

Workshop

“Sustainable urban transport and mobility: Policies and practices on the basis of UNECE Environmental Performance Reviews”

Budva, Montenegro, 18–19 June 2019

Compiled EPR recommendations related to transport and environment

Working document for session 5

- This document gives an overview of recommendations related to transport and environment in the latest EPRs of countries taking part in the Budva Workshop. Only recommendations directly-linked to the specific topic of transport and environment are included, meaning that not all workshop-participating countries are mentioned in the document.
- Recommendations are clustered into themes with a view to prepare the matrix included in the annex serving to help in organizing the work under agenda session 5 of the workshop.
- To assess the progress in implementing the transport and environment related recommendations, **participants in the workshop are invited to indicate for each recommendation the status** of its implementation under the “implementation progress” sub-section (marked in green) and to briefly explain their response in the space allocated for comments.

ALBANIA

(Third EPR, 2018, excerpt of recommendations related to transport and environment)

Chapter 10: Transport and environment

Development of sustainable transport

Albania has taken significant steps to improve its transport sector over recent years, with major investment projects and policy changes stimulating the growth of the sector. The number of national investment projects in the road sector has improved the connectivity of the country, as have investments in port facilities. However, to date, not enough has been directed at facilitating the development of sustainable transport. Road transport remains the largest polluter, and in particular, freight transport. Also, the fact that about 60 per cent of newly registered cars are actually second hand means that passenger transport also has a lower environmental performance than it could have. Furthermore, the rail sector suffers from underinvestment, limiting the potential environmental benefits from a modal shift.

The draft sustainable transport plan has been prepared in 2016 to improve the performance of the transport sector by focusing on improving national, road-based, public transport; however, the emphasis is still narrow and multimodal public transport is not the main focus. The draft plan sets out a number of national, road-specific measures that have not yet been implemented to improve the environmental impact of the road sector. These measures are focused on the road sector and are not supplemented by interventions in other transport sectors. Their implementation would lead to a reduction in CO₂ and energy volumes and would contribute to achieving target 9.1 (Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all) of SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation).

Recommendation 10.1:

The Government should adopt the draft sustainable transport plan and implement its provisions.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The national transport strategy and action plan for 2016-2020 for all transport modes was adopted in November 2016. The sustainable transport plan, which aims to ensure a sustainable transport network and improve energy efficiency, along with Road Tolling Strategy were prepared with the assistance of EBRD.

In October 2017, an inter-institutional working group was set up for monitoring the implementation of the strategy. The first monitoring report was presented to the public in June 2018. The second review of the national transport plan (ANTP3) is expected to be adopted during the second quarter of 2019.

Theme: POLICY

Public transport

The provision of public transport, especially rail services, remains low, even with an urban population that uses significant non-car modes of transport. The rail sector's performance is very poor, with maximum speeds significantly lower than road transport outside the city centres. Work continues on rehabilitating the rail network, and particularly its infrastructure, to improve the competitiveness of rail with other transport modes, as well as other investment projects aimed at reversing such things as the lack of multimodal facilities, which are limiting the potential use of public transport and stifling the use of more sustainable modes of transport. These initiatives would help achieve the requirements set out in target 9.1 of SDG 9 relating to transport infrastructure. Continuing this point, there are not enough measures aimed at ensuring that the railways are made safe through improved signalling and the removal of unauthorized crossings. At a local level, municipalities have yet to complete measures aimed at improving urban public transport services through the introduction and extension of bus lanes and/or cycle lanes.

Recommendation 10.2:

The Government should:

- (a) Invest in the upgrading of railway lines and related facilities;
- (b) Ensure that investments in public transport stations seek to maximize multimodal transport possibilities;
- (c) Encourage municipalities to procure public transport services that maximize environmental performance (e.g. by ensuring that private concession companies improve the environmental performance of buses).

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Investments in railway are a priority for the government. Tirana-Durrës-Rinas railway line is one of the most important investment project, supported by EBRD and WBIF. The construction works have already been tendered.

The rehabilitation of the existing railway and the new section are foreseen to end by 2020. The total value of the project is approx. 92 mil Euros. The upgraded railway is expected to increase the efficiency and safety of freight and passenger transport between Tirana, Durrës, and Rinas Airport. At the same time, it will contribute to the economic development of the economic zone of Durrës, Tirana and the whole region.

- (b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

National Transport Strategy has identified promotion of multimodal transport as one of the key priorities. Municipalities are therefore directed to ensure that relevant investments envisage such a model of public transport.

- (c) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Green taxis; New fleet of public buses; electric cars and charging stations are some of the new ways that have already been introduced into improving public transport and transforming it into a more environmentally-friendly one.

Theme: (a) – (c) INFRASTRUCTURE and INVESTMENT

Vehicle fleet

The majority of newly registered vehicles are second hand, leading essentially to more polluting cars entering the Albanian market than would otherwise occur. Car scrappage schemes may be difficult and costly to implement, but modifying the taxation and circulation tax structure to better reflect the environmental impact of different cars are steps that would improve the situation. The same also holds true for trucks and other commercial vehicles.

Recommendation 10.3:

The Government should:

- (a) Adapt the road and vehicle ownership taxation structure to ensure that owners of vehicles that emit more pollutants pay higher taxes;
- (b) Ensure that only vehicles of a level equivalent to the most recent Euro standards are allowed to be imported into the country, with a gradual increase of this level over time;
- (c) Ensure that the gap between the number of registered vehicles and the number of vehicles subjected to a technical inspection is closed by introducing strict monitoring and enforcement following the end of an amnesty period.

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Ministry of Finance and Economy currently applies a taxation system that considers the age of vehicles: the older the vehicle, the higher the annual vehicle tax.

- (b) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Decision of Council of Ministers, No. 633, dated 26.10.2018, provides that the only used vehicles that can be imported into Albania must be those respecting the Euro 4 emission norm.

(c) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

The gap between the number of registered vehicles and the number of vehicles subjected to a technical inspection is constantly decreasing. Traffic police constantly works on enforcement of technical inspection obligations deriving from the relevant legislation framework.

Theme: (a) SUBSIDIES AND TAXES; (b) – (c) ROAD VEHICLE STANDARDS

Road safety

Since the turn of the century, there has been a significant fall in road fatalities and the change in road fatalities has been decoupled from the growth in traffic. In the past two years, the significant fall in the number of deaths on the roads has plateaued and in 2016 the number has actually increased, calling into question whether target 3.6 (by 2020, halve the number of global deaths and injuries from road traffic accidents) of SDG 3 (Ensure healthy lives and promote well-being at all ages) can actually be achieved. A number of actions are currently being undertaken, with international support, to improve road safety through infrastructure and policy initiatives. Albania would benefit from fully implementing these initiatives to ensure that the number of deaths on the roads starts falling again.

Recommendation 10.4:

The Government should:

- (a) *Dedicate sufficient resources to the enforcement of traffic rules;*
- (b) *Implement all recommendations in relation to road safety as set out in the National Transport Strategy and Action Plan for the period 2016–2020.*

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Road Safety Strategy 2011 – 2020 and Action Plan are already in place. In 2017, legislation on the qualification of road transport operators with the EU's acquis was partially aligned. Guidelines were adopted and certification for inspectors, and road safety inspections (RSI) and road safety audits (RSA) are now obligatory. Pilot road-safety inspections and roads safety audits are now being implemented along the 'core' road network, and work is progressing on extending it to the entire network. Working Groups were established to monitor progress.

The Albanian Road Authority regularly allocates considerable funds from State Budget to identify the 'so-called' Black Spots and invest in their improvement, though still considered inadequate to meet all needs.

(b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

While work to implement Road Safety Strategy 2011 – 2020 and Action Plan is ongoing, Albania signed the Transport Community Treaty in July 2017 at the Western Balkans 6 Summit in Trieste and ratified it in February 2018.

Pursuant to that, the Regional Road Safety Technical Committee was established to address regional challenges in road safety. The committee is expected to identify shortcomings and come up with a regional Road Safety Action Plan to be implemented by all Parties. This will act as an added instrument to speed up efforts in the area.

Theme: (a) – (b) ROAD VEHICLE STANDARD

Maritime transport

Significant steps forward have been taken in greening the maritime sector in recent years, in particular since 2011. This has come through greater attention being placed on the disposal of waste from ships and the development of contingency plans in case of environmental incidents. However, although investments to install adequate equipment to gather and treat waste from vessels are ongoing, waste is carried by road vehicles to appropriate treatment facilities on land. By becoming a contracting party to Annex VI: Regulations for the Prevention of Air Pollution from Ships of the MARPOL Convention, Albania would further reduce the environmental impact of the sector to help achieve target 14.1 (by 2025, prevent and significantly reduce maritime pollution of all kinds, in particular from land-based activities, including marine

debris and nutrient pollution) under SDG 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development). However, without an increase in the number of resources dedicated to this activity, the implementation of the requirements of this and other conventions will be difficult.

Recommendation 10.5:

The Government should:

- (a) Continue the programme of investments aimed at improving the environmental performance of the transport sector in ports (e.g. the treatment of waste);
- (b) Complete accession to Annex VI (Regulations for the Prevention of Air Pollution from Ships) to the International Convention for the Prevention of Pollution from Ships.

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **On-going** Implemented

Comments/supporting evidence

There are about 8 Port Reception Facilities in total in Albania: Durrës, Saranda, Shengjin, and Vlora. These facilities are managed by private entities, licensed by MIE to manage ship waste, and monitored by General Maritime Directorate and Ministry of Environment. A national Meeting will take place this month calling all Port Reception Facilities staff to discuss on current challenges and ways for improvement, within the frame of a project implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC).

- (b) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

Work to adopt Annex VI: Regulations for the Prevention of Air Pollution from Ships of the MARPOL Convention, has already started. The relevant unit in the ministry has confirmed conclusion of the translation procedure, which will be followed by submission of the proposed act to all line ministries. The Ministry plans to have it adopted within 2019.

Theme: (a) INFRASTRUCTURE and INVESTMENT; (b) INTERNATIONAL LAW

Results of the for future inland transport systems (ForFITS) tool

(excerpt from the EPR annex VI)

The estimated WTW CO₂ emissions in 2014 from the transport sector in Albania show that emissions from freight vehicles were approximately 40 per cent more than those from passenger vehicles (2.3 billion kg vs 1.7 billion kg). Projections of CO₂ emissions from the transport sector in Albania show an overall increase of approximately 150 per cent by 2030, with a similar contribution by freight and passenger vehicles to total CO₂ emissions (5.1 billion kg and 4.8 billion kg). The increase in each sector shows the large impact of expected economic growth on CO₂ emissions.

While projections of future CO₂ emissions under the four alternative scenarios show this same increasing trend, several scenarios demonstrate opportunities to decrease future transport CO₂ emissions relative to the reference scenario.

The shift to public transport scenario results in an 8 per cent decrease in passenger transport energy use and a 4 per cent decrease in total WTW CO₂ emissions in 2030 compared with the reference scenario. This decrease is attributed to two factors: first, a decrease in total passenger transport activity associated with land use policies for denser cities and mixed-use areas; second, a shift in passenger transport activity towards more energy-efficient transport modes associated with policies favouring public transport over personal vehicles.

