1. Project Data

Summary project data			
GEF project ID		5737	
GEF Agency project ID		130281	
GEF Replenishment Phase		GEF-5	
Lead GEF Agency (include all for joint projects)		UNIDO	
Project name		Energy Efficient Low-carbon Transport	
Country/Countries		South Africa	
Region		Africa	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		CCM-4 Promote energy efficient, low-carbon transport and urban systems	
Stand alone or under a programmatic framework		Standalone	
If applicable, parent program name and GEF ID			
Executing agencies involved		South African National Energy Development Institute (SANEDI), Technology Innovation Agency (TIA), City of Durban, City of Johannesburg, Department of Trade and Industry, DEA, Department of Transport, Department of Environment	
NGOs/CBOs involvement		None	
Private sector involvement (including micro, small and medium enterprises)[1]		Electric Vehicle Industry Alliance (EVIA) - one of the beneficiaries and through consultations	
CEO Endorsement (FSP) /Approval (MSP) date		6/10/2015	
Effectiveness date / project start date		1/1/2016	
Expected date of project completion (at start)		6/30/2019	
Actual date of project completion		3/31/2021	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	0.065	0.065
	Co-financing		
GEF Project Grant		1.3	1.3
Co-financing	IA own		
	Government	6.95	N/A
	Other multi- /bi-laterals	0.16	N/A
	Private sector		
	NGOs/CBOs		
	Other		
Total GEF funding		1.36	1.36
Total Co-financing		7.11	N/A
Total project funding (GEF grant(s) + co-financing)		8.47	N/A
Terminal evaluation validation information			
TE completion date		6/30/2021	

[1] Defined as all micro, small, and medium-scale profit-oriented entities, including individuals and informal entities, that earn income through the sale of goods and services rather than a salary. (GEF IEO 2022)

Author of TE	Claudia Raimundo and Maria Florencia Clavin
TER completion date	11/16/2022
TER prepared by	Ritu Kanotra
TER peer review by (if GEF IEO review)	Neeraj Negi

Access the form to summarize key project features here: https://www.research.net/r/APR2023.

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	S	HS	__	MS
Sustainability of Outcomes		HS	__	ML
M&E Design		S	__	S
M&E Implementation		S	__	MS
Quality of Implementation		HS	__	S
Quality of Execution		HS	__	MS
Quality of the Terminal Evaluation Report			__	MS

3. Project Objectives and theory of change

3.1 Global Environmental Objectives of the project:

According to the Project Appraisal document (PAD), the goal of the project was to reduce air and noise pollution, particularly in large cities. The project aimed to promote the use of Electric Vehicles and solar energy utilization and cycling to create a strong market demand for Electic Vehicles and bicycles, and further reduce GHG emissions as compared to conventional fuel-based electricity.

3.2 Development Objectives of the project:

According to the PAD, the Development Objective of the project was the 'promotion of the widespread use of electric vehicles (EVs) and non- motorized transport (NMT), and the development of the necessary infrastructure, as part of the Green Transport and Green Cities initiatives of South Africa' (PD, pg33).

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or project activities during implementation? What are the reasons given for the change(s)?

None

3.4 Briefly summarize project's theory of change – describe the inputs and causal relationships through which the project will achieve its long-term impacts, key links, and key assumptions.

The project aimed at assisting the efforts of the Government of South Africa and the business sector to promote early and widespread use of Electric Vehicles (EV) and cycling practices, leading to a reduction in the rapid growth of GHG emissions emerging from transport sector. The project approach was developed around two substantive components; the first one at the national level addressing policy, institutional capacity building, coordination and awareness raising, and the second focusing on demonstration at the municipal level and in game reserves, including institutional capacity development through the provision of guidance on the implementation and operationalization of the relevant national policies. These two components aimed at promoting EV and solar energy utilization and cycling to create a strong market demand for EVs and bicycles, and to contribute to GHG emissions abatement compared to the baseline use conventional fuel-based electricity. In order to ensure effective

management of the project and a solid monitoring and evaluation (M&E) strategy, the project also had a comprehensive M&E component.

The project was designed to address the barriers of lack of enabling policy and incentive programs; limited coordination among relevant institutions in the Electric Vehicle and NMT markets; low public awareness on the opportunities associated with EV and cycling and lack of supporting infrastructure to develop sustainable forms of transport.

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

The outcome ratings (relevance, effectiveness, efficiency, and overall outcome rating) are on a six-point scale: Highly Satisfactory to Highly Unsatisfactory. The sustainability rating is on a four-point scale: Likely to Unlikely.

Please justify the ratings in the space below each box.

