



# Global project to support countries with the shift to electric mobility

Review CEO Endorsement and Make a recommendation

## Basic project information

**GEF ID**

10270

**Countries**

Global

**Project Name**

Global project to support countries with the shift to electric mobility

**Agencies**

UNEP, ADB, EBRD

**Date received by PM**

12/11/2020

**Review completed by PM**

4/23/2021

**Program Manager**

Filippo Berardi

**Focal Area**

Climate Change

**Project Type**

## PIF

### CEO Endorsement

#### Part I ? Project Information

##### Focal area elements

**1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**12/23/2020 - FB:**

Yes, the project remains aligned with the focal area elements included in the PFD, and in the Global Child Project concept as approved in June 2019, as complemented by the PFD Addendum approved in June 2020. Notably, the following changes were included with the Addendum, compared with the initially approved Global Child Project concept: 1. the thematic working groups were reorganized and a new WG on 2&3 wheelers was added; 2. an additional Support and Investment Platform for ECA, West Asia and Middle East was added; 3. additional resources for regional "helpdesks" were added and the project output structure was reformulated.

Agency Response

**Project description summary**

**2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review of: 03/03/2021 - FB]

**12/23/2020 - FB:**

Yes, the global child project design is considered appropriate to achieve the outcomes and outputs as described in Table B, and to support the achievement of the non-country specific objectives of the Global Program. However, please address the following comments:

1. Please revise the expected start implementation date to a more realistic one.

Agency Response

**16/02/2021**

1. The starting date has been revised to April 1st, 2021.

*Note: for ease of reference, all the edits have been highlighted in yellow in the updated PDF version of the Global e-mobility project CEO Endorsement Document uploaded on the ?Documents? section of the GEF portal.*

3. **If this is a non-grant instrument, has a reflow calendar been presented in Annex D?**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response

**Co-financing**

4. **Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

03/18/2021 - FB

**03/03/2021 - FB:**

1. Please spell out acronym CCMU in the new text related to aggregated co-financing reporting, on page 70.

All other comments are cleared.

**12/23/2020 - FB:**

It is positively noted that the overall co-financing amount presented in the Global Child Project at CEO ER stage is larger than the one presented at the time of the submission of the PFD. The expected co-financing at PIF stage was 32,155,000 (30,405,000 + 2,750,000), while the cumulative co-financing presented at CEO ER is now 34,273,250.

Review Comments:

1. UNEP letter: Please confirm the split of the co-financing contribution to the PMC, and confirm that \$451,997 out of the \$736,873 listed in the letter are indeed to be considered investment mobilized and not recurrent expenditure (i.e. these resources will be spent by UNEP to contract services/goods, and therefore are not to be considered recurrent expenditures).

2. EU/UEMI: OK

3. IEA letter: OK

4. ADB letter: OK

5. EBRD letter: OK

6. Please clarify the arrangements through which the Global Child project will keep track and report the co-financing materialized from all Child projects at Program level.

**Agency Response**

**15/03/2021**

1. The CCMU acronym has been spelled out on page 70.

**16/02/2021**

1. UNEP's total co-finance amounts to USD 5,668,250, of which USD 3,476,900 is considered investment mobilized, and USD 2,191,350 are in-kind contributions. The co-finance contribution is based on the Sustainable Mobility Unit's (SMU) and the Regional Office's for Latin America funding portfolio for electric mobility projects over the next 5 years. The PMC portion of USD 451,997 is based on the on the funds mobilized by UNEP through grant agreements and donor projects and is indeed related to investment mobilized?.

6. Country Child Projects implemented by UNEP will report co-financing contributions as part of their annual co-finance reporting requirement. For country projects not implemented by UNEP, UNEP will request the other IAs (ADB, UNDP, UNIDO, EBRD and DBSA) to share the annual co-finance reports of the projects they are implementing on a yearly basis, to be able to keep track and report the co-financing materialized from all Child projects at Programme level. This has been highlighted in section ?1.d. Child Project? of the CEO Endorsement Document (page 70).

#### **GEF Resource Availability**

**5. Is the financing presented in Table D adequate and does the project demonstrate a cost-effective approach to meet the project objectives?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**12/23/2020 - FB:**

Yes, the resources presented in Table D appears to be adequate to support the project's ambition and cost-effectively reach the project's objectives.

Agency Response

**Project Preparation Grant**

**6. Is the status and utilization of the PPG reported in Annex C in the document?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**12/23/2020 - FB:** yes, Annex C reports information related to the utilization status of the approved PPG resources. At the time of the submission of the CEO ER, USD 48,153 out of the approved amount of USD 50,000, equivalent to 96%, had been utilized.

