing some parts locally. McKinsey's Green Africa report, states that sub-Saharan Africa has many of the raw materials needed to develop a supply chain for at least the attractive cathode segment of batteries used in EVs.

Replacing inefficient, polluting and expensive engines of 2&3 wheelers with electric ones that are powered by renewable energy through the deployment of the pilots can bring innovation in the country."

Comment/answer related to the identification and assessment of a viable private sector-led business mode: Point noted. Due to time constraint, it has only be partially reflected within the PIF. We agree that the successful adaptation of e-mobility solutions requires innovative business models. The project will further engage with the private sector during the PPG phase and will assess and identify circular and shared economy approaches where users have only limited cash for investments. During this initial phase, the project will also identify and assess the potential of financial institutions such as banks, microfinance institutes and other credit institutions in order to enable technological innovation.

#### **Project/Program Map and Coordinates**

**Is there a preliminary geo-reference to the project's/program's intended location?**

Secretariat Comment at PIF/Work Program Inclusion

**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** Please provide the exact coordinates for the five selected cities.

#### **Agency Response**

The exact coordinates for the five selected cities have been included in the PIF as follow:

Abidjan: 5.3600° N, 4.0083° W

Yamoussoukro: 6.8276° N, 5.2893° W

Bouak?: 7.6905° N, 5.0391° W

San P?dro: 4.7579° N, 6.6424° W

Korhogo: 9.4669° N, 5.6143° W

During the PPG phase, the exact coordinates of the peri-urban and rural areas nearby these cities will be developed and shared at the CEO endorsement stage.

### **Stakeholders**

**Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** Please address the following comments:

- The PIF states that the relevant outcomes of the stakeholders' meetings conducted so far are reflected in the PIF document. However, this information could not be found in the PIF.
- Also, please specify when these preliminary meetings were conducted and, if possible, provide the list of stakeholders attended. Also, confirm whether indigenous people (if any) and local communities in the 5 selected cities have been consulted. If not, please explain why and when these consultations are expected.

### **Agency Response**

Comment/answer to point 1: even if the meetings have been conducted with the relevant stakeholders mentioned, the sentence has been replaced to include additional information about the consultations as follow:

"The project will rely on a structured network of new and existing stakeholders. It will involve key stakeholders from the outset of the project. The project will also engage with various other actors in the private industrial sector, associations and intermediary private sector umbrella structures (CGECI, Chamber of Commerce etc). The Ministry of Environment and Sustainable Development will work in collaboration with the Ministry of Transport which will collaborate with several local and external partners including the Ministry of Petroleum, Energy and Renewable Energies (CI-Energies), the Ministry of Equipment and Road Maintenance (Ageroute), the Institut National Polytechnique Félix Houphouët-Boigny (INP-HB), the Agence Nationale de l'Environnement (ANDE),

and the Centre Ivoirien Anti-Pollution (CIAPOL). **These partners have been actively involved in the development of the different concepts developed under this initiative. The organisation of these partners into steering and technical committees will be further detailed in the PPG preparatory assistance phase.**

The Lead Executing Agency of the project will be the Ministry of Environment and Sustainable Development. The Ministry will coordinate the project inputs from all the project stakeholders, as well as nominate the National Project Director (NPD) to act as the government representative and the focal point for the Project Management Unit (PMU). The Ministry will ensure ongoing ownership of the project and that project execution is operationally implemented in line with Government priorities, rules and regulations. The NPD shall have adequate authority and knowledge within the Government to get the necessary support from all local project partners to perform his/her duties under the project.

UNIDO is the implementing Agency of the project. Recruitment of international and local consultants, travel plans and allowances, and all direct project procurement will be conducted in accordance with UNIDO rules and regulations."

Comment/answer to point 2: Several preliminary meetings were conducted since the GEF STAR allocation meeting in 2019. Further meetings have taken place since then and will be undertaken at the PPG phase to update the needs assessment, roles and functions of the stakeholders. The outcomes of the meeting will be incorporated in the CEO document.

#### **Gender Equality and Women's Empowerment**

**Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes.**

Agency Response  
Private Sector Engagement

**Is the case made for private sector engagement consistent with the proposed approach?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes.**

Agency Response  
Risks to Achieving Project Objectives

**Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?**

Secretariat Comment at PIF/Work Program Inclusion  
6/27/2022 PM:

**Cleared.**

6/21/2022 PM:

**No.** Please incorporate and elaborate further on the following potential risks:

- Pollution effects from the disposal of batteries from electric vehicles as well as from photovoltaic panels.
- Forced labor allegation in the solar photovoltaics supply chain.

