

REPUBLIC OF CROATIA

MINISTRY OF ENVIRONMENTAL AND NATURE PROTECTION

Examples and good practices of strategies, policies and measures employed to implement obligations under any of the Protocols to the Convention

> 53rd WGS&R Geneva, 15-17 December 2015

- Croatia is Party of the Long-range Transboundary Air Pollution (1993) and its 7 Protocols (1993-2008)
- As of 1 July 2013 the Republic of Croatia became a full member of the European Union, with all the rights and obligations arising from this membership. In the accession process, environmental legislation was fully transposed into national legislation.
- Presentation is based on template on examples/good practices of strategies, policies and measures submitted for the 53rd WGS&R meeting relates to implementation of the obligations under the:
 - Protocol on to Abate Acidification, Eutrophication and Ground-level Ozone, Gothenbourg Protocol
 - Protocol concerning the Control of Emissions of Nitrogen Oxides

STRATEGIC AND LEGISLATIVE FRAMEWORK

- Programme for gradual reduction of emission of certain pollutants in the Republic of Croatia for period to the end of 2010 with emission projections for period from 2010 to 2020
 - pollutants covered : SO₂, NO₂, volatile organic compounds (VOC), NH₃, PM and heavy metals: Cd, Pb and Hg
 - Programme is adopted taking into account providions of Gothenbourg Protocol, Protocol on Persistent Organic Pollutants, Protocol on Heavy Metals and NEC Directive (2001/81 EC)
- Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 2017 period, (OG No. 139/2013)
 - sets objectives and priorities the protection of air, ozone layer and climate change mitigation in the Republic of Croatia in the five-year period from 2103 – 2017
 - Plan sets the goals and measures by sectors of influence with defined priorities, time frames and responsibilities for the implementation
 - the main goal is to protect and continuously improve the quality of air on the Croatian territory.

STRATEGIC AND LEGISLATIVE FRAMEWORK

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

> The 3rd National Energy Efficiency Action Plan

Regulation on unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles MAIN OBJECTIVES POLICY MEASURES

The 3rd National Energy Efficiency Action Plan

• for the period from 2014 to 2016

- 3rd NEEAP presents a comprehensive strategy for improving energy efficiency in Croatia
- adopted in accordance with the European Directive 2006/32/EC on energy end-use efficiency and energy services (ESD).
- it lays down the energy savings objectives and forms a basis for drawing up 3-annual national plans on energy efficiency for three triennial periods up to 2016
- meets the requirement referred to in Article 24 of the Energy Efficiency Directive (EED) and partially meets the requirements on reporting referred to in Directive 2010/31/EU on the energy performance of buildings (EPBD II).
- **contains measures** aimed at achieving energy efficiency in transport sector:
 - intermodal cargo transport,
 - promotion of integrated urban transport,
 - financial support for energy efficient vehicles (buy of hybrid and electric vehicles and remodeling/buy of vehicles with compressed natural gas (CNG) drive,
 - development of alternative fuels infrastructure
 - intelligent transport management

IMPLEMENTATION of 3rd NEEAP

- Ministry of Environmental and Nature Protection (MENP) in coorperation with the Environmental Protection and Energy Efficiency Fund envisages measures aiming to reduce the emissions from transport and to achieve the goal of a 10% share of RES in all types of transport:
 - 1. The measures for stimulating procurement of electric and hybrid vehicles for citizens, companies and trades which is implemented by the Environmental Protection and Energy Efficiency Fund
 - 2. Introducing environmental criteria
 - 3. Transposing into national legislation the provisions of EU Directive the Act on Promoting Clean and Energy Efficient Vehicles in Road Transport
 - 4. The measures for stimulating procurement of environmentally-friendly public transport vehicles
 - 5. The measure for stimulating ecodriving training
 - 6. The measures entitled the "Green Line" under which county public institutions, national parks and nature parks can apply for a grant to procure electric vehicles, vessels and hybrid vehicles.
 - 7. Proposal for a regulation governing special environmental charges for motor vehicles

