

ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY

Provides a framework for the environment and natural resource use.

An adequate economic structure and social security could be established for the needs of society.

national economy utilises the natural resources efficiently,

The purpose of environmental management is to ensure that:

necessary goods are manufactured and the necessary services – received,

pollution is reduced to the level which is not harmful to human health and ecosystems.

Environmental policy can be considered as environmental protection and conservation strategies.

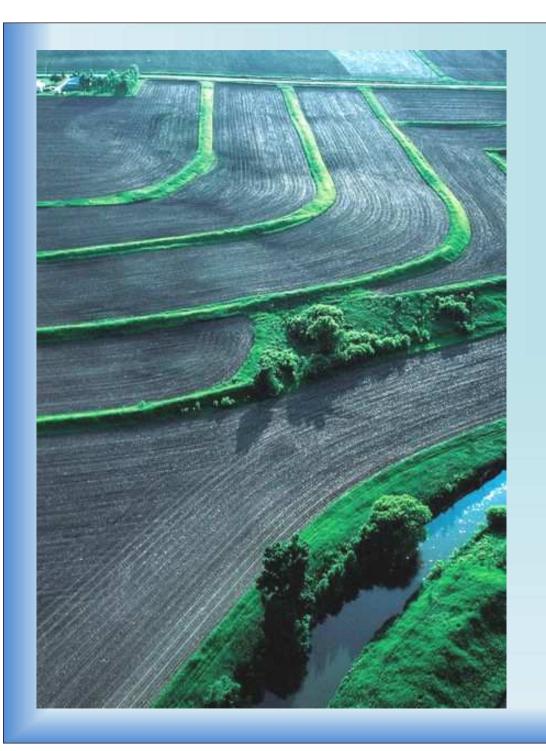
ENVIRONMENTAL MANAGEMENT

Environmental policy has more general and broader functions than environmental management, which provides the practical implementation of the environmental policy

Environmental resource management is "a purposeful activity with the goal to maintain and improve the state of an environmental resource affected by human activities".

Environmental resources management aims to ensure that **ecosystem services** are protected and maintained for equitable use by future human generations, and also, maintain ecosystem integrity as an end in itself by taking into consideration ecological, ethical, economic, and scientific variables.

Environmental resource management tries to identify the factors that have a stake in the conflicts that may rise between meeting the needs and protecting the resources.



Improved agricultural practices such as these terraces in northwest Iowa can serve to preserve soil and improve water quality.

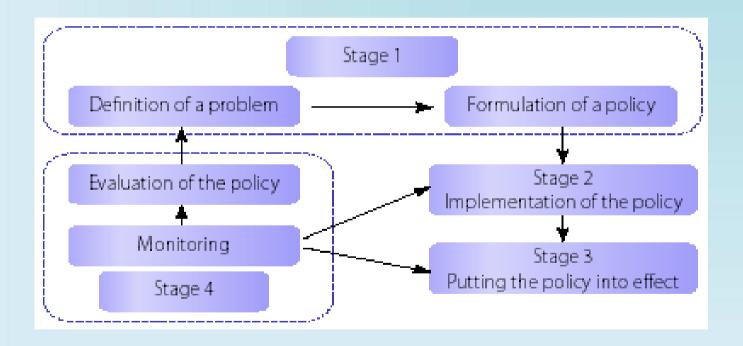


A water harvesting system collects rainwater from the Rock of Gibraltar into pipes which lead to tanks excavated inside the rock.

ENVIRONMENTAL POLICY AND MANAGEMENT

Environmental policy provides a framework for setting objectives and tasks for environmental protection and for ensuring the improvement of environmental quality.

Environmental policy consists of several interrelated stages that form a cycle.



KEY ENVIRONMENTAL PROBLEMS

- air quality standards in major cities are frequently exceeded, and transport emissions make the largest proportion of air pollution;
- eutrophication of inland waters is increasing, and it is largely caused by agricultural activity; this factor, in turn, adversely affects water quality in the Baltic Sea;
- in the situation of economic crisis, the use of recycled materials cause a problem;
- planning documents for economic sectors do not sufficiently reflect various environmental factors;
- society's lack of understanding about the dependence of long-term availability of natural resources;
- lack of long-term, systematic scientific studies on the potential impacts of climate change on the environment;
- lack of funding to control the compliance with the statutory requirements.

COMMUNICATION IN ENVIRONMENTAL POLICY

Solving of environmental problems directly depends on the level of society's knowledge on environmental protection. Environmental education and communication are the main tools of raising public awareness. Communication is an ongoing two-way exchange of information between decision-makers and the general public.



to make information available to the public

to draw public attention to specific issues or problems

The most important communication functions are:

to involve the public in discussing and solving specific problems

to provide information on new developments, promote the exchange of ideas and knowledge

to facilitate changes in public behaviour and attitudes

ENVIRONMENTAL EDUCATION

Environmental education is one of the most important means of raising public environmental awareness in the progress towards a sustainable society.

to promote community development in a way that would harmonise the spiritual and material needs and interests

The role of environmental education is:

to increase substantially the public sense of responsibility, involving citizens and society in environmental conservation and rehabilitation

to educate the public about the environment and nature, raising the level of knowledge and self-education opportunities

to involve the responsible organisations, educational institutions, experts and enthusiasts in the process of environmental education, thus supporting the national and local initiatives



ENVIRONMENTAL EDUCATION

Environmental education justifies the need for mobilising financial resources for environmental policy challenges. Environmental education, decision-making and practical activities are based on research and knowledge of environmental science.

Environmental education and environmental science are a foundation for setting environmental policy and social sustainability goals and dealing with problems.

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Environmental education is needed in order:

- to make possible drafting and implementation of laws and regulations,
- addressing internationally significant environmental problems at the local level,
 - studying the environmental quality,
 - developing new environmental technologies,
 - ensuring protection of the environment in general.

