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ENVIRONMENTAL INDICATORS AND
INDICATOR-BASED ASSESSMENT REPORTS

EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA



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The documents included in this publication result from a series of meetings organized by the UNECE Working Group on Environmental Monitoring and Assessment during the period from June 2003 to November 2006, including meetings of the Working Group itself and Workshops held near St. Petersburg (Russian Federation), in Chisinau (Moldova) and in Donetsk (Ukraine).

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Preface

The “Environment for Europe” process, under the aegis of the United Nations Economic Commission for Europe, has worked since 1991 to strengthen international cooperation to protect and improve the environment across Europe.

At the fifth “Environment for Europe” Conference, in Kiev, Ukraine, in 2003, environment ministers stressed the importance of environmental information and data for policy making and public awareness, recognizing that not all countries used indicator-based mechanisms for their periodic environmental assessments and their evaluation of the effectiveness of environmental policies and decision-making. For the ministers improving environmental assessments, including reporting, especially in countries of Eastern Europe, Caucasus and Central Asia, were top priorities.

To meet this goal, the UNECE Committee on Environmental Policy, through its Working Group on Environment Monitoring and Assessment, undertook the preparation of practical recommendations to countries of Eastern Europe, Caucasus and Central Asia on the application of internationally agreed environmental indicators in environment assessment reporting at the national and local levels. The Working Group organized a series of international meetings that involved experts from environment ministries, statistical agencies, academic institutions, civil society associations and international organizations.

The present publication results from this collaborative endeavour. It contains the *Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia* and the *Guidelines for the Preparation of Indicator-based Environment Assessment Reports in Eastern Europe, Caucasus and Central Asia* that were approved by the UNECE Committee on Environmental Policy in May 2007 and will be transmitted to the sixth “Environment for Europe” Conference, (Belgrade, Serbia, October 2007).

The publication is aimed at officials and experts working for environmental authorities and statistical agencies in countries of Eastern Europe, Caucasus and Central Asia and other countries, environmental citizens’ organizations and researchers. It is my sincere hope that it will prove very valuable to them.



Marek Belka
Executive Secretary
Economic Commission for Europe

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Abbreviations used in the text

BOD	biochemical oxygen demand
C	Celsius
CBD	Convention on Biological Diversity
CFC	chlorofluorocarbon
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLRTAP	Convention on Long-range Transboundary Air Pollution
COD	chemical oxygen demand
CYK	Czech koruna
D	driving force
ECMT	European Conference of Ministers of Transport
EEA	European Environment Agency
EECCA	Eastern Europe, Caucasus and Central Asia
EMEP	Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
EU	European Union
Eurostat	European Union Statistical Service
FAO	Food and Agricultural Organization
GCOS	Global Climate Observing System
GDP	gross domestic product
GHG	greenhouse gas(es)
GWP	global warming potential
HBFC	hydrobromofluorocarbon
HCFC	hydrochlorofluorocarbon
HELCOM	Baltic Marine Environment Protection Commission (Helsinki Commission)
HFC	hydrofluorocarbon
I	impact
IAEA	International Atomic Energy Agency
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
ISIC	International Standard Industrial Classification of All Economic Activities
ISO	International Organization for Standardization
IUCN	World Conservation Union
NFR	Nomenclature for Reporting
NMVOC	non-methane volatile organic compound
ODP	ozone-depleting potential
ODS	ozone-depleting substance
OECD	Organisation for Economic Co-operation and Development
P	pressure
PAH	polycyclic aromatic hydrocarbon
PAU	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PFC	perfluorocarbon
PH	acidity (concentration of hydrogen ions)
PM	particulate matter
POP	persistent organic pollutant
PPP	parity of purchasing power
QA/QC	quality assurance/quality control
R	response

S	state
TBFRA	Temperate and Boreal Forest Resources Assessment
TSP	total suspended particulates
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSD	United Nations Statistics Division
UV	ultraviolet
WCMC	World Conservation Monitoring Centre
WEI	water exploitation index
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WWF	World Wildlife Fund

CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
K ₂ O	potassium oxide
N	nitrogen
NH ₃	ammonia
NH ₄	ammonium
NO _x	nitrogen oxides
N ₂ O	nitrous oxide
O ₂	oxygen
O ₃	ozone
P	phosphorus
P ₂ O ₅	phosphorus oxide
SF ₆	sulphur hexafluoride
SO ₂	sulphur dioxide
USD	United States dollar

g	gram
ha	hectare
kg	kilogram
km	kilometre
km ²	square kilometre
ktoe	1,000 tons of oil equivalent
kWh	kilowatt hour

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