In comparison with the reference scenario, the shift to electric vehicles scenario reduces passenger transport energy use and total WTW CO₂ emissions by 5 and 4 per cent respectively in 2030. Not only are electric motors more energy efficient than internal combustion engines, but electricity is also a much cleaner energy source than diesel and gasoline fuels in Albania, since electricity generation relies almost entirely on hydropower.

Lastly, the shift to freight rail scenario projects a reduction in freight transport energy use and total WTW CO₂ emissions by 12 and 6 per cent respectively in 2030 compared with the reference scenario. The current freight transport sector in Albania is dominated by road trucks; this scenario shows the impact of shifting some freight transport activity to more energy-efficient modes such as rail.

These results together show the effect of steps that can be taken by Albania to limit emissions from the transport sector. Albania faces challenges in that its expected future economic growth would typically

correspond with an increase in CO2 emissions. However, improvements in the efficiency of its transport sector could help mitigate these issues.

The results provided in this annex demonstrate the potential impact of increasing the share of public transport in passenger transport activity, increasing the share of electric vehicles in the fleet and reducing the share of road trucks in freight transport activity. Projections generated by ForFITS based on these scenarios show that pursuing such policies can temper the current trend of increasingly high WTW CO2 emissions stemming from Albania's transport sector.

With the aim of mitigating the impact of future CO2 emissions from its transport sector, Albania may wish to further investigate the relative cost of implementing the following measures:

- (a) Developing conditions and policies so that cities are more favourable for the use of public transport and less favourable for the use of personal vehicles;
- (b) Developing policies, such as fiscal instruments, to facilitate the deployment of electric vehicles in the fleet;
- (c) Developing alternatives to road trucks in the freight transport sector, such as the development of freight rail.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Participation in the European Mobility Week, Promotion of Bicycle riding, increase in the number of dedicated riding paths in the cities, promotion of electric cars and building designated areas for electric cars charging stations, increase in the number of intercity bus lines, etc.

(b) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Work on approximating EU legislation on electric cars has not started yet. However, work to fully approximate the European Directive on technical control of vehicles is going on. The approximated law will exempt electric cars from certain technical controls, leading to lower fees. Also, the Municipality of Tirana is implementing a few projects intended to promote electric cars.

(c) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Developing railway transport remains a priority, in view of the fact that it currently is underdeveloped and its potential underused. At the moment, railway transport in Albania is mainly used for freight transport. Durrës-Hani i Hotit line is functional for freight transport and another line is already given in concession, Fier-Ballsh-Vlorë to be used for freight transport. Tirana-Durrës-Rinas railway line, which is undergoing a major investment, is expected to increase the efficiency and safety of freight and passenger transport between Tirana, Durrës, and Rinas Airport.

Theme: (a) POLICY; (b) – (c) INFRASTRUCTURE and INVESTMENT

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations		2	9	3

ARMENIA

(First EPR, 2000)

The first EPR carried out in 2000 is too outdated.

AZERBAIJAN

(Second EPR, 2011, excerpt of recommendations related to transport and environment)

Chapter 3. Monitoring, information, public participation and education

Azerbaijan is making efforts to ensure that environmental information is accessible to the public. MENR regularly updates its website, and produces information leaflets and posters for the general public and press releases. In addition to an Aarhus Information Centre in Baku, two similar centres were established in Ganja and Gazakh. MENR maintains a dialogue with the environmental NGO community. NGO representatives participate in the work of expert commissions established at MENR. The Ministry of Health regularly uploads information on health and the environment on its website. At the same time, the Ministries of Economic Development, Industry and Energy, Agriculture and Transport do not actively communicate to the general public the environment-related data and information that they collect or produce. National communications to governing bodies of multilateral environmental agreements (MEAs) are not uploaded on websites in the country and are thus not available to the general public.

Recommendation 3.3:

- (a) *The Ministries of Economic Development, Industry and Energy, Agriculture and Transport should regularly upload on their websites the environment-related data and information that they collect or produce.*
- (b) *The Ministry of Ecology and Natural Resources should introduce a procedure for regularly uploading copies in the national language of national reports to MEAs on its website.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

On February 13, 2017 the Ministry of Transportation was merged with Ministry of Communication and High Technologies and transformed into Ministry of Transport, Communications and High Technologies (MTCHT). Now the MTCHT has the plans to upload on its website the environment-related data and information.

Theme: (a) – (b) INFORMATION and AWARENESS

Chapter 5. Economic instruments and environmental expenditures for environmental protection

Increased affluence has resulted in an expansion of car ownership. As a result, and following a decision to close down certain of the most polluting installations in Baku and replace their capacity with newly-built ones located in lower populated areas, emissions from mobile sources have become the main source of air pollution in urban areas. Regulatory means, such as projected import restrictions, can raise environmental standards. However, this could be complemented by economic incentives and further public investments.

Recommendation 5.2:

The Ministry of Economic Development, in cooperation with the Ministry of Finance, the State Customs Committee, the Ministry of Taxes and the Ministry of Ecology and Natural Resources, should explore the possibility of:

- (a) *Introducing further differentiation in the customs tariff against the import of old cars;*
- (b) *Creating positive inducements for the renewal of the car fleet, including through advantages in car-related taxes;*
- (c) *Developing further public transport alternatives in major urban centres.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

As of April 1, 2014, only cars manufactured in the EU since 2005, United States since 2004, Japan and China since 2011, Korea since 2006 and Turkey since 2009, are allowed to be imported to Azerbaijan. From this date all imported cars must comply with the Euro-4 emission standard.

(b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

From Jan. 1, 2018, new customs duties on the import of cars were introduced in Azerbaijan. Thus, the import duties on new cars with an engine capacity of 1,500 cubic centimeters or more is \$0.7 per cubic centimeter, while customs duties for used cars with the same engine amount to \$1.2 per cubic centimeter. Starting from Jan. 1, 2019, the import of electric cars to Azerbaijan will be exempt from value added tax (VAT). Customs duties for electric car import to Azerbaijan are determined at an ad valorem rate and amount to 15 percent.

State Program for Road Traffic Safety in the Republic of Azerbaijan for 2019-2023 approved by the Presidential Decree No. 852 dated December 27, 2018.:

7.3.3.2.	<i>Establishment of appropriate normative legal basis with determination of tax, customs and other privileges and preferences for the production, import, export, circulation and exploitation of such vehicles for the purpose of stimulating the use of ecologically friendly vehicles with electric motors</i>	<i>Cabinet of Ministers</i>	<i>Ministry of Transport, Communications and High Technologies, Ministry of Ecology and Natural Resources, State Agency for Control of Antimonopoly and Consumer Market, Ministry of Economy, Ministry of Internal Affairs, Ministry of Taxes, State Customs Committee, Ministry of Justice</i>	<i>2019 – 2021</i>
----------	---	-----------------------------	---	--------------------

(c) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

By Decree of the President of the Republic of Azerbaijan dated December 21, 2015 on additional measures for carrying out reforms in the field of transport in Baku, the Baku Transport Agency under the Cabinet of Ministers of the Republic of Azerbaijan was established. The aim of the Agency's activity is to ensure safe, uninterrupted and comfortable traffic of vehicles and pedestrians on the administrative territory of Baku, as well as developing further public transport alternatives.

State Program for Road Traffic Safety in the Republic of Azerbaijan for 2019-2023 approved by the Presidential Decree No. 852 dated December 27, 2018.

7.1.12.2.	<i>Developing existing public transport infrastructure, increasing the number of public transport types, investigating cost effectiveness and opportunities and preparing proposals in this field</i>	<i>Ministry of Transport, Communications and High Technologies</i>	<i>Ministry of Internal Affairs, Baku Transport Agency, "Baku Metropolitan" CSJC, "Azerbaijan Railways" CSJC, "Azerbaijan Airlines" CSJC, "Azerbaijan Caspian Sea Shipping" CSJC</i>	<i>2019 – 2022</i>
-----------	---	--	--	--------------------

Theme: (a) SUBSIDIES and TAXES; (b) INCENTIVES and CHARGES; (c) INFRASTRUCTURE and INVESTMENT

Chapter 6. Air management and permit issuing

Since 2000, the total emissions of pollutants into the air do not exhibit any trend and are relatively delinked from economic development. Emissions of pollutants into the air from stationary sources show a declining trend and seem to be fully decoupled from the values of gross domestic product (GDP), and more than 50 per cent of generated air pollutants is abated. Emissions from mobile sources into the air have risen sharply in connection with the rapid increase in the vehicle fleet, especially cars. The emission inventory does not include all relevant items such as emissions from households and small businesses and emissions from diffused sources. Emissions from transport and from mobile sources are being assessed in an overly simplistic fashion on the basis of fuel consumption. Emission projections based on modeling are not available.

Air quality is not satisfactory in certain big cities, particularly in Baku, especially with regard to PM and nitrogen dioxide. Provided that the current economic development continues, the size of the vehicle fleet

could increase by a factor of two or three in a short time, which would lead to a significant rise in emissions from mobile sources and to subsequent further deterioration of air quality in cities, especially for Baku. The air quality monitoring network is obsolete and underdeveloped, with a limited number of stations, no automated stations, and no measurements of PM10, PM2.5 or ground-level ozone. No advanced treatment of monitoring data (modeling) is in place. No separate strategic or policy document on air quality management has been developed.

Recommendation 6.2:

The Ministry of Ecology and Natural Resources should:

- (a) In cooperation with the Ministry of Health and the Ministry of Transport, continue to upgrade the air quality monitoring network, especially with automated monitoring stations in other big cities in connection with new/revised air quality standards;
- (b) Introduce a modernized methodology of emission inventories covering also small businesses, households and diffused sources of emissions and advanced methodology of assessment of emissions from mobile sources using the EMEP/EEA Air Pollutant Emission Inventory Guidebook;
- (c) Introduce advanced air quality assessment methods (e.g. modeling by advanced dispersion models, chemical transport models or DPSIR models).

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

An online watchdog station has been acquired and the station has been operating since May 2016 in Baku, H.Aliyev pr.10. At present, the station receives information from PM10 dispers dust, NO2, SO2, Benzene, Toluene, ksolol and ozone levels every day. <http://www.eco.gov.az/en/post/1050>

- (b) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

No detailed information

- (c) **X Not started** Starting phase On-going Implemented

Comments/supporting evidence

No information

Theme: (a) – (c) INFORMATION and AWARENESS

Until 2009, air quality was not a priority in terms of environmental policy. Recently, several positive measures were implemented or planned to reduce emissions of pollutants into the air, especially in the case of mobile sources (development of transport infrastructure in Baku, licensing of vehicles, management of transport system in Baku, improvement of fuel quality, planting of trees around roads). Highly polluting industrial installations in Baku will be closed down and replaced by newly built ones located in sparsely populated sites. In addition, the monitoring network will be substantially upgraded in 2010–2012.

Recommendation 6.3:

The Ministry of Transport, in cooperation with the Ministry of Ecology and Natural Resources, as well as the Ministry of Industry and Energy should:

- (a) Further develop the existing sustainable transport strategy to address more effectively air pollution due to traffic problems and congestions in major cities with the appropriate measures, while fully incorporating environmental considerations;
- (b) Adopt, implement and enforce as soon as possible EURO standards for mobile sources and set up adequate vehicle emission and technical control schemes to check compliance with these standards and to reduce emissions from private cars;
- (c) The Ministry of Industry and Energy, in cooperation with the Ministry of Ecology and Natural Resources, should adopt and implement new fuel quality standards and set up adequate fuel quality control schemes.