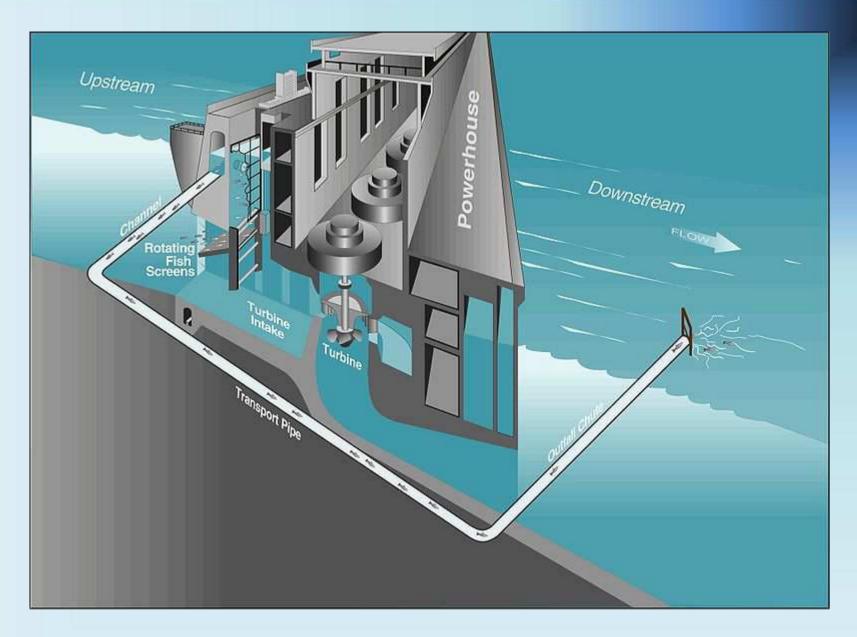
ENVIRONMENTAL EDUCATION

At schools, environmental education and education for sustainable development are generally integrated into various subjects according to their specific content, ensuring the continuity and coordination in various stages of education.

Research development and the use of knowledge and environmentally sound technologies is the principal economic development path that can ensure sustained prosperity.

It is essential to develop exact principles for the content and objectives of environmental education and science.

Environmental studies should focus not only on knowledge acquisition and research proficiency but also on the skills to identify and address environmental protection problems significant for society.



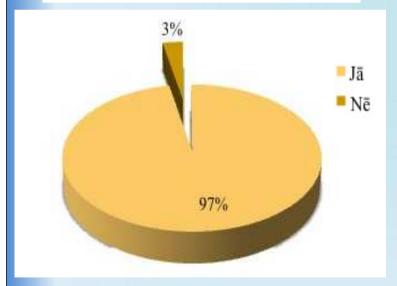
A diagram showing the juvenile fish bypass system which allows young salmon steelhead for safely pass the Rocky Reach Hydro Project in Washington.

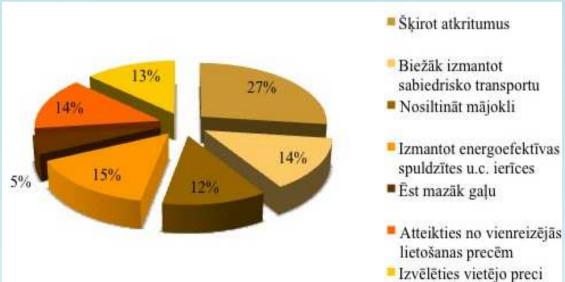
PUBLIC ENVIRONMENTAL AWARENESS

Environmental education is forming environmental awareness!

Do You agree, that is need to protect environment in Latvia?

What are You ready to do for more "green " living?





Environmental awareness in Latvia

ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental protection is a set of measures of environmental quality preservation and sustainable use of natural resources, whereas its purpose is to eliminate, mitigate or prevent environmental damage.

Environmental management system is a continuously repeated cycle of planning, implementation, outcome evaluation and more precise definition and improvement of further action.

planning of the overall process, starting with the environmental situation assessment for the purpose of setting goals

The set of

actions required for pilot projects ran for the purpose of gaining experience and becoming prepared for the main tasks

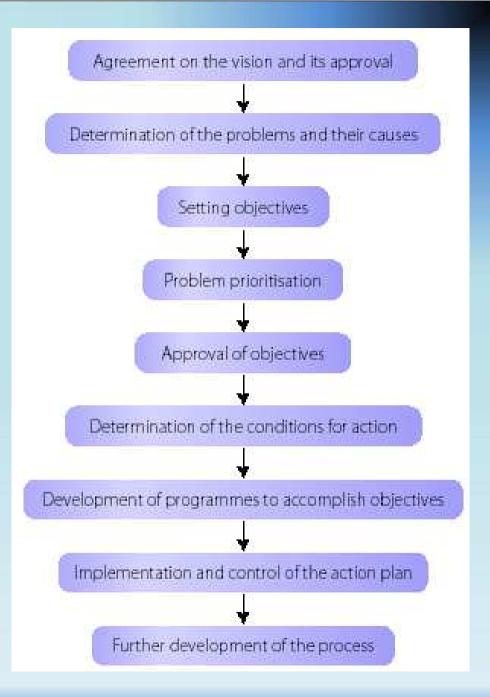
measures

control of the process and situation changes, including monitoring to make adjustments if necessary

includes:

implementation of the process to achieve the set objectives, evaluating performance at regular intervals to determine whether the achievements match the plans

Scheme of the general environmental protection system



DISCUSSION AND APPROVAL OF THE ENVIRONMENTAL POLICY VISION

To initiate an integrated environmental management, first of all there must be such **desire**.

state or local government leaders

non-governmental

organisations

Possible initiators:

citizens groups deputies

business representatives

Regardless of what caused the initial impetus, leaders must be ready to listen and to prepare adequate documentation for starting the process to resolve issues relating to financial resources and administrative involvement.

ENVIRONMENTAL INFORMATION

has a major role in environmental policy development and environmental management system operation.