4.1 **Relevance and Coherence**	S

The TE assessed the relevance of the project as 'highly satisfactory'. This TER rates relevance as 'satisfactory'. South Africa's heavy reliance on fossil fuels (especially coal), places the country as the 13th largest CO2 emitter in the world. As per the Project Document (PD), the transport sector accounted for 28% of energy consumption in the country with the demand expected to double by 2050. Transport sector contribution to GHG emissions showed an upward trend - increase by 33.3% in the 10 years from 2000 to 2010, translating into 13.1% of South Africa's total GHG emissions. Road transport contributed 91.6% towards the total transport GHG emissions in 2010, mainly due to increased motor vehicle sales. Project's focus on encouraging a shift in South Africa to a more environmental-friendly transport sector is very relevant. The project aligned well with recent policy documents such as the South Africa Low Emissions Development Strategy (GTS) and the new Nationally Determined Contributions (NDCs), which highlights the importance of transitioning to accessible and cost-effective low carbon transport systems.

The project was also well aligned with the GEF focal area Climate Change Mitigation (CCM)- 4 to promote energy efficient, low-carbon transport and urban systems. The implementation activities proposed in the project had the potential to directly tackle GHG emissions associated to the transport sector in South Africa.

4.2 **Effectiveness**	MS

The TE assessed the effectiveness of the project as 'highly satisfactory', which was revised by this validation to 'moderately satisfactory'. The project supported the development and approval of Global Transport Strategy (GTS) of South Africa (2018-2050), which provided an overall policy framework for the promotion of low carbon transport. However, the project had limited success in specifically making recommendations on policy, incentives and support programs to promote widespread use and local manufacturing of non-motorized transport as well as local manufacturing of game reserves EVs. The project was also successful in organization of various trainings and awareness generation events that

brought together various stakeholders from government and private sector for better coordination within and amongst them. As a result, the project supported installation of 8 PV charging stations as compared to target of 2, improving the demonstration impact of such technologies amongst end users.

The project had more success in promoting and generating awareness regarding Electric Vehicles but made limited progress in activities focused on Non-motorized Transport. This was because of change in priorities of the relevant government departments (primarily Department of Transport) and the city administrations (Cities of Johannesburg and Durban). As a result, the outputs and outcomes related to the promotion of non-motorized transport, such as development of policies/regulations with specific recommendations for women along with the implementation of NMT projects, were not delivered.

Component 1: Improvement of policy and regulatory frameworks for EV (Electric Vehicle) use and local manufacturing and NMT (Non-motorized Transport); capacity of concerned institutions built and awareness raised

This component aimed to support adoption of Electric Vehicles (EVs) and Non-motorized transport (NMT) in South Africa by facilitating development of an enabling policy framework and the building of capacities of the relevant institutions. The project contributed to the development of an overall strategy – Global Transport Strategy (GTS) of South Africa for the 2018-2050 period issued by Department of Transport. This was considered a significant milestone for the strengthening of the policy framework aimed at promotion and adoption of low-carbon transport modalities, with EV and NMT included as topics within GTS. The project supported several studies, including a roadmap and policy papers specific to Electric Vehicles (EVs). But a study on the local manufacturing and assembly of special EVs for the game reserves in South Africa was not delivered (Output 1.1.1). Overall, these studies and the various workshops/seminars organized to disseminate the findings created awareness and added to the knowledge base, as originally envisaged in the project document. The project raised awareness and capacity building of vast range of stakeholders including representatives from national, provincial and local governments, e-mobility and energy industry organizations from the private sector, which according to the TE, 'elevates the potential role that EVs and NMT can play in transport planning' (TE, Pg23) in South Africa in future (Output 1.1.2).

Component 2: Promotion of non-motorized and public transport in the cities of Durban and Johannesburg, and development and demonstration of the supporting infrastructure for Electric Vehicles (EVs)

This component focused on promotion of non-motorized transport (cycling) and public transport in the cities of Durban and Johannesburg as both the cities actively participated in various consultations and planning work during the project preparation phase. The project supported two studies for the city of Johannesburg for a cycling scheme in the city, which according to the TE, contributed significantly to the broad knowledge base needed for informed decision making by all the participating cities. A scoping study was also conducted for the inclusion of an electric bus in the city of Johannesburg as a pilot project. Although studies helped in generating awareness on the NMT and EVs, the extent of the contributions made by these studies to improvement of the policy framework is not clear. The project

also intended to contribute to the development and improvement of the regulatory framework that would encourage growth of demand for new bicycles and other forms of NMT. This output was not delivered (Output 2.1.1).

Project supported more than 5 capacity building workshop and seminars, which contributed towards institutional capacity building in the city of Johannesburg and eThekwini Municipality in Durban. However, NMT pilot projects couldn't be implemented in the city of Durban as the participating municipality changed its priorities regarding e mobility and non-motorized transport. (Output 2.1.2). On the expected output of 'adoption of standards and regulations for EV', there was no development of new standards but, according to the TE, instead the international standards were adopted (Output 2.1.3). As per the TE, the Department of Transport decided to initiate the legislation of standards through the National regulatory for Compulsory Specification (NRCS) to be implemented directly through the national government, the timeline for which could run beyond the timeframe of the project. However, the TE notes that a total of 8 charging stations were installed in various municipalities and in the Shamwari Game reserve as against a target of 2 (Output 2.1.4).

