

The State of Palestine's Nationally Determined Contribution (NDC) implementation plans: Transport – Reducing emissions in the road transport sector

Report for Palestine's Environment Quality Authority and the Islamic Development Bank under the NDC Partnership's Climate Action Enhancement Package



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Authority



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List of abbreviations

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AFD	French Development Agency (Agence Francaise de Developpment)
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EV	Electric vehicle
GCF	Green Climate Fund
GIZ	German Development Cooperation
HEV	Hybrid-electric vehicle
ICE	Internal combustion engine
IsDB	Islamic Development Bank
IKI	International Klimaschutzinitiative
JICA	The Japan International Cooperation Agency
MoT	Ministry of Transport
MoWA	Ministry of Women's Affairs
NAMA Facility	Nationally Appropriate Mitigation Action Facility
NDC	Nationally Determined Contribution
PENRA	Palestinian Energy and Natural Resources Authority
PV	Photo voltaic
UNDP	United Nations Development Programme
WB	World Bank

1 Introduction

1.1 Overview

This plan for **reducing emissions in the road transport sector** is intended to enhance Palestine's opportunities to access climate finance and thereby facilitate successful implementation and delivery of Palestine's Nationally Determined Contribution (NDC). Details of the methodology used to develop this plan are provided in Annex 1.

The plan lays out the steps to deliver the following NDC actions that are conditional on being able to secure international funding:

- Plug-in electric-hybrid-vehicles
- Improve the efficiency of the road vehicles
- Control the technical condition of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions.

These NDC actions aim to reduce emissions in Palestine by: increasing the number of electric vehicles (EVs); replacing older vehicles with newer, more efficient vehicles; and introducing periodic maintenance of vehicles to improve and maintain fuel efficiency. They are to be achieved through completion of eight activities, each contributing to the following targets that align with the NDC actions:

- Reducing the emissions of the passenger vehicle fleet by 8% by 2030, and 24% by 2040
- Scrapping 60% of vehicles older than 20 years by 2030 and scrapping all vehicles older than 20 years by 2040
- Conducting statutory tests on 30% of on-road vehicles by 2030, and 60% by 2040.

The indicative total cost of achieving these targets is 1,518m USD. Taking national contributions into account, there is a funding gap of 163m USD. Achieving the targets will provide considerable benefits in reducing Palestine's emissions and increasing its climate resilience by reducing the sensitivity of people to the impacts of climate change on health. There is strong government support to undertake these activities, which feature in multiple national and sectoral strategies.

1.2 Geographical scope

Activities in this NDC implementation action plan are an equal priority for the whole of the Occupied Palestinian Territory, i.e. the West Bank including East Jerusalem and the Gaza Strip. However, the consequences of Israel's military actions during May 2021 have major implications for the transport sector, its related infrastructure and the capacity of the Ministry of Transport (MoT) to provide services to the Palestinian people living in Gaza. As this plan was developed in the months immediately prior to Israel's military actions, there is an urgent need to reassess the transport sector's needs for rehabilitation before implementing specific activities in Gaza. As this could not be done in the preparation of this plan, the activities laid out may need to be revisited to account for resultant damage to buildings and infrastructure.

2 Relevance of GCF Country Programme

The Green Climate Fund (GCF) Country Programme includes a funding proposal to “Promote sustainable transport programme to reduce greenhouse gas emissions.”. This is to be achieved through three outputs, one of which is specifically relevant to this plan:

“Enforcement of the vehicle emission standard and upgrade of the existing fleet (e.g. low emissions vehicles, EVs, including fuel efficiency)”. This plan’s activities also go beyond enforcing emission standards and upgrading the fleet by including periodic maintenance and awareness-raising campaigns.

3 Reasons for prioritisation of NDC actions

The three NDC actions that will be implemented through this plan seek to reduce emissions in the transport sector. National stakeholders scored the relevance and feasibility of these actions based on the extent to which the Government’s existing national and sectoral policies, strategies and plans already acknowledge their importance (High = 10, 5, 0 = Low); their adaptation and mitigation benefits (Very positive = 10, 5, 0, -5, -10 = Very negative) and the capacity and technology available to achieve them (High = 5, 2.5, 0 = Low).

The capacity scores reflect that the activities in this plan are not currently being implemented, although this plan aims to increase the capacity available, as necessary, to address constraints. The results are shown in Table 1.

Table 1. Priority scores for NDC actions

NDC actions	Government support	Adaptation benefits	Mitigation benefits	Capacity available	Technology available	Total
Plug in electric-hybrid vehicles	10	5	10	2.5	5	32.5
Improving the efficiency of road vehicles	10	5	5	5	5	30
Controlling the technical conditions of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions	5	5	5	2.5	2.5	20

These scores drew upon and are justified by information in the following sub-sections that address each of the priority criteria.

3.1 Government support

The Government does not currently have an EV strategy, however, there is strong government support for the NDC action “Plug-in electric-hybrid vehicles”, as illustrated by the preferential tax rate for EVs compared to internal combustion engine (ICE) vehicles.