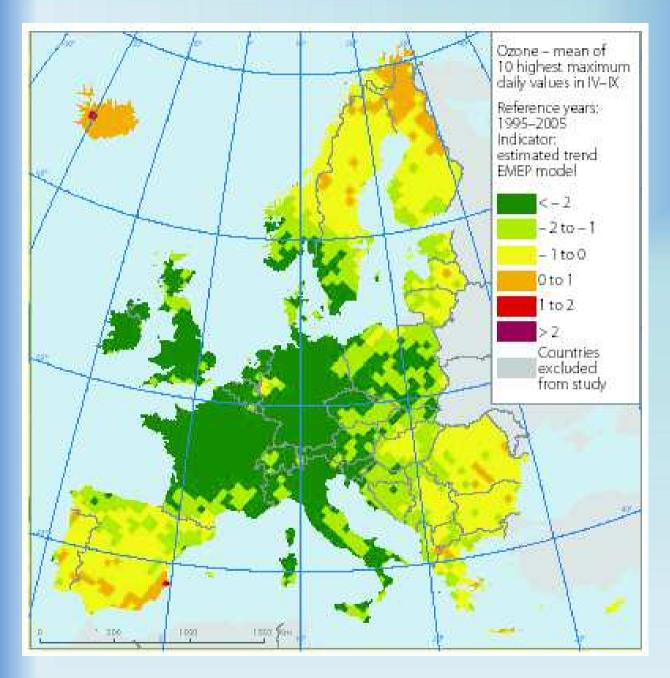
data obtained through environmental studies

Information comprises knowledge and data:

statistical information

long-term and systematic observations of the environment, society and its activities

Environmental information should enlighten the scientists, politicians and persons working in environ mental management, so that they would be able to make the correct policy decisions – i.e. matching the actual situation and the environmental challenges in the region – and to make well-founded and rational environmental protection and management measures.



Ozone estimated trend.

The data shown predict a reduction approximately 2 μg/m³ or more per year in central and north-western Europe.

Smaller reductions are predicted outside this region (Spain, Balkan countries, the Baltic and the Nordic countries).

DETERMINATION OF ENVIRONMENTAL PROBLEMS

People should be interrogated as to what kinds of environmental problems they see and how, in their opinion, these problems should be ordered by importance. Such information can be obtained from population surveys, by listening to the views of elected deputies and by other methods.

Estimations regarding future problems should also be made. Some of these problems can affect the entire country, such as a sharp increase in packaging material waste due to increased import of goods, or growing road traffic intensity due to increasing number of cars.

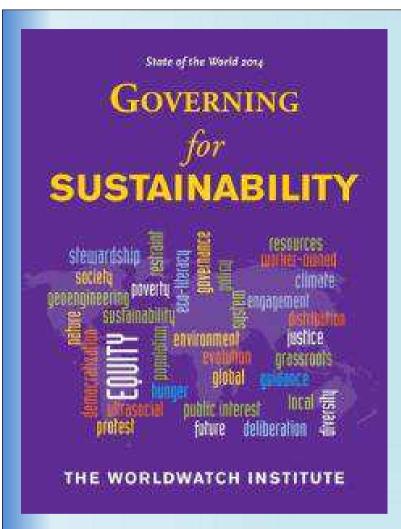
Sources of information:

Local governments

Ministry of Environment

Central Statistical Bureau of Latvia

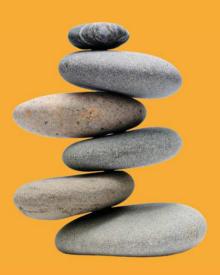
European Environmental Agency



State of the World 2014: Governing for Sustainability

State of the World 2015

CONFRONTING HIDDEN THREATS to SUSTAINABILITY



THE WORLDWATCH INSTITUTE

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OBJECTIVE ANALYSIS AND SUBJECTIVE ANALYSIS

Any observer is more or less subjective, and any perception is influenced by the manner in which an observation or measurement is made.

Some method of **objective analysis** could apply to a particular component of the environment, such as water, or to a specific pollutant.

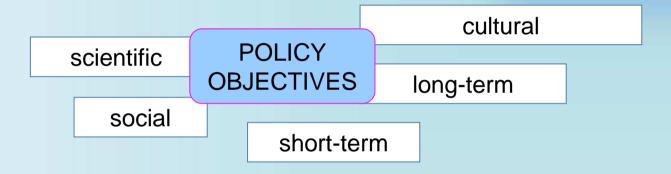
In the case of **subjective analysis**, the opinions of the society and citizens as to what they perceive as environmental problems are ascertained.

Although this type of information does not give a complete picture, because the respondents usually do not mention problems that cannot be seen or felt, it may give some direction where to look for the environmental damage.



SETTING ENVIRONMENTAL POLICY OBJECTIVES

Environmental policy objectives reflect society's expectations about the future.



Environmental policy objectives do not always need to be measured or evaluated quantitatively or against some previously accepted standards or criteria.

Even more important, - the **objective should include environmental philosophy**, which should underpin the vision even if its development has been entrusted to the experts.

EVALUATING OF ENVIRONMENTAL PROBLEMS

can be sorted in order of importance by several criteria:

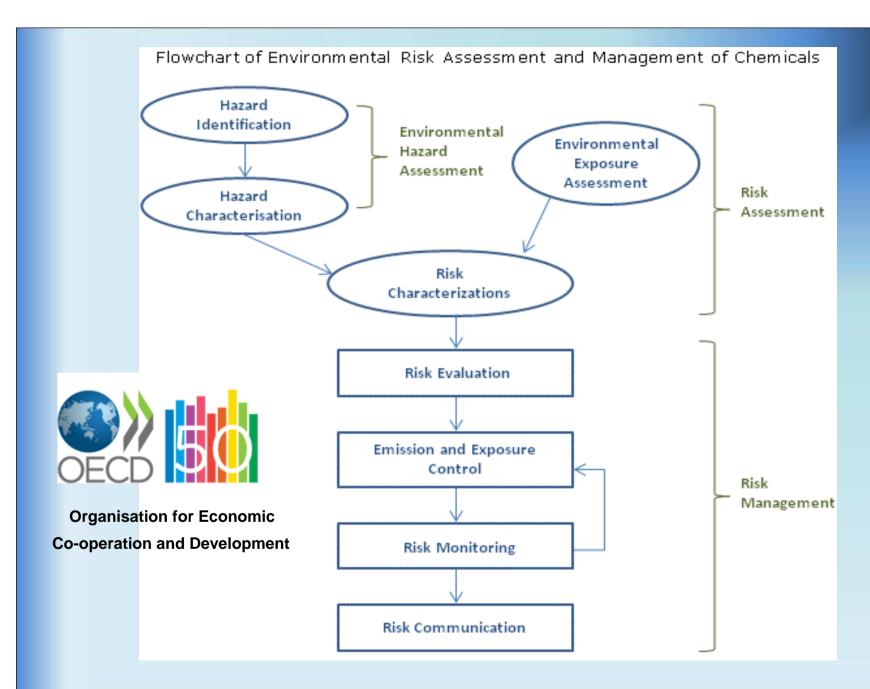
How much the pollution levels exceed the standards?