4.3 **Efficiency**	MS

The TE assessed the efficiency of the project as 'satisfactory', which this TER reviewed to be 'moderately satisfactory'. As per the TE, the project faced several delays, in part due to the impact of COVID-19, but also due to change of mandate and leadership in different government departments involved in the project. The project received two extensions and implementation period lasted for 5 years as against the original time frame of 3 years. The project team was effective in building partnerships and find alternative locations for implementing some of the project activities as the locations originally envisaged could not be covered due to shift in the priorities or leadership changes in these locations. As per the TE, the project mobilized all the co-financing and did not exceed the budget despite extensions. However, as the TE notes, change in priorities by the stakeholders resulted in delays in developing NMT policy, which was still not developed till the end of the project. As a result, the NMT pilot projects were also not implemented limiting the demonstration impact of the project.

4.4 **Outcome**	MS

The project contributed to the development of an overall strategy – Global Transport Strategy (GTS) of South Africa (2018-2050) issued by Department of Transport. This was not an intended output of the project but provided an overall policy framework aimed at promotion and adoption of low-carbon transport modalities, with EV and NMT included as topics within GTS.

Summarize key outcomes related to environment, human well-being, and enabling conditions (Policy, Legal & Institutional Development; Individual & Institutional Capacity-Building; Knowledge Exchange & Learning; Multistakeholder Interactions), as applicable. Include any unintended outcomes (not originally targeted by the project), whether positive or negative, affecting either ecological or social aspects.

The project also raised awareness and capacity building of vast range of stakeholders including representatives from national, provincial and local governments, e-mobility and energy industry organizations from the private sector, which according to the TE, 'elevates the potential role that EVs and NMT can play in transport planning' (TE, Pg23) in South Africa in future. As per the TE, the project brought the concept of 'low carbon transport' in the political agenda as it was otherwise a big challenge to make all stakeholders work together and collaboratively (TE, pg 40).

However, the project had more success in promoting and generating awareness regarding Electric Vehicles but made limited progress in activities focused on Non-motorized Transport (NMT) because of change in priorities of the relevant government departments (primarily Department of Transport) and the city administrations (Cities of Johannesburg and Durban). As a result, the outcomes related to the promotion of non-motorized transport, such as development of policies/regulations with specific recommendations for women along with the implementation of NMT projects, were not delivered. The project made limited progress in adoption of incentive programs, tax incentives and safety guidelines to foster the local manufacturing of Electric Vehicles and NMT in South Africa.

Where applicable, note how both intended and unintended outcomes have positively and/or negatively affected marginalized populations (e.g., women, indigenous groups, youth, persons with disabilities), and where some stakeholder groups have benefited more/ less than others.

Not reported.

4.5 **Sustainability**	ML

Note any progress made to sustain or expand environmental benefits beyond project closure, using stakeholder (rather than project) resources, e.g. through replication, mainstreaming or scaling-up of GEF-supported initiatives. Examples would be farmers adopting practices using own funds, follow-on replication projects, development of plans for scaling, inclusion in local or national legislation, and allocation of government budgets or private sector investments for institutional adoption.

The TE used a different scale and assessed the likelihood of sustainability of the project outputs and outcomes as 'highly satisfactory', which has been assessed by this validation as 'moderately likely'. The transport strategy – GTS (2018-2050) prepared with the support of the project was adopted by the Government and was also being implemented under the direction of *dtic*. This policy is likely to provide an overall framework for a move towards energy efficient low carbon transport systems in South Africa. The project also contributed to spreading awareness and capacity building of various stakeholders that led to an increase in their interest and awareness on the issue of low carbon transport in the country. The project was also successful in demonstrating and generating interest amongst beneficiaries and stakeholders regarding the use of Electric Vehicles (EVs), which is likely to be sustainable. However, the project did not receive the same level of interest in developing Non-motorized Transport (NMT) infrastructure.

Financial sustainability

According to the TE, the main executing agency – SANEDI had set up a formal working unit within the organization to sustain work on clean transport after the project was over. The TE mentioned SANEDI was in discussion with UNIDO about the possibility of electric bus demonstration project in 2022. As per the TE, SANEDI had its own program of action in the clean mobility space, and was able to raise its own funds after the project was over.