Agency Response

The potential risks related to the pollution effects and the forced labor allegation have been integrated within the risks table as follow:

Pollution effects from the disposal of batteries from electric vehicles as well as from photovoltaic panels

The project will provide recommendations and guidelines on fine-tuning environmental policies and regulations that can mitigate the environmental impact from EV's batteries. The project components address the problem of sustainability considering local ecosystems, so the realization of the project should effectively decrease the risk of environmental change.

The project will have a value chain wherever possible with a specific focus on battery life cycle. The recommendations and guidelines on environmental management, re-use (e.g., second life as stationary batteries) and recycling of batteries will be incorporated in the feasibility studies of the pilot projects.

Moreover, the training modules will include a range of environmental, social and technical topics such as future technology scenarios and environmental impact with a focus on battery lifecycle. Particular attention will be given to the collection, re-use and recycling with regards to batteries.

The project will also coordinate, exchange knowledge and learn from UNEP's project 'Integrated, Sustainable and Low Emissions Transport in Cote d'Ivoire'. Component 1 of the global e-mobility project includes a Global Thematic Working Group on 'Electric vehicle charging, grid integration, renewable power supply and battery re-use, recycling and safe disposal'. This Working Group's main objective will be to develop and make available knowledge materials that support governments in their ambitions for advancing a sustainable roll out of electric mobility, including policy instruments to ensure the sustainability of the battery supply chain and the end-of-life treatment of batteries. It also aims at the facilitation of discussions between regulators, recyclers and battery / vehicle manufacturers to better understand and enhance battery design to improve recyclability of batteries, especially with regards to economic viability.

Forced labor allegation in the solar photovoltaic supply chain

Close coordination with project stakeholders, manufacturers and developers, buyers, investors, governments, and civil society to come together to address forced labor risks by acting along the value chain.

Stakeholders will agree on plans, incentives, and timelines to move the industry towards a model that addresses the social externalities generated by solar energy production, storage, and use. These incentives could include sustainability-linked finance and market access.

#### **Coordination**

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?**

Secretariat Comment at PIF/Work Program Inclusion  
6/27/2022 PM:

**Cleared.**

6/21/2022 PM:

**No.** The selection of the executing agency is pending and will be confirmed at CEO Endorsement. However, this is consistent neither with the LoE (which states that the executing agency is the Ministry of Environment and Sustainable Development) nor with the Project Information in Part I, which states the executing agencies are GROUP A3E and Council of Panafrican Doctors in Environment (COPADEN). Please clarify and update accordingly.

Agency Response

The executing agency is adjusted to the Ministry of Environment and Sustainable Development, as per the latest OFP Endorsement Letter.

Co-executing agencies might be considered during the PPG phase; if agreed with the ministry and key stakeholders, UNIDO will undertake an Harmonized Approach to Cash Transfers (HACT) assessment to confirm the co-executing agencies.

**Consistency with National Priorities**

**Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes.**

Agency Response  
**Knowledge Management**

**Is the proposed knowledge management (KM) approach in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project's/program's overall impact and sustainability?**

Secretariat Comment at PIF/Work Program Inclusion  
6/27/2022 PM:

**Cleared.**

6/21/2022 PM:

**No.** The Knowledge Management section of the PIF provides information on the potential of the project for increasing awareness and impact. However, it does not clarify how the project plans to learn from relevant projects, programs and initiatives, and plans to capture, access, and document information, lessons learned, best practices and expertise. The PIF shall also identify the tools and methods for knowledge exchange, learning and collaboration, including knowledge platforms and websites, as well as plans for strategic communications.

#### Agency Response

Further information have been added to the knowledge management section as follow:

Elements related to how the project plans to learn from relevant projects, programs and initiatives, and plans to capture, access, and document information, lessons learned, best practices and expertise:

The proposed project will collaborate and regularly exchange knowledge with other (donor-funded) transport and energy sector initiatives such as UNEP's project on Integrated, Sustainable and Low Emissions Transport in Cote d'Ivoire. It will share the knowledge through the establishment of the e-mobility coordination body which will align e-mobility related policy making processes.