How big the costs of environmental damage elimination will be ?

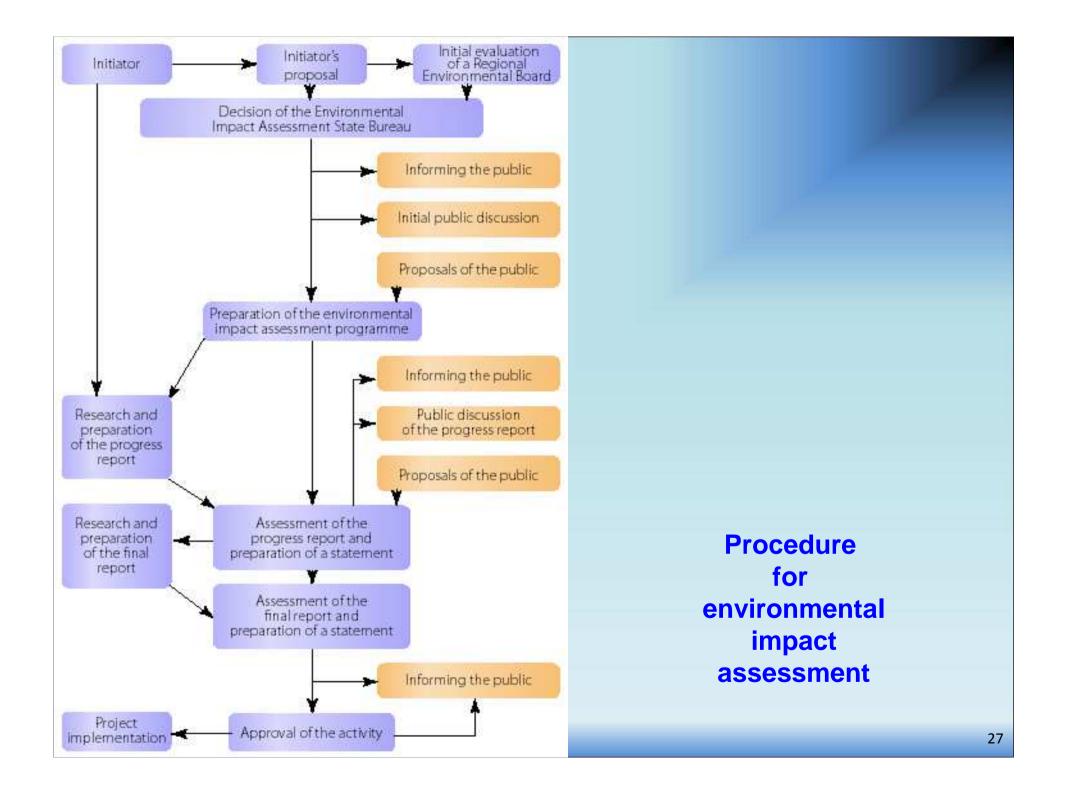
What the expected expenses for health care or other important areas are?

One of the most widespread methods is comparative risk analysis of population health, environmental protection and quality of living conditions.

Problems are ranked taking into account the selected criteria and mutual agreement on the acceptable level of risk.



Tools for Environmental Risk Assessment and Management by OECD



STRATEGIC ENVIRONMENTAL IMPACT ASSESSMENT

The strategic impact assessment should be performed for those planning documents, whose implementation can significantly affect human health and the environment, including the planning documents in the areas of agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, tele-communications, tourism and mining, as well as the planning documents related to regional development, land use, spatial planning and the use of EU co-financing.

The strategic environmental impact assessment procedure ensures that the developers of various **planning documents** (development plans and strategies for national economy and its various sectors as well as spatial development plans) are responsible for assessing how the implementation of these documents would **affect the environment** and for introducing the draft documents and environmental reports contained there to the public, so that the latter could express opinions.



In Europe the Convention on Environmental Impact Assessment in a Transboundary Context the so called *Esspo Convention* laid the foundations for the introduction of SEA in 1991.

In 2003, the Espoo Convention was supplemented by a Protocol on Strategic Environmental Assessment.

The EU SEA Directive 2001/42/EC required that all member states of the EU should have ratified the Directive into their own country's.

DEVELOPMENT OF THE PROGRAMMES

The development of an environmental programme is initiated on the basis of the analysis performed and objectives set.

The programme may contain separate plans or projects and a variety of methods to ensure information exchange, legislative compliance and economic conformity.

Projects can be carried out by the institutions or organisations that have won the state or local government tenders.

DEVELOPMENT OF THE PROGRAMMES

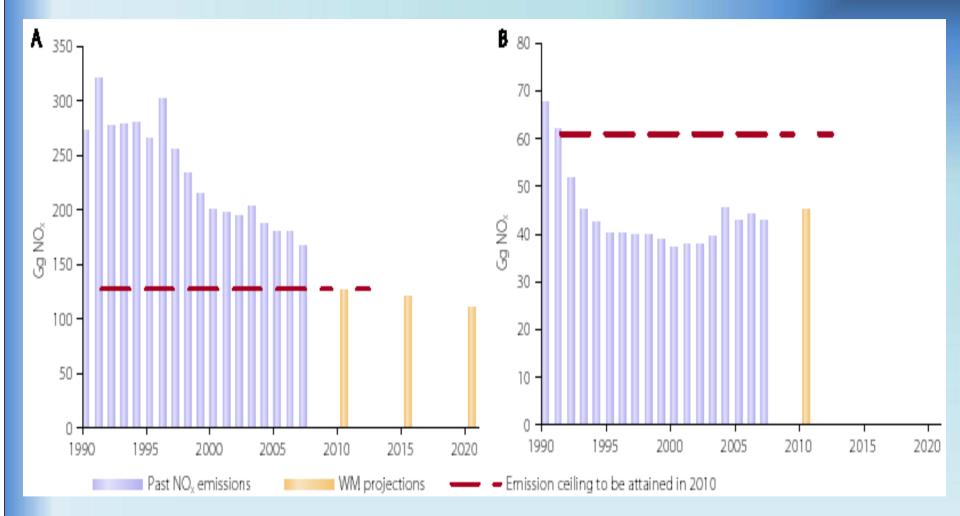
Accomplishing a certain objective, the agricultural pollution discharge into streams, rivers and lakes can be reduced in rural areas.

