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Committee on Environmental Policy

ENVIRONMENTAL PERFORMANCE REVIEWS

REPUBLIC OF MONTENEGRO

Second Review

UNITED NATIONS
Environmental Performance Reviews Series No. 25

NOTE

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Environmental Performance Reviews (EPRs) for countries in transition were initiated by Environment Ministers at the second Ministerial Conference “Environment for Europe” held in Lucerne, Switzerland, in 1993. As a result, the UNECE Committee on Environmental Policy decided to make the EPRs a part of its regular programme.

Ten years later, at the fifth Ministerial Conference “Environment for Europe” (Kiev, 2003), the Ministers confirmed that the UNECE EPR Programme had made it possible to assess the effectiveness of the efforts of countries with economies in transition to manage their environment. The Programme has addressed tailor-made recommendations to the Governments concerned on improving environmental management to reduce their pollution load, to better integrate environmental policies into sectoral policies, and to strengthen cooperation with the international community. The Ministers also reaffirmed their support for the EPR Programme as an important instrument for countries with economies in transition, and decided that the Programme should proceed with a second cycle of reviews. This second round, while taking stock of the progress made since the first review, puts particular emphasis on implementation, integration, financing and the socio-economic interface with the environment.

Through the Peer Review process, EPRs also promote dialogue among UNECE member countries and harmonization of environmental conditions and policies throughout the region. As a voluntary exercise, the EPR is undertaken only at the request of the country concerned.

The studies are carried out by international teams of experts from the region working closely with national experts from the reviewed country. The teams also benefit from close cooperation with other organizations in the United Nations system, including the United Nations Development Programme, and with the Organisation for Economic Co-operation and Development.

This is the second EPR of Montenegro published by the UNECE. The report takes stock of the progress made by Montenegro in the management of its environment since the country was first reviewed in 2002, when the country was part of Yugoslavia. While looking closely at the implementation of the recommendations of the first review, the report also covers seven issues of importance to Montenegro concerning policymaking, planning and implementation, the financing of environmental policies and projects, and the integration of environmental concerns into economic sectors and the promotion of sustainable development. Issues receiving special attention during the review included compliance and enforcement mechanisms, economic instruments and environmental funds, and environmental management in energy and in tourism.

I hope that this Review will be useful in supporting policymakers and representatives of civil society in their efforts to improve environmental management and further promote sustainable development in Montenegro, and that the lessons learned from the Peer Review process will also benefit other countries of the UNECE region.

Marek Belka
Executive Secretary
Economic Commission for Europe
Preface

The second Environmental Performance Review (EPR) of Montenegro began in May 2006 with a preparatory mission, during which the final structure of the report was discussed and established. The review team of international experts included experts from the Czech Republic, Germany, Switzerland, and Ukraine, and from the secretariat of the United Nations Economic Commission for Europe (UNECE).

The review mission took place from 30 October to 3 November 2006. In May 2007, the draft was submitted for consideration to the Ad Hoc Expert Group on Environmental Performance. During this meeting, the Expert Group discussed the report in detail with expert representatives of the Government of Montenegro, focusing in particular on the conclusions and recommendations made by the international experts.

The EPR report, with suggested amendments from the Expert Group, was then submitted for peer review to the fourteenth session of the UNECE Committee on Environmental Policy on 29 May 2007. A high-level delegation from Montenegro participated in the peer review. The Committee adopted the recommendations as set out in this report. The report will be translated into the national language with support from the United Nations Development Programme Country Office in Podgorica.

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

UNECE would also like to express its deep appreciation to the Governments of the Czech Republic, Germany the Netherlands and Switzerland, as well as the United Nations Development Programme, for their support to the Environmental Performance Review Programme and to this review.
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The mission for the project took place from 30 October to 3 November 2006. The peer review was held in Geneva on 29 May 2007. The ECE Committee on Environmental Policy adopted the recommendations set out in this document.

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# ACRONYMS AND ABBREVIATIONS

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<td>Adriatic-Ionian Initiative</td>
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<td>BERCEN</td>
<td>Balkan Environmental Regulatory Compliance and Enforcement</td>
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<td>BAT</td>
<td>best available techniques</td>
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<td>best available techniques reference documents</td>
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<td>CAMP</td>
<td>Coastal Area Management Programme</td>
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<td>CARDs</td>
<td>Community Assistance for Reconstruction, Development and Stabilisation</td>
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<td>CASP</td>
<td>Coastal Area Spatial Plan</td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>CEHAP</td>
<td>Children’s Environment and Health Action Plan</td>
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<td>CEPA</td>
<td>Classification of Environmental Protection Activities and Expenditures</td>
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<td>CETF</td>
<td>Centre for Ecotoxicological Research</td>
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<td>CFC</td>
<td>chlorofluorocarbon</td>
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<td>CHP</td>
<td>combined heat and power</td>
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<td>CIA</td>
<td>Central Intelligence Agency</td>
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<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Flora and Fauna</td>
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<td>CLRTAP</td>
<td>Convention on Long-range Transboundary Air Pollution</td>
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<tr>
<td>CO</td>
<td>carbon monoxide</td>
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<td>CO₂</td>
<td>carbon dioxide</td>
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<td>COFOG</td>
<td>Classification of Functions of Government</td>
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<td>Development and Poverty Reduction Strategy</td>
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<td>ECENA</td>
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<td>Protocol on Long-term Financing of the Cooperative Programme for</td>
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<td>EIA</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>EPCG</td>
<td>Electric Power Company of Montenegro (Elektroprivreda Crne Gore)</td>
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<td>EU</td>
<td>European Union</td>
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<td>FRY</td>
<td>Federal Republic of Yugoslavia</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GDP</td>
<td>gross domestic product</td>
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<td>GHG</td>
<td>greenhouse gases</td>
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<td>GIS</td>
<td>Geographical Information System</td>
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<td>GNI</td>
<td>gross national income</td>
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<td>Hydromet</td>
<td>Hydrometeorological Institute</td>
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<td>IDP</td>
<td>internally displaced person</td>
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<td>ICPDR</td>
<td>International Commission for the Protection of the Danube River</td>
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<td>IMO</td>
<td>International Maritime Organization</td>
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<td>IPPC</td>
<td>integrated pollution prevention and control</td>
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<td>KAP</td>
<td>Kombinat Aluminium Podgorica</td>
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<td>KfW</td>
<td>Kreditanstalt für Wiederaufbau</td>
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<td>MAFWM</td>
<td>Ministry for Agriculture, Forestry and Water Management</td>
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<td>MAP</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MEA</td>
<td>multilateral environmental agreements</td>
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<td>MEPPP</td>
<td>Ministry for Environmental Protection and Physical Planning</td>
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<td>MHLSW</td>
<td>Ministry of Health, Labour and Social Welfare</td>
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<td>MONSTAT</td>
<td>Statistical Office of Montenegro</td>
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<td>MoU</td>
<td>memorandum of understanding</td>
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<td>MSSD</td>
<td>Mediterranean Strategy for Sustainable Development</td>
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<td>MTE</td>
<td>Ministry of Tourism and Environment</td>
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<td>NAP</td>
<td>National Action Plan</td>
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<td>NATO</td>
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<td>NCSD</td>
<td>National Council for Sustainable Development</td>
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<td>NCPP</td>
<td>Monitoring and Evaluation of the Long-range Transmission of Air Pollutants</td>
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<td>NDA</td>
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<td>NEAP</td>
<td>National Environmental Action Plan</td>
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<td>non-governmental organisation</td>
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<td>Particularly Sensitive Sea Area</td>
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<td>strategic environmental assessment</td>
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<td>SEE</td>
<td>South East European</td>
</tr>
<tr>
<td>SERIEE</td>
<td>European System for the Collection of Economic Information on the Environment</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNCCD</td>
<td>United Nations Convention to Combat Desertification</td>
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<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
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<td>UNEP</td>
<td>United Nations Environmental Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>UNWTO</td>
<td>United Nations World Tourism Organization</td>
</tr>
<tr>
<td>ViK</td>
<td>Vodovod i Kanalizacija</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------</td>
</tr>
<tr>
<td>GWh</td>
<td>gigawatt-hour</td>
</tr>
<tr>
<td>ha</td>
<td>hectare</td>
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<tr>
<td>kg</td>
<td>kilogram</td>
</tr>
<tr>
<td>km</td>
<td>kilometre</td>
</tr>
<tr>
<td>koe</td>
<td>kilogram oil equivalent</td>
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<tr>
<td>KWh</td>
<td>kilowatt-hour</td>
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<td>m</td>
<td>metre</td>
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<tr>
<td>ppm</td>
<td>parts per million</td>
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<tr>
<td>TJ</td>
<td>Terrajoule</td>
</tr>
<tr>
<td>TWh</td>
<td>terawatt-hour</td>
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CURRENCY

Monetary unit: Euro (abbreviation €)

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<td>0.804</td>
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<td>2006</td>
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*Note*: From 2000 to 2002 Montenegro's national currency was Deutsche Mark - since then Euro.
EXECUTIVE SUMMARY

The first Environmental Performance Review (EPR) of Yugoslavia carried out in 2002 included the review of Montenegro, as at that time it was a constituent part of the country. In 2003 the Federation of Yugoslavia was restructured into a looser federation, the State Union of Serbia and Montenegro, based on the equality of the two member states. In May 2006, by referendum, the people of Montenegro decided that their country should become sovereign. Montenegro proclaimed its independence on 3 June 2006. The second EPR of Montenegro was carried out in 2006 after the country gained its sovereignty. This second review intends to measure the progress made by Montenegro both in managing its environment since the 2002 EPR, and in addressing the coming environmental challenges.

OVERALL CONTEXT

Montenegro, which declared itself an Ecological Country in its constitution of 1992, has experienced robust economic growth since 2002 with a 4 to 5 per cent GDP increase yearly, and is striving to harmonize its rules with those of the European Union (EU) in view of a possible accession.

However, there are serious drawbacks developing in the environmental situation of the country. Water is overused compared to the available resources, and the supply system is experiencing acute problems including summer shortages. Wastewater is discharged without treatment, a serious problem in the coastal region where untreated effluents are released into the sea. Only 60 per cent of all municipal solid waste was collected in 2004. Montenegro has also some severe air pollution hot spots, in particular a large aluminium plant in Podgorica and an important ironworks in Nikšić. At present, Montenegro is privatizing its main industrial assets in the absence of a strong policy to ensure a clean environment, and is encouraging the rapid development of coastal tourism. Its energy efficiency is ranked among the lowest ten countries in the world.

POLICYMAKING, PLANNING AND IMPLEMENTATION

The decision-making framework and its implementation

Montenegro has made significant progress in the harmonization of its legislation towards EU environmental legislation. Sophisticated laws were passed in 2005 on: integrated pollution prevention and control (IPPC); strategic environmental impact assessment (SEA); environmental impact assessment (EIA); noise; and waste. Other laws are in draft including: an environmental fund; air protection; ionizing radiation and radiation safety; chemicals; and water. The 1996 Law on Environment is being revised. However, the general lack of implementation of laws is of great concern.

The strategic framework, almost non-existent in 2002, has been considerably strengthened with adoption of an Agenda of Economic Reforms 2002–2007, the Poverty Reduction Strategy, and a series of more specific strategies to improve the management of coastal zones, mountainous zones, waste, wastewaters, noise, etc. The National Strategy for Sustainable Development has been adopted in March 2007. But, these strategies are not harmonized with each other and do not contain reporting obligations on their implementation. Moreover, environmental priorities drawn up by the Government are not clearly set out and examples of action taken to implement these strategies are still scarce.

Capacity for implementing laws and strategies is clearly underdeveloped. The environmental administration is too understaffed to cope with all the tasks caused by the new legislation and strategic framework, let alone undertake complex reforms. The creation of the Environmental Protection Agency (EPA) in 2007 would greatly alleviate the problem. Still, capacity and competences are also lacking at local level. The implementation of the new laws on EIA, SEA and IPPC in 2008 should bring about decentralization of competences to municipal level. Municipalities will also have to develop services to deal with the installations for waste and wastewater management set out in the master plans, tasks they are unable to execute at the moment.
Environmental enforcement is definitely a weakness. It suffers from a deficit in environmental monitoring and reporting, the absence of a polluter register, a fragmented system of permitting, scattered inspection responsibilities, and inefficient inspection practices. Moreover, environmental matters are evidently of little concern to the judicial system as it does not give feedback to the environmental inspectorate on cases prosecuted. There are no sanctions for environmental violations, which explain the little care that regulated entities pay to environmental protection. This is particularly evident in the management of the coastal zone where pressure to develop tourist activities is rising rapidly. In addition, the ongoing privatization process, not being subject at present to any legal environmental constraints, is causing deep concern in respect of big polluting enterprises.

Information, public participation and education

The establishment of the Environmental Protection Agency should strengthen and rationalize environmental monitoring in the medium term. There is no national programme of integrated environmental monitoring yet, although several monitoring institutions do perform measurements and produce data. Since 2001, monitoring tasks have been allocated yearly on tender to these institutions, even though some of them are not accredited and not all meet EU quality standards. The raw data are transmitted to the Ministry, but it does not have the capacity to process them any further. Therefore, at the moment these data are not used to underpin environmental management.

Since 2002, environmental discipline has been incorporated at all levels of education from primary school to university. International assistance is very active on environmental education. Montenegro needs to keep up the momentum and to train regularly teachers on environment and sustainable development issues. The ecological behaviour of the population will be important for the concept of “Ecological Montenegro”. However, informal education is broadly underdeveloped with at present only a few institutional awareness campaigns in the coastal zone against waste dumping. NGOs are not being active enough on this issue.

A number of new laws have strengthened the role of the public in environmental decision-making. A significant example of influence on decision-making has been the dam construction project on the Tara River, located in a protected area, a proposal that was withdrawn under public pressure in 2005. In spite of this, further progress is needed on setting out procedures for public involvement based on clear and transparent criteria. For instance, such procedures that should have been established under the EIA, SEA and IPPC processes are not yet approved nor implemented. The practice of public debates and hearings has increased, but their outcomes are rarely taken into account and access to justice is discouragingly complicated. Montenegro is not a party to the Aarhus Convention on Access to Information, Public Participation in Decision-making, and Access to Justice.

International agreements and commitments

Since its independence, Montenegro has maintained a strategic objective to integrate with the European Union… This long-term objective must be reached through the harmonization of its legislation, with 145 documents in the area of environmental protection. The country is benefiting from assistance from the EU; although in many cases, because the country is not clearly defining its priorities, the projects are donor-driven.

…and is striving to become a party to those international treaties and agreements to which the Federation was formerly a party, including multilateral environmental agreements (MEAs). Montenegro is actively preparing the legislative basis needed for implementing the MEAs and for integrating with the EU. But the implementation step will be more problematic because the structure and capacity of the Ministry is not well suited for the effective implementation of the MEAs and technical assistance projects. At the time of the mission the country did not have focal points for most of the MEAs.

The country is attracting significant donor assistance for environmental projects at national and local levels. A number of countries are expressing interest in assisting on a wide array of projects. A stumbling block is the lack of information on development assistance and an absence of clear priorities for international cooperation in environmental protection. Donor countries and international institutions struggle to find out for themselves on what projects they can best focus their support to be of real value for the country. This is counter-productive to
a smooth and efficient use of foreign assistance. The capacity of the environmental authorities to deal effectively with development assistance is not enough to turn the numerous proposals from donors into concrete projects.

**MOBILIZING FINANCIAL RESOURCES FOR THE ENVIRONMENT**

*Economic instruments*

*The use of economic instruments for environmental objectives is still underdeveloped.* There are no comprehensive statistics on the revenues from environmental taxes and charges. Although legally prescribed, very few pollution charges are collected. When they are, they do not adequately reflect the polluter- or user-pays principles. They generate moderate revenues but do not provide adequate incentives to improve behaviours towards an increased care of the environment. In short, sanctions are neither credible nor effective.

*...and a more stringent and intensive use of combined economic and regulatory instruments is urgently needed in many sectors.* Transport-related air pollution is of concern as no measures have been taken to reduce dependence on the obsolete vehicle fleet and low-quality petrol. Charges on waste, water and wastewater are too low to curb waste generation and reduce water consumption. There are no effective incentives targeting resource-consuming and polluting industries. The extent to which the industrial sector is equipped with pollution abatement equipment is not known, nor whether it is containing its impact on the environment or if it is investing in environmental protection. Cleaner technology in industry and energy sectors is not promoted, nor are there any economic incentives to boost the introduction of best available techniques (BAT).

*Environmental expenditures and their financing*

*There has been no significant increase in public sector environmental expenditure in recent years.* Total expenditure corresponds to only 0.2 per cent of GDP. An environmental fund, which is expected to become operational during 2007, will bring an additional estimated 0.05 to 0.1 per cent of GDP. In spite of this extra revenue, funds will still be limited. For a long time public environmental funds have not been spent on clear priorities and their cost-effectiveness has not been proven. In consequence, the criteria for allocation of funds to different projects and regions are not transparent. Montenegro should improve its practices and work on the basis of prioritized and results-oriented operational programmes. A cost-benefit analysis of proposed major projects should be carried out. These practices should also be applied to the spending of the newly-established environmental fund.

*There is no reporting system for environmental protection expenditure and revenue.* Expenditure on environmental measures by the private sector is simply unknown. There is a need for a coherent and comprehensive information and reporting system for this, and for revenues relating to the environment covering the public sector, business sector and private households.

**INTEGRATION OF ENVIRONMENTAL CONCERNS IN ECONOMIC SECTORS, AND PROMOTION OF SUSTAINABLE DEVELOPMENT**

*Tourism and environment*

*Montenegro has a strong potential for a future in tourism,* with many high quality and interesting features and locations. Recent investment is giving the tourism economy a strong boost, in particular along the coast. The coastal zone has begun to improve its infrastructure in water supply and wastewater collection. In sustainable tourism, there is steady growth to be seen in the central and north regions especially, thanks in part to the actions of the strengthened NGO sector. The improved offering in trend market like health and wellness, nature and adventure tourism is expected to extend the tourist season, to integrate more the entire hinterland and to balance the tourist turnover.

*Unfortunately, the increasing dynamism of this economic sector is leading to uncontrolled development.* In the coastal zone pressures on nature and the landscape continue to increase, mostly due to the lack of land use planning. A spatial planning system has been developed with specific zonal plans and management strategies, but municipalities are not implementing it. Uncontrolled and illegal building is taking place along the beaches
and even in protected areas, but the inspection administration is too weak to exercise control through building permits. In the mountain region nature is also under threat. Tourist infrastructure needs to be developed there, but current projects for several large ski areas are not complying with sustainable tourism principles. The National Strategy for Sustainable Development contains priorities regarding sustainable tourism, and the Strategic Environmental Assessment and Environmental Impact Assessment laws are both powerful tools to contain tourism pressures, but none of them will be enforceable before 2008.

Protected areas are also under threat from tourism pressure. In principle, national parks are suitable places for sustainable tourism. In Montenegro, management plans for the four national parks and other protected assets have been mooted, but never realized. This requires expert advice, professional management and sufficient staff resources for all types of protected areas, but none of these are sufficiently available in Montenegro today. As a result, there are no eco-standards for tourist premises and nature protection rules are frequently violated.

A series of recommendations for the development of sustainable tourism were addressed to Montenegro in the first Environmental Performance Review (EPR) in 2002, but have not been implemented. Although they are still relevant, the context has changed since then and pressures have increased greatly. The Government should reform its approach as a matter of urgency and put into practice these recommendations.

Energy and environment

Seventy-five per cent of electricity produced in Montenegro is renewable, and is generated from large hydropower plants... Most remaining power is produced by burning lignite in a single power plant that has no pollution abatement technology. The balance is imported. An energy policy was produced in 2005. It contains the modest objective to expand by only 2 per cent the share of renewable energy, but in Montenegro wind, biomass and small hydropower plants have the capability to replace all imported electricity. There is a need for a strategy on renewable energy with proposals for a mix of various technologies adapted to local circumstances.

...but energy efficiency is particularly low. Just two big industrial plants consume half of the total available electricity, the rest being consumed by domestic heating and appliances. First, losses along the transmission and distribution network are higher than average. Second, electricity prices for households are significantly below market levels and the collection rate is low. And last, households’ electricity consumption is mostly used for heating and cooling, and large savings could be expected from improved insulation of residential buildings and a shift to renewable energy use. An Energy Efficiency Strategy was adopted in 2005, but no action on it has been taken so far. There is a great untapped potential to save energy in the residential and business sectors. Economic instruments are not pushing toward sustainable production and use of energy in Montenegro.
INTRODUCTION

I.1 Physical context

The newly sovereign (2006) Republic of Montenegro is located in south-eastern Europe. It has a common border with Croatia to the west (border length 14 km), Bosnia and Herzegovina to the northwest (border length 225 km), Serbia to the northeast (border length 203 km) and Albania to the southeast (border length 172 km). Montenegro also has 293 km of Adriatic Sea coastline with 52 km of beaches.

Although Montenegro’s land area (13,812 km²) is small, the country has four distinctive geographical climatic zones. The coastal area is a narrow, two-to-ten kilometre wide strip of land with a Mediterranean climate. The average July temperature at the coastal area is between 23.4ºC and 25.6ºC. Summers are usually long and dry, winters short and mild.

The coastal area is separated from the inland by the high Dinaric limestone mountain range (the Rumija, Sutorman, Orjen, and Lovćen peaks). While plants and animals are scarce, some patches of fertile land can be found in karst depressions called polja. This area is actually one of the rainiest in Europe, but the porous, easily draining limestone prevents surface water build up.

Inland, just behind the mountains, is the Central Montenegrin depression. This fertile Zeta plain, with an average altitude of between 40 m and 500 m, with the Zeta River valley and the Nikšić plain are the only plain areas in Montenegro (comprising the Skadar Lake (area 369.7 km²) and the Skadar Lake National Park). The area’s population density is high and the two largest cities: the capital Podgorica (pop. 169,132) and Nikšić (pop. 75,282) are located there.

Hot air spreads to Podgorica along the Bojana River valley, making it the warmest city in Montenegro, and one of the warmest in the Balkans. The average July temperature in Podgorica is 27.5ºC and in Danilovgrad 25.4ºC, but maximum temperatures can reach 40ºC. The average January temperatures are around 5ºC, with a minimum of -10ºC.

The fourth main geographical zone is the high mountain area in northern Montenegro. From the plateau of 1,700 metres altitude rise vast mountain ranges and ridges of over 2,000 metres. Bobotov Peak in the Durmitor Mountains is Montenegro's highest elevation point at 2,523 meters. The mountains have rich pasturelands, forests and 28 mountain lakes. Two national parks – Biogradska Gora (5,650 ha) and Durmitor (39,000 ha) are situated in these mountains. The high mountain climate is typically subalpine with cold, snowy winters and moderate summers.

Major agricultural crops include cereals, tobacco, vegetables and fruits. The main industries are aluminium smelting, lumber milling, salt and tobacco processing.

Figure I.1: Land use

The country has five main rivers: Lim (123 km in Montenegro), Piva (78 km), Tara (141 km), Morača (99 km), and Ćehotina (100 km) and 40 lakes. About 80 per cent of the territory is covered with forests, natural pasturelands and meadows.

I.2 Human context

In the 2003 census, Montenegro’s total permanent population was 620,145. Current estimates are somewhere around 630,000. The 2003 census showed that there has been a substantial change in the ethnic structure of the population since 1991. The number of people describing themselves as Montenegrin fell by 107,000 between 1991 and 2003 to 267,669 (43.16 per cent of the total population), and the number of those identifying themselves as ethnic Serbs rose from 57,000 to 198,414 (31.99 per cent). Other ethnic groups include Bosniaks: 48,184 (7.77 per cent), Albanians: 31,163 (5.03 per cent), Muslims by nationality: 24,625 (3.97 per cent), Croats: 6,811 (1.1 per cent) and ten other small ethnic groups.
As of 2003, 63.5 per cent of the population speak Serbian as their mother tongue, while almost 22 per cent have Montenegrin as their mother tongue.

According to 2003 census, 74.2 per cent of Montenegrins are Orthodox Christians, 17.7 per cent Sunni Muslims, and 3.5 per cent of the population belong to the Roman Catholic Church.

The Balkan wars caused huge population movement across the whole ex-Yugoslav area. As a consequence, Montenegro has more than 8,000 mainly Bosnian and Croatian refugees and nearly 18,000 internally displaced persons (IDPs) from Kosovo. The IDPs are mainly ethnic Serbian or members of the Roma community and are in need of continuing assistance and protection, especially those displaced from neighbouring Kosovo.

The UNDP estimates that the poverty rate (the number of people on an income of approximately US$5 per day) is about 12 per cent and a large section of that percentage comprises Roma and IDPs. In addition, some 30 per cent of the population is economically vulnerable. The poverty distribution is unbalanced and regionally clustered. Measured by the Gini coefficient (0.29), Montenegro as a whole is among the most unequal of the countries in the West Balkans. Almost half (45 per cent) of the poor are living in the north of the country where the poverty rate is almost twice as high as the national average.

1 The Gini coefficient is a measure of inequality of an income distribution. Coefficient 0 corresponds to perfect income equality (i.e. everyone has the same income) and coefficient 1 corresponds to perfect income inequality (i.e. one person has all the income, while everyone else has zero income).

I.3 Economic context, main sectors of activities and their impact on the environment

Montenegro was already separated economically from the State Union of Serbia and Montenegro in 1998 when it stopped transferring collected taxes to the federal budget and did not receive a federal contribution towards its pension funds. In 1999 Montenegro began to use the Deutsche mark as a parallel currency with the Yugoslavian Dinar. This parallel currency system came to an end in 2000 when the Deutsche mark was made the official currency of the country. When the European Union adopted the Euro in 2002, Montenegro also changed its official currency to euros, although Montenegro is not officially part of the Eurozone.

Since 1997 Montenegro’s economic reform programme has had two main components: macroeconomic stabilization and market-oriented structural reforms. The adoption of the Euro was crucial for economic stabilization while fiscal reforms for improved revenue collection helped to cut the budget deficit to 3 per cent of gross domestic product (GDP) in 2004. Foreign trade has been significantly liberalized, and former publicly-owned capital assets have been privatized with rapid speed. GDP growth has been steady but not spectacular and growth is still relatively low compared to the sub-region.

The Montenegrin economy is oriented towards services, including tourism, and specializes in the manufacture of a few products, notably aluminium. Power generation, mining and metal processing account for around 70 per cent of industrial output. Other industries include wood, textiles, and food processing and manufacturing. The agricultural sector’s share of GDP is insignificant.
Aluminium is produced in one production plant, the Kombinat Aluminium Podgorica (KAP), situated ten kilometres from the capital Podgorica. Aluminium is the main industrial export product bringing in half of the country’s total export income. The production of aluminium is very energy intensive and accounts for about 50 per cent of the country’s electricity consumption. KAP is Montenegro’s most serious environmental hot spot, contaminating not only the air but also ground and surface water resources and hence endangering the health of nearby communities and biodiversity in the Skadar Lake watershed.

Montenegro’s mining industry is centred on two mines, the Pljevlja coal mine and Nikšić red bauxite mine. Pljevlja coal mine produces about 80 per cent of the country’s coal and sells 90 per cent of its annual 1.5 million ton total brown lignite coal production to the Thermo Power Plant Pljevlja. Annually, Nikšić mine produces 750,000 tons of red bauxite: strategically important aluminium ore that is used in aluminium production in KAP. In addition to being the home of the mine, Nikšić is also an important industrial centre with a major steelworks.

The GDP in United States dollar terms has grown since 2002 and average GDP per capita has more than doubled between 2000 and 2005, increasing by 112 per cent. During the same period, inflation decreased from an annual 24.8 per cent to a low 1.8 per cent, while external debt’s share of GDP diminished from 69.4 per cent to 41.6 per cent. Unfortunately, while there has been an otherwise good economic performance the unemployment rate has not diminished, and according to the CIA (Central Intelligence Agency) World Factbook, it stood at 27.7 per cent in 2005.

The tourism industry, which is economically very important, went into a decline in the late 1980s, and the war in the 1990’s combined with international sanctions hastened the downfall. The number of foreign tourists visiting Serbia and Montenegro fell from a peak of about 1.3 million visitors in 1988 to just 152,000 in 1999, the year in which NATO (North Atlantic Treaty Organisation) bombed Serbia. Since 2000, Montenegro’s tourism industry has been regaining the lost business and has reached former levels. The rebuilding and modernization of the tourism industry is crucial to the Montenegrin economy. Its increasing activity, however, will bring serious environmental effects (see Chapter 6).

Energy is not used very efficiently. Montenegro has a very high energy consumption rate compared with countries with similar Gross National Income (GNI) levels. Energy productivity is also low. The GDP generated per unit of energy in 2002 was 1.29 US$/koe while the average for the other South Eastern European transition countries was almost three times higher (3.71 US$/koe). The main causes for this low energy efficiency are the bad insulation of buildings, the widespread use of electricity for heating and cooling, the low production efficiency of power plants using lignite and high power transmission losses. The main industrial electricity consumer is KAP, which consumes 45 to 50 per cent of country’s total electricity (see chapter 7).

Figure I.2: GDP by sector in 2000, 2003 and 2005 (percentage of total GDP)

The privatization of the Montenegrin economy is well underway. Several important privatization projects in the oil, steel and telecommunication industries have already been finalized. In October 2002 the Government sold a 54.4 per cent stake in oil products company Jugopetrol to Hellenic Petroleum (Greece) for €65 million. In mid-2004 the Government sold the State’s 58 per cent stake in the Nikšić steelworks to Midland Resources Holding (UK). In March 2005 the Government sold the State’s 51 per cent stake in the fixed-line telecommunication monopoly, Telekom Montenegro, to Hungarian Matav. Since then Matav has raised its stake to more than 76 per cent and intends eventually to take over Telekom Montenegro fully.

In April 2005 the Government agreed to sell KAP, the largest company in the country, to Russian metals producer Rusal. The Government has also issued several tenders in banking, power generation and tourism industries. In 2005, tenders were issued for the sale of: a 64.3 per cent stake in Podgoricka Banka (the third-largest bank in the country), the Pljevlja power plant and coalmine, and several hotels. It was estimated that the expected revenue for 2005 would reach €300 million, double the cabinet’s initial projection, but actual revenue figures are not known.

The state-owned Electricity generation monopoly EPCG is also being prepared for privatisation.

The current estimation is that about 65 to 80 per cent of state owned companies have been sold off, and only 25 per cent of banking assets remain in state or social ownership.

### 1.4 Institutions

The current Constitution was approved in 1992 while Montenegro was still part of the Federal Republic of Yugoslavia. It established Montenegro as a democratic sovereign state, with Serbian as its official language. Power is vested in the citizens, who directly elect representatives to the Parliament. Decisions related to changes in constitutional status or to an alteration of borders are subject to a referendum. There was a referendum on 21 May 2006 when over 55 per cent of Montenegrins voted for independence and separation from the State Union of Serbia and Montenegro. After the referendum, on 3 June the Parliament of Montenegro declared Montenegro independent and Montenegro became the 192nd member state of the United Nations. The new constitution is expected to be approved by the Parliament in spring or summer of 2007.

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**Table I.2: Selected economic indicators, 2000-2005**

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<td>GDP in current prices (million national currency)</td>
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<td>GDP per capita (US$ PPP per capita)</td>
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<tr>
<td>Share of agriculture in GDP (%)</td>
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<td>Industrial output (2000 = 100)</td>
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<td>100.0</td>
<td>102.0</td>
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<td>Agricultural output (% change over previous year)</td>
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<td>Labour productivity in industry (% change over previous year)</td>
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<td>CPI (% change over the preceding year, annual average)</td>
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<td>28.0</td>
<td>9.4</td>
<td>6.7</td>
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<td>Registered unemployment (% of labour force)</td>
<td>37.0</td>
<td>37.0</td>
<td>..</td>
<td>25.8</td>
<td>22.2</td>
<td>..</td>
</tr>
<tr>
<td>Balance of trade in goods (million US$)</td>
<td>193.2</td>
<td>351.4</td>
<td>487.4</td>
<td>430.4</td>
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<tr>
<td>Current account balance (million US$)</td>
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<tr>
<td>Current account balance (as % of GDP)</td>
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<tr>
<td>Net FDI inflows (million US$)</td>
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<td>Net FDI flows (as % of GDP)</td>
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<tr>
<td>Cumulative FDI (million US$)</td>
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<td>Foreign exchange reserves (million US$)</td>
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<td>Foreign exchange reserves (as months of imports)</td>
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<td>Total net external debt (million US$)</td>
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<tr>
<td>Exports of goods (million US$)</td>
<td>161.3</td>
<td>178.0</td>
<td>194.2</td>
<td>171.3</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Imports of goods (million US$)</td>
<td>354.5</td>
<td>529.4</td>
<td>681.6</td>
<td>601.7</td>
<td>..</td>
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<tr>
<td>Ratio of net debt to exports (%)</td>
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<tr>
<td>Ratio of net debt to GDP (%)</td>
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<td>Exchange rates: annual averages (National currency/ US$)</td>
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<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
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<tr>
<td>Population (1000)</td>
<td>654,274</td>
<td>658,223</td>
<td>617,511</td>
<td>619,300</td>
<td>621,258</td>
<td>622,978</td>
</tr>
</tbody>
</table>

*Source: Statistical Yearbook 2005 and direct communications.*
Table I.3: Ministries, as designated in 2007

<table>
<thead>
<tr>
<th>Ministry of Transport, Maritime Affairs and Telecommunication</th>
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</thead>
<tbody>
<tr>
<td>Ministry of Tourism and Environment</td>
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<tr>
<td>Ministry of Finance</td>
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<tr>
<td>Ministry of Foreign Affairs</td>
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<tr>
<td>Ministry of Culture, Sports and Media</td>
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<tr>
<td>Ministry of Defense</td>
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<tr>
<td>Ministry of Agriculture, Forestry and Water Management</td>
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<tr>
<td>Ministry of Justice</td>
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<tr>
<td>Ministry of Education and Science</td>
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<tr>
<td>Ministry of Interior Affairs and Public Administration</td>
</tr>
<tr>
<td>Ministry for Economic Development</td>
</tr>
<tr>
<td>Ministry for Human and Minority Rights Protection</td>
</tr>
<tr>
<td>Ministry of Health, Labor and Social Welfare</td>
</tr>
</tbody>
</table>


The President is elected by a popular vote for a five-year term and can serve two terms in office. He/she can promulgate laws by ordinance, call elections for the National Assembly, propose to the Assembly candidates for the Prime Minister, President and judiciary of the Constitutional Court and can call for a referendum. The President is also a member of the Supreme Defence Council.

The Government, headed by the Prime Minister, is the executive branch of state authority. The Prime Minister submits to the Parliament the Government’s programme including a list of proposed ministers (13 as of May 2007 see Table I.3). The resignation of the Prime Minister causes the fall of the Government. The Government formulates and conducts foreign policy, adopts decrees and other regulations, implements laws, concludes international treaties and performs other duties as laid down in the Constitution.

The Parliament has 81 seats. It passes laws, ratifies international treaties, adopts the budget, and appoints the Prime Minister, ministers, and judges of all courts. The Parliament can pass a vote of non-confidence on the Government by a majority of the deputies.

In local government Montenegro is divided into 21 municipalities and two urban municipalities that are subdivisions of the Podgorica municipality.

I.5 Environmental concerns

Water

There are serious problems with the water distribution system. Compared with the resources available, water consumption levels are too high, especially during the summer when water resources are limited. This water shortage is exacerbated by the poor condition of the water distribution network, which loses about half of the drinking water before it reaches the consumers – over 90 per cent of households have access to tapped water. There is also a problem with cost recovery: only around 70 per cent of users pay for their consumption of drinking water. The municipality-run water management enterprises are unable to cope with these problems.

Wastewater discharges to the water bodies is another serious and overlooked problem. In the coastal region only 56 per cent of the population is connected to the sewerage network. The effluents are either discharged into the sea untreated or they infiltrate into the ground from leaking network pipes. Out of the 89 pipes leading the wastewater to the sea, only 11 have their dispersion point farther than the legally prescribed 1,000-metre distance away from the seashore. Six out of 26 sewage pumping stations are in dire need of renovation. The country has only two water treatment plants of which only the one in Podgorica is functioning. The Nikšić plant has been inoperative for years. Elsewhere in the country municipalities pump their wastewater either into streams and rivers or infiltrate it into the ground through sumps.

Air

Montenegro has some air pollution hot spots in industrial areas, particularly the nearby KAP and the ironworks in Nikšić. In these areas, sulphur dioxide and particulate matters exceed the national air quality standards by a large degree, which has led to a higher-than-average incidence of respiratory problems for the population.

The energy sector is also emitting CO, sulphur oxide and ash emissions exceeding the permitted standards
in a few municipalities. A main emitter is the Pljevlja coal-fired power plant, located three kilometers from the city centre, which burns lignite from the Pljevlja open pit. This lignite has a significant sulphur content, high moisture and low calorific value.

There is no district heating system in Montenegro’s cities. During the winter emissions from high-sulphur-content heating oil generated from individual domestic heating equipment pose a major air quality problem in cities. Another major source of air pollution is the use of leaded gasoline and high-sulphur diesel for vehicles.

**Waste**

Industrial and municipal wastes are disposed of in the many landfills or dumps scattered throughout the country. It is estimated that in 2004 about 85 per cent of solid waste in major towns was collected by a regular service, compared with only 15 per cent in rural areas. On average, only about 60 per cent of all municipal waste was collected in 2004.

There is almost no recycling and only 1 per cent of all waste was recycled in 2004. There is no deposit system for Polyethylene Terephthalate (PET) bottles and packaging material. Waste collection equipment is largely obsolete (75 per cent of equipment is more than ten years’ old).

A *National Strategic Master Plan for Solid Waste Management* was adopted in 2005.

**Biodiversity**

The four different climatic zones in Montenegro combined with its diverse relief features support a significant level of natural biodiversity. However, according to Conservation International, Montenegro is a biodiversity hotspot with a multitude of biodiversity threats. The principal reasons for the decline in biodiversity fall into a few broad categories: habitat degradation, illegal use of natural resources or poaching, and pollution.

The country strives to protect its natural heritage. It has created four national parks and has protected several important natural areas, many of them listed in the international conventions or protected by international agreements. Six to 7 per cent of its territory is protected, with the objective of reaching 10 per cent by 2015. For instance, Skadar Lake is one of the most important wintering areas for the waterfowl in Europe. The wetland system with endemic reptiles and hundreds of different algae types is a designated RAMSAR site. The Tara-river basin belongs to the UNESCO Biosphere Reserve and the Durmitor National Park, one of the biodiversity centres of the Balkans, is a World Natural Heritage site. Due to lack of financing, there is no biodiversity inventory or monitoring, and therefore no red books on flora and fauna, an issue of concern that was already pointed out in the first Environmental Performance Review in 2002.

Outside of these protected zones, the pressures on the environment are diverse and serious. Mountain habitats are suffering from overgrazing, illegal logging and uncontrolled clear-cutting, as well as the development of tourist, transportation and water infrastructure. Coastal areas are losing habitats and species due to eutrophication and problems caused by the rapid growth of the tourism industry. The unregulated, and sometimes illegal, fishing and hunting is causing significant damage to the animal populations. Pressure on biodiversity caused by pollution is centred on some hotspots such as gravel mining in the Moraca River, and wastewater from KAP and the Nikšić steelworks.
Map I.1: Map of Montenegro

Note: The boundaries and names shown in this map do not imply official endorsement or acceptance by the United Nations.
PART I: POLICYMAKING, PLANNING AND IMPLEMENTATION
1.1 Institutional capacity and setting

National level

Since the first Environmental Performance Review (EPR) in 2002, the status of Montenegro has changed twice: in 2002, when the Federal Republic of Yugoslavia was transformed into the State Union of Serbia and Montenegro, and in 2006, when the Union ended and the independence of the Republic of Montenegro was declared. As a result of these substantial changes the appropriate institutions were modified, including those dealing with environmental protection.

Until November 2006, the Ministry of Environmental Protection and Physical Planning (MEPPP) had main responsibility for environmental issues. It was the authority responsible for the environment during the first EPR. Its main tasks were performed by the Sector for Environmental Protection, one of the Ministry’s five functional sectors. The MEPPP’s main duty was to develop national strategies, policies, laws and standards for environmental protection. Administrative activities included:

- Protection of air, climate and ozone layer;
- Sustainable use of natural resources;
- Protection of nature and biodiversity;
- Protection of marine life;
- Management of hazardous waste;
- Protection against radioactive substances, and non-ionizing and ionizing radiation (except for medical purposes);
- Performance of strategic environmental assessments (SEA), environmental impact assessments (EIA), and integrated pollution prevention and control (IPPC);
- Use of economic instruments in environmental protection and eco-management;
- Development of environmental standards, environmental monitoring and the environmental information system;
- Creation of a polluter register;
- Designing and executing environmentally-oriented reclamation programmes and projects;
- Coordination of water supply;
- Management of environmentally-protected areas including those at the coast; and
- International cooperation on environment.

The Sector for Environmental Protection within the Ministry was responsible for supervising the following public enterprises:

- The Centre for Ecotoxicological Research (CETR), responsible for monitoring air, water, soil, waste, radiation and food;
- Hydrometeorological Institute (Hydromet), responsible for performing air quality monitoring, as well as surface and underground water quality monitoring; and
- National Parks of Montenegro, responsible for the management of national parks.

In November 2006, the Ministry had 90 employees, but only 15 of them were working in the Sector for Environmental Protection (there were 20 members of staff in 2002). Although official job descriptions had been developed, because of a restricted number of staff the employees within the Sector had to work on a flexible basis, cover a broad range of responsibilities, and be able to substitute other persons if necessary. This situation resulted in the activities of the Sector for Environmental Protection being concentrated mainly on top priority issues dealing with European Union (EU) accession – developing strategic documents and action plans, and drafting new legislation harmonized with the EU acquis communautaire. Training was delivered mostly on an ad hoc basis as a part of individual projects of international cooperation to obtain the knowledge necessary for the implementation of legislation important from an international cooperation and EU accession perspective.

Other environmentally-relevant activities were covered by other sectors within the Ministry, but without proper and systematic coordination and cooperation with the Sector for Environmental Protection: the Sector for Communal and Housing Matters performed the supervision of the Public Enterprise for Water Supply, Wastewater and Solid Waste, the Sector for Urban Planning and
Construction supervised the Chamber of Engineers, the Seismological Institute, the Directorate for Public Works and the public enterprise Coastal Zone Management.

On 10 November 2006, a new government structure was approved by the Parliament. A newly established Ministry of Tourism and Environment (MTE) became responsible for environmental matters. The former sectors for Environmental Protection and for Communal Infrastructure and Housing Policy were restructured (see Box 1.1) into four departments responsible for: air and radiation; control of industrial pollution, waste and wastewater management; nature protection, EIA, SEA and IPPC; and integration of strategic processes on environment. A unit within the MTE deals with EU integration. The four lawyers from the former Sector of Environmental protection and the former Environmental Inspectorate of four environmental inspectors have been included in the Sector of Legislation and Inspection Control within the MTE. Built on the 15 staff from the previous structure, the environment sector is expected to have 25 staff members at full capacity. Thirteen staff members are currently working in the Sector for Environmental Protection (see Figure 1.1).

