

Europe's environment: the third assessment



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European Environment Agency
Kongens Nytorv 6
DK-1050 Copenhagen K
Denmark
Tel: (45) 33 36 71 00
Fax: (45) 33 36 71 99
E-mail: eea@eea.eu.int
<http://www.eea.eu.int>

Contents

Foreword	5
List of acknowledgements	7
1. Introduction	10
<i>Developments in socio-economic sectors</i>	
2.0. Material flows	15
2.1. Energy	24
2.2. Industry	35
2.3. Agriculture	43
2.4. Forestry	52
2.5. Fisheries and aquaculture	61
2.6. Transport	71
2.7. Tourism	83
<i>Prominent environmental problems</i>	
3. Climate change	91
4. Stratospheric ozone depletion	112
5. Air pollution	117
6. Chemicals	133
7. Waste	151
8. Water	165
9. Soil degradation	198
10. Technological and natural hazards	213
<i>Cross-cutting impacts</i>	
11. Biological diversity	230
12. Environment and human health	250
<i>Policy management</i>	
13. Progress in managing the environment	272
14. Information gaps and needs	296
Acronyms and abbreviations	309
Annexes	
• Country tables of key statistics	313
• Ratification of multilateral environmental agreements	323
• Comparisons with other parts of the world	324

Foreword

This is the third assessment of the state of the environment at the pan-European level prepared by the European Environment Agency in support of the UN-ECE Environment for Europe process. It follows earlier reports published in 1995 and 1998 for the same purpose. The second report made clear that the policy measures that had been taken up to the mid-1990s had not yet produced a significant improvement in the state of the environment overall. This, the third assessment, shows that most progress on environmental improvement continues to come from 'end-of-pipe' measures, actions under well-established international conventions and legislation, or as a result of economic recession and restructuring.

We know from the past that these gains will be lost again if economic growth continues to be based on traditional, environmentally damaging activities, still prevalent, rather than on more sustainable, eco-efficient options. This is a particular risk for the EU accession countries and countries in eastern Europe, Caucasus and central Asia to which large amounts of manufacturing industry have been transferred from western Europe and elsewhere in the world.

In this context, moving towards more sustainable approaches seems to be more aspiration than reality in many parts of Europe. Progress has been made on developing policy frameworks for sectoral integration (e.g. EU strategies being developed under the Cardiff process since 1998) and for sustainable development (e.g. the action plan from the Johannesburg world summit on sustainable development in 2002). There has been less progress on implementation and substantial barriers to real progress remain, both political and financial.

The EU sustainable development strategy is a step in the right direction but needs more operational action by the relatively well-off Member States to remain environmentally credible. The accession countries face the major challenge of managing with limited resources, and against competing economic, social and environmental priorities, the transitions to EU membership, sectoral integration and sustainable development all at the same time. The EECCA countries have a much lower GDP per capita than elsewhere in Europe, but arguably greater and competing calls on limited resources, yet have relatively limited access to capital markets for finance to improve social and environmental welfare.

Better coordination and use of existing funding sources and mechanisms available at the European level would help overcome some of these problems but what is most lacking is a decision-making framework that takes proper account of the competing but often complementary economic, social and environmental considerations. The various initiatives on European regional energy co-operation are a good example of such a framework in action. Account is taken of overall welfare considerations when making decisions (e.g. the role of renewable sources, issues of fuel poverty, and not just of economic considerations (e.g. increased energy supply from fossil fuels to meet increasing demand)).

In such a framework though, trade-offs are just one side of the coin; the time dimension is also important. The timespan of five years between the second and third assessments is a short one for gauging progress. The time perspectives are much longer between early warnings of a problem, its scientific identification, political recognition and action, and resulting environmental improvements, as demonstrated by the development of air quality and acidification in Europe, substantially related to sulphur emissions, and the success story to date of pan-European cooperation.

Early warnings were available into the 1950s (London smog) and 1960s (acidification of Scandinavian lakes and rivers); initial international recognition was reached at the Stockholm UN environment conference in 1972; major policy initiatives were adopted in 1979 (Convention on long-range transboundary air pollution) and 1980 (first EU air quality directive); and action under Convention protocols and EU directives took effect during the 1980s and 1990s. The latest projections available indicate that there should be a return to

sustainable air quality concentrations for sulphur dioxide and deposition rates for sulphur after about 2012, 40 years after initial recognition of the issue and over 100 years after sulphur emissions first exceeded sustainable rates across the pan-European space.