Agency Response

**Core indicators**

**7. Are there changes/adjustments made in the core indicator targets indicated in Table E?**

**Do they remain realistic?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

rev: FB: 04/19/2021

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**FB: 04/12/2021:**

2. Emission reductions: While the reference to the upcoming German carbon pricing system is useful, there is a conceptual difference between setting a level of price per ton for a carbon pricing scheme and estimating the carbon abatement cost for a specific technology. In this case, the latter should be used to estimate emission reductions from a certain amount of available financial resources, and not a carbon pricing level which may include other policy-related consideration (affordability, urgency or obtaining results, conservativeness, political feasibility, etc). The analysis included in Tables 1, 2 and 3 below is very useful and should be the base for the estimate of the prospective emission reductions from this child project. We would therefore recommend using a weighted average of the abatement cost of the 3 technologies listed below (motorcycles, buses and cars), using an assumption of how much of the cash financing from project and counterpart in the global child project is going to go to EV buses, cars and two wheelers. This should result in a number lower than \$50/tons (but most likely higher than \$5/ton).

**FB: 03/18/2021:**

2. Emission reductions: unless substantiated by relevant sources, \$5 is too low an assumption for the cost of 1 ton of carbon reduced in the transportation sector via support to EVs. The McKinsey carbon abatement curve for instance, has a cost at about \$25/ton for plug in hybrids (there is no full EV category). In any case, the overall expectation for GEF7 average cost is not a good proxy for this project, as it include emission reduction options with widely different costs. Please identify a relevant scientific/technical source for the \$/ton data in the EV sector and use that one as proxy instead of the average cost of \$/ton at GEF portfolio level.

**FB: 03/03/21:**

1. cleared

2. thank you for the additional explanation below and in Annex M. The explanation below refers to a USD5 ton/CO2 "GEF benchmark". Please clarify what this refer to, what is the source/how it is calculated. This should be further explained in Annex M

too, as the rationale for this USD5/ton cost isn't justified (Annex M seems to imply this is the aggregated average cost/ton from the Child Projects, but this is not specified).

**FB: 01/05/2021**

The contribution of the Global child project to the Program in terms of generation of emission reductions remains broadly in line with the estimates submitted at the time of the approval of the PFD. In addition to the 7.5 million tons already estimated as indirect emission reductions from the sister EC Solution Plus program, additional estimates for secondary direct emission reductions have been included for approximately 1.78 million tons.

Please address the following comments:

1. in Section 6) *Global Environmental Benefits*: the table list a different number between the secondary direct CO2 emission reductions (1,782,324 tons) and the Total CO2 emission reductions reported for the same row (1,800,000 tons). Please correct the inconsistency.
2. With regards to the new estimated for emission direct secondary emission reductions, it is not clear exactly how this volume is expected to materialize. The Agency should provide additional explanation to complement the information provided in this section ("*...secondary emission reductions related to replication of e-mobility projects through the Regional Support and Investment Platforms*"). Please provide details of what exactly is being included in this category, possibly with an example, as appropriate.

**Agency Response**

**15/04/2021**

We agree with the comment that there is a conceptual difference between the cost of carbon as applied in a carbon pricing scheme and the abatement cost of a specific technology, albeit they are very closely related.

As per the recommendation, we have applied the GEF project cost weighted average of the abatement costs of electric motorcycles, buses and taxis (passenger cars) to estimate the impact of the Global Programme co-finance directed to the regional support and investment platforms on CO2 emission mitigation. At this point, we are not able to estimate how much of this co-finance will be directed towards electric 2&3 wheeler, bus and taxi projects, but by using the weighted average of the three options, this uncertainty should already be addressed. Applying global values for grid emission factors, fuel and electricity prices, and using ?global average? values for other parameters such as fuel economy / energy use, technical life-time, annual distance driven, carbon footprint of fuel / electricity, EV price increment and maintenance cost, we end up with a weighted abatement cost of USD 22 per ton of CO2 for electric motorcycles, buses and cars. More details are provided in the revised CEO Endorsement Document (Annex M). The GHG emission mitigation and energy saving values have been revised based on the revised carbon cost.

06/04/2021

Thank you for your comment. We agree that USD 5 per ton of CO2 is a low assumption for the mitigation of CO2 in the transport sector using electric vehicles. While a simple analysis of mitigation cost for electric motorcycles (refer to Table 1 below) can lead to negative carbon cost (see example for Kenya, based on clean electricity, high annual driving of 20,000km [which is conservative for motorcycle taxis], low fuel economy for cheap ICE motorcycles with carburetor engines, a favorable spread for gasoline vs electricity price), mitigation costs for e-buses (see Table 2 below) using the same assumptions with regards to fuel prices and carbon footprint can be around USD 20 per ton, and for passenger EVs used as taxi (refer to Table 3 below) around USD 40 per ton CO2. Please note that the simple example is based on conservative vehicle prices and battery cost of USD 250/kWh and does not consider resale value.