In spite of the new Government structure, a number of inadequacies that existed previously in the allocation of environmental tasks to different ministries have not been solved. The Sector for Environmental Protection shared some environmentally-important competences with a few other ministries:

- The Ministry of Health, Labour and Social Welfare on toxic substances, drinking water quality, noise and radiation protection in medicine;
- The Ministry of Agriculture, Forestry and Water Management, responsible for forestry, agricultural soils, water protection and use, and genetically modified organisms;
- The Ministry of Internal Affairs and Public Administration on risk assessment and control linked with civil protection;
- The Ministry of Transport, Maritime Affairs and Telecommunications on reduction of pollution emissions from motor vehicles; prevention, readiness and response in case of accidental pollution cases at sea; and marine protection from pollution;
- The Ministry of Culture, Sport and Medias on natural rarities and natural heritage protection; and
- The Ministry for Economic Development on new production technologies, fuel quality and costal zones.

In this context and because of restricted human resources, it is difficult to coordinate the activities performed by various environmentally-relevant inspectorates acting under different ministries.

### Box 1.1: Main tasks* of the Sector for Environmental Protection of the Ministry of Tourism and Environment

- Environmental protection;
- Sustainable use of natural resources;
- Nature conservation, national parks, protected areas and biodiversity;
- Protection of air, climate and ozone layer;
- Protection from harmful effects of ionizing and non-ionizing radiation;
- Protection of soil quality;
- EIA, SEA and IPPC;
- Monitoring of the state of environment and polluter register;
- Environmental economic instruments;
- Waste management;
- Export, import, transit and disposal of hazardous substances, including radioactive substances;
- Coordination of wastewater municipal infrastructure systems;
- Coordination of regional systems for water supply; and
- International cooperation on environment.

*According to the Law on Public Administration (OG RM No. 72/2006)
The EPA would be established with the support of the EU under the project managed by the European Agency for Reconstruction (EAR). The main purpose of the establishment of the EPA is to strictly separate environmental policy and legislation tasks. These legislation tasks would remain with the Ministry of Tourism and Environment. Legal implementation and enforcement of the environmental legislation would be the responsibility of the new Agency and would have direct implications for international environmental cooperation. The EPA mandate would include:

- Environmental permitting and EIA, SEA and IPPC procedures;
- Inspection and enforcement of activities under environmental legislation;
- Collecting and processing environmental monitoring data delivered by authorized institutions, establishing environmental databases, and organizing dissemination of information and public access to it;
- Reporting related to the EU environmental \textit{acquis communautaire}, national requirements in environmental law, and environmental agreements; and
- Publishing State of Environment reports after Government approval and communicating all relevant environmental information to interested stakeholders, including relevant international organizations.

The monitoring programme would be rationalized but the tendering procedure for monitoring would stay as it is (see Chapter 2). The EPA would be responsible for the practical implementation of the integrated approach to environmental issues as required by the EU environmental \textit{acquis communautaire}. Establishing the Agency would have an impact on the current responsibilities of Government bodies and institutions. A capacity of about 50 staff is forecasted for the EPA to be effective in performing its tasks, and to fund its human resources and the equipment needed.
A new model for the environmental protection institutional framework, which was developed in 2006 based on strategic documents, such as the 2003 Agenda of Economic Reforms for 2002 to 2006 and recommendations from different international projects (for example, the 2005 programme Strengthening Capacities of the Ministry of Environmental Protection and Physical Planning to Deal with Problems of Environmental Management and the 2005 to 2006 programme Assistance to the Ministry of Environmental Protection and Physical Planning) has to some extent been taken into account in the current institutional structure. Within this framework, the central government institution (i.e. the Ministry responsible for environmental protection) would be responsible mostly for long-term priority issues, such as developing key national strategic documents and basic instruments for their implementation (i.e. laws, edicts and decrees, economic instruments) that will be harmonized with those used by the European State Members and other international instances, such as international conventions and organizations.

Other responsibilities such as data collecting, analysis and reporting, inspection and enforcement, permitting, and data communication would be put under the Environmental Protection Agency (EPA), the establishment of which is provided for in the draft Law on Environment (OG RM No. 12/1996). An EPA model has been designed under the coordination of the cross-sectoral Advisory Committee and in October 2006 was submitted to the former Government. The proposal describes steps to be taken towards establishing the EPA, including plans for training and capacity building of EPA staff. As of May 2007, the decision to set up an EPA has not been adopted by the Parliament (see Box 1.2).

Local level

At the local level, the municipal environmental offices have expertise on and are in charge of environmental policy. Local governments (municipalities) have much less power regarding environmental policy, although they are not excluded from taking over a significant number of assignments. Some municipalities, such as Budva, Herceg Novi, Kotor, Nikšić, Pljevlja and Podgorica, have an environmental unit or person(s) dealing with environmental issues.

According to the Law on Environment, local authorities shall pass and implement their own environmental protection programmes and plans in compliance with national environmental strategic documents. According to the recently adopted laws, they will be responsible for implementing EIA, SEA and IPPC procedures that are not listed as of national importance, managing municipal waste and implementing protection measures against erosion and noise. Also, the implementation of the new EIA and SEA laws will create a division of competences between the national and local levels. Tasks deriving from municipal competences are fulfilled by municipal bodies and public services based on the 2003 Law on Local Self-Government (OG RM No. 42/2003). However, their capacity to implement laws is very limited, which explains why compliance with environmental legislation is not at a satisfactory level.

Municipalities are expected to use spatial planning as a tool to protect environmentally-valuable areas, and to set conditions for conservation and protection of local natural objects near urban areas. With the exception of the capital city Podgorica, their actual performance is limited by a lack of financial resources, technical facilities and human capacity.

Municipalities also have a specific role to play in environmental reporting: the Law on Environment requires polluters to submit annual State of Environment reports (including a description of their emissions) to the municipality in whose territory they are located; then the municipalities should submit these reports and their own State of Environment report to the Ministry once a year. Self-monitoring is not enforced; only one enterprise owns its self-monitoring system (a brewery located in Nikšić). The reporting from municipalities is badly implemented, and this is one of the reasons why the Ministry responsible for environmental protection has been unable so far to collect data on polluters and, based on this, to establish the polluter register.

Institutional setting to implement sustainable development

In response to the United Nations Millennium Declaration (2000) and the World Summit on Sustainable Development (2002), the National Council for Sustainable Development (NCSD) was founded in 2002. The Council is headed by the Prime Minister and consists of representatives from different ministries and scientific institutions, the business sector and non-governmental organizations (NGOs). The main role of the Council is the implementation of the National Strategy for Sustainable Development (NSSD) and tasks are defined in the document The Developmental
Direction of Montenegro as an Ecological State. The NCSD has to review national strategic documents, development policies and investment programmes to ensure that they are in compliance with the principles of sustainable development defined in the NSSD and to assess the level of coherence with its goals and objectives. With the aim of making other programmes coherent with the NSSD, in 2006 the NCSD reviewed a draft programme for sustainable tourism development in central and northern parts of Montenegro (see Chapter 6), a forestry policy and programme, and a programme on organic agriculture. This was a step forward, but more time and effort are needed to make this debate less formal and to encourage all members of the NCSD to use this opportunity to address a potential conflict of interest and to harmonize instruments with the NSSD so that they can be implemented.

To deal with sustainable development tasks and to back up the functioning of the NCSD, the Office for Sustainable Development (OSD) was established by the Government in January 2006 as a result of a joint project with the United Nations Development Programme (UNDP) and the Open Society Foundation Institute. The main mission of the OSD is to:

- Coordinate the implementation of the NSSD;
- Raise the profile of sustainable development on the political agenda;
- Enhance participation of the civil society and other stakeholders in policy making and implementation within the context of sustainable development; and
- Facilitate cooperation with the international community on the programmes and projects in support of the sustainable development of the Ecological State of Montenegro.

Besides serving as a secretariat body to the NCSD, the OSD has created the Inter-ministerial Working Group for Sustainable Development. NGO representation is not well defined in the Decision that led to the establishment of the NCSD. The OSD created the Forum of NGOs, which elects NGO representatives to participate in the NCSD. In order to raise awareness of sustainable development concepts within the country, the OSD trains journalists in these concepts. In support of the preparation of the NSSD, the OSD has organized meetings and seminars to set priorities to be addressed by the NSSD.

The OSD has close links with the other ministries. After more than one year of functioning, the role of OSD has been positive, in particular regarding communication and awareness-raising. Yet, despite significant effort, the OSD has not succeeded in creating synergies that would lead to harmonizing sectoral policies. This is due to low awareness of sustainable development goals, weak political will, understaffing, a lack of resources and some working methods (i.e. insufficient attention given to priority setting, establishing realistic targets, and developing operational, transparent and effective procedures).

1.2 Policies, strategies and plans

Since 2002, Montenegro has made significant progress in developing strategic documents and plans, most of them linked with the EU accession. This progress is being made on the basis of the European Partnership Agreement and relevant parts of appropriate European Partnership Implementation Plans.

The 2003 Agenda of Economic Reforms for the period 2002 to 2006 includes a specific section dealing with environmental issues that became the main and most important strategic framework for the activities performed by the MEPPP. The Agenda defines five-year environmental obligations aimed at:

- Establishing a modern system of environmental protection and natural resources management;
- Harmonizing environmental legislation with the relevant EU directives with main emphasis given to horizontal legislation such as EIA, SEA, IPPC;
- Strengthening the institutional framework including the establishment of the Agency for Environmental Protection;
- Strengthening environmental financing including the foundation of the Montenegro Ecological Fund; and
- Developing comprehensive environmental information and monitoring system.

Two years after the implementation of the Agenda started, the document was developed further and more detailed goals were defined.

A series of environmental protection strategies on water, waste and wastewater were adopted in 2004 and 2005, which are based on priorities identified by municipal authorities: the National Waste Management Policy, the National Waste Management Strategy, the Solid Waste Strategic Master Plan, the Strategic Master Plan for Sewerage and Treatment of Wastewater for the Montenegrin Coast and Cetinje Municipality, and the Strategic Master Plan for Sewerage and Treatment of...
Wastewater for Central and Northern Montenegro. They aim to create the conditions and build proper infrastructure for municipal waste and wastewater treatment that are in compliance with EU requirements.

Necessary steps were taken to create an appropriate legal basis to implement these sectoral environmental strategic documents and to assess the financial and other aspects of their implementation. For example, the 2005 Law on Waste Management (OG RM No. 80/2005) is fully harmonized with the relevant EU directives, and related bylaws are now to be drafted.

It is important to point out that action has been taken to follow on from these strategies. Several investment projects have been launched already to support the implementation of the Strategic Master Plan for Solid Waste Management, which is to be accomplished by 2009. For example, the Montenegro Environmentally Sensitive Tourist Area Project aims to reconstruct regional dump sites in Kotor, Tivat, Budva, Ulcinj and Bar, and to construct facilities for municipal waste management in Podgorica. In support of the implementation of the Strategic Master Plan for Sewerage and Treatment of Wastewater for the Montenegrin Coast and Cetinje Municipality, to be completed by 2028, sanitation projects for fuel stations in Kotor and Budva were carried out, and projects on constructing a sewerage system in Tivat launched.

Other strategic documents are to be adopted by end of 2007; for example: the Environmental Acquis Strategy, the National Strategy for Integrated Coastal Zone Management and the National Spatial Plan. For the first time a SEA pilot was conducted to assess the impact of the National Spatial Plan; and a pilot project supported by the Netherlands and the World Bank has been launched to test the procedure prescribed in the Law on Strategic Environmental Assessment (OG RM No. 80/2005) even before the law enters into force (see Chapter 6).

Other important strategic documents with environmentally-related components are:

- The 2003 Poverty Reduction Strategy, which defines the priority measures required to tackle the main environmental challenges in the context of poverty reduction, including prevention of human health risks caused by environmental pollution and the further improvement of environmental management;
- The 2005 Energy Efficiency Strategy, which defines activities that relevant institutions have to undertake in support of establishing a system of efficient energy use; for example through the promotion of energy saving schemes, minimization of environmental impacts of energy use and production, and promotion of renewable energy sources;
- The 2006 Strategy for Development of Food Production and Rural Areas aims to introduce sustainable development principles into Montenegrin agriculture through, among other methods, the introduction of the food brand “Made in Montenegro”;
- The 2006 Strategic Framework for Development of Sustainable Tourism in Northern and Central Montenegro;
- The 2006 Tourism Development Strategy for the period until 2020;
- The 2006 Functional Analysis of the Ministry of Environmental Protection and Physical Planning;
- The 2005 National Diagnostic Analysis (NDA) on the Sea Pollution from Land-based Sources;
- The 2005 National Action Plan (NAP) for Montenegrin Coast for Preventing Sea Pollution from Land-based Sources;
- The 2004 National Report on Biodiversity Condition in the Coastal and Sea Area of Montenegro;
- The 2004 Communication Strategy for Informing the Public on Montenegro’s EU Association Process;
- The 2006 Foreign Direct Investment Incentives Strategy of Montenegro; and

Other important strategic documents with environmentally-related components are in development:

- Development of an overall environmental protection strategy (i.e. a National Environmental Action Plan (NEAP));
- National Plan for Prevention, Readiness and Response in Cases of Sea Pollution Coming from Vessels – National Contingency Plan;
Chapter I: The decision-making framework and its implementation

- Strategic Environmental Assessment Capacity Development Strategy for Montenegro;
- First National Communication on Climate Change;
- Environmental Acquis Strategy; and
- National Strategy for Integrated Coastal Zone Management.

In these documents, efforts have been made to incorporate environmental issues more and more into the development policies of sectors. The implementation of the Law on Strategic Environmental Assessment, to come into force in 2008, will bring further progress. The proper implementation of these strategic documents based on extensive cross-sectoral cooperation and communication remains another challenge. Provisions for regular monitoring and assessment of progress are not clearly defined and mechanisms for the coordination of monitoring are very rare. In this respect, high expectations are being put on the activities of the NCSD and the OSD through the implementation of the NSSD.

It is expected that the NSSD that was adopted by the Government of Montenegro in March 2007 will play a significant role in the harmonization of sectoral strategies with sustainable development principles and goals. Coordinated by the MEPPP, the NSSD was drafted in an open and transparent way involving the public and other stakeholders in all phases. The NCSD provided political support during the entire process. The NSSD is being prepared following the United Nations Commission on Sustainable Development (UNCSD) and Organisation for Economic Co-operation and Development (OECD) methodology and refers to the implementation of the Mediterranean Strategy for Sustainable Development1, adapting it to the national level.

Compatibility and synergy have been identified through a consistency analysis between NSSD goals and the Economic Reforms Agenda 2002–2007, and other strategic documents such as the Action Plan for EU Accession, Development and Poverty Reduction Strategy and Development Directions of Montenegro as an Ecological State. Nevertheless, although the Economic Reforms Agenda 2002–2007 pays considerable attention to balanced development including the social and environment-related development factors, the document is primarily focused on reforming the market economy. The NSSD, on the other hand, puts much more emphasis on environmental issues, issues related to governance and participation, and to promoting knowledge, research and development, which are essential for economic and any other development. The harmonization of these approaches is an important task for the coming period as, apart from the technical aspects, the political choices regarding the direction of the development are key.

The NSSD defines the main principles of sustainable development tailored to the conditions of Montenegro (see Chapter 3). Main emphasis is given to:

- Integration of environmental concerns into development policies;
- Internalization of environmental costs through the implementation of the polluter- and user-pays principles;
- Participation of all stakeholders in decision-making, consultations, dialogue and partnership;
- Respecting the precautionary principle, and the principle of subsidiarity and interdependency between local and global levels, and
- Access to the services and financial resources necessary to meet basic needs.

The general objectives and specific goals for each of the three pillars of sustainable development (economic, social and environmental) are identified. Specific chapters are devoted to the implementation, monitoring, and financing of the NSSD. In the appendix to the NSSD, measures, deadlines, national sustainable development indicators and the bodies responsible for implementation are specified for each of the priority objectives. The Strategy was approved by the Government at the end of March 2007.

1.3 Legal framework

The 1996 Law on Environment lays down the main principles for environmental protection, such as polluter- and user-pays principles, environmental impact assessment and data transparency. Few bylaws have been developed to implement these principles.

The Law on Environment requires an EIA for any project that may have adverse effects on the environment. Regulations on Environmental Impact Assessment (OG RM No. 14/1997) prescribe: activities subject to EIA, preliminary assessment procedures, public participation in decision-making,
the procedure for the evaluation and verification of EIA and the criteria for assessment reports. As part of the EIA, an environmental protection programme has to include: impact assessments in the event of accident or emergency, a register of the type, quantity and method of disposal or release of detrimental or hazardous substances, and deadlines for respective measures for the proposed project or activity. The regulations set down about 80 categories of activities requiring an EIA. These categories are very general with few specifications as to size of enterprise, the potential environmental impact, or clear definition of the type of enterprise. Although requested by the 1996 Law on Environment, the polluter register has not been established.

Until the new Law on Environmental Impact Assessment (OG RM No. 80/2005) is enforced in 2008, the way that EIAs are regulated gives public officials considerable freedom to avoid public participation. Public participation for an EIA is not mandatory and is left to the discretion of the Ministry to organize public hearings for major projects and to define the procedures for these hearings. On the basis of an approved EIA, the Ministry issues an ecological permit containing the prevention and mitigation measures identified in the EIA. EIAs are also limited to areas where the MTE has biodiversity and air competences. Therefore, no preventive or mitigation measures are given for the protection of water or soil.

Since 2002, environmental legislation has developed significantly. The country’s overarching priority, accession to the EU, is the main driving force that explains this progress. In the European Partnership with the State Union of Serbia and Montenegro, which was adopted by the European Council in June 2004, main emphasis was given to adjusting the horizontal legislation, while legislation dealing with waste management, water quality, air quality, nature protection, management of chemicals and genetically modified organisms has not evolved much since the first EPR. Following the recent political changes, the European Council adopted the European Partnership with Montenegro in January 2007. The following laws, harmonized with the relevant EU directives, were adopted in 2005, but will enter into force in 2008: Law on Environmental Impact Assessment, Law on Strategic Environmental Assessment, Law on Integrated Pollution Prevention Control (OG RM No. 80/2005), Law on Waste Management and Law on Environmental Noise (OG RM No. 45/2006).

The 2005 Law on Environmental Impact Assessment defines the complete EIA procedure, from screening to approval, including public participation and transboundary effects. Under the EIA, potential or indirect impacts of a planned project on human life and health, flora and fauna, land, water, air, climate, landscape, material resources and cultural heritage (including relevant interactions among these factors) should be identified, described and assessed. EIAs shall be carried out for projects on industry, mining, energy production, transport, tourism, agriculture, forestry, water management and utilities, and for all the projects that are planned in protected natural zones and within the protected surroundings of national monuments. The Law should strengthen public participation.

For projects for which the permits and authorizations are issued by other competent national authorities, the EIA procedure shall be implemented by the national authorities responsible for environmental protection. Where projects for which the permits and authorizations are issued by other competent self-governed authorities, the EIA procedure shall be implemented by the authorities responsible for environmental protection in the local self-governed unit. In cases when a project has transboundary effects on the environment, the Law prescribes the procedure for informing the State affected.

The Decree on Projects Subject to an EIA Study was adopted by the Government and is waiting for publication in the Official Gazette, and the Regulation on the Contents of the Developer’s Application, Contents and Scope of EIA Study, Contents, Format and Method of Public Register Keeping is at the final stage of drafting and is expected to be adopted by the Government by the end of 2007.

Similarly to the EIA Law, the 2005 Law on Strategic Environmental Assessment defines the complete SEA procedure, from screening to approval, including public participation and transboundary effects. Plans and programmes are subject to a mandatory SEA if they are prepared for sectors specified in the Law and/or if they set the framework for future development projects that are subject to the EIA and could affect protected areas, natural habitats and preservation of wildlife plant and animal species. These specified sectors are agriculture, forestry, fisheries, energy, transport, waste management, water management, regional development, tourism, town and country planning or land use, and industry including mining. For programmes and plans at local level, or in cases of minor modification to plans and programmes, the need to conduct a SEA is to be determined on a case-by-case examination through obligatory consultations with the environmental
authority and relevant authorities. Provisions for procedures in cases of potential transboundary effects follow the SEA Directive and the Convention on Environmental Impact Assessment in a Transboundary Context. The SEA procedure is the responsibility of the respective environmental authority.

The 2005 Law on Integrated Pollution Prevention Control (IPPC) regulates environmental pollution prevention and control by issuing integrated permits for installations and activities that may have a negative impact on human health, the environment or material resources. It lays down measures designed to prevent or to reduce emissions in the air, water and land from the activities to be defined by sub-regulations, including measures concerning waste, efficient energy consumption, reduction of noise and vibrations, use of raw materials, prevention of accidents, and risk assessment. The integrated permitting system is based on the concept of best available techniques (BAT).

Related regulations have to be prepared on (among other things):
- Activities and installations that are subject to integrated permit issuing;
- The contents of programmes of measures of bringing the existing installations or activities in compliance with the set conditions;
- Criteria for determination of the BAT;
- Criteria for determination of emission limit values in integrated permits; and
- The Rulebook on the contents and method of keeping the registry book of issued integrated permits.

The 2005 Law on Waste Management establishes the basic legal framework and conditions created for the implementation of the National Strategic Master Plan for Waste Management. The Law:
- Prescribes the requirements for the elaboration of waste management plans;
- Defines competences, responsibilities and obligations related to waste management; and
- Sets out principles for a) managing special types of waste, b) incineration, disposal and storage of waste, c) monitoring, and d) penalization.

Among the necessary bylaws for implementation, the Rulebook on Waste Dumps, the Guidebook on Elaboration of Waste Management Plans and the Rulebook on Types and Manners of Waste Examination are developed and under ministerial consultation.

The Law on Environmental Noise regulates noise emissions and their impact, and establishes measures to reduce the harmful effect of noise on human health. These measures will be achieved through the establishment of a system that controls the:
- Source of the noise;
- Monitoring of noise levels;
- Restraining and limiting the use of the source of noise;
- Production of the acoustic cards based on the single noise indicators and noise estimation methods in the environment; and
- Development of action plans with short-term, mid-term and long-term noise protection measures.

Bylaws will be drafted in the near future.

All these laws are important steps in the harmonization of the national legislation with the EU environment acquis. Specifically, the laws on EIA, SEA and IPPC are crucial because of their horizontal character (i.e. relating to general environmental management issues rather than specific media). They create a basis for the correct formulation of other, more specific environmental laws. The assessment of projects and programmes will use the same parameters and procedures, including the procedure for public participation, as those applied in the EU. In addition, their proper implementation will be necessary for easier access to EU funding. If the Law on Integrated Pollution Prevention Control is to be implemented properly it should aim to create more effective and transparent permitting, better enforcement, and streamlined data collection and reporting. However, all these laws are very demanding on the skills and experience of regulators, so the regulated community and the general public should be made aware of these laws to help facilitate implementation. Necessary technical conditions should be in place well in advance to ensure the correct flow of information and proper decision-making. Because of these issues the Government has decided to postpone the full implementation of this series of laws until 2008.

Other laws under development or already under inter-ministerial consultation are:
- Amendments to the Law on Environment, which includes provisions for establishing the Environmental Protection Agency
- Amendment to the Law on National Parks
There is still no systematic approach to capacity building and awareness-raising in place that would ensure the smooth implementation of newly adopted laws. The provisions and requirements for proper implementation and enforcement (including capacity building of both regulators and the regulated community) are not considered and solved before the laws enter into force. There will be a pilot project for conducting the SEA procedure in the forthcoming National Spatial Plan, although the result of this assessment, performed on a voluntary basis, will not be legally binding. This preparatory work will draw additional benefits from the harmonization of the EU legislation.

Another concern is that there is no legislation in place or under preparation that deals with the environmental aspects of the privatization of industrial facilities and land. Privatization is considered an important instrument for the progress of Montenegro’s economic development and most of the anticipated privatization projects are expected to be concluded in 2008. However, since EIA and IPPC laws will only come into force in 2008, privatization projects are being performed without setting standards and transparent procedural criteria, and with no transparent rules for dealing with environmental liability.

1.4 Mechanisms for compliance and enforcement

The implementation of strategic environmental plans and programmes, and the enforcement of environmental legislation remain weak. The reasons for this include understaffing of the administrative bodies responsible for environmental issues, the unclear definition of institutional competences and responsibilities both within the institutions and in relation to the other decision-making bodies, unclear job descriptions, communication difficulties and a lack of finance.

The general legal provision for enforcement activities was established by the 2003 Law on Inspection Control (OG RM No. 39/2003). The Law set the principles of inspection control (i.e. prevention, proportionality, publicity, independence, protection of the public interest, truth, and subsidiarity) and the obligations and authorities of inspectors. The administrative measures and actions (including fines as an administrative measure) and the inspection control procedures are described in the Law. A specific part of the Law is devoted to the description of rights and obligations of a body under inspection and other legal persons.

Specific provisions for environmental inspections are set in the media-oriented laws. The implementation of the environmental legislation is included in the tasks performed by the Sector for Legislation and Inspection Control within the MTE. Responsibilities for environmental inspection are at the state level only. As regards the specific environmental inspection activities, there are only four job positions handling environmental issues. The inspectors are only just able to visit regularly the major environmental hot spots, such as the power plant and the mine in Pljevlja, the steel mill in Nikšić and the Kombinat Aluminium Podgorica. Owing to the absence of environmental law enforcement over the years, there have been few resulting court cases, which explains why the awareness among the judiciary system on environmental matters is too low. There was only one court case in 2006.

Concerning the permitting procedures, legal and appropriate provisions are included in sector-specific acts. The Sector for Environmental Protection issued 145 EIAs in 2005 and 260 in 2006 for projects that require EIAs according to the currently implemented 1997 Regulation on Environmental Impact Assessment (OG RM, No. 14/1997), and the 1997 Guidelines on EIA Study Content (OG RM No. 21/1997). The Sector for Environmental Protection issued permits for the import, export and transit of: goods and products for ionizing radiation; waste; products containing ozone depleting substances and/or chlorofluorocarbons (CFCs); and rare and animal species. It also issued opinions on spatial planning and urban plans.

The current permitting system is rather fragmented. Because of a lack of human capacity, technical means and resources there is no unified database of permits. This deficiency, the understaffed environmental inspection and a lack of reporting are resulting in the weak enforcement of legal provisions. Many significant changes in permitting practice will be brought by the new Law on Integrated Pollution Prevention and Control, but their effectiveness
depends on what capacities and technical conditions will be built before the Law enters into force.

Inspections are performed by the ecological inspectorate in compliance with the Law on Inspection Control, the Law on Environment and other media-specific laws. The Law on Inspection Control includes information-sharing with other inspectorates on measures taken. There are environmental inspections of ecological permits at the national and municipal levels. Inspections are carried out by the Ministry’s Sector for Legislation and Inspection Control. Municipalities carry out local inspections, such as inspections at municipal landfills. There are other inspectorates at the national level for mining, energy, forestry, veterinary services and water. Since 2003, there has been efficient cooperation among the different inspectorate bodies. This cooperation is achieved through joint inspections or by other inspectors reporting violations to the relevant inspectorate. Punitive action would be taken against an inspector who did not report possible violations.

Inspections are carried out in various ways, they can: (i) be planned, (ii) be ordered by the Minister or Deputy Minister, (iii) follow complaints, (iv) take place after an accident, and (v) take place at facilities requiring an environmental impact assessment. Inspections are ad hoc, and there is no inventory or list of polluting industries requiring environmental inspections, which implies that the enterprises eligible for inspection are not known. The inspectorate entrusts the appointed or accredited laboratories (CETR, Hydromet, Institute of Heath, Institute of Metallurgy for steel and iron) with the analyzing of samples taken during the inspections. Out of three mandatory samples taken, one is kept for further analysis in case of non-compliance.

In 2006 the Environmental Inspectorate:
- Carried out 279 inspections (delivering oral warnings for minor irregularities, and preventive instructions for proper waste disposal);
- Issued 115 decisions on measures to be taken in order to correct certain irregularities regarding emission monitoring, industrial waste disposal, deviation from authorized production processes and a lack of necessary environmental authorization for construction;
- Issued 16 information notices to other inspectorates about measures undertaken within their area of responsibility;
- Filed 37 law infraction cases (unfulfilled obligations, inappropriate waste disposal, a lack of necessary authorizations, environmental pollution and activities initiated in the protected natural zones);
- Filed one claim for criminal offence due to a pollution discharge on a large scale;
- Issued 12 decisions on withholding of authorizations for activities until corrective measures are implemented; and
- Forced closure of two premises.

Generally speaking, the environmental inspectorate never receives feedback on cases being prosecuted. The inspectorate initiated a court case in 2006, but nothing significant has resulted so far, and it is not certain whether the case will be continued.

In addition, in 2006, the ecological inspectorate also carried out:
- 15,305 controls of radioactivity on imported goods;
- 123 controls of authorizations for import, export and transit of waste on border crossings;
- 36 controls of authorizations for import, export and transit of goods containing ozone depleting substances; and
- 20 controls of ionized emissions at border crossings.

In a study for the Regional Environmental Reconstruction Programme (REReP) on strengthening environmental law enforcement capacity in the Balkans in 2001, the following shortcomings in inspection and enforcement for Montenegro were identified, a situation still prevailing today:
- Too few inspectors (four staff positions, but only one working in 2005 and two in 2006);
- A shortfall in municipal environmental inspections;
- A lack of specialization of inspectors (in air, water, soil, nature conservation);
- The need for modern quick-reaction technical equipment and support for it;
- Incomplete environmental legislation;
- A lack of harmonized regulations underlying the activities of all Ministry bodies and other inspectorates;
- A lack of training programmes and organized permanent education in environmental protection; and
- The need to standardize the work and action of inspectorates and individual inspectors.

**Inspection (2001/331/EC) in the Member States** underlined that there has been no improvement since 2001.

**Voluntary approaches**

In Montenegro best available techniques (BAT) are known to enterprises but they are reluctant to implement them. Their justification for this is social constraints and that technical BAT documentation (best available techniques reference documents (BREFs)) is not available in the local language. The Government adopted in 1994 and revised in 1999 and 2003 the *Quality System Implementation Strategy*. It created incentives by allocating resources to enterprises willing to implement ISO 9000 and ISO 14000 standards voluntarily.

Other compliance promotion approaches, such as providing education and technical assistance, building public support and publicizing success stories are being considered.

### 1.5 Conclusions and recommendations

Since the first EPR in 2002, many important strategic documents have been developed and adopted with the aim of providing a long-term framework for decision-making. A sound basis has been established for the implementation of sustainable development principles at the national level and for the improvement of horizontal inter-ministerial cooperation and communication. Also, the approach applied to sustainable development issues has contributed to the higher transparency of the decision-making processes and better access for the general public and all other stakeholders to information and to decision-making.

The *National Strategy for Sustainable Development* is also expected to serve as a reference document for each sectoral document and for other strategic documents – before being submitted for approval, each new strategy should be reviewed as to whether it is in compliance with the general framework defined by the *National Strategy of Sustainable Development*. Draft documents, once adopted by the Government, will bring significant positive changes in the entire system of environmental management, in particular the establishment of an Environmental Protection Agency and relevant revisions to the 1996 *Law on Environment*.

Montenegro has made significant and visible progress in the environmental policymaking framework. The harmonization of the national environmental legislation with the *acquis communautaire* is well managed, going from a substantial horizontal framework to more detailed provisions for the individual sectors of environmental protection. However, it is necessary to make all laws compatible to have a synergistic impact when implementing them. A lack of coordination would lead to problems in their practical implementation, resulting in a lack of compliance and inefficient or even impossible enforcement. The consistency of interaction between the newly adopted laws needs to be further explored and worked on to achieve a high level of compatibility between laws. The ongoing testing of the SEA procedure is a good initiative. Initiating twinning programmes with EU member countries that have been confronted with similar experiences may be even more beneficial.

Other improvements are needed, for instance on implementing the new legislation and policies. For this, a step-by-step approach has to be taken at each level of decision-making. A priority-setting process based on clear and transparent criteria needs to be undertaken so that the limited resources can be used to solve the most important problems. The system of enforcement has to be strengthened significantly to influence the behaviour of the regulated entities, and it has to be combined with other “positive motivation” incentives to promote compliance with legal requirements.

Laws and institutions alone are not enough. The top-down approach should be combined with bottom-up activities. Projects that are demand-driven and supported by local communities, possibly with the support of foreign assistance, are one of the best ways to make the legal framework effective. The experience gained from environmental management methodology at the local level for a specific area or project could further influence the drafting of laws and practices at country level. With this type of approach, cooperation with experienced international partners should be fruitful. In Montenegro, this bottom-up approach could well be used for the development and protection of the Skadar Lake area, if local capacities and competences can be developed.

**Institutional capacity**

Before 2006, the Sector of Environmental Protection within the Ministry of Environmental Protection and Physical Planning had limited human resources for tackling environmental protection matters, a situation that has not changed since the establishment of the Ministry of Tourism and Environment in November 2006. The situation is not better at local level where implementing capacity is low, a situation aggravated by the poor coordination with environmental
authorities at the national level. Establishing the Environmental Protection Agency according to the model submitted to the Government in autumn 2006 would solve to a great extent this problem of insufficient institutional capacity.

Recommendation 1.1:
The Government should urgently establish the Environmental Protection Agency (EPA), as defined in the model proposed by the cross-sectoral Advisory Committee, with the following main responsibilities: data collection, data analysis and data reporting, environmental permitting, and inspection and enforcement. Environmental permitting and inspection functions should be performed by separate units.

Recommendation 1.2:
The Government, and in particular local governments (municipalities), should strengthen the number and capacities of staff of environmental authorities at the national and local levels. Training programmes and awareness-raising activities for both the regulated entities and the general public should be promoted to ensure that environmental legislation is implemented properly.

Policies, strategies and plans

Montenegro has achieved significant progress in strategic planning. On the one hand, many important strategies, policies and plans have been developed recently, by both the environmental authority and other sectors. On the other hand, the limited resources and weaknesses in cooperation and coordination among various ministries undermine the effort made towards the implementation of these strategic documents. A step-by-step approach is needed to concentrate efforts on solving top priority issues and to develop action plans with realistic and enforceable goals to ensure that the limited resources are used efficiently. If a high political and legal profile is given to the National Strategy for Sustainable Development it could play an important role in strategic planning and ensuring that limited resources will be used efficiently. Then, as a strong framework benchmark, the Strategy would ensure that the principle of long-term sustainability would not be overridden by short-term economic interests, a concern expressed by the Montenegrin NGOs.

Recommendation 1.3:
The Government should harmonize sectoral strategies and action plans with the priorities and goals of the National Strategy for Sustainable Development. The Government and the ministries concerned should reconcile the content of the strategic documents, and coordinate their implementation.

Legislation

The ongoing harmonization of the Montenegrin environmental legislation with the acquis communautaire has been a key challenge since the first environmental performance review. Efforts should continue, but, in order to move further towards a coherent, easy-to-use, easy-to-enforce, less complicated and more transparent legal system, more attention needs to be given to how laws are interconnected and enforced. The enforcement tools have to be considered carefully to develop a mix of deterrent measures (such as fines and penalties) and positive incentives to increase the attractiveness of environmentally-responsible behaviour to regulated entities. Also, it might be useful to analyse the experience gained (including environmental aspects of the privatization process) in former transition countries, now new EU members, and consider the best way in which their experience from the EU accession process might be used in Montenegro: for example, through twinning cooperation. The strengthening of the environmental inspectorate capacity would be particularly relevant.

Recommendation 1.4:
The Ministry of Tourism and Environment should start implementing on a pilot basis the recently adopted legislation on strategic environmental impact assessment (SEA), environmental impact assessment (EIA), integrated pollution prevention and control (IPPC) and waste management.

Recommendation 1.5:
To ensure that the protection of the environment is taken into account in privatization agreements, the Government should:

(a) Require enterprises and industries put up for privatization to carry out environmental audits;

(b) Develop and introduce clauses on past environmental liabilities into the privatization agreements; and

(c) Include compliance plans, negotiated with the new owner, in these agreements. The plans should specify the measures that enterprises and industries have to implement to comply with environmental standards and regulations.

Some inadequacies that existed previously in the allocation of environmental tasks across different ministries still exist, such as the sharing or the
unclear division of responsibilities over water, forests and nature resources. Another serious drawback is the lack of cooperation between the national and local levels. An EU good practice is to implement the proximity principle and entrust the local level with those responsibilities that are better done at the field level (for instance domestic waste management, water supply and wastewater treatment, and protection of sites of local importance). However, this decentralization is always accompanied with the obligation of reporting to the national level to ensure consistency between actions. In Montenegro, for instance, because municipalities are not fulfilling their environmental reporting obligations, it has not been possible to establish and maintain the national polluter register. To facilitate these issues on decentralization, Montenegro could follow the EU good practice of decentralization of environmental protection competences.

**Recommendation 1.6:**
*The Government should define:*

(a) The horizontal responsibilities in environmental matters and the coordination of environmental management, in particular regarding the protection of natural resources; and

(b) The vertical division and coordination of competences between national and municipality levels to improve the implementation of the sectoral environmental legislation.

**Enforcement and compliance**

As stated earlier, environmental law enforcement remains a weakness, mostly because of a lack of staff capacities, financial resources and technical means. Also, the enforcement suffers from the low effectiveness of the current system of environmental monitoring and reporting. This has resulted in, among other things, the absence of a properly managed database of polluters (a polluter register). More effort needs to be made to install sound and effective mechanisms of environmental law enforcement, including an appropriate increase in staff and technical capacities, and in delivery of training at both national and local levels.

The system of enforcement has to be strengthened significantly to influence the behaviour of the regulated entities, and it has to be combined with other “positive motivation” incentives to promote compliance with the legal requirements. In this respect, capacity building is an important tool. For each of the newly adopted laws appropriate training programmes for regulators (including those at a local level) and awareness-raising activities for regulated entities and the general public have to be designed and properly performed.

**Recommendation 1.7:**
*The Government should strengthen significantly the capacity of the bodies responsible for enforcement to ensure effective enforcement of legal requirements, in particular by:*

(a) Increasing the number of inspectors;

(b) Promoting capacity-building programmes for inspection bodies in environmental law enforcement, particularly for new legislation, including permitting procedures and public participation;

(c) Establishing a polluter register, as requested by the legislation, and using it to streamline the environmental inspection activities;

(d) Increasing the cooperation of environmental law enforcement authorities with the police;

(e) Initiating training programmes for judges, state prosecutors and police, to strengthen their capacities in the field of environmental law enforcement; and

(f) Collecting and publishing data on concluded administrative, civil and criminal lawsuits concerning the environment.
Chapter 2

INFORMATION, PUBLIC PARTICIPATION AND EDUCATION

2.1 Current context for environmental information, public participation and education

The Environmental Performance Review carried out in 2002 recommended to the Republic of Montenegro that it should strengthen its environmental policy framework regarding information, public participation and education (see Annex I). These recommendations were addressed to different ministries and government agencies. Their implementation required the sectors to cooperate better than they did at the time.

Since then, the country has entered into a period of fundamental political transformation. Montenegro went through two substantial changes in its internal structure and organization, from the Federal Republic of Yugoslavia into the State Union of Serbia and Montenegro in 2003, and to its full independence in 2006. Another area undergoing fundamental transformation is the ongoing privatization of state assets. Changing ownership of enterprises and land is deeply influencing the political, economic, social and environmental sectors.

The whole governance system has been under reform since 2002. This is having profound implications for: the disclosure of environmental information, public access to this information, public participation in environmental decision-making and highlights the need for more environmental education.

2.2 Quality of environmental information and reporting

Legal and policy framework

The 1996 Law on Environment (OG RM No. 12/1996), with latest amendments of 2002, creates a legal basis for environmental monitoring activities. The Law describes the content of the monitoring programmes, which include “the degree of pollution of air, water and soil, flora and fauna, climatic changes, ionizing and non-ionizing radiations, noise and vibrations, as well as the observance of the obligations as stipulated by international treaties and conventions”. In 2003, the country started the revision of its legislation with the objective of harmonizing it with European Union (EU) legislation. In this context, the legislative basis of environmental monitoring activities will be revised. However, for the time being, environmental monitoring continues to be carried out in accordance with past laws and regulations (see Box 2.1).

In March 2003, the Government adopted the Agenda for Economic Reforms of Montenegro for 2003 to 2006. Among a range of priority activities on the environment, the Agenda specifies the “development of a comprehensive environmental information and monitoring system”. For that purpose, tasks to be carried out have been underlined and their implementation will require corresponding efforts and resources. In general, the Agenda envisages:

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<th>Box 2.1: Legislative framework regulating environmental monitoring activities, 2006</th>
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<tr>
<td>• Air quality: 1980 Law on Protection of Air from Pollution and 1982 Regulation on Methodology for Measuring the Maximum Permissible Quantity and Concentration of Polluting Substances at their Sources of Emission</td>
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<td>• Soil contamination: 1996 Law on Environment and 1997 Regulation on Permissible Concentration of Dangerous and Harmful Substances in Soil and Method for their Analyses</td>
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<td>• Radioactivity levels: 1996 Law on Protection Against Ionization Radiation and 1997 Decision on Systematic Analyses of Contents of Radionuclides in the Environment</td>
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<tr>
<td>• Water quality: 1995 Law on Water, 1996 Regulation on Classification and Categorization of Waters and 1997 Programme of Analyses of Quantity and Quality of Surface Water and Groundwater</td>
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revision of State monitoring programmes and methodologies based on internationally-accepted criteria, the strengthening of the organizational structure and coordination among monitoring institutions, the updating of monitoring equipment, and the strengthening of analyses, data processing and research. However, a lack of resources makes achieving these goals unrealistic in the short term.

After the 2006 split of the State Union of Serbia and Montenegro, Serbia became the successor to the Union’s previously ratified international treaties and conventions. As a sovereign country, Montenegro created a platform for involving itself in international monitoring programmes established to implement international conventions and started revising its legislative framework accordingly. Among the conventions stipulating comprehensive monitoring activities, the most important are the:

- **Convention on Long-range Transboundary Air Pollution**;
- **Convention on the Protection and Use of Transboundary Watercourses and International Lakes**; and
- **Revised Barcelona Convention for the Protection of the Mediterranean Sea against Pollution**.

Montenegro’s monitoring institutions have already participated in some international monitoring programmes (e.g., the *Programme for the Assessment and Control of Pollution in the Mediterranean Region* (MED POL) within the Barcelona Convention, the *Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe* (EMEP) within the Convention on Long-range Transboundary Air Pollution (see Chapter 3 on Implementation of International Agreements and Commitments). Comprehensive improvement of the national environmental monitoring system is envisaged in the *National Strategy for Sustainable Development* (NSSD).

The institutional framework of monitoring activities comprises a number of institutions currently subordinated to different government bodies. The Hydrometeorological Institute (Hydromet), the Seismological Observatory, the Institute for Nature Protection, the Institute of Marine Biology, the Public Enterprise National Parks of Montenegro, the Centre for Ecotoxicological Research (CETR) and the Institutes of Public Health are key actors in the monitoring activities. They provide monitoring data to the MTE on a regular basis. All institutions are supervised by the MTE except the Institutes of Public Health, which are subordinated to the Ministry of Health, Labour and Social Welfare.

