

Environmental and SustainableDevelopment Policy

Tourism Sustainability and Climate Change MPR TSCC

Vilém Pařil

Department of Regional Economics Faculty of Economics and Administration Masaryk University, Brno, Czech Republic

Content

Chapters

- Introduction
- Global Policy
- Economic Perspective
- EU Policy



Environmental policy

- policy aimed at guiding the behaviour of society (in the broadest sense) under the objective of preserving conditions of life on Earth
 - A set of activities aimed at influencing the decision-making of individual actors following the objectives set in the field of the environment
 - the result of knowledge of the adverse effects of human activities on the environment



The origins of international environmental policy

- 1950s/1960s awareness of the problems of environmental degradation
- 1962 Rachel Carson publication Silent Spring
- 1967 Establishment of the Environmental Protection Fund
- 1968 Garett Hardin publication of The Tragedy of the Commons
- 1968 Founding of the Club of Rome
- 1972 United Nations International Conference on Environment in Stockholm



1972 - United Nations International Conference on Environment in Stockholm

- participation of 113 countries
- Consent: economic activity cannot be carried out without regard for the environment
- Contradiction: different views of representatives of developed and developing countries
- The result:
 - Declaration on the Environment
 - Limits of Growth (Club of Rome)



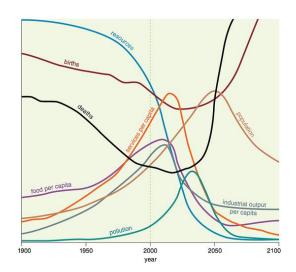
Declaration on the Environment

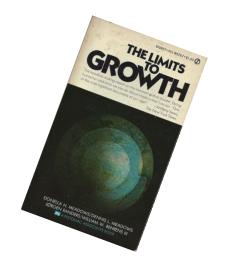
- "Planet Earth, the only one we have, is seriously threatened by us by ourselves, who are unaware of the vulnerability of its life giving systems and are damaging them by our own reckless actions. Chimneys of our factories and power stations spew huge amounts of air of foreign pollutants into our air, we are producing more and more waste, polluting our waters on land and in the seas with all sorts of harmful substances. Consequences of our actions are affecting nature, human health and the planet's life-support systems are threatened on a global scale."



Limits of Growth

- Exponential growth in population, production and demand for food will lead to a decline in resource supplies, increased pollution and ultimately catastrophic reversal
- Significant publicity, stimulating expert debate
- Criticism failure of not including technological advances
- No the term "sustainable development"



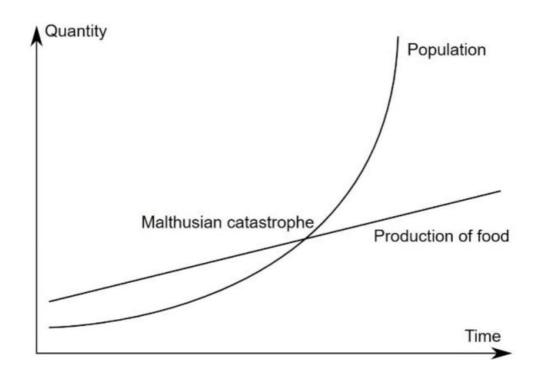




Economic Perspective

Thomas Malthus (1766-1834)

- _ 1798 Essay on the Principle of population: crisis
- impact of technological progress