Implementation progress: (Please indicate the status of implementation)

(a) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

In the State Program for Road Traffic Safety in the Republic of Azerbaijan for 2019-2023 approved by the Presidential Decree No. 852 dated December 27, 2018, the following measures are expected to decrease the green-house emissions:

- *Improvement of the Intellectual Transport Management System according to the existing international experience;*
- *Ensuring more efficient use of the opportunities of the Intellectual Transport Management System in the administrative territory of Baku city, gradually expanding its coverage in the country's main highways;*
- *Preparation of proposals on road traffic arrangements taking into account the features of the street-road network and other security criteria in order to reduce traffic congestion on the roads in the areas where the educational institutions of the large urban areas are located;*
- *Determination of areas where bicycle lines and stops can be created on the roads and in the street-traffic network, making relevant proposals and taking measures in this concern;*
- *Creation of special traffic lanes for public transport in the streets and avenues of major cities;*
- *Increasing express bus lines in Baku and suburban towns, settlements and villages of Baku;*
- *Taking measures to stimulate the turnover and importation of active, passive, environmentally safe vehicles and vehicles with high post-crash safety to the Republic of Azerbaijan, purchase, and sale of them in the country, etc. and improving the relevant legislative base;*
- *Establishing adequate bases for adapting the quality of fuel used in transport vehicles to Euro-4, as well as Euro-5, Euro-6, and other standards, and taking steps to stage-by-stage implementation of this process;*
- *Establishment of appropriate normative legal basis with determination of tax, customs and other privileges and preferences for the production, import, export, circulation, and exploitation of such vehicles for the purpose of stimulating the use of ecologically friendly vehicles with electric motors;*
- *Taking measures to create appropriate infrastructure for environmentally friendly, electric motor vehicles;*
- *Preparation and application of vehicle utilization program to ensure the removal of obsolete, technically-safe and environmentally unfavourable vehicles in order to improve the level of road safety in the Republic of Azerbaijan, the environmental situation, and stimulate domestic automobile production.*

(b) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

From April 1, 2014 all imported vehicles have to meet the requirements of emission standard Euro-4. This rule is for imported cars only.

(c) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

State Program for Road Traffic Safety in the Republic of Azerbaijan for 2019-2023 approved by the Presidential Decree No. 852 dated December 27, 2018.
7.3.3. Promoting the use of ecologically friendly vehicles

<i>7.3.3.1.</i>	<i>Establishing adequate bases for adapting the quality of fuel used in transport vehicles to Euro-4, as well as Euro-5, Euro-6 and other standards, and taking steps to stage-by-stage implementation of this process</i>	<i>Ministry of Energy</i>	<i>State Agency for Control of Antimonopoly and Consumer Market, Ministry of Economy, Ministry of Transport, Communications and High Technologies, Ministry of Internal Affairs, State Oil Company</i>	<i>2019 - 2023</i>
-----------------	--	---------------------------	--	--------------------

Theme: (a) POLICY; (b) – (c) ROAD VEHICLE STANDARDS

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations	1	6	3	

BELARUS

(Third EPR, 2016, excerpt of recommendations related to transport and environment)

Chapter 4: Air protection

In cities such as Minsk, the rapid growth in the number of private cars may cause problems with the air quality in certain places, in spite of the fact that individual new cars comply with more stringent standards and there is a good system of public transport. Very few people use bicycles although the terrain is appropriate (with no great elevations).

Recommendation 4.2:

The Ministry of Natural Resources and Environmental Protection, in cooperation with the local executive authorities, should investigate how the use of bicycles for shorter distances can be promoted, for example, by the construction of proper and safe infrastructure and a bicycle-sharing system.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

National concept of cycling development approved on March 11, 2018

In cities:

Brest - mobility plan with cycling section

Minsk, Hrodno - cycling concepts

Minsk - Strategic Plan until 2020, Cycling Development Council

Polotsk/Novopolotsk - sustainable urban mobility plan

Orsha - action plan

Mahilew - concept of cycling development

Lida - cycle route scheme

Theme: INFRASTRUCTURE and INVESTMENT

Chapter 9: Transport and environment

Belarus invests heavily in the promotion of sustainable transport, including through the promotion of electrified public transport. However, these investments are not yet based on a solid financial footing with adequate levels of cost recovery. Sustainable transport can be achieved through having a solid financial basis.

Recommendation 9.1:

The Government, together with local authorities, should ensure the financial sustainability of its transport policy by:

(a) *Improving the cost recovery of public transport;*

(b) *Prioritizing investments in types of transport where passenger loads justify them and taking measures aimed at increasing passenger demand.*

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase On-going Implemented

Comments/supporting evidence

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus don't have information about implementation progress

(b) Not started Starting phase On-going Implemented

Comments/supporting evidence

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus don't have information about implementation progress

Theme: (a) – (b) INCENTIVES and CHARGES

Because of the slow pace of vehicle renewal in Belarus, transport can still be identified as the number one cause of impacts on the quality of air in Minsk. The situation has improved in recent years, despite the constant increase in the number of vehicles, due to more stringent vehicle and fuel standards having been adopted nationwide.

Recommendation 9.2:

The Government should introduce economic incentives to facilitate the renewal of the country's aging fleet with a view to improving the situation regarding motor vehicles.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The taxes on the import of old transport have been raised. Adopted a document about banning the release into circulation of cars below Euro 5. Adopted the President Decree on the development of electric transport

Theme: INCENTIVES and CHARGES

The urban traffic performance of Minsk is improving through the application of domestically developed intelligent transportation system (ITS) solutions. However, the application of these solutions to improve the traffic situation and mitigate the negative environmental, health, economic and social impacts of motorized transport is not widely practised.

Recommendation 9.3:

The Government should ensure that the local executive and administrative bodies continue to deploy intelligent transportation system (ITS) solutions in order to improve traffic demand management and mitigate the negative externalities caused by urban transport.

Implementation progress: (Please indicate the status of implementation)

Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Intelligent transport system in Minsk is under construction. No systems in other cities.

Theme: INFORMATION and AWARENESS

Belarus is a Party to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), which is intended to ensure the safety, security and facilitation of transport operations. Carriers from one country can carry dangerous goods through and to any other country that is a Contracting Party without additional safety requirements imposed by transit or destination countries.

The ADR also allows mutual recognition of certificates, that is, packaging certificates, vehicle certificates, tank certificates and driver training certificates. The ADR is regularly updated and kept in line with the UN Recommendations on the Transport of Dangerous Goods, that is, with international regulations for the transport of dangerous goods by sea and air. The entry into force of the 1993 Protocol of amendment to the ADR would strengthen the ADR (accession by all ADR contracting parties is required).

Belarus is not yet a Party to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN). The goals of the ADN are to increase the safety of the international carriage of dangerous goods by inland waterways; contribute effectively to the protection of the environment, by preventing any pollution resulting from accidents or incidents during such carriage; and facilitate transport operations and promote international trade. Given the impact of accidents involving such cargoes on the environment and human health, Belarus would benefit as a transit country through participation in such agreements.

Recommendation 9.4:

The Government should consider accession to the following United Nations transport agreements, in order to improve the environmental performance of the transport sector and its competitiveness as a transit country:

- (a) *The 1993 Protocol amending article 1 (a), article 14 (1) and article 14 (3)(b) of the European Agreement of 30 September 1957 concerning the International Carriage of Dangerous Goods by Road (ADR);*
- (b) *The 2000 European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).*

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase On-going Implemented

Comments/supporting evidence

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus don't have information about implementation progress

(b) Not started Starting phase On-going Implemented

Comments/supporting evidence

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus don't have information about implementation progress

Theme: (a) – (b) INTERNATIONAL LAW

Results of the for future inland transport systems (ForFITS) tool

(excerpt from the EPR annex VI)

The estimated WTW CO₂ emissions in 2012 from the transport sector for Belarus show that emissions from passenger vehicles were almost 45 per cent less than those from freight vehicles (8.9 billion kg vs 16.0 billion kg).

Projections of CO₂ emissions from the transport sector show an overall increase of more than 25 per cent by 2030, with slightly higher increases in emissions resulting freight transport in comparison to passenger transport. This difference can be largely explained by the projected decline in population over this time period in contrast with the projected economic growth. The increase in each sector, however, shows the large impact of expected economic growth on CO₂ emissions. Likewise, projections of future CO₂ emissions under the five scenarios show this same effect.

In the high GDF growth scenario the average annual growth of GDP to 5 per cent (compared to approximately 2 per cent in the reference scenario) is projected to result in a more than 70 per cent increase in WTW CO₂ emissions in 2030 when compared to the reference scenario. The projected effect of the three other scenarios is not nearly as pronounced, but important differences can still be observed.

For the fuel price increase scenario, transport activity is reduced by almost 9 per cent in terms of passenger kilometres and over 12 per cent in terms of ton kilometres in 2030 when compared to the reference scenario. These projected decreases in activity translate to a more than 10 per cent decrease in overall WTW CO₂ emissions in 2030.

The nuclear/increased electrified rail scenario results show little change in transport activity, increases in transport efficiency are projected as a result of greater use of electrified rail and a lower WTT CO₂ emissions rate for electricity attributed to increased availability of nuclear power. Under this scenario, an overall decrease in WTW CO₂ emissions of approximately 8 per cent is expected in 2030 compared to the reference scenario.

Lastly, the high fertility scenario results in a much lower projected impact when compared to other scenarios. The range of possible changes in population is not substantial and the effect on transport emissions is not as direct as in the case of the other scenarios.

These results together show the effect of socio-economic factors as well as positive steps that can be taken by Belarus to limit emissions from both the passenger and freight transport sectors. Belarus faces challenges in that its expected future economic growth would typically correspond with an increase in CO₂ emissions. However, improvements in the efficiency of its transport sector could help mitigate these issues.

The results demonstrate the potential impact of improving transport infrastructure and increasing the efficiency of the transport sector through a shift to transporting freight by rail more frequently and by specifically increasing the use of electric rail. Projections generated by ForFITS based on these scenarios show that pursuing such policies can adjust the current trend of increasingly high WTW CO₂ emissions stemming from the transport sector of Belarus downward.

The following measures can moderate future CO₂ emissions from the transport sector:

- (a) Notwithstanding the known risks associated with nuclear energy, nuclear energy generation would lead to reduction of the GHGs emissions from the transport sector and would allow increasing the efficiency of the production of electricity;
- (b) Development of necessary infrastructure to support a shift toward increased use of freight rail transport;
- (c) Railway electrification to support a shift toward increased use of freight rail transport and to maximize the impact of increased efficiency in production of electricity;

- (d) Higher fuel prices with an aim to rationalize overall transport activity, while keeping in mind the need to mitigate impacts on the economically weaker/vulnerable social groups.

