Joint Task Force on environmental Statistics and Indicators
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Climate change policies and indicators in Republic of Macedonia

Katerina Nikolovska
Ministry of Environment and Physical Planning
Macedonian Environmental Information Center
Republic of Macedonia

Climate change policies – Responsibility

Ministry of Environment and Physical Planning	Key governmental body responsible for development of climate change policies
	National Focal Point to the UNFCCC
	Designated National Authority for Kyoto Protocol implementation

Climate change policies – current state

- Party to the United Nations Framework Convention on Climate Change (UNFCCC) as a non-Annex I country, 1997
- Party to the Kyoto Protocol without a quantified emissions limits and reduction commitment (QELRC), 2004
- Acceded to the Copenhagen Accord by submitting a list of non-quantified mitigation actions, 2009
- Climate change issues are incorporated into the Law on Environment, 2005
- The procedure for ratification of the Paris Agreement in the Parliament of the Republic of Macedonia was started in July 2017

Climate change policies – prepared documents

National Communication on Climate Change

- The First (submitted in 2003)
- The Second (submitted in 2008)
- The Third (submitted in 2014)

Biennial update report on climate change

- First (FBUR) (submitted in 2015)
- Second (SBUR) (submitted in 2017)

GHG Inventory

- National inventory report (2006)
- National inventory report (2013)
- National inventory report (2014)

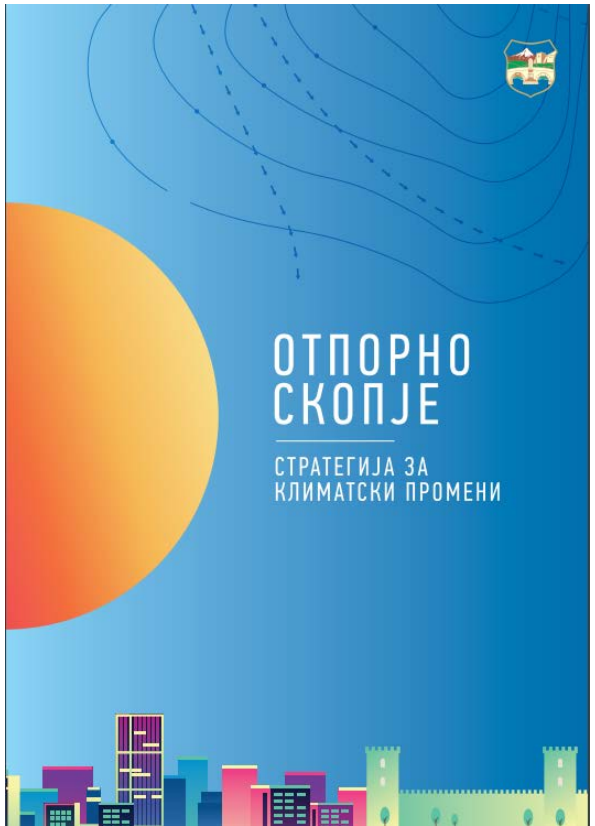
Climate change policies on local level

The United Nations Development Programme (UNDP) and the City of Skopje are working together with stakeholders, residents and experts on the development of Skopje's first ever collaborative strategy to tackle climate change

"Resilient Skopje" – Climate Change Strategy for the City of Skopje

This will be achieved by:

- building-up institutional capacity
- mobilizing knowledge
- transferring international best practices



Public awareness raising

- Several Public awareness raising workshops and campaigns
- Two Projects

This competition invites citizens to submit proposals for innovative projects aimed at fighting climate change and increasing urban resilience by:

- Reducing pollution;
- Reducing emissions from transport;
- Protecting green spaces; or
- Reducing solid waste

The Skopje Green Routes project provides travelers with all the information they need to plan:

- the quickest,
- cheapest and
- most environment-friendly routes to their destination.