Economic Perspective

Economic sustainability issues before

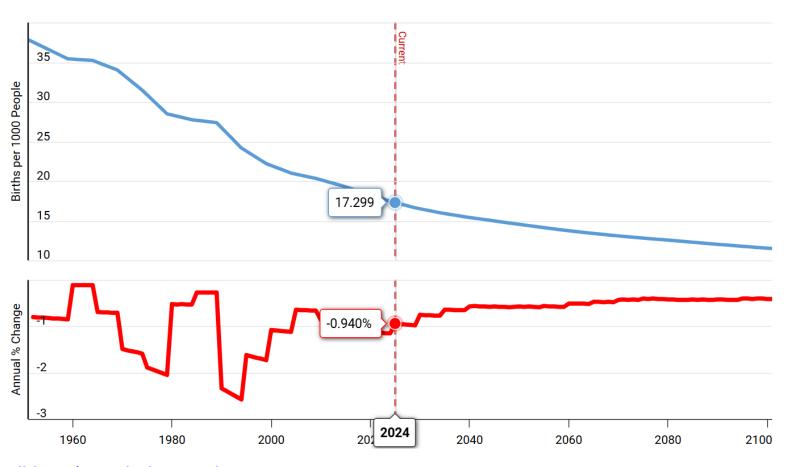
- issues of societal development, economic growth, relationship to the environmentenvironment, natural resources (Nordhaus, Tobin, Solow, Stiglitz)
 - the search for consumption levels and acceptable population growth rates (Solow, 1974)
 - determination of the equilibrium with natural resources, optimal growth of the economy, the optimal level of extraction of natural resources (Stiglitz, 1974)
- seeking answers to questions from a development perspective:
 ECONOMIC x ENVIRONMENTAL x SOCIAL



Economic Perspective

Fertility

- Change 1960 vs. 2100



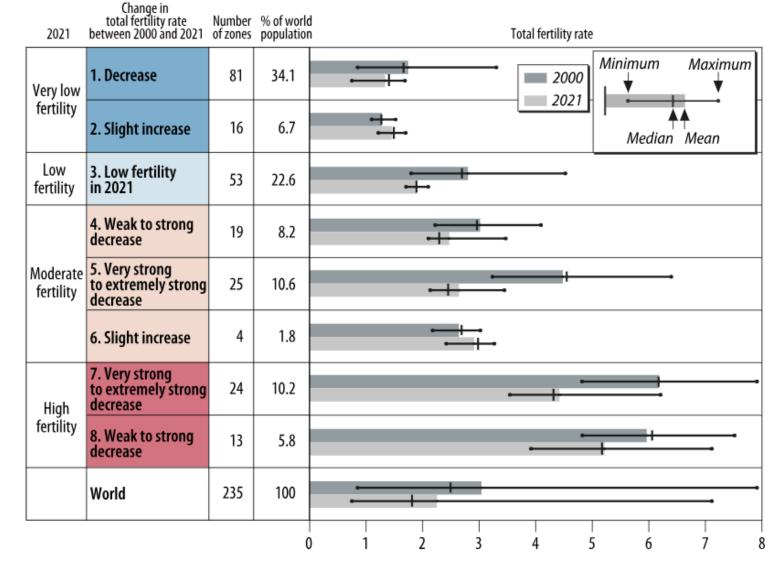
https://www.ined.fr/en/publications/editions/population-andsocieties/mapping-the-massive-global-fertility-decline-over-the-last-20-years/



Economic Perspective

Fertility

- Change 2000 vs. 2021



https://www.ined.fr/en/publications/editions/population-and-societies/mapping-the-massive-global-fertility-decline-over-the-last-20-years/

Histogram of frequencies Number of entities Total fertility rate • < 1.0 • 1.0-1.5 0 1.5-2.1 0 2.1-3.0 Population size 3.0-4.0 40 million 4.0-5.0 Total fertility rate 25 million >5.0 Histogram of frequencies Number of entities Total fertility rate < 1.0 1.0-1.5 0 1.5-2.1 0 2.1-3.0 Population size 3.0-4.0 4.0-5.0 _40 million >5.0 Total fertility rate

Economic Perspective

Change 2000 vs.2021

https://www.ined.fr/en/publica tions/editions/population-andsocieties/mapping-themassive-global-fertilitydecline-over-the-last-20years/

ECON

Traditional political paradigm

- Environmental problems addressed from a technocentric perspective
- Environmental problems as unfortunate side effects of economic growth
- Most environmental problems have solutions (technical progress)
- The interdependent relationship among ecosystems and political, economic, social and cultural systems
- Government policies are reactive
- Sectoral approach to environmental protection
- Environmental policy considered as a separate field 'end-of-pipe' solutions
- A constant emphasis on economic growth



The launch of modern environmental policy

- **1972 Stockholm UN Conference on the Human Environment**
- 1985 Convention for the Protection of the Ozone Layer
- 1987 The so-called Montreal Protocol on Substances that Deplete the Ozone Layer
- 1987 Brundtland Report, Our Common Future
- _ 1988 IPCC
- 1992 UN Conference on Environment and Development (UNCED), also known as the Earth Summit (Rio)
 - Agenda 21
 - Earth Charter
 - United Nations Framework Convention on Climate Change



Sustainable development

Definition

- "meeting the needs of the present without compromising the ability of future generations to meet their own needs."



