



SLOVAK
HYDROMETEOROLOGICAL INSTITUTE

NATIONAL INVENTORY SYSTEM OF THE SLOVAK REPUBLIC

TAIEX workshop, Zagreb, October 14, 2015

NATIONAL CIRCUMSTANCES

2

- Name: **The Slovak Republic**
- Established: **1 January 1993**
- Political system: **Parliamentary democracy**
- Area: **49 036 km²**
- Population: **5 410 836**
(as of 31 December 2012)
- Population density: **109/km²**
- Capital: **Bratislava**
- Neighboring countries: **Czech Republic, Poland, Ukraine, Hungary, Austria**

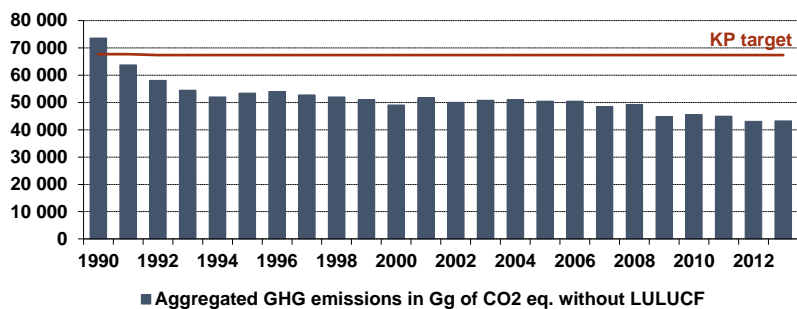


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GHG EMISSIONS TREND

3

Total GHG emissions in 2012: -41.7 % below 1990 level (without LULUCF)

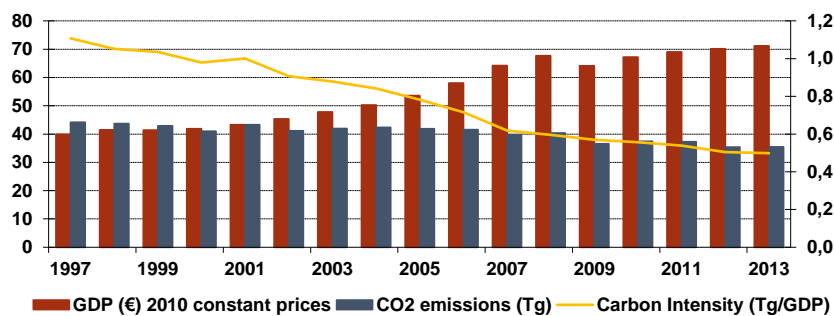


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CO₂ EMISSION INTENSITY

4

Decrease of emission intensity: -68 % (1990 – 2012) and -36 % (2005 – 2012)

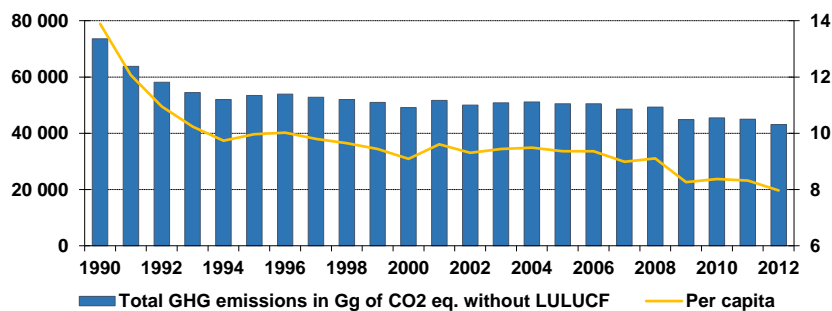


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GHG EMISSIONS per CAPITA

5

Decrease of GHG emissions per capita: -43 % (1990 – 2012)



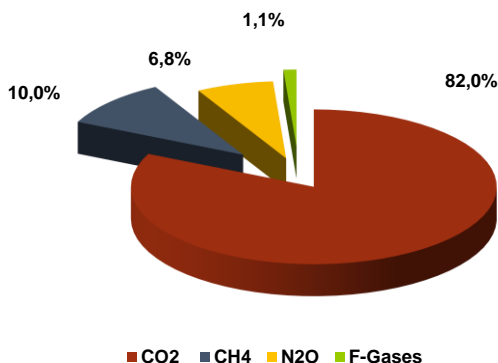
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GHG EMISSIONS by GASES in 2012