As per the analysis provided in the TE, number of EVs doubled between 2013 and 2020. Although this rise in number cannot be directly attributed to the project but Installation and testing of 8 PV-based charging stations as against a target of 2 before the end of the project is a testimony of growing interest and need amongst the beneficiaries and the city administration. The involvement of the manufacturing industry in the promotion of EVs and the private sector that started to roll out the necessary infrastructure for EVs, including charging infrastructure, infrastructure for payment, etc., could also be viewed as a step in the right direction for promotion of EVs in the country. However, there was limited evidence in the TE on the extent to which the project assisted in developing incentive schemes including financial incentives such as soft loans, various tax incentives and subsidies for electric vehicles and charging infrastructure, which could further stimulate both demand for and supply of Electric Vehicles and the related infrastructure in the target cities. As the TE notes, 'EVs presence are growing, they are still incipient and technologies will continue to improve, they tend to be more expensive than the traditional internal combustion engine vehicles' (TE, Pg19). The project laid the foundation but still a long way to go before such technologies were more affordable. The project had limited success in development of non motorized transport (bicycles) infrastructure and it is unclear from the TE as to how NMT related efforts would be sustained or carried forward after the project was over.

Sociopolitical:

The TE notes that the project 'triggered the opportunity for different departments and actors on the transport and other relevant sectors to work together in collaborative manner'. This integrated approach is likely to benefit the design of future NMT and EV transport strategies, since transport sector is connected to several other sectors such as energy, industrial development and technology innovation, small and medium size enterprises, etc. For instance, the project supported Electric Vehicle Industry Alliance (EVIA), a public sector consortium constituted to shape and stimulate the local EV industry in South Africa. As per the TE, the project invested resources in supporting EVIA to ensure a continued platform of engagement and activity beyond the lifespan of the project. Similarly, the project also involved other stakeholders such as Eskom (the national electricity utility), which was not foreseen as partner in the ProDoc. Project played a critical role in engagement of different stakeholders through their involvement in various trainings and awareness generation events.

The TE also indicates that project had relatively better support from the City of Johannesburg as compared to Durban. The project had to bring other cities into its fold due to lack of interest and change in priorities of the eThekwini Municipality of the City of Durban. This is despite the fact that the eThekwini Municipality showed a high level of interest during the project proposal stage in developing

and improving NMT in their cities as per the information in the project document (PD, Pg 13). Moreover, the outputs expected from the project related to enabling policy and regulatory framework development specifically for the use and promotion of EVs and NMT could not be fully achieved, which is likely to impact the sustainability of efforts and uptake of EVs and NMT in future.

Institutional framework and governance

The project facilitated the capacity building and institutional strengthening of the relevant stakeholders and provided support for the GTS 2018-2050 that provides a long-term vision of the transport sector transition in the country. However, the project was specifically expected to support drafting of national policy and regulatory framework, incentive programs, tax incentives, etc. to promote early take off, widespread use, and local manufacturing of EVs and NMT, which could not be fully accomplished but was essential to support the technologies and efforts under the project. But the project supported relevant studies that could form the basis for the formulation and approval of the policy and regulatory reform for the promotion of EVs and NMT in future.

Environmental

No environmental risks were anticipated at the point of project completion.

5. Processes and factors affecting attainment of project outcomes

Before describing the factors, you may choose to summarize reported outcomes and sustainability here: https://www.research.net/r/APR2023.

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The TE did not include a budget break down except that 'the Evaluation Team believes that co-financing was mobilized as planned since the activities were implemented' (TE, pg 25). There are no other details or information in the TE to support this statement.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project got two extensions and was implemented in five years instead of the original time frame of three years. As per the TE, the project faced several delays, in part due to the impact of COVID 19 but also due to changes of mandate and leadership in the different Government departments involved in the project. As a result, some of the project activities were not implemented and the project had to look for alternative cities where Electric Vehicle pilot projects could be implemented. For instance, the TE notes that change in the priorities of the government resulted in delays in defining the policy objectives for Non-motorized Transport (NMT). As a result, NMT policy could not be developed and the NMT pilot projects were also not implemented. Moreover, Photo Voltaic charging station was not deployed in the city of Durban due to their change of priorities. The project scope was expanded to cover other locations

due to which PV charging stations were installed in 8 as compared to only 2 locations originally included in the project proposal. TE does not clarify how the cost of additional PV charging stations was met.

5.3 Stakeholder ownership. Assess the extent to which stakeholder ownership has affected project outcomes and sustainability. Describe the ways in which it affected outcomes and sustainability, highlighting the causal links.

Overall, the project had good participation from all the stakeholders in various trainings, awareness generation events and conferences organized at local and national level, which was crucial for institutional strengthening and prioritizing the agenda of low carbon transport in South Africa. The willingness of the government, as one of the main stakeholders, was evidenced from the fact that it took the support of the project in developing Global Transport Strategy (2018-2050), which is a long-term strategy and vision for the transport sector development in South Africa. However, the project was specifically designed for promotion of Electric Vehicles (EVs) and Non-motorized Transport (NMT) through strengthening policy and regulatory framework, capacity building and implementation of pilot projects. There is little evidence to show that the project resulted in any changes in the policies and regulations specific to EVs. As per the TE, the project did not make much progress in the NMT space due to changes in the priorities of the government departments (Department of Transport and Department of Trade and Industry) and the eThekwini Municipality of Durban and the city of Johannesburg Municipality of the city of Johannesburg. As a result, the project failed to develop NMT policy, strategy and implement NMT pilot projects. This was despite the fact that both the cities of Johannesburg and Durban showed keen interested in promotion of NMT (specially cycling) during the PPG phase.