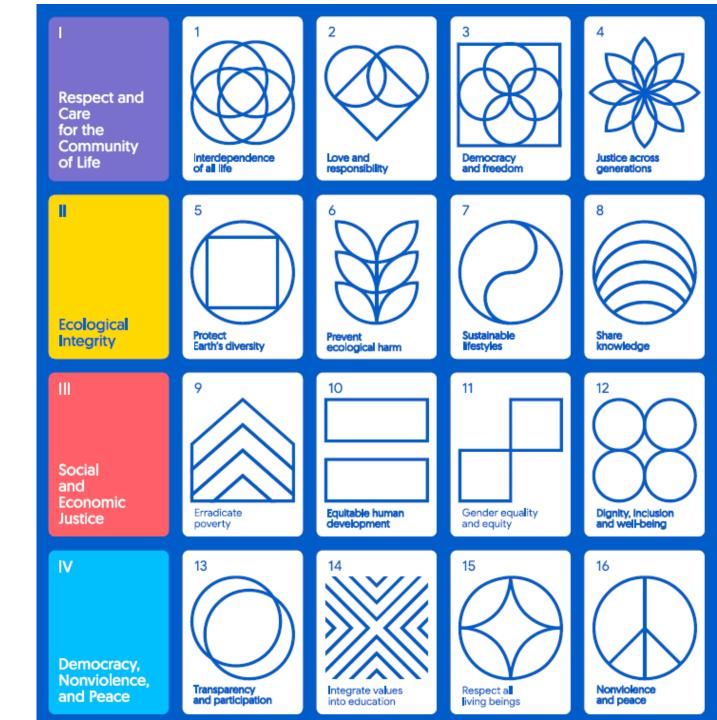
Intergovernmental Panel on Climate Change (IPCC)

- 1988 established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO)
- provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options
- Assessment Reports
- _ 1st 1990
- 2nd 1995
- 3rd 2001
- 4th 2007
- _ 5th 2014
- 6th 2021/2022/2023



Earth Charter

- _1992
- 16 principles



Other international environmental milestones

- 1994 Cairo Summit on Population and Development
- The critical importance of environmental conditions
- 1995 Copenhagen Social Summit
- Signing up to the ideas of sustainable development
- 1997 UN Rio+5 Conference in New York
- Recognition that the environment is deteriorating
- 1997 Kyoto Conference in the context of the UN Framework Convention on climate change
- Kyoto Protocol signed commitment by developed countries to reduce carbon emissions carbon dioxide and other greenhouse gases

(2012 – 5,2%; 2020 - 20% decrease x 1990)

2000 UN Millennium Summit in New York



2000 Millennium Summit in New York

- UN Summit in New York
- Millennium **Development Goals** (MDGs)
- 8 goals adopted defining the global human rights agenda development by 2015 (the Millennium **Development Goals**)



IMPROVE MATERNAL

HEALTH















Other international environmental milestones

- 2002 UN World Summit on Sustainable Development in Johannesburg (Rio+10)
- Implementation Summit
- 2010: UN Millennium Development Goals Summit in New York
- 2012: UN Conference on the Environment in Rio de Janeiro(Rio+20)
- Resulting non-binding document Future We Want- the creation of appropriate green jobs and social inclusion

clean and renewable energy for all sustainable cities food security and organic agriculture sustainable water management, ocean use, disaster preparedness