**Monitoring**

The monitoring system covers air pollution (from stationary and mobile sources), surface and underground water, radioactivity, biodiversity, and soil pollution. Monitoring programmes are adopted by the Government. The Centre for Ecotoxicological Research, the Hydrometeorological Institute and the Institute for Nature Protection maintain the network of related monitoring stations. The MTE is responsible for the development of the key monitoring programmes in consultation with monitoring institutions. The funding for the programme components comes from two ministries: the Ministry of Tourism and Environment and the Ministry of Agriculture, Forestry and Water Management. According to national legislation, executors of different parts of the monitoring programmes have to be selected following tender procedures. However, there is no choice in the selection of monitoring institutions due to the lack of alternative institutions able to monitor the required environmental parameters. Given that tendering is obligatory, tenders are being organized annually, although the results are clearly predictable.

Lack of funding affects monitoring activities, which are therefore restricted in terms of the number of monitored parameters and frequency of sampling. It also affects the quality of the data and their processing. For instance, Hydromet’s equipment is outdated and at the time of the EPR Mission, November 2006, its laboratories were still not accredited. An insufficient budget also limits the coverage of the monitoring network. Since 2002, funding of monitoring activities provided by the State budget has been increased. However, available resources are still covering only basic needs, mainly operational expenditures.

**Institutional framework**

Since 2002, the network of environmental monitoring institutions has not changed. However, the structure of the governing system passed through a substantial series of transformations, which is still ongoing. After the restructuring of the Government at the end of 2006, the new Ministry of Tourism and Environment (MTE) took over responsibility for environmental matters from the former Ministry of Environmental Protection and Physical Planning (MEPPP).
The Government is aware of the importance of an effective environmental monitoring system and therefore is coordinating related international technical assistance for the development of modern policies, capacities and equipment. One of the key outputs of EU technical and financial assistance on institutional strengthening, within the project managed by the European Agency for Reconstruction, is the establishment of an environmental protection agency (EPA), planned to become operational in 2007 (see Chapter 1). Among its executive functions, the EPA is to be in charge of: monitoring the environment; processing, managing and reporting environmental data; and managing communication activities with international environmental organizations.

If the EPA is established, the proposed Department for Monitoring, Analysis and Reporting will be in charge of the overall steering of environmental monitoring activities and responsible for all environmental reporting. Thus, the Department would be responsible for establishment and administration of the under-development integrated monitoring programme. Processing of the monitoring data would be done by a third party on a contractual basis.

**Monitoring programmes**

**Water monitoring**

Since 2002, water monitoring programmes have been run by MTE (former MEPP), CETR and Hydromet. Water monitoring is performed on surface and underground water. The measuring network includes 36 stations on watercourses, 10 on lakes, 20 on underground reservoirs and 17 on the coast. CETR is equipped to measure 56 chemical and toxicological parameters and certain radiation measurements. It also undertakes specific research on ad hoc requests (e.g. wastewaters; contamination of water for drinking water supply and treatment installations; drinking water quality; and radioactivity in sea waters and marine biota). The Institute of Public Health is another body responsible for control of drinking water quality.

The Hydromet monitoring network includes 40 hydrological stations and 36 stations measuring water quality indicators. In 2005 and 2006 Hydromet installed modern equipment at five hydrological stations (HS): HS Podgorica, HS Fraskanjel on Bojana River, HS Plavnica on Skadar Lake, HS Duklov mostly on Zeta River, and HS Bijelo Polje on Lim River. Hydromet is striving to gradually install new equipment that is able to perform measurements of the quantitative water parameters and to deliver data in real time.

The Institute of Marine Biology, which is part of the University of Montenegro, monitors a number of organic pollutants and biological components (seaweeds, benthic biocenoses, microbiota, bio-toxins, etc.) and some specific water phenomena caused by pollution (e.g. eutrophication of coastal seawaters) for the purpose of scientific research.

One of the Government’s key objectives is to achieve the consistent implementation of water quality monitoring in accordance with the European Union Water Framework Directive.

**Air monitoring**

The establishment of a national network for monitoring of air quality in accordance with EU standards is prescribed in the draft Law on Air Quality. Currently, the MTE is responsible for the development of the Programme on Air Quality.

Hydromet’s and CETR are the two institutions equipped to carry out the air monitoring programme in Montenegro. The Programme envisages the 24-hour measuring of air parameters on 27 measuring stations in 17 towns. The list of measured components includes SO$_2$, NO$_x$, O$_3$, NH$_3$, phenols, H$_2$S, F, particulate matters, heavy metals and their compounds, radionuclides, POPs, PAHs and a few other parameters. CETR is equipped with a mobile laboratory and carries out measurements of ambient air quality and the impact of mobile sources of pollution. Hydromet is involved in international air quality monitoring programmes such as the Global Atmosphere Watch (World Meteorological Organization), MED POL and EMEP.

In March 2007 Montenegro ratified the Kyoto Protocol. The monitoring and assessment of greenhouse gases emissions from industrial and other sources are of high importance for the country. As part of the ratification preparatory process, a draft greenhouse gases inventory has been prepared (see Chapter 3).

**Waste and soil monitoring**

As was the case in 2002, there is no waste inventory or monitoring system in the country. However, some programmes include specific research focused on the...
environmental impact of wastes. The *Law on Waste Management* (OG RM No. 80/2005) provides for the inventory and management of all legal and illegal landfills.

As part of the *National Environmental Monitoring Programme* the *Soil Monitoring Programme* is implemented on an annual basis. Within the programme, measurements of samples are to be taken from 92 locations near landfills and from other potential pollution sources of heavy metals, pesticides, PCBs (polychlorinated biphenyls), PCDDs (dibenzo-p-dioxins), mineral oils and other organic pollutants.

**Biodiversity monitoring and research**

The biodiversity monitoring programme is a part of the *National Environmental Monitoring Programme*, for which the implementation is also financed by the State budget.

The Institute of Nature Protection is keeping an inventory of protected areas and provides research services on nature protection. The Institute of Marine Biology carries out monitoring and research programmes on the biological resources of the continental shelf and slope of the Montenegrin Coast. Cadastres of plants and animals as well as their habitats and ecosystems are the responsibility of the Public Enterprise for National Parks.

The Forest Management Directorate within the Ministry of Agriculture, Forestry and Water Management and its 15 local management units maintains forest cadastres.

A more integrative biodiversity monitoring programme will be put in place after the adoption of a new law on nature protection expected by the end of 2007.

**Radioactivity monitoring programme**

A network of measuring stations to monitor environmental radioactivity over the territory has been defined by the *Ordinance on Systematic Examination of Contents of Radionuclide in Environment* (OF FRY No. 45/1997). At these stations, dose rate measurements and measurements of contamination with radioactive pollutants of air, water (rivers, lakes, and sea), soil, solid and liquid precipitation, drinking water, foods and feeding stuffs, flora and fauna, construction materials, and other items for general consumption and in particular at the workplace, are being regularly conducted.

Besides regular radioactivity monitoring, the preparation of a radon map for Montenegro is being carried out by the Centre for Ecotoxicological Research under the initiative of the Ministry of Tourism and Environment. Also, in order to detect and report on radioactive contamination of the environment as a result of transboundary transport, the Hydrometeorological Institute measures the absorbed dose of gamma radiation in the air in Žabljak and Herceg Novi. Measurements are taken periodically using methods prescribed by the *Rulebook on Network Determination and the Programme on the Performance of Meteorological Stations of National Interest* (OG SFY No. 50/1990), and the authorized bodies are informed accordingly.

**Environmental information processing, exchange and dissemination**

Existing legislation does not explicitly give a definition of environmental information, so this definition has to be inferred from the 1996 *Law on Environment* and from some other legal and policy documents. In general the existing legislation includes information on the state of the environment, on environmental legislation and regulations, and on environmental programmes and activities.

Information processing and dissemination procedures have not changed since 2002. Monitoring institutions provide data on the continuous monitoring of air, water, radioactivity, biodiversity, and soil to the MTE and other ministries on an annual basis. For instance, data on water and soils are transmitted to the Ministry of Agriculture, Forestry and Water Management. The Sector for Environmental Protection has kept monitoring data from 1999 onwards.

The annual national *Report on the State of Environment* is based on the data from the monitoring of air pollution, surface and underground water, biodiversity, soil pollution and radioactivity. This Report is prepared by MTE and adopted each year by the Government. According to the *Law on Environment*, local authorities are also obliged to prepare reports on the state of the environment over their respective territories and to submit them to the MTE, an obligation that they have not fulfilled up to now. *Reports on the State of the Environment in Montenegro* are posted on the MTE website in the national language.
Due to a lack of capacity, neither the MTE nor the Statistical Office of Montenegro (MONSTAT) can issue environmental reports that would have been produced on the basis of internationally-recognized indicators. The Environmental Unit of MONSTAT, which has one member of staff, collects raw data and issues statistical reports on the environment in four areas, namely water, energy, air and wastes. Statistical data are collected from relevant public bodies and published in annual and three-year reports. Statistics presented on MONSTAT’s website 1 include only a restricted number of indicators for water and energy sectors and do not reflect the real environmental situation in the country.

During the few past years, the former MEPPP invested a significant amount of money into Information, Communication and Technology (ICT) equipment. Improvements were made possible in particular due to the opportunities provided by foreign technical assistance programmes. The staff was trained accordingly. The current Ministry has inherited the technical capacity for managing data and processing information. However, environmental institutions still do not fully utilize opportunities that the Internet provides for disseminating information. Most institutions have websites, including a government portal, but their web pages provide access to a modest set of information. The updating of information is irregular and some sites even show outdated data. Availability of the information in English is limited although it is supposed to be available to international donors or organizations.

The Government’s Public Relations Bureau created and maintains the MTE website. In cooperation with the European Environment Agency, a Montenegrin environmental web portal has to be developed as part of the European Environment Information and Observation Network so that important environmental information under State responsibility may be made available to the public. However, as of December 2006, the section of the European Environment Information and Observation Network (EIONET) website on Montenegro 2 was not displaying any information.

Results of the monitoring research are published in scientific newspapers. For example, Studia Marina publishes papers devoted to the monitoring of and research on the marine environment of the Montenegrin coast.

The current environmental information system does not correspond to modern requirements and to international standards for environmental indicators, and needs to be reformed. The need for a modern integrated information system is reflected in policy documents, such as in the Agenda of Economic Reforms for Montenegro for 2003 to 2006 (adopted in 2003) and the NSSD. As part of this system, the procedures and programmes for exchange and distribution of information among national and local authorities, governmental and non-governmental organizations and businesses have to be developed and improved. Such programmes will encourage public participation in decision-making on the environment. The establishment of an integrated information system with adequate sub-systems (cadastre, physical planning, urban planning, and infrastructure) is envisaged but has not begun.

2.3 Public participation in environmental decision-making and the NGO role

The right to environmental information is provided for by the Constitution (Article 19/1992). The Constitution proclaims the right to a healthy environment and provides for timely public disclosure of the current state of environmental protection. Also, the 1996 Law on Environment protection: changes since 2002


Legal framework for access to information and public participation: changes since 2002

The legislation obliges all government bodies to make information (such as State of Environment reports) available to the public and to provide information to all interested citizens and organizations upon request. Dissemination of the information is mandatory for government agencies only. Private businesses are obliged to provide information to state agencies and local governments about environmental pollution caused by their

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1 http://www.monstat.cg.yu/EngMeniGodisnjiPodaci.htm
2 http://www.eionet.europa.eu/Countries/Montenegro
activities and about their respective environmental programme’s implementation. These data have to be made available to the public by their inclusion in consolidated reports. However, the procedure is not properly enforced. In particular, there are no time constraints for submission of reports by legal and physical entities to local bodies of competence.

The 2005 Law on Free Access to Information (OG RM No. 68/2005) regulates access to information. According to Article 9 of the Law, access to information may be restricted if the disclosure could jeopardize national security, defence, international relations, public safety and security, commercial, private and public interests, and privacy of the individual.

Another important step forward is the 2003 Criminal Code. Violation of the right to be informed on the state of the environment is considered a criminal action subject to criminal liability. Article 317 declares: “Anyone who contrary to regulations does not provide data or provides untrue data on the state of the environment and the phenomena which are necessary for the assessment of danger for the environment and for taking measures for the protection of life and health of people, shall be liable to a fine or imprisonment for a maximum term not exceeding one year.” The Code provides clear restrictions and criminal sanctions for non-authorized private, corporate or state data collection, disclosure or dissemination.

The importance and procedures of public information and participation were strengthened and developed further through the harmonizing of national legislation with EU legislation. In 2005, the Parliament adopted the Law on Environmental Impact Assessment (EIA) (OG RM No. 80/2005), the Law on Strategic Environmental Assessment (SEA) (OG RM No. 80/2005), the Law on Integrated Pollution Prevention Control (IPPC) (OG RM No. 80/2005), the Law on Waste Management (OG RM No. 80/2005), and in 2006 the Law on Environmental Noise (OG RM No. 45/2006). All these laws were harmonized with the relevant EU directives, including provisions regarding public access to environmental information, public participation in decision-making and access to justice.

It is expected that by 2008 institutional capacity will be enhanced and relevant bylaws aimed at clearly regulating public information and participation issues will be approved. In particular, by end of 2007, an administrative and expert procedure of the EIA will be developed and adopted.

A comprehensive background for access to information and public participation in an international context is provided by the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. Montenegro is not a party to this Convention although preparatory activities for its ratification have been realized. According to the NSSD, the ratification of the Convention is planned for 2008.

The role of NGOs

Since 2002, the NGO sector has been developing rapidly in Montenegro. NGOs are playing an increasingly significant role in: national environmental and social policy development, environmental decision making, raising environmental awareness, advocating human rights, and promoting sustainable development principles.

There are a number of factors promoting NGO sector development and increasing its role in political and social life. The 1999 Law on Non-Governmental Organizations (OG RM No. 27/1999) provides opportunities for the easy registration and operation of an NGO practically free of government control. As a result, hundreds of NGOs are being registered in the country. However, only a few dozen of them have declared their missions as environmental and an even smaller number have demonstrated the organizational and managerial capability and financial viability for implementing environmental activities and projects.

Uncertainties in the Law on Non-Governmental Organizations in terms of financial and operational regulations of NGO activities open the door for the registration of many businesses as NGOs. The attractiveness of the NGO status is that the legislation (including the VAT law) provides NGOs with a number of tax exemptions. It makes the picture of Montenegrin NGOs very uneven and discredits the public image of NGOs. To resolve this issue, some NGOs have initiated the establishment of an NGO coalition and the development of the National NGO Strategy, which will encompass legal reform and approval of the NGO Code of Conduct. In cooperation with Government authorities, the NGOs have developed amendments to the current law aimed at prevention of tax benefit abuse. It is expected that this issue will be resolved in the near future.
Another factor stimulating NGO activity is increased funding opportunities. There is a large amount of technical assistance available from international organizations and governments of developed countries. This is providing the NGO sector with unique opportunities to participate in the implementation of projects and programmes aimed at reforming the environmental sector through the securing of funds from external sources on a competitive basis. Apart from this, the Government has started to provide financial support in order to strengthen the NGO sector and its role in civil society. For example, in 2005, the Parliament Grant Commission supported more than 100 local organizations through providing, on a competitive basis, about €290,000 in grants. However, the mismanagement of grant distribution procedures resulted in a misuse of grant funds, a temporary suspension of the process and protests from the NGOs. There is a need to apply fair, clear and transparent procedures in awarding government funds.

For at least the last two years, financial support for NGO activities and projects has also been provided by local municipalities. Moreover, the Law on Procurement (OG RM No. 46/2006) envisages a competitive process to obtain Government contracts for providing public services or procurements. Any legal body including NGOs may apply on a competitive basis for these government contracts. This opportunity will likely enhance the NGO sector.

NGOs participated actively in the drawing up of the draft NSSD as well as in a number of other important public processes. In 2005, the NGO “Most” led the participatory process of the public discussions regarding key provisions of the draft NSSD. Local municipalities, professional organizations, representatives of educational institutions, the business sector, the mass-media and NGOs participated in many meetings and regional conferences, and showed great interest in and contributed to the NSSD process. NGO representatives are among the members of the National Council of Sustainable Development.

There have been some positive steps in the strengthening of cooperation between Government agencies and NGOs through a formalization of procedures. For instance, the former Ministry of International Economic Relations and European Integration and representatives of the NGO “European Movement” concluded a Memorandum on Cooperation (July 2004) in order to regulate their communication and cooperation regarding the process of European integration. The Memorandum envisages the exchange of information, the involvement of NGOs in drafting regulatory and policy documents, and participation in public debates, meetings and other activities. However, such positive facts cannot be considered a trend. NGOs and the mass media are included in the Montenegro European Integration Network, but no NGO representatives are invited, even to be observers, in the Council for European Integration of Montenegro and the Commission for Coordination of the European Union Accession Process.

In the meantime, NGOs demonstrated that they could have a significant role in decision-making. The remarkable campaign for the protection of the Tara River from the construction of an electrical power plant has united many NGOs and the public. Both a UNESCO (United Nations Educational, Scientific and Cultural Organization) report and the campaign forced the Government to cancel its decision and look for other options (see Box 2.2.). However, despite its increased role, the environmental NGO area is not consolidated or structured. Cooperation between government agencies and NGOs is not systematic and there are no clear and transparent procedures.

2.4 Education for sustainable development

Educational system reform

Until recently, environmental education was not considered a priority. Natural science subjects (like Biology and Geography) were included in the secondary school curricula; however, there was no formal or informal environmental education system as such in the country.

In recognition of these circumstances and in with the aim of leading the country towards EU integration, the Government has initiated substantial reform of the national educational system. Key components of the reform include modernization of educational curricula, improving teaching methodology and training teaching personnel. According to the plan developed by the Ministry of Education and Science, reform started for selected pilot primary schools three years ago and in 2006 for selected secondary schools.
The Durmitor National Park (a World Heritage site) is a breathtaking national park formed by glaciers and is traversed by rivers and underground streams. It is crossed by the Tara River canyon, the second biggest canyon in the world just after the Colorado River Grand Canyon in the USA. It is the most important natural heritage site in Montenegro with a depth of 1300m (average 1000m) and a length of 93km. Biodiversity in this area is one of the most rich and interesting in the whole of Europe and is protected by national and international legislation. The Tara River, known as the “Tear of Europe”, was put on the list of UNESCO (United Nations Educational, Scientific and Cultural Organization) Man and Biosphere (MAB) programme in 1977. The Tara River Canyon was placed on the UNESCO world list of natural heritage in 1980 and must be preserved as a unique site of natural beauty and habitat (Tara River Biosphere Reserve). The Tara River is partially (30km) a natural border between Montenegro and Bosnia and Herzegovina.

In April 2004 Montenegro ratified an agreement with Bosnia and Herzegovina concerning the construction of a hydroelectric power plant (HPP) that would flood the Tara Gorge. Following the agreement, a tender was opened for the construction of the Buk Bijela HPP plant in the Drina River (formed by the Tara and Piva Rivers). The situation resulted in strong civil society reaction, calling for the protection of the site. Opponents of the project collected more than 15,000 signatures against it in one day – a huge amount for a country of roughly half a million people. This resulted in a debate on this issue in the Parliament. On that occasion NGOs and civil society presented an alternative concept of sustainable tourism development, using the potential of agriculture, tourism and environment and respecting the sustainable development principles.

Considering Montenegro’s shortage in electricity, the reluctance of the public for the construction of the HPP and the international protection of the area, the Government asked UNESCO for expert advice on its construction. A UNESCO expert mission started in January 2005. According to recommendations made by UNESCO, the Government decided to stop activities for the construction of the HPP. The Parliament adopted the Declaration on the Protection of the Tara River, and the HPP construction was definitively abandoned in April 2005. This decision to protect the Tara River Canyon was made because of the strong opposition of the civil society and NGO sector and showed the importance of public participation in decision-making and the planning of programmes and projects that are of strategic importance for the nation.

The process will gradually involve more and more primary and secondary schools and other educational establishments until the educational programmes of all educational establishments are based on the updated curricula and modernized teaching methodology. Implementation of the reforms is based on the Strategic Plan for Education Reform for the period 2006–2010 and is challenged by resource limitations and – a key area of reform – the competences of current educational personnel.

### School education

As a result of educational reform, the environmental component of the updated educational curricula for primary and secondary schools has been strengthened. Thus, subjects such as Nature are included in the curricula for school pupils from the first grade (six-year-olds) and the content of the subject is gradually extended for the twelfth to sixth grade pupils. Biology and Ecology are included in the educational curricula for pupils from grade seven. Additional elective subjects (such as Ecology and Biodiversity) are included in teaching programmes of Gimnazija (preparatory schools for college entrance) and vocational schools. At the same time, there is no out of school formal or informal environmental education system for children.

### Higher education

The University of Montenegro includes 14 faculties and one college located in various towns of Montenegro. The university provides, among other things, environmental education and opportunities for academic and applied studies. Curricula for postgraduate and specialist studies include Biodiversity, Ecology and Sustainable Development. New courses in Environmental Studies were introduced a few years ago in the Faculty of Metallurgy and Technology allowing 30 students annually to graduate with a master’s degree. The course is very popular but due to official student quotas the university is not able to meet the increased demand. The university also trains natural science teachers for secondary schools.

There is no informal environmental education system for adults or for teacher training in environmental education and sustainable development. The only opportunities for such education have been provided within international programmes of cooperation and technical assistance.

### Tasks ahead

An understanding of the vital importance of education in general and environmental education in
particular - for faster economic development, elimination of poverty, achieving the high living standards of the Montenegrin nation and the sustainable development of the country - is being reflected in many recently-developed policy documents. Technical assistance from the EU and other international partners has been a crucial factor in the successful development of policies and strategies in the fields of, among others, education, environmental protection and management.

Addressing the Decade of Education for Sustainable Development 2005 to 2015 proclaimed by the United Nations, the Ministry of Education and Science is defining the objectives, activities and indicators related to sustainable development through the development of a national Strategy of Education for Sustainable Development 2005 to 2014. The establishment of an educational system that is as good as or better than systems in other EU countries is a key part of the Strategy. In addition to this, considerable attention will be paid to the establishment of a system of informal education to ensure lifelong learning and the application of up-to-date knowledge in professional practice.

Both formal and informal education is requiring increasing sustainable development content in their curricula. In this respect, there are considerable plans for including the subject in the curricula. However, only initial steps are being undertaken: for example, developing curricula for optional subjects for primary and secondary schools, including sustainable development topics within optional parts of preschool and university-level curricula.

2.5 Conclusions and recommendations

Since the first EPR in 2002, Montenegro has made some progress in the monitoring of its environment. It has enhanced its air and water quality observation network and has established new and has re-equipped some existing air and water monitoring stations. Funding of monitoring programmes from the State budget has increased since 2002. Staff members of monitoring institutions were trained, mostly within the framework of the international cooperation programmes and projects. However, both current monitoring networks and information management procedures are insufficient to meet the requirements of the country’s national legislation and international obligations.

Montenegro does not have a modern integrated environmental monitoring and information system. Besides modernizing the monitoring measuring network and methodology and retraining personnel, the current procedures and standards of information processing, exchange and dissemination do not ensure the easy and timely access of decision makers, clients and the broader public to reliable environmental information. Public access to environmental information is important, especially in cases when key national enterprises are privatized. In these particular cases, the imperfection of public access to environmental information has been evident.

Recommendation 2.1

The Ministry of Tourism and Environment, in cooperation with relevant stakeholders, should complete the reform of the environmental integrated monitoring and information system. The Ministry should take the leading role in its implementation as well as responsibility for mobilizing the internal and external resources needed. The Ministry of Tourism and Environment should, in particular:

(a) Harmonize the environmental monitoring programme and reporting system with European Environment Agency standards;

(b) Clarify the responsibilities of the respective monitoring institutions for the implementation of the different parts of the integrated monitoring programme;

(c) Clarify the procedures and standards for providing, processing and disseminating information; and

(d) Revise current reporting policies and procedures in order to disclose to the public, on a regular basis, environmental information produced by monitoring actors and competent government organizations, including through the Internet.

The role of the NGO sector in social and political activities is increasing. Over the last few years, to support NGOs and their activities the Government and local authorities have provided budgetary funding on a competitive, although restricted, basis. Significant support was provided to NGOs by international assistance programmes. Owing to this, NGO organizational capacity has gradually improved. NGO representatives were invited and contributed to the development of policies, strategies, legislative acts and programmes of national importance. This practice is becoming common. Nevertheless, public participation procedures in environmental decision-making are not prescribed on a sufficiently broad enough basis to implement general legal provisions. Usually, the public does not participate in the EIA, permitting and planning procedures.
Recommendation 2.2
To strengthen the environmental non-governmental organization (NGO) sector further and to improve public participation in environmental decision-making, the Government, in cooperation with NGOs, should:

(a) Review the NGO legislation on tax exemptions;
(b) Complete preparatory procedures to accede to the Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters (Aarhus Convention);
(c) Further improve regulations on public access to environmental information and participation in environmental decision-making, in particular in EIA and permitting procedures, and the development of environmental policies, plans and programmes; and
(d) Initiate the revision and approval of policies and clarify procedures of cooperation between government agencies and NGOs.

As a part of the EU integration strategy, Montenegro has initiated educational reform with the purpose of introducing EU educational quality standards and quality assurance. Within this reform, new educational curricula have been developed and introduced in selected primary and secondary schools. As part of the reform, environmental subjects are being integrated into mandatory curricula. The number of schools is increasing year by year, so that in a few years all of them will be working in new conditions. The country has a vision, a strategy and plans in the field of education for sustainable development. The NSSD envisages that sustainable development issues will be integrated into the regular education system’s curricula.

Recommendation 2.3
To complete educational reform and implement the Strategy of Education for Sustainable Development, the Ministry of Education and Science, in cooperation with the Ministry of Tourism and Environment and other relevant stakeholders responsible for specific areas of professional education, competent institutions and NGOs, should:

(a) Increase the number of training programmes in teacher training colleges and for all actors involved in the implementation of educational reform at the primary and secondary school levels, with a special focus on the environment and sustainable development;
(b) Facilitate the incorporation of environmental issues and sustainable development principles in programmes of graduate education, professional training and adult education; and
(c) Facilitate the involvement of environmental NGOs in informal environmental education and education for sustainable development, through educational projects and campaigns.
Chapter 3

IMPLEMENTATION OF INTERNATIONAL AGREEMENTS AND COMMITMENTS

3.1 Framework for international environmental cooperation and changes since 2002

At the time of the first Environmental Performance Review (EPR) in 2002, Montenegro was reviewed when it was part of the Federal Republic of Yugoslavia. Since that time, two significant political changes have occurred. In February 2003, the Federal Republic of Yugoslavia was transformed into the State Union of Serbia and Montenegro. In May 2006, Montenegro organized a referendum on independence, which resulted in the proclamation of its independence in June 2006. In accordance with the Constitutional Charter of the State Union of Serbia and Montenegro, Serbia, as a member of the State Union that has not used its right to secede from the State Union, has become a successor state of the State Union of Serbia and Montenegro. In its Declaration of Independence adopted by parliament, Montenegro confirmed that it adheres to all international treaties and agreements to which the State Union was a party and which are relevant for Montenegro. It began the process of joining international organizations (in the United Nations system: the Organization for Security and Cooperation in Europe (OSCE), the Council of Europe and others) and acceding to international agreements (including multilateral environmental agreements (MEAs)).

Montenegro has been participating in the Stabilisation and Association Process (SAA) with the European Union (EU) as a part of the State Union of Serbia and Montenegro, with the ultimate goal of becoming a member of the EU. In July 2006 the EU Council adopted a mandate for the negotiation of a Stabilisation and Association Agreement with Montenegro as a step towards getting the status of a candidate country for EU membership. The formal SAA negotiations between the EU and Montenegro began in September 2006. The SAA was initiated between the EU and Montenegro on 15 March 2007.

Integration into the EU is a strategic goal for Montenegro. In March 2006 Montenegro adopted an action plan addressing the priorities of the European Partnership relating to Montenegro. In November 2006, the European Commission issued the first dedicated Annual Progress Report on Montenegro and a new distinct European Partnership for Montenegro. Among other issues, the report reviews Montenegro’s capacity to approximate its legislation and policies to the EU acquis, in line with SAA and European Partnership priorities.

Potentially important in terms of defining both domestic and international priorities of the country was the Declaration on the Ecological State of Montenegro made by the Montenegrin parliament in 1991. Fifteen years later this statement remains only on paper with little practical implementation. There is no single formal policy document that defines priorities for international cooperation in the area of environmental protection. Montenegro does not have a national environmental action plan or a national environmental strategy. At the time of the mission it was not clear whether such documents would be developed.

There have been some positive developments lately in the area of environmental policy. In 2005 and 2006 a draft of the National Strategy for Sustainable Development (NSSD) was prepared. This comprehensive policy document specifies the country’s goals for the three pillars of sustainable development and for their interrelationship in the national context. To a large extent it encompasses the multiple strategic and policy documents developed in Montenegro so far. The NSSD contains subchapters on economic development, environment and natural resources, and social development. Each of them identifies problems and challenges, and priority objectives and measures to be undertaken for each of the three pillars.

The environmental section of the NSSD focuses on the following areas:

- Protection of biodiversity and nature conservation;
- Water resources and water management;
• Air protection, climate change and protection of the ozone layer;
• Land management and forestry;
• Environmental management system;
• Spatial planning;
• Sea and coastal zone; and
• Waste management.

Within these areas, specific objectives for Montenegro’s international cooperation and commitments, and the measures to achieve them are identified. For example, in the area of climate change and ozone layer protection, the NSSD lists the following measures that need to be implemented: drafting the first national communication to the United Nations Framework Convention on Climate Change (UNFCCC), which will contain an inventory of greenhouse gases (GHGs); an emissions reduction plan; a programme to mitigate the consequences of climate change; ratification of the Kyoto Protocol; and implementation of the programme for gradual elimination of ozone-depleting substances.

Analysis of the NSSD shows that overall priorities in the area of international environmental cooperation include:
• Ratification and implementation of a number of international conventions and agreements; and
• Further alignment of national legislation with EU environmental acquis.

The NSSD gives an indication that the establishment or, in some cases, improvement of national institutions responsible for the implementation of MEAs and national legislation harmonized with EU standards is indispensable to achieve the objectives. The NSSD contains a National Action Plan (NAP) for its implementation. The NSSD time frame is 2007–2012, and most of the measures envisaged in the NAP are also for 2007–2012. The NAP lists priority objectives, measures, deadlines for implementation, implementing agencies and indicators (qualitative and quantitative). In the case of quantitative indicators, there are no specific targets that would allow a meaningful assessment of the progress being made in achieving the objectives (see Section 3.5).

**Institutional and legal framework**

Montenegro is at a relative disadvantage with regard to the institutional setting for international environmental cooperation. It is partly a consequence of the previous arrangement within the State Union of Serbia and Montenegro, where most of the issues related to international cooperation were handled at the federal level or by Serbia. For example, for most of the MEAs the focal points were from Serbia, and Montenegro only had contact persons. Another reason is the institutional weakness of the national environmental authorities. The Sector for Environmental Protection became part of the Ministry of Tourism and Environment (MTE) in November 2006. It has a staff of 13 people. At the time of the mission, there was no designated unit for international cooperation. Sector staff are assigned responsibilities regarding international cooperation based on their individual expertise and main duties. The weak administrative capacity of the environmental authorities has been noted by the European Commission in the Montenegro 2006 Progress Report, and this will have an impact on international cooperation in this field. Particular weaknesses are: insufficient staffing of the Sector for Environmental Protection and lack of satisfactory coordination among the government bodies involved in environmental protection issues.

After the Government restructuring, the Sector for Environmental Protection within the MTE consists of four departments (see Chapter 1). One of them, the Department for Integration and Strategic Environmental Processes, is responsible, among other things, for coordination of international environmental cooperation.

At the time of the mission, the Ministry of International Economic Affairs and European Integration was responsible for, among other things, cooperation with regional and international economic organizations; coordination of all activities of ministries and other institutions in the process of accession to the EU; coordination, monitoring and reporting on national legislation harmonization with the EU acquis communautaire; and coordination of all international programmes in Montenegro. After the Government restructuring, the Ministry for Economic Development became responsible for international economic affairs. The Deputy Prime Minister for European Integration and the Secretariat for EU Integration now have responsibility for matters related to EU integration.

A significant change in the institutional setting for environmental protection would be the establishment of the Environmental Protection Agency (EPA) (estimated date: end of 2007). The Agency would be established with EU support under the project managed by the European Agency for Reconstruction (EAR). It might be necessary that the EU continues to support the EPA beyond the establishment stage to...
ensure that the capacity of the environmental management institutional framework is improved and that the environmental framework legislation to the EU acquis communautaire is further approximated.

See Chapter 1 on the decision-making and its implementation for more information on the EPA.

The task of harmonizing the environmental legislation with EU directives is under way. Montenegro has adopted several laws that are fully harmonized with the relevant EU directives. In 2005, the Parliament adopted laws on: Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Integrated Pollution Prevention and Control (IPPC) and Waste Management. These laws will come into force in 2008, as Montenegro currently needs to adopt secondary legislation to develop capacity for their implementation. The Law on Noise (OG RM No. 45/2006) was adopted and is currently in force. The Laws on EIA, SEA and IPPC include the requirements of EU directives on public access to environmental information, public participation in decision-making and access to justice. Several draft laws (inter alia on ambient air quality, on environmental funds, and amendments to the Law on Environment (OG RM No. 12/1996)) have been submitted to the Parliament for adoption. See Chapter 1 on policymaking, legal and institutional framework.

3.3 International cooperation on environmental issues of national importance

After having become an independent state, Montenegro is assuming a new role in international environmental cooperation. This section provides a review and analysis of:

- Montenegro’s participation in selected global and regional environmental agreements (in accordance with some of the main issues of national importance);
- The implementation of MEAs through national programmes and projects supported by international donors; and
- The status of the ratification process of those MEAs to which Montenegro is not yet a party.

It has to be noted that Montenegro is in the process of attaining membership to organizations and ratifying MEAs, as it has been officially allowed to succeed to all international treaties to which the former State Union of Serbia and Montenegro was a party or a signatory. Donor-supported projects until recently were mostly directed at the State Union of Serbia and Montenegro (as a party to a particular convention), although in many cases assistance was provided separately to Montenegro and Serbia in the framework of the same project. As noted earlier, at the time of the mission the country did not have focal points for most of the MEAs. Montenegro has not produced separate reports for many of the MEAs. A full list of the MEAs to which Montenegro is a party or has intention to become a party, is available in Annex III.

Protection of biodiversity and nature conservation


Montenegro is developing a new draft law on nature protection that will be harmonized with relevant EU directives and that will take into account the relevant provisions of the MEAs related to biodiversity and nature conservation.

The national focal point and competent authority for the Ramsar Convention, the CBD and CITES is the Sector for Environmental Protection of the MTE. Since 1995 Montenegro has one officially-designated Ramsar site, Skadar Lake, which was also designated as a transboundary Ramsar site with Albania in 2005. The Global Environment Facility (GEF)/World Bank project Integrated Management of the Skadar Lake Ecosystem (for Montenegro and Albania) started in 2006 with initial funding of US$450,000. The joint transboundary diagnosis analysis describing the environmental conditions of Skadar Lake and defining sources of pollution was completed in 2006, and a strategic action plan for the two countries has been recently finalized. The implementation phase of the project with funding up to US$5 million aims to:

- Reduce and prevent pollution;
- Improve ecological and biodiversity monitoring;
- Promote environmentally sustainable economic use of biological resources and manage protected areas; and
• Promote environmentally-sustainable tourism development with an emphasis on local community participation and benefits.

The Report on the Implementation of CITES for 2005 for the State Union of Serbia and Montenegro has been submitted to the Convention Secretariat. Montenegro has been implementing the requirements of CITES since 2003, which are incorporated in the Decision on the Control List for the Export, Import and Transit of Goods (OG RM No. 19/2006) (a by-law to the Law on Foreign Trade (OG RM No. 28/2004)).

The national report for the implementation of the CBD, as required by the Convention, has not been prepared yet. GEF has allocated funding for the project Developing Biodiversity Strategies and Action Plans for Serbia and Montenegro with an amount earmarked for Montenegro of about US$117,000. The implementing agency for the project is the UNDP (United Nations Development Programme). The project will identify the strategic directions and the actions needed to be taken to conserve biodiversity, and will produce a country study describing the critical features of the biodiversity resources and an action plan presenting a range of activities to facilitate their protection. It also aims to facilitate capacity building for participation in the Clearing-House Mechanism under the CBD. The National Biodiversity Strategy and Action Plan will form the basis of the First National Report to the CBD. Implementation of the project started in April 2007. Another GEF Enabling Activity related to biodiversity is the project National Capacity Self-assessment for Environmental Management in Serbia and Montenegro, which also has the UNDP as the implementing agency. The budget for Montenegro is about US$63,000. Its main objectives are to determine current capacities, assess priority needs and develop a plan of action to implement the three conventions (CBD, UNFCCC and UNCCD), and meet the country’s commitments to global environmental management.

Montenegro has four National Parks (Skadar Lake, Lovcen, Biogradska Gora, and Durmitor). The draft Law on Proclamation of the National Park Prokletije Mountain is being prepared and is expected to be adopted by the Parliament by the end of 2007.

Montenegro has two sites included in the World Heritage List: Durmitor Natural Park (natural property) and the Natural and Culturo-Historical Region of Kotor (cultural property). In 2005, an international expert mission by the International Union for the Conservation of Nature and Natural Resources and UNESCO visited the site of a proposed hydroelectric dam project, Buk Bijela, in Montenegro to evaluate its potential impact on the Durmitor National Park and on the Tara River Basin Biosphere Reserve. The conclusions of the mission and a public campaign led by NGOs, resulted in the suspension of the project because of the potential negative impact on the World Heritage Site (see Box 2.2, Chapter 2 on Information, Public Participation and Education).

Montenegro has been preparing to ratify the following conventions: Bonn Convention on the Conservation of Migratory Species of Wild Animals, and Bern Convention on the Conservation of European Wildlife and Natural Habitats. The MTE is responsible for the implementation of the Emerald Network Pilot Project in Montenegro that was launched in 2005 for the State Union of Serbia and Montenegro with the support of the Council of Europe and the European Environmental Agency (with a budget €9,000 for the first phase and €30,000 for the second phase). The project is intended to serve as a basis for accelerating the process of accession to the Bern Convention and will be used to define more areas of national importance for nature conservation. Draft laws on the ratification of the Bern Convention have been prepared.

Water protection and sea and coastal zones

Montenegro has not yet ratified the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes and its protocols on water, health and civil liability but stated its intention to do so. The preparatory activities related to the Convention on Co-operation for the Protection and Sustainable Use of the Danube River and the International Commission for the Protection of the Danube River (ICPDR) are under consideration.

Montenegro has expressed its intention to ratify the Revised Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its six protocols. Montenegro is participating within the framework of the UNEP (United Nations Environment Programme) Mediterranean Action Plan (MAP). Among the activities accomplished was the drafting of the National Strategy for Sustainable Development (see Sections 3.2 and 3.5). Montenegro has also prepared a number of documents under the Programme for the Assessment and Control of Pollution in the Mediterranean Region – MED POL.
for Montenegro, including Basic Emission Balance for the Montenegrin Coast, National Diagnostic Analysis, and the National Action Plan for the Montenegrin Coast. This plan has been incorporated into the Strategic Action Programme to Address Pollution from Land-based Activities in the Mediterranean Region (SAP MED). The Regional Activity Centre for Specially Protected Areas (SPA/RAC) supported the development of the National Action Plan on Marine and Coastal Biodiversity, which has been integrated into the Strategic Action Plan for Biodiversity in the Mediterranean Region.

In cooperation with the Regional Marine Pollution Emergency Response Centre (REMPEC), Montenegro carries out activities (in the area of prevention, preparedness and response in cases of sea pollution from vessels) that are aimed at identifying Montenegrin needs, strengthening its institutional capacity and improving its legal framework. Under the auspices of the Priority Actions Programme/Regional Activity Centre (PAP/RAC), preparations have started for the Coastal Area Management Programme (CAMP) in Montenegro. The National Strategy for Integrated Coastal Zone Management has been drafted with the support of the German Agency for Technical Cooperation (GTZ) and will be adopted by the Montenegrin Government at the end of 2007.

Montenegro has begun implementation of the Master Plan for Montenegrin Coast and Cetinje Municipality Waste Water Disposal and Purification and the Sewerage and Wastewater Strategic Master Plan for Central and Northern Montenegro. Each master plan envisages investments of about €280 million, and Montenegro has applied for loans and grants to a number of international organizations and financial institutions (such as the European Investment Bank (EIB), Kreditanstalt für Wiederaufbau (KfW), and EAR)) to finance the implementation of the projects under these master plans.

Air protection, ozone layer protection and climate change

Montenegro became a party by succession in 2006 to the Convention on Long-range Transboundary Air Pollution (CLRTAP) and its Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP). It has not ratified the other seven protocols to the Convention.

The ratification and implementation of international agreements dealing with air quality, ozone layer protection and climate change are listed as important policy objectives for 2007 to 2012 in the NSSD. Montenegro has prepared a draft Law on Air Quality harmonized with the relevant EU directives.

Montenegro is a party by succession, 2006 to the Vienna Convention for the Protection of the Ozone Layer, its Montreal Protocol, and four amendments to the Montreal Protocol. Since 2005 the National CFC Phase-out Plan for Serbia and Montenegro (NCPP) has been under implementation with support of the United Nations Industrial Development Organization (UNIDO) Multilateral Fund for the Implementation of the Montreal Protocol (with a total budget of around US$2.9 million). To achieve better coordination and implementation of sub-projects in Montenegro, a Project Management Unit (PMU) has been established in Podgorica. The final phase-out of CFCs is planned for the end of 2009. Since the Montenegrin independence, a new organizational structure for project implementation has been under preparation.

Montenegro succeeded (as a non-Annex I party) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2007. Montenegro is preparing the inventory of GHG emissions within the framework of the GEF project First National Communication in Response to its Commitments to UNFCCC (the total budget for Serbia and Montenegro is US$405,000). The UNDP is the implementing agency. Montenegro ratified the Kyoto Protocol in March 2007. The project Technical Assistance to Montenegro for the Ratification and Implementation of the Kyoto Protocol and for the Establishment of a System of Renewable Energy Green Certificates was supported by Italy’s Ministry of Environment, Land and Sea. As a result of the project, draft GHG inventories for 1990, 1998 and 2003 and a draft portfolio of the Clean Development Mechanism (CDM) projects were prepared. Further activities, including the establishment of the Designated National Authority and development of the Green Certificates system are anticipated in the next phase of the project.