Mitigation cost for EVs vary highly, depending on key parameters such as annual driving, fuel prices, vehicle prices and carbon footprint of electricity. Little concise and up-to-date literature about carbon pricing in transportation can be found, and the McKinsey abatement cost curve analysis is largely outdated. However, the German government has decided to put a price on greenhouse gas emissions in the transport and building sectors from 2021 onwards (<https://www.cleanenergywire.org/factsheets/germanys-planned-carbon-pricing-system-transport-and-buildings>, <https://www.gesetze-im-internet.de/behg/BJNR272800019.html>). The law foresees the introduction of a carbon price in form of a tax on fuels, amounting to USD 30 per ton CO2 in 2021 increasing to USD ~72 per ton of CO2 by 2026. This is to trigger the shift to cleaner transportation, including the use of EVs. We suggest therefore to use the average CO2 price (2021-2026) of USD 50 per ton CO2 as a proxy for the cost of mitigating CO2 emissions from transportation using electric vehicles.

The Annex M of the Global Programme including the estimated secondary direct CO2 emission reductions leveraged through investments mobilized through the regional support and investment platforms have been adapted accordingly (alongside the table on core indicators F and Annex F).

Table 1 Electric vs conventional motorcycle

	ICE	EV	
fuel economy L/100km	4.0	5.0	fuel economy kWh/100km
lifetime travel km	100,000		
carbon footprint fuel gCO2/L	2,320	237	carbon footprint power gCO2/kWh
lifetime CO2 emissions tons CO2	9.28	1.19	
EV price increment (including charger) USD	2,200		
lifetime CO2 emission savings tons CO2	8		
<b>USD/ton CO2 based on CAPEX only</b>	<b>272</b>		
lifetime fuel use L	4,000	5,000	lifetime fuel use kWh
fuel price USD/l	1.00	0.20	fuel price USD/kWh
lifetime fuel cost USD	4,000	1,000	
total fuel cost savings USD	3,000		
lifetime maintenance USD	900	450	
total maintenance savings USD	450		
CAPEX + OPEX USD	-1,250		
<b>Mitigation cost USD/ton CO2 based on CAPEX + OPEX</b>	<b>-154.42</b>		



Table 2 Electric vs conventional bus

	ICE	EV	
fuel economy L/100km	50.0	110.0	fuel economy kWh/100km
lifetime travel km	720,000		
carbon footprint fuel gCO2/L	2,650	237	carbon footprint power gCO2/kWh
lifetime CO2 emissions tons CO2	954.00	187.70	
EV price increment (including charger) USD	250,000		
lifetime emission savings tons CO2	766		
<b>USD/ton CO2 based on CAPEX only</b>	<b>326</b>		
lifetime fuel use L	360,000	792,000	lifetime fuel use kWh
fuel price USD/l	1.10	0.20	fuel price USD/kWh
lifetime fuel cost USD	396,000	158,400	
total fuel cost savings USD	237,600		
overhaul engine USD	36,000	87,500	replacement battery
lifetime maintenance USD	96,000	48,000	
total lifetime maintenance USD	132,000	135,500	
total maintenance savings USD	-3,500		
CAPEX + OPEX USD	15,900		
<b>Mitigation cost USD/ton CO2 based on CAPEX + OPEX</b>	<b>20.75</b>		

Table 3 Electric vs conventional taxi (passenger car)

	ICE	EV	
fuel economy L/100km	7.5	20.0	fuel economy kWh/100km
lifetime travel km	300,000		
carbon footprint fuel gCO2/L	2,320	237	carbon footprint power gCO2/kWh
lifetime CO2 emissions tons CO2	52.20	14.22	
EV price increment (including charger) USD	15,000		
lifetime CO2 emission savings tons CO2	38		
<b>USD/ton CO2 based on CAPEX only</b>	<b>395</b>		
lifetime fuel use L	22,500	60,000	lifetime fuel use kWh
fuel price USD/l	1.10	0.20	fuel price USD/kWh
lifetime fuel cost USD	24,750	12,000	
total fuel cost savings USD	12,750		
overhaul engine USD	5,000	8,750	replacement battery
lifetime maintenance USD	13,500	9,000	
total lifetime maintenance USD	18,500	17,750	
total maintenance savings USD	750		
CAPEX + OPEX USD	1,500		
<b>Mitigation cost USD/ton CO2 based on CAPEX + OPEX</b>	<b>39.5</b>		

Table 4 Carbon price in transport and buildings, Germany 2021 to 2026

	2021	2022	2023	2024	2025	2026
EUR	25	30	35	45	55	60
USD	30	36	42	54	66	78
<b>Average 2021 - 2026</b>		<b>50</b>	<b>USD</b>			