Another objective could be related to the diversification of regional economic by attracting tourists.

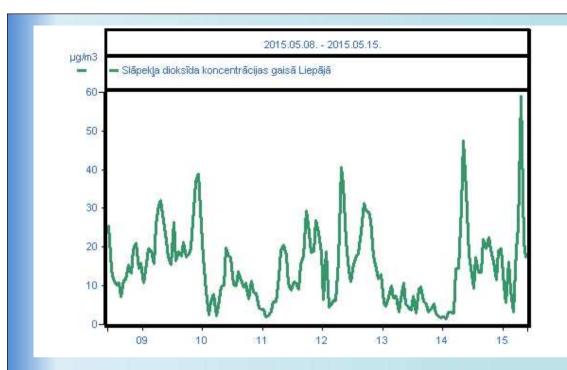
A clean river with nature trails and opportunities to observe wildlife could draw the attention of tourists; at the same time, a certain balance should be kept in order to avoid the rise of new conflicts between tourists and nature.

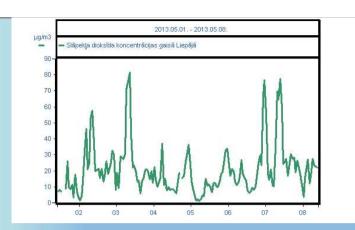
For example, if the river is used for water sports development, it can adversely affect the fauna of the river. Additional difficulties and new challenges may arise, and they have to be dealt with to avoid contradictions in the overall execution of the environmental programme.

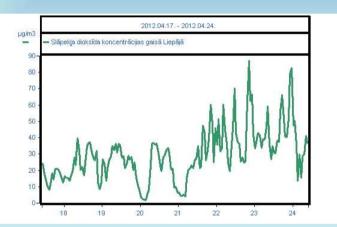




NO_x emissions and projections in Denmark (A) and Latvia (B)



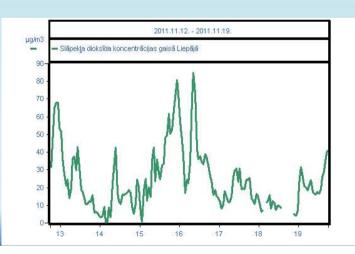




Concentration of NO₂ in the air of Liepaja city

Limit – $40 \mu g/m^3 NO_2$

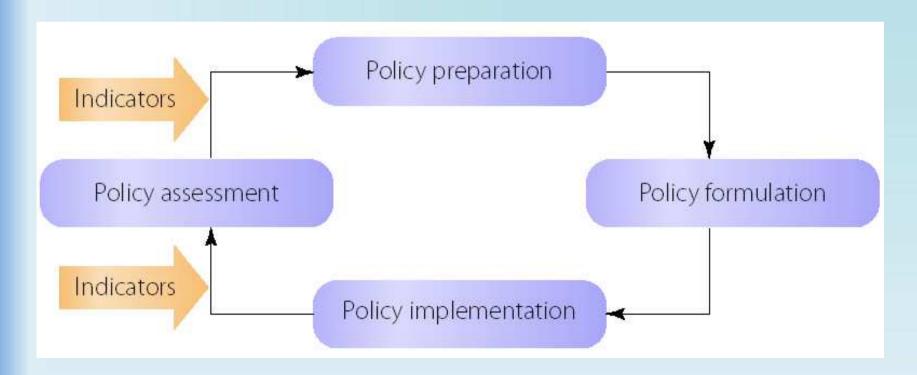
ENVIRONMENT CONTROL, *example*



POLICY CYCLE AND INDICATORS

The main function of indicators is to provide information during the decisionmaking process and to adjust different levels of policy according to the policy cycle scheme.

The use of sustainable development indicators in such a scheme is focused on the interaction links between the traditional indicators, but the synergistic effects in such a complex system are stronger as the direct cause-effect interactions.



EU ENVIRONMENTAL MANAGEMENT



Many EU countries have long environmental protection traditions, which are also reflected in their environmental law.

In some countries – for example, in the Mediterranean – environmental protection issues have received less attention.

Increasing integration of the EU requires supporting the implementation of the most effective environmental policies at a much larger scale.

It is also necessary to ensure a common framework of environmental law, uniform monitoring methodology and standards.

These issues are the competence of the European Commission's

Directorate-General for the Environment.



EC President (2014-2019)

Jean-Claude Juncker



The President is the head of the European Commission.

According to the Treaties, he decides on the organisation of the Commission, allocates portfolios to members of the Commission and can make changes at any time. The President also determines the Commission's policy agenda, defending the general European interest. The President was elected by the European Parliament on the basis of his Political Guidelines that were formed drawing on his contacts with the parliamentary committees and the strategic guidelines for the Union presented by the European Council of 27 June 2014:

A New Boost for Jobs, Growth and Investment

A Connected Digital Single Market

A Resilient Energy Union with a Forward-Looking Climate Change Policy

A Deeper and Fairer Internal Market with a Strengthened Industrial Base

A Deeper and Fairer Economic and Monetary Union

A Reasonable and Balanced Free Trade Agreement with the U.S.

An Area of Justice and Fundamental Rights Based on Mutual Trust

A New Policy on Migration

A Stronger Global Actor

A Union of Democratic Change



Floor 13 of the Berlaymont, Commission's meeting room.