Waste management and hazardous chemicals

In 2006 Montenegro acceded to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and to its Ban Amendment. After the Government restructuring in November 2006, the MTE became the competent authority for the control of and the
import/export/transit permits and information relating to transboundary movement of hazardous and other wastes, and for hazardous waste management. The Centre for Ecotoxicological Research is the competent authority for the characterization of wastes and provides technical expertise and analysis. The Law on Waste Management (OG RM No. 80/2005), which will come into force in 2008, contains provisions in accordance with the requirements of the Basel Convention. Secondary legislation, including waste classification regulation and guidance on the development of waste management plans, in accordance with the guidance documents of the Convention, was in the final stages of drafting at the time of the mission. In 2005, Montenegro adopted the Strategic Master Plan for Solid Waste Management, which envisages an investment of about €109 million. Several projects are in the process of implementation with the support of loans and grants from the World Bank, the United States Agency for International Development (USAID), EAR, Norway and other international organizations and foreign donors. Montenegro has not ratified the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal. Implementation of the Protocol will be difficult for Montenegro because of the lack of technical and financial capacities of governmental institutions, businesses and insurance companies.

Montenegro has not yet ratified the Stockholm Convention on Persistent Organic Pollutants (POPs Convention) (signed by Serbia and Montenegro in 2002), but has expressed its intention to do so. The Law on Waste Management contains provisions for compliance with the POPs Convention. The GEF project Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants: National Implementation Plan for Serbia and Montenegro was approved in 2003 and since the Montenegrin independence, project organization has been restructured and a National Implementation Plan especially for Montenegro is being drafted with US$150,000 being allocated to Montenegro. UNEP is the implementation agency, and the Centre for Ecotoxicological Research is the national coordinator of activities in Montenegro. The main goals of the project are to assist the country in anticipating its needs and obligations for implementing the Convention, including reporting and other obligations, and to strengthen its capacity to manage POPs and chemicals in general.

Montenegro is not yet a party to the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. However, the country is planning to ratify it after the necessary pre-conditions for its implementation are in place.

Transboundary environmental impact assessment

Montenegro is not yet a party to the Espoo Convention on Environmental Impact Assessment in a Transboundary Context and its Protocol on Strategic Environmental Assessment (signed in 2003) but expressed its intention to ratify the Convention. The Law on Environmental Impact Assessment (OG RM No. 80/2005) and the Law on Strategic Environmental Assessment (OG RM No. 80/2005) that will come into force in 2008 are fully harmonized with the relevant EU legislation and are in line with requirements of the Espoo Convention and Strategic Environmental Assessment Protocol. A SEA capacity gap assessment has been conducted with support of the Netherlands and the World Bank, and the SEA of the National Spatial Plan for the period up to 2020 has been identified as a pilot project for Montenegro’s SEA.

Cleaner production

In Serbia and Montenegro’s first EPR, the establishment of national cleaner production centres was recommended. Montenegro has not yet established such centres. From June 2006 to June 2007, the pilot project Preparatory Assistance for the Establishment and Operation of a National Cleaner Production Programme in Montenegro was carried out by UNIDO. The Faculty for Metallurgy and Technology is the national coordinating institution. The final result of preparatory assistance, among others, will be the development of a project proposal for the establishment of a National Cleaner Production Centre.

Public participation

Montenegro is not yet a party to the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. Several recently adopted laws (on EIA, SEA, and IPPC) contain provisions that correspond to the requirements of the Aarhus Convention, and to those of relevant EU directives. Montenegro benefited from the Regional Environmental Reconstruction Programme (REReP) project for several Balkan countries called Improving the Practices of Public Participation: Next Steps in Implementing the Aarhus Convention (with a total
budget €515,000; funded by the Netherlands Government). The implementing agency for the project in Montenegro is the Regional Environmental Centre (REC) office in Podgorica. Among the project’s activities, several training courses related to provisions for public participation in the recently adopted laws on EIA and SEA have been conducted in the country (see Chapter 2 for more information on public participation).

3.4 Bilateral and regional cooperation and international technical assistance

Bilateral and cross-border cooperation

Montenegro is participating in bilateral cooperation in environmental protection with a number of countries, with the emphasis on cooperation with countries in the region and on receiving technical and other assistance from donor countries. Montenegro places importance on signing memoranda of understanding (MoUs), although the effectiveness of cooperation often depends more on the availability of funds for joint programmes and projects than on the existence of a formal agreement.

Bilateral MoUs have been signed with Albania, Italy, Poland and the former Yugoslav Republic of Macedonia. There are no activities within the framework of the MoU with the former Yugoslav Republic of Macedonia and Poland yet. Cooperation with Albania is focused primarily on the integrated management of Skadar Lake within the framework of cross-border projects: UNDP with GEF/World Bank funding and REC/REReP with Swiss Agency for Development and Cooperation (SDC) funding.

There is active cooperation with Italy. The Italian Ministry of Environment, Land and Sea: signed MoUs with the former Ministry of Environmental Protection and Physical Planning (MEPPP) and the Ministry of Economy in 2004; established a representative office in Podgorica; and is involved in a number of technical assistance projects. Particular emphasis is placed on assistance to Montenegro for: the implementation of MEAs, specifically the ratification of the Kyoto Protocol to the UNFCCC; the implementation of the CDM projects; preparation for the first national communication to the UNFCCC; and projects related to air quality management, water management, and eco-tourism.

There are plans to sign MoUs with the Czech Republic and Slovenia. Both countries are already involved in providing technical assistance to Montenegro.

Montenegro participates in the Regional Environmental Reconstruction Programme (REReP) for South-Eastern Europe and is involved in a number of cross-border cooperation activities within its framework. The REC serves as the Secretariat for REReP. Montenegro participates in the Environmental Compliance and Enforcement Network for Accession (ECENA) (the former Balkan Environmental Regulatory Compliance and Enforcement Network (BERCEN)). The Network provides technical assistance and facilitates the exchange of experience and information among specialists in the South East European (SEE) region involved in environmental inspection, permitting and implementation of environmental laws.

Montenegro has been participating in the AIMS Network, a Joint Network of MEA Senior Officials and Legal Experts established under the REReP project Support for Acceptance and Implementation of Multilateral Environmental Agreements in South Eastern Europe. Montenegro has benefited from regional workshops on the Basel Convention and UNECE (United Nations Economic Commission for Europe) conventions, and from the national capacity-building workshop on priority MEAs and MEA issues. The continued activity of the AIMS Network is of particular value for Montenegro after gaining independence, as it is preparing for ratification of several MEAs (see Section 4.3) and will be working on their implementation. Also within REReP’s framework, Montenegro participates in the ENVSEC initiative1.

Montenegro has benefited from the REReP project Assistance in Environmental Law Drafting in South Eastern Europe. Its second phase was funded by the European Commission and began in 2003. Montenegro is receiving assistance in drafting its new chemical legislation and in the transposition of EU chemical legislation. A similar project was implemented in Serbia during the first phase of the project, and this project incorporates lessons learned from the work in Serbia. Montenegro is a beneficiary country of the SEE Priority Environmental Investment Programme (PEIP). Within PEIP, a list of environmental hotspots has been identified, and of high-priority projects from a regional perspective, which includes seven projects in Montenegro. For Montenegro, with its relatively low capacity for major environmental investment projects, the provision of 1) continued institutional support for the

1 The Environment and Security initiative in partnership with the UNDP, UNEP, the OSCE, NATO (North Atlantic Treaty Organisation), the UNECE and REC.
strategic planning process for EU compliance and of 2) support for identification of appropriate projects for priority financing is particularly important. Among the environmental projects that have started are reconstruction of wastewater treatment facilities in Nikšić and Podgorica, construction of the regional sanitary landfill for municipalities of Podgorica, Cetinje and Danilovgrad, and remediation and recultivation of Mojkovac lead and zinc tailings dam.

Montenegro participates in the Adriatic–Ionian Initiative (AII) and held AII Presidency from June 2004 to June 2005. Within its framework, ADRICOSM-STAR (Montenegro coastAl ARea and Bojana river catchment basin) project has been launched in Montenegro. The project is supported by the Italian Ministry of Environment and Territory and also supports the partial participation of Albania in a transboundary context. Its goals are (i) the continuous monitoring and forecast of the surface and ground water cycle, and (ii) the drawing up of study scenarios for different cases of river and marine area use. This project is a part of the ADRICOSM Partnership (ADRIatic sea integrated COastal areaS and river basin Management system) launched in 2001. Montenegro is also a member of the Joint Expert Group (with Albania, Bosnia and Herzegovina, Italy and Slovenia, under the leadership of Croatia) that is working on developing a proposal for designation of the Adriatic Sea as a Particularly Sensitive Sea Area (PSSA) to be submitted to the International Maritime Organization (IMO).

International technical assistance

Montenegro receives significant amounts of international assistance in the area of environmental protection: one of the highest in the region on a per capita basis. However, it is not clear if there is any comprehensive accounting for donor assistance to the country. The Sector for Environmental Protection has prepared a table that contains donor-funded environmental projects from 2005 onwards. Major projects supported by donor countries and international organizations are mentioned in Section 3.3 (see Chapter 5).

Several problems related to the provision of international technical assistance are identified as significant by both the donor community and national authorities. Among them is poor absorption capacity (the ability to use allocated funds effectively) of the assistance beneficiaries, including Government institutions. This results in under-utilisation of disbursed funds for particular projects and in the postponement of projects. A problem linked to this is that many projects are donor-driven, which results in an insufficient sense of ownership for the national institutions – the recipients of assistance, and a lack of follow-up after a project ends. Another problem is insufficient coordination of donor efforts: certain areas may be covered by overlapping assistance, while others receive inadequate attention. The absence of a clearly-defined environmental strategy also hampers donors’ efforts to use their resources most effectively and in the priority areas.

Major bilateral donors for Montenegro in the area of environmental protection are the Governments of Austria, the Czech Republic, Finland, Germany, Hungary, Italy, Japan, the Netherlands, Slovenia, Sweden, Switzerland, and the United States.

Some examples of projects supported by bilateral donors include:

- **Development of Environmental Legislation in Serbia and Montenegro** (Yugolex) funded by the Government of Finland (total budget €2 million). It was carried out from 2002 to 2005 and resulted in the adoption of the Laws on EIA, SEA, IPPC and Waste Management harmonized with the relevant EU directives.
- **Remediation and Recultivation of Mojkovac Lead and Zinc Tailings Dam** funded by the Czech Republic. It is now in the second phase, which includes reconstruction of the sewage system and construction of a wastewater treatment plant, with an estimated budget for 2005 to 2007 of €7.5 million.
- **Development of Eco-tourism in Bjelasica and the Komovi Mountain** funded by the Government of Austria (budget US$1 million), completed in 2006.
- **Sustainable development of Bjelasica and Komovi Region**, funded by the Government of Austria and the Government of Montenegro (with a budget of about €2.4 million), to be completed in 2009.
- **Montenegro Coastal Development and Environment Activity** funded by USAID (total budget US$12 million). Within its framework a number of projects on water and wastewater improvement were implemented from 2004 to 2006 that benefited the municipalities of Budva, Kotor, Cetinje and Bar among others. The United States is also providing technical assistance for a feasibility study for the establishment of the Montenegro Water Revolving Fund.

International organizations that provide assistance in environmental protection to Montenegro include
EBRD (European Bank for Reconstruction and Development), EEA (European Environment Agency), EIB, GEF, OSCE, UNDP, UNECE, UNEP, UNIDO, UNITAR (United Nations Institute for Training and Research), and World Bank. Of particular importance to Montenegro is cooperation with the EU. Montenegro has benefited from EU assistance since 1998. It has been receiving support from the CARDS (Community Assistance for Reconstruction, Development and Stabilisation) programme since 2001 when EAR, responsible for implementation of the CARDS Programme, opened its operational centre in Podgorica. From 2002 to 2006 approximately €12 million were allocated to projects in the environmental sector (out of a total of about €81 million). Priorities for EU assistance were set in the Multi-annual Indicative Programmes (MIP) for Serbia and Montenegro for 2002 to 2004 and for 2005 to 2006. The projects provide assistance for:

- Institution and capacity building; for example, the establishment of the Environmental Protection Agency;
- Waste management; for example, the 2005 Strategic Master Plan for Solid Waste Management on the national level; and
- Wastewater management and treatment; for example, the Strategic Master Plan for Sewerage and Treatment of Wastewater for Montenegrin Coast and Cetinje Municipality, the Strategic Master Plan for Sewerage and Treatment of Wastewater for Central and Northern Montenegro, and construction of the sewage system and wastewater treatment facility of Rijeka Crnojevica.

As of 2007, all existing EU assistance programmes will be replaced by the Instrument for Pre-Accession Assistance (IPA). As a potential candidate for membership, Montenegro will have access to two out of five components of this instrument: 1) support for the transition process and institutional building and 2) regional and cross-border cooperation. Projects in the environmental sector, including infrastructure projects, will be eligible for IPA funding. A major role in the new system for EU assistance management is supposed to be played by Government institutions instead of EAR; however, their capacity for this activity seems to be insufficient. In March 2006, the Ministry of International Economic Relations and European Integration in cooperation with other Montenegrin government bodies prepared the Action Plan for Implementation of the European Partnership Priorities. It represents a short-term (2006–2007) and medium-term (2007–2009) framework of planned activities for enhancing the Stabilisation and Association Process in line with EU recommendations. Montenegro receives feedback from the EU through the progress reports issued by the European Commission.

3.5 The World Summit on Sustainable Development and the Millennium Development Goals

World Summit on Sustainable Development

Montenegro established the National Council for Sustainable Development (NCSD) after the Johannesburg Summit in 2002 and developed the National Strategy for Sustainable Development in 2006. The NSSD was adopted by the Government in March 2007. The MEPPP coordinated the preparation of the Strategy, which was supported by UNEP/MAP, UNDP and Italy’s Ministry of Environment, Land and Sea. The working team responsible for its drafting consisted of public administration representatives, academics, NGOs, and experts on sustainable development. A high level of public participation and consultations with stakeholders was ensured through round tables, three regional workshops and two rounds of participatory meetings at the local level (the latter organized by the NGO sector). The Strategy was developed in a way consistent with the Mediterranean Strategy for Sustainable Development (MSSD) and is intended as an instrument for the implementation of the MSSD in Montenegro.

Montenegro also participated at the annual sessions of United Nation Commission for Sustainable Development (UNCSD) in 2005 and 2006. The country intends to establish regular and efficient communication with UNCSD in order to create conditions for more successful harmonization of national development with United Nations sustainable development goals and requirements.

Millennium Development Goals

In 2005 Montenegro issued the Millennium Development Goals (MDG) Report 2004. It was prepared with UNDP support. The report uses information mainly from the Development and Poverty Reduction Strategy (DPRS), official United Nations reports, and data from ministries and other government agencies. It is a positive sign that the process, which began by the adoption of the DPRS in 2003, continues.
Part I: Policymaking, planning and implementation

Box 3.1: Key indicators for the NSSD goals of ensuring efficient pollution control, reducing pollution, and ensuring sustainable resources management

- Percentage of the territory protected to preserve biodiversity
- of marine protected areas and coastal zone
- Water consumption per capita
- Share of wastewater being treated
- Territory under forests
- Tourism density at the coast
- CO\textsubscript{2} emissions per capita
- Consumption of substances damaging for the ozone layer


However, the report acknowledges that the availability and reliability of data used in the report is generally poor. This is true for most of the indicators of MDG Goal 7 (Ensure environmental sustainability). For example, the indicator “Proportion of land area covered by forest” varies in different sources from under 40 to over 50 per cent (the NSSD estimates this figure to be 45 per cent). Therefore, it is difficult to have a clear picture of the current situation in the country and of the possibility of achieving the targets set for 2015. However, assessing the MDG situation was a useful exercise and allowed the Government and society to get a better idea of the country’s problems and its potential to solve them. Some of the MDG indicators were customized and adjusted to take into account Montenegro’s specific needs and circumstances. An important activity that accompanied the preparation of the report was the joint review of statistical needs by the UNDP and the Statistical Office of Montenegro (MONSTAT). Monitoring of further progress towards the achievement of MDGs will to a large extent depend on the availability of accurate data.

A link between MDG Goal 7 and the NSSD can be seen in one of the NSSD general goals (ensure efficient control and reduce pollution; ensure sustainable resources management) and its corresponding key indicators (see Box 3.1). However, these key indicators (as well as more detailed indicators in the National Action Plan for implementation of the NSSD) do not have specific quantitative targets, which would allow the monitoring of progress of their implementation.

3.6 Conclusions and recommendations

Since the first EPR in 2002, Montenegro has been eager to participate in international environmental cooperation. New opportunities for this have been open to the country since it became independent in May 2006. However, the country is in many ways at a disadvantage for both objective and subjective reasons. Until recently, Montenegro had no focal points for the MEAs (only contact persons). The country had to go through the formal procedure of applying for succession to the MEAs to which the State Union of Serbia and Montenegro was a party. Institutional capacity of the environmental authorities – the Sector for Environmental Protection at the MTE – is weak. At the time of the mission, there was no unit in the Ministry with specific responsibility for international environmental cooperation.

Montenegro continues the process of harmonizing its environmental laws with the EU environmental acquis. It has been active in developing strategies and policies in the area of environmental protection with assistance from the international community. However, in many cases the projects are donor-driven. Their implementation and follow-up at the national level are often hampered by the insufficient capacity of national institutions and lack of coordination between various government agencies. The absence of a national environmental strategy is one of the reasons that there are no clear priorities for the country’s international environmental cooperation. The soon to be adopted National Strategy for Sustainable Development could, to some extent, provide such priorities. There are also gaps in the collecting of information on international assistance projects, and there is no comprehensive database for the projects. Donor activities in the area of environmental protection are not coordinated well enough.

Recommendation 3.1:
The Government should strengthen the institutional capacity of the Ministry of Tourism and Environment for international environmental cooperation, to meet the requirements linked to the further development of multilateral environmental agreements and their implementation, as well as the European Union (EU)
accession process (including the establishment of a project implementation unit).

**Recommendation 3.2:**
The Ministry of Tourism and Environment should:

(a) Clearly define the country’s priorities and objectives in the area of international environmental cooperation and identify resources for achieving them from both domestic and external sources; and

(b) In cooperation with relevant national authorities (e.g. the Ministry of Finance and the Secretariat of European Integration), develop a system that will allow for full accounting of international assistance in the area of environmental protection and promote better coordination of the donor activities in this area, both with the donors and among the government agencies and local authorities.

Montenegro decided to become a party to all international treaties and conventions (including MEAs) to which the State Union of Serbia and Montenegro was a party. It has continued activities related to the ratification and implementation of global and regional environmental agreements. It has prepared a list of conventions that it intends to ratify, and for some of them has prepared draft laws for ratification. Several new laws that contain provisions in line with MEAs have been adopted, including the Law on Environmental Impact Assessment, the Law on Strategic Environmental Assessment, the Law on Integrated Pollution Prevention and Control (OG RM No. 80/2005), and the Law on Waste Management. At the time of the mission the country still did not have focal points for most of the MEAs. For the implementation of many conventions, Montenegro relies heavily on international assistance and will be relying on it in the foreseeable future. It participates in the AIMS Network, which supports acceptance and implementation of MEAs in South Eastern Europe.

**Recommendation 3.3:**
Concerning multilateral environmental agreements (MEAs):

(a) The Government should:
   i. Proceed with the ratification of MEAs for which all the necessary preparatory work has been done; and
   ii. Designate relevant government bodies as focal points and competent authorities for the MEAs, and create adequate conditions to ensure their implementation. These government bodies should continue attracting international assistance for this purpose, with the ultimate objective being to build sufficient national capacity for their implementation.

(b) The Ministry of Tourism and Environment should, in cooperation with relevant international organizations and financing institutions, develop national implementation plans (or similar documents) for MEAs that are signed and ratified according to their provisions.
PART II: MOBILIZING FINANCIAL RESOURCES FOR ENVIRONMENTAL PROTECTION
**Chapter 4**

**ECONOMIC INSTRUMENTS**

### 4.1 The economic context for environmental policy

The economic context for the conduct of environmental policy in Montenegro has gradually improved since the first Environmental Performance Review (EPR) in 2002. There has been strong economic growth (averaging 4.4 per cent per annum between 2004 and 2006), progress in macroeconomic and structural reforms, progress in privatization of state- and socially-owned enterprises, and increases in average real incomes per capita. However, poverty is still widespread (see Introduction). Major challenges remain in the reforming of the energy sector (see Chapter 7) and the strengthening of competitiveness of the industrial sector. It is a Government strategy to develop tourism into a pillar of the economy (see Chapter 6).

By the end of 2001, the process of price liberalisation was nearly completed. Administrative price controls have been maintained for services related to natural monopolies, public and municipal utilities (electricity and water) and a small range of other products, including oil and oil derivatives. Still, about one third of the population has an income below 150 per cent of the national poverty line and therefore is considered to be “economically vulnerable”, i.e. facing a high risk of falling into poverty. Issues related to social affordability need to be taken into account when economic instruments are designed.

The legacy of the former economic system can be seen in the obsolete equipment found in large parts of the industrial sector, with concomitant adverse consequences for environmental performance. State-owned firms generally have not been able to mobilize the financial resources required for modernizing equipment and improving competitiveness, and payment of pollution charges has not been enforced. Moreover, the public infrastructure, including environmental infrastructure, is in a poor state owing to more than decade’s neglect. This neglect is due to a lack of funds for maintenance and modernization.

Key sectors of the public administration have very limited human and financial resources. This adversely affects the design and implementation of reform and investment programmes.

### 4.2 Economic instruments for environmental policy

The situation concerning the general legal framework for environmental policy-making and the use of economic instruments has not changed since the first EPR in 2002, with the main exception of the introduction in May 2004 of a new environmentally-related tax on the use of motor vehicles (see below). The 1996 *Law on Environment*, which formally established the polluter- and user-pays principles as key instruments for environmental protection in Montenegro, is, however, currently under revision. The Law distinguishes two groups of eco-charges (i) pollution charges (to be based on the polluter-pays principle) and (ii) an investment charge.

Both instruments are mentioned in the context of identifying sources for the financing of environmental protection activities, and the corresponding revenues are to be paid into a special Government sub-account. The draft *Law on the Environmental Fund* envisages that the revenues from these charges will be allocated to the Environmental Fund, once it has become operational.

Besides these instruments indicated in the *Law on Environment*, there are user charges for services provided by local utilities in the area of water supply and wastewater treatment and for solid (non-hazardous) waste collection and disposal. All these services and the corresponding setting of charge rates are arranged at municipal level.

As regards charges for the use of natural resources, the *Law on Environment* only refers to the need to establish criteria in a separate regulation for the use of natural resources.

**Investment charge**

An investment charge corresponding to 1 per cent of total investment value continues to be levied on projects that are subject to an environmental impact assessment (EIA). The charge corresponds to 2 per cent of the value of the investment project in the case when it is located in the area of a national park, except for projects that are directly related to natural resource protection. In practice, the applied rate has
been always 1 per cent, because so far there has been no permit issued for an investment project in the area of national parks that would be subject to an EIA. It is also noteworthy that the draft Law on the Environmental Fund will still retain the investment charge as a source of revenue for financing the Fund’s activities until the amendments of the 2006 Law on Environment have been adopted by the Parliament, which is expected before the end of 2007.

Currently, EIAs are carried out according to the Law on Environment and the Regulations on Environmental Impact Assessment (OG RM No. 14/1997), which prescribe the activities subject to the EIA. The new Law on Environmental Impact Assessment, which was adopted in 2005, will take effect in 2008.

Pollution charges

The Law on Environment prescribes pollution charges for: air pollution; consumption of fossil fuels; use of lubricant oils; use of motor vehicles, aircrafts and vessels; use of ozone-depleting substances; and the production and disposal of hazardous waste (see Table 4.1). Details concerning pollution charges levels are elaborated in the Regulation on Environmental Pollution Taxes (OG RM No. 26/1997, 9/2000, 52/2000), which was modified for the last time in 2000. As can be seen from Table 4.1 most of these instruments were, however, never implemented. And those instruments that were implemented witnessed a significant erosion of their potential function as incentives because of strong cumulative inflation: all the corresponding charge rates (per unit of pollution or polluting source) declined in real terms by some 40 per cent in 2006 compared with 2000.

Table 4.1: Environmental charges and taxes earmarked for financing environmental protection in the 1996 Law on Environment

<table>
<thead>
<tr>
<th>Item</th>
<th>Charge/tax rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution charges*</td>
<td></td>
<td>Earmarked</td>
</tr>
<tr>
<td>CO</td>
<td>1.15 Euro/ton</td>
<td>NI</td>
</tr>
<tr>
<td>SO₂</td>
<td>2.05</td>
<td>NI</td>
</tr>
<tr>
<td>NO₂ (soot)</td>
<td>1.64</td>
<td>NI</td>
</tr>
<tr>
<td>NF</td>
<td>62.00</td>
<td>NI</td>
</tr>
<tr>
<td>Benzo(a)pyren</td>
<td>92.40</td>
<td>NI</td>
</tr>
<tr>
<td>CFC</td>
<td>460</td>
<td>Earmarked /NI</td>
</tr>
<tr>
<td>Hazardous waste</td>
<td></td>
<td>Earmarked</td>
</tr>
<tr>
<td>Production</td>
<td>77.50</td>
<td>NI</td>
</tr>
<tr>
<td>Disposal</td>
<td>38.75</td>
<td>NI</td>
</tr>
<tr>
<td>Eco-tax on heating fuels</td>
<td>Euro/ton</td>
<td>Earmarked</td>
</tr>
<tr>
<td>Heavy fuel oils</td>
<td>0.38</td>
<td>NI</td>
</tr>
<tr>
<td>Light fuel oils</td>
<td>0.30</td>
<td>NI</td>
</tr>
<tr>
<td>Coal</td>
<td>0.23</td>
<td>NI</td>
</tr>
<tr>
<td>Eco-tax on engine fuels</td>
<td>Euro/1,000 litre</td>
<td>Earmarked</td>
</tr>
<tr>
<td>Gasoline</td>
<td>1.53</td>
<td>X</td>
</tr>
<tr>
<td>Diesel</td>
<td>3.06</td>
<td>X</td>
</tr>
<tr>
<td>LPG</td>
<td>1.53</td>
<td>X</td>
</tr>
<tr>
<td>Eco-tax on motor vehicles</td>
<td>10 % of annual road user fee</td>
<td>Not earmarked / X</td>
</tr>
<tr>
<td>Investment tax related to EIA</td>
<td>1% (2%) of investment value</td>
<td>Earmarked / X</td>
</tr>
</tbody>
</table>


Note: Pollution charges are to be paid by companies with an installed fuel–power capacity of more than 1 MW

* A partial list of the substances for which charges have been specified

Earmarked: Revenues earmarked by law for financing of environmental measures

NI = Tax/charge not implemented; X = Tax/charge implemented

Original charges and taxes expressed in Deutschmarks were converted into Euros using the official conversion rate of 1 Euro = 1.95583 DM
Industrial air pollution charges

Environmental air management is still regulated by the 1980 Law on Air Pollution (OG RM No 14/1980). The adoption of a new draft Law on Air Quality is expected for mid-2007. The transposition of all relevant European Union (EU) air sector directives is to be completed by the end of 2007. The transposition of the-European Union Large Combustion Plants Directive is scheduled for 2007. Montenegro has ratified the Kyoto Protocol in April 2007. A draft inventory of greenhouse gases (GHG) has been prepared. The Italian Ministry of Environment and Territory has provided assistance in the drafting of the Law on Ratification of the Kyoto Protocol and the creation of the Green Certificates, also known as Renewable Energy Credits, for the promotion of electricity generated from renewable energy sources.

Air emission standards are still those fixed in a federal by-law of 1982. Air emission charges (see Table 4.1) have in principle to be paid by facilities with an installed fuel–power capacity of more than 1 MW. The draft Law on the Environmental Fund envisages raising this threshold to at least 2 MW. Enterprises are charged for all emissions, not only those beyond the established limits. In the absence of adequate self-monitoring and measurement equipment at industrial facilities, emissions have been measured on an ad hoc basis by the Centre of Ecotoxicological Research. But emission charges have not been collected since 2000. The main reason for this is the fragile financial situation of the largest polluters, notably the Electric Power Company of Montenegro (EPCG) and Kombinat Aluminium Podgorica (KAP), the two largest companies in Montenegro. As regards KAP, the profit situation is expected, however, to improve in view of its privatization in early 2006 and the envisaged rationalization and modernization of production processes. In a similar vein, there has been progress in the restructuring of EPCG, which is also to be privatized, and operational losses appear to have been significantly reduced by tariff increases and improved collection rates over the past years.

Road transport-related taxes and fees

Annual emissions of pollutants in ambient air from road transport are not being reported. But vehicle emissions are acknowledged to be a major and increasing source of air pollution (lead, soot, SO₂, NOₓ). The main problems are the high average age of vehicles and the large number of vehicles that are not equipped with catalytic converters. Existing regulations on exhaust gases emission are, moreover, poorly enforced. An insufficient road network leads to congestion with the associated increased emissions of air pollutants. The public transportation system is largely obsolete and underdeveloped, and at present there are no official plans for its modernization or for promoting the use of the system.

Fuel quality standards, in terms of maximum allowed sulphur and lead content, have been very low not only compared to Western Europe but also to other countries in South Eastern Europe. The Government has so far no definite plan for phasing out leaded gasoline and the maximum allowed sulphur content in petrol is 2000 parts per million (ppm), about twelve times as much as in other countries in the region. Excise taxes on leaded petrol are significantly below the EU minimum rates. There is, moreover, no discrimination in favour of unleaded petrol. But the excise tax rate on unleaded petrol is slightly above the EU minimum rate and quite high compared to other countries in the region (Table 4.2).

Vehicle fuel prices are still regulated. Since spring 2006, the Government has been fixing a maximum fuel price, which is adjusted on a two-week basis in line with changes in the world market price of crude oil and the evolution of the exchange rate of the euro (the domestic currency) against the dollar.

There is an eco-charge on motor fuels, which is earmarked for environmental protection financing. It amounts to €1.5 per 1,000 litre of gasoline (leaded and unleaded) and has remained unchanged since 2000. Taking into account the increase in the general price level by some 60 per cent since 2000, this corresponds to a charge in real terms of about 90 euro cents per 1,000 litres in 2006. There are several other transport-related taxes, which, for the most part, have been introduced without a specific environmental purpose, though they may have an impact on the volume of transport and environmental pollution.

There is an annual vehicle registration tax, which includes, as separate item, also a road user charge. Both vary depending on the category, age and motor size of vehicles. Since January 1998, an eco-tax on the use of motor vehicles has been levied, which corresponds to 10 per cent of the annual road user charge. The road user charge is collected by the Ministry of Interior Affairs and Public Administration and is not earmarked for environmental protection. A new (additional) tax on

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1 For economic instruments applied to the energy sector see Chapter 7.
Table 4.2: Excise taxation on motor fuels

<table>
<thead>
<tr>
<th>Products</th>
<th>Unit</th>
<th>Montenegro</th>
<th>EU minimum excise rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline leaded</td>
<td>Euro/1,000 litre</td>
<td>364</td>
<td>421 / 421</td>
</tr>
<tr>
<td>Gasoline unleaded</td>
<td>Euro/1,000 litre</td>
<td>364</td>
<td>359 / 359</td>
</tr>
<tr>
<td>Diesel</td>
<td>Euro/1,000 litre</td>
<td>270</td>
<td>302 / 330</td>
</tr>
<tr>
<td>Kerosene</td>
<td>Euro/1,000 litre</td>
<td>120</td>
<td>302 / 330</td>
</tr>
<tr>
<td>LPG</td>
<td>Euro/1,000 litre</td>
<td>..</td>
<td>125 / 125</td>
</tr>
<tr>
<td>Natural gas</td>
<td>Euro/Gigajoule</td>
<td>..</td>
<td>2.6 / 2.6</td>
</tr>
</tbody>
</table>

Sources:

Note: EU minimum rates: the first figure is the minimum rate in force since 1.1.2004, the second figure is the minimum rate to be applied as from 01/01/2010.

The use of passenger motor vehicles, vessels and aircraft entered into force at the beginning of May 2004\(^2\). The tax on motor vehicles ranges from €15 to €150 and for motorcycles from €10 to €200. The tax liability can decline to up to a maximum of 70 per cent with the increase in age of the vehicle. This tax is not earmarked for environmental purposes.

In principle there are annual mandatory technical inspections for car emissions, which are a requirement for obtaining a car registration. But the strictness of these examinations is subject to doubt. There are no plans for introducing tighter systems of road vehicle control designed to ensure compliance with minimum environmental standards and, partly related to that, with the improvement in standards of vehicle maintenance. There are, however, restrictions on imports of used vehicles: those that are more than three years old and/or do not comply with Euro 3 emission standards.

There is no determined policy designed to reduce vehicle pollution. There is notably no official commitment to the phasing out of leaded petrol or to reducing sulphur in transportation fuels by a given target date. Excise taxes and the eco-tax on engine fuels do not discriminate in favour of unleaded fuels. Also, the other transport-related taxes and fees (registration tax, road user fees, and tax on use of motor vehicles) do not discriminate in favour of cars that are equipped to use unleaded petrol. The eco-charges on fuel, moreover, are much too low to create any incentives that would lead to environmental improvements, and its only purpose therefore is to generate government revenues. There are also no plans for introducing financial incentives that would promote a reduction of the average age of vehicles.

It is noteworthy that the pollution charges currently in force are to be revised with the entry into force of the Law on the Environmental Fund (expected in the course of 2007) and the related by-laws (to be developed), which specify new emission charges. The main changes envisaged by the draft Law on the Environmental Fund are:

- Payment of emission charges for major pollutants only (SO\(_2\), NO\(_x\), CO, particulate matters, heavy metals and hydrocarbons);
- Introduction of specific emission thresholds above which there is a progressive increase in charges per ton of emissions;
- Introduction of a tax on plastic shopping bags\(^3\);
- Stronger differentiation of charges for the production and disposal of hazardous waste; and
- New eco-tax on motor vehicles, which takes into account the environmental performance of the vehicle; this tax is to replace the current eco-charge on motor vehicles, which amounted to 10 per cent of the road user fee.

All these proposed changes, if adopted and implemented, would be a step in the right direction. But their effectiveness as regards environmental protection will depend crucially on the corresponding levels of various pollution charges, which are still to be determined, and the enforcement of their payment.

Waste management charges

The Law on Waste Management (OG RM No. 80/2005), which is harmonized with EU standards for landfills, incineration and sewage

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\(^2\) Law on Tax on Use of Passenger Motor Vehicles, Vessels and Aircraft (OG RM No. 28/2004 and 37/2004)

\(^3\) This appears to have been motivated by the successful application of such a tax in Ireland, where it was introduced in 2000. The tax is imposed on consumers who require plastic bags for goods or products purchased at retail outlets.
sludge, will enter into force at the beginning of 2008. New by-laws and regulations for the implementation of the Law (pertaining inter alia to the classification of waste and rules for waste disposal sites) are to be adopted by mid-2007. The Strategic Master Plan for Solid Waste Management that was approved in 2005 envisages a general increase in waste charges in line with the polluter-pays principle. The implementation of the various waste-related investment projects in Montenegro indicated in the Strategic Master Plan is estimated to require €120 million for the period up to 2014.

Solid waste management is organized at the municipal level by local public utility companies (PUC) in line with the Law on Municipal Activities (OG RM No. 7/4 1995). Each PUC is an independent legal entity, but is owned by the municipality, which generally exercises a strong influence on the PUC regarding tariffs, investments and staffing policy. The central government provides the general legal framework for supervision of and strategic directions for solid waste management. In some municipalities the provision of waste management is combined with water and wastewater management (and other services such as maintenance of green parks) in a single municipal enterprise.

Recently, the Government has encouraged a regional waste management approach, involving the cooperation of several municipalities, to achieve cost savings resulting from economies of scale. This cooperation should facilitate a shift from landfills to other waste management approaches such as recycling and deposit-refund schemes.

Each municipality sets its own charges for communal waste collection and disposal. There are no national guidelines to be followed and charges do not need approval by government bodies or a specialized agency. There is no general database for the structure of waste-related charges and revenues among the 21 Montenegrin municipalities, but charge rates and collection rates are reported to vary considerably. In general, collection fees are not based on volume of waste generated but rather on the size of domestic residences or, in case of firms, business premises.

Information on the development of waste charges in recent years is largely missing. However, there was a significant increase in waste collection charges in Podgorica at the beginning of 2004, designed to ensure improved cost recovery. Waste charges for households rose by 25 per cent; and increases in charges for municipal waste generated in the retail trade, and hotel and restaurant sectors were within the range of 100 to 150 per cent.

In general, however, revenues from waste charges are reported to be very low and insufficient for covering operational costs of waste collection and disposal, necessitating financial support from the municipal budget and the central government budget. This is a consequence to a large extent of the low collection rates of waste bills, which averaged only 60 per cent in 2004, which, in turn, reflects the lack of effective legal enforcement mechanisms.

Efforts to promote recycling are at an initial stage. Some pre-sorting of waste for recycling purposes is currently only done in Podgorica and some municipalities in the coastal region, but it is limited to glass and packaging paper. The establishment of a regional recycling centre, involving an investment of €10.3 million, supported by a loan from the Spanish Government, is planned for Podgorica in 2007.

There has been no significant change regarding the management of hazardous waste in Montenegro over the past few years. There is no systematic collection of information on the specific type and volume of hazardous waste generated in industry and from households. Although official charges for the production and disposal of hazardous waste exist (see Table 4.1), they have not been applied. It is noteworthy in this context that there is no special facility for the storage and treatment of this kind of waste in Montenegro. A general strategy for the collection, storage and disposal of hazardous waste, including its export, does not yet exist. The EU Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment is expected to be fully transposed by 2009.

Certain kinds of industrial waste (hazardous and non-hazardous) that can be sold for recycling are collected by private firms and transported for treatment mainly to Serbia. Most of the large industrial producers of hazardous waste have storage facilities on their business premises, which are, in principle, being monitored by the environmental inspectorate of the Ministry of Tourism and Environment (MTE) and the corresponding municipality, but the scope and frequency of this monitoring is not known. Small- and medium-sized firms appear to often mix their hazardous, non-hazardous and communal waste, with the consequence that these are dumped on municipal waste sites.
The setting of waste charges appears to be, in general, strongly influenced by local socio-political considerations. This helps to explain why revenues from waste management are largely insufficient to cover the related costs. There is a need to raise public awareness about the costs of waste collection and disposal and the related environmental benefits. This could be done, for example, by the separate identification of waste collection and disposal costs on tax bills to be paid by households and businesses. Also, the use of adequate incentives for recycling and waste separation could be explored.

Water and wastewater charges

The conditions of water use, water pollution and financing are still regulated by the 1995 Law on Water and the associated by-laws. But this legislation is not fully compatible with the relevant EU directives. A new Law on Water, which is consistent with the European Union Water Framework Directive, was adopted by the Parliament towards the end of 2006 and its implementation is planned for some time between 2007 and 2009.

It should be mentioned that the entire water sector infrastructure is still state-owned. However, its use and the responsibility for service provisions has been delegated to the municipalities, most of which have their own legally-independent public water and wastewater utility, Vodovod i Kanalizacija (ViK), with some also being combined with the provision of waste management services.

In 2004, the municipalities in the coastal region of Montenegro established VODACOM, which is a joint service company for the municipalities and the ViKs. VODACOM is expected to support the ViKs in the planning and organization of the future development of water supply and wastewater services, the monitoring of the billing process and the debt management of the existing ViKs.

The Government, moreover, created the Public Enterprise for Water Supply, Wastewater Drainage and Treatment and Solid Waste Disposal (PEW) in 2004, which is supposed to improve water supply and sanitation services in the coastal region by coordinating the implementation of infrastructure investment projects.

The improvement of water quality and sanitation is one of the key challenges facing policy makers in Montenegro after a prolonged period of only moderate investments, if any, in the maintenance and renewal of the water infrastructure. This will be particularly important for the coastal region where adequate water quality and services are key for promoting tourism, which, as mentioned, is one of the pillars of the Government’s economic development strategy. The Master Plan for Water Supply for the Montenegrin Coast and Cetinje Municipality, the Strategic Master Plan for Sewerage and Treatment of Wastewater for Montenegrin Coast and Cetinje Municipality, and the Strategic Master Plan for Sewerage and Treatment of Wastewater for Central and Northern Montenegro were adopted in 2004 and 2005 with planned investments totalling €49 million until 2009. The implementation of these plans hinges crucially on the availability of foreign financial assistance.

Although the municipal utilities are legally independent institutions, the setting of prices for water supply and wastewater services is done in close consultation with the relevant municipality. Charges for water supply and wastewater discharge vary significantly among the municipalities and can also vary with the season (summer/winter). Generally, charges are significantly higher for non-domestic users (mainly firms) than for households and social institutions (see Table 4.3). On average, wastewater charges account for about one quarter of the combined price for water supply and wastewater, but detailed data are only available for a few municipalities.

Charge rates for water supply and wastewater collection and treatment have been raised gradually, but overall only moderately, during the past years with the aim of lowering water consumption, reducing cross-subsidization and ensuring improved cost recovery. Even so, water consumption per capita is still very high at twice the level (some 150 litres per capita and day) of consumption in Western Europe. According to the wastewater feasibility study, water and wastewater charges combined accounted on average for only a small share, some 2.5 per cent, of household budgets in 2003. However, surveys suggest that households are willing to pay more for water services in return for an improved quality in services. Nevertheless, to ensure affordability, water charges (water supply and wastewater discharge) should, on average, account for no more than three to 5 per cent of household income.
Collection rates of water and wastewater bills have improved, but are still quite low, averaging some 60 to 65 per cent at the national level in 2005 (see Table 4.3). It is noteworthy that 3 per cent of each collected bill is transferred to a Ministry of Agriculture, Forestry and Water Management (MAFWM) special account, and the accumulated funds are mainly to be used for environmentally-related investment projects in small municipalities. Overall revenue from water supply and wastewater charges amounted to some €30 million in 2005. Revenue could be increased considerably if contracts were enforced, with consequential raised collection rates (for which there is considerable scope).

In general, water utility revenues are barely sufficient to cover operational and basic maintenance costs. The direct consequence has been that utilities are, in general, dependent on financial support, partly from the central Government and mainly from local governments, for undertaking major investment projects designed to improve the water sector infrastructure. But in the face of their own lack of sufficient revenues and competing expenditure priorities, municipalities have been able to provide only very limited financial support to their water utilities. The obsolete state of the water network is reflected in the considerable physical water losses, which amount on average to 55 to 60 per cent of water abstraction. These losses were even higher before the recent improvements in infrastructure.

The legal basis for the calculation of industrial water effluent charges is the Decree on Water Pollution Charges (OG RM No. 15/1996). It stipulates that pollution charges are to depend on the quantity of water discharged, the type of pollutant and the type of water receiving the effluent. In practice, however,

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1 Direct communication from the MTE
because there is no adequate equipment for the monitoring and measurement of water effluents, water effluent charges paid by industry are related only to the volume of wastewater and not the quantity and characteristics of discharged polluted water. Therefore, the polluter-pays principle is applied only to a limited extent. The bill to be paid, moreover, is often based only on an estimate of total volume of polluted water discharged. Measurements of water pollution currently only take place at KAP and the thermal power plant. It is planned that enterprises can subcontract (outsourcing) monitoring of wastewater discharge to specialized service providers.