Needs for further improvement

For the purpose of strengthening the capacity in climate change management, IPA TAIB 2012-2013 will support the implementation of a project that will contribute to:

- Preparation of long-term strategy for climate change
- Preparation of framework law on climate change and provision of legal grounds for further adoption of the relevant bylaws
- Preparation and adoption of the relevant legal regulations, guidelines and plan concerning the implementation of Decision 280/2004/EC for greenhouse gas emissions monitoring mechanism
- Assessment of administrative needs of all relevant stakeholders in terms of fulfillment of the obligations under the new climate law
- Development of short-term and long-term plan for training

Environmental Indicators preparation approach

Country statistics – produced indicators

1	·AIR QUALITY	23
2	·BIODIVERSITY	4
3	·CLIMATE CHANGE	5
4	·SOIL	4
5	·WASTE	6
6	·WATER	7
7	·AGRICULTURE	4
8	·ENERGY	8
9	·FISHERY	1
10	·TRANSPORT	4
11	·HEALTH	5
12	·TOURISM	5
13	·ENVIRONMENTAL PROTECTION EXPENDITURES	1
		77

TOTAL

Environmental Indicators in compliance with SEIS

Category	Relevance
	Accuracy
	Timeliness and punctuality
	Accessibility
	Clarity
	Comparability

Relevance

All produced indicators are in accordance with national legislation and/or international reporting obligations

Environmental Indicators in compliance with SEIS

Accuracy

The segment on data sources specifies all types and sources of data that should be used in reports preparation

(ex. we collect the data, we use other producers' data and in some cases we estimate the data)

All used data are regularly assessed and validate by the data source

In order to show the real trend of a given indicator, we need to have continuous data for a period of 10 years (in the best situation), or at least for a period of 3 years

We have procedures and guidelines for data quality management

Environmental Indicators in compliance with SEIS

Timeliness and punctuality

Based on the Law on Environment, environmental indicators are prepared (revised) every second year, precisely every even year

The frequency of data updating depends of indicator

(ex. yearly, every second, three, five year .....)