The project had better stakeholder engagement and interest for installation of Photo Voltaic(PV) charging stations from cities other than listed in the project document. The project was successful in installing 8 PV charging stations in different cities as compared to the original target of 2 that provided more end-users to experience the technology and expand the scope of the project.

The TE did not discuss the level of engagement of other stakeholders listed in the project document, such as that of South African Local Government Association and the South Africa Cities Network – CSOs involved during the PPG phase and were supposed to play a role in awareness raising and policy inputs throughout the project. However, the project supported and engaged with Electric vehicle Industry Alliance (EVIA), a key stakeholders' group composed of market actors with a focus on electric mobility and which according to the TE, 'is likely to provide a continued platform of engagement and activity beyond the lifespan of the project' (TE, Pg 36). Similarly, the project also involved other stakeholders such as Eskom (the national electricity utility), which was not foreseen as partner in the ProDoc. According to the TE, 'Eskom became of the project champions' (TE, pg 36). As the electric vehicles continue to grow in South Africa, Eskom is likely to be a key partner to bring about the needed infrastructural support and ensure that EVs are charged the right electricity tariffs.

5.4 Other factors: In case the terminal evaluation discusses other key factors that affected project outcomes, discuss those factors and outline how they affected outcomes, whether positively or negatively. Include factors that may have led to unintended outcomes.

None.

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory to Highly Unsatisfactory.

Please justify ratings in the space below each box.

6.1 **M&E Design at entry**	S

This TER concurs with the assessment by the TE of 'M&E design at entry' as 'satisfactory. Monitoring and Evaluation plan included clearly defined outputs and with budget for planned activities. In addition, the project results framework included specific and measurable indicators with targets for monitoring progress of the project. For instance, outcome indicators such as monitoring of GHG emission savings; number of policy papers on low carbon transportation approved by the government; number of PV charging stations installed and operated etc., were measurable and specific to the project objectives. The results framework also included gender relevant indicators. M&E plan included provision for project inception, GEF tracking tool, periodic progress reports, semiannual reviews and end term evaluation, with clearly defined time frame and responsible parties.

6.2 **M&E Implementation**	MS

The TE assessed the M&E as 'satisfactory', which is revised by this validation as 'moderately satisfactory'. Overall, the project prepared all the progress reports including yearly progress report, mid-term evaluation and end term evaluation on time. Project progress was reviewed periodically by the Project Steering Committee (generally once a year instead of bi-annually) and project used an adaptive approach to address unforeseen changes and risks such as impact of COVID 19 and change of interest and priorities of the cities of Johannesburg and Durban related to Non-Motorized Transport policy development and pilot projects.

On the other hand, the project did not use the GEF tracking tool and data on GHG mitigation was also not collected, which was one of the main indicators to assess achievement of the overall project objective. Project lacked a systematic approach to recording the gender disaggregated data. According to the TE, despite a high percentage of women participation in events, there were no records, except a few pictures, about participation of women in the project activities.

7. Assessment of project implementation and execution

Quality of Implementation rating is based on the assessment of the performance of GEF Agency(s). Quality of Execution rating is based on performance of the executing agency(s). In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six-point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 **Quality of Project Implementation**	S

This TER concurs with the 'satisfactory' rating provided by the TE for the quality of project implementation. As per the TE, UNIDO was seen as a politically neutral and enabling partner to support projects in key areas of action, such as transport. UNIDO built relationships with different stakeholders and engaged with the relevant government departments and policy makers. UNIDO provided the overall guidance, participated in the Project Steering Committee meetings, and facilitated timely monitoring and supervision of project progress. UNIDO's role was specifically found relevant in facilitating 'synergies between stakeholders' as well as providing the technical support (TE, pg 33), which was not only crucial for project implementation but also sustainability of certain outcomes. For instance, UNIDO played an important role in developing good relationship between South African National Energy Development Institute (SANEDI) and the City of Johannesburg, who were discussing the possibility of implementing an electric bus demonstration project in 2022 at the time of the TE, as a follow up the project. UNIDO would also continue to provide technical support to *dtic* (Department of Trade, industry and Competition) in formulating the implementation plan of the South Africa Green Transport Strategy 2018-2050 (GTS) developed through the project.