The role of the Environmental Protection and Energy Efficiency Fund

- The Environmental Protection and Energy Efficiency Fund (EPEEF) is the central point for collecting of extra budgetary resources and investing in the programmes and projects of environmental and nature protection, energy efficiency and use of renewable energy sources.
- EPEEF was established in late 2003 pursuant to the Act on the Environmental Protection and Energy Efficiency Fund (Official Gazette No. 80/13, 78/15).
- aim of establishment to ensure additional financial resources for the purpose of financing programmes, projects and other activities in the following areas:
 - a) Environmental protection,
 - b) Energy efficiency (EnE),
 - c) Renewable energy sources (RES)
- the EPEEF co-finances the measures for enhancing energy efficiency in transportation through 3 programmes:
 - a) co-financing the buy of electric, plug-in hybrid and hybrid vehicles for citizens, companies and trades,
 - b) co-financing ecodriving training and
 - c) co-financing other measures for energy

Fees and special fee for environmental protection and energy efficiency

- fees and special fees are collected by EPEEF/payed to EPEEF as prescribed by the Act on the Environmental Protection and Energy Efficiency Fund and the regulations adopted according to this act
- fees and the special fee are collected from parties subjected to paying environmental protection and energy efficiency fees:

> environmental pollution fees

- > special environmental fee for motor vehicles
- > fee for burdening the environment with waste
- **the criteria and benchmarks for establishing the fees and the special fee** are prescribed by the regulation adopted by the Government of the Republic of Croatia upon proposal by the minister responsible for environmental protection and the minister responsible for energy

- The fees collected from environmental polluters relates to the emissions of:

 \succ carbon dioxide (CO₂ emission),

- sulphur oxides expressed as sulphur dioxide (SO₂ emission),
- \succ nitrogen oxides expressed as nitrogen dioxide (NO₂ emission).

- obliged to pay fees for emissions into the environment are legal and natural persons which own or use an individual source of CO_2 , SO_2 and NO_2 emission as part of their activities

- fees for CO_2 , SO_2 and NO_2 emissions are calculated and paid according to the quantity of emissions in tonnes per calendar year.

Special environmental fee for motor vehicles

- The special environmental fee for motor vehicles is collected from legal and natural persons, owners or right holders of motor vehicles
- The special fee is paid at vehicle registration, or certification of the technical validity of vehicles, and is paid according to the vehicle type, engine type and fuel, engine volume and power and vehicle age or CO₂ emissions (for newer vehicles)



POLLUTER PAYS FEES SYSTEM – material and money flow



Additional benefit is related to the use of the funds collected from fees and a special fee for the following tasks:

- 1. financing, preparation and implementation of programmes and projects in field of environmental protection and energy efficiency,
- 2. expert and other tasks of raising and using funds
- **3.** mediation in financing from resources of international organisations and institutions as well as domestic and foreign legal and natural persons
- 4. keeping of a database on programmes and projects from the Fund's activities and on necessary and available financial resources
- 5. stimulation and realisation of cooperation with international and national financial institutions

Examples of programmes and projects in emission and air sector financed/cofinanced by EPEEF

- Air quality monitoring in the state AQ network 100 % funding of the measurement programme, all other related expert activities; establishment of new monitoring station est. 1.4 mil EUR/year
- Implementation of IPR e- reporting (2013-2015)
- Project "Development and upgrade of emission inventory according to CLRTAP obligations aiming to provide background for improvement of air quality in zones and agglomerations (2016-2017)
- Project "Establishment of ozone and ozone precursors modelling system" (2016-2017)
- Project "Mapping of critical loads for nitrogen with the assessment of the effects on biodiversity" (2016-2017)
- Project "Modernisation and upgrade of state air quality network" Operational programme C&C 2014-2020 preparatory phase
- Project "National reference laboratory for emission measurements from non-road vehicles" Operational programme C&C 2014-2020 national co-financing
- Local Air Quality plans co- financing
- Liquid fuels monitoring programme



- in total est. 5 mil Eur

ASSESMENT OF THE CURRENT SITUATION IN CROATIA

• Emissions from the **transport sector** (road, air, rail and water) are the result of evaporation and fuel combustion.