Implementation progress: (Please indicate the status of implementation)

(a) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Commissioning of the nuclear power plant is scheduled for 2019

(b) Not started Starting phase On-going Implemented

Comments/supporting evidence

-

(c) Not started Starting phase On-going Implemented

Comments/supporting evidence

The length of the electrified railway sections is 1228 km or 22.5% of the total length of the railway lines of the Belarusian Railway. In May 2018 the investment project was started 141 km will be electrified

(d) **X Not started** Starting phase On-going Implemented

Comments/supporting evidence

Theme: (a) – (c) INFRASTRUCTURE and INVESTMENT; (d) SUBSIDIES and TAXES

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations	1	2	2	

BOSNIA AND HERZEGOVINA

(Third EPR, 2018, excerpt of recommendations related to transport and environment)

Chapter 7: Air protection

Transport and air pollution

In Sarajevo and other cities, the growth in the number of private cars is one of the main causes of air pollution (NO_x, PM₁₀, NMVOC and SO₂). In December 2016, the air quality in Sarajevo was so bad that a cantonal emergency committee took the measure to ban half the city's cars from the roads on alternate days, allowing only cars with licence plates ending with an odd number one day and those ending with an even number the next day, for as long as the bad air quality episode lasted. Other measures followed, such as prohibiting older cars and heavy trucks on several routes. The critical situation in Sarajevo and other cities, such as Tuzla and Zenica, lasts for several months each winter when temperatures are low and there are air inversions in the valleys that hamper air circulation.

Private cars in the country are generally between 15 and 18 years old, which means that they do not comply with modern emission standards. Import of cars is already restricted for vehicles with lower emission standards than Euro-3. Although most cities are not steep or have a great altitude differential, and a few have cycleways, only a few people use bicycles. There is no campaign to promote a shift to cleaner heavy-duty diesel vehicles and low-emission fuels and cars. It is not easy to use bicycles for shorter distances due to the lack of a safe cycling infrastructure or the common use of bicycles.

Recommendation 7.4:

The Governments of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District, in cooperation with the Council of Ministers of Bosnia and Herzegovina, should:

- (a) *Introduce economic incentives to facilitate the renewal of the country's ageing vehicle fleet with a view to improving the situation regarding motor vehicle emissions;*
- (b) *Support municipalities to abate air pollution from transport by improving their public transport system, in particular by promoting the use of clean and energy-efficient transport modes;*
- (c) *Promote active (non-motorized) mobility in cities and assess the possible benefits of such a transformation.*

Implementation progress: (Please indicate the status of implementation)

(a) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

Ministry of Communication and Transport: starting phase
Decision on the minimum technical requirements to be met by new and used vehicles undergoing vehicle type approval and individual vehicle approval testing, as well as the vehicle parts, devices and equipment undergoing the vehicle type approval testing
(Official Gazette of B&H, No. 23/19).

Government of Brcko District of Bosnia and Herzegovina, Department for Spatial Planning: not started for the Brcko District

(b) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

Ministry of Communication and Transport: starting phase
Energy Efficiency Action Plan of Bosnia and Herzegovina 2016-2018.
(Official Gazette of B&H, No. 23/19).

Government of Brcko District of Bosnia and Herzegovina, Department for Spatial Planning: not started for the Brcko District

(c) **Not started** Starting phase On-going Implemented

Comments/supporting evidence

Ministry of Communication and Transport: "not started"

Government of Brcko District of Bosnia and Herzegovina, Department for Spatial Planning: "on-

going” and “implemented” for the Brcko District
For several years the practice of increased bus transport takes place during the course of the school lessons. This reduces the number of cars in traffic. Promotion of the use of bicycles is done by the government and non-governmental sector, workshops, plaques, tv...

Theme: (a) INCENTIVES and CHARGES; (b) INFRASTRUCTURE and INVESTMENT;
(c) POLICY

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations	1	2		
Number of recommendations for Brcko District	2		1	1

CROATIA

(Second EPR, 2014, excerpt of recommendations related to transport and environment)

Chapter 5: Economic instruments and financing of environmental protection expenditure

Vehicle-related charges in general increase with the horsepower of engines; however they decrease with the age of vehicles (cars and motorcycles). Similarly, sales taxes are based on the value of vehicles with no regard to environmental performance, thus penalizing environmentally friendly vehicles (such as hybrid vehicles). As a result, some of the currently applicable tax bases weaken demand for less polluting vehicles.

Recommendation 5.4:

The Government should review and adjust the current system of transport-related taxes, in order to encourage transition to less environmentally polluting practices and choices.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase On-going Implemented

Comments/supporting evidence

--

Theme: SUBSIDIES and TAXES

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations				

GEORGIA

(Third EPR, 2016, excerpt of recommendations related to transport and environment)

Chapter 2: Economic instruments, environmental expenditures and investments for greening the economy

In Georgia, the management of environmental pollution does not rely on pollution charges to create economic incentives for reducing emissions of air and water pollutants to acceptable standards. Given the structural changes in the economy, the main preoccupation as regards air pollution is now the urban road transport sector. Excise duties on motor fuels, in combination with technical regulations, can be regarded as an instrument not only for reducing pollution associated with the use of motor vehicles but also to generate government revenue for financing the operation and maintenance of the road network. The excise duties applied in Georgia appear, however, to be rather low for creating such incentives. In a similar vein, the excise duty levied on imports of motor vehicles creates wrong incentives by favouring the purchase of older vehicles, which are, in general, more polluting than newer cars.

Recommendation 2.1:

The Government should:

- (a) *Consider reforming the system of excise duties on imported motor vehicles to eliminate the financial incentives for purchasing older vehicles;*
- (b) *Increase excise duty rates on motor fuels, including a surcharge to support improvement and maintenance of the road network.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

From January 1 of 2017, the excise duty was increased by approximately 25% for almost all vehicles, but it was doubled for 10 year-old cars and almost tripled for cars older than 14 years. These actions have contributed to an increased demand on newer vehicles. Compared to previous years, when the major share of import was Euro 2 and Euro 3 cars, in the last two years, the largest share of import was Euro 3, Euro 4 and Euro 5 cars. In 2017, the share of import of Euro 5 standard was significantly increased in total imports.

- (b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

From January 1 of 2017, the excise tax on the import of petrol was increased 2 times and for diesel fuel almost 3 times. Together with tax reduction on import of hybrid vehicles and zero taxation on electric cars in 2018, the import of gasoline cars decreased by 3 times compared to 2015. On other side, in the same period the import of hybrid cars has increased by 20 times. As a result, every second car from the imported vehicles in 2018 was a hybrid or fully electric. The trend of imports of electric cars is even higher.

Theme: (a) – (b) SUBSIDIES and TAXES

Chapter 3: Air protection

Transportation is the most important source of air pollution in Tbilisi. Due to heavy traffic, transportation causes local hotspots near busy roads. In several places, air quality standards are exceeded. Georgia used to have a system of yearly, mandatory technical inspection of all road-going vehicles. This system was abandoned in 2004. Without a mandatory annual test of safety, roadworthiness and exhaust emissions, supported by relevant regulations, it is not possible to identify and then ban the most polluting vehicles from the road.

The most cost-effective measure to reduce emissions from transport is to prevent the use of vehicles with high emissions – the super polluters. In general, these are old vehicles, vehicles that need maintenance or vehicles that are operated in an improper way. Banning old vehicles would improve public health in densely populated areas such as city centres. Often the population is not aware of the relationship between pollution from road traffic and human health.

Recommendation 3.1:

The Government should:

- (a) Reintroduce the mandatory annual test of the safety, roadworthiness and exhaust emissions of all vehicles, including an assessment of the emissions of each vehicle tested;
- (b) Introduce and enforce regulations to restrict the use of the most polluting vehicles in urban areas;
- (c) Regularly inform the population of the health effects of road transport pollution.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Technical regulation №510 on roadworthiness tests for motor vehicles and their trailers was adopted by the government of Georgia in 2017. By this technical regulation the Mandatory PTI started from 1 January 2018 and entered into force for all categories of motor vehicles since January 1, 2019. From July 1, 2018, vehicles of state agencies and legal entities have to undergo obligatory technical inspection. According, the above mentioned regulation, to have catalytic converter will be mandatory starting from 2020.
Herewith, by the aforementioned act the exhaust emission is the component which is checked in the process of periodical technical inspection.
Assessment of the emissions of tested vehicles will be provided at the beginning of 2020, when whole car fleet will be go through technical inspection.

(b) **X Not started** Starting phase On-going Implemented

Comments/supporting evidence

This issue included in the State Programme on Improvement of Ambient Air Quality in Tbilisi.

(c) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Up to date Information on air quality using modern European air quality index are available at Georgian Ambient Air Portal: www.air.gov.ge. Information on health effects of each pollutant and each index is provided as well. Moreover, the portal provides information on emissions sources (road transport among them) for each pollutants and many other relevant information.

Theme: (a) – (b) ROAD VEHICLE STANDARDS; (c) INFORMATION and AWARENESS

To develop and implement environmental policy, especially on air protection, requires knowledge of environmental sciences and a lot of information. This knowledge base for air quality management is lacking but can be organized inside or outside the governmental structures.

Recommendation 3.2:

The Ministry of Environment and Natural Resources Protection should:

- (a) Establish a mechanism for governmental institutions, academia and NGOs to share knowledge and information about air quality management;
- (b) Produce a yearly assessment report based on data on traffic, the vehicle fleet, fuel consumption, air quality monitoring and meteorology, as well as calculations from the air quality models used for Tbilisi and other cities in Georgia.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Under the Ministry of Environment was established LEPL Environmental Information and Education Center who is responsible for dissemination of information and knowledge sharing. In addition to that, general information on air quality management is available on the air quality portal www.air.gov.ge

(b) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Early assessments and reporting on emissions from transport sector and fuel consumption and car fleet are carried out.
Newest air quality data, monthly and annual reports are available on the air quality portal www.air.gov.ge.
To create ambient air quality modelling system in the country, a new project was launched several weeks ago through the support of the Italian Government.

Theme: (a) – (b) INFORMATION and AWARENESS

Traffic data and data about the vehicle fleet would allow the development of effective and efficient measures to reduce air pollution levels in cities. The Ministry of Internal Affairs has information on registered vehicles (number, age and model). In addition, the Ministry of Economy and Sustainable Development maintains data on transport volumes and modalities. These data, however, are not combined to make calculations or estimates of emissions by road transport. However, detailed information, such as fuel type and engine size, is available only for vehicles that have been imported since 2008. More detailed information on traffic and vehicles can be used to calculate emissions from mobile sources based on datasets about different aspects of mobile transport.

Recommendation 3.4:

The Ministry of Internal Affairs, in cooperation with the Ministry of Environment and Natural Resources Protection, the Ministry of Economy and Sustainable Development, the Ministry of Infrastructure and the municipality of Tbilisi, should develop a shared information system for providing data on traffic, infrastructure, vehicle emissions and air quality, and should make those data available to all stakeholders.

Implementation progress: (Please indicate the status of implementation)

Not started **Starting phase** On-going Implemented

Comments/supporting evidence

Information on emissions from road transport and air quality data is freely available for everyone through the air quality portal www.air.gov.ge

Theme: INFORMATION and AWARENESS

Chapter 10: Transport and environment

There is no overarching strategic policy document governing the development of all modes of transport, to ensure that the sector, and individual modes within it, develop in a coherent, efficient and sustainable way. Experience across countries and over time shows that the existence of a national strategy for sustainable transport is a prerequisite for achieving synergies, avoiding overlaps and implementing well-assessed national priorities in the pursuit of sustainable transport.