**15/03/2021**

2. As was explained in Annex M, the Secondary Direct GHG emission reductions of the global project will result from the co-financing committed under Component 2 in the form of Investment Mobilized from the Regional Support and Investment Platforms ? excluding the ECSOLUTIONSplus co-finance. At the time of the submission of this CEO Endorsement Document, this committed co-finance is not yet attached to determined projects or countries, so it is currently not possible to estimate the GHG emission reductions based on specific e-mobility intervention scenarios. As such, at this stage the only way we can estimate the environmental benefits this co-finance will potentially generate is by using a proxy to convert the co-finance amount (US\$ 5,757,126) into a quantity of CO2 emission reductions ? from US dollars to tons of CO2 mitigated. In order to set the global project?s target for Secondary Direct GHG emission reductions resulting from the investments mobilized (co-financing) through the Regional Support and Investment Platforms, we have used a US\$ 5 per ton of CO2 mitigated cost effectiveness ratio as a proxy to undertake that conversion, since this ratio is consistent with the GEF?s overall ambition for CO2 emissions reduction and the allocation to the Climate Change Mitigation Focal Area under the GEF-7 cycle (including the ratio of 1:7 co-finance). We have therefore divided the total amount of co-finance investment mobilized (US\$ 5,757,126) through the Regional Support and Investment Platforms by the US\$ 5 per ton of CO2 ratio to obtain the project?s target amount of Secondary Direct GHG emission reductions (1,153,425 tCO2eq). Of course, during the implementation of the project, the Secondary Direct GHG emissions resulting from the investments mobilized will however be calculated as the aggregation of the benefits actual materializing in the country projects receiving those investments and translating them into e-mobility interventions. This has been further explained in Annex M.

**16/02/2021**

1. The inconsistency has been corrected and was based on formerly rounded values. The figure has been re-calculated in line with the explanations in bullet point 2. below and with the updated explanations in Annex M of the CEO endorsement document.

2. The underlying rationale for the estimates of the secondary direct emission reductions stemming on the interventions of the Regional Support and Investment Platforms has been elaborated in Annex M of the revised project document. In addition, the mitigation value has been corrected for double counting of the emission mitigation achieved through the contribution of the EC SOLUTIONSplus project. As described in Annex M, secondary direct emission reductions through the Regional Support and Investment Platforms are based on the co-finance contributions in form of investment mobilized (through UNEP, ADB and EBRD, see table Annex I-2 of the project documents), which

are mainly grants to support countries in the region with the development and implementation of e-mobility projects. The investment mobilized is then multiplied with the GEF mitigation cost benchmark of USD 5 per ton CO<sub>2</sub>, assuming that these additional e-mobility projects achieve similar economic efficiency compared to the GEF Country Child Projects.

The emission reductions resulting from the Global Child Project can be regarded as conservative estimates. Most direct and indirect emission reductions will be achieved through the Country Child Projects, and will be reported at the country level. The Global Child Project will put in place the structures to collect and aggregate all Country Child Project and the Global Child Project emission reductions, and will report them against the estimates at CEO Endorsement submission stage. For the time being, programme-wide emission reductions can only be estimated at concept stage (see PFD and PFD addendum) since not all Country Child Projects (concepts submitted in March 2020) do have finalized CO<sub>2</sub> emission reduction estimates for CEO Endorsement submission yet. For the sake of simplicity and transparency, no emission reductions achieved at the Country Child Project level have been allocated to the Global Child Project.

## **Part II ? Project Justification**

**1. Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:** Yes, the descriptions of the global environmental problem, its causes, barriers and the proposed solutions are considered adequate.

Agency Response

**2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

Yes, the descriptions of the baseline scenario and of the associated baseline project are considered adequate.

Agency Response

**3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?**

Secretariat Comment at PIF/Work Program Inclusion

**This item is cleared.**

**03/18/2021 - FB**

**FB: 03/03/21:**

1. cleared
2. cleared, but please note that the text added in footnote 1 on page 33 needs revision as it does not read well (i.e. remove the words "In the following" at the beginning of the paragraph).
3. thanks for the explanation. Please include a sentence in the general description of component 2 (pag 43 and 44), under the scale up and replication and replication paragraphs respectively, to refer to the scale up and replication "concepts" that will be developed for each region. There is no reference of this under the "Supporting the demonstration and scale-up of e-mobility" paragraph, and the following one ("Replication of e-mobility projects") refers to "proposals likely to involve the close participation of financial institutions...", without a clear link to the concepts to be developed as output.
4. Cleared.
5. Cleared. Thank you, noted.
6. Cleared. Noted. We strongly encourage the establishment of a channel to gather data on snad alone projects between UNEP/IEA and UNDP, and we would appreciate an update from UNEP on this in the PIRs.
7. Cleared. Thank you. We appreciate efforts to report on the captive RE systems funded or supported otherwise by the project for EV charging networks.
8. Cleared. Noted.

**01/05/2021 - FB:**

Yes, the descriptions of the alternative scenario and of the associated baseline project are considered adequate.

However, please clarify the following items:

1. Each of the WGs will provide the option for countries to request "additional tools developed upon request by Country Child Projects". For some of the WGs, the number of "additional tools" is capped at 2 or 3, for other WGs there is no limit. The Agency should think through, and describe in the document, the process following which the countries child projects will be able to request such support. How will the funding be awarded? Is it on first come first serve basis?