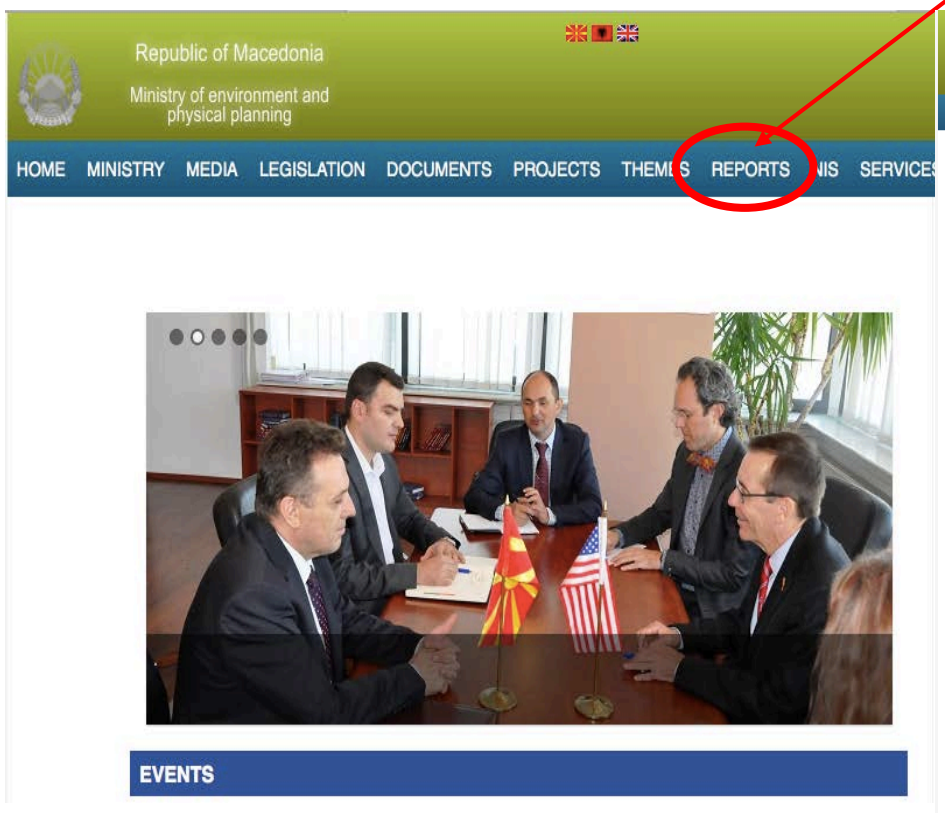
Clear visible last modified date

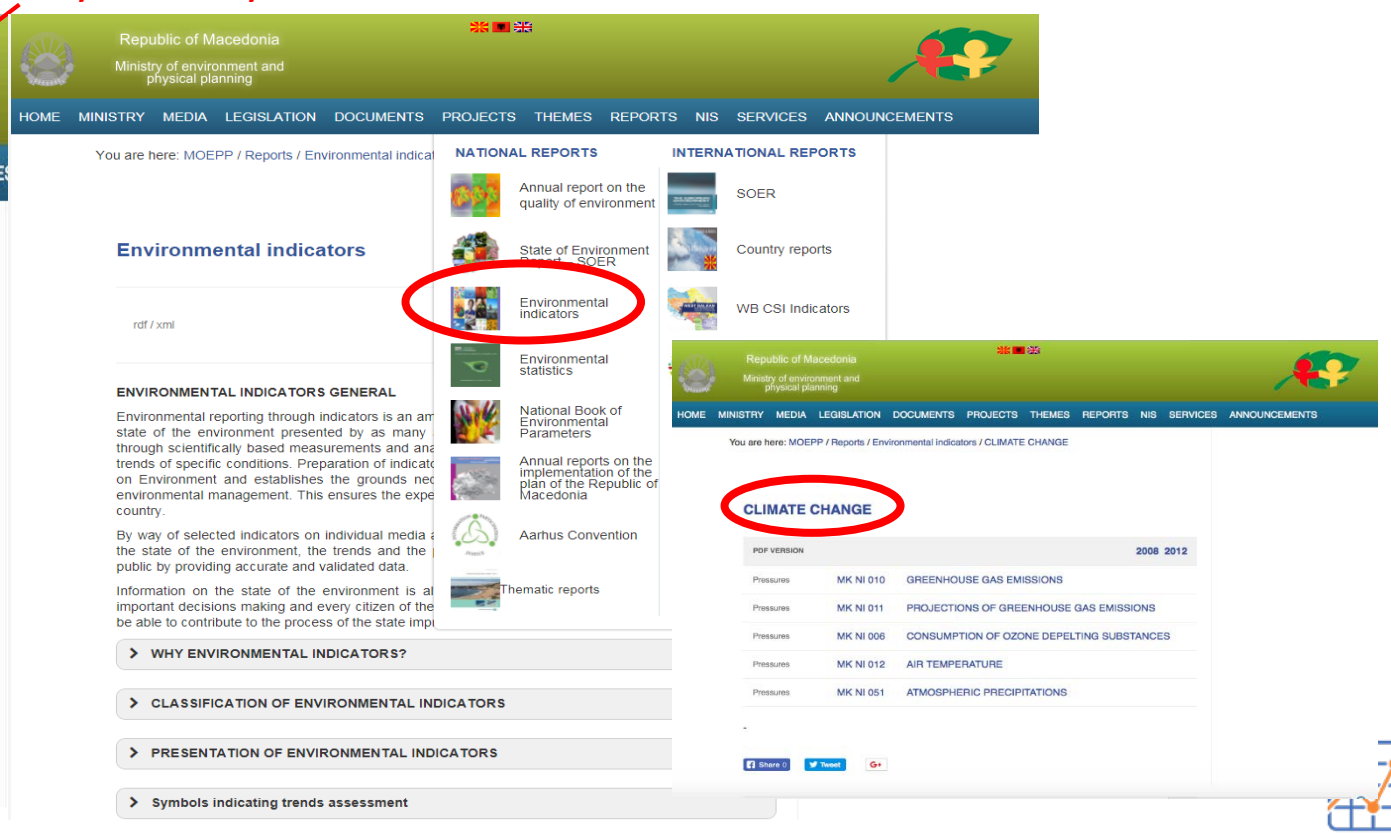
Environmental Indicators in compliance with SEIS

Accessibility

All environmental indicators are easily accessible online on national integrated platform

Easy Accessibility





Environmental Indicators in compliance with SEIS

Clarity

The indicators are presented in detailed fact sheet with:

- name
- trend and categorization symbol
- definition
- units
- key message
- assessment
- methodology
- policy relevance
- target
- reporting obligation
- general metadata

All indicators are available in Macedonian and English

Environmental Indicators in compliance with SEIS

Comparability

Produced indicators are comparable with:

