

Electrifying Mobility in Cities: Investing in the Transformation to Electric Mobility in India

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

10276

Countries

India

Project Name

Electrifying Mobility in Cities: Investing in the Transformation to Electric
Mobility in India

Agencies

UNEP, ADB

Date received by PM

8/28/2020

Review completed by PM

4/22/2021

Program Manager

Aloke Barnwal

Focal Area

Climate Change

Project Type

FSP

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

Yes, the project remain aligned with climate change mitigation focal area and consistent with the e-mobility program framework document.

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

The project design is comprehensive and integrated covering capacity building and awareness raising, policy and standards development and on-field implementation to catalyze investment in technology and new business models in e-mobility sector in India. The dual focus on national and city level is also strategic for transformational change.

There seems to be an overlap in component 1 and 3. Under both the components, preparation of charging infrastructure plan is proposed (1.2 and 3.1).

Component 3 states enabling scale up through pilot demonstrations. From the outputs, it seems pilots is just one activity. There is also focus on enabling environment support such as market assessments, developing financial models, etc. The two outcomes listed are same despite of different outputs. Please review and revise as appropriate.

GEFSEC April 5, 2021

Thanks for the clarification and modification in Table B. Comment cleared.

Agency Response

ADB Response 17 March 2021

Output 1.2 focuses on types and applications of charging infra required for different vehicle segments, electricity and grid requirements as part of city level e-mobility plans. Whereas, output 3.1 focuses on feasibility study of charging infra, its network planning within a city, business models and financing.

Overlap activities of charging infrastructure has been removed from Output 1.2. (For e.g. Spatial mapping of city for charging infra).

Updated in CER: 1b. Project description (under 1.2 output

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

Secretariat Comment at CEO Endorsement Request NA

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

The co-financing is adequately documented and sources are classified and described well.

However, the Agency should elaborate about efforts to increase the level of co-financing from private sector operators and potential beneficiaries, be that in-kind or in cash. This project has a significant participation from private sector operators and it is designed to

directly benefit them (including fleet managers, OEMs, battery recycling companies, utilities, etc) and it is surprising that there is no mention of any of these actors in the list of sources of co-financing

GEFSEC April 5, 2021

Thanks. Good to note that the project will mobilize finance during the implementation phase. Please add the description provided in the comment box below in the project document also.

GEFSEC April 21, 2021

Thank you. Comment cleared.

Agency Response

ADB Response 17 March 2021

The project preparation activities did include consultations with private sector corporations, although there was limited opportunity to request co-finance, in part, due to the industry slowdown due to Covid 19. Following receipt of the GEF Secretariat first review, additional consultations have been undertaken with Attero and Tata Power in particular, with some emerging positive results. During project inception a more systematic effort will be made to mobilize participation of additional private sector corporations and secure co-financing resources.. Some of the private players and industry association whom we have already engaged on this matter and plan to further seek their support during project implementation are: battery recyclers like Attero, manufacturers like Kinetic Greens, Darwyn, Konvert Motors, fleet operators like BluSmart and Industry association like Society of Indian Automobile Manufacturers, Society of Manufacturers of Electrical vehicles.

ADB Response 21 April 2021

The paragraph has been inserted in the private sector engagement section (**green highlight**)

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

The GEF Financing distribution across different components are overall balanced. However, please see a few comments for consideration:

- The outcome 4 (component 4) has been narrowed down from EV supply chain (in the concept note) to just demand stimulation. The barrier section provides a very detailed analysis of issues related to supply side of EVs. However, the capacity building and other components in the project design doesn't give enough emphasis on the supply and manufacturing related barriers except for batteries.

- As mentioned earlier, component 3 has some overlaps with component 1 especially related to charging infrastructure plan development. Also, this component stresses on pilot whereas there is also focus on other aspects which are important for scaling up EV market. And, we would like the project to have a greater emphasis on that instead of just pilots as Indian government is already doing a number of pilots and has a good baseline to scale up by addressing systemic barriers related to financing, demand aggregation, policy certainty and incentives for manufacturers.

In the budget, the proposal has categorized \$1.8 million for pilot EV investments under ?equipment, vehicle and furniture?. This doesn't look right as this category seems to be more related to project operations. The investment is to procure/purchase EVs which will likely be owned by a different entity other than the GEF Agency. This fund could fit better under the budget head ?transfers and grants to implementing partners?.

GEFSEC April 5, 2021

Thanks for the clarification. Well noted the point that the focus remains on supply chain. Well noted the revision made in the budget sheet. Comment cleared.

Agency Response

ADB Response 17 March 2021

Output 4.3 of the project considers capacity building and awareness programs for service/ maintenance technicians. This staff will mainly come from supply side that is OEMs/ and its respective dealers.

A ?ZEV City Connect? (Output 1.3) knowledge portal will also be established and involve all stakeholders including supply side for best practices exchange.

The project will bring global knowledge centre and working groups to share their experience with private manufacturers (i.e. supply side) as part of Output 4.4.

The overlapping contents of component 1 and 3 are removed.