2. How is a "tool" to be defined in this context? What does qualify as such for the purposes of the project design and of the awarding of the additional country-specific support by the Global Child Project? Please clarify.

3. Regarding the Support and Investment Platforms, "*replication concept facilitated*" and "*scale up concept facilitated*" are listed as deliverables for each one of the four regions. Please define these two deliverables in more details as it is not clear as presented what they refer to exactly.

4. The concept of "community of practice" is included under component 2, for each one of the 4 regional platforms. However, there is no explanation of what it to be intended by this term, how the CoP will work or what will be the main expected outputs. Please include a short section to explain these aspects at the beginning of the description of component 2.

5. As general comment: we request the agency to ensure that proper name recognition to the GEF is ensured in all tools and knowledge/training materials developed, including web resources and printed ones. This should also be reflected in the EV outlook of the IEA which is being supported by the Program.

6. Please confirm that all countries covered by the GEF program will be included in the IEA's Global EV Outlook series. Will also countries funded by the GEF in GEF 7 as stand alone projects (not formally in the program) be included?

7. Component 3, output 3.2: We note that the program will monitor "renewable power generation capacity added". We recommend also monitoring the subset of RE capacity added specifically to serve EV charging stations, as opposed to general RE additions to the grid.

8: Component 3, output 3.2: Please clarify that GHG emission reductions are also included in the list of indicators to be monitored for country EV market development.

## Agency Response

15/03/2021

2. Thank you for your comment. The footnote wording has been revised.

3. Reference to the concepts has been added to the respective paragraphs.

6. We take good note of your suggestion and we will make sure to discuss the data exchange modalities of stand-alone projects with UNDP during the global e-mobility project's inception. We have added a footnote on this in the Knowledge Management section of the CEO Endorsement Document (p. 115).

## 16/02/2021

1. This deliverable captures the development of additional tools, which are developed *by the Working Groups*, upon request by the Country Child Projects but agreed with the WG Coordinators. The underlying rationale is that while a set of predefined tools will be developed by the WGs, we also want to keep the flexibility to develop a set of tools, upon the request of the Country Child Projects. The need to develop specific tools will be evaluated through the task teams (on specific e-vehicle modes, e.g. e-buses and e2&3 wheelers) of the Regional Support and Investment Platforms through their 'user needs assessment' carried out during the establishment of the Communities of Practise (Output 2.1, 2.4, 2.7 and 2.10). To make it manageable from a resources point of view, it is important that the WG Coordinator has the last say on the prioritisation among the various requests.

The process for the selection and development of additional tools will be further defined in the set-up of the working groups, guided by the respective WG lead. Therefore, no funds will be exchanged between the Global Child and the Country Child Projects. Additional language to clarify the process has been added on page 34 of the Endorsement document.

2. All knowledge products developed by the WGs are 'tools' and will be part of the joint GEF 7 / EC SOLUTIONSplus on-line e-mobility toolbox. Tools are therefore defined as analytical reports, best practise policy briefs, e-mobility market status updates, technology overviews, generic business models & financing schemes etc. This definition furthermore includes analytical tools such as interactive tools (e.g. for total cost of ownership analysis), excel based models, etc. It also includes training materials such as presentations, recorded webinars and other on-line learning materials which are for example developed in cooperation with EC SOLUTIONSplus partners. Additional explanatory text and a footnote have been added on page 33 of the CEO endorsement document.

3. Scale up concepts and replication concepts are simply project concept notes to be shared with interested financiers / donors. The Country Child Projects, with the support of the Global Child Project, aim at developing scale-up and replication concepts for e-mobility applications to be submitted to financing institutions such as development banks, the Green Climate Fund or bilateral development programmes. It is the task of the Regional Support and Investment Platforms to facilitate the development of such concepts by bringing together stakeholders from national, regional and city governments with an interest to develop e-mobility projects with financiers and the e-mobility industry. The market-place events hosted by the Regional Support and Investment Platforms will seek for an adequate format to support match-making between the respective e-mobility stakeholders.

4. The communities of practice are described in detail on page 42. Additional detail has been added in the CEO Endorsement Document and the role of the help desks to help coordinating the communities of practice is further elaborated.

5. UNEP is currently working on the branding of the UNEP E-Mobility and the GEF 7 Electric Mobility Programmes. Knowledge products and training material developed

within the project will acknowledge GEF's funding of the project. For the IEA Global EV Outlook, which the IEA produces as part of the IEA publication series, GEF funding will be acknowledged alongside other donors in an appropriate way.

6. The IEA will, through the GEF programme, will expand the scope of the EV data collection to all participating GEF country child projects. To support this exercise and to facilitate dissemination of analysis in future Global EV Outlooks, all Country Child Projects will be requested, as part of their annual PIR, to provide e-mobility market benchmark and progress data. The collection will be based on a data template developed by the IEA and will be circulated by the Implementing Agencies alongside the annual PIR exercise. The UNEP SMU, with support from the UNEP Climate Change Mitigation Unit (CCMU), will coordinate the collection of the data with partner IAs (including UNDP, UNIDO, ADB, DBSA and EBRD). Stand-alone e-mobility projects can be integrated in case the necessary data-exchange protocols can be established with UNDP.