Biography

Maltese nationality. Married with two children.

EU Commissioner for Environment, Maritime Affairs and Fisheries

2014-present

Minister for Tourism and Aviation

2013-2014

Chairman of the Orange Travel Group

2010-2013

Group Coordinator for the Labour Party Parliamentary Group

2008-13

Executive Chairman of Corinthia's Mediterranean Construction Co

2008-10

Executive Chairman of Corinthia Hotels International 2001-07

Master's degree in Tourism Management

2000

Tourism Minister

1996-98

Industry Minister

1984-87

Minister for Public Works

1981-83

Member of the Maltese Parliament

1976-2014

Architect, Director in various companies

Bachelor's degree in Architecture and Civil Engineering 1973



EU DIRECTORATE-GENERAL FOR THE ENVIRONMENT

Director General of DG Environment –

Karl Falkenberg

- The Directorate-General (DG) for the Environment is one of the more than 40 Directorates-General and services that make up the European Commission.
- Commonly referred to as DG Environment, the objective of the Directorate-General is to protect, preserve and improve the environment for present and future generations.
- To achieve this it proposes policies that ensure a high level of environ mental protection in the European Union and that preserve the quality of life of EU citizens.
- The DG makes sure that Member States correctly apply EU environ mental law. In doing so it investigates complaints made by citizens and non-governmental organisations and can take legal action if it deems that EU law has been infringed.
- In certain cases DG Environment represents the European Union in environmental matters at international meetings.

EU Environment DG

The is based largely in Brussels with the unit dealing with radiation protection based in Luxembourg.

The Directorate-General is organised into an Office of the Director-General and 7 directorates:

- Directorate A: Legal Affairs & Cohesion
- Directorate B: Nature
- Directorate C: Industry
- Directorate D: Water, Chemicals & Biotechnology
- Directorate E: International affairs
- Directorate F: Strategy
- Shared Resources Directorate (SRD) (shared with DG Climate Action

EU Environment DG

MISSION AND CHALLENGES

- The main role of DG Environment is to initiate and define **new environment policy** and legislation, to promote integration of environmental concerns into other policy areas, and to ensure that agreed policy measures are implemented effectively in the EU Member States.
- Its mission statement is "protecting, preserving and improving the environment for present and future generations, and promoting sustainable development".
- The political guidelines highlight that the exit from the crisis should be the point of **entry into a new sustainable social market economy**, a smarter, greener economy, where our prosperity will come from innovation and from using resources better, and where the key input will be knowledge.
- Conserving energy, natural resources and raw materials, using them more efficiently and increasing productivity will be the key drivers of the future competitiveness of our industry and our economies.
- Consequently, developing a **resource efficient low-carbon economy** and stimulating green innovation, growth and jobs are among the main priorities of the EU-2020 Strategy.



The 7th Environment Action Programme of the European Community 2014-2020

In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.

The programme lists nine priority objectives and what the EU needs to do to achieve them by 2020. They are:

- 1. to protect, conserve and enhance the Union's natural capital
- 2. to turn the Union into a resource-efficient, green, and competitive low-carbon economy
- 3. to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing
- 4. maximise the benefits of the Union's environment legislation by improving implementation
- 5. to increase knowledge about the environment and widen the evidence base for policy
- 6. to secure investment for environment and climate policy and account for the environmental costs of any societal activities
- 7. to better integrate environmental concerns into other policy areas and ensure coherence when creating new policy
- 8. make the Union's cities more sustainable
- 9. to help the Union address international environmental and climate challenges more effectively.

SDI theme	Headline indicator	Long-term evaluation (since 2000)	Short-term evaluation (last five-year period)
Socioeconomic development	Real GDP per capita	0	0
Sustainable consumption and production	Resource productivity	(i)	
Social inclusion	People at risk of poverty or social exclusion	ക്ക് രദ	6 o
Demographic changes	Employment rate of older workers	(e)	
Public health	Life expectancy and healthy life years	(O)	0
Climate change and energy	Greenhouse gas emissions		
	Primary energy consumption	<i>ಹ್ಲಾ</i>	
Sustainable transport	Energy consumption of transport relative to GDP	4	
Natural resources	Common bird Index	(2) m	90 m
Global partnership	Official development assistance	\$ e	9
Good governance	[No headline indicator]	:	***

EU Sustainable Development Strategy implementation progress for the period between 2000 and 2015.

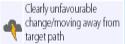
Clearly favourable



Moderately unfavourable change/on target path change/far from target path



favourable change/ close to target path



: Contextual indicator or insufficient data

⁽¹⁾ An explanation of the evaluation method and the meaning of the weather symbols is provided in the Introduction.

⁽f) From 2002

^(*) From 2005.

^(*) Evaluation based on EU-27.

^(*) From 2004.

^(*) EU aggregate with changing composition.



EUROPEAN ENVIRONMENT AGENCY

The task of the European Environment Agency (EEA) is to provide sound, independent information on the environment.

EEA is a major information source for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public.

Currently, the EEA has 32 member countries – 27 EU Member states, 3 European Economic Area members: Iceland, Norway, Liechtenstein, 1 EU candidate country: Turkey, and Switzerland.

The regulation establishing the EEA was adopted by the European Union in 1990. It came into force in late 1993 immediately after the decision was taken to locate the EEA in Copenhagen.

Work started in earnest in 1994. The regulation also established the European environment information and observation network (EIONET).