7.2 **Quality of Project Execution**	MS

The TE assessed the quality of project execution as 'highly satisfactory', which has been revised by this TER as 'moderately satisfactory'. The project was executed through multiple executing partners with South Africa National Energy Development Institute (SANEDI) as the lead executing agency. As per the TE, SANEDI hosted the Project Management Unit (PMU), executed activities as per the original plan and facilitated engagement between different stakeholders. The two main government departments – Department of trade and Industry (diti) along with Department of Transport (DoT) were mainly responsible for execution of Component 1 of the project, with *diti*'s specific focus on policy related to EV promotion and manufacturing and DOT's focus on NMT policy promotion. It seems that the government departments participated actively in various trainings, conferences, events, etc., and supported commissioning of various studies and assessments to form the basis for strengthening of policy and regulatory framework for local manufacturing of Electric Vehicles and Non-Motorized Transport but none of the documents were approved by the government. Other partners included Cities of Johannesburg and Durban. Due to change in the leadership and priorities, the project did not get the same level of support as was originally committed by both the cities but primarily City of Durban. Other executing partners such as The Technology Innovation Agency (TIA)- Ministry of Science and Technology worked closely with the project team and collaborated throughout the project.

8. Lessons and recommendations

8.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report, including how they could have application for other GEF projects. Lessons must be based on project experience.

Lessons listed in the TE are as follows:

1. Partnerships are key for an effective and efficient project implementation. It is important to understand the different partners to be involved in the project and appropriately choose the partnership arrangements at the start of the project.
2. It is important to appropriately select and deploy pilot projects, as well as adapt to changes when needed to achieve objective and, possibly, yield additional benefits.
3. It is crucial to continue to support the organizations responsible for implementing the pilot projects after the project is over.
4. M&E plan implementation training, indicators selection and targets selection is very important to ensure that the project remains on track and that can provide the desired results.
5. There is frequent variability in the political will and political agendas, which should be more thoroughly evaluated at design stage during the risk analysis to mitigate the impact on the project execution

8.2 Briefly describe the recommendations given in the terminal evaluation.

Recommendations listed in the TE are as follows:

1. End users should be engaged during the project design phase. Need to identify targeted communication strategies and awareness raising campaigns for project aiming behavior changes for a diverse range of stakeholders.
2. During the design phase, indicator selection for monitoring progress of the project should be realistic, with training and capacity building of the team to execute M&E plan, especially if it relates to technical issues such as collection of data on carbon emissions or GHG as well as gender disaggregated data.
3. Need to integrate awareness generation strategies such as media coverage, advertising and communication activities to motivate the installation of pilot projects such as PV-charging stations or system and explaining how these projects could be beneficial promoting cleaner mobility options.

9. Quality of the Terminal Evaluation Report

Before rating the quality of the terminal evaluation, click here to summarize your observations on the sub-criteria: https://www.research.net/r/APR2023.

A six-point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria/indicators of terminal evaluation quality	GEF IEO COMMENTS	Rating
1. Timeliness: terminal evaluation report was carried out and submitted on time?	TE was carried out within the first six months of completion of the project	S
2. General information: Provides general information on the project and evaluation as per the requirement?	Overall, TE covers all the main details.	S
3. Stakeholder involvement: the report was prepared in consultation with – and with feedback from - key stakeholders?	Feedback from Stakeholders was taken during the time of the evaluation But unable to assess if the report was prepared in consultation with the stakeholders	UA
4. Theory of change: provides solid account of the project's theory of change?	Provides a detailed account of Theory of Change.	S
5. Methodology: Provides an informative and transparent account of the methodology?	The TE was carried out remotely and mainly through online questionnaire, interviews through teleconferencing and desk review of project documents due to COVID -19. The TE clearly states the methodology including limitations	S
6. Outcome: Provides a clear and candid account of the achievement of project outcomes?	Not all aspects are adequately covered. It could be due to the limitation of carrying out evaluation remotely. The TE does not adequately cover impact of partial achievement of certain outputs on the outcome of the project. The TE is not very candid on the factors that impacted achievement of certain outputs such as project had zero impact in promoting NMT but TE didn't discuss this aspect in adequate detail.	MU

7. Sustainability: Presents realistic assessment of sustainability?	TE does not cover factors impacting sustainability in adequate detail. It could also be due to TE conducted remotely and rating is not backed by adequate evidence.	U
8. M&E: Presents sound assessment of the quality of the M&E system?	***M&E design and implementation is covered in adequate detail.***	S
9. Finance: Reports on utilization of GEF funding and materialization of co-financing?	***TE does not provide details in terms of break-down of the materialization of co-financing by various actors.***	U
10. Implementation: Presents a candid account of project implementation and Agency performance?	The role played by different government departments responsible for project execution and how the coordination mechanism led to achievement or non-achievement of some of outputs could been discussed in more detail.	MS
11. Safeguards: Provides information on application of environmental and social safeguards, and conduct and use of gender analysis?	**TE provides details on the gender analysis but not on other safeguards**	MS
12. Lessons and recommendations are supported by the project experience and are relevant to future programming?	**Some of the factors that impacted the project are discussed more in detail under the lessons learnt as against the discussion in the main body of the report**	MS
13. Ratings: Ratings are well-substantiated by evidence, realistic and convincing?	***All the ratings assigned are not backed by convincing and adequate argument. For instance, effectiveness of the project is rated is 'highly satisfactory' but the evidence does not full support this rating.***	MU
14. Report presentation: The report was well-written, logically organized, and consistent?	Report was more or less well written, except in some sections, the TE did not provide enough evidence in some of the sections (sustainability, effectiveness) due to which it took lot of time to validate and assign various ratings.	MS
Overall quality of the report		MS

10. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).

