ECONOMIC COMMISSION FOR EUROPE Committee on Environmental Policy

## ENVIRONMENTAL PERFORMANCE REVIEW

# SLOVENIA



UNITED NATIONS New York and Geneva, 1997

### Environmental Performance Reviews Series No.2

#### NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

\*

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

UNITED NATIONS PUBLICATION
Sales No. E.97.II.E.16
ISBN 92-1-116674-8
ISSN 1020-4563

# Preface

The ECE Committee on Environmental Policy launched the Environmental Performance Review of Slovenia in January 1996. Two months later, the preparatory mission for the project was organized, and a team of both national and ECE experts was formed to carry out the review. The Governments of Albania, Hungary, Israel, Norway, Poland, Slovakia and Switzerland made national experts available for the task. The Bilthoven Division of the WHO European Centre for Environment and Health contributed its expertise and resources for the preparation of the review of environmental health issues. The travel expenses of experts from countries in transition and from the ECE secretariat were covered by extra-budgetary funds, which had been provided by Austria, Finland, France, Netherlands and Norway. The successful conclusion of the project would not have been possible without the generous support from all these sources.

The review team prepared a report on the environmental performance of Slovenia before, during and after the review mission in Ljubljana in November 1996. The Slovene partners in discussion with the review team did not spare time or effort in responding to the queries and requests made. The review mission could therefore benefit from optimal cooperation with Slovene institutions. The report by the review team, including draft recommendations for the solution of exisiting problems in national environmental policy and management, was submitted for evaluation by the ECE Committee on Environmental Policy at its fourth annual session in Geneva, on 26 May 1997. A high-level delegation from Slovenia attended this session. It was headed by the Minister of the Environment and also included the State Secretaries for Agriculture, Forest and Food, Economic Affairs, Environment, Physical Planning, Transport and Communications, and other delegates. The evaluation by the Committee was based on the in-depth preparation by two reviewing countries, the Netherlands and Poland. At the end of its evaluation, the Committee agreed on a final set of recommendations, replacing the draft recommendations of the review team for inclusion in this publication.

The ECE Committee on Environmental Policy and the ECE review team wish the Slovene environmental managers success in implementing and following up the policy recommendations in this review.

#### LIST OF TEAM MEMBERS

Ms. Eli Marie CSEN	(Norway)	Chapter 12
Mr. Juraj BALAJKA	(Slovakia)	Chapter 11
Mr. Branko BOSNJAKOVIC	(ECE secretariat)	Chapter 6
Ms. Gabriella BUZAS	(Hungary)	Chapter 1
Ms. Catherine CHALANDON-MASSON	(ECE secretariat)	Chapter 2 and Project Coordinator
Ms. Elisabeth CLEMENT-ARNOLD	(Switzerland)	Chapter 10
Mr. Arian GACE	(Albania)	Chapter 7
Mr. Israel GEV	(Israel)	Chapter 5
Ms. Elï bieta GRUSZKA	(Poland)	Chapter 9
Mr. Andreas KAHNERT	(ECE secretariat)	Team leader
Mr. Michal KRZYZANOWSKI	(WHO/ECEH)	Chapter 13
Ms. Lisanne LOSIER	(ECE secretariat)	Chapter 4
Mr. Vilius POGOZHELSKIS	(ECE secretariat)	Chapter 8
Mr. Guennadi VINOGRADOV	(ECE secretariat)	Chapter 3

The preparatory mission for the project took place on 25-26 March 1996. The review mission was organized from 17 to 27 November, 1996, and the peer review was held in Geneva on 26 May 1997. The ECE Committee on Environmental Policy adopted the recommendations as set out in this publication.