Recommendation 10.1:

The Government should adopt a national strategy on transport, integrating all modes of transport, with the achievement of sustainable transport as its main focus.

Implementation progress: (Please indicate the status of implementation)

Not started **Starting phase** On-going Implemented

Comments/supporting evidence

There is no a national strategy for development sustainable transport, but already exist draft of such document that prepared by the UNDP Georgia and it is in approval phase now.

Theme: POLICY

Georgia is not yet a party to UN transport agreements on the transport of dangerous goods and special cargoes, including perishable foodstuffs. Given the impact of accidents involving such cargoes on the environment and human health, Georgia would strengthen its position as a transit country with its accession to such legal instruments. Furthermore, Georgia has not yet ratified the ECE agreement on periodical technical inspections, although it signed it in 1997, almost 20 years ago.

Recommendation 10.2:

The Government should accede to or ratify the following United Nations transport agreements, in order to improve the environmental performance of the transport sector and the country's competitiveness as a transit country:

- (a) *The 1997 Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections;*
- (b) *The 1957 European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), and the related Protocols;*

- (c) *The 1970 Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP).*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

It is in on-going, as the Government ratified the following United Nations transport agreements and now its implementation phase.

By the parliamentary decree N4563-IS of November 25, 2015, the 1997 Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections was ratified. Herewith, the implementation of basic provisions of the aforementioned agreement is in progress.

- (b) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

By the parliamentary decree N5507-IIS of June 26, 2016 The 1957 European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) was ratified. Herewith, N89 Technical Regulation on the carriage of dangerous goods was adopted on February 15, 2019 which is main normative act implementing ADR in Georgian legislation.

- (c) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Theme: (a) – (c) INTERNATIONAL LAW

Because of the specific circumstances affecting the vehicle fleet in Georgia, transport can be identified as the number one cause of environmental impacts on the quality of air in Tbilisi. The situation keeps getting worse due to the constant increase in vehicle numbers. To reverse this trend and check the environmental impacts of the sector, drastic measures are needed in multiple directions affecting the efficiency of vehicles, travel and the transport system as a whole. Equally needed are regulations defining the technical characteristics of vehicles, to limit, for example, the use of right-hand-drive vehicles among the registered cars within Georgia.

Recommendation 10.3:

The Ministry of Economy and Sustainable Development, with a view to improving the situation concerning road vehicles, should:

- (a) *Reinstate mandatory inspections of roadworthiness and vehicle emissions and use these inspections to assess the presence of catalytic converters and unregulated retrofitting of vehicles to burn natural gas;*
- (b) *Consider regularizing retrofitting for conversion of cars to natural gas by setting up safety regulations and certification schemes for qualified technicians;*
- (c) *Adopt emission standards for vehicles and technical specifications;*
- (d) *Together with the environmental authorities, tighten fuel quality standards, especially vis-à-vis the sulphur content of liquid fuel;*
- (e) *Adopt regulations defining the technical characteristics of vehicles, inter alia, to limit the use of right-hand-drive vehicles that has risen considerably in recent years;*
- (f) *Make car insurance obligatory.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Technical regulation №510 on roadworthiness tests for motor vehicles and their trailers was adopted by the government of Georgia in 2017. By this technical regulation the Mandatory PTI started from 1 January 2018 and entered into force for all categories of motor vehicles since January 1, 2019.

Herewith, by the aforementioned act the vehicles which use natural gas are inspected by the general rule which is used to all vehicles. Also, the presence of catalytic converters will be inspected from January 1, 2020.

- (b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Technical regulation N80 sets up safety regulations in respect of vehicles using natural gas. Also, this aforementioned technical regulation prescribes safety regulations and certification issues for qualified technicians. Herewith, at this moment, N80 technical regulations only covers vehicles using CNG (Compressed Natural Gas) system. Also, new amendment project is in the process of elaboration which will cover vehicles using LPG (Liquefied Petroleum Gas) system.

(c) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Draft technical regulation on introduction of emission standards for vehicles (Euro 1-Euro 6) was developed. In the nearest future, feasibility study to identify which standard is most appropriate for the country at this stage will be carried out and based on results emission standard will be introduced.

Emission norms for vehicles is regulated by the technical regulation N510 which states the following:

Where the exhaust emissions are not controlled by an advanced emission control system such as a three-way catalytic converter that is lambda-probe control, the maximum permissible CO content in the exhaust gases is that stated by the vehicle manufacturer. Where this information is not available, the CO content must not exceed the following:

(i) for vehicles registered or put into service before 1 October 1986, CO — 4,5 % vol.;

(ii) for vehicles registered or put into service for the first time after 1 October 1986 — 3,5 % vol.

Where the exhaust emissions are controlled by an advanced emission control system such as a three-way catalytic converter that is lambda-probe controlled:

The maximum permissible CO content in the exhaust gases is that stated by the vehicle manufacturer.

Where this information is not available the CO content must not exceed the following:

Measurement at engine idling speed:

The maximum permissible CO content in the exhaust gases must not exceed 0,5 % vol.

Measurement at high idle speed (no load), engine speed to be at least 2 000 min⁻¹:

CO content: maximum 0,3 % vol.

Lambda: $1 \pm 0,03$ or in accordance with the manufacturer's specifications.

Herewith, by the aforementioned technical regulation, by January 1, 2020, the maximum permissible CO content in the exhaust gases is defined as 0.8 % vol. (0.5 % vol. and 0,3 % vol. will enter into force after January 1, 2020).

Also, detectible smoke is visually checked in the process of exhaust emissions inspection.

(d) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

From 1 January, 2017 in Georgia use of petrol with sulphur content higher than 10 ppm is prohibited. From the same date, permissible sulphur content in diesel fuel reduced from 150 ppm to 100 ppm as well. Further reduction of sulphur content in diesel fuel we achieved this year - from 1 January 2019 maximum limit of sulphur was defined as 50 ppm. From the next year we will switch to the diesel fuel with ultra-low sulphur content (10 ppm).

In addition to this, in May 2017 Government adopted regulation on norms of sulphur content in certain liquid fuels (heavy fuel, gas oil, marine fuel) as it is required by Association Agreement between EU and Georgia (Directive 2016/802/EU).

Moreover, it is important to highlight that in May 2016 we established state control system of fuel quality which is necessary to enforce established standards

(e) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

By the technical regulation N510 it is prohibited to change position of steering wheel. Herewith, currently, technical characteristics of vehicles is defined by the technical regulation N510, however, there is no specific regulation for vehicles which have steering wheel on the right side. New system of tax regulations was introduced to limit the use of right-hand-drive vehicles.

(f) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Theme: (a) – (f) ROAD VEHICLE STANDARDS

Official statistics show a potential deterioration in road safety in Georgia. Current statistics may underreport fatalities and injuries while not offering adequately detailed information as to the causes of accidents. Given the gaps in the existing legal and institutional framework of ensuring the roadworthiness of vehicles, because of the absence of compulsory vehicle inspections, statistics on road safety do not reflect the sources of accidents in order to sensitize public opinion and mobilize political actors to reinforce the roadworthiness inspections regime in the country.

Recommendation 10.4:

The Ministry of Internal Affairs should improve statistics on road accidents and their causes, while taking active measures, including training of drivers and information campaigns, to raise awareness of the need to improve the country's road safety record.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

In July 2016, the Georgian government approved the new National Traffic Safety Strategy and the Ministry of Economy and Sustainable Development was designed as the lead government agency for its implementation. The government created the new interagency coordination mechanism, Road Safety Inter-Agency Commission, consisting of high representatives from the governmental agencies and departments that have core responsibilities for road safety and the National Road Safety Action Plan for 2017. Representatives of other government agencies, non-governmental, international organizations and private sector can be invited to the meetings of the Inter-Agency Commission or the working group. The 2017 Action Plan is more concrete than the old 2010-2013 plan and includes a list of activities in different areas, such roads, vehicles, enforcement, education and first aid. We could conclude that, this program marks the first coordinated attempt for Georgia to address road safety in a more comprehensive approach.

In accordance with Decree N 1389, 11 July 2016 of the Georgia Government and by order of the Minister of Economy and Sustainable Development dated 7 October 2016, an Inter-Agency Road Safety Commission and the National Road Safety Working Group were created and the regulations were approved. In accordance with its statute, the main tasks of the Commission are to provide financial, technical and other kind of support from government, state and private or civil sectors, as well as the international organizations. It has to coordinate, supervise and support the activities of the Working Group so that the Working Group undertakes activities to meet Georgia's road safety and strategy goals. The commission is accountable to report to government of Georgia every six months. It is worth noting that the specific activities, stakeholders, timeframes in the 2017 Action Plan, makes it more effective and enables commission to some extent monitoring action plan implementation.

Theme: INFORMATION and AWARENESS

Despite improvements in the urban transport performance of Tbilisi, it is necessary to further develop solutions to improve the traffic situation and mitigate the negative environmental, health, economic and social impacts of motorized transport, for example through the deployment of Intelligent Transport Systems (ITS) solutions. Electrified transport in the form of trolleybuses and trams has been discontinued, despite the fact that these are some of the more economical and ecological means of transport (producing fewer emissions and less noise than fuel combustion). As recent policy studies and empirical evidence have shown, the promotion of active (i.e. non-motorized) mobility for passengers is a source of considerable benefits in that direction.

Recommendation 10.5:

The Ministry of Economy and Sustainable Development, in cooperation with the municipalities of Tbilisi and other big cities, should:

- (a) Consider the deployment of Intelligent Transport Systems solutions in order to improve traffic demand management and mitigate the negative externalities caused by urban transport;*
- (b) Promote active (non-motorized) mobility in the cities and assess the possible benefits of such a transformation.*

Implementation progress: (Please indicate the status of implementation)

(a) Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Tbilisi and Batumi municipalities has just started the deployment of Intelligent Transport System and it is in initial stage.

(b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

Tbilisi, Batumi and other Georgian cities have started introduction of bike lines, pedestrian zones and car restriction measures in the city canters.

Theme: (a) INFORMATION and AWARENESS; (b) POLICY

Recommendation 10.6:

The Government should introduce supportive policies to promote the development of electrified transportation.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

To promote electrified transportation several important measures have been implemented. In, particular:

- New (23rd) metro station was opened in Tbilisi (autumn 2017)*
- No taxes on the import of electric cars*
- Development of charging network for electric vehicles (more than 65 charging stations at this stage)*

- From 1 January of 2016 excise duty was reduced by 60% for up to 6 years old hybrid vehicles.*
- From 1 January of 2017 excise duty for import of petrol was doubled and almost tripled for diesel import*

The above mentioned policies show further very positive results:

- Compared to 2015, in 2018, the import of gasoline cars decreased by 3 times.*
- In 2018, the import of hybrid cars has increased by 20 times compared to 2015. As a result, every second car from the imported vehicles in 2018 was a hybrid or fully electric.*
- The trend of imports of electric cars is even higher.*

In October 2018, the Georgian Prime Minister announced that in the next 10 years, 90% of vehicles in the country will be replaced by electric cars. Georgia plans to start producing electric cars.

Tbilisi City has started to install electric car chargers for free and residents owning electric cars may soon be able to have free chargers in the vicinity of their homes. In addition, Tbilisi City Hall introduced car sharing system that operates only on e-vehicles.