Component 3 has GEF finance budget of over \$3 million, of which \$1.8 million is proposed to be utilized for pilots (pilots are in areas where there is no on-going programme) and remaining fund for creating enabling conditions for scale-up through market assessments and development of new business models as part of investment readiness studies.

The other components (i.e. 1, 2 and 4) through policy development, technical assistance and enabling studies supplement the activities related to scaling up of EV market.

Updates have been made in Annex I-1 GEF budget, as suggested.

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 Yes

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

GEFSEC April 21, 2021

Thank you. Comment cleared.

GEFSEC April 18, 2021

Thanks. All responses well noted. Please address the inconsistency in the GHG reduction targets using consistent units. Total direct emissions need to be updated in the portal entry.

GEFSEC

It is understood that there were some issue with portal entry of indicators. This has been resolved and correct entry can be made now.

Comments on Core indicator 6 GHG emission reduction

1. The Agency should explain why direct secondary emission reductions are not included in the figure presented as expected direct tCO₂e. The number presented for aggregate direct emission reductions seems to only capture direct (primary) emission reduction (10,000 tCO₂e), while the calculation sheet indicates 37 million tCO₂e in direct secondary emission reductions. The total direct (primary + secondary) emission reductions should therefore be updated.
2. The calculation sheet indicates as main assumption that: ?Pilot demonstration projects are focused on e-2 Wheeler and e-3 Wheeler their numbers are 500 and 500 respectively.? The cost for 2 and 3 wheelers is indicated in the CEO ER at US\$600 and US\$3,200 respectively. This would amount to a total value just below US\$ 2 million, while the total allocation to the investment/pilot component (output 3.2) is USD 162 million. Could the Agency explain this discrepancy?
3. Section 6) on GEBs (pag 85) mentions that ?in the BAU scenario, it is estimated that GHG emissions will rise to 1,163.78 MtCO₂e by the year 2035?. Please complete the sentence by indicating the current figure, so that the reader can understand the starting point.
4. The Agency should include, in the text under section 6) an estimate of the potential direct post project emission reductions that could be generated by the guarantee scheme, as opposed to a direct subsidy of the capital/purchase cost of the pilot 2/3 wheelers. The guarantee scheme would be more sustainable and could unlock a much larger number of deployed vehicles.
5. The table included in pag 88 (?total indirect and secondary direct CO₂ emission mitigation potential?) should specify if it refers to the transport sector or to road transport, or to??

Agency Response

ADB Response 17 March 2021

1. As suggested, we have updated CEO doc and Annex F with total direct (primary and secondary) reductions as below:

? Total direct emission mitigation: 201 ktCO₂e

? Total secondary direct emission mitigation: 43703 ktCO₂e

? Total indirect emission mitigation: 101,973 ktCO₂e

2. Moreover the project now accounts for the impact on emission reduction impact on emission reduction due to inclusion of 2000 additional e-cars (earlier version did not account for this). It is estimated that during project duration, EESL will roll out additional 2K e-cars through the co-finance funds. They already have deployed around 1500 e cars by March 2021.

Around \$1.8 million of GEF funds is proposed for investment in pilot projects of 2W and 3W. The project co-finance will contribute to at least 2,000 4W as well as additional charging infrastructure

The revised proposal presents new emission reduction numbers taking into account not only 500 2W and 500 3W but also 2,000 4W.

Updated in CER package:

? Table F. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

? Section 6 under 1b

? Annex M

? Annex P

3. Updated in CEO document: Completed the sentence in Section 6 under 1b

4. In the revised proposal, we are not considering pilot funds for PRGF. Therefore, impact on GHG emission due to PRGF has not been estimated.

5. Updated in CER: Completed the sentence in Section 6 under 1b

ADB Update 21 April 2021

The core indicator section, the GEB section and '21-04-21 NEW Annex F Core Indicators Detailed Methods" (new in uploaded docs) have all been reviewed and aligned.

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

The project justification is strong. However, please see below a few comments:

- The project has a focus on 3W which is fine given its importance in ensuring last mile connectivity. However, a significant portion of 3 W vehicles now run on CNG in key cities. Has the project considered that as a baseline? Also, for 2 W, there is already a good penetration of electric 2 Ws. Though, most of them are lead acid one. Will this project focus on Lithium ion for 2 Ws?
- The proposal elaborates on a barrier related to production side i.e. availability of good models compared to ICE engines alternatives. It is not clear how the project will address this barrier in its design either directly or through co-finance. Given the past experience of pilots in India, one of the reasons was that the overall performance of initial models were quite sub-par compared to ICE vehicles e.g. mileage, size, comfort and other design aspects. While the focus on improved batteries and fast recharging can address some of the barriers, there are other performance and durability aspects which is important for successful scaling up. It is not clear how the project will collaborate with manufacturers on these aspects.

GEFSEC April 5, 2021

Thanks. Well noted. No further comments.

