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CROATIA

Second Review

Synopsis

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CONTENTS

Preface

The second Environmental Performance Review (EPR) of Croatia began in October 2012 with a preparatory mission. During this mission, the structure of the review report was discussed and the time-schedule established. A review mission took place on 12-19 March 2013. The team of international experts taking part included experts from Austria, Czech Republic, Germany, the Republic of Moldova, Slovakia and as well as from the EEA and the secretariats of the United Nations Environment Programme (UNEP) and ECE.

The draft EPR report was submitted to Croatia for comment and to the Expert Group on Environmental Performance Reviews in August 2013 for consideration. During its meeting on 1-2 October 2013, the Expert Group discussed the report in detail with representatives of the Government of Croatia, focusing in particular on the conclusions and recommendations made by the international experts.

The EPR recommendations, with suggested amendments from the Expert Group, were then submitted for peer review to the nineteenth session of the ECE Committee on Environmental Policy on 24 October 2013. A high-level delegation from Croatia participated in the peer review. The Committee adopted the recommendations as set out in this report.

The Committee on Environmental Policy and the ECE review team would like to thank the Government of Croatia and its experts who worked with the international experts and contributed their knowledge and assistance. ECE wishes the Government of Croatia further success in carrying out the tasks involved in meeting its environmental objectives, including the implementation of the recommendations in this second review.

ECE would also like to express its appreciation to the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and to the German Federal Environment Agency for their support to the EPR Programme through the Advisory Assistance Programme for Environmental Protection in the Countries of Central and Eastern Europe, the Caucasus and Central Asia; and to Austria, Czech Republic, Germany, EEA and UNEP for having delegated their experts for the review; and the United Nations Development Programme for its support of the EPR Programme and this review.

Executive summary

The first Environmental Performance Review (EPR) of Croatia was carried out in 1999. This second review intends to measure the progress made by Croatia in managing its environment since the first EPR, especially from 2005, and the potential for addressing upcoming environmental challenges.

Croatia's GDP achieved an average 4.1 per cent growth rate during 2005-2008. However, the international financial crisis led to a contraction of GDP by 6.9 per cent in 2009 and 2.3 per cent in 2010. Year 2011 saw zero growth but the contraction continues, as the latest available figures show a 2 per cent decrease for 2012. Croatia's ranking in the UNDP's *Global Human Development Report* remained constant: with a Human Development Index (HDI) score in 2012 of 0.805, it came 47th out of a total 186 countries, the same ranking as in 2005. Progress was made in Croatia's gender parity, with women occupying 24 per cent of Parliament seats and several high political offices. The 2012 Gender Inequality Index was 0.179, placing Croatia in 47th place out of 186 countries.

Key environmental indicators showed a positive trend. Air pollution emissions were reduced, with the exception of the share of mobile source emissions from total NOx emissions, which increased from 62.6 per cent in 2005 to 65.3 per cent in 2011. Total greenhouse gas emissions decreased by 7.2 per cent, while CO_2 emissions alone during the same period decreased by 11.1 per cent. Total waste generation stayed steady over the review period: 3.39 million tons in 2005 and 3.38 million tons in 2011. Designated protected areas expanded from 7.23 per cent of the national territory in 2005 to 8.45 per cent in 2013.

Policymaking framework for environmental protection and sustainable development

Since 1999, Croatia has made significant progress in adopting and strengthening environmental legislation, with progress on laws in various sectors, such as air quality and waste management. However, implementation of some of these laws is less encouraging and several strategic documents are out of date. With regard to the policy framework, some strategic documents need to be updated, such as the National Environmental Strategy of 1999, which expired in 2012. Croatia, moreover, is still in the process of adopting river basin management plans.

Green Economy Initiatives signify a step forward for Croatia. The 2001 Strategic Guidelines for Green Economic Development include a set of action plans and strategic documents for developing a green economy. However, the Guidelines do not set concrete goals, activities or deadlines and there are no institutional mechanisms for coordination and monitoring. Despite this deficiency, several green economy initiatives have started since 1999. A total of €3.2 million financed 78 projects in the sustainable building sector related to energy efficiency in lighting and heating, the substitution of primary energy sources in boiler plants and the optimization of combustion plants.

