

**III. Template to facilitate the submission of examples/good practices with regard to strategies, policies, and measures employed to implement obligations under any of the Protocols to the Convention**

<p><b>Country:</b> Croatia</p>	<p><b>Sector:</b> <i>Environment, transport</i></p>
<p><b>Type of strategy, policy or measure:</b> <i>Economic, disincentive (taxes, funds, subsidies, prices or caps/ceilings, payments, rebates, etc); regulatory (legislation)</i></p>	<p><b>Level:</b> <i>National, municipal, regional</i></p>
<p><b>What is the main objective of the strategy, policy or measure? When has it been implemented/or will be implemented?</b></p> <p><i>Environmental Protection and Energy Efficiency Fund, was established in 2003 according to the Act on Environmental protection and Energy Efficiency Fund (OG 107/03 and 144/12) due to collecting money for financing projects and programs in environmental protection, nature protection, and project and projects in renewable sources (e.g. for transport sector co-financing electro and hybrid vehicle (M1) for legal physical persons and training for eco driving). In year 2004 regulation stipulates unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles (OG 2/04) was adopted. The way and deadlines of calculation and payment unit charges are prescribed in Ordinance on way and deadlines of calculation and payment environmental unit charges for motor vehicle (OG 20/04).</i></p> <p><i>Based on the above mentioned regulations, the amount of compensation depended on the category of vehicle and the type of engine and the motor fuel, the volume of work or engine power and age of the vehicle, without taking into account direct vehicles emissions. Since the existing model of payment need to be modified in line with the new developed technology in vehicle production has been decided to upgrade policy including the way and long term objectives (polluter pays principle), proposal of new regulation has been drafted. The main aim is to encourage legal and physical persons to buy more environmentally friendly and more fuel-efficient vehicles as well as equitable distribution of charges.</i></p>	
<p><b>Background and driving forces:</b></p> <p><i>Emissions from the transport sector ( road, air, rail and water ) are the result of evaporation and fuel combustion. The road transport is the major source of Pb, NOx, CO and particulate matter. In Croatia road transport accounts for 36 % NOx emissions (in the cities can be much higher), of which passenger cars account for 54 %, and heavy-duty vehicles 31% of emissions. Internal combustion engines emit a variety of pollutants as nitrogen oxides ( NOx ), volatile organic compounds ( VOCs ), sulfur oxides ( SOx ), carbon monoxide ( CO ), greenhouse gases, fine particulate matter ( PM<sub>10</sub>, PM<sub>2.5</sub> ), heavy metals, benzene and others. Emissions are primarily dependent on the vehicle / engine technology and fuel characteristics.</i></p> <p><i>The total number of vehicles in Croatia in the 2011 in relation to the number of vehicles in 1990 year increased by 2.2 times. This increase was largely due to growth in the number of passenger cars. Today in Croatia there are 2,002,851 registered motor vehicles. The share of passenger cars in the total number of registered vehicles is 75.6 % ( 1,514,847 registered passenger cars ). There are 42,809 registered vehicles for the transport of cargo and 3,440 vehicles for passenger transport. There has been an increase in light trucks by 67 %, as well as heavy duty vehicles by 31% compared to in 1990 year. Number of mopeds and motorcycles has increased more than six times due to the increase in the number of moped engine capacity of less than 50 cm<sup>3</sup> and motorcycles engine capacity of less than 250 cm<sup>3</sup>.</i></p> <p><i>Also there is significant increase in the consumption of diesel fuel while the consumption of petrol is slightly decreasing. The share of fuel consumption in road transport in relation to the transport sector is over 90 %. The existing vehicle fleet is old, on average, over 11 years with the growth in</i></p>	

*the number of vehicles 4-5 % annually.*

*Together with the technical and technological interventions on transport, the most effective measure of reducing emissions is the transport policy, both at the global and national level. It is possible to achieve a significant reduction of the negative impact of transport on the environment through strategic planning of the transport system and transport policy that will provide guidelines to minimize potential negative effects of traffic as well as through measures to improve the system and preventive measures implemented by the international agreements and national policy which should lead towards sustainable development.*

**Description of the strategy, policy or measure:**

*According to the regulation for stipulates unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles (OG 2/04) unit charges are calculated as a product of basic charges of category of vehicle and corrective factor of each vehicle (depends of the type of engine and the motor fuel, the volume of work or engine power and age of the vehicle).*