6

CO₂ has the highest share of the total GHG emissions

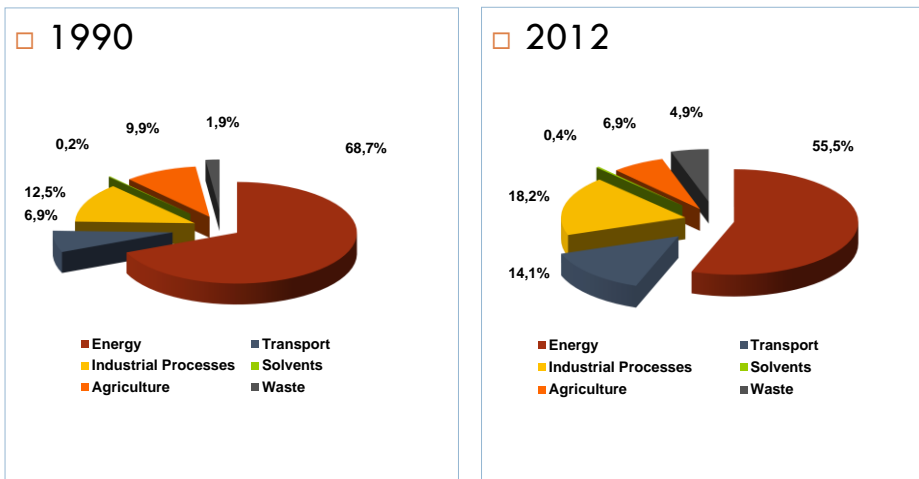
No significant changes in 2012 compared to the base year 1990



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GHG EMISSIONS by SECTORS

7



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POLICIES and MEASURES

8

NATIONAL LEVEL

- **The National Reform Programme:**
 - To meet structural policy objectives of the EU 2020 Strategy
 - The Action Plan with targeted sectoral policies, including climate and energy policy
- **National Sustainable Development Strategy of the Slovak Republic**
 - The environmental part *National Environmental Strategy*

EU LEVEL

- **EU 2020 Strategy for Smart, Sustainable and Inclusive Growth**
- **Climate and Energy Package 2020**
 - Total EU GHG emissions: **-20 % (comp. 1990)**
- **National targets:**
 - ETS emissions: **-21 % (comp. 2005)**
 - Non-ETS emissions: **+13 % (comp. 2005)**

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POLICIES and MEASURES

9

CROSS-SECTORAL PAMs

- **Energy Security Strategy**
- **EU Emissions Trading Scheme**
- **Effort Sharing Decision**
- **Carbon Capture and Storage**
- **Taxation of Energy Products and Electricity**
- **Act on Air Protection – National Emission Ceilings**
- **National Adaptation Strategy**

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SECTORAL PAMs

- **Energy and Transport:**
Action Plan for Energy Efficiency 2011 – 2013
National Action Plan for Biomass Use
National Renewable Energy Action Plan
- **Buildings:** Concept of Energy Efficiency in Buildings in 2010 overlooking to 2020
- **Industry:** F-gases Decision, air conditioning in motor vehicles
- **Agriculture:** Common Agricultural Policy, Nitrate Directive
- **Waste:** Waste Act

SVK NIS DEVELOPMENT (1)

10

- **Before EU (2004):** UNFCCC Annex I Party (after split of former Czechoslovakia)
 - simple NIS structure;
 - Ministry of Environment - NFP to the UNFCCC, main coordination of the commitments;
 - Inventory tasks fulfilled within the yearly approved plan of main tasks of the SHMI (one coordinator);
 - Mainly based on system one expert = one sector (vulnerable);
 - No specific policy in place (except for Act on Air Protection 1991 with the positive indirect impact on GHG emissions).

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SVK NIS DEVELOPMENT (2)

11

- **After EU accession (2004) and before 1KP (2005-2007):**
 - Starting preparation for the EU ETS 1st phase (major interest of the Ministry of Environment);
 - Implementation of EU reporting decision 280/2004/EC – transition period;
 - Successful review of the Initial Report for the First Commitment Period under the KP (2007);
 - NIS formalisation – document published in 2007;
 - Eligibility of the Slovak Republic for 1KP flexible mechanisms in 2008.