#### TABLE OF CONTENTS

List of figures an	d tables	v-vi
Abbreviations an	nd signs	vii-viii
Introduction · F	eatures of Slovenia	1-7
Introduction. I	1. Physical structure	······ 1 /
	<ol> <li>Historical and political context</li> </ol>	
	3. Demography	
	4. Economics	
	5. Human development	
	<ol> <li>Environmental context before 1990</li> </ol>	
PART ONE: T	HE FRAMEWORK FOR ENVIRONMENTAL P	OLICY AND MANAGEMENT
Chapter 1:	Legal Instruments and Institutional Arrangements	11-23
Chapter 1.	1.1 Environmental legislation, enforcement and co	
	1.2 Environmental administration and coordination	
	1.3 Policy objectives, priorities and non-financial	
	1.4 Environmental information	instruments
	1.5 Public participation	a mation with the anadomic community
	1.6 Environmental research and development, coo	peration with the academic community
	1.7 Environmental education and training	
	1.8 Conclusions and recommendations	
Chapter 2:	International Cooperation	
-	2.1 International cooperation in context	
	2.2 Cooperation in the framework of the United N	ations Economic Commission for Europe
	2.3 Other regional and global cooperation	
	2.4 Bilateral cooperation	
	2.5 International financing	
	2.6 Conclusions and recommendations	
Chapter 3:	Spatial Planning	35-44
Chapter 5.	3.1 Spatial planning: objects and tools	
	3.2 Spatial planning framework	
	3.3 Spatial planning in the transition period	
	3.4 Conclusions and recommendations	
PART TWO: M	IANAGEMENT OF POLLUTION AND OF NAT	URAL RESOURCES
Chanton 4	A in Management	47.54
Chapter 4:	Air Management	
	4.1 Evolution of air pollution and underlying deter	
	4.2 Policy objectives, instruments and implementa	tion
	4.3 Conclusions and recommendations	
Chapter 5:	Water Resources Management and Water Quality A	Aspects 55-63
-	5.1 Water resources and quality	
	5.2 Water use and waste water	
	5.3 Objectives and implementation of water policy	and management
	5.4 Conclusions and recommendations	-

Chapter 6:	<ul> <li>Waste Management</li> <li>6.1 Waste generation, reuse/recycling, exports/imports, treatment and disposal</li> <li>6.2 Instruments of policy and management</li> <li>6.3 New waste management strategy</li> <li>6.4 Conclusions and recommendations</li> </ul>	65-77
Chapter 7:	<ul> <li>Nature Conservation, Forest and Biodiversity Management</li> <li>7.1 Current state of nature</li> <li>7.2 Pressures on nature</li> <li>7.3 Nature conservation policy and management</li> <li>7.4 Conclusions and recommendations</li> </ul>	79-89
PART THREE:	ECONOMIC AND SECTORAL INTEGRATION	
Chapter 8:	<ul> <li>Integration of Economic and Environmental Decisions</li> <li>8.1 Options for the integration of decisions</li> <li>8.2 Instruments for integration</li> <li>8.3 Conclusions and recommendations</li> </ul>	93-102
Chapter 9:	<ul> <li>Introduction of Cleaner, Safer and Less Resource-using Technologies in Industry</li> <li>9.1 Environmental attributes of industry</li> <li>9.2 Meeting technological objectives in industrial development</li> <li>9.3 Conclusions and recommendations</li> </ul>	103-114
Chapter 10:	<ul> <li>Environmental Concerns in Agriculture</li> <li>10.1 Agriculture and environmental issues</li> <li>10.2 Policy formulation and implementation</li> <li>10.3 Conclusions and recommendations</li> </ul>	115-125
Chapter 11:	<ul> <li>Environmental Concerns in Energy</li> <li>11.1 Energy production and use</li> <li>11.2 Environmental effects</li> <li>11.3 Environmental policy and management</li> <li>11.4 Conclusions and recommendations</li> </ul>	127-135
Chapter 12:	<ul> <li>Environmental Concerns in Transport</li> <li>12.1 Transport infrastructure, activities and environmental effects</li> <li>12.2 Policy and management regarding environmental effects of transport</li> <li>12.3 Conclusions and recommendations</li> </ul>	137-145
Chapter 13:	<ul> <li>Human Health and the Environment</li> <li>13.1 Health status and environmental conditions</li> <li>13.2 Instruments of environmental health policy and management</li> <li>13.3 Conclusions and recommendations</li> </ul>	147-155
LIST OF SOUF	RCES USED	157-161
ANNEXES		
Annex I	Selected Basic Data	
Annex II	International Agreements on Environment	167-168
Annex III	Chronology of Selected Environmental Events (1991-96)	169-171