**Natural resource use charges**

The use of natural resources is possible on the basis of a leasing contract or a specific permit or licence, all involving the payment of a fee or tax. Main examples are water abstraction; use of land and forests; extraction of minerals; and fishing and hunting. There is no evidence available on the role of the charges to show that they help to achieve the broader objectives of natural resource management. It is also not clear, for example in the case of natural resource extractions, to what extent the fees take into account the environmental impact of these activities.

The current system is for concessions on forest use to be awarded on the basis of annual tenders. Stumpage fees vary depending on the type of wood; they ranged from €15/m³ to €25/m³ in 2006. A new draft law on forests provides for the possibility of multi-year concessions, possibly up to 30 years, which could raise incentives for winners of these contracts to engage in measures designed to ensure sustainable logging.

Visitors to national parks have to pay entry fees. There are also fees for licences and permits for using watercourses, for example for fishing or rafting. Owing to growing tourism, revenue has increased significantly in recent years and is earmarked for park maintenance. Total revenue for the four national parks combined amounted to €0.6 million in 2005. Funds from the Government budget financed operational expenditures, such as personnel costs (€0.34 million) and (limited) capital investment expenditures: €0.15 million. In June 2006, an eco-tax of €0.5 per person, per night staying in hotels located in national parks was introduced. Eighty per cent of the revenue from this eco-tax is allocated to the local tourism organisation and the remainder (20 per cent) to the central government budget.

**Non-compliance fees and fines**

The Law on Environment stipulates the imposition of fines for the non-observance of (i) pollution standards and (ii) legal provisions concerning environmental impact assessment of investment projects. Fines are defined as a multiple of the national minimum wage and are therefore not directly related to the extent of non-compliance or the severity of environmental damage caused. The current system of penalty payments is therefore best characterized as a regulatory instrument. There is no information available on the number and amount of fines imposed by the environmental inspectorates or on the revenues collected from these fines. Legal enforcement is reported to be weak, which reflects the lack of familiarity of courts with environmental issues.

**4.3 Conclusions and recommendations**

The use of economic instruments for the achievement of environmental objectives is still underdeveloped in Montenegro. Most of the legally prescribed pollution charges are not implemented. This holds notably for industrial pollution discharged into air and water. Those environmental taxes and charges that have been implemented are not adequately reflecting the polluter- or user-pays principles. They generate revenues (though often only at a moderate level) but do not provide adequate incentives for changing behaviour towards the environment. Moreover, there is a lack of credible and effective sanctions to ensure compliance with environmental norms and standards.

An effective combination of regulatory and economic instruments is required to modify the environmental behaviour of firms and households. Montenegro built the legal basis for the application of environmental policy instruments in the 1996 Law on Environment, but implementation has been only partial and the degree of stringency insufficient to entail improvements in environmental quality. The upshot is that an increased and more stringent use of economic and regulatory instruments for environmental protection is needed urgently.

The existing legal instruments for environmental protection need to be reviewed in order to gauge their effectiveness in achieving well-defined and realistic environmental objectives over a specific time period. To the greatest extent possible, the choice of a given (major) instrument should be based on a comparison of the expected environmental benefits with the costs of its implementation. Transparent and targeted subsidies and exemptions could, however, be provided for compelling social or economic reasons.
(for example, reasons of competitiveness) in well defined and limited cases.

**Recommendation 4.1:**
The Government needs to ensure a more stringent application of environmental policy instruments in line with the polluter- and user-pays principles in order to create adequate incentives for changing behaviour towards the environment. In this context, it should base the determination of specific policy measures on an intensive dialogue with major stakeholders, with the aims of:

(a) Reviewing the effectiveness of existing economic instruments for environmental protection in achieving well-defined and realistic environmental objectives;

(b) Determining policies that achieve major environmental benefits in a cost-effective way;

(c) Achieving the gradual elimination of environmentally harmful subsidies, taking into account the need to ensure social affordability and provide for support in the event of compelling competitiveness concerns in well-defined and limited cases; and

(d) Abolishing taxes currently earmarked for environmental financing, but which have no obvious environmental impact, such as the investment tax on business projects requiring an environmental impact assessment, which should be replaced by an appropriate administrative fee.

A major problem in Montenegro remains transport-related air pollution and the related high risks of adverse health effects. More generally, there is a lack of a comprehensive medium- and long-term transport policy strategy that also fully integrates environmental issues. Such a strategy would have to address topics like modal split (road versus rail transport), the relative role of public versus private transport, and effective policy instruments for reducing transport-related pollution. In the absence of such a strategy, the authorities can, nevertheless, introduce measures designed to reduce the pressure on the environment stemming from the obsolete vehicle fleet and the use of low-quality petrol. This can be done by using targeted instruments that shift the demand for cars and petrol to more environmentally-sustainable options.

**Recommendation 4.2:**
The Government should, as soon as possible:

(a) Set a target date for the phasing out of leaded fuel for motor vehicles and for the reduction of sulphur in transportation fuels to current EU maximum levels of 50 parts per million (ppm);

(b) Provide fiscal incentives that promote the use of unleaded fuel and fuels with a lower sulphur content;

(c) Promote the introduction of cleaner vehicles using fiscal incentives;

(d) Prepare the legal basis for the introduction of Euro 3 emission standards, and thereafter ensure their implementation as soon as possible; and

(e) Tighten technical inspection standards for motor vehicles and ensure their effective implementation.

The improvement of the existing and the creation of new infrastructure for solid waste and wastewater management are major challenges for the Government. At the same time there is a need for a comprehensive review of the waste, water and wastewater charges policies in order to curb waste generation, reduce water consumption, and establish effective incentives for adequate industrial wastewater treatment and disposal. Higher charge rates based on the volume and quality of waste and wastewater, respectively, in combination with improved charge collection rates would also mobilize more resources for domestic financing of operational and maintenance expenditures. However, in view of the positive effects associated with sanitation services, for example: health effects, full cost recovery is not necessarily an appropriate target, and there is a case for supporting the operations of wastewater utilities by limited subsidy payments financed from general tax revenue. For instance, household waste charges could be based on the number of persons per household rather than the size of living space. For hotels, waste charges could be based on the average number of overnight stays during the billing period.

**Recommendation 4.3:**
Regarding municipal solid waste management, municipalities should:

(a) Establish a system where waste charges are, to the greatest possible extent, proportional to the amount of waste collected, in order to create proper incentives for waste minimization. Municipalities should strive to establish agreements with all major groups of waste producers and with citizens to reduce, sort and deliver waste; and

(b) Increase efforts to promote the recycling of waste and offer the appropriate infrastructure to do this properly.
**Recommendation 4.4:**
For water supply and sewerage services, municipalities should raise user charges in stages to achieve more sustainable water consumption and improve cost recovery. Affordability problems for low-income households should be addressed by appropriate targeted subsidies.

There is no quantitative information on the stock of existing environmental control and abatement equipment in the industrial sector or any on environmental protection expenditures by enterprises in recent years. Available anecdotal evidence suggests that the existing stock of this equipment is small and often outdated. Moreover, there neither seems to be any policy for promoting cleaner technology in industry, nor any economic incentives to encourage the introduction of best available techniques (BAT) in the industry and energy sectors. Against this background, the environmental benefits that can be expected from investing in pollution abatement and control equipment appear to be quite high.

**Recommendation 4.5:**
The Government should enforce more stringent environmental standards within the framework of well-defined emission targets for major pollutants. The associated incentives for firms to increase investments in pollution abatement and control equipment should be supported by adequate fiscal policy measures to stimulate investment in best available techniques (see Recommendation 4.1).
5.1 Environmental expenditures and domestic sources of environmental financing

**Domestic sources of environmental financing**

According to the *Law on Environment* (OG RM No. 12/1996), environmental protection activities shall be financed from:

- Government budget revenues;
- Eco-charges (pollution charges and an investment tax);
- Funds from the collection of environmental fines prescribed by the Law;
- Funds from particular sources prescribed by local authorities, subject to Government approval; and
- Funds from other sources (including foreign assistance).

The eco-charges (pollution charges and the investment tax) have to be paid from 2007 into a separate Government (ecological) sub-account, which is administered by the authority responsible for environmental management, the Ministry of Tourism and Environment (MTE). The potential revenues from eco-charges have not been realized, however, because most of the legislated pollution charges have not been implemented or enforced (see Chapter 4), with the exception of the eco-tax on fuels and the investment tax. Also, revenues from fines for non-compliance with environmental standards are virtually non-existent. As a general rule, revenue raised in the current year is available for spending in the next year.

Revenues from policy instruments that have been applied have been relatively moderate, fluctuating around €1 million between 2002 and 2005 (see Table 5.1). In general, more than half of these revenues are accounted for by the investment tax. A considerable increase in these revenues by some 50 per cent to €1.5 million was projected for 2006, reflecting mainly a surge in investment tax revenues on account of the strong rise in construction activity in Montenegro’s coastal region. According to the Sector for Environmental Protection within the MTE, the earmarking of these revenues for environmental financing is now well observed.

Information on other environmental revenues that are earmarked for environmental spending is not collected systematically at the MTE. Fees for natural resource use amounted to some €2.5 million during the first nine months of 2006, but details are not available. It has also not been possible to compile data for previous years.

There is no systematic collection of information on user charges for waste collection and disposal, and for wastewater discharges paid by households and companies at the local government level. Water supply and wastewater charges amounted to €30 million in 2005, but separate data for revenues from wastewater charges are not available.

**Domestically-financed environmental expenditures**

The *Law on Environment* lists a number of broad environmental activities that can be financed or at least co-financed with public revenue. It is noteworthy that there is no explicit mention of the monitoring and enforcement of environmental norms and standards, which are a key function of government authorities.

Information on total domestically-financed environmental expenditure is hard to come by. A breakdown of government expenditures according to the *Classification of Functions of Government* (COFOG) exists only for the 2006 central government budget plan. Aggregate central government environmental protection expenditure is projected to amount to €3.8 million, corresponding to 0.75 per cent of total Government outlays or 0.2 per cent of GDP. About 40 per cent of this expenditure was covered by the budget of the Environmental Sector of the former Ministry of Environmental

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1 COFOG provides a breakdown of Government expenditures into ten main functions, of which one (group 5) is environmental protection.

2 A direct communication from the Ministry of Finance. Details on main environmental expenditure categories are not available.
Protection and Physical Planning (see Table 5.1), corresponding to somewhat less than 0.1 per cent of GDP since 2002. Between 2002 and 2006, a large bulk of the expenditure administered at national level was in the area of solid waste management.

There is no statistical information reported on aggregate annual operational and capital expenditures by public utility companies for waste and wastewater management nor is there any on the extent of financial support from the central and local government budgets. The Sector for Municipal and Housing Matters within the new Ministry for Economic Development is currently elaborating the possibility of introducing a revolving fund for financing of environmental investment projects at the municipal level by public utilities. This would be mainly soft loans that, after repayment, would be available for financing other projects. A feasibility study is currently being carried out with the support of the United States Agency for International Development (USAID).

There are also no data reported on private sector Pollution Abatement and Control (PAC) expenditures, which appear, in any case, to be quite limited.

The limited domestic funds that have been allocated so far for the financing of environmental protection measures are in sharp contrast to the considerable long-term investment requirements, which amount to more than €600 million and are detailed in a number of strategic documents:

- The Strategic Master Plan for Solid Waste Management: €62 million over the period 2005 to 2009;
- The Wastewater Feasibility Study for the Coastal Region and the Cetinje Municipality: €281 million for 2004 to 2028, of which €28 million is for 2004 to 2008;
- The Draft Strategic Master Plan for Sewerage and Treatment of Wastewater for Central and Northern Montenegro: €279 million over the period 2005 to 2029, of which €81 million is for 2005 to 2009;

This is a non-exhaustive list, but the overall magnitude of environmental investments required points to the considerable challenges that lie ahead concerning the required domestic planning and implementation capacities as well as the need to ensure sufficient domestic resource mobilization, including by means of cost-reflective user charges and effective pollution charges. In any case, to ensure the implementation of this environmental investment, domestic financial resources will have to be supplemented by foreign financial assistance, and possibly to a large extent (see Section 5.3).

To provide a comparison, the 2003 Development and Poverty Reduction Strategy (DPRS) paper projected environmental expenditures on water, forestry and environmental protection amounting to an annual average of some €24 million, corresponding to 1.5 per cent of annual GDP during the period 2004 to 2006. It was planned that about half of these projects would be financed with foreign grants and loans. The costs of the environmental programme in the DPRS paper did not include major infrastructure investments in the energy sector (€22.9 million) and in water supply and sewage (€28.5 million), which directly or indirectly were also expected to have favourable environmental impacts. These plans were, however, too ambitious to be implemented over such a short time, not only from a financial resources point of view, but also in view of the limited ability of the public sector to execute simultaneously the planning and the managing all these projects. In its first progress report on the DPRS paper published in July 2005, the Government did not explicitly refer to these environmental investment projects or the extent to which they have been implemented.

5.2 Establishment of the Environmental Fund

The Environmental Fund is expected to become operational during 2007, pending the adoption of a corresponding law by the Parliament. The Fund will be set up as an independent legal entity, but its overall human and financial resource endowments remain to be decided. The main bodies of the Fund will be the Managing Board, which will be appointed by the Government, and the Director, who in turn will be appointed by the Managing Board. The Board will be composed of nine members; i.e. representatives of the ministries responsible for environment, finance and economics, each with two representatives, and the NGO sector, business sector and a group of national environmental experts, each with one representative.
The Fund’s activities are expected to cover all main environmental sectors, including the promotion of environmental education and research, and the use of renewable energy sources. Financial resources will be provided by the Fund in the form of grants, subsidies and soft loans. The Fund is intended to mediate the use of resources provided by the Government, and possibly by international organisations and financial institutions. The draft Law indicates the following sources of revenue for financing the activities of the Fund:

- Air emission charges for main pollutants;
- Tax on motor fuels of fossil origin, ozone depleting substances and plastic bags;
- Tax on hazardous waste production and disposal;
- Revenues from privatization that are earmarked for environmental protection;
- Annual eco-tax on use of motor vehicles (which would replace the current 10 per cent surcharge on the road user fee);
- Domestic and foreign grants and loans;
- Income from financial investments made by the Fund; and
- Funds collected from the imposition of environmental fines.

The main motivation for the establishment of the Fund is to secure more resources for environmental protection and to avoid funds earmarked in the State budget for environmental financing being used for other purposes, as has happened frequently in the past.

5.3 Foreign financial assistance

Considerable investment is required for the rehabilitation and extension of the deteriorated and largely insufficient environmental infrastructure. In view of the limited domestic financial resources, the Government has recognized that foreign financial assistance is essential for achieving the necessary improvements in environmental performance and for meeting European Union (EU) norms and standards required for eventual EU accession. In fact, EU institutions have played the dominant role in promoting these objectives.

The Ministry for Economic Development has a Donor Programme Coordination Unit and monitors external financial assistance.

A database maintained by the MTE shows that in 2005 and 2006 registered projects with a total budget of some €22 million were being implemented. Some of these projects have an implementation period that goes beyond 2006. This pertains notably to the rehabilitation of the Mojkovac zinc mine, which requires estimated expenditures of some €7 million. But only the financing of the first phase (€1.4 million) is currently ensured, of which €1 million has been contributed by the Montenegrin Government. Other main projects are:

- The Integrated Management of the Skadar Lake Ecosystem (US$2.4 million, financed by the Global Environment Facility (GEF) and World...
Bank), which also required a transboundary (Albania–Montenegro) diagnostic study;

- The Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol, US$2.8 million, supported by Sweden and the United Nations Industrial Development Organization (UNIDO); and
- A project (US$3.9 million) to enhance and improve the water supply and wastewater system in the coastal region (municipalities of Budva and Kotor) and the inland community of Cetinje.

Montenegro has benefited from considerable EU environmental and energy-related assistance since 1998. Initially this assistance was provided through the Obnova (i.e. Renewal) Programme. Since 2001, the EU assistance programmes to Montenegro (and other countries in the western Balkans) have been provided through the Programme for Community Assistance for Reconstruction, Development and Stabilisation (CARDS). The European Agency for Reconstruction (EAR) has been in charge of the management of EU projects (See Chapter 3).

For the period 2002 to 2006, actual and projected CARDS assistance for environmental projects amounted to some €14.5 million (see Table 5.2). The main areas where financial support has been needed are in the development of wastewater treatment and solid waste management and in the feasibility studies designed to catalyse International Financial Institutions (IFI) investments. Technical assistance to the MTE has focused on the preparation and drafting of environmental legislation in line with EU standards and the development of environmental strategies (air, waste, water) and institutional capacities, including the establishment of an Environmental Protection Agency (see Chapter 1). EU twinning programmes have helped to strengthen public sector administrative capacities.

Along with other multilateral institutions, the World Bank is strongly involved in the funding of the Montenegro Environmentally Sensitive Tourist Areas Project, involving total project costs of US$9.5 million. The project aims to establish environmentally- and economically-sustainable solid waste collection and disposal services in the coastal Montenegrin municipal, which is needed to support the development of tourism.

Since 2006, the European Bank for Reconstruction and Development (EBRD) has been reviewing a project designed to improve the potable water supply from Lake Skadar to the municipalities (Budva, Tivat, Kotor and Herceg Novi) along the Montenegrin coast. The main benefits of this would be reduced risks to public health and the increased efficiency and reliability of the regional water supply system. If it goes ahead the project will involve a loan of up to €17.9 million. A final decision is expected for May 2007. A similar project for two other municipalities (Bar and Ulcinj) at the Montenegrin coast will be supported by a loan of €9 million from the World Bank as part of a larger multi-sector loan.

5.4 Conclusions and recommendations

The available information suggests that there has been no significant increase in public sector environmental expenditures in recent years. In the face of the considerable environmental challenges to be addressed, total expenditures corresponding to only 0.2 per cent of GDP are clearly insufficient and illustrate the need for environmental protection to be moved up the Government’s priority list.

Against the backdrop of more than a decade of weak and insufficient spending on environmental infrastructure and in the face of limited financial means, there is a need to establish clear priorities for public sector environmental spending programmes and to ensure their cost-effectiveness. In order to do this it is essential that the administrative capacity for evaluating the relative costs and benefits of competing projects is strengthened. It is also important to ensure transparency about the criteria for allocation of funds to different projects and regions. There is, moreover, a need to strengthen the link between national development strategies (including for the environment) and annual and multi-annual budget processes on the basis of prioritized results-oriented operational programmes.

The implementation of the various official environmental or environmentally-related master plans hinges on the availability of foreign financial assistance. It is, however, important for the authorities to realize that foreign financial assistance

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3 The exception is Croatia, which has been granted candidate country status and is benefiting from pre-financial assistance. But Croatia has remained eligible for participation in the CARDS regional programme.

4 This is part of the partnership commitments in the Organisation for Economic Co-operation and Development (OECD) Paris Declaration on Aid Effectiveness, endorsed by over one hundred countries and organisations in March 2005 and signed by Serbia and Montenegro.
Table 5.2: EU environment-related CARDS assistance to Montenegro, 2002–2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Environment</th>
<th>Main purpose</th>
<th>Total CARDS appropriations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1.7</td>
<td>Sewerage and wastewater treatment</td>
<td>12.0</td>
</tr>
<tr>
<td>2003</td>
<td>4.0</td>
<td>Solid waste management (2.7)</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sewage and wastewater (1.3)</td>
<td>12.0</td>
</tr>
<tr>
<td>2004</td>
<td>..</td>
<td>Technical assistance; investment in environmental infrastructure</td>
<td>16.5</td>
</tr>
<tr>
<td>2005</td>
<td>3.0</td>
<td>Wastewater treatment plant (1.6)</td>
<td>18.5</td>
</tr>
<tr>
<td>2006</td>
<td>2.6</td>
<td>Wastewater treatment plant (1.6)</td>
<td>18.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.3</strong></td>
<td><strong>Wastewater treatment plant (1.6)</strong></td>
<td><strong>116.5</strong></td>
</tr>
</tbody>
</table>

Source: European Agency for Reconstruction, annual action programmes [http://www.ear.eu.int/Montenegro]

Note: excluding funds allocated to region-wide projects

(Grants and soft loans) can only supplement domestic efforts and that the bulk of environmental infrastructure investment costs will have to be financed from domestic sources. In the broader context, this points to the need for the authorities to “own” the overall environmental reform and investment process, and to avoid excessive reliance on foreign donors in the design of environmental strategies. In any case, a continued flow of international assistance, especially IFI funding, will require a persistent and credible commitment from the Government to adopt and implement the necessary legislative and institutional reforms.

**Recommendation 5.1:**
The Government and the municipalities should significantly increase budget resources for the financing of environmental protection measures. The Government and municipalities should integrate medium-term environmental investment plans with the annual and multi-annual budget processes on the basis of prioritized, results-oriented programmes. Funds should be allocated according to clear and transparent criteria, and if possible, should involve a cost-benefit analysis of proposed major projects.

As regards the Environmental Fund, its establishment is in line with a corresponding recommendation made in the 2003 Environmental Performance Review; and such a fund, if properly managed, has shown its value in other Central and Eastern European countries. Environmental funds can be a mechanism for governments to demonstrate their commitment to improving the environment. In the absence of information on possible human resource endowments and of more or less reliable estimates of expected revenues from the various potential sources of financing, it is currently difficult to gauge the scope of activities that could be undertaken by the Fund. Rough estimates suggest that the Fund’s regular annual domestic revenues could be within a range of €1 to 2 million. This would be equivalent to some 0.05 to 0.1 per cent of GDP in 2006, which, considering what the situation actually requires would not help much. With the establishment of the Fund, revenues earmarked for environmental financing would be diverted from the MTE budget to the Fund. It is not known what portion of privatization revenues will be allocated to the Fund. In any case, privatization is expected to come to an end in the near future. It will be crucial for the effective operation of the Fund to set clear priorities within the framework of a medium- and long-term strategy.

**Recommendation 5.2:**
The Government should ensure that the Environmental Fund has an adequate endowment of human and financial resources, and should consider allocating an appropriate share of privatization revenues to financing the activities of the Fund. The Fund should conduct its operations within the framework of a medium- and long-term strategy reflecting environmental priorities and the resources available to achieve them. The Fund should operate in line with recognized international principles and practices. The Fund should support the development of environmental infrastructure at the municipal level by providing loans at favourable conditions to public utility companies. The Fund should engage in regular consultations with foreign donors, with a view to aligning foreign assistance with domestic priorities.

The design of effective and efficient environmental policies, including their monitoring, is seriously hampered by the pervasive lack of adequately detailed statistics on the state of the environment, environmental spending by the private and public sector, and revenues from environmental taxes and
charges, including environmentally-related taxes that are not earmarked for environmental spending.

**Recommendation 5.3:**
The Government should establish a coherent and comprehensive information and reporting system for environmental protection expenditures and revenues covering the public sector, business sector and private households. As a general framework for this, it should use the European System for the Collection of Economic Information on the Environment (SERIEE) developed by the Organisation of Economic Co-operation and Development/Eurostat and the associated Classification of Environmental Protection Activities and Expenditures (CEPA).
PART III: INTEGRATION OF ENVIRONMENTAL CONCERNS INTO ECONOMIC SECTORS AND PROMOTION OF SUSTAINABLE DEVELOPMENT
6.1. The current tourism situation in Montenegro

As a reawakening vacation destination in the south of the Adriatic region, Montenegro has strong potential for a future in tourism (see Map 6.1). Busy tourist towns and lonely beaches impress the visitors, as well as old towns and monuments laden with history. Montenegro is known as the “Wild Beauty” of the Mediterranean because of its outstanding natural resources, from the dramatic coastline to high mountain ranges and deep river canyons. Other notable attractions are the historic towns and seaports Budva and Kotor (a UNESCO World Heritage site); the Tara River Basin; the historic royal town, Cetinje, and four national parks: Durmitor: a UNESCO World Natural Heritage Site; Biogradska Gora: one of the oldest forests in Europe; Skadar Lake (Skadarsko Jezero): a Ramsar site of wetlands of international importance; and Lovcen: a cultural, natural and historic site.

The Government’s goal is to preserve Montenegro’s natural beauty for citizens and tourists, while developing high quality, unique and sustainable tourism products, market-competitive and diverse tourist accommodation, and an efficient transport and service infrastructure. The Government’s top sustainable development priorities focus on nature-based summer and winter tourism: reviving winter tourism with the modernization of existing ski facilities and the introduction of new winter sport activities.

More specifically, the Government’s priorities are to:

- improve the existing hotel accommodation, promote new facilities such as small family run hotels and inns, and upscale market oriented resorts on the coast;
- set eco-lodges in strategic natural locations;
- extend the tourism package to health and wellness, golf, and adventure tourism; and
- increase the number of Blue Flag designated beaches (see Box 6.1).

In 2007, the national Council for Sustainable Development adopted the sustainability principles of the United Nations World Tourism Organization (UNWTO). These principles will be integrated into the currently revised Master Plan for Tourism Development to assure balanced tourism development at the economic, social and environmental levels, with a focus on the optimal and sustainable use of natural resources, and on respect for local communities and their cultural heritage. The Ministry of Tourism and Environment (MTE) is also focused on maintaining a high level of tourism satisfaction and raising visitor awareness on sustainable issues with initiatives such as the “Let it be clean” campaign, which aims to keep towns and roads litter-free.

In the mountain region, with the help of international donor organizations, natural attractions have been made more easily accessible to visitors. Inland, the tourism infrastructure for nature-based tourism activities such as hiking, biking and especially mountain biking, is being developed. New tourism packages are being introduced for rural and mountain regions. On the coast, tourism is growing quickly and cultural features in this area, Bar, Budva, Herceg Novi, Kotor and Ulcinj, are being highlighted and appreciated. Many apartment complexes and vacation houses have been newly built or renovated in the past years.

Unfortunately, due to the lack of land use planning by municipalities, this has led to increasingly uncontrolled development. Without a consequent counterbalance by the Government to this unsustainable development there is a risk that the most beautiful and important tourism areas will become over built and eventually destroyed. When the new Law on Environmental Impact Assessment (OG RM No. 80/2005) is enforced in 2008, environmental impact assessments will be required for new tourism project developments, and requirements to mitigate the threat on the sensitive coastal ecosystem will be incorporated into tender documentation.

While the coastal resorts remain the mainstay of the tourism sector, the improved offering in trend markets such as health and wellness, nature and adventure tourism is expected to extend the tourist

\[1\text{ United Nations Educational, Scientific and Cultural Organisation}\]
Tourism is one of the key drivers for economic growth in Montenegro, bridging other economic sectors such as agriculture, banking, telecommunications, construction and transport. In the past four years, transport infrastructure has been improved with better roads, the Sozina tunnel and modernized international airports. A key element in the country’s recent development has been the privatization and subsequent modernization of hotels. Ten new modernized hotels are expected to open in 2007, adding 5,000 new beds in the coastal and mountain regions. Around €350 million of private investments have gone towards the modernization of hotels, mostly four stars, and the Government has invested €150 million further in improving infrastructure. Investments in nearly a hundred small hotels and inns and other tourism enterprises are estimated at over €25 million.

6.2. Dynamics of tourism development

Since the end of the 1990s, tourism in Montenegro has been constantly rising (see Figure 6.1). The increase in international guests in 2006 relative to the preceding year was 39 per cent, and in comparison with 2001 more than 200 per cent. In 2006, Montenegro was visited by over 370,000 foreign tourists, which accounted for 2.2 million overnight stays. Over half a million domestic tourists originated from the former State Union of Serbia and Montenegro and accumulated 3.74 million overnight stays. This makes a total of 950,000 visitors and almost 6 million overnight stays in 2006. The other originating markets outside Montenegro and Serbia are, respectively, the Russian Federation, Bosnia and Herzegovina, the Czech Republic, and Germany. The foreign visitors register a daily average expenditure of €43. The revenue generated from tourism was €271 million in 2006.

Concerning tourist numbers and revenue creation there are large differences between coastal and mountain regions and between the different individual sites. More than 90 per cent of overnight stays are in the coastal region and less than 10 per cent in the northern and central regions. The large majority of guests arrive at the coast in July and August. The most visited destination by far is the coastal town Budva, where over a third of the national tourism revenue is generated, followed by the coastal towns Herceg Novi, Ulcinj, and Kotor.

Activities in the mountains, such as hiking and nature sports are presently mainly confined to the warmer seasons and will be extended into the winter season to assure a more balanced and sustainable tourism development in the region. The most important destination in the mountain region is Žabljak in Durmitor National Park, followed by the municipalities in and around the Bjelasica National Park, with Kolašin on the train line from Podgorica to Belgrade being the most developed. The ultimate goal is to reduce poverty in the region and to balance the wealth generated from tourism on a national level. Both summer and winter seasons are important in the mountain area (see Map 6.2).
Map 6.1: Tourism in Montenegro

Note: The boundaries and names shown in this map do not imply official endorsement or acceptance by the United Nations
Source: Ministry of Tourism and Environment, 2007
Part III: Environmental concerns in economic sectors and sustainable development

Alongside the growth in tourism, there is the development in accommodation infrastructure. Although a series of modernized and new hotels opened recently, there is still a major imbalance in the demand and supply of up-market hotel resorts with amenities necessary to prolong the coastal tourism season, to open up the mountain region for global nature-based tourism and to connect coastal tourism programmes with those of the mountain region.

The development of tourist accommodation in the mountain region focuses on four season resorts, small family hotels and eco-villages, and larger scale nature-integrated eco-lodges. According to the 2006 Howarth Hotel Industry Survey of Montenegro, there were 35,756 star-rated beds in Montenegro. Of these, only 9 per cent were in the four- and five-star categories compared to 57 per cent in one- and two-star classes. Furthermore, there are a great number of unrated beds in hotels, vacation apartments, and privately offered accommodation. While the seaside area offers over 125,000 tourist beds, the central region has only 3,200 beds and the northern area 2,200 beds. The number of beds in the central region, especially in the capital Podgorica, has increased since 1989, whereas the capacity in the northern area has strongly diminished. Considering that second or holiday residences, largely owned by foreign citizens, and the great number of private rooms are not registered as tourist accommodation, the number of private tourist accommodation might be double than the officially registered numbers. The Government has adopted a law to register and levy a tourist tax on all second or holiday residences owned by residents and foreign citizens.

A strong increase in income from tourism is expected in the following years. An increase in international arrivals, both at the seaside and in the mountain regions is expected. To improve the value of what is offered to tourists, it will be important to increase the quality and capacity of the hotel–resort bed structure, to contain uncontrolled construction of second residences and holiday apartments and to develop international, marketable holiday tourism packages that take into account the natural and cultural assets of Montenegro. These tourism packages should make better use of spring and autumn. If they are adequately protected, Montenegro’s historical and ecological assets can take a major role in this.

Certain measures and strategic decisions have to be taken as a result of the problems created by the concentration of tourism during the high season. When the modernization of Montenegro’s five traditional mountain resorts (Zabljak, Kolasin, Plav, Rozaje and Berane) is completed, attractive year-round tourism packages can be developed and marketed. The most important factor for success in increasing tourism levels in the central and northern regions and in prolonging the season will be the establishment of outdoor and winter sport infrastructure, the building up of the tourist accommodation infrastructure and supply infrastructure and the combining of tourism activities between the mountain and coastal regions. For example, Montenegro is preparing an outstanding “hiking & biking” package with mountain biking as one of its driving forces for the development of tourism and using an existing but widely unknown mountain road network of about 4,000 km. With areas dating from the Roman, Illyrian, Ottoman and the Habsburg dynasty times, this road passes through fascinating scenery. The target is for Montenegro to become the Mediterranean market leader in mountain biking and one of the best options with respect to hiking and trekking.

6.3. Environmental pressures related to tourism

On the one hand, the return of tourism has brought with it a gain: the growth of economic well-being. On the other hand, the pressure on nature and the environment has strongly increased. The strain placed on soils and groundwater by sewage discharge and the ongoing urban sprawl of the coast are critical issues. This is especially true for the tourist-intensive regions along the coast. By implementing various strategies and plans, the MTE is addressing the stress on soils caused by the uncoordinated accumulation of domestic waste from residential areas and tourism. It is also addressing shortages (due to the heat and the losses in the water supply network) in drinking water supplied to the population and to the resource-intensive tourism industry, especially during the tourism period in summer.
Chapter VI: Tourism and Environment

Map 6.2: Tourist regions of Montenegro

The uncontrolled building of holiday apartments and tourist infrastructure affects many unique landscapes and natural assets along the coast and in the mountain region. The MTE, with donor support, is partnering with Podgorica’s Faculty of Architecture to develop six types of indigenous residential buildings and two nature-integrated eco-lodges with the objective to create new infrastructure that is in harmony with nature and local culture. As part of the ongoing revision of the Tourism Master Plan, it is planned to use these initiatives for giving the “hiking & biking” road network an authentic Montenegrin character.

Water supply

In the coastal region most of the water supply is for human consumption (for permanent residents and tourists; less is used for industry). Rapid tourism growth generates new needs for water supply. At present, water resources are limited during the summer and sources used by municipalities may go dry. The drinking water supply system is too inefficient to cope with the summer shortages. According to the former Ministry of Environmental Protection and Physical Planning, more than 90 per cent of households have access to drinking water. However, the condition of the water distribution network is in such bad shape that more than half of the drinking water is lost on the way to the consumer. At the same time only around 70 per cent of users pay for their consumption of drinking water.

In February 2006, the Government adopted a Decision for Constructing a New Regional Water Supply System. This system will provide water from the Skadar Lake to a central point from which the water will be distributed via new or upgraded piping systems to all coastal municipalities. Financing for the project will be provided by the World Bank, EBRD and the Government. The project is scheduled to be completed by September 2010. During the construction period, temporary interruptions and
water shortages, which are caused by hydrological conditions (such as lack of rain), may occur.

Wastewater

Although connection to the sewerage network has risen to 56 per cent on average in the coastal region, there is still a significant problem with wastewater. The effluents are discharged into the sea untreated or go into the ground from the leaky network of pipes. Of 89 pipes leading the wastewater into the open sea, only 11 have the legally prescribed length of 1,000 metres away from the seashore, the rest of the pipes are shorter. Of the 26 sewage pumping stations for wastewater in the coastal zone, at least six are urgently in need of renovation. The only functional wastewater treatment plant is in the capital Podgorica; the plant in Nikšić has been inoperative for years. In the other municipalities in the central and northern regions wastewater is either pumped into streams and rivers or infiltrated into the ground through sumps. A particular problem is the drainage of wastewater in collection systems that do not have any functional treatment units, like in the town of Rijeka Crnojevica in the Skadar Lake National Park. The implementation of small decentralized treatment units based on those with state-of-the-art water treatment facilities should be considered after doing a cost-benefit assessment.

Solid waste

Industrial and municipal wastes are disposed of in landfills or dumps distributed throughout the country. An especially negative example is the landfill located in Bar, where all the waste is tipping down a cliff into the sea and is regularly set on fire. Currently there is neither a system for recycling, nor a deposit system for polyethylene terephthalate (PET) bottles and packing material. These measures would help avoid the degradation of the landscape.

In future, according to the 2005 Strategic Master Plan for Solid Waste Management, the disposal of waste will take place in eight regional landfills, distributed around the country. Incineration plants meeting western standards are planned for after 2020. To reach this objective, the MTE is supporting the municipalities to establish organized and managed landfills.

Urban planning in the coastal region

An important problem that has increased in magnitude over the last 15 years is the illegal construction of holiday apartments and homes in many municipalities. The situation has worsened with a boom in residential real estate purchases by foreign citizens since Montenegro regained its sovereignty. Construction laws are not enforced because of a lack of inspectors and, to some extent, the laxity of the local and national authorities. Municipalities give out building permits too easily or do not check seriously enough projects and their implementation.

In the 2006 report Corruption in Spatial Planning and Development, the environmental NGO MANS (The Network for Affirmation of the NGO Sector) lists a series of illegal tourist buildings that have been erected in the past few years and have circumvented planning legislation. Near the seaport of Budva, an international investor illegally ordered the demolition of a coastal cliff for the disputed construction of a large hotel, marina and heliport. Since 2004, several car parks and a wide asphalted access road have been constructed illegally in the Velika Plaza protected area. On the beach one can find small shops and other permanent buildings, although this is illegal according to environmental and coastal protection laws. New infractions like road embankments, the filling of land, and illegal construction also took place in Buljarica Bay in 2006.

Many unique cultural and natural monuments in the coastal region such as Kotor and the Bojana Delta are seriously threatened by current development. Kotor is not being managed properly. The main problems on the coast lie in the lack of a simple procedure for new constructions and in the urgent need for inspection personnel and for the missing environmental impact assessments (EIAs) for such projects. These constructions can also cause obstructions in areas planned for infrastructure development, such as roads, water pipelines and wastewater systems. Without highly-protected green spaces, the urbanization of the coast (for example between Petrovac and Ulcinj) will be unstoppable.

Under the current legislation, the Government does not have control over apartment and housing projects below 1,000 m2, as building licences for these projects are issued by municipalities. In addition, although the municipalities have the power to formulate their own physical or spatial plans, they often lack the funding or expertise to perform these tasks. Sometimes it is simply a lack of will or the short-term attraction of the grey market that encourages the local authorities to turn a blind eye to illegal construction along the coast and in the mountain region. The illegal construction is of great concern to the Government. There are a couple of exceptions: the municipality of Budva, which has
The mountain region’s main problem is the lack of economic opportunities, which lately has led to a high rate of emigration (from this region to other parts of the country). This is also true for well-known tourist centres such as Kolašin: between 1991 and 2003, 10 per cent of inhabitants emigrated; and in Žabljak the rate was 14 per cent. Overall in Montenegro there was a 4 per cent level of immigration. The development of sustainable villages and nature tourism is in its beginnings and lacks human resources at the local level. Adequate tourist accommodation and transport infrastructure for buses and railways, for example, are insufficient. The MTE is making a deliberate effort to coordinate donor activities for nature-based tourism developments such as an internationally-recognized, uniform system of marking for hiking and biking trails and the publishing of guidebooks and trail maps. The legal basis and appropriate instruments for visitor management and quality control need to be strengthened, for example for river rafting on the Tara River. The few, now privatized, existing small- and medium-sized ski areas are in the process of modernization with modern lift transport systems for summer and winter tourism development as well as expanding upmarket hotels and other tourist accommodation facilities. Winter hiking, snowshoe and cross-country skiing trails are being developed as part of the overall hiking and biking trail system. In February 2007, the MTE requested the Hydrometeorological Institute (Hydromet) to carry out a comprehensive study and analysis of the snow reliability in winter and, in order to adjust the sustainable development targets, the possible effects of ongoing climate change. Results will be published in summer 2007 and will be taken into account in the revision of the Master Plan for Tourism Development.

Protected areas

On the basis of the 1996 Law on Environment, Montenegro has a series of protected areas covering 5.85 per cent of the territory. Although the Law stipulates several categories for protection, such as regional parks, natural reserves, natural monuments and others, only the four national parks, Biogradska Gora, Durmitor, Lovcen and Skadar Lake, are professionally managed. Two new national parks are planned at Prokletije Mountain and Orjen. In other categories of nature protection, there are more areas being planned without their future management and protection objectives being clarified.

Due to the current insufficient financial and staff resources, protection instruments in the national parks are not being enforced properly. In Durmitor National Park, foreign investors have been building private vacation homes and in Skadar Lake National Park large quantities of gravel are being quarried. Also in Skadar Lake National Park, a hotel and a marina are under construction illegally in Plavnica, and other developments on the lake shore are planned in Virpazar. An unresolved issue is the illegal hunting of birds in the Skadar Lake area and especially along the coast, and of large mammals in Biogradska Gora and Durmitor. The legal hunting period during the nesting season and spring migration does not follow biodiversity protection principles and does not conform to European Union (EU) guidance on hunting, although this is not binding in Montenegro. In the national parks there is currently no monitoring of flora, fauna, or visitors.

Roads and railways

The transportation infrastructure presents problems. The railway lines from Belgrade to Bar via Podgorica and from Podgorica to Nikšić are in a poor state, with problems such as low speed, a lack of modern equipment or outdated equipment, and a shortage of railway carriages. Also in bad condition is the main road from Podgorica to the border with Serbia. The stretch between Podgorica and Kolašin is especially dangerous. And between Podgorica and the most important ski area, Durmitor, the road is not safe in the wintertime. There are positive contrasts to these examples: the Sozina tunnel opened in 2005, which...
Part III: Environmental concerns in economic sectors and sustainable development

significantly shortened the driving distance between Podgorica and the coastal town Bar. And in Podgorica and Tivat, modern airports have been built.

6.4. National policies, strategies and objectives regarding tourism

Institutional framework

Until the end of 2006, the Sector for Environmental Protection was part of the Ministry of Environmental Protection and Physical Planning. After the 2006 restructuring of the Government, the Sector was merged with the former Ministry of Tourism, which became Ministry of Tourism and Environment. This merge would give Montenegro the opportunity to incorporate environmental issues into tourism development.

General Policies

In the past few years Montenegro has elaborated a large number of policies that are relevant to the development of sustainable tourism. All of them incorporate the UNWTO principles for sustainable development. Some of the documents, such as the 2007 National Strategy of Sustainable Development (NSSD) and the 2004 Strategic Framework for Development of Sustainable Tourism in Northern & Central Montenegro, provide an important basis for the implementation of measures that will help towards a future of sustainable tourism in Montenegro. The Tourism Master Plan was adopted by the Government and the Parliament in 2002, as well as two more detailed regional tourism master plans for Velika Plaza and for Boka Kotorska.

The 2002 Tourism Master Plan for Montenegro is based on the assumption that Montenegro will host around 20 million overnight stays in 2020, which would be four times more than in 2005. Of these, around 75 per cent are expected to be on the coast and 25 per cent inland. The Tourism Master Plan describes the organization of quality-based tourism with an offer of 280,000 beds, of which around a third should be in a higher price bracket. But already for the year 2010 slower growth than expected in the Plan is foreseen with regard to the development of market-oriented hotels and resorts.

Since July 2006, the Tourism Master Plan has been under extensive revision. It will cover the period until 2020, incorporate sustainability principles outlined in the NSSD, the 2005 Coastal Area Spatial Plan for the Republic of Montenegro (CASP) and the National Spatial Plan of Montenegro, and will elaborate further on strategies to develop nature-based tourism activities, such as outdoor summer and winter tourism in the Central and Mountain Regions. The section related to coastal tourism will also be updated to incorporate the goals defined in, among others, the 2005 Nautical Tourism Development Strategy. In the process of revision, ten public workshops were held in January and February 2007, involving about 500 participants from all ministries, tourist organizations, and international and national institutions that are related to tourism, private business and the public. The document is expected to be adopted by the Government and the Parliament at the end of 2007 after undergoing a strategic environmental assessment (SEA) procedure.

The 2007 National Strategy of Sustainable Development lists the following priority objectives regarding tourism:

- Diversification of tourist packages (for example: the development of the countryside; agro-, eco-, mountain and cultural sports; and other forms of tourism, especially in the northern part of the country) in order to help extend the tourist season and attract guests with higher purchasing power (the final aim being to increase direct and indirect revenues from tourism).
- Integration of sustainability criteria in tourism development projects (i.e. with the adoption and assessment of plans), especially regarding coastal and winter mountain tourism.