Public institutions such as the Croatian Environment Agency, the Environmental Protection and Energy Efficiency Fund and the State Institute for Nature Protection, under the competence of the Ministry of Environmental Protection, provide additional oversight of environmental policy and information and are largely independent. The Agency was established in 2002 to analyze and interpret environmental data and provide information necessary for environmental policymaking. The Fund was established in 2003 as an extra-budgetary legal entity for ensuring the implementation of environmental protection programmes on waste management, nature conservation, sustainable consumption, energy efficiency and renewable energies. The State Institute was established in 2002 and provides expertise on nature protection.

While significant progress is lauded, Croatia has room for improvement in strengthening its institutional mechanisms. In particular, there is a need for greater promotion of strategic environmental assessments (SEA) and the establishment of quality assurance mechanisms for implementing SEAs. SEA implementation remains deficient, due in part to the weak role that the Ministry of Environmental and Nature Protection plays in the SEA screening process and procedures. The Ministry of Environmental and Nature Protection lacks, moreover, a dedicated unit for coordinating subnational environmental protection.

Compliance and enforcement mechanisms

Since 1999, Croatia has established an environmental regulation and compliance assurance system that responds to the needs arising from the country's international obligations. Environmental impact assessment (EIA) is well developed in Croatia, with a number of cases of application in many areas. Both permitting and EIA procedures have been amended to make them more transparent. Public participation has improved, as well as coordination with administrative procedures such as integrated permitting. Croatia has transposed the EU Directive on integrated pollution prevention and control (IPCC), although there is insufficient capacity for implementation and a backlog of IPCC permits are awaiting issue.

While Croatia has made significant progress in compliance and enforcement, better use of compliance promotion instruments and procedures would strengthen its effectiveness and capacity for administrative and judicial enforcement. Compliance promotion and voluntary schemes are relatively limited, although environmental labelling has been gradually put in place: as of early July 2013, 13 manufacturing companies and 15 hotel/campsite operators have been awarded the national environmental label. The system for carrying out environmental inspections largely follows internationally recognized practices and its capacity has proved efficient. Training of industrial operators is taking place.

Environmental monitoring, information, public participation and education

Croatia has made significant improvements in environmental monitoring, in particular for air quality, bathing and drinking water, and radioactivity. Monitoring, which has improved since 2002, is largely the purview of the Croatian Environment Information System, comprising over 40 different databases. The CEA is charged with establishing, maintaining and coordinating a single national environmental information system consisting of several environmental databases. Gaps remain in monitoring bio-diversity, soil, noise, vibrations and land use (except for forestry), although educational workshops aim to improve these areas.

Preparation of state of the environment reports is on track under the responsibility of the CEA. However, an inordinately long approval process threatens the credibility of these reports, since figures are often outdated by the time they are published. In order to reduce the time lag of available data, the CEA has started to publish *Selected Indicators of the Environment in Croatia*.

Croatia is active in environmental education, from kindergarten level, for which around 40 environmental experts have been trained in eco-programmes, to university level, where ecology is part of natural and social science courses. The country has adopted the Strategy on Education for Sustainable Development. Two hundred eco-schools and 130 regular schools in Croatia follow the Global Learning and Observations to Benefit the Environment programme.

Implementation of international environmental agreements and commitments

Since 1999, Croatia has ratified 22 Multilateral Environmental Agreements (MEAs). Since 2005, Croatia has taken on a broad range of measures to ensure participation in and implementation of MEAs. Implementation is low at regional and local levels due to a lack of awareness and knowledge about MEAs.

In terms of technical assistance on the environment, Croatia has benefited from EU programmes for transposing the acquis communitaire into Croatian legislation, as well as from cooperation with major international financial institutions, UNEP and the Global Environmental Fund (GEF). Cooperation with GEF has included 30 projects, 14 on national level and 16 on regional level. The majority of national projects focus on biodiversity and climate change; regional projects focus mostly on international waters. Cooperation with UNEP has centred mainly on sustainable consumption and production, and implementing the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution.

Croatia adopted the National Sustainable Development Strategy (NSDS) in 2009 and submitted its first progress report on the Millennium Development Goals (MDGs) in 2006. In 2010, it also submitted its second national report on MDG Implementation for 2006-2010, which showed a positive trend in achieving MDG-7 ("Ensuring Environmental Sustainability"). However, the link between the NSDS and the MDGs is weak, with a lack of coherent indicators to track progress.

Economic instruments for environmental protection

The majority of State subsidies are directed towards sectoral support and not horizontal expenditure in favour of environmental protection and green initiatives. However, some taxation schemes can be seen to support greening the economy, such as the exclusion of electric cars from the special tax on road vehicles.