European Environment Agency building in Copenhagen

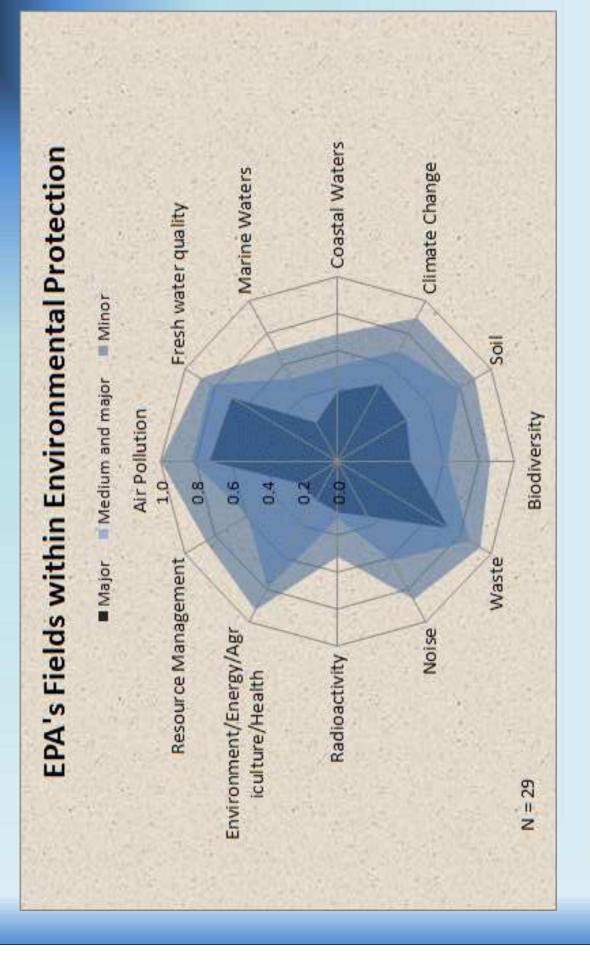
Jacqueline M. McGlade, Director of the EPA

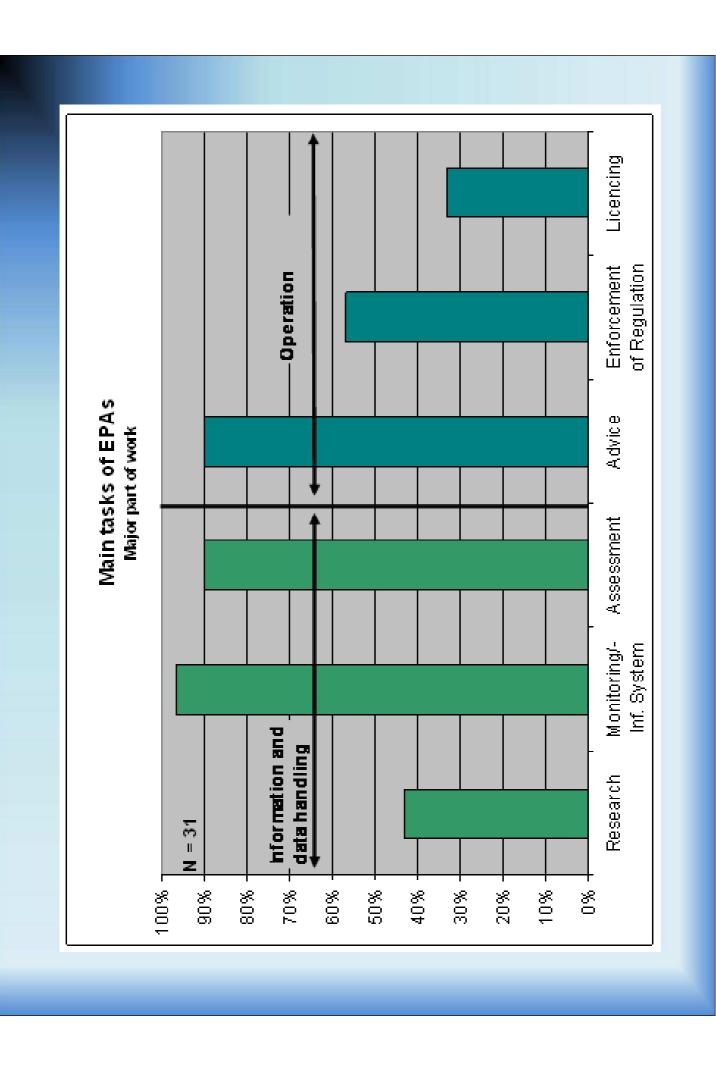
J. McGlade was in was born in UK. She was a leading marine biologist and environmental informatics professor at University College London. Her research focuses on the spatial and nonlinear dynamics of ecosystems, climate change and scenario development.



EPA Network

- EPA Network is an informal grouping of the Heads and Directors of European Environmental Protection Agencies and similar bodies across Europe.
- The Network is a forum for the exchange of views and experiences on issues of common interest to organisations involved in the practical day-to-day implementation of environmental policy.
- The EPA Network was established in 2003 and consists at present of 30 agencies.
- The Network meets twice a year and has established a number of interest groups dealing with issues of interest to member agencies.
- The issues dealt with by the interest groups cover a wide range of areas ranging from environmental policy and how to implement it, to cooperation between agencies on common issues.
- The Network has issued a number of statements on environmental policy.
- It is usually the task of Environmental Protection Agencies within individual countries, with around five exceptions where the ministries have the role, to oversee and implement these obligations and enforce national laws.
- However, as the legal and institutional structures differ remarkably across Europe, so too do the approaches to implementation of environmental legislation.
- Consequently there is a substantial variety in the roles of EPA's and what they are tasked with.





European Topic Centre Land Use and Spatial Information

- The European Topic Centre Land Use and Spatial Information is an international consortium under contract to the European Environment Agency.
- The consortium is led by the Autonomous University of Barcelona and supported by the Spanish Ministry of Environment, Marine and Rural Affaires, the Ministry of Environment of the Government of Andalusia and the Ministry of Environment of the Government of Catalonia from Spain.
- Centre is part of the European Environmental Information and Observation Network (EIONET) and a support to other EIONET partners.
- The activities have an important component on networking with various experts in the member countries on data harmonisation, quality issues and exchange of data and in capacity building.
- Centre assists countries in discussing options for improving national information systems related with the topic "land use and spatial information".

European Topic Centre on Air and Climate Change

The European Topic Centre on Air and Climate Change assists the European Environment Agency in its support of European Union policy in the field of air pollution and climate change. It is a consortium of 14 European institutions, established in 2001 by the EEA, with an annual budget of about 2 millions Euros, with the Netherlands National Institute for Public Health and the Environment as the lead institution.