These knowledge management activities will enhance the impact of the project because they empower stakeholders to take informed decisions, create a strong sense of ownership by active participation in the conceptual work, anchor knowledge and skills in the country and ensure that best practices are shared regionally and internationally.

The project will facilitate the flow of learnt lessons such as: data and demonstration results, working policies and regulations, working business models, operational know-how, working financial instruments etc. The project will generate a learning curve on electric mobility that can be transferred to other countries.

Elements related to the identification of the tools and methods for knowledge exchange, learning and collaboration, including knowledge platforms and websites, as well as plans for strategic communications:

The activities of the proposed project will be built on the baseline activities and support knowledge and know-how transfer among key stakeholders by inviting them to participate in events and working groups. These working groups will generate universal knowledge products that contain best practices, factsheets, interactive tools and guidance, as well as experiences from countries that have advanced their e-mobility platforms.

The project will learn from the E-Mobility Global Programme and the knowledge products developed by the working groups will be shared and disseminated by the regional platform.

#### **Environmental and Social Safeguard (ESS)**

**Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?**

Secretariat Comment at PIF/Work Program Inclusion  
6/21/2022 PM:

**Yes.**

Agency Response

#### **Part III ? Country Endorsements**

**Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?**

Secretariat Comment at PIF/Work Program Inclusion  
6/27/2022 PM:

**Cleared.**

**6/23/2022 PM:**

**No.** An updated LoE has been provided on June 23, 2022 which incorporates the correct title for the project. However, please note the LoE states that the project would be prepared and implemented (executed) by the Ministry of Environment and Sustainable Development. However, the PIF under the Institutional Arrangements' section states that the executing agency is still to be confirmed while Part I on Project Information includes GROUP A3E and Council of Panafrican Doctors in Environment (COPADEN) as the executing agency. This inconsistency shall be solved, so the information on the LoE and the PIF matches.

Agency Response

Please note that the aforementioned inconsistencies are solved and updated.

GROUP A3E and Council of Panafrican Doctors in Environment (COPADEN) might be considered as co-executing agencies. This will be validated during the PPG phase.

**Termsheet, reflow table and agency capacity in NGI Projects**

**Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.**

Secretariat Comment at PIF/Work Program Inclusion

**6/21/2022 PM:**

N/A.

Agency Response

**GEFSEC DECISION**

**RECOMMENDATION**

**Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?**

Secretariat Comment at PIF/Work Program Inclusion  
**6/27/2022 PM:**

**Cleared.**

**6/21/2022 PM:**

**No.** Please address the comments above.

#### **ADDITIONAL COMMENTS**

**Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.**

Secretariat Comment at PIF/Work Program Inclusion  
**6/21/2022 PM:**

The following comments shall be addressed/provided at CEO Endorsement stage:

- At CEO Endorsement please provide a spreadsheet with the GHG estimations to facilitate transparency and tracking.
  
- Identification synergies and potential areas of overlaps between the proposed project and the UNEP national child Project GEF ID10302 Integrated, Sustainable and Low Emissions Transport in Cote d'Ivoire shall also be further analyzed at CEO Endorsement. For instance, Would the roadmap to be delivered under Component 1 be built on the strategy to be developed under component 1 of the UNEP project 10302 (which was endorsed in June 2021 and is already under implementation)? Also, how the proposed project would benefit from Component 3 of the UNEP project i.e. "the Government of C?te d'Ivoire adopts financial incentives and technical standards to promote investments in low-carbon electric mobility in public transport?.
  
- The PIF explains that there are currently 6 dams under construction in Cote D'Ivoire, which will help the country transition towards a cleaner grid and therefore a cleaner electric mobility transport. However, the PIF does not provide information on the

current electricity grid mix in the country, and by when the current dams are expected to be start operation. If not available at PIF, this information can be provided at CEO Endorsement.

- The project does provide information on the expected projection growth of 2&3 wheelers in the country. In addition, information on the current percentage of 2&3 wheelers within the overall transport sector in Cote D'Ivoire would help the reader understand the need to focus on this type of transport. If not available at PIF, this information can be provided at CEO Endorsement.

- At CEO Endorsement, gender markers will be assigned at the output level.

**Review Dates**

**PIF Review      Agency Response**

<b>First Review</b>
<b>Additional Review (as necessary)</b>

**PIF Recommendation to CEO**

**Brief reasoning for recommendations to CEO for PIF Approval**