Agency Response

ADB Response 17 March 2021

For Baseline, we have not considered CNG autos. The reason for this is that most of the 3W in cities across India still runs on either petrol or diesel. Only a few cities run on CNG autos (CNG autos operate chiefly in Mumbai and Delhi. In Chennai and Kolkata, it's mix of LPG. In Bangalore, CNG autos are less than 5% of total Autos). In tier 2 cities (E.g. Ahmedabad, Bhuvneshwar, Lucknow etc.), 3W auto runs on either diesel or petrol).

For commercial viability, we have compared CNG auto with e3W so that if e3W is viable with CNG, it is definitely viable in comparison to petrol and diesel.

Yes, this project will focus only on Lithium Ion batteries for 2W.

The "barrier" issue is addressed through co-financing support for 2000 4W (with performance, features and design aspect at par with ICE cars), the identified barriers on supply side of limited models and makes. Also, in GEF financed pilots with e-2Ws and

e-3Ws, these aspects of improved technical design and specifications will be incorporated.

The above selection of pilot vendors will provide a good opportunity to collaborate with manufacturers. Additionally, in proposed forums under output 4.3, stakeholder consultations and trainings of OEMs and their service technicians would be undertaken.

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

Secretariat Comment at CEO Endorsement Request

The baseline is described in quite details.

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

The alternate scenario is overall comprehensive and aims to target key barriers identified building on the existing baseline. Please consider following comments in the design:

- The focus on financing needs to be strengthened. It is not clear from the proposal, how the financial barrier will be addressed through this project? There is a proposal to develop a partial risk guarantee fund. It is not clear on what basis this financing instrument has been selected. What about other options? It is recommended that a more detailed assessment of different financing options be carried out in consultation with market players and financial institutions and with reference to models existing in other countries. Based on the findings of this assessment, the preferred options should be developed in consultation with relevant national and urban departments. Partial risk guarantees may not be effective in every case.
-
- Under component 3, with reference to table **How will the GEF financing complement or provide additionality to the ADB /EESL baseline investments?**, it is indicated that the project will support pilots for 2W and 3W only? What about 4 W vehicles which offer a large scope for GHG emission reduction and there is also scope to pilot advanced technology models and business models? In addition, it is unclear why mass transit options are not supported, particularly e-buses. There are a number of other programs in

India supporting e-buses, if the design choice to leave e-buses is motivated by this factor, please make it explicit as part of the project logic/narrative.

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- The business model for EV PCS has been illustrated in the proposal. However, it is not clear whether the project will replicate this model or further innovation on this will be carried out under this project?
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- Also, the proposal says that the GEF project will consider efforts to scale up particular pilots proposed by EESL. Few comments on this:
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 - - First, please describe what is meant by 'efforts' here i.e. what exactly will GEF financing support?
 - - Second, all the pilots suggested are existing EESL pilots already conceived and GEF funding will support scaling up. So, it doesn't seem that GEF funding is supporting the initial piloting rather scaling up the initiatives already conceptualized. Please clarify.
 - - Will the project influence design of pilots at the outset based on market assessments proposed under component 2?
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- Output 1.1.1 proposes to develop a ZEV policy framework. Two comments on this. Why is it not broadly for e-mobility instead of ZEVs? If these terms are used interchangeably here, please elaborate. Second, a ZEV policy framework already exists developed by Niti Aayog.
https://niti.gov.in/writereaddata/files/document_publication/EV_report.pdf Please elaborate whether this will be updated or the scope of this policy framework will be more broader.
-
- Under 4.4., please clarify the difference between the forum and the platform. Their composition and objectives seem similar.
-
- India's grid emission factor is relatively carbon intense. Some countries in similar circumstances (e.g. China and South Africa) are exploring options to connect EV fleets directly to renewable energy generation facilities to bypass the need for the grid to get 'cleaner' before maximizing the EVs' potential to generate mitigation impacts. Is this something that the project will look to promote? If so, please mention it in the document.
-
- Utilities play a potentially key role in the success of the EV market expansion, both as providers of energy and as potential sources of financing under several possible business and ownership & lease models. They are not mentioned in the CEO ER document and do not appear in the list of stakeholders consulted. Please provide details on the reason for this.
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- Figure 11 seems to be included twice.

GEFSEC:

Thanks for clarifications and addressing the comments. It is clear and accepted. Noted the point on Figure 11 also. Comment cleared.

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Agency Response

ADB Response 17 March 2021

We have proposed new business and financing models for retrofitting, battery swapping and battery leasing? deliverable under output 3.1, which will look into available different financing options for EVs and its ecosystem and propose specific measures for India. This will be done in close consultation with stakeholders including OEMs and their financing partners, organized FIs, NBFCs, PSUs, multilaterals and other relevant players.

The earlier proposed PRGF will be one of the evaluated financing options under output 3.1 and 4.3. In the new revision, we have removed PRGF pilot option under output 3.2 given the GEF funds will not be sufficient for piloting it. However, efforts will be directed to potentially pilot appropriate recommended financial instrument in planned pilots.

Pilots for 2W and 3W will be carried out using GEF finance.