Regarding the action “Improve the efficiency of road vehicles”, the current regulations only allow importation of EURO5 or EURO6 ICE vehicles, which are among the most effective standards in the world for limiting emissions from road vehicles. This contributes to ensuring efficiency of vehicles on the road. The action is also featured in Strategic Goal 4 of the Palestine Transportation Sector Strategy (2017-2022)¹.

The action “Controlling the technical conditions of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions” is also featured in Strategic Goal 4 of the Palestine Transportation Sector Strategy (2017-2022)¹. Legislation requires every vehicle in Palestine to be checked every six to 12 months. However, according to government stakeholders, a lack of testing facilities and trained examiners means that periodic maintenance of vehicles is not currently enforced.

The Palestine Transportation Sector Strategy has recently been updated from 2017-2022 to 2021-2023, detailing progress made on the strategic goals¹ and further outlining government support towards the NDC actions in this plan.

3.2 Benefits for adaptation to climate change

Future climate scenarios for Palestine project an increase in temperatures and a decrease in average annual rainfall, translating into an increase in the risk of drought. Increased temperatures may result in negative impacts on health, among others, causing heat stress, particularly in urban areas.

Air pollution from road transport also damages people’s health leading to respiratory problems, exhaustion, and heatstroke, among others. This exacerbates people’s sensitivity to the negative impacts of higher temperatures on health. Moreover, air pollution from road transport amplifies the urban-heat-island effect, increasing the capacity of surfaces to absorb and retain heat.

Reducing air pollution from road transport requires more efficient internal combustion vehicles (ICE), and a switch to using EVs and hybrid-electric vehicles (HEVs). Hence, implementation of the NDC actions that are the focus of this plan will have some adaptation benefits.

3.3 Benefits for mitigating climate change

Old vehicles used in Palestine are much more polluting than newer vehicles, emitting more carbon dioxide, particulate matter and nitrogen oxides. In total, emissions from road transport represent around 30% of Palestine’s total emissions. If the current fleet remains unchanged, emissions are projected to grow proportionally to population growth². Hence, it

¹ Text reads: “Strategic goal no.4: Enhancement of driver and vehicle licensing standard to match international standards, especially EU standards. Current status/achievement: 1. International standards were adopted, specifically EU technical standards, for vehicles such as EURO4 which requires car producers to reduce emissions harmful to the environment. 2. Also, the technical specifications of these vehicles increase safety on the road. 3. Also a policy of importing 3-year old used vehicles in preference to vehicles in their year of production ensures the modern, environmentally-friendly technical specifications”. NB this statement means that vehicles can only be imported into Palestine if they are less than 3 years old.

² Palestine Initial National Communication Report

is important to ensure that a growth in population and in road transport activity does not translate into an increase in emissions.

An increase in EVs and a decrease in purely ICE vehicles will lead to a substantial reduction in CO₂ emissions. Hence, the NDC action “Plug-in electric-hybrid vehicles” will provide substantial mitigation benefits.

The other two NDC actions will also lead to a reduction in CO₂ emissions by promoting the use of newer and more efficient ICE vehicles and ensuring vehicles are more efficient and well maintained. Keeping vehicles in good condition will prevent reductions in fuel efficiency and increases in emissions by ensuring that emission-control technologies are functioning. This will contribute to reducing emissions per vehicle significantly. However, the mitigation benefits provided may be outweighed by an increase in the overall numbers of vehicles on the road.

3.4 Capacity available

With respect to the NDC action “Plug-in electric-hybrid vehicles”, there is currently a lack of charging infrastructure to support an increase in the number of EVs. For wide-scale introduction of EVs to be a success, there is a need to ensure that sufficient charging infrastructure, as well as the necessary power networks and electrical capacity, is available. In addition, expertise in maintenance of EVs needs to be developed, as technicians in Palestine currently have limited exposure to working on them.

The capacity is available to implement the NDC action “Improving the efficiency of road vehicles”, as newer vehicles can replace those currently in use. However, due to low incomes and the poor economic situation in Palestine, people are likely to keep their cars instead of replacing them with newer models. A key challenge is to incentivise and encourage people to upgrade their vehicles. While the capacity to implement these incentives exist, they are not currently in place.

Regarding the NDC action “Controlling the technical conditions of vehicles and periodic maintenance”, there is currently insufficient capacity in Palestine for regular control of all vehicles. Capacity needs to be developed by increasing: (i) the quantity of infrastructure to test vehicles and perform the technical controls, as well as (ii) the number of technicians with the knowledge and skills to carry out the technical checks and periodic maintenance.

3.5 Technology available

The types of vehicles required to deliver the three NDC actions in this plan include EURO5, EURO6, HEVs and EVs. Such vehicles are not constructed in Palestine and need to be imported. Although all are already being imported, there is much less demand for EVs, as the technology is still fairly new in Palestine.

Moreover, a recycling scheme will need to be developed to ensure adequate disposal of old vehicles in Palestine, as the fleet is gradually updated to HEVs and EVs. Palestine already has private-sector facilities for the disassembly of parts. However, additional technology may be needed to compact and shred vehicles. It is anticipated that the private sector will procure

this technology. Alternatively, parts can be sold and sent to Israel for compacting and shredding.