- EEA
- UNECE
- SDI
- Thematic indicators

Environmental Indicators related to climate change

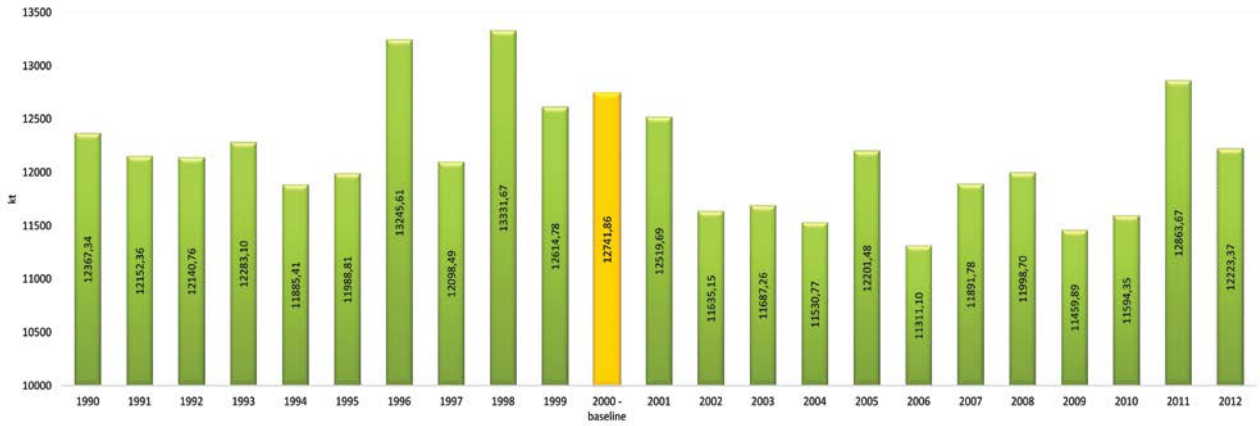
Climate change

- B3. Greenhouse gas emissions

Energy

- G1. Final energy consumption
- G2. Total energy consumption
- G3. Energy intensity
- G4. Renewable energy consumption

B3. Greenhouse gas emissions – MK NI 010

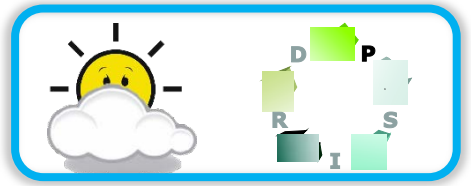


Total GHG emission in kilotons CO2-equivalent (baseline 2000)

Key message

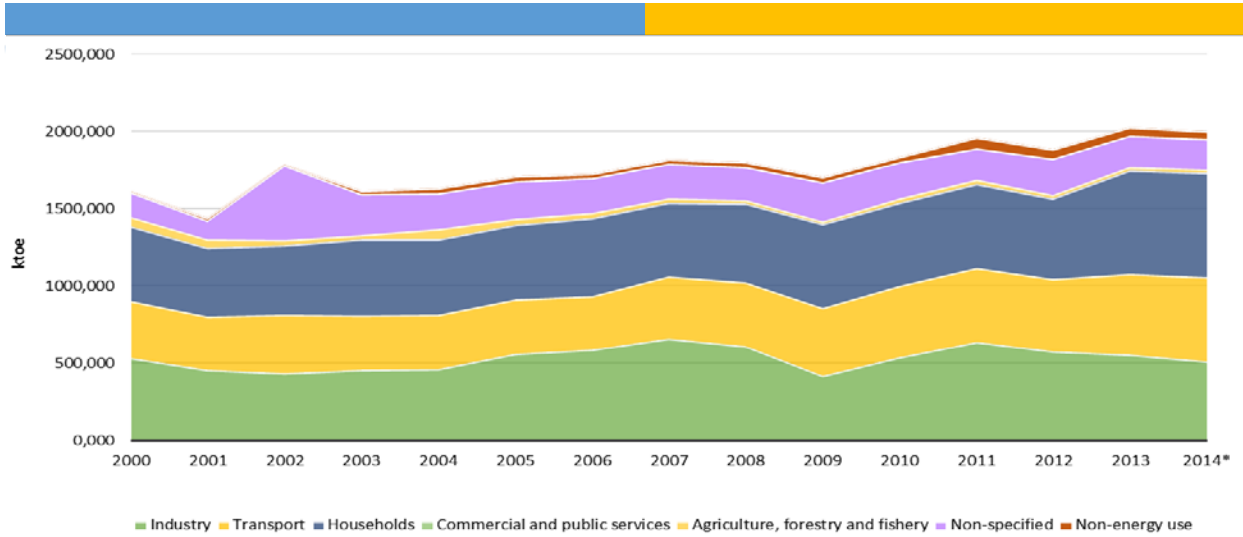
Total emissions throughout the inventory taking period have undergone slight growth from 0.4% compared to 1990. Total national emissions in 2012 amounted 12223.37 Gg of CO2-eq. The five biggest categories with highest sources of emissions in Macedonia are as follows:

- Emissions of CO_2 from energy industries (coal, lignite) (49.5%)
- Emissions of CH_4 from solid waste landfills (11.7%)
- Emissions of CO_2 from mobile sources, including road motor vehicles (11.6%)
- Production and construction industries (8.8%)
- Emissions of CH_4 from enteric fermentation of livestock (3.9%)



- **Legal bases for data collection:**
  Law on Environment, Republic of Macedonia is a Party to the United Nations Framework Convention on Climate Change and to the Kyoto Protocol
- **Data source (s):**
  Macedonia's Third National Communication to UN Framework Convention on Climate Change (UNFCCC), Ministry of Environment and Physical Planning
- **Temporal coverage:**
  1990 - 2012
- **Methodology for indicator calculation:**
  IPPC Methodology for GHG Inventories development
- **International reporting obligation:**
  UNFCCC

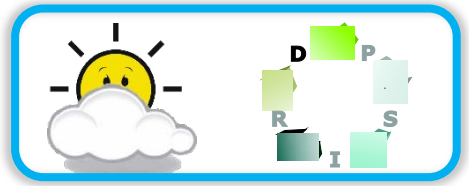
G1. Final energy consumption – MK NI 027



Final energy consumption by sector

Key message

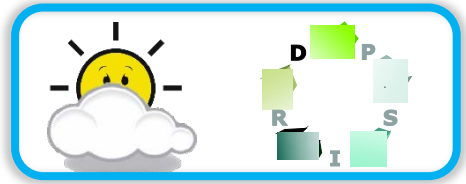
Policies in energy sector should favour measures aimed at rational and efficient energy consumption, especially by households and industry.
During the period between 2000 and 2014, final energy consumption in the Republic of Macedonia increased by 7.96%, with an annual average rate of 6.26%. Non-energy consumption is the sector with the most rapid growth in energy consumption noting an increase by 982%. During the same period, final energy consumption in transport increased by around 47.46%, while final energy consumption in industry decreased by 3.7%. Significant fall in final energy consumption was recorded in the sector agriculture (-62.07%) and households (-6.25%).
The highest share in the total final energy consumption was recorded in the sectors industry with 29.7% and transport with 31.1%.



- **Legal bases for data collection:**
  Law on Energy; Energy Balance of the Republic of Macedonia - annual planning document defining the demands for energy and the possibility for their supply
- **Data source (s):**
  State Statistical Office
- **Temporal coverage:**
  2000 - 2014
- **Methodology for indicator calculation:**
  Regulation on Energy Statistics of the European Parliament and of the Council (Regulation no.1099/2008).
  "Energy Statistics Methodology Eurostat F4, 1998"
  National classification of activities, Rev.2 (Official Gazette of the Republic of Macedonia no. 147/2008)
- **International reporting obligation:**
  Eurostat
  ECE/UN
  IEA/OECD

G4. Renewable energy consumption – MK NI 030

Share of renewable energy in the total energy consumption by energy source (%)



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- **Methodology for indicator calculation:**
  Regulation on Energy Statistics of the European Parliament and of the Council (Regulation no.1099/2008).
  "Energy Statistics Methodology Eurostat F4, 1998"
- **International reporting obligation:**
  Eurostat
  ECE/UN
  IEA/OECD

Key message

Policies in energy sector should favour measures for greater use of renewable energy sources.
Relatively low share of renewable energy in the total energy consumption (10.4% at an average) indicates dominant use of fossile fuels which is unfavourable in terms of both depletion of energy resources and environmental pollution.
Biomass has the highest share of renewable energy in the total energy consumption and ranges from 4.6% to 7.7%, while the lowest share belongs to solar electric energy ranging between 0.0001% and 0.047%. Hydro electricity has a share in the range between 2 and 7.3%.

Thank you for your attention!

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