Theme: INFRASTRUCTURE and INVESTMENT

Results of the for future inland transport systems (ForFITS) tool

(excerpt from the EPR annex IV)

The estimated WTW CO₂ emissions in 2010 from the transport sector for Georgia show that emissions from freight vehicles were approximately 60 per cent less than those from passenger vehicles (1.4 billion kg vs 3.4 billion kg).

Projections of CO₂ emissions from the transport sector in Georgia show an overall increase of more than 70 per cent by 2030. However, the projected trends of the freight and passenger sectors are quite different. While emissions from the passenger sector are projected to increase by approximately 50 per cent between 2010 and 2030, emissions from the freight sector are projected to increase by more than 120 per cent. This difference can be largely explained by the projected decline in population over this time period in contrast with the projected economic growth and shows the large impact of expected economic growth on CO₂ emissions, particularly those from freight vehicles.

While much of the variation in future emissions will be the result of socio-economic factors, there are still ways that Georgia can address the issue of limiting CO₂ emissions from the transport sector. The analysis of Georgia performed by the ECE demonstrates that savings in emissions could be substantial compared to a reference scenario where few mitigation measures are implemented. Compared to such a scenario, emissions from the freight sector in 2030 are projected to be 11 per cent less if freight transport shifts significantly from road to rail and 7 per cent less for the passenger sector if the country's transport patterns shift toward those of

countries with the most developed public transport systems. These results show that positive steps can be taken by Georgia to limit emissions from both the passenger and freight transport sectors.

Projections of future emissions levels depend most strongly on population and GDP changes, but policy decisions are clearly relevant as well. Georgia faces challenges in that its expected future economic growth would typically correspond with an increase in CO2 emissions. However, improvements in the composition of its transport fleet could help mitigate these issues.

The results demonstrate the potential impact of improving public transport infrastructure and increasing the efficiency of the transport sector through a shift to transporting freight by rail more frequently and by increasing turnover in personal vehicles. Projections generated by ForFITS based on these scenarios show that pursuing such policies can adjust the current trend of increasingly high emissions stemming from the transport sector of Georgia downward.

The following measures can moderate future CO2 emissions from the transport sector:

- (a) Developing infrastructure necessary to support a shift toward increased use of public transport by residents
- (b) Creating conditions that encourage freight carriers to shift from road to rail transport in order to take advantage of the energy efficiency of the rail sector
- (c) Encouraging increased turnover in passenger vehicles to ensure faster adoption of new and more energy efficient technologies.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **On-going** Implemented

Comments/supporting evidence

Tbilisi city hall already replaced 233 old diesel buses with new Euro 6 CNG and diesel buses. A tender for the purchase of additional new modern 220 buses has been already announced. It is planned to add 200 new buses in 2020 to increase bus fleet up to 900 in Tbilisi.

Moreover, Tbilisi city hall developed bus line system in the city that will be expanded in the near future. Additionally, waiting time in metro during the rush-hours was shortened and from the next year new trains will be added to the Tbilisi metro.

The popularization of public transport is one of the top priorities for Tbilisi, Batumi, Zugdidi and other several other cities.

(b) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

There was government decision to encourage freight carriers to shift from road to rail transport, but process now stopped.

(c) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

Electric car sharing system have been launched in Tbilisi and the similar system will be launched in Kutaisi.

Theme: (a) INFRASTRUCTURE and INVESTMENT; (b) – (c) INCENTIVES and CHARGES

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations	1	8	13	3

MONTENEGRO

(Third EPR, 2015, excerpt of recommendations related to transport and environment)

Chapter 5: Implementation of international environmental agreements

Since 2007, Montenegro has acceded to a number of global and regional MEAs. Montenegro also completed accession to all ECE environmental conventions. At the same time, the country is not yet a party to a few instruments, such as the Protocol on Water and Health and the Protocol on Pollutant Release and Transfer Registers.

In 2013 the Parliament ratified Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Recommendation 5.4:

The Ministry of Transport and Maritime Affairs, in cooperation with the Ministry of Sustainable Development and Tourism, should ensure the implementation of the Annex VI Prevention of Air Pollution from Ships of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

In March 2017, Montenegro adopted a new Decree on limit values of polluting substances in liquid fossil fuels, aligning sulphur content in marine fuels with latest decisions of EU and IMO. Decree requires international ships to switch to low-sulphur fuel at the entrance of Montenegrin territorial waters. Control of marine fuel quality is regularly performed on suppliers side, and in accordance with MARPOL rules at 20% of ships at berth in Montenegrin ports. In September there will be a workshop with EMSA (European Maritime Safety Agency) in Montenegro exercising fuel sampling on board.

Theme: INTERNATIONAL LAW

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations			1	

NORTH MACEDONIA

(Third EPR, 2019, excerpt of recommendations related to transport and environment)

Chapter 3: Greening the economy

Road transport

Road transport is a major source of air pollution in the country. Motor vehicles are subject to excise duties and other charges; pump prices of motor fuels also include excise duties. There is scope to strengthen the potential environmental effectiveness of these charges.

Recommendation 3.3:

The Government should:

- Adjust excise duties on motor fuels to move towards European Union minimum rates and eliminate the differentiation between rates on diesel and petrol, following a broad, participatory, multi-stakeholder discussion;
- Reform the vehicle registration tax and the excise duty on imports of passenger motor cars by taking into account environmentally relevant factors such as emission standards, including CO₂, the age of the vehicle and type of motor fuel.

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase **On-going** Implemented

Comments/supporting evidence

--

- (b) Not started **Starting phase** On-going Implemented

Comments/supporting evidence

--

Theme: (a) – (b) SUBSIDIES and TAXES

Chapter 8: Air protection

Renewal of the vehicle fleet

Transport is a significant source of pollution, especially in Skopje. The main characteristic of passenger transport, which dominates the sector, is a very high share of passenger cars (77 per cent), the average age of which was 18.6 years in 2016. The average estimated age of public transport buses in 2016 was 17.8 years. The share of urban and suburban public transport (11.9 per cent in 2016) is low compared with the use of individual passenger cars. End-of-life vehicles and the low rate of use of public transport against that of passenger cars together multiply significantly the negative impacts of transport on air quality.

Recommendation 8.5:

The Ministry of Economy, in collaboration with the Ministry of Environment and Physical Planning, should:

- Introduce measures for renewal of the passenger vehicle fleet, favouring fuel economy through the “feebate” system of charges and rebates, whereby energy-efficient or environmentally friendly practices are rewarded while failure to adhere to such practices is penalized;
- Introduce a green public procurement system and advise national public institutions and municipalities to renew the public transport fleet, including by using the green public procurement system, favouring electric and gas-powered buses.

Implementation progress: (Please indicate the status of implementation)

- (a) **Not started** Starting phase On-going Implemented

Comments/supporting evidence

--

- (b) **Not started** Starting phase On-going Implemented

Comments/supporting evidence

--

Theme: (a) – (b) INCENTIVES and CHARGES

Overall status of implementation	Not started	Starting phase	On-going	Implemented
Number of recommendations	2	1	1	

REPUBLIC OF MOLDOVA

(Third EPR, 2014, excerpt of recommendations related to transport and environment)

Chapter 3: Economic instruments and financing of environmental protection expenditure

Since 2005, the system of payments for environmental pollution has been maintained without any significant changes. These payments generate revenues for the environmental funds, but there is no supporting evidence that they provide significant incentives, if any, for pollution abatement. The system of taxes for emissions of air pollutants from stationary sources and for discharges of water pollutants applied in the Republic of Moldova is administratively complex due to the very large number of pollutants that are covered. This significantly weakens the effectiveness of the system. Charge rates (per ton), moreover, have remained broadly stable at a low level over the past decade or so and have been eroded by inflation. Payments for emissions from mobile air pollution sources are applied in the form of an ad valorem excise on the import value of motor fuels. The tax base is, therefore, not at all pollution oriented, leaving aside the fact that the tax rates applied are very small and have not changed over recent years. The upshot is that this tax, in contrast to the specific excise on petrol and diesel (established in the Tax Code), has not had any impact on motor fuel price developments over the past years. The pollution charges on the storage and disposal of enterprise waste are biased towards storing toxic and non-toxic waste on enterprise premises, and this does not create any incentives for significantly reducing waste generation. The rationale for this tax is not obvious once it has been ascertained that waste has been stocked according to established regulatory standards. The tax base (customs value) for the product charges on imports of environmentally harmful products is also neither pollution oriented nor related to the costs of damage prevention. These product charges are, moreover, not applied to similar domestically produced goods. Furthermore, the tax rates are, in general, very low. The upshot is that the role of the current system of payments for pollution is limited to generating revenues for the environmental funds.

Recommendation 3.1:

The Government should undertake comprehensive reform of the system of pollution charges in order to provide significant incentives for pollution prevention and abatement, and a sound basis for environmental financing and, notably:

- (a) *Apply pollution charges only to major air and water pollutants;*
- (b) *Establish a credible timetable for raising emission charge rates to levels that provide effective incentives to reduce pollution;*
- (c) *Abolish the ad valorem charges related to mobile pollution sources, given that the tax base is not pollution oriented;*
- (d) *Introduce specific charges per unit of imported environmentally harmful products (i.e. not based on their import value) and also apply similar product charges to these products that are domestically produced, including for the handling of electric and electronic equipment waste;*
- (e) *Identify and eliminate, step by step, environmentally harmful subsidies;*
- (f) *Create effective incentives for enterprises to manage production waste in an appropriately regulated and monitored manner.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase On-going Implemented

Comments/supporting evidence

--

- (b) Not started Starting phase On-going Implemented

Comments/supporting evidence

--

- (c) Not started Starting phase On-going Implemented

Comments/supporting evidence

--

- (e) Not started Starting phase On-going Implemented

Comments/supporting evidence

--

Theme: (a) – (d) and (f) INCENTIVES and CHARGES; (e) SUBSIDIES and TAXES

Overall status of implementation	Not started	Starting phase	On-going	Implemented
Number of recommendations				

ROMANIA

(Second EPR, 2012, excerpt of recommendations related to transport and environment)

Chapter 5: Economic instruments for environmental protection

Car owners are subject to a car pollution tax, which is basically a registration tax with an exhaust emission norm component. There is also an annual car ownership tax, levied by local authorities, which is based on engine capacity. Fuel excise duties have been set at or closely above EU minimum rates. There are, moreover, countrywide user charges for national roads and highways.

The car pollution tax (a one-off tax) and the annual ownership tax are not related to actual car use and are therefore unlikely to impact upon purchasing decisions concerning the fuel efficiency of cars, which are more likely influenced by the level of fuel excise duties. In turn, the overall price of petrol in combination with road user charges also plays an important role as regards the actual use of cars and the choice between public and private transport.

Recommendation 5.4:

The Government should explore the scope for strengthening the role of fuel taxes and road user charges for dealing with road transport pollution.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

In Romania, the road user charge system is the vignette system. At the EU level, there is under discussion and negotiation a Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures. The Commission submitted this proposal to the European Parliament and to the Council on 1 June 2017 as a part of the First Mobility Package. The Commission has presented its proposal to address the problems relating to greenhouse gas emissions, financing of the road infrastructure and congestion. The proposal was one of the priorities of the Romanian Presidency of the EU Council and one of the main principles underlined in this proposal is the principle of polluter pays.