Many of the other environmental issues reviewed in this report are more complex and will require recognition and action by a wider range of players than was necessary for sulphur emissions. Examples include climate change, biodiversity loss, and soil degradation. The start of the Kyoto Protocol target period for limiting greenhouse gas emissions is now five years away and additional measures, not yet agreed, will be necessary to reach the targets in many countries; the target date for (significantly) halting biodiversity loss is only seven years away and there is no agreement yet on how to measure and monitor biodiversity loss; and strategies to prevent soil degradation have yet to be agreed. New approaches such as the precautionary principle and the EU's proposal on impact assessment should be considered further to help reduce the lead times between early warnings, scientific and policy action and resulting improvements.

Both the integrative nature of the above problems and the implementation of approaches like the precautionary principle, have major implications for the design and content of the monitoring and assessments systems that are needed to track progress and to indicate where more attention is required. In the face of increasing demands for information by policy makers, including issues involving much scientific uncertainty, and decreasing resources for monitoring in member states, some new thinking is required. For example, a better balance needs to be struck between efforts put into producing information through traditional approaches to monitoring and assessment and more recent ones. Examples of these relatively new approaches in the pan-European context include tissue-based monitoring of health impacts, the identification of biomarkers as the basis for considering wider impacts, the use of upstream proxy indicators for assessing downstream environmental impacts and, wider use of explorative and quantitative based scenarios tools. The EEA is fully ready to engage in processes that involve such new thinking.

Finally I would like to recognise the substantial progress in cooperation and provision of relevant data and information for this report, particularly (but not only) from the EU candidate countries and EECCA countries. There is a long way still to go and many gaps and inconsistencies remain in the information presented in this report. However we are making progress with countries and international programmes in the development of an increasingly focussed, streamlined and shared European environmental information system. On behalf of the European Environment Agency, I look forward to developing this vision, to monitoring progress in policies, action and outcomes and hence to supporting the environmental programme for Europe, in whatever form it continues after the Kiev Ministerial Conference.

I trust that this report will contribute to both the understanding of where we are in the sequence from early warning to resolution of the various prominent environmental problems facing Europe and to the decision-making required to restore and maintain environmental quality and achieve sustainable development

Gordon McInnes
Interim Executive Director
European Environment Agency

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National contact points and other national contributors

Albania:

Narin Panariti

Armenia:

Gennadi Kojoyan, Tamara Hovhannissian

Austria:

Bettina Götz, Johannes Mayer

Azerbaijan:

Gilinjkhhan Hajiyev

Belarus:

Svetlana P. Utochkina

Belgium:

Eddie Muylle, Lore van Eylen, Marleen van Steertegem, Jan Voet

Bosnia-Herzegovina:

Mladen Rudez, Mehmed Cero

Bulgaria:

Krassimira Avranova, Svetlana Zhekova

Croatia:

Monica Trsic, Ivana Mijatovic

Cyprus:

Christina Pantazi, Antonis Antoniou

Czech Republic:

Erich Lippert, Klara Quasnitzova, Josef Sejak

Denmark:

Torben Moth Iversen, Bjarne Norup

Estonia:

Ott Roots, Leo Saare

Finland:

Pertti Heinonen, Tapani Säynätkari

Former Yugoslav Republic of Macedonia:

Darko Blinkov, Svetlana Gjorgjeva

France:

Philippe Crouzet, Thierry Pontille

Georgia:

Nino Sharashidze

Germany:

Barbara Clark, Christoph Schlüter

Greece:

Mata Aravantinou

Hungary:

Elemer Szabo, Pál Bozo

Iceland:

Ólafur Pétursson

Ireland:

Larry Stapleton

Italy:

Laura Migliorini, Claudio Maricchiolo

Kazakhstan:

Sapar Bazarbayev

Kyrgyzstan:

Omor Rustembekov

Latvia:

Ilze Kirstuka

Liechtenstein:

Hermann Schmuck

Lithuania:

Juozas Molis, Liutauras Stoskus

Luxembourg:

Eric De Brabanter

Malta:

Louis Vella

Moldova, Republic of:

Petru Cocirtă

Monaco:

Wilfrid Deri

Netherlands:

Jan van der Plas, Pieter van der Most, Roel

Thomas

Norway:

Oystein Nesje, Johnny Auestad

Poland:

Lucyna Dygas-Ciolkowska

Portugal:

Maria Leonor Gomes

Romania:

Silviu Stoica, Cornel Florea Gabrian, Dalia

Maier

Russian Federation:

Olga A. Novosselova, Yuri S. Tsaturov,

Valery Chelyukanov, Alexandr A.