ADB loan and Co-finance from EESL will be utilised for deploying 2000 4W which are advanced technology models with higher range and better performance.

In the revised proposal, GHG emission now includes these numbers and its impact on GHG emission reduction.

Buses are being systematically supported through other programs (FAME2, State government providing subsidies) in India. Also, buses are not part of EESL propositions and therefore these are not included in the proposal.

Updated in CEO document: Sub-section 2 ? baseline scenario under 1b. project description

Regarding the business model for EVs: As part of technical assistance for output 3.1, different business models for EV PCS will be analysed and documented. EESL or other entities can take benefit of the relevant innovative models for their further investment in rolling out PCS. The illustration is one of the business models which are being used by

EESL in their deployment of PCS. EESL have already installed or are in process of installing some of the PCS basis this illustrated model.

Regarding scaling up and EESL efforts: In the revised proposal, pilots for 2W and 3W will be carried out using GEF funds. Earlier it was proposed that EESL will conduct the initial pilots and GEF funds will be utilised for scaling up the EESL efforts. However EESL could not conduct the pilot due to Covid-related delays and now in the revised proposal, it is expected that GEF funds will be used for the initial pilots. Updated in CEO document: Proposal revised under Component 3 (Output 3.2)

Regarding suggested pilots: Initially these pilots were planned with GEF funds only however due to perceived market demand, EESL decided to advance the 2W and 3W pilot timing. So they were planning to use their own funds for the initial investment and scale up with GEF funds. However, EESL couldn't carry out the pilots as planned chiefly due to COVID and some other factors and therefore in the revised proposal finally GEF funds are only proposed for initial piloting of 2W and 3W. Updated in CEO document: Proposal revised under Component 3 (Output 3.2)

Regarding influencing the design of pilots: The assessments under component 2 will look into battery related financing/ leasing/ swapping/ disposal. These will form important considerations for pilot design under Output 3. However, there will be learnings from these pilots that will also close-loop and guide policy & other recommendations in the project.

Regarding Output 1.1.1: [This](#) document from Niti Aayog is known and also referred in initial baseline section under 'policy overview'. It only talks about a very generic policy framework using ZEV term and is part of one of the brief whitepaper released in one of the government organized summit (MOVE Summit 2018) and has no legal standing. We have proposed a more detailed and elaborated policy framework building on the white paper of NITI Aayog that will align different hierarchy of Government (National, State and City). We have chosen 'ZEV' term to align with GoI current positioning and is used interchangeably for e-mobility. It is also a common global used term for policy directives encompassing both supply and demand side. The final positioning and terminology will be agreed with right institutional body (like Niti Aayog) during execution for better mainstreaming

Regarding Output 4.4: We have changed it to 'forum' to maintain consistency. Updated in CEO document: i) Table B. Project Description Summary, and ii) 1b. Project description (under 4.4 output).

Regarding India's grid emission factor: Most of the EV charging will happen through grid. The energy required for charging EVs will be used from the grid, which has increasing mix of renewable energy due to GoI ambitious target of 450 GW by 2030. However, at certain locations standalone/ decentralized renewable energy charging stations can be developed (e.g. private fleet operators depot/ airport parking/

etc.). As per the wheeling policy in India, these charging stations can opt for renewable energy directly from the producer.

Regarding role of utilities: Updated utilities names in CEO document: Section 2. Stakeholders. The project team has consulted Tata Power, DDL, BRPL, BYPL. We had also consulted BEE, which is the nodal agency for charging infrastructure development in India. They cater to the pool of distribution utilities. As utilities are directly involved with BEE in this endeavour so we also had their point of view noted through BEE.

Figure 11 is only mentioned once in our view of the CEO document. This is likely a portal issue.

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

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

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

Secretariat Comment at CEO Endorsement Request

The section mentions three issues for incremental reasoning i.e. i) there is no clear target of production, sales of EVs, ii) lack of model availability and iii) lack of financing?. It is not very clear how the first two barriers are targeted in the project design. Also, as commented earlier, access to finance barrier is targeted through a partial risk guarantee facility (prgf) only. What is the basis for selecting this instrument? It would be better to consider a suite of options and then decide on the best instrument. Please also indicate how much funding is expected to be set aside for the financing facility whether it's PRGF or any other instrument.

GEFSEC:

Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

- i) The TA in component 1 will help decide Country wise/ city wise targets for EV roll out to address the barrier related to production/ sales.
- ii) Through co-financing support for 2k 4W, the identified barriers on supply side of limited models and makes will be resolved. Due to this pilot, more demand of different and newer models of e-4Ws will be encouraged. Also, through GEF finance pilots of e-2Ws and e-3Ws, there will be more demand for new models in the market
- iii) We have deliverables 4.3.4 and 4.3.5, where various financing models will be analysed and accordingly capacity building and training related to EV financing needs will be provided to FIs. They will be able to understand financing challenges, provide and service EV loans and hence it is will address the financing barrier. (For e.g The Content of training module could be to help understand FIs about partial risk guarantee mechanism and its challenges.)