7. The country Child Projects will be expected to report on additional renewable power generation capacity installed as part of the project. It would also be possible to report on renewable energy powered EV charging infrastructure, which is not connected to the grid (e.g. stand-alone solar chargers for EVs, or charging infrastructure integrated in renewable mini and / or microgrids), to the extent these systems are captured within national datasets.

8. Under Output 3.2, the IEA will be collecting market data to report on e-mobility market development based on specific indicators such as e-vehicles registration, e-vehicles by type, charging infrastructure installed, policy information, etc. A dedicated monitoring template has been developed for this purpose and will be attached to the annual PIRs for the Project Managers to complete them. However, GHG emission reductions will not be monitored as part of output 3.2. Nevertheless, the GHG emission reductions will be monitored as part of each country child project's PIR process, since this is a Core Indicator for GEF projects in the Climate Change Mitigation Focal Area. Additional language has been added to Section 1.d Child Project elaborating on the issue of reporting (p. 70-71).

**4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

The description of the alignment with FA strategies is adequate and consistent with the one approved at PIF/PFD level.

Agency Response

**5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

The description of the incremental reasoning, expected contributions from the baseline and co-financing is adequate and consistent with the one approved at PIF/PFD level.

Agency Response

**6. Is there further and better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

The description of the GEFs is adequate and consistent with the one approved at PIF/PFD level. Additional comments on the details of the GEF calculation were included above in this review sheet.

Agency Response

**7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

The description of the project's innovativeness, sustainability and potential for scaling up is adequate and consistent with the one approved at PIF/PFD level. Particularly with regards to sustainability, we note with appreciation that the Agency commits to ensuring that the Support and Investment Platforms will continue to operate beyond the duration of the GEF program and that the Lead organization for each one of the Platforms are committed to ensure that.

Agency Response

**Project Map and Coordinates**



**Is there an accurate and confirmed geo-referenced information where the project intervention will take place?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/05/2021 - FB:**

Yes, a project map and child project coordinates are provided.

Agency Response

**Child Project**

**If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**03/03/2021 - FB:**

1. Cleared. This is acceptable and it seems reasonable.
2. Cleared.
3. Cleared.

**01/05/2021 - FB:**

Yes, this is a child project and, as the Program's Global Child Project, its contribution to the overall program impact is clearly articulated and reflected in the CEO ER. However, the following comments are logged for the Agency's attention, with regards to Table 12:

1. Some indicators included in the table, seem to have a level of ambition that is not in line with the ambition of the Program. For instance, why are indicators 2.1 and 3.1 only listing 20 countries (out of 27) as end point target?
2. We recommend adding an indicator for component 2 related to the # of financial institutions / development banks (national/regional) that have been engaged and are actively supporting the sector after the program's end.

3. We recommend adding an indicator to track the number of scale up/replication experiences that were triggered by the global program (at least by the end of the Program's lifetime).

## Agency Response

**16/02/2021**

1. Project document submission for CEO Endorsement is structured in two phases: phase 1 including 17 Child Country Projects and the Global Child and phase 2, adding another 10 Child Country Projects. Of phase 1, so far 13 Country Child Projects have been submitted, none of the Country Child Projects of phase 2 has yet been submitted for CEO endorsement to the GEF. By setting the end of project target to 20 Country Child Projects we wanted to anticipate the uncertainties around successful project CEO endorsement and implementation, in particular against the background of the COVID 19 pandemic and related difficulties when it comes to project design and implementation. We are happy to increase the ambition but suggest to formulate the target as a relative target based on successful projects? CEO approval, therefore anticipating COVID 19 related uncertainties with regards to the submission and CEO approval of outstanding phase 1 and phase 2 countries. GEF SEC is suggesting a relative success rate of 85% to 89% (23 or 24 out of 27 Country Child Projects, see comment on the results framework below). We suggest setting the target to 85% of all CEO endorsed/approved Country Child Projects. This new target has been integrated in the Global Programme Monitoring Framework (in section 1.d. Child Project) and in the results framework (Annex A).

2. We agree to include an indicator on the # of financial institutions / development banks (national/regional) that have been engaged through the Global Programme and are actively supporting e-mobility projects (refer to section 1.d. Child Project page 70).

3. We have added an Indicator ?# of e-mobility scale up and/or replication concepts facilitated as a result of the match-making? in section 1.d. Child Project (page 70). which is targeted at tracking the ?the number of scale up/replication experiences that were triggered by the global program?. The development of both scale-up and replication projects based on the experiences of the GEF 7 Global Electric Mobility Programme will materialize towards the end of the programme, and hence most of these replication and/or scale projects will still be at the concept / project proposal stage. Therefore, this indicator is formulated targeting ?concepts? rather than ?experiences?.