4 Gender mainstreaming

4.1 Rationale for mainstreaming in this plan

The impacts of climate change are not gender neutral³. Globally, women and girls are disproportionately affected by the impacts of the climate crisis, as existing vulnerabilities are intensified and intersect with a range of social, economic and political inequalities⁴. A business-as-usual approach is likely to exacerbate existing inequalities and limit the opportunities for gender-sensitive and, where appropriate, gender-responsive adaptation actions that may improve gender equality.

At the UNFCCC's 25th Conference of the Parties in 2019, the Enhanced Lima Work Programme on Gender and its gender action plan acknowledged the need for gender mainstreaming through all relevant targets and goals, noting that gender-responsive implementation of climate policy and action can raise ambition, enhance gender equality, and promote a just transition of the workforce⁵. Integrating gender equality into development leads to better outcomes in terms of economic efficiency, productivity and policy choices⁶. Gender responsive solutions can help to tackle poverty and inequality while providing better community representation and technical solutions⁷.

4.2 Gender mainstreaming in this plan

All of the plan's activities and targets have been reviewed by a team of gender experts, including a representative of the Ministry of Women's Affairs (MoWA). Activities identified as gender-relevant are planned in ways that ensure they are at least gender-sensitive⁸ and at best gender-transformative⁹. More specifically, this implementation plan addresses the following gender issues identified in the transport sector:

³ Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs) (2019), p.2. Accessible [here](#)

⁴ Climate change, agriculture and gender in Gaza: Assessing the implications of the climate crisis for smallholder farming and gender within olive and grape value chains in Gaza (2020), p.5. Accessible [here](#)

⁵ Report of the Conference of the Parties on its twenty-fifth session, held in Madrid from 2 to 15 December 2019 (2019), p.6-15. Accessible [here](#)

⁶ World Development Report 2012 : Gender Equality and Development (2012). p.3-6. Accessible [here](#)

⁷ Implementation of gender-responsive climate action in the context of sustainable development (2016). Accessible [here](#)

⁸ Gender-sensitive programmes and policies are Level 3 in the WHO Gender Responsive Assessment Scale and is defined as "Considers gender norms, roles and relations; Does not address inequality generated by unequal norms, roles or relations; Indicates gender awareness, although often no remedial action is developed". Accessible [here](#)

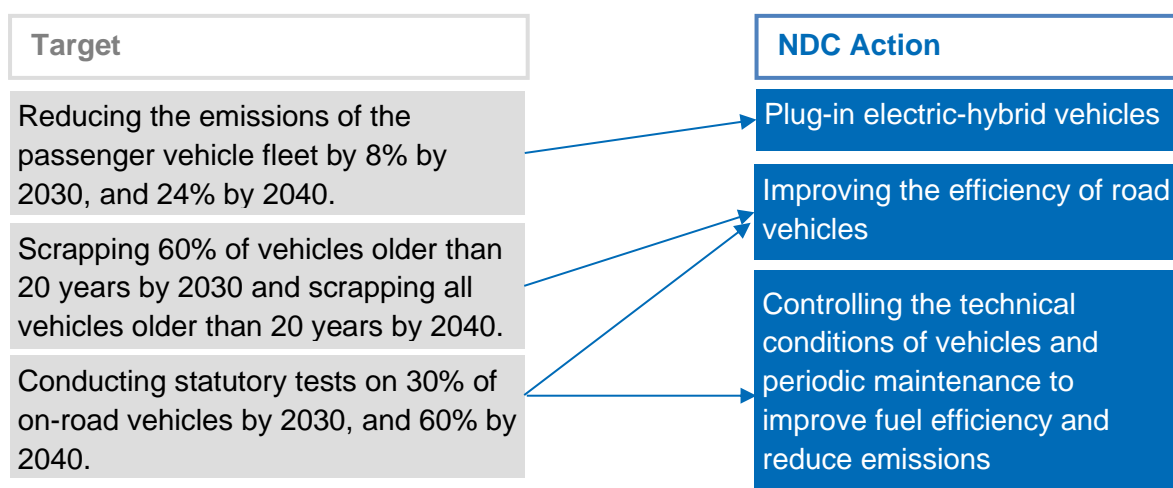
⁹ Gender-transformative programmes and policies are Level 5 in the WHO Gender Responsive Assessment Scale and is defined as "Considers gender norms, roles and relations for women and men and that these affect access to and control over resources; Considers women's and men's specific needs; Addresses the causes of gender-based health inequities; Includes ways to transform harmful gender norms, roles and relations; The objective is often to promote gender equality; Includes strategies to foster progressive changes in power relationships between women and men". Accessible [here](#)

- Men and women prefer different vehicles, in part, due to differences in financial resources and awareness. Hence, this plan ensures that an awareness campaign to promote the use of EVs is targeted towards both men and women.
- There is currently a low numbers of female car mechanics. Both men and women will be invited to technical and maintenance training for EVs and HEVs.
- Some locations may be unsafe for women to access at certain times of the day. In seeking to increase the number of charging stations for EVs, this plan ensures that they will be located in well-lit areas that can be safely accessed by women.
- Women and children are particularly vulnerable to air pollution and there are causal links between air pollution and premature births. Women cannot easily relocate to avoid pollution. In improving the efficiency of vehicles and reducing the number of polluting vehicles, implementation of this plan will reduce women's exposure to air pollution.