The basic principle was to create fair and uniform conditions for road charging schemes of heavy goods vehicles, where the Member State wishes to apply such a charge. However, a number of elements have been added to the scheme, such as tools against congestion and pollution.

The latest Commission proposal continues on the path of making the charging directive more comprehensive, but inevitably also more complex. The main changes proposed by the Commission cover the following objectives:

- i) terminating the use of vignettes;*
- ii) introduce additional 'congestion charge' with uniform conditions;*
- iii) stop EURO-class based variations of charges and introduce a system based on CO₂;*
- iv) compulsory variation charges according to the environmental performance of passenger cars, minibuses and vans;*
- v) earmarking of revenues from congestion charging; and*
- vi) more detailed and frequent requirements on reporting.*

In conclusion, the subject of reducing road transport pollution related to new charging schemes is an important topic both at national and EU level and the discussion on the revision of the Eurovignette Directive will continue in the next months.

Theme: SUBSIDIES and TAXES

Chapter 6: Expenditures for environmental protection

The EF has been financing a car-scrapping programme since 2005. The programme has both an environmental and an economic justification. From an environmental perspective, it was designed to stimulate the replacement of old cars by new, more energy-efficient cars with lower CO₂ emissions per km.

However, there has also been an economic motive for the car-scrapping programme, namely, to use it as an anti-cyclical measure for supporting domestic vehicle producers, although the overall fiscal stimulus was

relatively small. Given that most of the new cars purchased were imported, there were, moreover, considerable demand leakage effects.

Car-scrapping programmes have been applied in many European countries in recent years. The general lesson from such programmes is that the demand for new cars is mainly brought forward from the future to the present, as a result of which the economic effects tend to wane over the medium and longer terms. Yet such a programme can still be a helpful instrument for supporting economic activity in the short term in vehicle-producing countries. It is also known that car-scrapping programmes create market distortions and delay necessary structural adjustments in the vehicle production sector. At the same time, the environmental impacts of vehicle-scrapping programmes are ambiguous and, in any case, difficult to gauge.

From an environmental perspective, the opportunity costs of the funds allocated to the car-scrapping programme by the EF are therefore quite high, given that they accounted for half of total expenditure in 2010/11. In general, such vehicle-scrapping programmes are likely to be less efficient than alternative instruments designed to reduce exhaust emissions from road transport, namely, fuel taxes, road user charges and other forms of vehicle taxation partly linked to pollution.

Recommendation 6.1:

The Government should evaluate the economic and environmental effects of the car-scrapping programme in order to decide whether it is really useful to continue with it.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** **X Implemented**

Comments/supporting evidence

The vehicle-scrapping programmes run in parallel with alternative economic instruments like fuel taxes, road user charges managed by the Ministry of Transport.

Ministry of Environment (through the Environmental Fund Administration/EFA) runs two multiannual programs, at national level:

1. Car-Scrapping Program (the Rabla Program) aiming to stimulate the renewal of the National Automobile Park

2. Plus Car-Scrapping Program (the Rabla Plus Program) aiming to reduce greenhouse gas emissions in transport by promoting clean and energy-efficient road transport vehicles.

On 27 May 2019, EFA published new lists with legal entities accepted in the two programs. At this stage 123 files for 250 cars were accepted for the Rabla Program. For the Rabla Plus Program, 91 files for 201 car were accepted (44 hybrid electric vehicles and 157 pure electric vehicles).

The submission of files by legal entities for both Programs runs until September 30, 2019.

The amount allocated during the financing session of 2019 for stimulating the renewal of the National Car Park 2017-2019 is 235,000,000 lei (49,000,000 EUR), out of which: 200,000,000 lei (41,666,667 EUR) for individuals and 35,000,000 lei (about 7,292,000 EUR) for legal entities.

Theme: INCENTIVES and CHARGES

Chapter 10: Climate Change

In some economic sectors, GHG emissions have increased even though total GHG emissions have decreased. The increase in the number of motor vehicles and the growth of road transportation caused overall GHG emissions of the transport subsector to almost triple from the base year 1989 to 2009. A similar development took place in the waste sector where, during the same period, GHG emissions increased by 54.6 per cent due to the population's rising consumption.

In 2009, the agricultural sector produced 19.6 per cent of total GHG emissions. Agriculture-related GHG emissions were 49.3 per cent lower than in 1989. Of the sector's CO₂ equivalent GHG total emissions in 2007, some 40 per cent was CH₄, which had decreased by almost half (46.9 per cent) compared with the base year. Most of this was due to the declining number of domestic livestock.

Recommendation 10.4:

The Ministry of Environment and Forests should develop appropriate projects and programmes to:

(a) Counter the rising GHG emissions trends in the transport and waste sectors; and

- (b) Anticipate and respond to the potential future increases in particular sectoral GHG emissions, e.g. in the livestock farming sector.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **X On-going** **X Implemented**

Comments/supporting evidence

Plus Car-Scrapping Program (the Rabla Plus Program) aiming to reduce greenhouse gas emissions in transport by promoting clean and energy-efficient road transport vehicles.
 The Guide to Financing the Program to reduce greenhouse gas emissions in transport by promoting clean and energy-efficient road transport vehicles, for 2017-2019, was approved through Ministerial Order No. 661/2017.
 For the Rabla Plus Program, 91 files for 201 cars were accepted (44 hybrid electric and 157 pure electric). The submission of files by legal entities runs until September 30, 2019.

Unpolluted public Transport
 The Guide to Financing the Program to improve air quality and reduce greenhouse gas emissions by using less polluting vehicles in local public transport was approved through Ministerial Order No. 761/2018. The objective of the program is to reduce greenhouse gas emissions by putting in service electric buses, hybrid electric buses, GNC fuelled buses and trolleybuses. The aim of the program is to improve air quality and reduce greenhouse gas emissions as a result of the use of less polluting vehicles in local public transport. The objective of the program is the acquisition of new electric buses, new hybrid electric buses, new buses powered by GNC and new trolleybuses, through the non-reimbursable financing from the Environmental Fund, of the sums obtained after auctioning the greenhouse gas emission certificates.
 It is a multiannual program and is carried out at national level. Total budget: 460 mil lei/95,833,333 EUR to support the purchase of electric buses, hybrid electric buses, CNG buses (compressed natural gas) or trolleybuses.

Ongoing projects:
 - in Bucharest: acquisition of 100 trolleybuses and 130 hybrid electric buses (340,000,000 lei/70,833,333 EUR).
 - in Brasov: acquisition of 32 electric buses and 20 hybrid electric buses (109,600,000 lei/22,833,333 EUR).

Green power infrastructure is a program to reduce greenhouse gas emissions in transport by promoting infrastructure for energy-efficient road transport vehicles: recharge stations for electric and electric hybrid plug-in vehicles.
 The Guide to Financing the Program to reduce greenhouse gas emissions in transport by promoting the infrastructure for energy-efficient road transport vehicles: recharging stations for electric vehicles in municipalities of county residences was approved through Ministerial Order No. 760/2018. The purpose of the Program is to improve the quality of the environment by reducing greenhouse gas emissions by stimulating the use of electric vehicles.
 The objective of the Program is to develop the power supply infrastructure for electric vehicles. Total budget: 92 mil lei/19,166,166 EUR to put in place installations of recharge stations for electric vehicles in the municipalities of the county.
Ongoing projects: battery recharging stations for electric and electric hybrid plug-in vehicles at local level (two stations in Iași, 4 stations in Bacău and 4 stations in Târgoviște). The project submission session is still ongoing for other proposals.
Finalized projects in 2018 in Bucharest, Buzău, Covasna and Argeș.

Theme: (a) INFRASTRUCTURE and INVESTMENT

Overall status of implementation	Not started	Starting phase	On-going	Implemented
Number of recommendations			3	(2)

SERBIA

(Third EPR, 2015)

There is no recommendation related to transport and environment.

UKRAINE

(Second EPR, 2007, excerpt of recommendations related to transport and environment)

Chapter 5: Economic instruments and environmental funds

The review of the system of pollution charges needs to consider the use of alternative instruments, including product charges. In particular, charges for air pollution from mobile sources that apply only to enterprises could be replaced by a product tax on fuel products that does not differentiate between users but takes into account the different environmental impacts of the various types of motor fuels. This tax could be collected together with excise taxes to minimize administration costs, with revenues earmarked for environmental expenditure, as in the current system of pollution charges. For instance, charges on SO₂ emissions could be replaced by the differential taxation of fuel according to its sulphur content.

Recommendation 5.2:

The Ministry of Environmental Protection, in cooperation with the Ministry of Finance, should extend the base for the emissions charges for air pollution from mobile sources to all users. This should be done by inclusion of these charges in the price of all motor fuels.

Implementation progress: (Please indicate the status of implementation)

Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The Law of Ukraine dated November 23, 2018 No. 2628-VIII "On Amendments to the Tax Code of Ukraine and Certain Other Legislative Acts of Ukraine Concerning Improvement of the Administration and Revision of Certain Taxes" introduced amendments to the Tax Code of Ukraine regarding the expansion of the base for the payment for emissions from air pollution.

Theme: INCENTIVES and CHARGES

Chapter 9: Environmental management in transport

The impact of the transport sector on the environment in Ukraine has increased significantly during the last decade. In spite of insufficient and unreliable data, there is evidence that:

- Official calculations show an increase in all types of emissions from road transport;
 - Associated with the emissions, energy consumption by road transport has also increased;
 - Based on the increased stock of private passenger cars, there has been a corresponding increase in transport volume and vehicle mileage; and
 - A modal shift has occurred in the overall traffic volume, with road transport increasing its share.
- The local situation in Kyiv also supports the assumption of deteriorating environmental performance:
- The stock of private passenger cars has almost tripled in the past decade.
 - Air pollution in Kyiv has worsened due to increased transport volume and a lack of catalytic converters, even in new vehicles.
 - Nitrogen dioxide concentrations have increased since 2001 and are now about 2.75 times higher than the national standards.

Experience in other countries in transition has shown that improvements in the economic situation are generally accompanied by an increase in transport volumes. Therefore, it is likely that further economic growth will lead to an increase in transport activities and the use of private vehicles, and therefore an increase in energy consumption and air-polluting emissions. For all these reasons, the environmental impact of transport activities is beginning to create serious health and environment problems, and Ukraine, which until now has paid little attention to this issue till now, urgently needs to address it.

Before any sectoral strategy is developed, reliable statistical data need to be collected and appropriate internationally recognized indicators used. These are necessary not only for determining policy directions but also for measuring the effects of any policy that is finally implemented. The serious inconsistencies and gaps in Ukraine's official data on transport indicators and related environmental impacts are cause for concern. These data are insufficient to support any decision-making and cannot be used to adequately reflect trends. This shows that government competencies are not being used appropriately and that cooperation between government institutions is lacking. In addition, the overall political responsibility for transport and its environmental impacts does not seem to be coordinated by one government body but rather is distributed among several ministries, institutions and oblast and local authorities.

Recommendation 9.1:

The State Committee of Statistics, in cooperation with the Ministry of Transport and Communications and the Ministry of Environmental Protection, should gather, manage and publish all information on transport and its environmental impacts, following internationally recognized statistical systems and indicators.