Other international environmental milestones

- 2015 UN Sustainable Development Summit World Summit in New York
- Agenda adopted 2030
- 17 Sustainable Development Goals adopted
- 169 sub-goals
- A roadmap for the world by the year 2030
- 2015 UN Climate Change Conference in Paris
- Adoption of the Paris Agreement (2030 40%)
- 2017 UN Ocean Conference in New York
- First Global Ocean Conference
- Global agreement to stop marine degradation results
- 2019 UN World Summit on Sustainable Development in New York



History of EU Environmental policy

- 1972 Paris Summit development and approval of action programmes 1st Action Plan (1973 1976)
- 1986 (1987) Single European Act inserted a chapter on the environmental basic principles, objectives
- 1992 (1993) EU Treaty/Maastricht Treaty environmental policy enshrined definition of objectives and targets
- 1994 creation of the Cohesion Fund (Cohesion Fund)
- 1997 (1999) Amsterdam Treaty strengthening of the legal basis
- 2007 (2009) Lisbon Treaty no significant changes emphasis on the fight against climate change consideration of the environment also in the field of energy
- 2019 European Green Deal
- 2021 Fit for 55 targets a 55% decrease in Greenhouse gas (GHG) emissions by 2030



Principles of environmental policy

- Precautionary principle
- Prevention principle
- Polluter pays principle
- Principle of pollution capture at source



EU environmental policy priorities

- fighting climate change and pollution
- conservation of biological diversity
- promoting responsible use of natural resources
- sustainable development



EU action programmes on the environment

- Multiannual programmes setting priorities in the field of the environment
- Drivers of legislative developments in the field of the environment
- 8 action programmes adopted to date
- 2022: 8th Action Programme adopted by 2030
- Other EU Action Plans or strategies
 - Circular Economy Action Plan for a Clean and Competitive Europe
 - EU Biodiversity Strategy 2030
 - the Farmer-to-Consumer Strategy



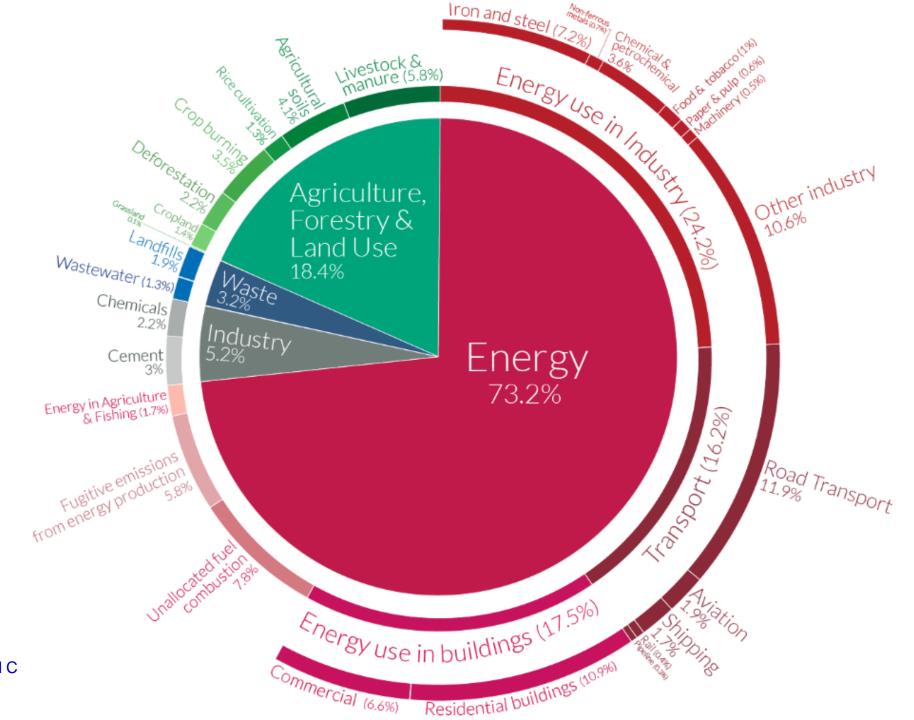
8th Environmental Action Plan 2030

- 6 priority areas:
- achieving the 2030 greenhouse gas reduction target and climate neutrality by 2050
- enhancing adaptive capacity, building resilience and reducing vulnerability to change climate vulnerability
- progress towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to the circular economy
- striving for zero pollution, including air, water and soil, and protecting the health and wellbeing of Europeans
- protecting, conserving and restoring biodiversity and enhancing natural capital
- reducing environmental and climate pressures related to production and consumption (in particular in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade and the food system)