ANNEX 1. GEF IEO THEORY OF CHANGE FRAMEWORK

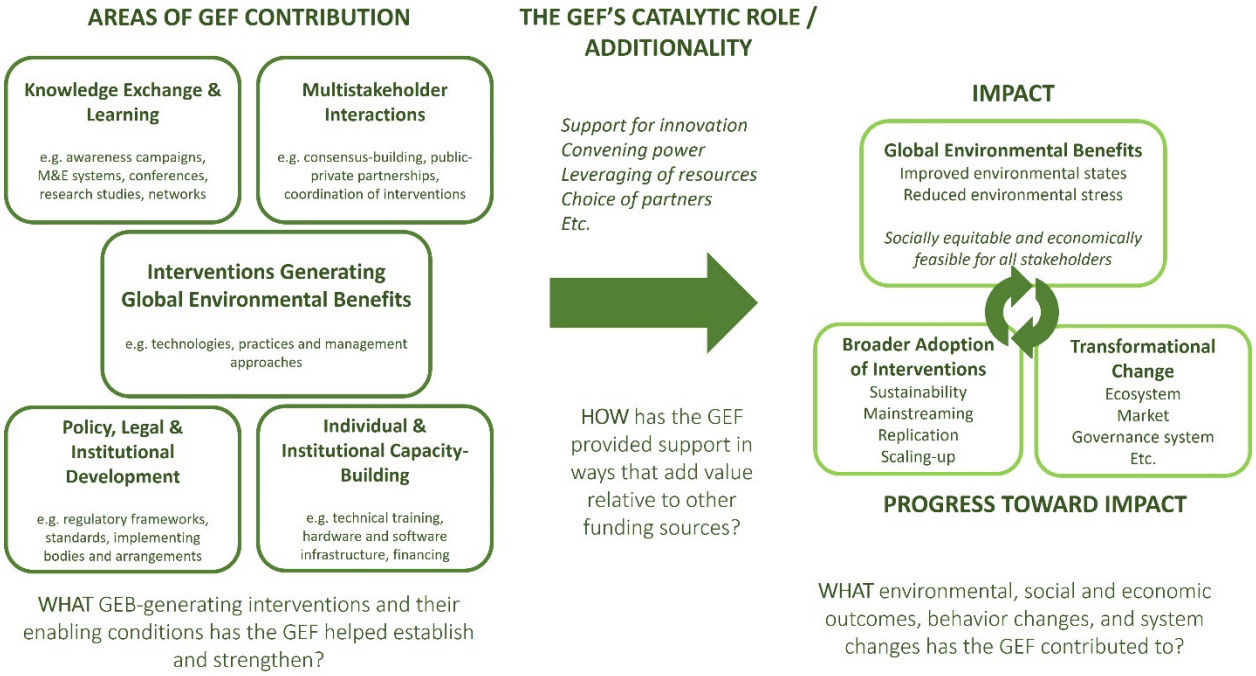

Figure 1. The GEF IEO's updated Theory of Change Framework on how the GEF achieves impact

The general framework for the GEF's theory of change (figure 1) draws on the large amount of evaluative evidence on outcomes and impact gathered over the years by the GEF Independent Evaluation Office. The framework diagram has been updated to reflect the IEO's learning since OPS5 (GEF IEO 2014, p. 47-50) about how the GEF achieves impact, as well as the evolution of the GEF's programming toward more integrated systems-focused and scaled-up initiatives.

The framework outlines the three main areas that the IEO assesses in its evaluations: a) the GEF's contributions in establishing and strengthening both the interventions that directly generate global environmental benefits, and the enabling conditions that allow these interventions to be implemented and adopted by stakeholders, b) the GEF's catalytic role or additionality in the way that the GEF provides support within the context of other funding sources and partners, and c) the environmental, social and economic outcomes that the GEF has contributed to, and the behavior and system changes that generate these outcomes during and beyond the period of GEF support.

The circular arrow between impact and progress toward impact, as before, indicates how bringing about positive environmental change is an iterative process that involves behavior change (in the form of a broader group of stakeholders adopting interventions) and/or systems change (which is a key characteristic of transformational change). These three areas of change can take place in any sequence or simultaneously in a positively reinforcing cycle, and are therefore assessed by the GEF IEO as indicators of impact.