The Centre reports on the progress of EU environmental policy on air pollutant emissions, air quality, and climate change issues. The Centre participates in relevant reports issued by the EEA, collects data concerning the current state of the environment, and harmonises European air quality monitoring networks and reporting obligations.

The Centre also maintains an online copy of the Model Documentation System which is a catalogue of most of the air quality and air pollution dispersion models developed or used in Europe. The MDS catalogue listings include the name, description and support contacts for each model as well as other pertinent technical details.

EEA INTERNATIONAL COOPERATION

In addition to its 32 member and six cooperating countries (from the Western Balkans), the EEA also cooperates and fosters partnerships with its neighbours and other countries and regions, mostly in the context of the European Neighbourhood Policy:

- Eastern Partnership states: Belarus, Ukraine, Moldova, Armenia, Azerbaijan, Georgia;
- The Union for the Mediterranean states: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestinian Authority, Syria, Tunisia;
- Russia;
- Central Asia states: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Additionally the EEA cooperates with multiple international organizations and the corresponding agencies of the following countries:

- United States of America (Environment Protection Agency);
- Canada (Environment Canada);
- People's Republic of China (State Environmental protection Administration).

Programmes of the European Commission's Directorate-General for the Environment



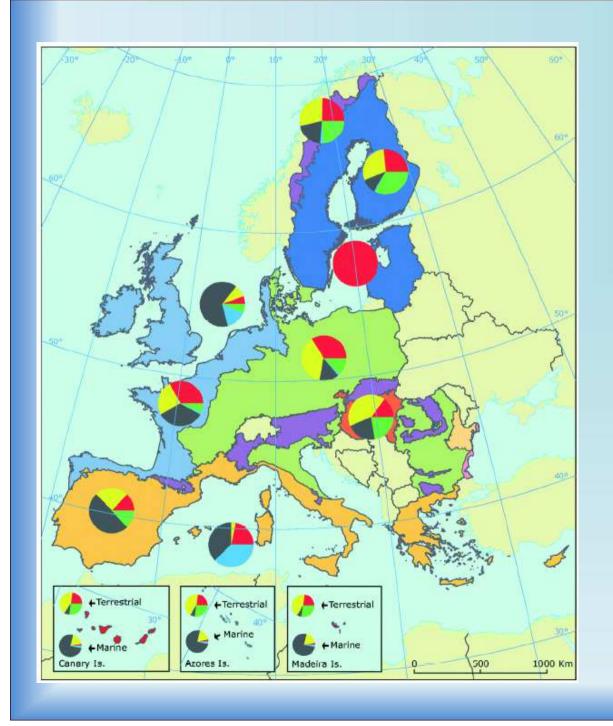






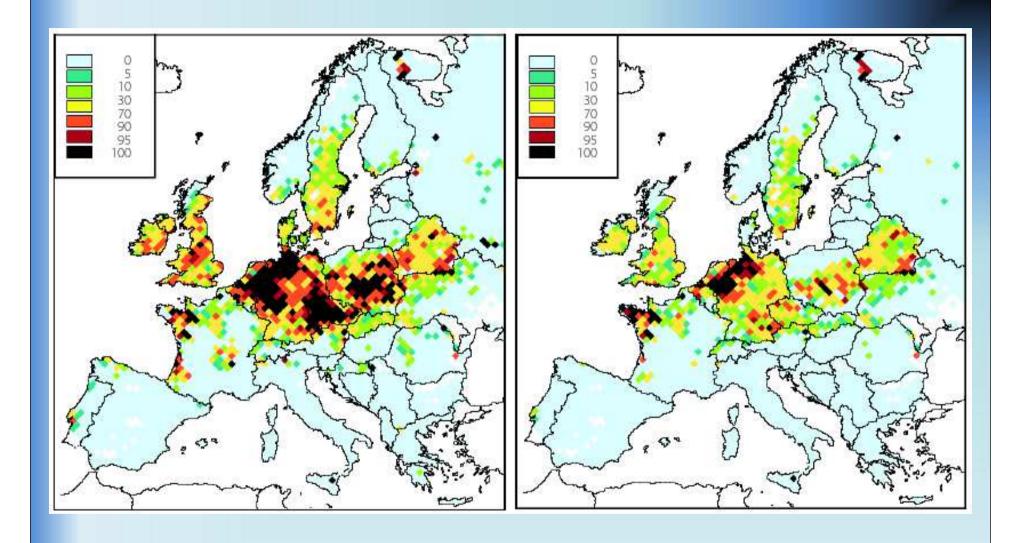




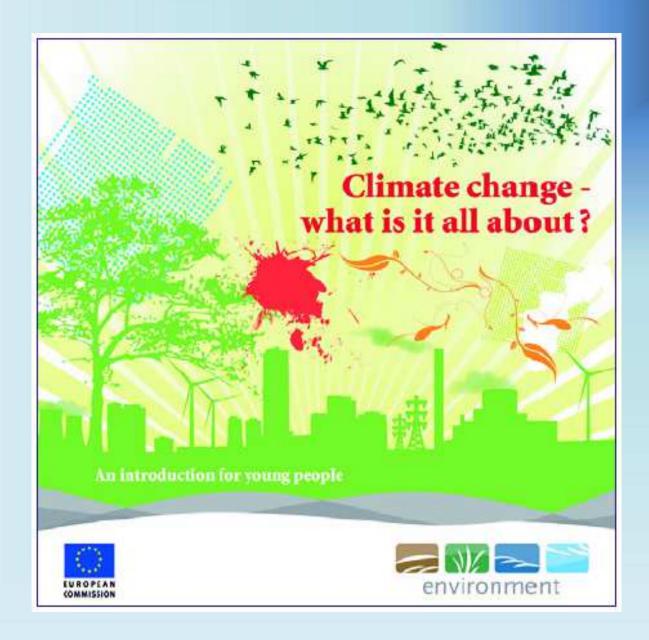


Protection levels of European protected species at different biogeographic regions





Percentage of total ecosystem area receiving nitrogen deposition above the critical loads for eutrophication for the baseline emissions for 2000 (the left panel), the current legislation case of the 'Climate policy' scenario in 2020 (the right panel)



EU brochure for young people about climate change



THANK YOU FOR ATTENTION!