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

The direct GEBs have been reduced significantly from the concept. From 22 million tons to 11 kilo tons CO₂e. This is quite low. The project may consider enhancing focus on 4-W and e-bus to increase the GEBs.

Please also see comments related to this above.

GEFSEC April 5, 2021

Please refer to earlier comment and email conversation in this regard.

GEFSEC April 21, 2021

Comment cleared.

Agency Response

ADB Response 17 March 2021

Updated in CEO document: Section 6 ? ?global environmental benefits?

Revised GHG emission reduction updated with 201 KtCO₂e from 11 KtCO₂e as we have now taken into account the impact on emission reduction due to inclusion of 2000 e-cars (earlier we had not accounted for it).

Buses are being systematically supported through other programs (FAME2, State government providing subsidies) in India. Also, buses are not part of EESL propositions and therefore these are not included in the proposal.

ADB Response 21 April 2021

The core indicator section, the GEB section and '21-04-21 NEW Annex F Core Indicators Detailed Methods' (new in uploaded docs) have all been reviewed and aligned.

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

Innovation aspect is articulated well. Under sustainability, it seems ICT vehicles is a typo (should be ICE). The sustainability aspects are comprehensibly described. However, please elaborate on how the MRV system will be institutionalized for sustainable use and reporting beyond the project period. Just integrating within knowledge repository may not ensure usage.

GEFSEC April 5, 2021

Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

The typo has been corrected.

MRV institutionalisation- Updated in CEO document: ?Sustainability of market development after the project? under Section 7 in 1b.

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

Please indicate the targeted cities. The national government headquarters is not the geography where the project intervention will take place. It indicates that the project will support New Delhi which is not likely to be the case. Please indicate when the cities will be identified (was expected in the PPG phase). If there is a sense of target cities, it is recommended to mention those cities in the map. A remark can also be made that the project's policy intervention can have pan-country impact (if that's the case).

GEFSEC April 5, 2021

Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

Yes, we have a list of cities identified however the selection of cities will be done during implementation stage and that has been documented. However, some probable city options as has been indicated are Delhi, Pune, Mumbai, Chennai, Hyderabad, Bangalore, Kolkata, Ahmedabad, Agra. These are depicted on the map.

Updated in CEO document: i) 1c. Project Map and Coordinates, ii) Annexure E, and iii) Output 3.1 under 1b. Project Description

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 has been illustrated to some extent under the section 'alignment with GEF IP strategies' in the table of outcomes and indicators. However, in the section under 'child project?', please elaborate how this child project's components contributes to the overall global program impact. Currently, just the global programs framework is summarized.

GEFSEC April 5, 2021

Thank you. No more comments on this.

Agency Response

ADB Response 17 March 2021

The 'Table 15: Linkages with Global Program' contains the relevant information.
Reference note added in Section 1d. Child project

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

The stakeholder consultations have been summarized well and targeted stakeholders for engagement under different components is also listed. The project will benefit from engaging industrial associations also such as SIAM, FICCI, CII, etc. and also with city networks such as ICLEI which works closely with cities.

GEFSEC April 5, 2021

Thanks. Well noted. No further comments.

Agency Response

ADB Response 17 March 2021

Updated in CEO document: i) Section 2. Stakeholders, ii) Section 6. Institutional Arrangements, and iii) Annexure K

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

Yes, a gender analysis is completed and included in the endorsement package. While the analysis provides a good description of urban mobility challenges for women, it provides limited information about demand of EVs by women. It is understood that the uptake of EVs in India is quite low for doing such an analysis. However, the project design will benefit from an analysis of gender issues related to EV market in other countries. It is likely that those issues may eventually emerge in India also e.g. women not keen to buy EVs due to limited mileage, frequent stop for recharging, limited safety features, smaller size for family use, high cost, etc. The project will likely to address some of these issues (e.g. design), however, a linkage with women's demand for EVs with these issues will be useful in both policy development as well as pilots and financial models.

The analysis suggests that ??a committee for prevention, prohibition and redressal of sexual harassment at workplace appointed as provisioned by GOI?. Will it be a new committee and where will it be housed? As per GOI laws such a committee should already exist in executing agencies.

GEFSEC 18 April

Thanks. Comment cleared.

Agency Response

ADB Response 17 MArch 2021

Gender expert will engage with global project to use such information. Further, good practices based on desk/literature review will be included while sharing inputs on policy documents.

Updated in CEO document: Section 3. Gender Equality and Women's Empowerment.

Updated in CEO Doc: In table 16 GAP, we have deleted Activity 3 Point (iv) ?a committee for prevention, prohibition and redressal of sexual harassment at workplace appointed as provisioned by GOI

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

Private sector engagement (both as stakeholder and financier) across the four components has been elaborated. However, please describe how the project will engage with the private sector more systematically and institutionally e.g. engagement under

project steering committee or technical working group to ensure that their ideas, perspectives and concerns are systematically integrated in the project implementation.

GEFSEC 17th April

Thanks. No further comments.