#### LIST OF FIGURES AND TABLES

Introduction:	
Table I.1	Mean temperatures in January and July
Figure I.1	Map of Slovenia
Figure I.2	Land use in 1994
Table I.2	Components of GDP
Table I.3	Selected economic indicators, 1990-1996
Figure I.3	Share of major sectors in GDP, 1991-1995
Figure I.4	GDP, inflation, and unemployment rates
Table I.4	Main economic indicators, CEFTA, 1995
Observation 1	
Chapter 1:	
Figure 1.1	Structure of the Ministry of Environment and Physical Planning
Figure 1.2	Main functions of the institutes of the Ministry of Environment and Physical Planning
Figure 1.3	System of permits including EIA procedure
Chapter 3:	
Table 3.1	Types of settlements areas according to selected indicators
Table 3.2	Distribution of population by type of settlements
Chapter 4:	
Table 4.1	Emissions of selected air pollutants, 1990-1995
Figure 4.1	Air emissions of SOx
Figure 4.2	Air emissions of NOx
Figure 4.3	Air emissions of $CO_2$
Table 4.2	Concentration of air pollutants in selected cities, 1995
Chapter 5:	
Table 5.1	Water abstraction
Table 5.2	Main characteristics of river basins
Table 5.3	Regional nitrogen balances 1991
Table 5.4	Water use
Table 5.5	Water losses in distribution
Table 5.6	Waste-water generation and treatment
14010 0.0	
Chapter 6:	
Figure 6.1	Shares of major groups of wastes in the total quantity of 8.75 million tonnes
Table 6.1	Estimated waste trends, 1995-2010
Table 6.2	Laws regarding waste disposal
Table 6.3	Implementing regulations for waste management
Table 6.4	Projected targets for the reduction of landfilling by type of waste (2000 and 2010)
Chapter 7:	
Table 7.1	Number of species by group in Slovenia
Figure 7.1	Forest area in Slovenia and other European countries, 1996 data
Table 7.2	Forest resources, 1980-1994
Table 7.3	State of protected areas in Slovenia
Figure 7.2 (a)	Caves registered in the Slovene Cave Cadastre
Figure 7.2 (b)	Polluted and damaged caves according to the Slovene Cave Cadastre
Table 7.4	Number of fires and fire sites in the Slovene sub-Mediterranean region
Figure 7.3	Population of selected hunted species and number killed per year
i iguio 7.5	r opulation of selected named species and named kined per year
Chapter 8:	
Table 8.1	Funds committed for environment as a result of ownership transfer, end of 1995
Table 8.2	Environmental expenditure from State budget, 1994-1996
Table 8.3	Environmental expenditure from business and non-business sector, 1990-1996
Box	The Eco-Fund
Chapter 0:	
Chapter 9:	Share of natural recourse intensive industries in menufacturing value added 1000 1002
Table 9.1	Share of natural-resource-intensive industries in manufacturing value-added, 1988-1992
Table 9.2	Intensity of water use by type of water, in selected manufacturing industries, 1991-1994 Manufacturing and mining enterprises by size, 1995
Table 9.3	Manufacturing and mining enterprises by size, 1995
Table 9.4	Waste-water discharges from industry
Table 9.5	Development of production of heavy industry (physical indicators)
Table 9.6	Expenditures for investments in mining, manufacturing and electricity supply

Table 9.7 Table 9.8	Examples of technological changes through co-funded investments, 1993-94 Projects for the phase-out of ozone-depleting substances
Chapter 10:	
Table 10.1	Current farm structures, 1994
Figure 10.1	Nitrate in groundwater of different regions, 1991-1994
Figure 10.2	Use of nitrogenous fertilizer in Slovenia and other European countries, 1995
Figure 10.3	Use of pesticides in Slovenia and selected countries
Figure 10.4	De-agrarization and irrigation
Case study:	Large pig farms in Slovenia
Case study:	Agriculture, environment and tourism
Case study:	Illustrative excursion: The private farm of Mr. X.
Table 10.2	General review of geographical regions and their relationship to agricultural activities
Table 10.3	Specific regional problems due to agricultural activities
Chapter 11:	
Table 11.1	Primary energy supply
Table 11.2	Current and predicted electric power generating capacity
Figure 11.1	Primary energy consumption and heat and electricity production at combined heat and power plants
Figure 11.2	Primary energy consumption and heat production in heating plants
Table 11.3	Final energy consumption
Table 11.4	Energy intensity in OECD countries, transition economies and Slovenia
Table 11.5	Energy consumption in the residential sector, 1994
Table 11.6	Trends in air emissions from the energy sector, 1990-1995
Figure 11.3	Air emissions forecast/high-growth scenario
Figure 11.3 bis	Air emissions forecast/low-growth scenario
Table 11.7	Abatement devices of the main power stations, 1996
Table 11.8	Average sales tax rate for liquid fuels in % of pre-tax price
Table 11.9	End-user prices of energy
Table 11.10	Share of fuel cost in the industrial electricity price by generation technology, 1996 prices
Chapter 12:	
Table 12.1	Vehicle fleet, 1992-1996
Table 12.2	Performance of passenger transport, 1993
Table 12.3	Performance of freight transport, 1993
Figure 12.1	Consumption of leaded and unleaded petrol, 1990-1996

Chapter 13: Table 13.1

Outbreaks of water-borne disease recorded in Slovenia, 1990-1995

### 预览已结束,完整报告链接和二维码如下:



https://www.yunbaogao.cn/report/index/report?reportId=5\_12713 https://www.yu