## Stakeholders

**Does the project include detailed report on stakeholders engaged during the design phase?  
Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review: 03/03/2021 - FB]

**01/05/2021 - FB:**

Yes, a report of the stakeholder engagement activities carried out at design stage was provided.

With regards to the Stakeholder Engagement Plan, please clarify the following item:

1. FIA Foundation: the Stakeholder Engagement Plan mentions that the FIA is cofinancing the global program, but this contribution is not listed in the cofinancing table. Please clarify.

Agency Response

**16/02/2021**

1. The FIA Foundation is a long-standing partner in the Global Fuel Economy Initiative, which was key for the development of the e-mobility country projects and contributes to the aggregated UNEP co-finance to the Global Project. In addition, FIA Foundation is very much interested in contributing to e-mobility demonstration projects, especially in Africa. FIA Foundation co-finance is part of the UNEP co-finance envelope and is therefore not listed in the co-finance table.

**Gender Equality and Women's Empowerment**

**Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/06/2021 - FB:**

Yes, a gender gap analysis has been completed, which identifies several areas where gender differences exist in the context of the (low carbon) transportation sector. The Child project includes several gender responsive activities and measures, as well as gender equality roles. These include the Program's Gender Manager, Gender Focal Points for the Global Working Groups and Support Platforms and gender specific activities. Table 15 includes a list of gender related project outputs, each one accompanied by its own indicator, target and mean of verification.

Agency Response  
**Private Sector Engagement**

**If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

**01/06/2021 - FB:**

The success of Global Child Project - and consequently of the Global Program - hinges on the significant links with the private sector and its expected participation and engagement. In addition to the role the private sector had during the consultation for the project design, participation of the private sector will take place within the Thematic Working Groups, the Support and Investment Platforms and through the support provided to the demonstration projects at Country Child Project level.

Agency Response  
**Risks to Achieving Project Objectives**

**Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

**01/06/2021 - FB:**

Yes, a risk analysis is included. The identified mitigation measures appear to be adequate. The project document also includes a good analysis of risks and opportunities posed by the COVID-19 pandemic to the project implementation.

Agency Response  
**Coordination**

**Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/06/2021 - FB:**

Yes, the institutional arrangements for implementation and execution are described, as well as the arrangements for the coordination with the sister program (EC Solution Plus) and the other relevant programs implemented in parallel by the Lead Agency and the other participating IAs and EAs.

Agency Response

**Consistency with National Priorities**

**Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/06/2021 - FB:**

The Global Child Project includes information related to the program countries' priorities for the low carbon transport sector as spelled out in each countries' NDCs. It is expected that more information will be provided for each specific country at the time of the submission of each specific child project.

Agency Response

**Knowledge Management**

**Is the proposed Knowledge Management Approach for the project adequately elaborated with a timeline and a set of deliverables?**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review: 03/03/2021 - FB]

**01/06/2021 - FB:**

Yes, the project document includes a good description of the knowledge management approach. However, please consider and address the following comments:

1. Under the section "Proposed knowledge outputs to be produced and shared with stakeholders", the text from "The secretariat of the Working Groups..." to "without prior written approval by the respective project partner" is repeated from the section "Proposed process to capture, assess, and document info...." above.
2. One of the items composing the 7 KM approaches listed in the PFD is now missing: "#6 - Discussion on how knowledge and learning will contribute to the overall program sustainability". Please include such item.

Agency Response

**16/02/2021**

1. The repetition has been removed.
2. The respective section has been re-introduced and updated (page 116).

**Monitoring and Evaluation**

**Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

[review: 03/03/2021 - FB]

**01/06/2021 - FB:**

Yes, the project includes a budgeted M&E plan. Please consider the following comment:

1. Please include the M&E budget in the portal version of the project document. At the moment it is only available in the Prodoc, so it will not appear in the CEO ER document once printed/PDF-ed from the portal.

Agency Response

**16/02/2021**

1. The M&E budget table is now included in the Portal.

**Benefits**

**Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

**01/06/2021 - FB:**

Yes, the relevant socio-economic co-benefits are described in the relevant section.

Agency Response  
**Annexes**

**Are all the required annexes attached and adequately responded to?**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

[review: 03/03/2021 - FB]

**This item is cleared.**

**01/06/2021 - FB** - Please see comments above and below on missing Annexes to be included in the live portal version (i.e. annexes which are included in the ProDoc but not on the portal).

Agency Response

**16/02/2021**

The requested annexes have now been included in the live Portal version.

**Project Results Framework**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review: 03/03/2021 - FB]

**01/06/2021 - FB**

A project result framework is provided, however please address the following comment:

1. Indicators A and B of the Project Objective list as target "at least 20" countries. This appears to be a low number considering the total number of 27 countries. We request the Agency to consider revising this number upwards to increase the level of ambition. 23 or 24 countries would appear more appropriate, while still allowing for some room for unexpected events. Please provide clarification on this point.