5 Activities

The targets set by national stakeholders to facilitate implementation of this plan and achieve its focal NDC actions are outlined in [Figure 1](#).

Figure 1 Targets for reducing emissions in the transport sector



In total, eight activities were identified to achieve these targets. These are listed in [Figure 2](#) to [Figure 4](#). Further details are provided in the subsequent sections.

Figure 2 Summary of activities for “plug-in electric-hybrid vehicles”

Plug-in electric-hybrid vehicles		
Reducing the emissions of the passenger vehicle fleet by 8% by 2030, and 24% by 2040.		
Establishing a baseline of the number of vehicles in the vehicle fleet.	0.030m USD (total) 0.029m USD (gap)	1140.12m USD (total) 1.087m USD (gap)
Carrying out a study of market readiness for EVs and HEVs.	0.120m USD (total) 0.114m USD (gap)	
Promoting the use of EVs and HEVs.	1'125.400m USD (total) 0.380m USD (gap)	
Implementing the technical requirements to develop the EV and HEV infrastructure to enable switching 5% of the passenger vehicle fleet to HEVs and 5% to EVs by 2030, and 15% to HEVs and 15% to EVs by 2040.	14.570m USD (total) 0.564m USD (gap)	Target
		NDC Actions

Figure 3 Summary of activities for “improving the efficiency of road vehicles”

Improving the efficiency of road vehicles		
Scrapping 60% of vehicles older than 20 years by 2030 and scrapping all vehicles older than 20 years by 2040		
Defining and implementing incentives for scrapping vehicles that are 20 years and older	215.280m USD (total) 161.460m USD (gap)	376.740m USD (total) 161.460m USD (gap)
Developing a recycling scheme to ensure adequate disposal of old vehicles	161.460m USD (total) 0.000m USD (gap)	
		Target
		NDC Actions

Figure 4 Summary of activities for “controlling the technical conditions of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions”

Controlling the technical conditions of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions		
Conducting statutory tests on 30% of on-road vehicles by 2030, and 60% by 2040.		
Building testing units for vehicle condition monitoring	0.530m USD (total) 0.504m USD (gap)	0.794m USD (total) 0.755m USD (gap) Target
Building capacity for operating mobile and stationary testing units	0.264m USD (total) 0.251m USD (gap)	
		NDC Actions

5.1 Activities to reduce passenger vehicle fleet emissions

National stakeholders have identified the specific activities that need to be undertaken to achieve the target of “Reducing the emissions of the passenger vehicle fleet by 8% by 2030, and 24% by 2040”. This will require switching 5% of the vehicle fleet to EVs by 2030, and 15% by 2040; and switching 5% of the vehicle fleet to HEVs by 2030, and 15% by 2040.¹⁰ The activities are listed below:

1. Establishing a baseline of the number of vehicles in the vehicle fleet

Data will be collected to determine the total number of vehicles on the road, as well as the types of vehicles.¹¹

2. Carrying out a study of market readiness for EVs and HEVs

This market readiness study will seek to identify:

- The social impacts of switching to EVs and HEVs
- The environmental impacts of switching to EVs and HEVs
- The economic feasibility of importing EVs and HEVs, and
- People’s willingness and acceptance of EVs and HEVs.

It will address the whole of the West Bank and the Gaza Strip. Questions, wording, locations, and time of the study will be tailored to ensure both men and women can provide inputs.

¹⁰ The ability of replacement of these proportions of the current passenger vehicle fleet with EVs and HEVs to meet the emissions reduction targets is based on an assumption of no net increase in the number of passenger vehicles (e.g. due to population growth), and no net decrease in the number of passenger vehicles (e.g. due to increasing public transport use). Changes in the total number of passenger vehicles will require reconsideration of these targets.

¹¹ Note that the implementation plan ‘Sustainable road usage’ also requires a baseline assessment study, to determine the total number of small transit vehicles in use on the roads. The studies have different outputs; however, this activity could be combined for practicality.

3. Promoting the use of EVs and HEVs

a. Implementing an awareness campaign

Palestinians lack confidence in the effectiveness of EVs and HEVs due to their limited exposure to these new vehicles. It is, therefore, extremely important to ensure that men and women understand the social, economic and environmental benefits of making the switch from their current ICE vehicles to EVs and HEVs.

This awareness campaign will be delivered through the TV, radio and social media platforms, targeting educational institutions, car traders and the general public in the West Bank and the Gaza Strip. It is important to target car traders, who are responsible for importing vehicles into Palestine, as they are a focal point for consumers and, hence, a key actor to encourage the uptake of EVs and HEVs in Palestine.

Campaigns will target men and women separately, addressing the differing issues they may face regarding the purchase and use of vehicles.

b. Maintaining incentives

The Government imposes an import tax on cars. In order to incentivise uptake, a tax reduction has been applied to EVs and HEVs. EVs and HEVs are subject to an import tax of 20% and 30% respectively, compared to ICE vehicles which are subject to an import tax ranging between 50-130%. The Government will continue to maintain these incentives.