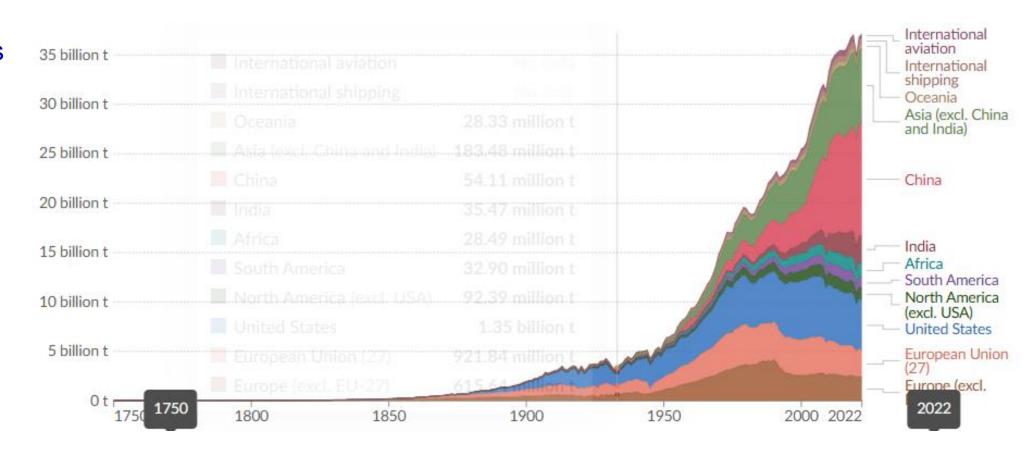
CO₂ emissions

structure



CO₂ emissions

structure





CO₂ emissions

structure





Energy

production

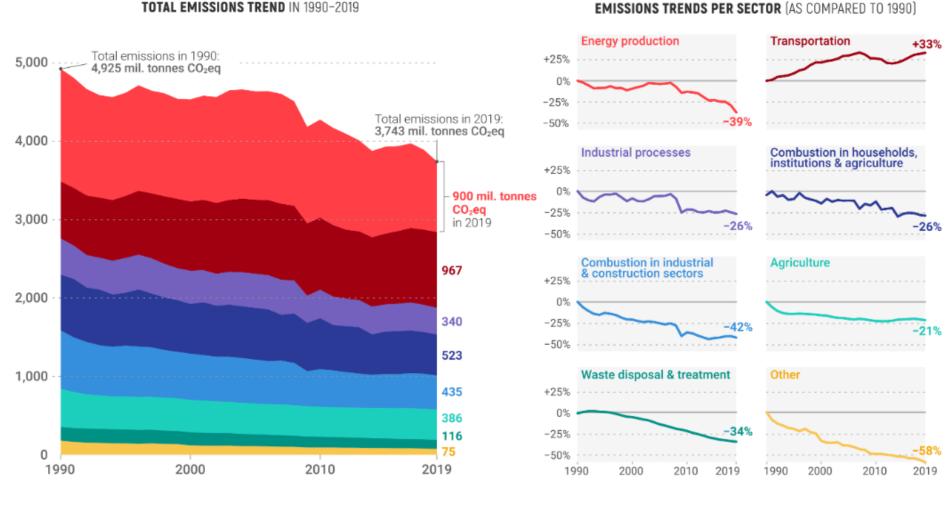
Transportation

Industrial

processes

EU CO2 emissions

- Structure
- Change
- 1990 x 2021



Combustion in industry

& construction sector

Combustion in households,

institutions & agriculture



Waste disposal

& treatment

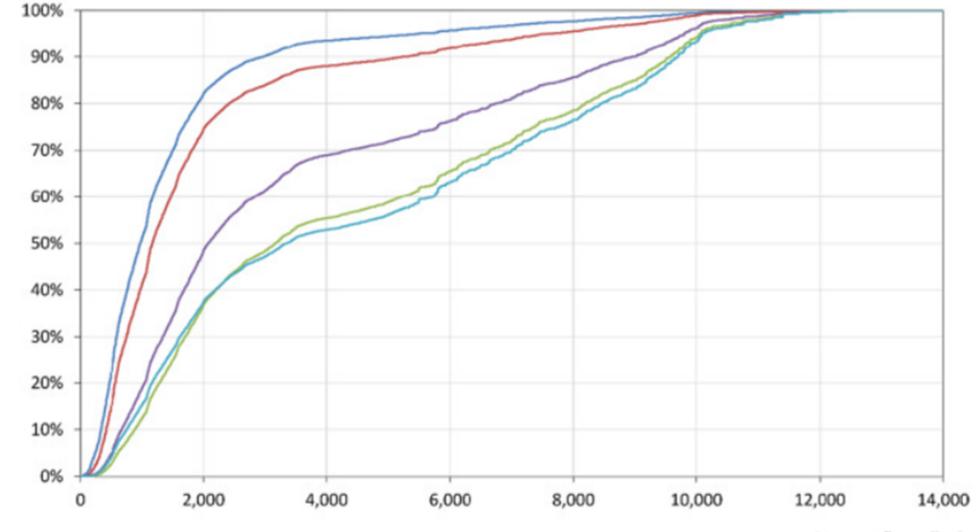
Agriculture

Other

CO₂ emissions

- Flights emissions structure
- Dobruszkes, 2022





Distance flown (km)