Implementation progress: (Please indicate the status of implementation)

Not started **X Starting phase** On-going Implemented

Comments/supporting evidence

Draft Law of Ukraine "On the Basics of Monitoring, Reporting and Verification of Greenhouse Gas Emissions" is being prepared for Parliament's decision.

Theme: INFORMATION and AWARENESS

As their standard of living improves, Ukraine's inhabitants will increasingly purchase and use private vehicles. This will result in higher road transport volumes and mileage. Consequently, the modal shift from rail to road transport, which is already noticeable today, can be expected to continue. Further increases can be expected in transport-related environmental impacts, including energy consumption, carbon dioxide emissions, and air and noise pollution. More attention needs to be devoted to reducing these impacts.

Recommendation 9.2:

The Ministry of Environmental Protection, together with the Ministry of Transport and Communications, should:

- (a) *Carry out an analysis of the environmental impacts of the transport sector; and*
- (b) *Based on the results of this analysis, elaborate strategic concepts for developing sustainable transport and solving related environmental problems. All data, definitions and concepts should be made publicly available and discussed with the stakeholders.*

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

An analysis of the impact of the transport sector on the environment is carried out in accordance with the Law of Ukraine of October 16, 1992 № 2707 No. On the Protection of Atmospheric Air, order of the Ministry of Health of Ukraine of April 13, 2007 No. 184 "On Approval of Methodological Recommendations" Risk Assessment for the Health of the Population against Pollution of the Atmospheric Air".

(b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The Resolution of the Cabinet of Ministers of Ukraine dated May 30, 2018, No. 430-r, approved the National Transport Strategy of Ukraine for the period up to 2030 which envisages raising the level of environmental safety in transport.

Theme: (a) – (b) INFORMATION and AWARENESS

Better knowledge of the environmental impacts of transport and an improved sense of political responsibility are prerequisites for raising awareness of environmental problems and winning acceptance of mandatory improvements in the transport sector. Technical measures are generally accepted most readily because they do not influence traffic behaviour and because, at least in some areas, they have very high efficiency. For instance, emissions of major air pollutants from vehicles complying with current EU standards are up to over 90 per cent lower than emissions from vehicles complying with the current Ukrainian national standards. It is important that requirements of national standards on pollutants emissions for new vehicles are brought closer to EU emission limits as soon as possible. However, the purchase of new vehicles depends on their affordability for a potential consumer. Therefore many cars built to dated environmental standards will continue to be used for some time, as will low-quality fuels. To be effective, policies will need to include measures that improve the current vehicle stock.

Improving the quality of fuels and checking their compliance with quality standards would also reduce air pollution. Equipping vehicles with catalysts and filters further reduces emissions of nitrogen oxide, carbon monoxide, hydrocarbons and possibly particulate matter. In order to check the increasing energy

consumption and the growing emissions of greenhouse gases, other measures have to be considered, and technical inspection of cars needs to be carried out strictly and regularly. Such measures, when accompanied by changes in driving behaviour, usually lead to a reduction in fuel consumption and therefore in air emissions.

Recommendation 9.3:

The Ministry of Transport and Communications and the Ministry of Environmental Protection should:

- (a) Request the relevant authorities, including State Customs Service, to swiftly implement the Euro 2 standards, and prepare steps for transition to Euro 3 and 4;*
- (b) In cooperation with the Ministry of Fuel and Energy, introduce EU standards on motor fuels EN 228-2004 and EN 590-2004 as national standards for vehicles with improved environmental indicators, facilitate improvement of fuel quality, in particular regarding sulphur content, and strengthen the enforcement of related quality standards;*
- (c) Develop incentives to encourage the renewal of the car fleet and preferably to give a comparative advantage to cars with good environmental performance; and*
- (d) Establish a national testing centre to check compliance of vehicle types with requirements of international standards.*

Implementation progress: (Please indicate the status of implementation)

- (a) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Approved by the decision of the Cabinet of Ministers of Ukraine from August 1, 2013 № 927 TECHNICAL REGULATION concerning requirements for automotive gasoline, diesel, ship and boiler fuels, which set requirements and the deadline for the introduction of motor gasoline and diesel fuel into the circulation: the environmental class Euro3 - until December 31, 2015. ecological class Euro4 - until December 31, 2017, the environmental class Euro5 - is not limited.

- (b) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

National standard DSTU 4839: 2007 "Gasoline cars of high quality. Specifications "- State standard of Ukraine, complies with the requirements of European standard EN 228: 2004. Approved by the Order of the Derzhspozhyvstandart of Ukraine No. 244 of October 03, 2007.
National standard DSTU 4840: 2007 "Diesel fuel of high quality. Specifications "- The state standard of Ukraine, complies with the requirements of the European standard EN 590: 2004. Approved by the Order of the Derzhspozhyvstandart of Ukraine No. 244 of October 03, 2007.

- (c) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

Among the priority areas is the development of transport infrastructure, increase and replacement of outdated rolling stock. Large cities of Ukraine receive new vehicles with ecological requirements of Euro 5. It is planned to launch electric buses, which are currently being tested.

- (d) Not started Starting phase On-going **X Implemented**

Comments/supporting evidence

List of Certified Certification Authorities (authorized bodies) that have the right to issue type certificates and certificates of conformity of vehicles, their parts and equipment in accordance with the Resolution of the Cabinet of Ministers of Ukraine dated June 9, 2011 No. 738 "Certain issues concerning the certification of vehicles, their parts and equipment" and "Procedure for approving the design of vehicles, their parts and equipment", approved by the order of the Ministry of Infrastructure of Ukraine dated August 17, 2012 No. 521, registered with the Ministry of Justice of Ukraine on 14.09.2012 for No. 1586/21898.

Theme: (a) – (b) and (d) ROAD VEHICLE STANDARDS; (c) INCENTIVES and CHARGES

Globally, it has been observed that increased use of public transport (relative to the use of private passenger cars or aircraft) normally leads to lower environmental impacts. This applies to passenger transport via railways, trams or metro (subways) as well as to freight transport by rail or inland navigation. Passenger transport in the large cities of Ukraine could have a particularly large environmental impact. These cities have well-developed public transport systems whose relevance could, however, decrease in the future given the growing numbers of private passenger cars. Municipal authorities should devise measures to maintain attractive and competitive public transport services.

Recommendation 9.4:

The Ministry of Transport and Communications should continue and intensify the promotion of public transport by:

- (a) Developing a programme for modernization of the railway infrastructure;
- (b) In cooperation with municipal authorities, introducing measures to improve public urban transport. This includes modernization of the passenger fleet to decrease its emissions (e.g. retrofitting diesel vehicles with particulate filters, use of natural gas and other cleaner fuels for buses, and extension of tram, trolleybus and metro networks), facilitation of public transport flows, optimization of schedules and connections, and introduction of other appropriate measures favouring public transport.

Implementation progress: (Please indicate the status of implementation)

(a) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The Resolution of the Cabinet of Ministers of Ukraine dated May 30, 2018, No. 430-r, approved the National Transport Strategy of Ukraine for the period up to 2030 which includes the modernization of the railway infrastructure.

(b) Not started Starting phase **X On-going** Implemented

Comments/supporting evidence

The Resolution of the Cabinet of Ministers of Ukraine dated May 30, 2018, No. 430-r, approved the National Transport Strategy of Ukraine for the period up to 2030 appropriate work is done on improving public urban transport.

Theme: (a) – (b) INFRASTRUCTURE and INVESTMENT

Overall status of implementation	<i>Not started</i>	<i>Starting phase</i>	<i>On-going</i>	<i>Implemented</i>
Number of recommendations		1	4	5

ANNEX I

Matrix of clustered recommendations

The EPRs recommendations presented in the document are clustered per theme and per country in the table below with a view to support the work in groups during the workshop.

Country Theme	<i>Albania</i>	<i>Azerbaijan</i>	<i>Belarus</i>	<i>Bosnia and Herzegovina</i>	<i>Croatia</i>	<i>Georgia</i>	<i>Montenegro</i>	<i>North Macedonia</i>	<i>Republic of Moldova</i>	<i>Romania</i>	<i>Ukraine</i>	<i>TOTAL</i>
1. POLICY	2	1		1		2						6
2. ROAD VEHICLE STANDARDS	4	2				8					3	17
3. INTERNATIONAL LAW	1		2			3	1					7
4. SUBSIDIES & TAXES	1	1	1		1	2		2	1	1		10
5. INCENTIVES & CHARGES		1	3	1		2		2	5	1	2	17
6. INFRASTRUCTURE & INVESTMENT	6	1	4	1		2				1	2	16
7. INFORMATION & AWARENESS		5	1			6					3	15

ANNEX II

Selected typical EPR recommendations grouped by theme/type of mechanism, for groups' discussion under agenda item 5(a).

Theme/mechanism	Recommendations		
POLICY	Develop Sustainable Urban Mobility Plans for cities in the region aimed at encouraging the shift away from private car use	Develop public transport networks to improve accessibility, affordability and quality for citizens	Promote active (non-motorized) mobility in cities and assess the possible benefits of such a transformation
ROAD VEHICLE STANDARDS	Ensure that vehicle standards are adopted that guarantee that the vehicles that are registered nationally reflect the most recent emission and safety requirements as set out in the UN vehicle regulations	Ensure mandatory inspections of roadworthiness and vehicle emissions for all vehicles	Ensure that fuels used for vehicles are of the highest quality to increase the efficiency of vehicles and reduce the environmental impact of road transport
INTERNATIONAL LAW	Ensure accession to, and implementation of, UN inland transport Conventions and Legal Instruments, in particular road safety conventions	Ensure accession to, and the implementation of, the Annex VI Prevention of Air Pollution from Ships of the International Convention for the Prevention of Pollution from Ships (MARPOL)	
SUBSIDIES & TAXES	Adapt a road and vehicle ownership taxation structure to ensure that owners of vehicles that emit more pollutants pay higher taxes	Ensure fuel pricing policy is appropriate to reflect market prices and to disincentivize the use of low-quality fuels and private transport	Consider introducing appropriate road charging policies to incentivize the use of public transport and active mobility
INCENTIVES & CHARGES	Introduce economic incentives to facilitate the renewal of the country's ageing vehicle fleet with a view to improving the situation regarding motor vehicle emissions	Introduce a green public procurement system and advise national public institutions and municipalities to renew the public transport fleet, including by using the green public procurement system, favouring electric and gas-powered buses	Develop incentives to encourage the renewal of the car fleet and preferably to give a comparative advantage to cars with good environmental performance
INFRASTRUCTURE & INVESTMENT	Ensure that investments in public transport seek to maximize multimodal transport possibilities	Develop alternatives to road trucks in the freight transport sector, such as the development of freight rail and alternative urban freight solutions.	Support municipalities to abate air pollution from transport by improving their public transport system, in particular by promoting the use of clean and energy-efficient transport modes
INFORMATION AND AWARENESS	Invest in information dissemination and marketing campaigns aimed at increasing the use of public transport and active mobility	Ensure that the local executive and administrative bodies continue to deploy intelligent transportation system (ITS) solutions in order to improve traffic demand management and mitigate the negative externalities caused by private urban transport	Gather, manage and publish all information on transport and its environmental impacts, following internationally recognized statistical systems and indicators