Agency Response

**16/02/2021**

1. GEF Sec is suggesting a relative success rate of 85% to 89% (23 or 24 out of 27 Country Child Projects). We suggest setting the target to 85% of all Country Child Projects successfully CEO approved/endorsed. This new target has been integrated in the results framework (Annex A).

**GEF Secretariat comments**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

**01/06/2021 - FB**

The compilation of GEF SEC comments and the relative answers is included as Annexes B.1 and B.2 (for the Addendum).

Agency Response

**Council comments**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review: 03/03/2021 - FB]



**01/06/2021 - FB** - Responses to Council comments, both for the original PFD submission and the Addendum, have been added to the Prodoc as Annex B.4.

1. Please include such comments in an annex to the CEO ER document live on the portal, so that they show up when printed from the portal (or downloaded as PDF).

Agency Response

**16/02/2021**

1. The responses to Council comments have now been pasted in the dedicated field of the Portal.

**STAP comments**

Secretariat Comment at CEO Endorsement Request

**This item is cleared.**

[review: 03/03/2021 - FB]

**01/06/2021 - FB** - Responses to STAP comments have been added to the Prodoc as Annex B.4.

1. Please include such comments in an annex to the CEO ER document live on the portal, so that they show up when printed from the portal (or downloaded as PDF).

Agency Response

**16/02/2021**

1. The responses to STAP comments have now been pasted in the dedicated field of the Portal.

**Convention Secretariat comments**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response

**Other Agencies comments**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response

**CSOs comments**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response  
**Status of PPG utilization**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

**01/06/2021 - FB**

The Status of utilization of the PPG resources is included in Annex C to the ProDoc.

Agency Response  
**Project maps and coordinates**

Secretariat Comment at CEO Endorsement Request  
**This item is cleared.**

**01/06/2021 - FB**

A project Map is included.

Agency Response  
**Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)**

Secretariat Comment at CEO Endorsement Request  
N/A

Agency Response

**Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response

**Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)**

Secretariat Comment at CEO Endorsement Request N/A

Agency Response

**GEFSEC DECISION**

**RECOMMENDATION**

**Is CEO endorsement recommended? (applies only to projects and child projects)**

Secretariat Comment at CEO Endorsement Request  
**04/19/2021 - FB**

The project is being recommended for technical clearance.

**04/12/2021 - FB**

Not yet, the agency is requested to address the last remaining comment on emission reduction assumptions/calculations in this review sheet and resubmit.

**03/03/2021 - FB**

Not yet, the agency is requested to address the last remaining comment on emission reduction assumptions/calculations in this review sheet and resubmit.

**03/03/2021 - FB**

Not yet, the agency is requested to address the remaining comments in this review sheet and resubmit.

**01/06/2021 - FB**

Not yet, the agency is requested to address the comments in this review sheet and resubmit.

**Review Dates**

**Secretariat Comment at  
CEO Endorsement****Response to  
Secretariat  
comments**

<b>First Review</b>	<b>1/6/2021</b>
<b>Additional Review (as necessary)</b>	<b>3/3/2021</b>
<b>Additional Review (as necessary)</b>	<b>3/18/2021</b>
<b>Additional Review (as necessary)</b>	<b>4/12/2021</b>
<b>Additional Review (as necessary)</b>	<b>4/19/2021</b>

**CEO Recommendation****Brief reasoning for CEO Recommendations**

The objective of the global child project under the Global Program to Support Countries with the Shift to Electric Mobility is to provide effective coordination between the national child projects, ensure knowledge exchange and cross pollination, and implement global-level activities and regional components. The global child project will support four global thematic working groups (GTWGs), including on (i) 4-wheeled light duty electric vehicles (EVs), (ii) 2 & 3 wheeled EVs, (iii) heavy duty EVs, and (iv) EV charging, grid integration, renewable power supply and battery re-use, recycling and safe disposal. In addition to the GTWGs, the global child project will support the establishment and execution of 4 regional Support and Investment Platforms (SIPs), for Africa, Asia, Eastern Europe and Latin America and the Caribbean. The SIPs will represent the link between the thematic working groups and the national projects and will have 4 main tasks: (i) adapt and disseminate knowledge material from the GTWGs, (ii) create communities of practice for EV projects, (iii) support demonstration and scaling up of EV projects and (iv) promote replication of experiences in other cities, region or countries. Through this set of activities the project is expected to calibrate and support the implementation of the Global Program, and to generate additional 269,000 tCO<sub>2</sub>e in direct emission reductions and 7.5 million tCO<sub>2</sub>e in indirect emission reductions.

The project is also expected to have a positive impacts in relation to the risks posed by the COVID-19 pandemic, specifically by producing tangible results in reducing local air pollution which is linked to an increase in the risk of medical complications a potential

Covid-19 infection. In terms of risks, the project execution may be subject to delays in the expected implementation timeframe should restrictions to travel and meetings in person continue to remain in place during the expected lifetime of the project.