Agency Response

ADB Response 17 March 2021

Please refer to update in CEO document:

? Section 6. Institutional Arrangements

? Annexure K

In the Technical Working Group (TWG): i) For each meeting, special invitee from private sector will attend, ii) Manufacturers from 2W, 3W and 4W ? are going to be engaged.

In PSC (at least once annually): i) members of industry associations will attend.

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

The risk from COVID-19 is linked with project operations only. Please elaborate if there is any market and investment related risks also due to COVID-19.

Please also provide a more detailed COVID-19 context for this project and in addition to risks if there are any opportunities that this project could support for green recovery.

GEFSEC 17th April

Please refer to GEFSEC COVID-19 guidance and provide a more detailed assessment of COVID-19 context, risks and opportunities for green recovery through this project.

GEFSEC April 21, 2021

The addition is fine. Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

The target setting for EVs at National and select city level (Output 1.1 and 1.2) will account for COVID 19 impact on the industry. Indian [automotive industry](#) has shown rebound with higher post-COVID 19 sales in 2Ws and passenger car segments.

The impact of green recovery from EVs including on employment will be studied in under output 1.1 and appropriate interventions will be recommended

Updated in CEO document: i) Risks section 5, and ii) 1b. Project Description: Output 1.1

ADB Response 21 April 2021

Covid 19 pandemic consideration has been expanded in the risks section.

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

Please elaborate how the project will coordinate with other GEF-finance projects e.g. sustainable cities IP and IAP, clean energy related projects and other bilateral/multilateral initiatives to support e-mobility in India.

GEFSEC 17 April

Thanks. Well noted.

Agency Response

ADB Response 17 March 2021

This project has a strong component of working with Cities and developing their specific EVs and charging infra roadmap (output 1.2, output 3.1) and collaboration with on-going national programmes, including GEF finance projects (like Sustainable Cities in Chennai, Pune), National Clean Air Programme (NCAP) under Ministry of Environment, Forest and Climate Change, etc.

Updated in CEO document: i) Section 6. Institutional Arrangements, ii) ToR of project manager has been updated with additional responsibility to coordinate with other GEF/ multilateral funded projects in e-mobility

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

Yes.

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

Yes. The knowledge management approach is elaborated well.

Agency Response

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

M&E activities are proposed to be funded through project management budget primarily. \$40,000 and \$25,000 has been set aside for TE and MTR. The M&E budget sheet however, mentions a total of \$71,000. Please clarify the \$6000 gap in the budget sheet.

GEFSEC

Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

The amount is \$65,000. Mistakenly the audit amount was included in the total M&E, which was removed but the total was corrected. The correct figure is updated in CEO document. See Section 9: M&E and Annex J.

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 section in the proposal doesn't clearly provide an answer to the second part of the review question. In addition, please clarify how the following benefits will accrue from the current baseline of ICE vehicles:

" Increased safety and security, and improved mobility options for non-drivers too are expected benefits. Improved reliability of travel times for public transport will also contribute substantially to the attractiveness of living and the ease of doing business in urban areas."

Thanks. Comment cleared.

Agency Response

ADB Response 17 March 2021

The socio-economic benefits as such do not impact GEBs but indirectly contribute to sustaining climate change benefit. Updated CEO doc

? Section 10: Benefits

? Removed some of the earlier mentioned benefits as per the review comments

Annexes

Are all the required annexes attached and adequately responded to?

Secretariat Comment at CEO Endorsement Request

Yes. Co-finance letters, budget sheets, detailed work plans, ESS, emission reduction methodology and other relevant documents are attached.

Thanks.

Agency Response

ADB Note: an additional co-finance letter from Attero Recycling has been annexed.

Project Results Framework

Secretariat Comment at CEO Endorsement Request

The baseline for GHG emission reduction (objective 1 in the table) is indicated as zero. Given that there is already some market base for e-vehicles, please provide an estimate of emission reduction in the baseline.

GEFSEC 17th April

Ok. Noted. No further comments.

Agency Response

ADB Response 17 March 2021

Response: EV adoption is happening albeit it is still at nascent stage. The baseline is considered to be zero to indicate the incremental benefits from the project. Please see updated Annexure A: PRF

GEF Secretariat comments

Secretariat Comment at CEO Endorsement Request

GEFSEC 26 April 2021

In relation to emission reduction estimation, please see below additional comments:

- Please attach the Excel File of the emission reduction calculation sheet on the portal.

- Please define in methodology the three emission reduction categories i.e. direct, secondary direct and indirect? Also, a brief rationale behind the chosen level and application mechanics of the causality factor assumption will be useful.

-

- While there are calculations for estimating direct emissions, we couldn't find the details for the direct secondary and indirect emission reduction assessment. Can you please add that also?

The main reason behind this is that the final numbers of 101 million tons (indirect) and 43 million tons (direct) is high relative to the overall program GEBs, and in general relative to the GEF-7 project portfolio. We would also like to make sure that emissions as estimated at the outset are as close as possible to those that will be reported in the final evaluation at project close.