4. Implementing the technical requirements to develop the EV and HEV infrastructure

a. Carrying out a technical study to determine the electric-charging stations specifications

This study will aim to identify suitable types of charging stations for the different models of imported vehicles and suitable locations for the charging stations to facilitate access for men and women and ensure stable connection to the local grid. Two studies will be undertaken, one for West Bank and one for the Gaza Strip.

b. Installing electric-charging stations

Informed by the technical study, charging stations will be installed, ensuring that they are suitable for various models of imported vehicles and placed at the appropriate locations to facilitate access for men and women and ensure stable connection to the local grid.

c. Providing technical training

Due to the limited exposure to EVs and HEVs in Palestine, there are currently few technicians who have the knowledge and skills required to repair and maintain these vehicles. Technical training will be provided to ensure that individuals have the specific knowledge and skills required to repair and maintain different vehicle types and models.

The training will be targeted to attract both men and women who have graduated from engineering and technical degrees. This will assist in trying to increase the representation of women in the workforce. Women will be directly encouraged to attend the training to overcome gender barriers.

5.2 Activities to scrap old vehicles

National stakeholders have identified the specific activities that need to be undertaken to achieve the following target: “*Scrapping 60% of vehicles older than 20 years by 2030 and scrapping all vehicles older than 20 years by 2040*”. These activities are listed below:

5. Defining and implementing incentives for scrapping vehicles that are 20 years and older

Many people in Palestine choose to keep their old cars and do not buy new ones due to financial limitations. Hence, there is a need to assess, pilot and, ultimately, provide a level of financial compensation that will encourage people to scrap their old vehicles.

This activity includes a study to identify the appropriate type, level of compensation and implementation mechanisms that may encourage scrapping old vehicles, so that consumers can purchase the more efficient EVs and hybrid engines. It also includes the implementation of these incentives and the provision of financial compensation.

6. Developing a recycling scheme to ensure adequate disposal of old vehicles

A recycling scheme will be developed to ensure adequate disposal of old vehicles, including disassembly of parts, compacting and shredding. MoT will be responsible for its administration.

This activity includes a study to define the different parameters of this scheme, including length and frequency and resources required, among others. It also includes the implementation of recycling activities.

5.3 Activities to control the technical conditions of vehicles and periodic maintenance

National stakeholders have identified the specific activities that need to be undertaken to achieve the following target: “*Conducting statutory tests on 30% of on-road vehicles by 2030, and 60% by 2040.*” These activities are listed below:

7. Building and updating testing units for vehicle condition monitoring

Mobile and stationary testing units will be built and/or updated as appropriate. Both types of testing units will serve the same purpose of enforcing emissions tests and carrying out periodic licensing of vehicles. Stationary testing units are to be located off-road whereas mobile testing units will be placed along the roadside.

a. Building mobile testing units:

Mobile testing units will be built to carry out air quality and emissions tests on the roadside. There is currently a pilot running in the West Bank for mobile testing units to help to identify suitable locations. Further units will be built based on the outcomes of this pilot.

b. Upgrading stationary testing units:

Stationary testing units are to be used to provide testing for periodic licensing of the vehicles. Existing facilities for testing vehicles focus on ICE engines. They will be upgraded to enable the testing of EVs and HEVs. MoT will provide licenses to the

testing centres and carry out regular inspections to ensure that testing units comply with required quality and safety standards

8. Building capacity for operating mobile and stationary testing units

Operators will be trained to carry out the necessary tests at the mobile and stationary testing units. The training will be targeted to both men and women who have graduated from engineering and technical degrees. This will assist in trying to increase the representation of women in the workforce. Women will be directly encouraged to attend the training to overcome gender barriers.

6 Timeframes, indicative costs, existing funding and likely sources of funding

For each of the activities and sub-activities, Table 3 (below) identifies:

- The indicative implementation period
- Indicative costs
- National contributions, where relevant
- Existing international funding, where relevant
- Any remaining funding gap, and
- Potential international public funding sources that were preliminarily identified as potential support to address the funding gap. Note that international funders' priorities are subject to change and negotiation.

7 Institutional arrangements

Figure 5 (below) sets out the institutional arrangements for implementing this plan. It identifies the MoT as the lead organisation for a cross-ministerial Project Steering Committee, as well as project delivery partners and other project stakeholders. The latter may include other organisations as delivery of the plan is progressed. MoT is intended to be the main contact point with international public funders. The committee will aim for equal gender representation to encourage gender mainstreaming throughout plans and activities.

It will be of key importance for MoT to allocate appropriate financial and administrative resources and clearly secure internal ownership of each activity in the implementation plan. This way, MoT can ensure that the implementation plan is delivered, and the Project Steering Committee is functional, delivering the activities to achieve the targets of the plan while adhering to timescales.

The Palestinian Energy and Natural Resources Authority (PENRA) will also play a key role in the successful implementation of this plan as a delivery partner. This is because the electricity infrastructure's capacity to provide energy will need to be expanded to serve the substantial increase in the quantities of EVs and HEVs used in Palestine. This energy will also need to come from renewable sources if the use of EVs and HEVs is to lead to a true reduction in emissions. The plan's successful implementation, therefore, requires particularly good communication and coordination between MoT and PENRA. These organisations are already in communication and working together to ensure smooth introduction of charging stations for EVs and HEVs.