ROAD TRANSPORT

- the road transport is the major source of NO_x , CO and particulate matters
- road transport accounts for 36 % NO_x emissions, of which passenger cars account for 54 %, and heavy-duty vehicles 31% of emissions (source: *The Faculty of Mechanical Engineering and Naval Architecture*).
- In the transport sector during the period from 2005 to 2010, fuel consumption was increased by an average annual rate of 4.8 %.
- In Croatia, in 1990 were approximately 1.24 million vehicles and in 2010 a number of vehicles was increased to 1.7 million.
- The structure of the <u>fleet in 2010</u> was as follows:

81 % the passenger cars,

7 % trucks,

2 % heavy-duty vehicles

10 % mopeds and motorcycles.

• The average age of the existing vehicle fleet is about <u>11 years</u>.

Example of good practice: CLEANER (GREEN) TRANSPORTATION

Introducing the green transportation

- in compliance with EU goals to reduce emissions and considering growing air pollution
- implements energy efficiency in transport sector and encourage the projects aimed at increasing energy efficiency of transportation systems
- promote the use of more efficient vehicles (vehicles using RES, which emit less CO₂ and electric vehicles)



Example of good practice: CO-FINANCING THE PURCHASE OF HYBRID AND ELECTRIC VEHICLES

- the public calls for co-financing of the buy of hybrid and electric vehicles published in 2014 and 2015 by EPEEF
- in the first half of 2015, the EPEEF approved co-financing of 506 vehicles with amount of 18.4 mill HRK (est. 2.4 mill EUR)
- due to the great interest of citizens and companies, additional calls were issued in 2015 to ensure a further 7.5 mill HRK (est. 1,0 mill EUR)
- beneficiaries of calls: legal and natural persons
- EPEEF financial allocation per vehicle :
 - a) Electric vehicles co-financing HRK 70,000.00 (est. 9.000,00 EUR)
 - **b)** "Plug in" hybrid electric vehicles co-financing HRK 50,000.00 (est. 6.500,00 EUR)
 - c) Hybrid vehicles co-financing HRK 30,000.00 (est. 4.000,00 EUR)



Example of good practice: CO-FINANCING THE PURCHASE OF HYBRID AND ELECTRIC VEHICLES

Documentation required for the call application and contracting

- 1. Application form,
- 2. Informative offer for the purchase of vehicle,
- 3. Copy of the identity card.
- > Decision on utilisation of EPEEF funds and project contract
- > 6-month time limit as of the date of the contract for implementing the project
- > Project implementation and documents required for disbursement of EPEEF funds:
 - 1. Invoice and payment certificate,
 - 2. Certificate of Conformity of the vehicle,
 - 3. Copy of the registration certificate.



Example of good practice: CO-FINANCING THE PURCHASE OF HYBRID AND ELECTRIC VEHICLES



No. of vehicles bought

Regulation on unit charges, corrective coefficients and detailed criteria and benchmarks for determination of the special environmental charge for motor vehicles

- entered into force on 1 January 2015
- prescribes:
 - a) the special environmental charge for motor vehicles means a fee paid by legal and natural persons, owners or right holders of motor vehicles
 - b) the special charge is calculated and paid at the time of the registration of the vehicle
- the new Regulation aims to achieve a equitable payment method, following the principle of who pollute more should pay a higher amount and one of the goal is to calculate fees based on CO₂ emissions and the emission levels of vehicles.
- the goal of this measure is to focus customer's demand to environmentally friendly and energy-efficient vehicles.
- the first result and inputs will be visible in 2016, due to the entrance into force date

THANK YOU FOR YOUR ATTENTION!

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