These objectives will be integrated into the update of the Tourism Master Plan and in most of the other Government plans, policies and programmes. The planned objectives for the implementation of the National Strategy of Sustainable Development Action Plan in 2006 to 2009 are:

- Preparation of pilot projects identified in the development studies;
- Activities related to the promotion and creation of more diverse tourist packages through the joint activities of the MTE, tourist organizations, tourist companies and the civil sector; and
- Training of staff and provision of funds for the implementation of development projects.

Regarding the second priority objective, principles and guidelines for sustainable development will be applied, as well as EIAs, in the implementation of large development projects.

In the agreement Technical Assistance to the Republic of Montenegro (September 2006), the Italian Government commits to help with the implementation of measures concerning tourism. The
main focal points are nature-based tourism in the national parks, adoption of an eco-label, and, in order to promote exchange of training and development of joint projects, the establishment of an international network between Italian and Montenegrin associations and institutions in charge of management of National Parks and Natural Protected Areas (land and marine).

The National Spatial Plan of Montenegro is supposed to be adopted by mid-2007. The document underlines the importance of declaring and enforcing the protection of areas already proposed by the previous National Spatial Plan of Montenegro (1997), but so far this has not been achieved. However, the new Plan does not present a description of how the growing impact of tourism can be confronted, or provide a vision for the future correlation of tourism and the protection of nature. The proposed new protected areas along the coast are important, but the mechanisms to manage and develop them are unclear. The upcoming National Spatial Plan will be subject of a pilot SEA in 2007 supported by the World Bank and the Netherlands (see Chapter 1). The 2005 Law on Spatial Planning and Development (OG RM No. 280/2005) makes this procedure mandatory. The focus is on a limited number of priority spatial plans and on economic sectors that will be assessed by a SEA procedure.

**Policies for the Coastal Region**

The main objective of the aforementioned CASP is the establishment of spatial planning directives to facilitate and mitigate the impact of economic growth in the coastal area, which is presently the most important resource for tourism development. Alongside this plan, an Integrated Coastal Management Strategy is being elaborated. The CASP is in contradiction with the environmental laws (in particular the 1996 Law on Nature Protection) that attribute to beaches the status of natural monuments. A list of biotopes considered worthy of protection (for example, coastal and alluvial forests, dunes and wetlands) is in the CASP. But without an indication in the CASP of nature protection categories for beaches and corresponding offshore areas, illegal interventions made in these biotopes cannot be prevented. A further problem is posed by the authorized hunting in the area managed by the Coastal Zone Management Agency, Morsko Dobro, which is hard to reconcile with the goals of tourism and species protection. Although the Regional Tourism Master Plan for Velika Plaza includes some specific requirements for coastal areas, such as 100 m² of open green space per bed, a similar percentage of protected areas in non-coastal areas would be needed to provide a basis for sustainable tourism. In general, improved zoning could be important for the image of the Ecological State and in order to build a sustainable tourist destination.

In the coastal zone there are problems with drinking water and wastewater management. With the Strategy for Wastewater Treatment in the Coastal Zone, existing infrastructure should be improved or modernized. The next step is to improve wastewater management. Implementation of phase one of the Strategy has been carried out, but the next phases are dependent on finding financial support from international donor organizations and investors.

Based on the Coastal Zone Law (OG RM 14/1992), Morsko Dobro was established in 2002 with the task of "enlarging the areas of the coast that can be used for economic and other activities, such as the development of managed beaches for tourism and of new infrastructure". To fulfil its obligations, the Agency has four main responsibilities:

- Protection, restoration, and development of coastal and marine resources;
- Management of coastal and marine resources (see Box 6.1);
- Contracting and leasing of the coastal zone stretch; and
- Development and maintenance of infrastructure for the management of coastal and marine resources.

**Inland tourism development policies**

The 2004 Strategic Framework for Development of Sustainable Tourism in Northern and Central Montenegro set forth the philosophy for sustainable tourism development but did not provide specific strategies and action plans to reduce poverty and minimize illegal logging. Furthermore, it does not provide guidelines to donor-assisted development programmes by developing sustainable summer and winter tourism. The focus of this document is strictly on summer tourism activities. To compensate for the lack of specific guidelines and definitions for a balanced approach to sustainable tourism development, in 2007 the NCSD adopted the UNWTO’s guidelines and principles for sustainable tourism development. The Government is updating the Master Plan for Tourism Development and is further elaborating a strategy for sustainable winter and summer tourism in the Northern and Central Regions which will be incorporated in the revised Master Plan for Tourism Development.
6.5. Implementation of Sustainable Tourism Policies

While there are a large number of policies in Montenegro, unfortunately there is a lack of implementation of these policies. Among the projects being done in cooperation with foreign donor organizations, there are projects that aim to implement the sustainability goals formulated in the policies. These projects can be seen as good practice examples. Since 2005, the Sector for Environmental Protection has been organizing roundtables at regular intervals and inviting international donor organisations for the sharing of information on ongoing environmental activities in the country.

The regional focal areas of the projects are Durmitor, Bjelasica and the coastal zone. In the north the most major donor organisations are working on a series of larger projects with the aim of strengthening entrepreneurship in sustainable tourism. In the near future a connection between heritage sites in the Western Balkan region is going to be established. Projects for the support of tourism are also in progress in the areas of Lovcen and Skadar Lake national parks. During the implementation of the projects, Skadar Lake has to be preserved as a bird sanctuary and biodiversity area of European significance. In the coastal zone the focus lies on the conservation of natural and cultural heritage and on the management of water resources.

Case study in the coastal region: the Bojana–Buna Delta Project

The Bojana–Buna Delta Project is based on the DEG (Deutsche Investitions- und Entwicklungsgesellschaft mbH) Regional Master Plan for Tourism (2002). This plan proposes, in addition to the existing natural monument Velika Plaza, the development of protected areas in the eastern part of Velika Plaza and Spatula, covering the whole area managed by Morsko Dobro between the sea, the Bojana River and the road to Ada Island. Because such a protected area needs management and marketing, the donor organization European Nature Heritage Fund (Euronatur) has assessed the value of the surrounding landscape. Euronatur started the Bojana–Buna Delta Project in 2003 with an assessment of the area’s ecological value. The resulting paper maps the area’s most important natural assets and proposes the establishment of a transboundary marine park in the Bojana–Buna Delta as a tool for sustainable tourism development. The World Bank has started to prepare a Global Environment Facility project for tourism in sensitive areas of Montenegro. Funds are needed for the development of a management unit and plan, the implementation of zoning and the creation of nature tourism packages such as bicycle trails, tower hides and an information centre.

The assessment paper of the Bojana–Buna Delta project identified the Solana as one of the key sites for bird protection in Montenegro. In 2004, Euronatur started a pilot project for nature conservation and nature tourism in the Ulcinj salt pans with Solana Ulcinj, a salt works. The cooperation was based on a memorandum of understanding. Solana Ulcinj was interested in developing nature tourism as a second source of income and to promote their product (salt). Euronatur helped the enterprise to improve the dyke system and create artificial islands for birds. As a result of this cooperation and a hunting ban in this area, the number of birds rose to 30,000 in March 2006. Dalmatian pelicans arrived from Albania and Greece and their numbers reached 96 in 2005. In spring and autumn 2006, three flamingos were present. A small
information centre for visitors has been set up. The creation of a nature park is part of Solana Ulcinj’s new business plan.

In summer 2006 Euronatur supported a three-year project for the promotion of the eastern Adriatic coast by starting a birdwatching area. Its goals are to monitor the key sites for migrating birds, promote their protection and present its results in 2009. Nature guides published in the same year will help bird watchers to find ideal locations for bird watching.

Case-study in the mountain region: sustainable tourism and regional development in the north of Montenegro

In the past few years, new initiatives supporting sustainable tourism and sustainable regional development started in the Bjelasica and Komovi regions. Austria supports these initiatives. The Bjelasica and Komovi project is the first example of an integrative and participative approach to regional development in Montenegro. For this reason, this project is to be presented and made widely known as a best practice example.

Adequate mountain tourism infrastructure is to be developed. For example, entrance and information boards concerning hiking and other outdoor activities, and tourist infrastructure. The signposting and marking of major trails and the publication of a hiking guide of the Bjelasica is planned. Two mountain huts are to be built in Andrijevica and Bijelo Polje. Training and workshops for mountain associations are being arranged. Foreign tour operators and mountaineering clubs are to support these changes by drafting tour programmes.

In Biogradska Gora National Park, educational programmes are being set up. The national park is being developed as an asset for tourism in the region. This is being accomplished by improving the infrastructure; for example, the renovation of a traditional hut that was made into a visitor centre, and the refurbishment and reopening of the old fish hatchery to produce endemic fish in the lake and rivers in the vicinity. Other plans include the renovation of the existing bungalow grounds, a thematic adventure path around the lake and the publishing of information material.

In July 2006, after several years of work, the five municipalities in the Bjelasica–Komovi region succeeded in founding a regional tourism organisation. This tourism organisation is responsible for the development and implementation of a regional tourism strategy. Furthermore, it is to assure the continuous involvement of the relevant stakeholders in the region, and to join in the development of an open and cooperative regional culture. Above all, it strives to establish a rationale for the comprehensive sustainable development of the region by considering national strategies and local development plans, and drafting a sustainable local development strategy for the municipalities as part of a common regional development strategy.

6.6. Conclusions and recommendations

Since the first Environmental Performance Review (EPR), a series of improvements can be noted. There are stronger economic dynamics in the tourism sector. Numerous policies and reports have been elaborated. The coastal zone has begun to improve its water supply and wastewater collection infrastructure. Thanks in part to the actions of the strengthened NGO sector, there is steady growth in sustainable tourism and especially in the central and northern regions. The information exchange and cooperation between donor organisations works, although it could be improved further.

On the negative side, because the spatial planning system has not been implemented, the pressures on nature and the landscape, mainly in the coastal zone, have increased further. This lack of implementation also makes it more difficult to check compliance to legislation through inspection and control. The Coastal Area Spatial Plan is in hand, however, and the Integrated Coastal Management Strategy is being worked on.

Recommendation 6.1:
To incorporate the priorities contained in the National Strategy for Sustainable Development regarding sustainable tourism, the Ministry for Economic Development should update the Spatial Plan and the Coastal Area Spatial Plan. The Ministry of Tourism and Environment should incorporate the priorities regarding sustainable tourism contained in the National Strategy for Sustainable Development into the Tourism Master Plan.

A large problem is the remaining poor road and rail infrastructure in many areas of Montenegro, which is of particular concern for a tourist country. Without better traffic connections, it will not be possible to establish a tourist package that links mountains and the coast. However, the project that would bring real benefits in this area, the fast road or highway from Belgrade to Bar via Podgorica, is being designed in the Montenegrin part without an EIA.
Montenegro has striven to develop a series of programmes and strategies to organize and rationalize all projects that could improve tourist activities. However, there is a need to implement the SEA and EIA procedures as soon as possible in order to ensure that roads, highways, ski resorts, buildings, water infrastructure and waste disposal sites are developed or rehabilitated in a sustainable way.

Recommendation 6.2:
The Government should enforce the Law on Strategic Environmental Assessment and the Law on Environmental Impact Assessment (OG RM No. 80/2005) as soon as possible, in order to control the environmentally-sound development and rehabilitation of infrastructure, particularly in tourist areas. (See Recommendation 1.4)

An important objective of the Government is to increase tourism levels in the central and northern regions and to prolong the season by: establishing outdoor and winter sport infrastructure, building up the tourist accommodation infrastructure and supply infrastructure, and combining tourism activities between the mountain and coastal regions. To this aim, the elaboration of guidelines are being considered for tourism development at the local level, as well as the introduction of environmental standards for CO2 emission reduction, energy conservation, solid waste reduction and wastewater treatment for tourist premises for new greenfield site developments or brownfield site redevelopments. Along these lines, it is worth mentioning the commitment of a significant investment in an environmental clean up and remediation by the developer before the reconstruction of the Tivat Arsenal into a modern hotel marina complex. Sustainability indicators for all different types of tourist locations are being developed according to globally-tested models by the MTE with the assistance of the United Nations World Tourism Organization.

Due to their weak economic development, rural areas are facing the problem of migration. All master plans take into account this concern but appropriate solutions have to be found to cope with it, for instance by developing specific development plans or promoting local products produced in rural areas.

Recommendation 6.3:
To develop new sustainable tourism products, the Ministry of Tourism and Environment should, through the initiation of appropriate programmes and involvement of relevant stakeholders (e.g. agriculture, cultural heritage and nature protection), strengthen cooperation between providers of tourism services in the coastal, central and northern regions. The Ministry for Economic Development, in cooperation with relevant stakeholders, should elaborate and implement broader economic development plans for rural areas.

In the national parks the most promising ambitions towards the development and implementation of sustainable tourism strategies can be found. Montenegro is developing economic activities to support this ambition. Entrance fees are being introduced in national parks to provide funding for nature conservation and national park management. The drawing up of management plans for the national parks and other protected assets is in progress. In spite of these efforts, several large ski areas are projected that, in their present form, are not reconcilable with a sustainable tourism strategy. This is especially true when lifts and slopes are planned to be built in a national park. Moreover, professional management and sufficient staff resources are needed not only for all protected areas, including the national parks, but also the natural parks, natural monuments, areas with special natural characteristics and others. There are no fiscal incentives for owners of tourist premises that would entice them to implement environmental measures. Moreover, the protection rules are frequently violated.

Recommendation 6.4:
The Ministry of Tourism and Environment with relevant stakeholders should further implement management plans for all protected areas.

The development of tourism is of great importance to the economic future of Montenegro. It is in the country’s interest to preserve the beauty of its nature and environment as a main asset for a sustainable future in tourism, and to contain the development of the related infrastructure. There is a lack of a simple procedure for new constructions and an urgent need for inspection personnel and for the implementation of environmental impact assessments (EIAs) for new projects. In regions where the pressure on the environment caused by tourism is high, municipalities should formulate their own physical or spatial plans. To tackle this problem, there is a need for greater horizontal and vertical exchange of information both from the Government to the municipal authorities, and vice versa.

Recommendation 6.5:
The Ministry for Economic Development, in cooperation with all relevant stakeholders at the national and municipal levels should take effective
measures to urgently stop uncontrolled and illegal constructions to preserve the tourism potential and nature values.

A series of recommendations for the development of sustainable tourism were addressed to Montenegro in the first EPR in 2002. Many of these recommendations are still important and relevant but have not been implemented. Although the context has changed since the first EPR the Government should adjust the recommendations to the current context and put them into practice.

Recommendation 6.6:
For the development of sustainable tourism, the Government should readjust and put into practice especially the following recommendations that were addressed to Montenegro in the first Environmental Performance Review in 2002 (see Annex 1):

- 13.9 on integrated transport planning;
- 14.1(c) on eco-standards for tourist premises;
- 14.1(d) on sustainable tourism indicators;
- 14.1(e) on inventory of all sites of tourist interest;
- 14.2 on fiscal incentives for tourist premises that implement eco-standards;
- 14.3(a) on campaigns to raise awareness of sustainable tourism;
- 14.3(b) on sustainable tourism development in the curricula of the higher schools; and
- 14.5 on survey of local products.
Chapter 7
ENERGY AND ENVIRONMENT

7.1 Trends in the energy sector since 2002

Since 2002, there have been significant changes in Montenegro’s energy sector. Some first steps have been taken towards the liberalisation of the energy market through (i) the functional unbundling of the grid operation and the electricity production units in the national electricity company, Elektroprivreda Crne Gore (Electric Power Company of Montenegro (EPCG)), and (ii) the privatization of one of the power plants. There has been progress in creating the legal basis for further reform of the energy sector. The new Energy Regulatory Agency became operational in 2004. An Energy Efficiency Strategy was approved in 2005, and some actions have been taken to improve energy efficiency. However, Montenegro’s energy efficiency is rather low by international standards. This is one of the main challenges to be addressed in the years ahead.

There is significant potential for energy savings in the highly energy-intensive metal industries, notably the large aluminium plant, Kombinat Aluminijum Podgorica (KAP), and in other parts of the economy, including the private household sector. Although the rate of electricity losses in the distribution network decreased in 2006, losses in the energy transmission and distribution network are still a matter of concern. The existing potential for the greater use of renewable energy has not been fully exploited. A large part of domestic electricity supply comes from the highly-polluting, coal-fired power plant in Pljevlja.

Montenegro remains dependent on large electricity imports to meet domestic energy demand. Electricity prices are, moreover, not yet at levels that would allow full cost recovery. The combination of inadequate bill collection rates and technical losses of the energy grid has led to major financial losses for the EPCG.

7.2 Current situation

Environmental impacts from energy production and consumption

Owing to the reliance of industry and residential heating on electricity, it accounts for more than 50 per cent of final energy use (or 63 per cent of primary energy demand) in Montenegro. Most of the remaining heat generation and a large part of road transport are based on oil derivatives, corresponding to 30 per cent of primary energy demand. Direct combustion of fuel wood (5 per cent) and coal (2 per cent) for heating accounts for the residual primary energy demand.

Data on CO₂ emissions have not yet been published, although a draft greenhouse gas (GHG) inventory has been prepared (see Chapter 2). Estimates suggest that CO₂ emissions amounted to around four tons per capita in 2003, a low value compared to emissions in industrialized countries (for example there are ten tons of CO₂ per capita in Germany). Total GHG emissions in Montenegro are likely significantly higher, given the emissions of fluorinated gases from KAP.

An additional environmental impact from the energy sector is air pollution from CO emissions, sulphur oxide and ash. These pollution levels probably exceed permitted standards in some municipalities. The main emission source is the Pljevlja coal-fired power plant, which is located three kilometres from the centre of Pljevlja. It burns lignite from the Pljevlja open pit, which – compared with other fuels – has a high content of sulphur (0.8–1.6 per cent) as well as of ash and moisture (29–35 per cent). As a result, its calorific value is low (8,000–12,000 kJ/kg). Emissions are high and emission limits cannot be met. The power plant is equipped with electrostatic precipitators for dust removal, but the effectiveness of the cleaning equipment is largely insufficient. The power plant has, moreover, no cleaning equipment for sulphur dioxide emissions. In addition to air pollution, ash deposition has adverse impacts on nearby waterways, soil and groundwater.

Fuel combustion in households is also a major contributor to air pollution, although there is no data available on household emissions. The widespread use of fuel wood and lignite for heating in households equipped with poor combustion technology, particularly in the mountainous areas, leads to emissions of particulate matters.
Table 7.1: Electricity balance, 2000–2004

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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</thead>
<tbody>
<tr>
<td><strong>Electricity supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydroelectric energy</td>
<td>1,586</td>
<td>1,769</td>
<td>1,101</td>
<td>1,539</td>
<td>2,240</td>
</tr>
<tr>
<td>Thermoelectric energy</td>
<td>1,069</td>
<td>724</td>
<td>1,226</td>
<td>1,196</td>
<td>1,068</td>
</tr>
<tr>
<td>Imported</td>
<td>1,198</td>
<td>1,236</td>
<td>1,187</td>
<td>1,227</td>
<td>1,198</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,853</td>
<td>3,729</td>
<td>3,514</td>
<td>3,962</td>
<td>4,506</td>
</tr>
<tr>
<td><strong>Transfer and distribution losses</strong></td>
<td>471</td>
<td>512</td>
<td>514</td>
<td>525</td>
<td>694</td>
</tr>
<tr>
<td><strong>Available for consumption</strong></td>
<td>3,382</td>
<td>3,217</td>
<td>3,000</td>
<td>3,437</td>
<td>3,812</td>
</tr>
</tbody>
</table>

| **Electricity consumption** |        |        |        |        |        |
| Industry total             | 1,945  | 2,105  | 2,209  | 2,292  | 2,377  |
| Electric railways          | 20     | 21     | 21     | 21     | 22     |
| Public water supply system | 94     | 98     | 97     | 98     | 96     |
| Public lighting            | 18     | 18     | 18     | 24     | 24     |
| Households                 | 1,114  | 1,099  | 1,117  | 1,079  | 1,043  |
| Business and other premises| 189    | 189    | 188    | 194    | 188    |
| Other customers            | 35     | 35     | 36     | 36     | 34     |
| Agriculture                | 32     | 32     | 31     | 31     | 31     |
| **Total**                  | 3,447  | 3,597  | 3,717  | 3,775  | 3,815  |


**Energy intensity, efficiency and conservation**

In 2004, electricity consumption in Montenegro amounted to some 4,500 GWh, of which about half was produced by hydropower stations, a quarter came from the power plant in Pljevlja, and the remaining 1,200 GWh was imported (see Table 7.2). During the past few years, the share of electricity imports in total domestic supply varied between 25 per cent and 35 per cent. Montenegro’s dependence on imports of electricity has thus remained quite high over the past decades. A large share of the electricity supply (about 26.5 per cent in 2006) is provided by the Serbian Electric Power Utility (EPS) under a long-term contract. Industry is the main user of electricity, with KAP accounting for about 40 per cent of total domestic consumption. Another major industrial consumer is the steel plant in Nikšić.

The second largest electricity consumer is the household sector. Consumption doubled during the 1990s and has reached the German and Austrian level per capita of 1,500–2,000 kWh/year. This is due to a high demand for air conditioning and heating – the share of electricity consumption is relatively low for household appliances, IT-equipment and other appliances. As there is no district heating and no gas grid in Montenegro and given that oil boilers are not common, about half of the population uses electricity for heating purposes.

**Electricity production**

The total electricity production capacity in 2004 was 868 MW, of which about 75 per cent (658 MW) was accounted for by hydropower plants and 25 per cent (210 MW) by the Pljevlja thermal power plant (TPP). The construction of an additional 210 MW block for TPP is being planned. There are two large storage hydropower plants with rated capacities of 342 MW (Piva) and 307 MW (Perucica) and an average annual electricity generation of 740 and 825 GWh respectively. In addition, there are seven small hydropower plants with the capacity of about 9 MW and an average annual electricity generation of 17.4 GWh. Piva hydropower plant is operated by the Serbian Electric Power Utility (EPS) under a long-term contract between the national energy utilities of Montenegro and Serbia (see Table 7.2).

Despite its large mountainous areas, Montenegro has a relatively well-developed transmission and distribution network. The high-voltage transmission system is closely integrated with the transmission networks of Serbia, and Bosnia and Herzegovina.

At the end of 2006 there were no district heating systems in Montenegro, but there is a plan for building such a system in Pljevlja in the northern region of the country. It is envisaged that the Pljevlja coal-fired power plant will be used, to a limited extent, for cogeneration and that a distribution line to Pljevlja will be created.
### Table 7.2: Electricity generation, 2004

<table>
<thead>
<tr>
<th>Plant Description</th>
<th>Capacity MW</th>
<th>Operation hours</th>
<th>Production GWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydropower Plant &quot;Peručica&quot;</td>
<td>307.0</td>
<td>3,942.7</td>
<td>1,210.4</td>
</tr>
<tr>
<td>Hydropower Plant &quot;Piva&quot;</td>
<td>342.0</td>
<td>2,915.2</td>
<td>979.0</td>
</tr>
<tr>
<td>Seven small hydropower plants</td>
<td>9.0</td>
<td>2,644.4</td>
<td>23.8</td>
</tr>
<tr>
<td>Coal-power plant &quot;Pljevlja&quot;</td>
<td>210.0</td>
<td>4,545.2</td>
<td>954.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>868.0</strong></td>
<td><strong>3,670.2</strong></td>
<td><strong>3,185.7</strong></td>
</tr>
</tbody>
</table>


**Efficiency**

Energy efficiency in Montenegro is low. Energy consumption per unit of real GDP amounted to about 775 koe/US$1,000 in 2002 compared with 269 koe/US$1,000 in the other transition countries of South Eastern Europe. Among the main causes for the low energy efficiency are: the low energy production efficiency of lignite-fired power plants, obsolete technologies in high energy-intensity industrial sectors, poor insulation of buildings, and the widespread use of electricity for heating and cooling purposes. Another important factor is the high power transmission and distribution losses. In 2002, these losses amounted to nearly 12 per cent of total electricity consumption. This has been a significant source of financial losses for the energy utilities and was amplified by losses associated with household electricity supply owing to prices below cost recovery levels and inadequate collection rates.

**Renewable energy sources**

The share of hydropower plants in total annual electricity supply was within the range of 30–50 per cent during 2001 and 2004. The dominating sources by far were the large hydropower plants; the seven smaller plants accounted for only about 0.5 per cent of total supply.

The Ilino Brdo wind power pilot project, supported by the Dutch Government, is ongoing. Meteorological data show high wind-energy potential for the area around Nikšić, the south-western region, and the mountain ranges near the coast. Potential wind capacity estimates for Montenegro and Serbia combined (made before the separation of the two countries) are for a total of 15,000 MW (onshore and offshore), of which 11,000 MW onshore; potential electricity produced from onshore and offshore wind would amount to 26.3 TWh/year.

Solar radiation levels in Montenegro are among the highest in Europe. The most favourable areas for solar energy record about 2,000 to 2,500 hours of sunshine per year. In the coastal area, the Zeta River and Morača River valleys, solar energy could be used for water heating, air conditioning and heating of buildings, but its use is underdeveloped.

### 7.3 Strategic, legal and institutional framework for energy

**Policies and strategies**

The main policy objectives and the instruments for their achievement are laid down in the Government’s 2005 Energy Policy of the Republic of Montenegro. The overall aim is to ensure a high quality, reliable and diversified power supply by establishing a competitive energy market and reducing dependence on energy imports. These objectives are to be reached by: using existing domestic renewable energy sources, and gas and oil; improving energy efficiency (especially of the biggest consumers: KAP and households); and reducing the share of electricity for heating by substitution with other heating methods.

The Policy document gives a brief general overview of the country’s energy policy, listing background information on the current situation, formulating goals and suggesting instruments for their implementation. Environmental concerns are considered in different parts of the Policy. However, not enough concrete action is being taken to implement it.

A very important pillar of the Policy is the Energy Efficiency Strategy, which was published in 2005. It foresees the establishment of annual action plans and the strengthening of the Energy Efficiency Unit in the Ministry for Economic Development. In 2006, the Government adopted the first annual Action Plan for the Implementation of the Energy Efficiency Strategy and the related activities have been implemented to a large extent. The Action Plan for 2007 was adopted at the beginning of 2007 and activities for the strengthening of the Energy Efficiency Unit in the Ministry for Economic Development are underway as well. It is noteworthy that measures designed to improve energy efficiency seem to rely largely on
proposals made by external consultants who are financed by foreign donors.

Another important pillar of the Government’s Energy Policy is the development of an Energy Development Strategy, for the period until 2025, designed to set medium- and long-term objectives, establish priorities and create conditions conducive to the future development of the energy sector. There are plans to build large hydropower plants (Andrijevo, Raslovići, Milunovići, Zlatica and Komarnica). The development of this Strategy is in the final phase.

The Strategy for the Development of Small Hydropower Plants was adopted in 2006. It contains measures designed to increase the role of small hydropower plants in domestic energy supply. But, although the Strategy points to the huge untapped potential for up to 800–1000 GWh/year capacity for hydropower, it recommends only a modest expansion of small hydropower plant capacity of 20 to 30 MW until 2015. The corresponding contribution of small hydropower plants to overall domestic electricity consumption would therefore remain very small: between 1.5 to 3 per cent. The Strategy proposes a range of instruments to encourage private sector investments in small hydropower plants, such as fixed feed-in tariffs, state guarantees, public–private partnerships, and Government assistance in identifying appropriate sites.

The Government intends to create favourable conditions for an increased use of renewable energy resources in Montenegro. The Assessment of Renewable Energy Sources Potential in Montenegro, which estimates the potential of wind, sun and biomass energy, was adopted in April 2007. The study provides a solid information basis for the planning of projects in this field, and should therefore also be of interest to potential investors.

Important challenges in the years ahead are to:

- Establish a detailed statistical information system for national energy production and consumption;
- Increase research and development activities related to the enhanced use of renewable sources;
- Develop and implement projects for improving energy efficiency; and
- Develop a cost-reflective tariff policy taking into account social affordability aspects.

**Legislative framework**

Montenegro adopted a Law on Energy (OG RM No. 39/2003) in 2003, which has been harmonized with European Union legislation. The Law regulates the generation, transmission, distribution and supply of electricity; the organization and functioning of the electricity market; the market for coal as regards the use of coal for electricity generation; and the transportation, distribution, storage, trade and supply of petroleum products and natural gas.

The overall objective is to open the electricity market to competition, which involves, among other things, the unbundling of the grid operation from the power supply. To execute this, an Energy Regulatory Agency was established and became operational in 2004. The Agency’s Management Board, which is an independent public body, is appointed by the Parliament. The Agency has an obligation, laid down in its statutes, to take environmental aspects into consideration in its activities.

The Law prescribes some conditions for electricity generation from renewable sources and for small power plants. These conditions include simplified procedures for obtaining concessions and permits for the construction of small hydropower plants and other renewable energy facilities, and for issuance of permits for network access and licences for power generation and sale. The Energy Regulatory Agency reported that these provisions have been reflected in the regulations concerning the distribution and transmission of electricity. Small renewable electricity producers are entitled to be connected to the distribution grid, and their transmission grid fees have been waived.

In order to ensure the proper implementation of the Law on Energy and its harmonization with international legislation, including relevant United Nations agreements and European Union Directives, and in particular the Kyoto Protocol and Athens Memorandum, secondary legislation is to be developed. The Law on Ratification of the Kyoto Protocol was adopted in March 2007 and an inventory of greenhouse gases has been prepared.

**Institutional framework**

At the institutional level, the main change since 2002 has been the establishment of the Energy Regulatory Agency in 2004. Its powers, functions and responsibilities include:

- Issuing licences to conduct activities and to interconnect facilities, networks and equipment for energy generation, transmission, distribution, supply and sale;
• Issuing authorizations for construction of new or modification of existing facilities;
• Controlling compliance with licences; and
• Establishing rules for the safety of facilities, personnel, the public and the environment.

There has also been significant progress in the restructuring of the national electricity utility EPCG. The functions of generation, transmission and distribution have been unbundled into separate entities. These entities received temporary licences in June 2004.

Further steps are planned to strengthen the administrative capacities required for implementing the Energy Development Strategy, the Strategy for the Development of Small Hydropower Plants and the Energy Efficiency Strategy, and for improving inspections.

7.4 Electricity pricing and its effects on environmental protection and sustainable development

As already mentioned, electricity is the most important form of energy in Montenegro. The tariff system for electricity went through a major reform in 2003. There are now three different tariff categories for low voltage electricity (see Table 7.3). The price for household consumption was 0.0443 €/kWh (day tariff in dual tariff) and 0.0354 €/kWh (single tariff) in 2006. This is much lower than the prices for other consumption (mainly by enterprises) which varies from 0.115 €/kWh to 0.126 €/kWh. An estimate for the full economic cost of a kilowatt hour of electricity for South-eastern European countries is 0.08 US$/kWh (0.06 €/kWh). This rough estimate suggests that electricity prices for household consumption are still significantly below full cost recovery levels and that the household sector continues to be subsidized. There are no data available that show the share of utility payments in total household expenditures for electricity, heating and water supply in Montenegro. Low electricity prices provide little incentive to households for the rational use and saving of electricity.

Since the 2003 reform, electricity prices in Montenegro have not been increased. Further tariff modifications have been prevented because of disagreements between the EPCG and the Energy Regulatory Agency on methodological issues about the determination of appropriate price levels. The Energy Regulatory Agency expects some further tariff increases but considers the current household tariff of 0.0443 €/kWh to be already approaching market levels. Local engineering staff at the Pljevlja coal-fired power plant indicated current electricity production costs to be 0.037 €/kWh. By comparison, the price currently allocated by the EPCG to their company unit running the Pljevlja power plant was said to be 0.0186 €/kWh and future prices were estimated to be 0.042 €/kWh. The Government plans to increase energy prices to some 0.108 €/KWh in the next five years. Taking costs for grid maintenance into account, which in Western Europe are 0.05 €/kWh on average, this price target would allow full cost recovery.

<table>
<thead>
<tr>
<th>Table 7.3: Electricity prices, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tariff rate</strong></td>
</tr>
<tr>
<td>Households</td>
</tr>
<tr>
<td>for dual tariff</td>
</tr>
<tr>
<td>higher</td>
</tr>
<tr>
<td>lower</td>
</tr>
<tr>
<td>single tariff</td>
</tr>
<tr>
<td>Other consumption</td>
</tr>
<tr>
<td>higher</td>
</tr>
<tr>
<td>lower</td>
</tr>
<tr>
<td>I level - customer with metered electricity</td>
</tr>
<tr>
<td>higher</td>
</tr>
<tr>
<td>lower</td>
</tr>
</tbody>
</table>


A completely different price scheme applies to large industrial consumers, which in Montenegro are the steel and aluminium plants. These consumers connect directly to the transmission grid and thus save the cost of the distribution grid, which accounts for up to 90 per cent of grid costs. Furthermore, these large consumers have a steady demand for electricity, which makes planning of electricity production easier for the power supplier and therefore the cost of electricity distributed to them is significantly lower.

It appears that the contractual arrangements between the EPCG and KAP have been implemented to the mutual satisfaction of both parties. There has been, moreover, an agreement on the conditions for electric power supply for a five-year period between the EPCG and the private investor that bought the steelworks in Nikšić (MN Specialty Steels Limited).

7.5 Privatization of energy-intensive industry and integration of environmental requirements

The most sensitive issue in the energy sector is the privatization of electric power companies. There is a need for significant investment to modernize the

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1 According to Frankhauser and Tepic (2005)
facilities proposed for privatization. Potential investors need a reliable policy framework that provides predictable conditions for their future operations. There is currently, however, significant uncertainty about the future design, implementation and enforcement of energy sector legislation. Investors have, therefore, an interest in fixing future production and pricing conditions in the privatization contracts. This points to the need to ensure that environmental requirements are given adequate weight in these privatization contracts, which does not seem to have been the case so far.

There are two prominent cases of the privatization of pollution hotspots: KAP (in 2005) and the Pljevlja coal-fired power plant (still under negotiation in spring 2007). In both cases, the privatization process has been carried out under the auspices of a specialized commission for privatization. The former Ministry of Environmental Protection and Physical Planning has been involved in the process, which nevertheless has not been made sufficiently transparent to the public.

KAP was purchased by a private foreign company, Rusal, in 2005. The electricity sales contract between the EPCG and KAP stipulates that the electricity price to be paid by KAP will depend on the development of the primary aluminium price at the London Metal Exchange. The investor has agreed to spend €20 million on a five-year programme for remediation and environmental investments and for the replacement of obsolete equipment.

Since 2006, Rusal has also been negotiating the purchase of the Pljevlja coal-fired power plant and the nearby lignite open mine pit. According to information provided by the investor, there are plans to renovate the current 210 MW power block by 2011, involving expenditures of €12 million. Additionally, the remediation of the existing ash deposit and the establishment of a new ash deposit are planned. Further investment plans foresee the establishment of a second power block of 225 MW involving a total expenditure of €170 million. As a result, the profitability of the plant is expected to improve and the cost of electricity production to fall. However, there is a lack of information on the environmental requirements associated with the privatization deal. In the event of a deal there would be serious concerns about the likely increased impact on the environment. It would necessitate costly mitigation measures, in particular regarding proper management of ash and mine tailings.

7.6 Conclusions and recommendations

In the energy sector, Montenegro has the potential to live up to its ambition to be an Ecological State. The already remarkably high share of electricity generated from renewable resources (approximately 50 per cent from hydropower) could be raised even further given that the hydropower plants provide the means for managing the feed-in of other renewable energy sources.

The first priority in the Montenegrin energy policy should be to save electricity. There is a good information base in the Energy Efficiency Strategy. For implementation to start, a decision is needed on which areas to focus the existing staff capacities in the Ministry for Economic Development. Energy losses are from different origins and occur at different stages from production to consumption. First, high distribution network losses point to the need for investments in maintenance and repair. Second, final users have insufficient incentives for reducing their energy consumption, with levels of electricity prices and collection rates for bills being rather low, especially as regards households. Electricity prices and collection rates are also rather low. But measures to increase collection rates have been taken recently.

Electricity prices should reflect production costs and, through adequate taxation, should internalize the costs of environmental externalities. Special social support measures should be introduced for poor people who cannot afford payment of cost-reflective prices. The preparation of a subsidy programme for vulnerable groups of citizens that should enable them to satisfy their minimum needs for electricity and heating is underway.

Knowing that households’ electricity consumption is mostly used for heating and cooling, large savings could be expected from improved insulation of residential buildings and an increased use of renewable energy. Adequate economic incentives (for instance tax rebates or investment subsidies) designed to encourage people to invest in insulating their homes could be considered.

Recommendation 7.1:
The Government should strive to improve energy efficiency, in particular through:

(a) Phasing out subsidization of electricity prices to private households and large enterprises;
Montenegro should work out an approach for developing renewable energy that takes into account the differing climatic conditions of the coastal and central areas and the mountain region. For example, in the coastal area, which has a relatively low heat demand due to mild winter temperatures, the focus could be on using solar energy for heating purposes. In cities of the central mountainous area where no grid is available, gas boilers supplied through refillable compressed gas tanks could be an alternative. In the mountain area, where good insulation is of importance, heat supply on the basis of wood biomass could be an option, particularly if the introduction of clean wood-burning technologies is encouraged.

An option for increasing the use of renewable energy would be to tap into the as yet unused potential for hydropower plants. In this context, the existing plans for (preferably) small hydropower plants should also be implemented. The use of other renewable energy forms, such as wind energy and thermal energy, should also be given serious consideration, where appropriate.

The development of such a strategy for renewable energy, which could proceed through a mix of various technologies adapted to local circumstances, cannot be implemented simply by top-down decisions by the Government. It needs to involve other relevant stakeholders. This would also increase transparency in the decision-making process. In particular, a plan to set up an additional large hydropower plant would require clear procedures, ensuring that stringent environmental standards are applied. Such a strategy typically needs to be submitted to an in-depth evaluation, as required by the Law on Strategic Environmental Assessment (OG RM No. 80/2005). This Law, however, will not be in force until 2008.

Montenegro has the sufficient know-how to start the implementation of renewable energy projects. Secondary regulations specifying the economic framework are now urgently needed; for example, a feed-in tariff for renewable energy. While aiming to set up a manufacturing base for renewable power plants might be too ambitious, a realistic goal could be to develop installation and maintenance expertise with regard to renewable energy technologies, in order to be able to provide these services later on to other countries in the region that also want to promote the use of renewable energy. Therefore, project developers and in particular foreign investors that can bring their technological and managerial expertise to the country need to be attracted. It is important to ensure that domestic companies gain experience in this field and benefit adequately from the presence of foreign investors. For example, Elektroprivreda Crne Gore (EPCG) could build on existing experience in providing sites and grid access and could establish a unit to promote and implement wind-power projects. This project unit could also ensure the link between foreign donors or developers and domestic projects.

Montenegro should make more use of cooperation opportunities with neighbouring countries. For example, it would be advantageous to implement legislation for energy efficiency standards and the promotion of renewable energy similar to that of neighbouring countries. This would make it easier for international investors to operate in the Montenegrin market and would provide more opportunities for Montenegrin companies to enter other markets in the region. Also, experiences as regards energy efficiency measures should be gained by close cooperation, including special support contracts, with energy efficiency agencies in other countries without necessarily creating a separate national energy efficiency agency.

Recommendation 7.2:

(a) The Ministry for Economic Development and the Ministry of Tourism and Environment should ensure the development of renewable energy sources (hydropower, solar and wind power, and biomass) in accordance with the goals of the National Strategy for Sustainable Development (NSDS). Various scenarios should be developed and discussed in forums with a high level of public participation. Targets for renewable energy sources should be adopted by the Government within the framework of the general energy policy, NSDS and relevant spatial plans.

(b) The Government should encourage the Electric Power Company of Montenegro (EPCG) and private domestic and foreign investors, and seek foreign assistance, to support the implementation of renewable energy projects.
The Pljevlja coal-fired power plant, with its high impact on the environment, low efficiency and reliability, and rigid electricity production, is currently a burden on the Montenegrin electricity system. Nevertheless, through the privatization agreement, the retrofitting of the existing block and the establishment of a second block as an ultimate objective is being considered. In view of the unfavourable production conditions and the problem of environmental impact that arise from the operation of this power plant, alternatives for electricity production and economic development of the region around Pljevlja should be considered. Important preconditions for the proper exploration of these alternatives are that the future operation of the Pljevlja coal-fired power plants would have to comply with European standards for best available techniques and that there should be no fixed minimum price in privatization contracts for the electricity produced, which would lead to price subsidization.

**Recommendation 7.3:**
The Ministry for Economic Development, in cooperation with the Ministry of Tourism and Environment, should:

(a) Ensure that the existing first block of the Pljevlja coal-fired power plant complies with Best Available Techniques (BAT) within ten years at most;

(b) Ensure that, if built, the next block meets BAT standards; and

(c) Consider alternatives to the Pljevlja coal-fired power plant, by developing a plan for a combined heating and power plant which complies with BAT.

(See also Recommendation 1.4 on IPPC permits.)
ANNEXES

Annex I: Implementation of the recommendations from the first review held in 2002

Annex II: Selected regional and global environmental agreements

Annex III: Selected economic and environmental indicators

Annex IV: List of national environment-related legislation
Annex I

IMPLEMENTATION OF THE RECOMMENDATIONS FROM THE FIRST REVIEW HELD IN 2002

Background information

Since the first Environmental Performance Review (performed in 2002 and issued in 2003), the status of Montenegro has changed twice: in 2002, when the Federal Republic of Yugoslavia was transformed into the State Union of Serbia and Montenegro, and in 2006, when the Union split and the independence of the Republic of Montenegro was declared. Therefore, all recommendations addressed to the Federal Level in 2002 are now addressed to the Government of Republic of Montenegro.

The Ministry of Environmental Protection and Physical Planning (MEPPP) was dissolved in the last term of 2006. The Department of Environment was merged with the former Ministry of Tourism to form the Ministry of Tourism and Environment (MTE). In addition, the Ministry of Health and Social Policy became the Ministry of Health, Labour and Social Welfare (MHLSW).

PART I: THE FRAMEWORK FOR ENVIRONMENTAL POLICY AND MANAGEMENT

CHAPTER 1: Decision-making framework for environmental protection

Recommendation 1.1:
The Federal Government of Yugoslavia, in cooperation with the Montenegrin Ministry of Environmental Protection and Physical Planning,
(a) Should take advantage of their constitutional reviews and the framework agreement with the EU to harmonize all legal instruments concerning the protection of the environment and the management of natural resources; and
(b) Should establish a mechanism to coordinate the process of approximation to EU legislation.