GEF Secretariat 28 April 2021

Thanks. The revised targets are fine. Please upload a revised excel sheet of GHG emission reduction estimation as many of the cells aren't properly linked with the formula used. Also, please add the definition of different emission reduction categories i.e. direct, secondary direct and indirect in the methodology.

Also, please provide your response to PPO's comments in the box below so that it can be recorded in the review sheet.

GEF Secretariat 29 April 2021

Thanks. Comments related to the GHG emission estimation is cleared. All responses are fine.

The response to PPO comments are fine too. Regarding PPO's comment on PMC proportionality, the program manager is supportive of the revised budget coming from co-finance. While it is not exactly in the same ratio as of the GEF finance, the amount is significant and sufficient for effectively manage the project. For example, a significant amount of co-finance is for purchasing electric vehicles which may not require a significant project management resources compared to other activities (e.g. policy development, capacity building, etc.) which are related to working with a number of partners.

So, the PPO comments are also cleared technically.

Agency Response

ADB Response 28 April 2021

The observations above are well noted. We have convened our team and re-assessed the approach and methods used for GHG emissions calculations. In this connection we have revised the core indicators as you will see from the Portal section. We have decided to use a 'causality factor' of 10%.

Please see "**21-04-28 NEW Annex F Notes on Methodology for GHG Emissions Calculations**" in the uploaded documents section for a detailed explanation.

Also in the uploaded documents section is a suite of files which provides detailed calculations on emissions reduction estimates. These include the following files:

21-04-28 India GHG emissions Calculations rev FINAL

21-04-28-EMOB 3wheeler-calculator-India

21-04-28-EMOB LDV-calculator-India

21-04-28-EMOB-Bus-calculator1.2-India

ADB Response 29 April 2021

GEF :Thanks. The revised targets are fine. Please upload a revised excel sheet of GHG emission reduction estimation as many of the cells aren't properly linked with the formula used. Also, please add the definition of different emission reduction categories i.e. direct, secondary direct and indirect in the methodology.

ADB: A revised Excel worksheet titled: "21-04-29 India GHG Emissions Calculations rev FINAL" has been uploaded in the documents section. This version has removed some of the formulas etc which may have made some of the cell entries go askew.

ADB: On definitions related to methodology, narrative has been inserted in the Core Indicators section, the GEB section and also the preamble for the methodological note titled: "21-04-29 NEW ANNEX F Notes on Methodology for GHG Emissions Calculations with Definitions" - in the uploaded documents section.

Response to PPO Comments:

GEF: On Agency Fee: Kindly note that there is a small difference between the Agency Fee in Table D of the Project and Table D of the Agency Fee in the PFD (ID 10114) ? please ask the Agency to amend.

ADB: The Table in CER has been amended to conform to the PFD Table

GEF: On the PMC Proportionality: there is no proportionality in the co-financing contribution to PMC. If the GEF contribution is kept at 5%, for a co-financing of \$162,280,000 the expected contribution to PMC must be around \$8,114,000 instead of \$500,000 (which is 0.3%). As the costs associated with the project management have to be covered by the GEF portion and the co-financing portion allocated to the PMC, the GEF contribution and the co-financing contribution must be proportional, which means that the GEF contribution to PMC might be decreased and the co-financing contribution to PMC might be increased to reach a similar level. Please amend either by increasing the co-financing portion and/or by reducing the GEF portion.

ADB: The co-financing PMC has been adjusted to \$ 4,057,000. We feel that a PMC of over \$ 8 million is unusually high for management costs for this amount of co-financing; and that the objectives of PMC can be suitably addressed with this amount.

GEF: On the Budget:

- i. Office Supplies should be charge to the PMC and not across the components
- ii. If the Survey is for Monitoring purposes, it should be charged to M&E plan

ADB: Office supplies there was a slight misunderstanding. Standard office supplies will be provided by the co-financing from various Government of India partners. The original budget had also lumped in "printing, reproduction and documentation" as office supplies. This has now been shifted to the budget under Training, Workshops, Meetings,.

ADB: the survey is not for monitoring purposes, rather these are technical / data collection surveys to support project activities. The budget has been clarified

GEF: Procurement specialist should be charged to PMC and not to Component 3

ADB: there is one procurement and finance assistant under PMC. The second is essentially a Finance Specialist, that will have minor responsibility to support the procurement specialist when needed. This is clarified in the project budget.

GEF: On Environmental and Social Safeguards: We note that the project overall ESS risk is identified as low, and UNEP attached UNEP Environmental, Social and Economic Review Note (ESERN). However, there is no signature and comment of the Safeguard Advisor in ESERN. Please ask UNEP to clarify overall risk of the project and provide the ESERN with signature and comment of the Safeguard Advisor.

ADB: The signed ESERN is now included.

GEF: On co-financing: Co-finance from Attero REcycling Private Ltd should be reported as from ?private sector?.

ADB: Done.

Council comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

STAP comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Convention Secretariat comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Other Agencies comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

CSOs comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Status of PPG utilization

Secretariat Comment at CEO Endorsement Request

Yes. Please note that the remaining PPG should be utilized within the first year of the project implementation and should not be used for project implementation purposes.