Chekhovtsov

Serbia and Montenegro:

Irena Mitrovic

Slovak Republic:

Vladimir Benko

Slovenia:

Anita Pirc-Velkavrh, Irena Rejec Brancelj

Spain:

Francisco Cadarso, Juan Martínez Sánchez

Sweden:

Y. W. Brodin, Bernt Røndell

Switzerland:

Jean-Michel Gardaz, Nicolas Perritaz

Tajikistan:

Taginisso Nassirova

Turkey:

Irem Sesenoglu, Cumali Yüksek

Turkmenistan:

Irina Atamuradova

Ukraine:

Oleh Velychko

United Kingdom:

Stan Speller

Uzbekistan:

Nariman Umarov

European Commission contacts

Contact point: Hans Stielstra (Directorate-General (DG) Environment)

Contributions received from Commission services (DG Enterprise, DG Energy and Transport, DG External Relations, DG Fisheries, DG Environment)

Contributors by chapter**Chapter 1 Introduction***Coordination and authors:*

Ronan Uhel, Peter Bosch, Jock Martin (EEA)

Chapter 2.0 Material flows*Coordination:*

Pawel Kazmierczyk (EEA)

Authors:

Stephan Moll, Stefan Bringezu (Wuppertal Institute)

Chapter 2.1 Energy*Coordination:*

Ian Smith, Aphrodite Mourelatou (EEA)

Author:

George Marsh (AEA Technology, United Kingdom)

Chapter 2.2 Industry*Coordination:*

Ronan Uhel (EEA)

Author:

Sander de Bruyn (CE Solutions for environment, economy and technology, Netherlands)

Chapter 2.3 Agriculture*Coordination:*

Jan-Erik Petersen, Peder Gabrielsen (EEA)

Authors:

Simon Turner, Harriet Bennett (ADAS Consulting Ltd, United Kingdom)

Chapter 2.4 Forestry*Coordination:*

Tor-Björn Larsson (EEA)

Authors:

Mercedes Rois Díaz, Andreas Schuck (European Forest Institute, Finland)

Chapter 2.5 Fisheries and aquaculture*Coordination:*

Anita Künitzer (EEA)

Authors:

Crick Carleton, John Hambrey, Tristan Southall, Katharine Winnard (Nautilus Consultants Ltd, United Kingdom)

Chapter 2.6 Transport*Coordination:*

Ann Dom, Wouter de Ridder (EEA)

Authors:

Jos M. W. Dings, Max Smith (CE Solutions for environment, economy and technology, Netherlands)

Chapter 2.7 Tourism*Coordination:*

Ronan Uhel (EEA)

Author:

Aurélie Pelletreau (EEA)

Chapter 3 Climate change*Coordination:*

André Jol (EEA)

Authors:

Lambert Schneider (Oeko-Institute, Germany), Jelle van Minnen ((RIVM (National Institute of Public Health and the Environment), Netherlands), Tinus Pulles (TNO (Netherlands Organisation for Applied Scientific Research), Netherlands)

Chapter 4 Stratospheric ozone depletion*Coordination:*

Roel van Aalst (EEA)

Author:

Guus Velders (RIVM, Netherlands)

Chapter 5 Air pollution*Coordination:*

Andreas Barkman, Roel van Aalst (EEA)

Authors:

Kevin Barret, Frank de Leeuw, Detlef van Vuuren, Janusz Cofala, Hans Eerens (European Topic Centre on Air and Climate Change (ETC/ACC))

Chapter 6 Chemicals*Coordination:*

David Gee, Ingvar Andersson (EEA)

Authors:

Keith A. Brown, Martin L. Adams (AEA Technology, United Kingdom)

Chapter 7 Waste generation and management*Coordination:*

Dimitrios Tsotsos (EEA)

Author:

Jens Brodersen with support of Despo Fatta, Fotis Kourmoussis, Brian Meaney, Stephan Moll, Maria Gabriella Simeone, Mette Skovgaard, Matti Viisimaa, Thomas Weissenbach (European Topic Centre on Waste and Material Flows (ETC/WMF), Denmark), contribution from Morten Sickel (Arctic Monitoring and Assessment Programme (AMAP))

Chapter 8 Water*Coordination:*

Anita Künitzer, Peter Kristensen (EEA)

Authors:

Steve Nixon, Zoe Trent, Concha Lallana (European Topic Centre on Water (ETC/WTR))

Chapter 9 Soil degradation*Coordination:*

Anna Rita Gentile (EEA)

Author:

Timo Tarvainen, Marrtha Wepner, Martin Schamann, Banko Gebhard, Jaume Fons Esteve (European Topic Centre on Terrestrial Environment (ETC/TE))

Chapter 10 Technological and natural hazards*Coordination:*

Ronan Uhel, David Stanners (EEA)

Author:

Glenn Pettitt (Environmental Resources Management (ERM), United Kingdom), contribution from Morten Sickel (AMAP)

Chapter 11 Biological diversity*Coordination:*

Tor-Björn Larsson, Ulla Pinborg (EEA)

Author:

Dominique Richard (European Topic Centre on Nature Protection and Biodiversity (ETC/NPB))

Chapter 12 Environment and human health*Coordination:*

Ronan Uhel, David Gee (EEA)

Authors:

Ingvar Andersson (EEA), Bent H. Fenger in cooperation with World Health Organization (WHO) staff, contribution from Morten Sickel (AMAP)

Chapter 13 Progress in managing the environment*Coordination:*

Hans Vos, Ronan Uhel (EEA)

Authors:

Alan Bond (University of Wales, United Kingdom); R. Andreas Kraemer, Aneke Klasing (Ecologic, Denmark); Frans Oosterhuis (Institute for Environmental Studies (IVM), Netherlands); Elisabeth Wilson (Oxford Brookes University, United Kingdom); Françoise Breton (ETC/TE); contributions from Malcolm Ferguson (Institute for European Environmental Policy (IEEP), United Kingdom), Mirjam Schomaker

Chapter 14 Information gaps and needs*Coordination:*

Ronan Uhel (EEA)

Author:

Nicolas Perritaz, with contributions from coordinators of chapters (EEA) and Ljiljana Stancic (Aarhus convention secretariat)

Annex 1 Country comparative tables

Peter Bosch, Nicolas Perritaz (EEA); Rosella

Soldi (Progress Consulting) and David Simoens (EEA)

Annex 2 Multilateral environment agreements

Ronan Uhel (EEA); Rosella Soldi (Progress Consulting)

Annex 3 International comparisons

Ronan Uhel (EEA); Rosella Soldi (Progress Consulting)

Data collection and processing

EEA: Nicolas Perritaz (EEA) and Rosella Soldi (Progress Consulting)

ETC/NPB: Grégoire Lois, Gabriela Augusto, Ward Hagemeyer, Romain Julliard

ETC/WTR: Steve Nixon

ETC/ACC: Kevin Barret

ETC/TE: Jaume Fons Esteve, Françoise Breton

ETC/WMF: Jens Brodersen

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- Nikolai Denisov, Ieva Rucevska, (UNEP/GRID-Arendal)
- Andrew Farmer (IEEP, United Kingdom)

Maps: design and production*Coordination:*

Andrus Meiner (EEA)

Production:

Mette Lund (EEA)

Graphs: design and production*Coordination:*

Nicolas Perritaz, Charlotta Colliander Golding (EEA) and Rosella Soldi (Progress Consulting)

Production:

Folkmann Design

Coordinating and editing

Ronan Uhel, Andrus Meiner, Peter Bosch (EEA), Peter Saunders (Consultant) with support from: Alexei Kostin, Angela Sochirca, Nicolas Perritaz, Anne-Dorthe Hansen, Charlotta Colliander Golding, Charlotte Islev (EEA)