Implementation:
(a) In spite of the substantial changes that Montenegro faced between 2002 and June 2007, the country has made serious efforts to move towards harmonizing the national legislation with the European Union (EU) acquis communautaire. During 2005, five important legal Acts were adopted by the Montenegrin Assembly, all of them harmonized with the appropriate EU Directives: the Law on Environmental Impact Assessment (EIA), the Law on Strategic Environmental Assessment (SEA), the Law on Integrated Pollution Prevention Control (IPPC), the Law on Waste Management, and the Law on Environmental Noise.
(b) In Montenegro, a mechanism to coordinate the EU approximation has been established. The Ministry of Foreign Affairs bears the main overall responsibility for the EU integration issues. The MEPPP has been involved from the very beginning through the Ministry for International Economic Relations and European Integration, and by its participation in the Republic Commission for the Coordination of the Process of the EU Accession. The main emphasis has been given to implementing priorities specified in the European Partnership Agreement. The legal requirements have been included into the Action Plan for Implementation of the European Partnership Recommendations. To coordinate the fulfilment of tasks defined by this document, the MEPPP, now the MTE, takes part in the Permanent Enhanced Dialogue Meetings. The results achieved are reported by quarterly and annual Progress Reports.
Recommendation 1.2:
Montenegro’s Ministry of Environmental Protection and Physical Planning should implement the Agreement\(^1\) that they reached on 12 July 2002 on cooperation on environmental protection. Implementation should be consistent with the new constitutional charter and in cooperation with the relevant Yugoslav Ministry.

Implementation:
This recommendation was tailored to a specific situation in 2002. Nevertheless, Montenegro adapted previous inter-federal obligations into current international activities. Cooperation with the neighbouring countries has been declared as a long-term priority in the overall context of international cooperation.

Recommendation 1.6:
The Ministry of Environmental Protection and Physical Planning should develop a national environmental action plan following the document called ‘developmental directions for Montenegro, the ecological State’.

Implementation:
The MEPPP decided to focus on sustainable development and to enhance the position of environmental protection in the broader context of economic and social development. The National Council for Sustainable Development headed by Prime Minister was formed in 2002; in 2005, the Office of the Council was opened and the drafting of the National Strategy on Sustainable Development was launched.

Recommendation 1.7:
The environmental inspectorate should improve the coordination of joint inspections with the various inspectorates for water, forestry, sanitation and nature conservation, preferably starting with the biggest industrial polluters, and develop a joint pollution database as a first step towards an integrated approach to environmental problems.

Implementation:
As the environmental inspectorate is understaffed, the register of polluters envisaged by the 1996 Law on Environment has not been developed yet. Inspectors regularly visit the most important environmental “hot spots” such as the power plant and the mine in Pljevlja, the steel mill in Nikšić, and the Kombinat Aluminium Plant in Podgorica.

CHAPTER 2: Economic instruments and financing

Recommendation 2.5:
The Ministry of Environmental Protection and Physical Planning, together with the Ministry of Agriculture, Forestry and Water Management and the Ministry of Finance, should analyse their existing economic instruments and put more emphasis on their application. Important factors in the analysis of existing economic instruments are environmental effectiveness (i.e. the extent to which instruments contribute to the achievement of environmental goals), economic efficiency, administration and compliance costs, use of revenues, and the incentive effects.

Implementation:
This recommendation was not implemented. The use of economic instruments for environmental policy has remained underdeveloped. A main reason for this appears to be the weak financial situation of the industrial sector (largely State- and socially-owned companies) for most of the review period. Air emission charges have not been collected; the same holds for charges related to chlorofluorocarbons and hazardous waste production. At the municipal level, communal waste charges are too low to influence behaviour towards the environment. The same holds for waste water charges. Charge increases have taken place but are insufficient to have an impact on behaviour of households and firms. Concerns of limited social affordability seem to have dominated as regards environmental charges for households. But survey data suggest that there is scope for raising charges, except for the lower-income groups. But the latter problem could be addressed with targeted subsidies.

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\(^1\) Agreement on Principles of Relations between Serbia and Montenegro.
Recommendation 2.6:
(a) The Government of Montenegro should take the necessary steps to establish a special sub-account within its State budget to channel financing for environmental purposes, in line with the Law on the Environment.
(b) To make environmental investments more effective, priority projects need to be identified by the Ministry of Environmental Protection and Physical Planning and should be viewed in the context of the preparation of the national environmental action plan.

Implementation:
An Environmental Fund will be established when the corresponding draft law will be adopted before the end of 2007. The Fund is expected to become operational during 2007. There appears to have been a stricter adherence to the earmarking of pollution charges (those which were collected) and the investment tax for the financing of environmental projects in recent years.

CHAPTER 3: Information, public participation and awareness-raising

Recommendation 3.1:
The Federal Secretariat for Labour, Health and Social Care and Montenegro’s Ministry of Environmental Protection and Physical Planning should continue providing support for the establishment of environmental NGO networks and provide NGOs with access to accurate environmental information and the opportunity to participate in environmental decision-making.

Implementation:
It is rather difficult to provide precise evaluation. However, the general conclusion is that implementation of the recommendation is still ongoing. The Government is providing financial support for NGO activity and this support is increasing. The regulations on access of NGOs to governmental financial support, however, as well as access to environmental information and participation in environmental decision-making, are still in the process of development and improvement.

Recommendation 3.2:
The Government of Montenegro, through its Ministry of Environmental Protection and Physical Planning, should provide the resources to update monitoring facilities for carrying out a comprehensive and systematic monitoring of the state of the environment. (See recommendation 6.4)

Implementation:
This recommendation has been partially implemented. The Government is providing basic support for monitoring institutions (operational and monitoring program costs); however, further updating of monitoring programmes and facilities is needed.

Recommendation 3.3:
Montenegro’s Ministry of Environmental Protection and Physical Planning should:
(a) Prepare periodic reports on the basis of the data collected and analysed
(b) Provide training programmes for the staff currently employed in the monitoring institutes.

Implementation:
(a) The Ministry is preparing annual reports on the State of Environment in the country based on the data available from monitoring institutions. However, the framework of the report, procedures of collecting, and aggregation and usage of the information should be revised and improved. The quality of the reports is questionable due to the poor quality of the data.
(b) Implementation is ongoing and current staff of monitoring institutions were involved in some training sessions. Further modernization of monitoring facilities, equipment and techniques, however, requires systematic retraining of personnel.

Recommendation 3.4:
Montenegro’s Republic Hydrometeorological Institute, in cooperation with the Federal Hydrometeorological Institute, should update the water monitoring to include life parameters, such as vegetation and animal
ecosystems in the rivers and along the riverbanks. A first step would be to start simple observation studies on the status of the ecosystems close to the riverbanks.

**Implementation:**
Implementation of this recommendation is not yet completed because only a restricted number of life parameters, mostly microbiological ones, have been included in water monitoring programmes to date. Monitoring programmes need to be updated in this regard.

**Recommendation 3.5:**
Montenegro’s Ministry of Environmental Protection and Physical Planning should:
(a) Introduce public participation in EIA procedures and should include more provision for public participation in the environmental decision-making procedures in accordance with the Aarhus Convention.
(b) Consult Montenegro’s Ministry of Education and Science on appropriate ways to introduce environmental protection issues into the curricula of primary schools.
(c) Raise public awareness of environmental issues through information campaigns, the use of the media, environmental programmes, and cooperation with schools and universities.

**Implementation:**
(a) Implementation is not completed. Public participation in EIA procedures is provided in the 2005 Law on EIA as well as in some others (Law on SEA, Law of IPPC and Law on Wastes). However, the implementation of these legal acts has been postponed till 2008.
(b) Implementation has started. In the framework of educational reform, environmental subjects are incorporated into the curricula of primary and secondary schools and a restricted number of pilot schools have been involved into the implementation of the new model of general education (see chapter 3). Availability of methodological and educational materials, as well as retraining of teaching personnel according to new requirements, is an issue.
(c) Implementation of this recommendation has an open-ended character and has required systematic, ongoing efforts. Some activities were implemented on irregular basis. However, the Ministry is working on a plan or strategy for raising the awareness of environmental issues through public information and education.

**Recommendation 3.8:**
The Ministry of Environmental Protection and Physical Planning, the Ministry of Health and the Ministry of Agriculture, Forestry and Water Management should define clearly the responsibilities of the different institutes within Montenegro so as to rationalize environmental monitoring.

**Implementation:**
Implementation of this recommendation is not completed. The responsibilities of the different institutes involved in the environmental monitoring are not harmonized due to lack of coordination between Ministries and the absence of integrated monitoring program. Nevertheless, in order to rationalize environmental monitoring, precise domains and precise obligations between sectors and institutions were defined. For instance, the MHLSW and health institutions are in charge of:
- Water and food quality monitoring;
- Prevention, scientific and survey researches connected to environmental risks;
- Activities for repression of bad habits causing “outbreak” of chronic degenerative diseases;
- Support the safe disposal of medical waste;
- Noise protection; and
- Control and supervision of applying provisions of Law on Limiting Use of Tobacco Products.

**CHAPTER 4: International cooperation**

**Recommendation 4.1:**
The Federal Government of Yugoslavia should establish a standing consultative mechanism with Montenegro to:
- Clarify the respective roles of the Federal Government and the two republics with regard to international cooperation in environmental (and other) areas;
• Coordinate the implementation of international conventions;
• Facilitate decision-making on related issues; and
• Discuss the modalities for entering into bilateral agreements specific to one republic (e.g. concerning the coastal area or the Danube River basin).

**Implementation:**
This recommendation was no longer relevant after Serbia and Montenegro became independent States. The Montenegrin Government is now responsible for all issues related to international cooperation in environmental protection. The Parliament of Montenegro has decided to become a successor State to all international environmental agreements to which the State Union of Serbia and Montenegro was a party, and to undertake the necessary steps to accomplish this goal.

**Recommendation 4.2:**
The Federal Government of Yugoslavia should ratify:
• The Sofia Convention on Cooperation for the Protection and Sustainable Use of the Danube River;
• The UNECE Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes;
• The UNECE Helsinki Convention on the Transboundary Effects of Industrial Accidents;
• The UNECE Espoo Convention on Environmental Impact Assessment in a Transboundary Context; and
• The 1995 Revised Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

Following ratification, the Government of Montenegro should implement these conventions.

Yugoslavia in cooperation with the Government of Montenegro should also make operational as soon as possible bilateral agreements dealing with transboundary water issues.

**Implementation:**
Montenegro has not yet ratified these conventions. Since 2006, Montenegro has prepared a draft law on ratification of the Revised Barcelona Convention, which has to be approved by the Parliament. Preparatory work is being done for the ratification of the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the Helsinki Convention on the Transboundary Effects of Industrial Accidents, and the Espoo Convention.

**Recommendation 4.3:**
The Federal Government of Yugoslavia should ratify the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters as soon as possible.

Following ratification, the Government of Montenegro should implement the Aarhus Convention.

**Implementation:**
Montenegro has not yet ratified the Aarhus Convention. However, some legislative basis for ratification and implementation of the Aarhus Convention has been created. In particular, the following laws contain the necessary provisions in accordance with the requirements of the Aarhus Convention: Law on Environmental Impact Assessment (EIA), Law on Integrated Pollution Prevention and Control (IPPC), and Law on Strategic Environmental Impact Assessment (SEA). The project “Preparation of a National Profile to Assess Capacities to Implement the Aarhus Convention”, supported by UNECE and United Nations Institute for Training and Research (UNITAR), began in 2005 for Serbia and Montenegro.

**Recommendation 4.4:**
The Federal Government of Yugoslavia and the respective ministries of Montenegro should seek further international support for establishing cleaner production centres. Support for the implementation of conventions related to the management of chemicals should be provided or channelled through such centres, in cooperation with the Basel Convention’s Regional Centre for Training and Technology Transfer in Bratislava, United Nations Environment Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO). (See also recommendations 7.2b and 10.3.)
**Implementation:**
Serbia and Montenegro began working on developing a project on establishment and operation of a National Cleaner Production Programme in 2004. In 2006, UNIDO began implementing the project “Preparatory assistance for the establishment and operation of a National Cleaner Production Programme for Montenegro”. The project is ongoing.

**Recommendation 4.5:**
The Federal Government of Yugoslavia should consider submitting the following projects (among others) to the Global Environment Facility (GEF) for funding:
(a) Enabling Activity for Biodiversity, to develop a national biodiversity strategy and action plan. After implementation of the Enabling Activities, a second project for the establishment of a clearing-house mechanism could be envisaged (see also recommendation 9.3.);
(b) Development of a national biosafety framework. Yugoslavia would need to express its intention to ratify the Cartagena Protocol on Biosafety; and
(c) Development of a national implementation plan for the Stockholm Convention, using the Global Environment Facility’s “Initial guidelines for enabling activities for the POPs Convention.”

**Implementation:**
Montenegro is in the process of implementation of several projects financed by GEF. The following projects were approved for the State Union of Serbia and Montenegro, but their implementation has not yet started.
• Biodiversity Strategy, Action Plan and National Report – UNDP/GEF.
• National Capacity Self-Assessment for Environmental Management in Serbia and Montenegro (the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the United Nations Framework Convention on Climate Change (UNFCCC)) – UNDP/GEF.
• Development of the National Biosafety Framework for Serbia and Montenegro – UNEP/GEF.
• Development of National Implementation Plan for Stockholm Convention on POPs – UNEP/GEF.
• The First National Communications to the UNFCC – (UNDP/GEF).
A separate strategy, action plan, national report or self-assessment will be developed for Montenegro.

**Recommendation 4.6:**
(a) The Federal Government of Yugoslavia should continue to give high priority to regional and transboundary cooperation, in particular within the framework of the Regional Environmental Reconstruction Programme. Further development of bilateral environmental framework agreements with neighbouring or other States is encouraged. Serbia and Montenegro should be enabled to establish transboundary cooperation arrangements where they have specific interests.
(b) Montenegro’s Ministry of Environmental Protection and Physical Planning should consider developing programmes for assistance in the implementation of multilateral environmental agreements in a regional context, in the framework of and fully harmonized with the AIMS project (Support to Acceptance and Implementation of Multilateral Environmental Agreements in South-Eastern Europe, RERE 1.12).

**Implementation:**
Montenegro has participated and is planning to become more active in regional and transboundary cooperation after it became independent. Montenegro is a participant in several regional initiatives: the Regional Environmental Reconstruction Programme (RERE), the Adriatic-Ionian Initiative, and the Mediterranean Action Plan (MAP). Montenegro also participates in Environmental Compliance and Enforcement Network for Accession (ECENA) network of environmental inspectorates, and in AIMS Network. Environment-related bilateral Memoranda of Understanding (MoU) have been signed with Albania, Italy, Poland and The former Yugoslav Republic of Macedonia. MoUs with the Czech Republic and Slovenia are in the process of preparation. Montenegro also cooperates closely with Austria, Hungary, Japan, the Netherlands, Serbia, and United States, although there are no bilateral environmental framework agreements with them.
PART II: MANAGEMENT OF POLLUTION AND OF NATURAL RESOURCES

CHAPTER 5: Management of water resources

Recommendation 5.2:
Montenegro’s Ministry of Agriculture, Forestry and Water Management, in collaboration with its Ministry of Environmental Protection and Physical Planning, should prepare a comprehensive national flood disaster management strategy, which includes preparedness, mitigation, recovery and reconstruction. The impact of floods can be further reduced by integrating hazard mitigation measures into land-use planning and investment projects.

Implementation:
There is no strategy on flood management. The Water Directorate within the Ministry of Agriculture, Forestry and Water Management (MAFWM), in collaboration with the MTE, elaborates four-year action plans on flood management split into annual action plans. These four-year action plans include flood preparedness, mitigation, recovery, and reconstruction of damaged assets. Areas prone to floods are mapped into the Spatial Master Plan.

Recommendation 5.3:
Montenegro’s Ministry of Agriculture, Forestry and Water Management, in collaboration with its Ministry of Environmental Protection and Physical Planning and its Ministry of Health and Social Policy, should:
(a) Undertake a thorough study of rural water-supply systems, both formal and informal, as the basis for designing a programme for improving rural water supply. In Serbia, the Ministry of Agriculture and Water Management has a list of priority projects in small town and rural water-supply systems that could serve as the basis for an assessment of rural water needs. The assessment should include, inter alia, the state of the existing water-supply systems, an inventory of informal water-supply systems, an inventory of private wells and a survey of water quality in private wells;
(b) Provide the legal and institutional framework for monitoring, regulating and supporting the rural water sector, as a priority;
(c) Focus on water-supply systems for medium-sized cities and rural areas. This includes urgent investment to get infrastructure working again, lower operating costs, provide operational and management information and deal with immediate water-quality problems;
(d) Include in a rural water-supply programme a component for health education and promotional activities that would incorporate, among other things, education and training on the appropriate design and use of wells, design and use of home-made chlorination systems, school sanitation and health, and water quality monitoring in remote rural communities; and
(e) Give top priority to the provision of water-supply and sanitation services to communities or persons who are underserved.

Implementation:
(a) No full study was made. In its four-year action plans, MAFWM renovates more than 30 rural water-supply systems, including private wells. The Public Health Institute within MHLSW is responsible for controlling the quality of drinking water in supply systems. The number and frequency of examinations are determined by the Regulation on hygienic drinking-water quality according to health-based groundwater enforcement standard.
(b) The responsibility of the rural water sector is under the local administration. The monitoring of the implementation of action plans at the local level is made by local technical teams of the MAFWM.
(c) Plans for water-supply systems for medium-sized cities and rural areas are in the preparatory phase. They have yet to be adopted. Their financing is still questionable in regard to the charges paid by communities. Some investments to get infrastructure working again are made, but it is more for maintenance purposes. Water supply in medium-sized cities has been regularly monitored and water quality is tested by the Public Health Institute, which publishes the results and makes them available on its website (www.ijz.cg.yu).
(d) Health education is an important component in the rural programme for water protection. It is included in campaigns for protecting water supplies. These campaigns target urban communities as well. Technical staff of the Water Directorate train rural communities in designing and using wells.
(e) One of the priorities of the Water Directorate is to supply water and sanitation services to communities or persons who are underserved. But results are uneven, as they depend on the availability of financial means.
Recommendation 5.4:
Montenegro’s Ministry of Health and Social Policy, in cooperation with its Ministry of Environment and Physical Planning, should expand drinking water quality monitoring to rural areas.

Implementation:
The MHLSW, through its Public Health Institutes in cooperation with all relevant institutions, is extending drinking-water quality monitoring to rural areas.

Recommendation 5.5:
Montenegro’s Ministry of Agriculture, Forestry and Water Management should:
(a) In the medium term, improve the financial situation of water and waste-water utilities through appropriate pricing policies, management strengthening and better operating procedures;
(b) Allocate funds to achieve a cost-effective mix of institutional strengthening, improved efficiency and service expansion;
(c) Give priority to maximizing the efficiency of existing water utility systems with a first step directed towards reducing the huge losses in the systems; and
(d) Continue developing private sector involvement.

Implementation:
The MAFWM is drafting a Law on Water Management. The Law will include all requirements described in the EU Water Framework Directive 2000/60/EC. Once the Law is adopted, it will lead to development of a Strategy for Water Management, which would include all requirements mentioned in the Recommendations 5.5 and 6.6.

Recommendation 5.6:
Montenegro’s Ministry of Agriculture, Forestry and Water Management should:
(a) Reduce consumption through water-demand management and demand-reduction programmes that would include a cost-effective metering strategy, consumption-based billing, tariff levels that are sufficiently high to induce consumers to use less water, and public awareness on water conservation;
(b) Adopt adequate commercial management systems;
(c) Replace the current “basic cost-plus” tariff formula with one that provides incentives for cost reductions and allows for an acceptable level of profits and reduces large differences in tariffs among household, industrial, and other users. Targeted support for vulnerable users should be included as part of the tariff reform; and
(d) Improve the efficiency and reduce the operating costs of the utilities with policies aimed at: improving their financial management and control, streamlining personnel, making plant and network operations more efficient through rehabilitation and adequate maintenance, reducing water and energy consumption, using good materials, and insisting on quality civil works. These efforts should involve the customers as part of a more general effort to improve client orientation.

Implementation:
The situation is unchanged compared to 2002.

Recommendation 5.7:
Montenegro’s Ministry of Environmental Protection and Physical Planning, in collaboration with its Ministry of Agriculture, Forestry and Water Management, should set priorities for the selection of the most urgent needs in waste-water treatment infrastructure, such as waste-water treatment plants that discharge into or upstream of vulnerable zones, e.g. drinking water resources, recreation areas, and protected areas.

Implementation:
A few waste-water treatment plants are maintained. Some plans for the development of waste-water infrastructure have been elaborated, with their corresponding financial means. The adoption of the Law on Water Management and the Strategy on Water Management will provide a strong legal framework to support these plans.
Recommendation 5.10:
The Ministry of Environmental Protection and Spatial Planning, in cooperation with its Ministry of Tourism, should prepare a coastal zone management plan integrating all sectoral plans including documents for infrastructure, environmental and landscape protection, as well as municipal services development.

Implementation:
The MTE is actually working on an “Integrated Coastal Management Strategy” (an assessment and a first draft of which are done). The final draft is expected by September 2007. Furthermore, there seem to be big problems with the implementation of spatial planning principles.

Recommendation 5.11:
The Ministry of Environmental Protection and Spatial Planning, in cooperation with the Ministry of Tourism, should assess the waste-water treatment improvements for the coastal cities that are currently under way through private-public partnerships in Montenegro.

Implementation:
A Strategy for Waste-water Treatment in the Coastal Zone will actually be drafted by the MTE. In a first phase, the existing infrastructure will be reconstructed. The next steps are to further improve the performance of wastewater management. Implementation of phase I has been carried out, but the next phases depend on finding financial support from international donor organizations or possible investors.

CHAPTER 6: Air management

Recommendation 6.1:

Implementation:
After the independence in 2006, Montenegro applied for all protocols of the CLRTAP to accede to them by succession. See also Recommendation 4.1.

Recommendation 6.2:
Montenegro’s Ministry of Environmental Protection and Physical Planning should each establish the legal framework for air management, based on a multi-pollutant and multi-effect approach and integrated prevention and pollution control, including limit values for emissions.

Implementation:
The Law on Air Quality is currently awaiting Parliament adoption by mid-2007. The Law is compatible with the EU Air Quality Framework Directive 96/62/EC and its requirements.

Recommendation 6.3:
Montenegro’s Ministry of Environmental Protection and Physical Planning should:
(a) Prescribe environmental audits to be carried out by large enterprises or other big polluting sources;
(b) Establish a pollutant release and transfer register of big polluters (PRTR) on the basis of the audit results; and Develop national action plans to combat air pollution, taking into account the monitoring data and results from mobile sources. Such plans should cover all existing stationary and mobile sources and include a mixture of effective control measures, including the more rational use of raw materials, energy management, lower-waste technologies, basic control techniques and better housekeeping.

Implementation:
(a) Large enterprises and other major pollution sources are required by law to carry out environmental audits. But due to the lack of enforcement, this tool is not at all implemented.
(b) PRTR is not established. The Environment Protection Agency, once created, would carry out this task. The same applies to the action plans to combat air pollution.

**Recommendation 6.4:**
Montenegro’s Ministry of Environmental Protection and Physical Planning and its Ministry of Health and Social Policy should establish an environmental information system on air pollution starting with source emission data according to the Cooperative Programme for Monitoring and Evaluation of Long-range Transboundary Air Pollution (EMEP) sector split. It should cover SO\(_x\), NO\(_x\), VOCs, ammonia, CO, CO\(_2\), particulate matter (PM\(_{10}\) and PM\(_{2.5}\)), heavy metals and POPs.

Sufficient funds should be allocated from the budget to redefine a national monitoring strategy respecting international requirements (EMEP, PRTR) and to extend the air pollution monitoring programme to mapping critical loads and participating in international cooperative programmes. (see also recommendation 3.2)

**Implementation:**
The air-quality monitoring covers SO\(_x\), NO\(_x\), VOCs, ammonia, dust, heavy metals and a few POPs. The reliability of monitoring results seems questionable. The Law on Air Quality, approved by the Government but awaiting adoption by the parliament, will include all requirements for air monitoring, as well as provisions for the preparation of a national air protection strategy. The Environment Protection Agency, once created, would carry out all tasks related to the air monitoring.

**CHAPTER 7: Waste management**

**Recommendation 7.1:**
The Federal Secretariat for Labour, Health and Social Care should:
(a) Urgently find funding for the Institute for Nuclear Sciences in order to define the composition of radioactive waste stored in the Institute’s facilities;
(b) Introduce treatment facilities and the environmentally sound disposal of radioactive waste; and
(c) Regularly monitor and maintain the facilities so as to prevent radioactive contamination in the vicinity of Belgrade.

**Implementation:**
With the help of the International Atomic Energy Agency (IAEA), Montenegro is building storage for low and medium radioactive waste. The monitoring would be among the tasks of the Environment Protection Agency. Montenegro does not have nuclear energy sources.

**Recommendation 7.2:**
The Federal Secretariat for Labour, Health and Social Care should:
(a) Prepare a proposal for the harmonization of all existing laws and regulations on hazardous waste, in cooperation with the competent authorities in Serbia and Montenegro; and
(b) Establish a coordination structure and procedures for the control of transboundary movements of hazardous waste and its disposal. Coordination should include the relevant federal authorities, including the customs authorities, from the Governments of Serbia and Montenegro and local authorities responsible for waste movement on their respective territories. (see also recommendations 4.4 and 10.3)

The coordination mechanism should be complemented with training programmes for customs officials and inspectors on how to control hazardous waste shipments and management operations, including recycling, so as to meet Basel Convention obligations. In this regard a user-friendly technical handbook or guidelines on how to determine what constitutes hazardous waste for the use of customs officials and inspectors could be drafted.

**Implementation:**
The 2005 Law on Waste Management, which will enter into force in November 2008, is harmonized with the relevant EU Waste Directives. Nevertheless, the main tasks set by the new legislative and strategic framework for waste management in Montenegro include waste reduction, waste separation, adequate disposal and recycling to reduce waste pollution. In this context, the priority task of the National Strategy for Sustainable Development (NSSD) is further alignment with EU legislation and further development of the database. The
measures that need to be implemented in the coming three years (covered by the NSSD Action Plan) to make progress in attainment of this objective include: (a) enactment of by-laws; (b) drafting national and local waste management plans; (c) development of sanitary landfills for municipal waste and development of a landfill for hazardous waste; (d) establishment of proper waste data; and (e) public awareness-raising campaign regarding proper waste disposal and to promote recycling.

With industrial and hazardous waste, the main challenges relate to the implementation of new regulations and to necessary improvements in management of these categories of waste.

It is important to point out that the Master Plan also envisages the restoration plans for current dumping sites and construction of recycling centres, but these activities have been envisaged for implementation after the year 2010.

Montenegro has recently started considering the problem of medical waste.

**Recommendation 7.3:**
Montenegro’s Ministry of Environmental Protection and Physical Planning should each prepare inventories of industrial (including hazardous) waste generation. The inventories should include:

- The main sectors generating industrial (including hazardous) waste and the number of installations per sector;
- The kinds of waste being generated;
- The production processes producing the waste; and
- The location where waste is being stored and discharged.

**Implementation:**
Although the number of industrial facilities is small and their inventory easy to do, there is no inventory of industrial waste, including hazardous waste, in Montenegro. The three last bulleted items above are more difficult to identify due to the lack of enforcement and lack of capacity.

**Recommendation 7.4:**
Montenegro’s Ministry of Environmental Protection and Physical Planning should:
(a) Draw up a comprehensive waste management strategy for industrial waste, municipal waste and hazardous waste, paying special attention to hazardous industrial waste;
(b) Develop an implementation plan, on the basis of the waste management strategy, that would include, inter alia, legal and economic priorities, measures and targets to ensure that goals are met.
As preparatory steps for the development of the implementation plans, the respective Ministries should each prepare a study of the waste recycling industry.

**Implementation:**
This recommendation has not yet been implemented.

**Recommendation 7.5:**
Montenegro’s Ministry of Environmental Protection and Physical Planning should develop and implement a law on waste management. The law should as far as possible take into account relevant EU waste legislation. It should:
- Define and classify all waste, including hazardous waste;
- Lay down clearly the responsibilities for waste management;
- Provide for regulatory instruments for local authorities and procedural mechanisms to ensure proper implementation, including permitting requirements; and
- Specify institutional arrangements for its enforcement.

**Implementation:**
For details, see the status of implementation of Recommendation 7.2.
Recommendation 7.6:
Montenegro’s Ministry of Environmental Protection and Physical Planning should launch a wide information campaign addressing businesses, institutions and members of the public to promote the minimization of waste at the source. It should be complemented by educational and training programmes to prepare the separate collection of municipal waste. Communication media, such as television, radio and newspapers, should be used to the fullest extent.

Implementation:
NGOs are more active on communication regarding environmental matters. Based on available funding, they run campaigns and even train pupils at schools. However, they face some obstacles in a few schools. For example, directors have refused them the right to teaching pupils about waste or other environmental matters because this had never been done before. For a complement of information, see also Recommendation 3.5(c).

Recommendation 7.7:
Montenegro’s Ministry of Environmental Protection and Physical Planning should, in cooperation with selected municipalities, prepare a study for the rehabilitation of landfills. On the basis of the results of this study, they should initiate demonstration projects for the construction of new sanitary landfills.

Implementation:
Implementation of this recommendation is in the preparatory phase.

Recommendation 7.8:
The Ministry of Industry and Energy, together with the Municipality of Podgorica and in consultation with the Ministry of Environmental Protection and Physical Planning, should undertake a financial viability study of the aluminium plant. If the plant is found to be viable, it is important to begin immediately to modernize its technologies, introducing purification equipment and constructing a new landfill for red mud according to EU standards and norms.

Implementation:
The Kombinat Aluminium Plant was privatized and the investor has agreed to spend €20 million on a five-year programme for remediation and environmental investments and for the replacement of obsolete equipment (see chapter 7). The Government is responsible for the past pollution for all privatized enterprises. How the remediation of the past pollution will be financed or even undertaken remains a question.

CHAPTER 8: Mineral resources management

Recommendation 8.1:
Montenegro’s Ministry of Economy and Industry, in cooperation with its Ministry of Environmental Protection and Physical Planning, should develop long-term strategies for their mining industries that take into consideration, among other issues, the rehabilitation of the industries to minimize their negative impact on the environment, the clean-up of existing waste and decontamination of waste water, the maintenance or reconstruction of weak or damaged tailing collectors and dams (e.g. in Bor and in Mojkovac) and the rehabilitation of degraded land. The strategies should also address the need for regular monitoring, data collection and analysis.

On the basis of these long-term strategies, they should develop short-, medium- and longer-term action plans that would serve as a basis for discussions with multilateral and bilateral partners as well as with investors. (see recommendations 10.2 and 10.8)

Implementation:
The Ministry of Economy and Industry is drafting a Law on Mining, taking into account EU requirements. Once adopted, strategic papers will be developed. The rehabilitation of sites in Mojkovac and in Sulpja Stijena has started.

Recommendation 8.2:
Montenegro’s Ministry of Economy and Industry, in cooperation with its Ministry of Environmental Protection and Physical Planning, in developing their actions plans, should work closely with the management of the
mining and related energy companies to identify sources of financing for the implementation of the companies’ environmental rehabilitation. An adequate and reliable timetable should be established for each project, and implementation deadlines respected.

**Implementation:**
The draft *Law on Mining* envisages the environmental rehabilitation of new mining sites. The rehabilitation of abandoned mining sites and sites under exploitation remains an issue.

**Recommendation 8.5:**
The Ministry of Economy and Industry should:
(a) Review the 1994 *Law on Mining* in order to establish an up-to-date legal framework, harmonized with EU regulations, that takes full consideration of environmental impacts;
(b) Introduce a bank guarantee or similar system as a requirement for issuing exploitation permits, and define rules for self-monitoring; and
(c) In cooperation with the Ministry of Environmental Protection and Physical Planning, support the environmental management training of professionals working with environmental issues in mining.

**Implementation:**
The *Law on Mining* is being drafted and will be adopted in 2007. It takes into account all requirements prescribed in the relevant EU legislation. Self-monitoring is a normal requirement in the law. See status of implementation of Recommendation 8.1.

**Recommendation 8.6:**
The Government of Montenegro should increase its financial support to the Geological Survey. Modern analytical devices and computers are necessary to ensure reliable and timely data and to increase opportunities for the sustainable management of the environment.

**Implementation:**
The situation has remained unchanged since 2002. However, the Geological Survey has moved to a new building and received new equipment.

**Recommendation 8.7:**
(a) The Ministry of Environmental Protection and Physical Planning, the Ministry of Industry and Energy and the Municipality of Mojkovac should immediately start rehabilitation activities at the Mojkovac tailing deposit in order to protect the Tara River and the vicinity from contamination by toxic sludge.
(b) The Government of Montenegro should earmark adequate funds for the rapid implementation of the project, starting with an environmental impact study of the project.

**Implementation:**
In mid-2005, a €7.5 million remediation project of the lead and zinc mine dumpsite in Mojkovac was initiated. It will be carried out in two stages. The first stage, with a value of €1.5 million, included the following activities in 2005: additional research activities; construction of a collector for protecting the dumpsite from rain; improvement of the structure of the existing retaining reservoir; and elaboration of a project for a waste-water treatment facility in Mojkovac. About €700,000 was spent for these works. Financing was provided by the State budget of the country and by a donation from the Czech Republic. In 2006, activities continued, primarily with the construction of the waste-water treatment facility and the reconstruction and upgrading of sewerage system in Mojkovac.” The company Cijevna Komerc from Podgorica won the tender for the sewerage works and signed a contract with the Ministry with a value of about €150,000. Funds were provided by the Government. The 5,200 inhabitant-equivalent waste-water treatment plant will include mechanical and biological treatments, a final disinfection step and a salt treatment. The project was designed by a Czech company, and financed by the Czech Republic. The Ministry will launch a public tender for selecting a contractor in September 2007, after the technical inspection commission has commented and approved the project. The €1.3 million investment will be paid by the country.

The activities regarding technical inspection of the main waste water treatment facility in Mojkovac are currently in their final stage. The main project defines funding in the amount of around €1.3 million that will be
provided by the country: completion of these works will create preconditions for the realization of the second phase of waste disposal, i.e. for final waste disposal sanitation. The second stage of the project on remediation and recultivation has been estimated at €6 million.

In addition, a contract with a private company for the development of technical documentation for sanitation and recultivation of the dumpsite of the lead and zinc mine “Suplja stijena” in Gradač, Pljevlja, has been signed. The contract value amounts to €80,000 and should be completed within six months.

CHAPTER 9: Biodiversity conservation and nature protection

Recommendation 9.1:
Montenegro’s Ministry of Environmental Protection and Physical Planning should facilitate the harmonization of their nature protection legislation with international biodiversity conservation and management criteria. Cooperation with scientific and public institutions, non-governmental organizations and other stakeholders would facilitate this process.

Implementation:
The Ministry of Tourism and Environment is drafting a new Law on Nature Protection taking into account the requirements of relevant EU Directives related to nature protection and biodiversity. Requirements of the main conventions linked to biodiversity are also included. The project will be finished at the end of 2006. The Ministry, in cooperation with other institutions, manages other projects such as the Geographical Information System (GIS) for forestry and biodiversity and the EMERALD network. See also Recommendation 4.5.

Recommendation 9.2:
Montenegro’s Ministry of Environmental Protection and Physical Planning, its Ministry of Agriculture, Forestry and Water Management and its Ministry of Tourism should:
(a) Within the next four years, harmonize all of their respective legislation that impacts on nature conservation and protection, agriculture, water and tourism; and
(b) Reflect these harmonized laws in all relevant management plans.
(see also recommendation 12.6.)

Implementation:
(a) Other sectors of economic activities are developing and harmonizing their respective laws according the EU legislative framework and, when necessary, including environment in respective legislation.
(b) Environmental impact assessment, for example, is done on projects related to mining, tourism and agriculture sectors.

Recommendation 9.3:
Montenegro’s Ministry of Environmental Protection and Physical Planning, in order to implement the Convention on Biological Diversity and other international agreements, as well as their own nature protection policies, should develop and implement national biodiversity strategies and action plans, in cooperation with international organizations and national stakeholders. The institutional strengthening and capacity building of nature protection administration and management staff at all levels should be included. (see also recommendation 4.5)

Implementation:
The State Union of Serbia and Montenegro started the development of the National Biodiversity Strategy and Action Plan with the support of UNDP Country Office in Belgrade. After Montenegro’s independence, the Ministry restarted the development of the Strategy with the support of UNDP Country Office in Podgorica. See also Recommendation 4.5.

Recommendation 9.4:
Montenegro’s Ministry of Environmental Protection and Physical Planning, in cooperation with scientific institutions, national park management and other stakeholders, should develop and implement management plans for each national park, according to international standards and best practices, and taking into account the interests of local communities. (see also recommendations 14.2 and 14.3.)
**Implementation:**
The MTE, in cooperation with scientific institutions, national park management and other stakeholders, develops management plans for each national park, according to international standards and best practices, and taking into account the interests of local communities. The national park management implements them and reports to the Ministry on annual basis. The other categories of protected areas have no management plan or strategy. However, great problems still remain, such as illegal activities in Durmitor area.

**Recommendation 9.5:**
**Montenegro’s Ministry of Environmental Protection and Physical Planning, in cooperation with its Ministry of Agriculture, Forestry and Water Management, should each develop and implement a national forestry strategy based on sustainable forest management, taking into account international forest certification principles. This should be done in cooperation with all stakeholders, using transparent and internationally recognized procedures.**

**Implementation:**
The preparation of the National Forest Policy has started recently with the support of SNV (a Dutch development organization). The aim of the policy is to prepare a National Framework for Forest Management that will include all aspects (environmental, social and economic) of forests and forestry. Furthermore, the aim is to involve all stakeholders into preparation of the Policy, which will highlight the significance of forests in the further development of Montenegro.

**PART III: ECONOMIC AND SECTORAL INTEGRATION**

**CHAPTER 10: Industry and the environment**

**Recommendation 10.1:**
The Federal Secretariat for Labour, Health and Social Care, as soon as possible and in cooperation with the Federal Ministry of Economy and Internal Trade, and with the authorities responsible for environmental management and industrial development in Montenegro, should develop an overall strategic framework and action plan for the reconstruction and modernization of industry, with agreed priorities, as the basis for discussions with potential donors and external investors.

**Implementation:**
The implementation was never started and is no longer relevant after Montenegro’s independence. Privatization, in the meantime, has started in Montenegro. It is worth to mentioning that in most cases the privatization was done without consideration of environmental clauses in the contracts. As well, the Laws on EIA, SEA and IPPC were adopted in 2005, but their entry into force has been postponed to 2008, as they would have been a possible barrier for privatization.

**Recommendation 10.2:**
The Federal Secretariat for Labour, Health and Social Care, in cooperation with the Federal Ministry of Interior Affairs and the environment ministry of Montenegro, should, as soon as possible:

(a) Make a thorough review of current practice and problems in the handling, storing and depositing of hazardous substances from industry and of related chemical spills and risks of chemical accidents;

(b) Based on this review, develop an up-to-date strategy and an action plan for the remediation of chemical spills and for the prevention of chemical accidents and of other negative environmental impacts from the handling of hazardous substances;

(c) Review, update and enforce the requirements for industry to establish a risk management and safety system in collaboration with the relevant authorities; and

(d) Review and update, as necessary, current procedures for the authorities involved in emergency operations in the event of chemical accidents. These procedures should take account of those contained in the UNECE Convention on the Transboundary Effects of Industrial Accidents and the Seveso Directive.

(see recommendation 10.8)
For (a), (b) and (c): No strategy has been developed, nor a concrete plan to deal with the industrial waste, including chemicals and hazardous waste. See also Recommendation 7.2. Regarding (d): The National Strategy for Emergency Situations in the Republic of Montenegro was adopted in 2007.

**Recommendation 10.3:**
Montenegro’s Ministry of Environmental Protection and Physical Planning, in cooperation with its Ministry for Economy, should:
(a) Establish a clean production centre and promote the introduction of cleaner technologies, environmental management and international environmental standards in industry (see also recommendation 8.4); and
(b) Develop action plans for the clean production centre to promote demonstration projects for cleaner technologies and environmental management systems within selected priority areas. The economic advantages and the means of financing cleaner technologies should also be highlighted in the demonstration projects.
This activity should be undertaken in cooperation with other institutions currently involved in cleaner production activities and with important stakeholders such as industrial associations, private banks and universities. (see also recommendations 4.4 and 7.2 b)

**Implementation:**
UNIDO methodology promotes a national centre or programmes for implementation of cleaner production goals. The pilot phase of the Project on cleaner production is now in its final stage, and as result, the country has to decide of what would be the most useful: a programme or a national centre. A centre would aid the development of small and medium-sized enterprises in agriculture production, while a Cleaner Production Programme would require competent institutions, which do not yet exist in Montenegro. Cleaner production and new technologies are recognized as a priority in the National Strategy for Sustainable Development.

**Recommendation 10.4:**
Montenegro’s Agency for Reconstruction and Foreign Investment should include environmental clauses in the sales contracts for the privatization of enterprises and industries.

**Implementation:**
This recommendation has not been implemented.

**Recommendation 10.5:**
The Government of Montenegro should regulate and increase the role of its environment ministry in the privatization of enterprises and industries by introducing environmental audits or environmental impact assessments including cost estimation of the environmental damage from past pollution.

**Implementation:**
In privatization, an environmental audit is not mandatory. But for potential buyers willing to perform an environmental audit, the MTE is involved, e.g. the Ministry was involved in the privatization of Kombinat Aluminium Plant.

**Recommendation 10.9:**
The Ministry of Environmental Protection and Physical Planning, in connection with the upcoming environmental action plan, and in close cooperation with other relevant ministries, should undertake a thorough review of present environmental legislation and regulations in order to ensure, inter alia:
• Harmonization with EU requirements and standards with respect to industry and environment. This should include the adoption of an integrated permit and auditing system respecting the EU IPPC Directive;
• Provision of the necessary resources for administration and enforcement, including control, inspection and supervision; and
• Industrial self-monitoring based on voluntary agreements.
Implementation:
The 2005 Law on IPPC will come into force in 2008. In the meantime, the necessary secondary legislation is being drafted. The Strategy for the Implementation of Quality Systems, adopted by the Government in 1994 (and revised in 1999 and 2004), plays an important role in voluntary compliance. The Strategy includes the implementation of international standards ISO 9000 and ISO 14000 within enterprises. The Government has allocated financial support for those enterprises, which are willing to implement these standards. Up to now, 30 enterprises have the ISO 9001-4 certificates and three are in phase of preparation for ISO 14001 certificates. Other compliance promotion approaches, such as providing education and technical assistance, building public support and publicizing success stories, are still in early development.

CHAPTER 11: Energy and the environment

Recommendation 11.1:
The Federal Ministry of Economy and Internal Trade and the relevant authorities of the two republics should:
(a) Update the existing Strategy for the Development of the Energy Supply Industry and develop action plans and programmes to improve energy efficiency and integrate environmental principles in the energy sector; and
(b) Promote and implement a legislative framework and develop an institutional framework to facilitate implementation.

Implementation:
(a) This recommendation has not been implemented. The energy supply strategy for Montenegro is under development, but has not been finalized. The energy efficiency strategy has been developed and adopted, but rather represents an assessment while not giving strategic directions.
(b) Implemented: The Energy Law (OG RM no. 39/2003) regulates energy sector activities, including the establishment of an Energy Regulatory Agency. This Agency has been operating since 2004. While not all responsibilities of the Agency have been fully implemented, the Agency can generally be regarded as operational.

Recommendation 11.2:
Montenegro’s Ministry of Economy should end all subsidies of energy prices. The electricity companies should be allowed to set prices to reflect the real economic costs. Targeted support for vulnerable users should be included as part of the tariff reform.