CO₂ emissions

- Flights emissions structure
- Dobruszkes, 2022

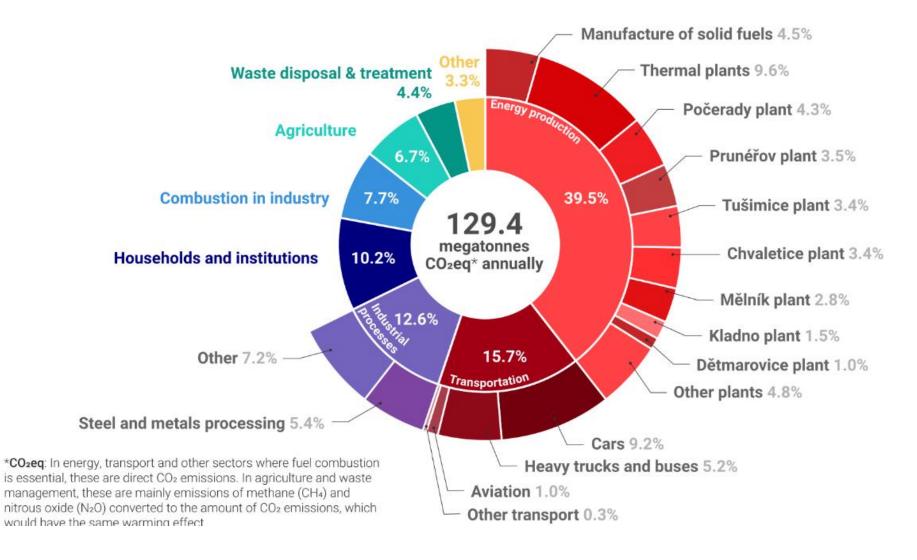
Distance	Flights	Seats	Km flown	Seats-km	Fuel burnt
<200km	4.5%	1.9%	0.4%	0.2%	0.3%
<500km	27.9%	19.9%	6.6%	4.2%	5.9%
<1,000km	56.6%	46.7%	21.6%	15.2%	17.9%
<2,000km	84.0%	76.7%	50.0%	38.9%	39.1%
<3,000km	91.3%	85.3%	62.8%	50.3%	48.6%
<4,000km	93.8%	88.3%	68.6%	55.7%	53.0%
≥4,000km	6.2%	11.7%	31.4%	44.3%	47.0%
≥4,000km	6.2%	11.7%	31.4%	44.3%	47.



Czech **Policy**

Czechia CO2 emissions

Structure





Thank you for your attention

Děkuji za pozornost