8 Recommendations for an enabling environment

The successful delivery of this plan will be ensured by developing a supportive enabling environment where it does not yet exist. This may include updating or developing legislation, regulations, statutory guidance (and standards), national or sectoral policies and strategies, and incentives (including fiscal measures) that would contribute to ensure the successful implementation of the activities or remove potential barriers to implementation.

Maintenance of some existing policies will facilitate delivery of this NDC implementation action plan. These include:

- **Palestine's Environment Law Amendment** that is yet to be enacted **should be used as an enabling context** for the development of the legislation, regulation, statutory guidance, policies, strategies or incentives that are relevant to this plan.
- **A tax reduction on imported EVs and HEVs:** EVs and HEVs are subject to an import tax of 20% and 30% respectively, compared to ICE vehicles, which are subject to an import tax ranging between 50-130%. Table 2 outlines the number of EVs and HEVs imported into Palestine.

Table 2 Quantities of EVs and HEVs imported into Palestine

Year	Hybrid – gas	Hybrid – diesel	Electric
2015	6	0	0
2016	32	0	0
2017	170	0	0
2018	183	0	36
2019	220	2	35
2020	243	7	16
2021	219	0	9
Total	1073	9	96

- **Emission standards to limit emissions from vehicles:** Although there are emission standards in place, they are often not strongly enforced and may be more lenient than other international standards. Currently, Palestine is looking to apply and enforce stricter international standards by 2025.

Key recommendations for development of the enabling environment to support the implementation of this plan identified by national stakeholders that will be given further consideration include:

Developing regulations and other mechanisms to incentivise the scrapping of old vehicles. Many people in Palestine choose to keep their old vehicles rather than purchasing new ones, due to financial limitations. Therefore, without introducing incentives, it is unlikely that people will acquire newer, less polluting vehicles. A fee of 2,000 USD could be provided to anyone who decides to scrap their old vehicle. Providing this sum of money will incentivise people to scrap their old vehicles, thereby leading to a reduction in the use of old, extremely

polluting vehicles on the road. Such a sum is necessary in Palestine, as without it, many people would not have sufficient funds to scrap their old vehicles and purchase a new one.

- The MoT has begun drafting incentives mechanisms¹² and regulations to encourage the scrapping of old vehicles, which should be further developed and implemented:
 - **Reduced import tax rates** on new vehicles, to encourage scrapping of vehicles that are 30 years or older
 - **Exemptions on licensing fees** granted to owners of vehicles with licenses that expired between 1995-2019¹³, depending on when the license expired.
 - 1995-2000: 60% exemption
 - 2000-2010: 10-15% exemption
 - 2011-2019: no exemption

If owners do not wish to renew the vehicle's licence, the vehicles should be deleted from the MoT's records and any debt transferred to the Ministry of Finance for follow up and collection

- **Developing regulations for solar-PV (photo voltaic) charging.** An early version of the regulations for charging stations has been drafted, outlining the regulations around ownership, licensing requirements, planning approval, and operation of the charging stations. The draft also considers the development of some off-grid solar-PV charging stations. This should be further developed to help reduce the strain on the grid that would be caused by a substantial increase in the number of EVs, and to ensure that the EVs and HEVs are using electricity from renewable sources. PENRA can be responsible for implementing this regulation
- **Developing an EV strategy** or embedding it in the Palestine Transportation Sector Strategy. Despite supporting the deployment of EVs through preferential tax rates, the Government does not currently have an EV strategy
- **Developing statutory guidance for testing and maintenance of vehicles.** This would help ensure that examiners and technicians can comply with Strategic Goal 4 of the Palestine Transportation Sector Strategy (2017-2022) focusing on controlling the technical conditions of vehicles and periodic maintenance to improve fuel efficiency and reduce emissions. Currently, there is insufficient government support to enforce these tests and controls
- **Developing regulations for employers** to ensure that awareness-raising and training activities are included within the terms of their employment, so that individuals are paid to attend during working hours. This will improve women's access to such activities by addressing the time and economic constraints that they face. Implementing this recommendation requires securing formal approval from the Council of Ministers
- **Developing regulations and statutory guidelines to enforce gender budgeting,** i.e. analysing all budget lines and financial instruments for climate adaptation and mitigation from a gender-perspective, to ensure gender-sensitive or gender-

¹² It should be noted that the proposed sum of 2,000 USD has not been included within the draft regulations as this is subject to international funding.

¹³ Vehicles which have not been licensed since 1994 should be scrapped from MoT records.

responsive investments in relevant programmes (e.g. addressing technology transfer and capacity building), such as this plan. The MoWA can be responsible for taking forward this recommendation and securing formal approval from the Council of Ministers.

9 Challenges for implementation

Israeli control over Palestinian territories is no impediment to the implementation of this plan. Palestine's unique geo-political situation since 1995 means that the MoT and its delivery partners have adapted to the requirements and restrictions enforced by Israel's various levels of control and occupation across the West Bank and the Gaza Strip¹⁴. Efficient decision-making and implementing structures have been developed to circumvent restrictions, including by communicating with the Israeli authorities.