Implementation:
This recommendation has not been implemented. See chapter 6, which reflects the current situation.

Recommendation 11.3:
Montenegro’s Ministry of the Economy, together with the electricity company, should start broad-based public information campaigns to publicize energy-saving and energy-efficiency measures.

Implementation:
This recommendation has not been implemented. Public information campaigns of the electricity utility focus on “commercial losses” of electricity.

Recommendation 11.4:
Montenegro’s Ministry of the Economy should begin the restructuring of the energy sectors as soon as their national assemblies adopt the new energy laws.

Implementation:
First steps have been taken towards a liberalization of the energy market by functional unbundling of the grid operation and the electricity production units in the national electricity company, Elektroprivreda Crne Gore (EPCG – Electric Power Company of Montenegro) and for the privatization of one of the power plants. There has been progress made in creating a legal basis for further reform of the energy sector. The new Energy Regulatory Agency became operational in 2004.
Recommendation 11.5:
Montenegro’s Ministry of the Economy should introduce a standards and labelling system for household appliances to decrease electricity consumption.

Implementation:
This recommendation has not been implemented.

Recommendation 11.6:
Montenegro’s Ministry of the Economy, in cooperation with the management of the thermal power plants, should:
(a) Rehabilitate the thermal power plants to a state where they can operate within emission limits, as a matter of priority;
(b) Provide the necessary financial resources for this purpose, through increased tariffs and governmental funding; and
(c) Introduce a fee system guaranteeing the limits and forcing the production plants to comply with them.

Implementation:
This recommendation has not been implemented.
(a) There has been no significant investment in the thermal power plant. Environmental problems, particularly with particulate matter (PM) and SO$_2$ emissions as well as ash deposition, remain. In the case of the privatized Pljevlja power plant, the investor reported that there is a plan to carry out investments solving these issues by 2012.

(b) While electricity tariffs increased significantly for small commercial customers in 2002, big industrial customers, as well as household customers, appear to pay low tariffs. Neither the electricity utility nor the Government has provided funds for rehabilitation of the coal-fired power plant. The Government appears to expect these investments from the new private owner, but no written evidence for this is available.

(c) While legal limits for emissions seem to exist, no implementation of these limits –either by legal enforcement, or by financial incentives – is foreseen.

Recommendation 11.9:
(a) The Ministry of the Economy should develop and implement a strategy and an action plan for the use of renewable energy sources, and it should begin to develop demonstration projects for solar energy.
(b) The Ministry of the Economy, in cooperation with the Ministry of Tourism, may wish to consider establishing the first demonstration projects in high-volume areas, such as in the tourist areas along the coast, where demand for air conditioning peaks.

Implementation:
(a) This recommendation has been partially implemented. The Energy Law foresees the creation of favorable legal conditions for generation from renewable energy sources and “small power plants” (Article 32). The Law on Environment foresees deductions and exemptions from taxes and charges that are payable on the account of, inter alia, the use of renewable sources of energy – sun, wind, sea waves, biogas, etc. (Article 24). This does not appear to be implemented though. While the Ministry of Economic Development made a rather detailed assessment (“Strategy”) for the development of small hydropower plants, there are only some rough estimates in the “energy efficiency strategy” for other renewable energies. The Strategy for the Development of Small Hydropower Plants was adopted beginning of 2006. There are no concrete projects either under way or planned, however.

(b) This recommendation has not been implemented. Existing use of solar energy in renewable energy are said to stem from the 1990s. New projects are not known.
CHAPTER 12: Agriculture and the environment

Recommendation 12.1:
Montenegro’s Ministry of Agriculture, Forestry and Water Management should transpose European Union regulations on phytosanitary, veterinary and food safety and genetically modified organisms and implement them as a priority. An important part of the implementation will be to organize the responsible institutions and make enough funding available to them. Serbia and Montenegro should work together to find efficient collaborative solutions.

Implementation:
Montenegro transposed the EU phytosanitary and veterinary regulations:
- The Phytosanitary Law was adopted in 2006; and
- The Veterinary Law was adopted in 2004.

The Law on Genetically Modified Organisms was drafted and adopted in 2002 under the State Union of Serbia and Montenegro.

MAFWM and MHLSW are drafting the Law on Food Safety, which will be available for ministerial consultation in early 2007.

Recommendation 12.9:
The inter-ministerial working group, established between the Ministry of Agriculture, Forestry and Water Management and the Ministry of Environmental Protection and Physical Planning, should:
(a) Integrate environmental concerns in the development of agricultural policies. For example, any proposed input and price support policies should be carefully analysed from an environmental point of view; and
(b) Manage the development of practical codes of good agricultural practices and recommendations for implementation. Measures should be taken to involve important stakeholders in this process.

Implementation:
The inter-ministerial working group established between the MAFWM and the MEPPP was cancelled. The two ministries work on ad-hoc basis.
(a) The MAFWM integrates environmental concerns into the development of agricultural policies, such as the protection of rare species and the reduction of pesticide use.
(b) Practical codes of good agricultural practices and recommendations for implementation have been developed. The MAFWM provides support in different ways to the farmers to help them apply the codes.

Recommendation 12.10:
The Ministry of Agriculture, Forestry and Water Management should promote the development of organic farming.

Implementation:
The MAFWM promotes the development of organic farming. The Ministry supports farmers selling their products inside and outside the country and is ready to comply with EU requirements on organic farming. It creates the “Monte Organic” agency to certify agricultural products. By-laws have been developed and adopted to support organic farming. A national label has been developed.

Recommendation 12.11:
The Ministry of Agriculture, Forestry and Water Management and the Ministry of Environmental Protection and Physical Planning should promote international labelling of food products by establishing regulations, supporting the establishments of organizations and capacity-building projects. The possible use of “Montenegrin food” as a trademark for “clean food” should be investigated.

Implementation:
See implementation of Recommendation 12.10.
Recommendation 12.12:
The Ministry of Agriculture, Forestry and Water Management, in developing the extension services, should include advice on how to achieve environmentally sound agricultural production. This should be reflected in the mandate and objectives of the extension services, and advisers should be given specific training on environmental problems caused by the agricultural sector as well as environmental labelling opportunities for agricultural production.

Implementation:
The MAFWM participates actively in developing tools for sustainable agriculture development, which includes an environment component. Extension services are following this concept and incorporate environment protection in their approach. See also implementation of Recommendation 12.10. Assuring the safety and quality of food and proper nutrition represents an important issue regarding public health. The Food Safety Strategy, adopted in 2006, recommends solutions for all problems regarding the safety and quality of food.

CHAPTER 13: Transport and the environment

Recommendation 13.1:
The responsible authorities of the Federal Government and Montenegro should allocate a greater percentage of funding for rail, water and urban public transport based on sustainable transport policies. Consideration should also be given to services for non-motorized transport.

Implementation:
Allocating a greater percentage of funding for rail, water and urban public transport is envisaged in the strategy on transport. Actually, the trend in the share of public transport is the same and road transport is growing. As well, the age of the car fleet of private cars as well as for the public transport is increasing. Almost all the public transport buses are 15 years old, with some being 30 years old.

Recommendation 13.2:
The responsible authorities of the Federal Government and Montenegro should develop a strategy to phase out highly polluting cars and to introduce high-quality fuels, taking into account environmental elements. This could be achieved through fiscal measures, such as eco-taxes and car registration taxes, or other measures.

Implementation:
As of November 2006, no plan was envisaged due to the economic constraints on the population. Checks are done only once per year.

Recommendations to Montenegro

Recommendation 13.3:
Montenegro’s Ministry of Maritime Trade and Transport, in collaboration with its Ministry of Environmental Protection and Physical Planning, should develop a sustainable transport policy that fully incorporates environmental considerations through strategic environmental assessments.

Implementation:
A Strategy for Transport is to be adopted in 2007 by the Parliament. The Strategy was developed taking into account requirements under the Master Spatial Plan, but without strategic environment assessments (SEAs). SEAs would perhaps be introduced in the future. EIAs are mandatory for new works.

Recommendation 13.4:
Montenegro’s Ministry of Environmental Protection and Physical Planning, in cooperation with its Ministry of Maritime Trade and Transport, should promote capacity building in the municipalities in transport issues and should assist the secretariats for environmental protection and the persons responsible for making transport-planning decisions to receive training in environmental management and sustainable transport principles.
**Implementation:**
The Ministry of Maritime Trade and Transport promotes and encourages sustainable public transport and other transport planning decisions at the municipal level.

**Recommendation 13.5:**
The relevant authorities in Montenegro should develop a plan to phase out the use of leaded petrol as quickly as possible taking into account an existing database (UNECE "Regional Car Fleet Study") to identify the fuelling requirements of all vehicle types in their republics and, if necessary, the changes needed to run the vehicles on unleaded petrol.

**Implementation:**
As with Recommendation 13.2, no plan is envisaged to avoid placing an economic burden on the poor population. The difference in price of leaded and unleaded fuel, in Euros, is about 1 cent.

**Recommendation 13.6:**
Montenegro’s Ministry of Maritime Trade and Transport (Road Administration) should:
(a) Ensure that environmental impact assessment is carried out when building new or reconstructing existing transport infrastructure; and
(b) Ensure that environmental parameters, for instance the results of the EIAs, are integrated into the new database.

**Implementation:**
(a) The Ministry of Maritime Trade and Transport (Road Administration) ensures that EIAs are carried out when building new or reconstructing existing transport infrastructure. Public participation in decision-making will be increased when the new Law on EIA enters into force in 2008.
(b) No EIA database has been built.

**Recommendation 13.9:**
The Ministry of Maritime Trade and Transport should ensure that its project budgeting and planning reflect integrated planning between sub-sectors and with rail and road routes in Serbia.

**Implementation:**
The transport system in Montenegro is in a difficult state because of the lack of public financing. The most advanced project is the fast road or highway from Belgrade through Podgorica to Bar. The actual draft of the National Spatial Plan names a number of priorities such as the motorway from Belgrade to Bar and the Adriatic-Ionian Motorway and mentions the modernization of the existing railway system. But no concrete projects are currently taking place.

**Recommendation 13.10:**
If the Podgorica–Bar project becomes a real option, the Ministry of Maritime Trade and Transport and the Ministry of Environmental Protection and Physical Planning should collaborate on a thorough EIA of the project.

**Implementation:**
A tunnel was built between Podgorica and Bar, and an EIA was performed in a collaboration between the Ministry of Maritime Trade and Transport and the MEPPP. When the new Law on EIA enters into force in 2008, an EIA will be performed on all new transport projects.

**CHAPTER 14: Tourism and the environment**

**Recommendation 14.1:**
Montenegro’s Ministry of Tourism, in cooperation with its Ministry of Environmental Protection and Physical Planning, should:
(a) Each prepare and submit for approval by the Government a policy for sustainable tourism. The policy should serve as a framework for all tourist-related activities. In Montenegro, it should be consistent with its declaration as an Ecological State (1991);
(b) Develop a tourism master plan, also based on the overall policy for sustainable tourism, to allow for appropriate economic, spatial and resource planning and the development of the necessary infrastructure in tourist areas. In Serbia, the master plan should be harmonized with the draft action plan for sustainable tourism in protected areas. In Montenegro, where a tourism master plan has already been drafted, the Ministry should ensure that it reflects the (new) sustainable tourism policy;

(c) On the basis of the policy, develop guidelines for tourism development at the local level and introduce eco-standards for tourist premises;

(d) On the basis of the policy, identify the important sustainable tourism indicators and provide the means for monitoring, collecting and evaluating the data accordingly; and

(e) In cooperation with the Ministry of Culture, make an inventory of all sites of tourist interest. As the sites are identified, individual plans for their sustainable development should also be prepared (e.g. for sustainable tourism in national parks).

(see also Recommendation 9.4)

Implementation:

(a) The elaboration of a policy for sustainable tourism has started only in the mountain region. There are several new assessments and reports concerning sustainable tourism in the mountain zone, but an overall strategy for sustainable tourism in Montenegro does not exist.

(b) Based on the United Nations World Tourist Organization’s sustainable tourism principles, the Ministry of Tourism submitted some general guidelines for sustainable tourism development to the National Council for Sustainable Development, which integrated these into the draft for the National Strategy for Sustainable Development (NSSD). In addition, the Tourist Master Plan 2020, which is currently in revision, includes some specific requirements, such as 100 m² of open green space for each bed and the requirement to carry out environmental impact assessments.

(c) Guidelines for tourism development at the local level have been worked out for the mountain region, but not for the coastal region. Eco-standards for tourist premises have not been introduced (exceptions include blue flag for beaches/marinas, and eco-tourism in the mountain region).

(d) Without any policy for sustainable tourism, it is quite impossible to identify the important sustainable tourism indicators. Means for monitoring, collecting and evaluating the data are only foreseen for general tourist indicators.

(e) There is no inventory of all sites of tourist interest and no individual tourist management plans.

Overall, a strategy for sustainable tourism development does not exist and the guidelines for sustainable tourism in Montenegro are too general. The Tourist Master Plan should put a closer focus on sustainable tourism principles, for example by integrating eco-standards or implementing sustainable tourism indicators.

Recommendation 14.2:
Montenegro’s Ministry of Environmental Protection and Physical Planning should establish the following economic instruments to support sustainable tourism:

- Entrance fees at national parks;
- Fiscal incentives for tourist premises that implement eco-standards, such as “green hotels” that give special attention to the conservation and protection of resources such as water and energy.

(see also recommendation 9.4)

Implementation:
Implementation has started. Entrance fees exist for all national parks. Up to now, there have been no fiscal incentives for tourist premises that would help implement eco-standards.

Recommendation 14.3:
Montenegro’s Ministry of Tourism, in cooperation with its Ministry of Environmental Protection and Physical Planning, should:
(a) Carry out widespread campaigns to raise awareness of sustainable tourism particularly among hotel managers, tourist agencies, tourists and municipal authorities. The campaign should make use of workshops, community meetings, brochures and posters, among other media; and
(b) In cooperation with Serbia’s Ministry of Education and Sport and Montenegro’s Ministry of Education and Science, introduce sustainable tourism development into the curricula of the higher schools for tourism and catering.

Implementation:
(a) Not implemented. Although some initiatives were undertaken by NGOs, there have not been widespread campaigns to raise awareness of sustainable tourism, either with tourist stakeholders or with municipalities.
(b) Not implemented. Sustainable tourism development is not a special issue in the curricula of higher schools for tourism or catering.

Recommendation 14.5:
The Ministry of Tourism, in cooperation with local authorities, should undertake a survey of local products that could be supported and included in a sustainable tourism development plan.

Implementation:
Implementation has started. A survey of local products does not yet exist, but for several products, thematic marketing has already started. Some of the new implemented projects integrate local and regional products.

Recommendation 14.6:
The coordination committee established for the master tourism plan should establish smaller, more agile thematic working groups, including one dedicated to sustainable tourism and development. The committee should include representations of both local communities and non-governmental organizations.

Implementation:
For several special issues, smaller thematic working groups on tourism, have been established, e.g. for national parks and the coastal zone. Local communities and NGOs are included in the mountain region.

CHAPTER 15: Human Health and The Environment

Recommendation 15.1:
The Federal Secretariat for Labour, Health and Social Care, and Montenegro’s Ministry of Health and Social Policy, in cooperation with its Ministry of Environmental Protection and Physical Planning, should:
(a) Together draw up a national environmental health action plan (NEHAP) to identify priorities and establish an implementation plan, paying particular attention to resource requirements. Among other issues, the NEHAPs should address activities for awareness-raising, and define a strategy to improve waste-water treatment, waste disposal, air quality, drinking water, food safety and traffic safety;
(b) Consider the establishment of an intersectoral body for environmental health that would, inter alia, aggregate, analyse and interpret the relationship between existing environmental and health data; review existing laws, conventions and regulations for environment and health, with particular reference to World Health Organization (WHO) guidelines and European Union regulations; and coordinate environment and health activities with a view to building strong environmental health networks at all levels;
(c) Help municipalities to develop local environmental health action plans with strong public participation; and
(d) Give consideration to the UNECE-WHO Transport, Health and Environment Pan-European Programme (THE PEP) as a policy tool around which specific actions and partnership (including at the international level) to tackle the environmental and health problems posed by transport could be developed.

Implementation:
The development of the Montenegrin NEHAP has not yet started, but main priority goals related to health have been incorporated in other national documents. Specifically for the health sector, priority goals supported by the Children’s Environment and Health Action Plan (CEHAP) include the:
• Health Policy in Montenegro until 2020. (2001)
• Strategy for Health Development (2003)
• National Strategy for Tobacco Control (2005)
• Strategy for Preserving and Improvement of Reproductive Health (2005)
• National Programme for Violence and Health (2003)
• Action Plane for Prevention of Sex Trafficking (2005)
• Strategy for HIV/AIDS Prevention (2005)
• Master Plan for Health Development
• National Plan for Avian Flu and Avian Flu Pandemic Prevention
• Law on Protection from Noise (2006)
• National Action Plan for Youngsters
• Drug Law
• Law on Medical Devices.

Recommendation 15.2:
(a) The appropriate statistical office(s) should carry out a census as soon as feasible;
(b) The statistical offices and public health institutes at all levels should cooperate to identify a common set of essential environmental health indicators that need to be monitored and reported on a regular basis and decide among themselves on which institutions should be responsible for collecting these data. These data should be collected systematically and made available to the public. Ongoing international developments could provide a most useful reference for this work, also in view of improving international comparability of data;
(c) The public health institutes at all levels should address the need to undertake combined exposure assessments and analyses of health and environmental data in order to identify the negative health effects of environmental pollution. This should include reviewing the existing data collection and standardized protocols for data collection and evaluation, in close cooperation with statistical offices. Missing data should be identified and recommendations on reorganizing data collection should be given. The result of the analysis should be routinely reported; and
(d) Montenegro’s Ministry of Health and Social Policy, in cooperation with its Ministry of Environmental Protection and Physical Planning, should initiate scientific investigations into the impact of specific local environmental pollution on health and address public concerns in relation to these issues.

Implementation:
(a) The Statistical Office of Montenegro (MONSTAT) undertakes annual surveys and publishes the results in the Statistical Yearbook. Data for 2005 will be available, and the 2006 Statistical Yearbook is in preparation.
(b) MONSTAT and the Institute for Public Health, responsible for health indicators monitoring, cooperate closely on shared tasks, works, responsibilities, needs, data exchange and other issues. All data are public, published regularly and made available on their respective websites: www.monstat.cg.yu and www.ijz.cg.yu.
(c) The Institute for Public Health, with the aim of estimating the state of health of population, analyses different factors from the health statistics system, which are verified, collected and prepared by the basic services of primary health care and different specialized public health institutions. Estimation of the population’s state of health and the planning and programming of the health care is based on data collected from all public health institutions. Health Statistical Yearbooks cover basic data on the population from 1990 to the present.
(d) A few preliminary studies have been done.

Recommendation 15.3:
The Federal Secretariat for Labour, Health and Social Care, and Montenegro’s Ministry of Health and Social Policy should:
(a) Carry out continuous and major public awareness campaigns to reduce smoking among the population. Particular efforts should be made to prevent young people from taking up the habit. Initiatives such as “The National Committee for Tobacco Prevention”, “Quit and Win” or “Clear the air from cigarette smoke” have to be strengthened financially; and
Work together to develop and pass anti-smoking legislation to protect children and other non-smokers from passive smoking. Existing regulations have to be enforced. No-smoking policies in public and private buildings should be initiated.

**Implementation:**

(a) Health promotion and disease prevention as components of a tobacco control framework were topics contained in different documents produced by the MHLSW (Tobacco Control Law, Health Care Law, Health Care Development Policy of Montenegro, Primary Health Care Reform, and Poverty Reduction and Development Strategy). Among 21 specific targets enunciated in the Strategy of Public Health Development, one calls for a reduction in tobacco use in Montenegro by 30 per cent by the year 2015.

One of the principles of the National Strategy for Sustainable Development is the “Minimization of wastes, effective pollution prevention and control and minimization of environmental risks”. The 2004 National Action Plan for Children also stresses out the importance of laws for environment protection, to prevent children from exposure to damaging contaminants from air, water, ground and food. Concerning indoor air pollution, the Law on Limiting Use of Tobacco Products prescribes limiting the use of tobacco products in public places, the selling of tobacco products to youngsters, tobacco advertising, etc. Also, the National Action Plan for Children in Montenegro and the National Strategy for Tobacco Control have indicators for monitoring and supervising children’s exposure to indoor air pollution, with a view to applying related directives.

Tobacco use in Montenegro is an escalating health and economic problem. Anecdotal information suggests that Montenegro is among the leading countries in terms of tobacco consumption. Cardiovascular diseases are the first cause of death (49% of all deaths) and cancer the second, accounting for 18 per cent of all deaths (Health Statistical Yearbook, Republic of Montenegro, 2001). A UNICEF-sponsored health behaviour survey, conducted in 1999, showed a smoking prevalence rate of 3.9 per cent for children in primary school (aged 11–14 years), and 19.7 per cent for high school students aged 15–18 years.

The Global Youth Tobacco Survey (GYTS) is an international study monitor tobacco use among young people aged 13–18, and guides the implementation and evaluation of tobacco prevention and control programmes. The survey attempts to:

- Determine the level of tobacco use;
- Estimate the age of initiation of cigarette use;
- Estimate levels of susceptibility to become cigarette smokers;
- Exposure to tobacco advertising;
- Identify key intervening variables, such as attitudes and beliefs on behavioral norms, with regard to tobacco use among young people that can be used in prevention programs;
- Assess to the extent to which major programs are reaching school-based populations, and establish the subjective opinions of those populations regarding such interventions.

The Institute of Health of Montenegro carried out the GYTS in the republic’s elementary schools in 2003 and in its secondary schools in 2004. The results were intended to be used to influence policymakers and decision-makers with respect to future tobacco control policy, regulations and programmes.

(b) The Law on Limit in Use of Tobacco Products regulates measures for reducing and limiting use of tobacco products and preventing harmful consequences due to use of tobacco products. It is also prohibited to sell tobacco products in educational establishments and health institutes, and in the vicinity of less than 300 metres of these establishments, pharmacies or specialized shops for medicinal products; sports and recreational facilities; vending machines; directly or indirectly as specials to buyers or any third party, such as gifts, awards, or reduced trade discount or the right to participate in prize games, lotteries or competitions.

The Law mentions that tobacco products must be marked with wording or phrases that refer to a particular brand being less harmful than others (e.g. “low tar”, “light”, “mild”, “ultra mild”, “ultra light”, etc.) in a manner that allows for self-service by consumers.
Other provisions of this Law (available at: www.mz.vlada.cg.yu) stipulate protection from indoor air pollution from tobacco products in public places, schools, health and other institutions, and not only protect youngsters’ health, but that of the population in general.

Recommendation 15.4:
The Federal Secretariat for Labour, Health and Social Care, and Montenegro’s Ministry of Health and Social Policy, in cooperation with its Ministry of Environmental Protection and Physical Planning, should:
(a) Adopt and implement the WHO Guidelines for drinking-water quality in order to improve the microbiological and physico-chemical safety of drinking water; and
(b) Strengthen the legal and institutional framework for monitoring and enforcing drinking-water quality standards in accordance with the UNECE Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes (see Recommendation 4.2).

Implementation:
(a) Strong efforts have been undertaken to develop and implement national legislation that complies with the international agreements that Montenegro as a new sovereign country must ratify. The World Health Organization Guidelines for drinking-water quality have already been applied in order to improve the microbiological and physical-chemical safety of drinking water, and water quality is monitored regularly by the Institute for Public Health.
(b) Provisions of UNECE Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes have been implemented through provisions of Montenegrin laws and by-laws.

Recommendation 15.5:
(a) Montenegro’s Ministry of Environmental Protection and Physical Planning should regulate and implement the proper management of medical waste. This should include, inter alia:
• Developing separate collection strategies for wastes with different levels of hazardousness;
• Providing incinerations, disinfection and special treatment for infectious medical waste; and
• Exploring ways to reuse and recycle materials to reduce the amount of hazardous waste.
These activities could begin as pilot projects, implemented in cooperation with local authorities, hospitals and other stakeholders.
(b) Montenegro’s Ministry of Health and Social Policy should, through their public health institutes, train medical professionals and others who have contact with medical waste.

Implementation:
As with industrial waste, medical waste management is an important issue. The MHLSW recognizes this and is paying more attention to this topic. The Ministry has started a project on medical waste, and is quite positive that it can achieve implement Recommendation 15.5. It plans to elaborate a Code of conduct for medical waste management as soon as possible.

Recommendation 15.6:
The Federal Secretariat for Labour, Health and Social Care, and Montenegro’s Ministry of Environmental Protection and Physical Planning, in cooperation with its Ministry of Health and Social Policy, should:
(a) Supervise the medical check-ups of the population at risk in the hot spots, e.g. nursing mothers, to assess the possible health effects on industrial pollutants and the extent of the body burden of the pollutants. The data of human bio-monitoring and health effects should be combined with environmental monitoring data. Such knowledge helps to decide which environmental clean-up actions are most urgent;
(b) Initiate, during clean-up actions, human bio-monitoring and effect monitoring to measure the effectiveness of the actions; and
(c) Initiate epidemiological environmental research programmes in cooperation with international organizations, regional health authorities and research institutes.

Implementation:
(a) Some sporadic checks are done on populations living in contaminated areas. But there is no regular follow-up due to the lack of funding.
(b) Monitoring is done only if funding is available.
(c) Some programmes are done in collaboration with international organizations and research institutes.
Pursuant to the different conventions related to environment and health, the Institute of Public Health undertakes permanent training and public awareness-raising in the effort to properly respond to the issues of greenhouse gas emissions and global climate change.

Applying and monitoring the application of the provisions of related laws and by-laws could show discrepancies. Based on these likely discrepancies, competent institutions would urgently have to take adequate actions and address responsibilities to correct them.
## Annex II

### SELECTED REGIONAL AND GLOBAL ENVIRONMENTAL AGREEMENTS

<table>
<thead>
<tr>
<th>Worldwide agreements</th>
<th>Montenegro</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As of 20 May 2007</strong></td>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>1958 (GENEVA) Convention on the Continental Shelf</td>
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<tr>
<td>1958 (GENEVA) Convention on the Territorial Sea and the Contiguous Zone</td>
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<tr>
<td>1961 (PARIS) International Convention for the Protection of New Varieties of Plants</td>
<td></td>
</tr>
<tr>
<td>1971 (RAMSAR) Convention on Wetlands of International Importance especially as Waterfowl Habitat</td>
<td>1982 (PARIS) Amendment</td>
</tr>
<tr>
<td>1971 (RAMSAR) Convention on Wetlands of International Importance especially as Waterfowl Habitat</td>
<td>1987 (REGINA) Amendments</td>
</tr>
<tr>
<td>1971 (GENEVA) Convention on Protection against Hazards from Benzene (ILO 136)</td>
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<tr>
<td>1971 (BRUSSELS) Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage</td>
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<tr>
<td>1971 (LONDON, MOSCOW, WASHINGTON) Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-bed and the Ocean Floor and in the Subsoil thereof</td>
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<tr>
<td>1972 (PARIS) Convention Concerning the Protection of the World Cultural and Natural Heritage</td>
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<tr>
<td>1972 (LONDON) International Convention on the International Regulations for Preventing Collision at Sea</td>
<td>SFRJ 1987</td>
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<tr>
<td>1972 (GENEVA) International Convention for Safe Containers</td>
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<tr>
<td>1977 (GENEVA) Convention on Protection of Workers against Occupational Hazards from Air Pollution, Noise and Vibration (ILO 148)</td>
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<tr>
<td>1980 (NEW YORK, VIENNA) Convention on the Physical Protection of Nuclear Material</td>
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<tr>
<td>1981 (GENEVA) Convention Concerning Occupational Safety and Health and the Working Environment</td>
<td></td>
</tr>
<tr>
<td>1985 (GENEVA) Convention Concerning Occupational Health Services</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Agreement</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tbody>
</table>
| 1985       | (VIENNA) Convention for the Protection of the Ozone Layer  
1987 (MONTREAL) Protocol on Substances that Deplete the Ozone Layer  
1990 (LONDON) Amendment to Protocol  
1992 (COPENHAGEN) Amendment to Protocol  
1997 (MONTREAL) Amendment to Protocol  
1999 (BEIJING) Amendment to Protocol | SFRJ 1990  
SFRJ 1990  
SCG 2004 | Su  
Su  
Su   |
| 1986       | Convention Concerning Safety in the Use of Asbestos  
(VIENNA) Convention on Early Notification of a Nuclear Accident  
(VIENNA) Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency |            |            |
| 1989       | (BASEL) Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal  
1995 Ban Amendment  
1999 (BASEL) Protocol on Liability and Compensation | SRJ 1999   | Su   |
| 1990       | (LONDON) Convention on Oil Pollution Preparedness, Response and Cooperation |            |            |
| 1992       | (RIO) Convention on Biological Diversity  
2000 (CARTAGENA) Protocol on Biosafety | SRJ 2001  
SRJ 2001 | Su  
Su   |
| 1992       | (NEW YORK) Framework Convention on Climate Change  
2007     | Su  
Ra   |
| 1993       | (PARIS) Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction |            |            |
| 1994       | (VIENNA) Convention on Nuclear Safety |            |            |
| 1994       | (PARIS) Convention to Combat Desertification |            |            |
| 1997       | (VIENNA) Convention on Supplementary Compensation for Nuclear Damage |            |            |
| 2001       | (STOCKHOLM) Convention on Persistent Organic Pollutants | 2007       | Si   |

Ac = Accession;  Ad = Adherence;  De = denounced;  Si = Signed;  Su = Succession;  Ra = Ratified.
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<tr>
<th>As of 20 May 2007</th>
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<td>1957</td>
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<td>1969</td>
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<td>1976</td>
<td>(STRASBOURG)</td>
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<td>1979</td>
<td>(GENEVA)</td>
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<tr>
<td>1992</td>
<td>(HELSINKI)</td>
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<tr>
<td>1993</td>
<td>(OSLO and LUGANO)</td>
</tr>
</tbody>
</table>

Ac = Accession; Ad = Adherence; De = denounced; Si = Signed; Si* = Succession to signature; Su = Succession; Ra = Ratified.
## SELECTED ECONOMIC AND ENVIRONMENTAL INDICATORS

### Selected economic data

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<td><strong>TOTAL AREA (1,000 km²)</strong></td>
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<td>13.8</td>
<td>13.8</td>
<td>13.8</td>
<td>13.8</td>
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<td>Total population, (million inhabitants)</td>
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<td>615.0</td>
<td>615.0</td>
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<td>620.1</td>
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<tr>
<td>% change (1990=100)</td>
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<td>..</td>
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<tr>
<td>Population density, (inh./km²)</td>
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<td>..</td>
<td>48.7</td>
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<td><strong>GROSS DOMESTIC PRODUCT</strong></td>
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<td>GDP, (million US$)</td>
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<td>1244.8</td>
<td>1301.5</td>
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<td>per capita, (US$ 1,000/capita)</td>
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<td>2031.0</td>
<td>2113.0</td>
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<td>2654.0</td>
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<td>Value added in industry (% of GDP)</td>
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<td>Industrial production - % change (1990=100)</td>
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<td>Value added in agriculture (% of GDP)</td>
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<td>11.4</td>
<td>11.3</td>
<td>11.2</td>
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<td>Total supply, (Mtoe)</td>
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<td>0.908</td>
<td>1.001</td>
<td>1.019</td>
<td>1.037</td>
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<tr>
<td>% change (1990=100)</td>
<td>103.3</td>
<td>97.4</td>
<td>107.4</td>
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<td>111.3</td>
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<td>Energy intensity, (Toe/US$ 1000)</td>
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<td>0.554</td>
<td>0.528</td>
<td>0.517</td>
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<td>% change (1990=100)</td>
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<td>Structure of energy supply, (%)</td>
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<td>Oil</td>
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<td>Gas</td>
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<td>Nuclear</td>
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<tr>
<td>Hydro,etc.</td>
<td>44.2</td>
<td>53.0</td>
<td>40.0</td>
<td>43.6</td>
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<td>Road traffic volumes</td>
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<tr>
<td>- million vehicle km</td>
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<tr>
<td>- % change (1990=100)</td>
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<tr>
<td>- per capita (1,000 vehicle km/capita)</td>
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<tr>
<td>Road vehicle stock,</td>
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<tr>
<td>- 1,000 vehicles</td>
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<td>- % change (1990=100)</td>
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<td>- per capita (vehicles/100 inhabitants)</td>
<td>170</td>
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**Source:**

.. = not available.    - = nil or negligible.
## Selected economic data

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<tr>
<td>Total area (1,000 km$^2$)</td>
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<td>13.8</td>
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<td>13.8</td>
<td>13.8</td>
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<td>Major protected areas (% of total area)</td>
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<td>Nitrogenous fertilizer use (tons/km$^2$ arable land)</td>
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<td>314.0</td>
<td>190.0</td>
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<td>Forest area (% of land area)</td>
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<td>Use of forest resources (harvest/growth)</td>
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<td>10.0</td>
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<tr>
<td>Tropical wood imports (US$/capita)</td>
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<th>THREATENED SPECIES</th>
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<td>Mammals (% of species known)</td>
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<td>29.2</td>
<td>29.2</td>
<td>29.2</td>
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<td>Birds (% of species known)</td>
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<td>76.7</td>
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<td>76.7</td>
<td>76.7</td>
<td>76.7</td>
<td>80.7</td>
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<td>Fish (% of species known)</td>
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<td>Water withdrawal (million m$^3$/year)</td>
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<td>47.0</td>
<td>45.0</td>
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<td>Fish catches (% of world catches)</td>
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<td>..</td>
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<tr>
<td>Public waste water treatment (% of population served)</td>
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<tr>
<td>Emissions of sulphur oxides (kg/capita)</td>
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<tr>
<td>&quot; (kg/US$ 1,000 GDP)</td>
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<tr>
<td>Emissions of nitrogen oxides (kg/capita)</td>
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<td>&quot; (kg/US$ 1,000 GDP)</td>
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<tr>
<td>Emissions of carbon dioxide (ton/capita)</td>
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<tr>
<td>&quot; (ton/US$ 1,000 GDP)</td>
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<td>Industrial waste (kg/US$ 1,000 GDP)</td>
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<tr>
<td>Municipal waste (kg/capita)</td>
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<td>Nuclear waste (ton/Mtoe of TPES)</td>
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<td>Population exposed to leq &gt; 65 dB (A) (million inhabitants)</td>
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*Source:*

.. = not available. - = nil or negligible.
Annex IV

LIST OF NATIONAL ENVIRONMENT-RELATED LEGISLATION

Legislation

1992
• Law on coastal zone (OG RM No. 14/1992)

1995
• Law on Municipal Activities (OG RM No. 7/4 1995)

1996
• Law on Environment (OG RM No. 12/1996)
• Law on Protection from Ionizing Radiation (OG FRY No. 46/1996)

1997
• Regulations on environmental impact assessment (OG RM No. 14/1997)
• Guidelines on EIA Study content (OG RM No. 21/1997)

1998
• Law on the Basic Principles of Environmental Protection (OG FRY No. 24/1998)

1999
• Law on Non-Governmental Organizations (OG RM No. 27/1999)

2000
• Law on Forests (OG RM No. 55/2000)

2001
• Law on genetically modified organisms (OG FRY No. 21/2001)
• Bylaw on methods of organic plant production and on collecting forest fruits and curative plants as products of organic agriculture (OG FRY No. 51/2001)
• Bylaw on trade, import and sampling of fertilisers (OG FRY No. 59/2001)
• Bylaw on trade, import and sampling of pesticides (OG FRY No. 59/2001)
• Bylaw on types of packaging for pesticides and fertilisers and on destroying pesticides and fertilisers (OG FRY No. 35/1999 and No. 63/2001)
• Bylaw on method of destroying plants for which measures of destroying are ordered (OG FRY No. 67/2001)

2002
• Bylaw on methods of organic livestock production (OG FRY No. 51/2002)
• Bylaw on restricted use of genetically modified organisms (OG FRY No. 62/2002)
• Bylaw on trading with genetically modified organisms and products from genetically modified organisms (OG FRY No. 62/2002)
• Bylaw on introducing into production genetically modified organisms and products from genetically modified organisms (OG FRY No. 62/2002)
• Bylaw on content and data of register of genetically modified organisms and products from genetically modified organisms (OG FRY No. 66/2002)
• Bylaw on conditions which must be fulfilled by legal persons performing examination of methods of organic production process (OG FRY No. 67/2002)

2003
• Law on implementation of the Constitutional Chart of the State Union of Serbia and Montenegro (OG RM No. 1/2003)
• Law on Inspection Control (OG RM No. 39/2003)
• Law on Energy (OG RM No. 39/2003)
• Law on Local Self-Government (OG RM No. 42/2003)

2005
• Law on Spatial Planning and Development (OG RM No. 280/2005)
• Law on Free Access to Information (OG RM No. 68/2005)
• Law on Environmental Impact Assessment (OG RM No. 80/2005)
• Law on Strategic Environmental Assessment (OG RM No. 80/2005)
• Law on Integrated Pollution Prevention Control (OG RM No. 80/2005)
• Law on Waste Management (OG RM No. 80/2005)

2006
• Law on Environmental Noise (OG RM No. 45/2006)
• Law on Public Procurement (OG RM No. 46/2006)

Plans, Programmes, and Strategies

2003
• Poverty Reduction Strategy

2004
• National Report on Biodiversity Condition in the coastal and sea area of Montenegro
• Communication Strategy for Informing the Public on Montenegro’s EU Association Process

2005
• Energy Efficiency Strategy
• Coastal Area Spatial Plan for Montenegro

2006
• Strategy for Development of Food Production and Rural Areas
• Strategic Framework for Development of Sustainable Tourism in Northern and Central Montenegro;
• Tourism Development Strategy until 2020
• Administrative capacity building action plan for implementation of the Stabilization and Association Agreement
• Functional Analysis of the Ministry for Environmental Protection and Physical Planning
• National Diagnostic Analysis (NDA) on the Sea Pollution from Land-based Sources
• National Action Plan for Montenegrin Coast (NAP) for Preventing Sea Pollution from Land-based Sources
• Foreign direct investment incentives strategy of Montenegro

2007
• National Strategy for Sustainable Development
**Sources**

**Individual Authors:**


**Material from Montenegro:**


42. MANS. Corruption in spatial planning and development. Podgorica 2006.

43. Master Plan for Sewerage and wastewater in Central and Northern Region.


71. Reform of educational system in Montenegro. Intervention by Serbia and Montenegro. First South-East Europe sub-regional workshop on the implementation of the UNECE strategy for education for sustainable development. 28 November 2005, Athens, Titania Hotel.


Regional and international institutions:

82. EBRD. Information. EBRD activities in Serbia Montenegro. September 2005.
87. EU and OECD. Sigma. Public Management Profiles of Western Balkan Countries: Serbia and Montenegro - State Union Level. As of October 2003.
139. UN. Commission on Sustainable Development. CSD. National Sustainable Development Strategies.
140. UN. Commission on Sustainable Development. CSD. Part III. National Reporting Guidelines for CSD-14/15 Thematic areas. B. Energy.
141. UN. Commission on Sustainable Development. CSD. Serbia and Montenegro. A case study on commitments-related best practice or lessons learned in sanitation.
143. UNDP and SIDA. Developing strategies for sustainable development in the member states of Serbia and Montenegro through country-to-country cooperation. 24 October 2003.
156. UNECE. Interim Report on fulfillment of the recommendations of the Environmental Performance Review Republic of Montenegro.

**Internet Addresses:**

**Ministries and government institutions:**


**Other internet sites:**

186. Danube Commission (ICPDR) http://www.icpdr.org/
190. EAR. Montenegro http://www.ear.eu.int/montenegro/montenegro.htm
194. EEA http://countries.eea.eu.int/SERIS/view_on_coverage?country=yu
195. EIA: South eastern Europe country analysis
   http://www.eia.doe.gov/emeu/cabs/seeurope.html

196. Energy Regulatory Agency of Montenegro ERA. Erranet
   http://www.erranet.org/AboutUs/Members/Profiles/Montenegro

197. EPS Electric Power Industry of Serbia
   http://www eps.co.yu/ecology.htm

198. EU
   http://europa.eu.int/index_en.htm

199. EU and World Bank. Energy in South East Europe
   http://www.seerecon.org/infrastructure/sectors/energy/

200. European Environment Information and Observation Network (EIONET)
   http://www.eionet.europa.eu/Countries/

   USAID/Serbia-Montenegro September 8, 2005.

202. FAO
   &iso3=YUG

203. FAO statistics
   http://faostat.fao.org/

204. Geographically guide
   http://serbia.europe-countries.com/

205. Governments on the net

206. Human Rights Watch: Serbia Montenegro
   http://hrw.org/doc?t=europa&c=serbia

207. IMF
   http://www.internationalmonetaryfund.com/external/country/SCG/index.htm

208. IMF and Serbia Montenegro

209. IMF and Serbia Montenegro

210. IMF. Poverty Reduction strategy Paper. Serbia Montenegro

211. Implementing sustainable winter & summer tourism in northern & central Montenegro: an assessment of current strategies & next steps. A Report to the Rockefeller Brothers Fund and UNDP.
   Colorado November 27, 2005

212. OECD Sigma
   http://www.oecd.org/pages/0,2966,en_33638100_33638151_1,1_1_1_1_1_1_1_1_1_1_1_1,00.html

213. OECD. Sigma: Serbia Montenegro
   http://www.oecd.org/document/3/0,2340,en_33638100_34923779_1_1_1_1_1_1_1_1,00.html

214. OSCE Mission to Montenegro
   http://www.osce.org/montenegro/19701.html

215. REC. REREP
   http://www.rec.org/REC/Programs/REREP/

216. REC. Sava Commission
   http://www.rec.org/REC/programs/sava/

217. REC. Serbia Montenegro
   http://www.recyu.org/indexe.asp

   http://www.rec.org/REC/Publications/PPDoors/CEE/Montenegro1.html

219. SEE
   http://see-environment.info/index.shtml


221. SEENERGY. EU and World Bank. Serbia. Energy Sector Strategy
   http://www.seenergy.org/index.php?/countries&stat=5&type=3&col=2120

222. Sustainable Development UN ESA

223. Sustainable Development UN ESA
229. UN. Millennium goals http://www.un.org/millenniumgoals/
232. UNDP http://www2.undp.org.yu/newsroom/links.cfm
234. UNDP http://europeandcis.undp.org/?menu=p_article&ArticleID=303
236. UNDP http://www2.undp.org.yu/montenegro/SD/index.html
240. UNECE Steering Committee On Education For Sustainable Development http://www.unece.org/env/esd/1stMeetSCIntervent/SerbiaandMontenegro.doc
242. UNEP GRID Arendal http://enrin.grida.no/soe.cfm?country=CS&groupID=2
244. UNEP GRID Arendal http://enrin.grida.no/soe.cfm?country=CS&groupID=2
249. UNSTATS. Millennium goals: http://unstats.un.org/unsd/mi/mi_goals.asp
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<td>WHO. European health for all databases (HFA-DB)</td>
<td><a href="http://data.euro.who.int/hfadb/">http://data.euro.who.int/hfadb/</a></td>
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