Assessing the GEF's progress toward achieving impact allows the IEO to determine the extent to which GEF support contributes to a trajectory of large-scale, systemic change, especially in areas where changes in the environment can only be measured over longer time horizons. The updated diagram in particular expands the assessment of progress towards impact to include transformational change, which specifically takes place at the system level, and not necessarily over a long time period.

The updated diagram also more explicitly identifies the link between the GEF's mandate of generating global environmental benefits, and the GEF's safeguards to ensure that positive environmental outcomes also enhance or at the very least do not take away from the social and economic well-being of the people who depend on the environment. Thus the IEO assesses impact not only in terms of environmental outcomes, but also in terms of the synergies and trade-offs with the social and economic contexts in which these outcomes are achieved.

ANNEX 2. DEFINITION OF TERMS

Intervention	Any programmatic approach, full-sized project, medium-sized project, or enabling activity financed from any GEF-managed trust fund, as well as regional and national outreach activities. In the context of post-completion evaluation, an intervention may consist of a single project, or multiple projects (i.e. phased or parallel) with explicitly linked objectives contributing to the same specific impacts within the same specific geographical area and sector. https://www.gefieo.org/evaluations/gef-evaluation-policy-2019
Activity (of an intervention)	An action undertaken over the duration of an intervention that contributes to the achievement of the intervention's objectives, i.e. an intervention is implemented through a set of activities. E.g. training, (support to) policy development, (implementation of) management approach.
Outcome	An intended or achieved short- or medium-term effect of a project or program's outputs. https://www.gefieo.org/evaluations/gef-evaluation-policy-2019
Impact	The positive and negative, primary and secondary long-term effects produced by a project or program, directly or indirectly, intended or unintended. https://www.gefieo.org/evaluations/gef-evaluation-policy-2019
Environmental outcomes	Changes in environmental indicators that could take the following forms: • Stress reduction: reduction or prevention of threats to the environment, especially those caused by human behavior (local communities, societies, economies) • Environmental state: biological, physical changes in the state of the environment http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Social and economic outcomes	Changes in indicators affecting human well-being at the individual or higher scales, e.g. income or access to capital, food security, health, safety, education, cooperation/ conflict resolution, and equity in distribution/ access to benefits, especially among marginalized groups.
Synergies	Multiple benefits achieved in more than one focal area as a result of a *single intervention*, or benefits achieved from the interaction of outcomes from at least two separate interventions in addition to those achieved, had the interventions been done independently.

	http://www.gefieo.org/evaluations/evaluation-multiple-benefits-gef-support-through-its-multifocal-area-portfolio-map-2016
Trade-offs	A reduction in one benefit in the process of maximizing or increasing another benefit. http://www.gefieo.org/evaluations/evaluation-multiple-benefits-gef-support-through-its-multifocal-area-portfolio-map-2016
Broader adoption	The adoption of GEF-supported interventions by governments and other stakeholders beyond the original scope and funding of a GEF-supported intervention. This may take place through sustaining, replication, mainstreaming, and scaling-up of an intervention and/or its enabling conditions (see definitions below). http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Sustainability	The continuation/ likely continuation of positive effects from the intervention after it has come to an end, and its potential for scale-up and/or replication; interventions need to be environmentally as well as institutionally, financially, politically, culturally and socially sustainable.https://www.gefieo.org/evaluations/gef-evaluation-policy-2019
Replication	When a GEF intervention is reproduced at a comparable administrative or ecological scale, often in different geographical areas or regions. http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Mainstreaming	When information, lessons, or specific aspects of a GEF initiative are incorporated into a broader stakeholder initiative. This may occur not only through governments but also in development organizations and other sectors. http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Scaling-up	Increasing the magnitude of global environment benefits (GEBs), and/or expanding the geographical and sectoral areas where they are generated to cover a defined ecological, economic, or governance unit. May occur through replication, mainstreaming, and linking. http://www.gefieo.org/evaluations/evaluation-gef-support-scaling-impact-2019
Transformational change	Deep, systemic, and sustainable change with large-scale impact in an area of major environmental concern. Defined by four criteria: relevance, depth of change, scale of change, and sustainability. http://www.gefieo.org/evaluations/evaluation-gef-support-transformational-change-2017
Additionality	a) Changes in the attainment of direct project outcomes at project completion that can be attributed to GEF's interventions; these can be reflected in an acceleration of the adoption of reforms, the enhancement of outcomes, or the reduction of risks and greater viability of project interventions. b) Spill-over effects beyond project outcomes that may result from systemic reforms, capacity development, and socio-economic changes. c) Clearly articulated pathways to achieve broadening of the impact beyond project completion that can be associated with GEF interventions. https://www.gefieo.org/sites/default/files/ieo/council-documents/files/c-55-me-inf-01.pdf