*In new suggested improved system for unit charges are also calculated as a product of basic charges and corrective factor of each vehicle but number of kilometres passed by each vehicle are taken in the calculation for all vehicles categories. Corrective factor for M1 vehicle category includes emissions level of each vehicle. Corrective factor for the M1 cars registered from 1 January 2010 depends only on CO<sub>2</sub> emission and fixed corrective factor is defined for the electric vehicle.*

*Legal or physical person have obligation to pay the unit charges during the process of registration of vehicle.*

*One of initiative for improvement and upgrading of existing model is new developed technology in vehicle production, establishment "polluter pays principle" and achievement of long term objectives including impact of CO<sub>2</sub> emissions based on the expert study for calculation of charges for road vehicles.*

*In year 2011 230.000.000 HRKN (cca 30.000.000,00€) was collected from unit environmental charges on motor vehicle.*

*Investment in projects and programs in environmental protection, nature protection, and project and projects in renewable sources is planning (e.g. for transport sector co-financing electro and hybrid vehicle (M1) for legal physical persons, training for eco driving and clean transport in amount of 12.000.000,00 HRKN (cca 1.500.000,00 €) is planning for the for the year 2014).*

*According to the Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 – 2017 investment in amount of 3.200.000,00 HRKN (cca 421.000,00 €) is planned for providing measures for abatement of emissions from transport sector.*

*Implementation and monitoring of the Projects and programs of environmental protection is under responsibility of Environmental Protection and Energy Efficacy Fund under supervision of other responsible governments bodies (e.g. Ministry of Environment, Ministry of Interior, Ministry of Economy)*

**Costs, Funding and Revenue allocation:**

*Ordinance on way and deadlines of calculation and payment environmental unit charges for motor vehicle (OG 20/04) prescribes the way of calculation and payment of unit charges.*

*Unit charges are calculated and paid annually during registration vehicles, and the verification of its technical correctness. Proof of paying of unit charges is a condition for the registration of the vehicle or certify of its technical correctness.*

*Implementing the new proposed system vehicles with lower emissions will be stimulated by smaller amounts while the owners of vehicles with higher emissions will pay a higher unit charges. The aim of the proposed system is also motivation and direction for legal and physical persons buying more efficient new cars with lower air pollutant emissions*

*In year 2011 230.000.000 HRKN (cca 30.000.000,00€) was collected from unit environmental charges on motor vehicle.*

**Effect and impacts on air pollution abatement:**

*Preparation and implementation of projects is crucial for achieving the objectives arising from the harmonization of national legislation with the EU and reducing emissions from transport in*

accordance with the Energy Strategy of the Republic of Croatia. Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 – 2017 prescribes the measures and their objectives with implementation mechanisms and the expected effects. The predicted measures are part of an overall strategy that applies to traffic in accordance with the Energy Strategy (OG 130 / 09 ).

By implementing the proposed system of paying unit charges, vehicles with lower emissions will be stimulated by smaller amounts while the owners of vehicles with higher emissions will pay a higher unit charges. The aim of the proposed system is also motivation and direction for legal and physical persons buying more efficient new cars with lower air pollutant emissions. Buying cars with less emissions resulting in a reduction of emissions from passenger cars and therefore of the total emissions from the transport sector. The measures will contribute to the development of consciousness manufacturer of environmental and nature protection which will have the effect of encouraging the development of new technologies, production and consumption of products which are less harmful to the environment and human health as well as to the rational management of raw materials and energy.

Collecting resources from unit charges would be redirect to the implementation of other measures as is development of infrastructure and filling station for electric cars, stimulation for buying more environmental acceptable cars (Electric and hybrid cars) and promotion of using eco cars, label "environmentally friendly" ect.

**References/Further information:**

[www.mzoip.hr](http://www.mzoip.hr)

[www.fzoeu.hr](http://www.fzoeu.hr)

-Regulation for stipulates unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles (OG 2/04)

-New draft regulation for stipulates unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles

-Ordinance on way and deadlines of calculation and payment environmental unit charges for motor vehicle (OG 20/04).

-Model for collecting charges for CO<sub>2</sub> emissions, FSB, 2013.

-Environmental Protection and Energy Efficacy Fund Programme for year2014

-Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 – 2017

-Energy Strategy of the Republic of Croatia (OG 130 / 09 ).

-Programme for gradual emission reduction of certain pollutants in the Republic of Croatia for the period until the end of 2010, with emission projections for the period 2010-2020 (OG 152/09)

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**Additional comments:** -