Over the years, the MoT has worked with a range of international development partners, including the AFD, EBRD, EIB and others. In doing so, it has assisted them in navigating the administrative procedures required to ensure that programmes can be successfully implemented.

Regarding implementation of this plan, constraints arising from Israel's occupation will not impose significant challenges. Cars must be imported into Palestine through Israel, which has a direct interest in ensuring that newer, less-polluting vehicles are imported. Israel is, therefore, expected to encourage the activities within this plan. There is ongoing cooperation between Palestine and Israel in this regard, as well as similar emissions standards.

¹⁴ Palestine constitutes the Occupied Palestinian Territory, which is made up of the West Bank (including East Jerusalem) and the Gaza Strip, based on the borders of June 1967 and are separated by Israel, the occupying power. The Oslo II Accord, formally entitled the 'Interim Agreement on the West Bank and the Gaza Strip of 1995', created three territorial zones in The West Bank: Area A, where the Palestinian Government has responsibility for public order and internal security; Area B, where the Palestinian Government assumes responsibility for public order for Palestinians, while Israel controls internal security; and Area C, where Israel maintains exclusive control.

Table 3 Timeframes, indicative costs, existing funding (USD million) and likely sources of funding

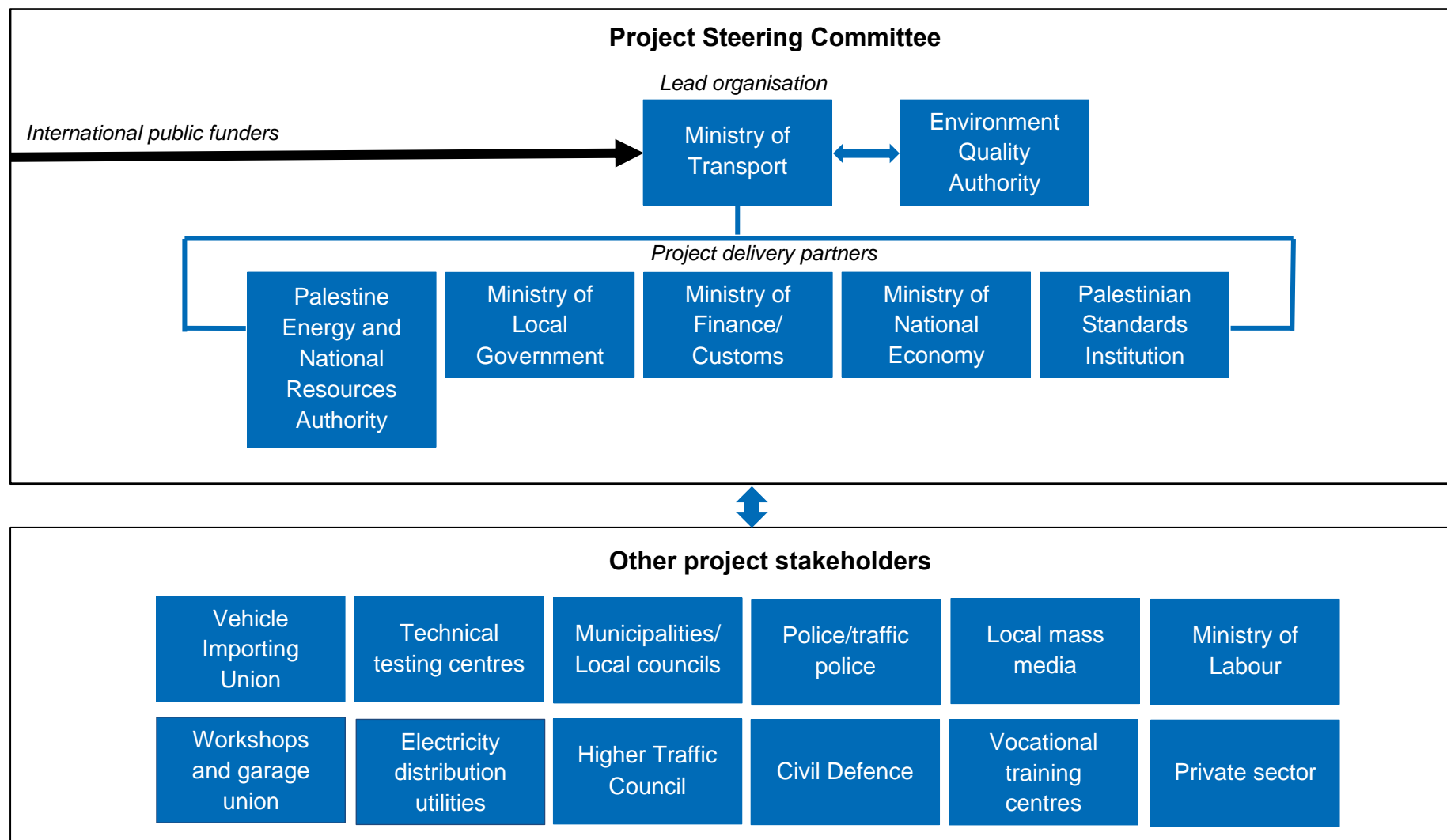
Activity	2021-2025	2026-2030	2031-2040	Unit cost	No. units	Unit type	Total cost	National contribution ¹⁵	International funding	Funding gap	Indicative options to secure international public funding to address funding gaps
1				0.030	1	Study	0.030	0.002	0	0.029	AFD; EBRD; EIB; GiZ; IsDB; IKI; JICA; NAMA Facility; UNDP; WB
2				0.030	4	Studies	0.120	0.006	0	0.114	
3a				0.010	40	Campaigns	0.400	0.020	0	0.380	
3b				0.002	25,000	EVs & HEVs	375.000	375.000 ¹⁶	0	0.000	
				0.002	50,000		750.000	750.000	0	0.000	
4a				0.060	2	Studies	0.120	0.006	0	0.114	
4b				0.007	2,000	Electric charging stations	14.000	14.000	0	0.000	
4c				0.030	15	Training courses	0.450	0.000	0	0.450	
5				0.002	52,440	No. of vehicles that need to be scrapped	104.880	26.220 ¹⁷	0	78.660	
				0.002	55,200	No. of vehicles that need to be recycled	110.400	27.600 ¹⁸	0	82.800	
6				0.002	107,640	Vehicles	161.460	161.460 ¹⁹	0	0.000	
7a				0.010	13	Mobile testing units	0.130	0.007	0	0.124	