Thanks.

Agency Response ADB response: Thank you. This is noted.

Project maps and coordinates

Secretariat Comment at CEO Endorsement Request Provided.

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

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 NA

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

Agency Response

GEFSEC DECISION

RECOMMENDATION

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

Secretariat Comment at CEO Endorsement Request

The Agencies are requested to consider the above comments and return the project for further review.

GEFSEC 17th April

Please address a couple of additional comments and resubmit the project.

GEFSEC 21 April, 2021

Yes, the project is recommended for CEO Endorsement.

GEFSEC 26 April 2021

Please see comments on emission reduction estimation under the "GEF Secretariat Comments" section above and address those. Please also address the following comments from the PPO.

Child Project to be returned to the Agency due to:

1. On Agency Fee: Kindly note that there is a small difference between the Agency Fee in Table D of the Project and Table D of the Agency Fee in the PFD (ID 10114) ? please ask the Agency to amend.
2. On the PMC Proportionality: there is no proportionality in the co-financing contribution to PMC. If the GEF contribution is kept at 5%, for a co-financing of \$162,280,000 the expected contribution to PMC must be around \$8,114,000 instead of \$500,000 (which is 0.3%). As the costs associated with the project management have to be covered by the GEF portion and the co-financing portion allocated to the PMC, the GEF contribution and the co-financing contribution must be proportional, which means that the GEF contribution to PMC might be decreased and the co-financing contribution to PMC might be increased to reach a similar level. Please amend either by increasing the co-financing portion and/or by reducing the GEF portion.
3. On the Budget:
 - i. Office Supplies should be charge to the PMC and not across the components
 - ii. If the Survey is for Monitoring purposes, it should be charged to M&E plan
 - iii. Procurement specialist should be charged to PMC and not to Component 3
4. On Environmental and Social Safeguards: We note that the project overall ESS risk is identified as low, and UNEP attached UNEP Environmental, Social and Economic Review Note (ESERN). However, there is no signature and comment of the Safeguard Advisor in ESERN. Please ask UNEP to clarify overall risk of the project and provide the ESERN with signature and comment of the Safeguard Advisor.
5. On co-financing: Co-finance from Attero REcycling Private Ltd should be reported as from ?private sector?.

GEF Secretariat 28 April 2021

Please address an additional comment related to emission reduction methodology provided under the "GEF Secretariat Comments" section above in the review sheet. Also, please record the response to PPO comments in the same response box.

GEF Secretariat 28 April 2021

All comments are addressed satisfactorily and therefore the project is recommended for CEO endorsement.

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	11/9/2020	
Additional Review (as necessary)	4/17/2021	
Additional Review (as necessary)	4/26/2021	
Additional Review (as necessary)	4/28/2021	
Additional Review (as necessary)	4/29/2021	

CEO Recommendation

Brief reasoning for CEO Recommendations

The "Electrifying Mobility in Cities: Investing in the transformation to Electric Mobility in India" project under the GEF's global e-mobility program aims to transform the EV market in India with a focus on cities and three key vehicle segments of 2W, 3W and 4W. In collaboration with the EESL and the Niti Aayog which have the mandate from Indian government to scale up electric vehicles in India, the project will work with financial institutions, private sector and other key market players to create an enabling environment for deployment of EVs. The project design targets key systemic national and global drivers of EV market development and has the potential to become an anchor project of the GEF's e-mobility program. The project will result in reduction of 43.9 million tons of direct GHG emissions till 2032 and 101 million tons of indirect GHG emissions by 2035. It will mobilize nearly \$160 million investment with a co-finance ratio of 1:33. With increasing share of renewable energy in Indian electricity

grids and opportunities to integrate renewable energy directly with e-mobility infrastructure, the project could further contribute to India's climate change mitigation goals.

The project focuses on key issues of the e-mobility market in India including the charging infrastructure, batteries, limited availability of finance, lack of coordination across institutions and affordability of EVs. Using a combination of interventions such as a **National Policy Framework for e-vehicles; city level e-mobility plans** aligned with integrated urban development plans; **business models using innovative financing** and public private partnership; and **increased awareness and institutional capacity**, the project will stimulate demand of e-vehicles in India. On the technical side the project will support scaling up of charging infrastructure in target cities and developing EV battery standards for retrofitting, swapping and leasing and setting up Li-ion battery reuse and recycling plants in India. Through the GEF funds and investment mobilized from EESL and ADB, the project will demonstrate viable business and financial models in selected cities for wider replication across the country.

The project builds on a strong baseline in India where the country is committed to roll out of EVs, financial institutions like the ADB have dedicated programs on e-mobility and awareness is increasing among people and the private sector about the benefit of EVs regarding its utility and environmental benefits over ICE vehicles. The project has also factored in the COVID 19 pandemic impact in India and could potential contribute to green recovery by creating new jobs and reducing air pollution.

The project is recommended for CEO Endorsement . It demonstrates good value for money and builds on GEF's past and current investment in India including in clean energy and sustainable cities.