The country has a diversified charge system for the main pollution and emission sources – these economic instruments consist of air pollution, water and waste charges. In addition to standard municipal and industrial waste levies, Croatia also taxes packaging waste, used tyres, end-of-life vehicles, used batteries, accumulators and oils.

Although the country adheres to an air pollution charge system for CO_2, SO_2 and NO_2, and around 1,200 polluters are obliged to pay levies, the system is not sufficiently effective as the charges do not reflect regional differences; levies have not been raised since 2008 and the unit charges are not inflation adjusted.

Energy-related economic instruments are inversely related to consumption, rewarding higher energy consumption. The price structure does not motivate consumers to conserve energy nor does it give incentives for energy-saving innovations and investment in energy efficiency.

A greenhouses gas emission trading system was established in 2008. Installations participating in the trading system have been obliged to obtain emission permits since 2009 and have monitored emissions from installations and submitted annually verified reports since 2010. Croatia joined the EU's Emission Trading Scheme phase III in 2013 – ahead of its accession to the EU.

Funding for environmental protection changed significantly during the review period. In nominal terms, local Government expenditure stayed almost the same, but a doubling of central Government expenditure increased inflation-adjusted total expenditure levels by almost 50 per cent from 2005 to 2011. The Croatian Environmental Protection and Energy Efficiency Fund provided loans, grants and subsidies to promote and stimulate green initiatives totalling €148.6 million from 2005-2011.

Waste management

Croatia has made significant progress in waste management, with political commitment to the importance of setting up waste management plans and providing reliable data and information on waste. It exports hazardous waste to countries with more developed facilities. Considerable work has been done within the legislative framework for waste management, including the transposition of EU directives on solid waste and management of special waste streams, including batteries, packaging and vehicle waste. However, information on the environmental impact of waste management in Croatia is limited.

Positive trends in waste management include investment in the recycling infrastructure and development of regional waste management centres (WMC). WMCs ensure basic safe management of municipal solid waste. However, the current system lacks consolidation and therefore faces the challenge of redirecting waste from more than 146 disposal sites to 20 WMCs. Groundwater and air pollution caused by landfill is insufficiently controlled, and a significant amount of biodegradable waste is landfilled.

Sustainable management of water resources

Around 50 per cent of the public water supply in Croatia comes from groundwater. From 2005 to 2012, the volume of water abstracted increased from 511 million m^3 to almost 570 million m^3 per year. In addition to domestic demand on water resources, tourism brings increased pressure, especially during the touristic period.

Flooding is also a problem, causing considerable environmental damage. Investments in the maintenance of flood protection systems were insufficient until 2005. Since then, revenues from water protection charges have grown significantly, but are still insufficient to develop a protection system. Flood prevention measures are in place and early warning systems and alarms are used, but the safety of inhabitants and assets in many potential flood areas is not yet ensured.

Household wastewater has increased significantly due to a greater connection ratio. In 2005, around 126 million m³ of wastewater originated from households, rising to about 184 million m³ in 2012. Approximately one third of the wastewater collected is discharged into the environment, for example untreated wastewater discharge into the sea. However, a clear improvement has been visible since 2007. Sewage sludge poses a persistent problem.

Biodiversity and protected areas

Since 2005, protected areas have increased by 18.2 per cent and now cover 8.45 per cent of the total national territory. Almost all national and nature parks have management plans, sometimes including visitor management. No national monitoring system exists and capacity and equipment are deficient, although some species are monitored, e.g. large carnivores and some bird species.

The greatest threat to native wild taxa in Croatia is the destruction and loss of habitat. This occurs in particular when natural habitats are converted into urbanized areas or agricultural land, or following the construction of roads and other transport, which lead to the fragmentation of habitats. Wild taxa are also threatened by the introduction of non-native species, overexploitation in the fishing sector and the pollution of water, soil and air.

Tourism and the environment

In 2012, the travel and tourism sector directly accounted for approximately 12 per cent of GDP. In 2012, the sector's total contribution to employment, including jobs indirectly supported by the industry, was 30.2 per cent of total employment (319,000 jobs). Croatia has some of the best quality bathing waters in Europe. Of the 919 coastal bathing sites in Croatia, 876 have excellent bathing water, 27 good quality and 3 have poor quality water.

Total waste generation from tourism is not particularly significant in terms of quantity, but may be relatively high for tourist locations taken in isolation. Data on municipal waste generated by the tourism sector are hidden in the total municipal waste data. Disposal of waste on the islands is prohibited. The country makes efforts to relocate existing waste and unregulated landfills away from coastal areas in WMCs.