¹⁶ Government loss due to tax reductions on imported EVs and HEVs.¹⁷ Loss to the Government in licensing fees.¹⁸ Loss to the Government in licensing fees.¹⁹ Anticipated contribution from the private sector.

Activity	2021-2025	2026-2030	2031-2040	Unit cost	No. units	Unit type	Total cost	National contribution ¹⁵	International funding	Funding gap	Indicative options to secure international public funding to address funding gaps
7b				0.020	20	Trainees	0.400	0.020	0	0.380	
8				0.004	66	Trainees	0.264	0.013	0	0.251	
TOTAL							1'517.654	1'354.354		163.302²⁰	

²⁰ Total funding gap is subject to rounding errors.

Figure 5 Institutional arrangements for implementation





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معالي الاخ جميل مطور حفظه الله

رئيس سلطة جودة البيئة

الموضوع: اعتماد خطط العمل لتنفيذ المساهمات المحددة وطنيا في قطاع النقل والمواصلات

Subject: Endorsement of NDC Implementation Plans for the transport sector

تحية طيبة وبعد.....

تهديكم وزارة النقل والمواصلات أطيب التحيات وتتمنى لكم موفور الصحة والعافية وتقدم لكم بجزيل الشكر على جهودكم الموصولة والهادفة لحماية البيئة الفلسطينية، بالإشارة إلى الموضوع أعلاه وبناء على طلبكم يرجى العلم بأن وزارة النقل والمواصلات تؤيد وتدعم خطط العمل لتنفيذ المساهمات المحددة وطنيا والتي تم اعدادها بالتنسيق والتعاون مع وزارة النقل والمواصلات وأعضاء اللجنة الوطنية لتغير المناخ والشركاء ذوي العلاقة وذلك ضمن نشاطات المشروع المنفذ من قبل سلطة جودة البيئة وشراكة المساهمات المحددة وطنيا وبدعم من البنك الاسلامي للتنمية.

قائمة بأسماء الخطط والكلفة الاجمالية لها حسب رسالة سلطة جودة البيئة:

- 1- Reducing emissions in the road, estimated budget: 1,517.654 M USD.
- 2- Promoting sustainable road, estimated budget: 618.050 M USD.

مع العلم بان هذه الخطط تأتي انسجاما مع توجيهات مجلس الوزراء وبما يتوافق مع الاولويات الوطنية و الاستراتيجية الوطنية لقطاع النقل والمواصلات .

وتقبلوا فائق التقدير والاحترام

أ. عاصم سالم
وزير النقل والمواصلات





Excellency Mr. Jameel Mtour

Chairman of Environment Quality Authority

Subject: Endorsement of the NDC Implementation Plans for the Transport Sector

The Ministry of Transport sends you best regards and wishes you good health in these difficult days of COVID 19, and would like to thank you for your extended and continued efforts to protect the Palestinian Environment.

Reference is made to the subject and to your kind request for an endorsement letter, and in my capacity as Minister of Transport, this is to confirm that Ministry of Transport fully endorse the NDC Implementation Plans for Transport Sector, that was prepared with Ministry of Transport, National Committee for Climate Change and key stakeholders as part of the project implemented by Environment Quality Authority and NDC Partnership and funded by the Islamic Development Banks.

List of Plans and estimated budget:

1. Reducing emissions in the road, estimated budget: 1,517.654 M USD.
2. Promoting sustainable road, estimated budget: 618.050 M USD.

I would like to reiterate that this plan is in conformity with the National Priorities and relevant Sectoral Strategies as well as the guidance of the Palestinian Council of Ministers.

Assem Salem

Minister of Transport





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معالي الاخ جميل مطور حفظه الله

رئيس سلطة جودة البيئة

الموضوع: اعتماد خطط العمل لتنفيذ المساهمات المحددة وطنيا في قطاع النقل والمواصلات

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