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SVK NIS DEVELOPMENT (3)

12

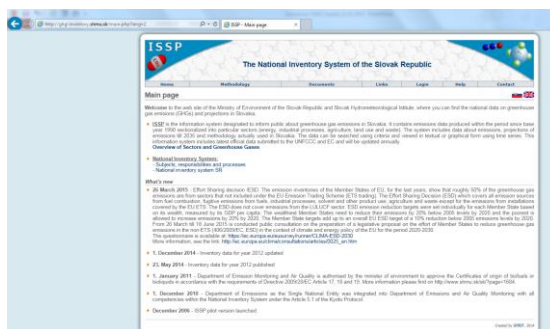
- **In-country review 2011:** under UNFCCC and KP
 - Non-compliance of the SVK NIS;
 - Compliance committee hearings during 2011-2013;
 - A lot of new measures implemented (see unfccc web);
 - Compliance case has initiated interest of the highest management body of the Ministry of Environment;
 - Inter-institutional cooperation enhanced.
- **New EU policy (EU/525/2013), new international commitments (2KP):**
 - Improved SVK NIS fulfil new conditions regarding the new reporting (biennial reports, new IPCC Guidelines);
 - New review tool under the ESD and EU review system under the regulation EU/525/2013.

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OFFICIAL WEBSITE of the SVK NIS

13

<http://ghg-inventory.shmu.sk/main.php?lang=2>



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INSTITUTIONAL ARRANGEMENT (1)

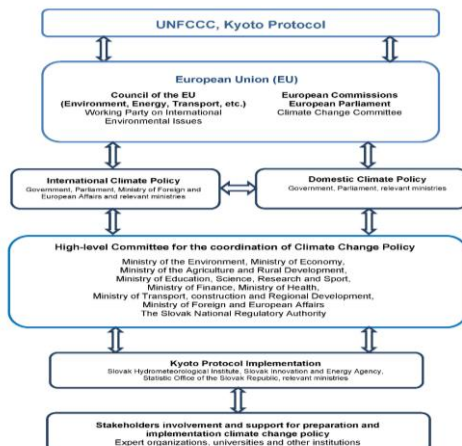
14

- ❑ **Intergovernmental Coordination Committee for climate change policy on the State Secretary level (ICC);**
- ❑ **Two working groups under the ICC on adaptation and on low-carbon development;**
- ❑ **Ministry of the Environment – Department of Climate Change is the National Focal Point (NFP) to the UNFCCC;**
- ❑ **Slovak Hydrometeorological Institute – Single National Entity, independent group under responsibility and coordination of the NFP;**
- ❑ **Experts (focal points) cooperation on involved ministries and institutions;**
- ❑ **External organisations and institutions contracted by the SNE;**
- ❑ **Individual experts only for consultations or special case study.**

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INSTITUTIONAL ARRANGEMENT (2)

15



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INSTITUTIONAL ARRANGEMENT (3)

16

■ Statistical Office of the Slovak Republic

- Bilateral contract in several parts of data delivering;
- e.g. energy balance (top down, bottom up), solvents, households, agricultural statistics, industry, transport;
- Statistics are on individual level (also not published data).

■ Ministry of Transport, Building and Regional Development

- Transport Research Institute;
- Civil Aviation Authority of the Slovak Republic.

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INSTITUTIONAL ARRANGEMENT (3)

17

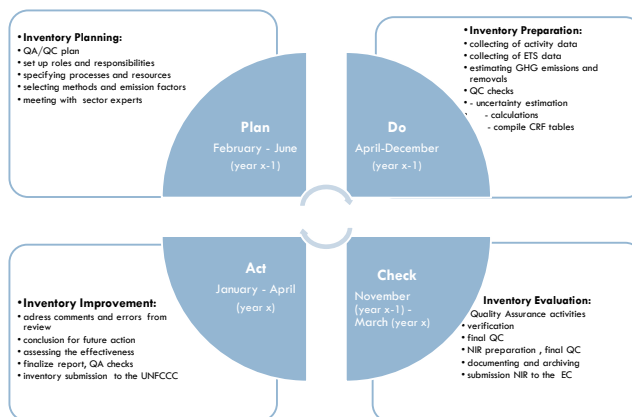
■ Ministry of Agriculture and Rural Development

- National Forest Centre
- Research Institute on Soil Protection
- Research Institute on Grassland
- Research Institute on Animal Feeding
- Central Controlling and Testing Institute in Agriculture
- Geodesy, Cartography and Cadaster Authority of the Slovak Republic

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INVENTORY ARRANGEMENT

18



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QUALITY MANAGEMENT SYSTEM

19

- **QA/QC Plans (update and approve annually):**
 - Internal (SNE level);
 - External (National level).

- **QC Activities (during inventory preparation):**
 - General activities used for documentation, data collection and emission calculation;
 - Special activities to control and maintain data quality.

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QUALITY MANAGEMENT SYSTEM

20

- **QA Activities (after inventory preparation):**
 - Independent review inside SVK NIS
 - Independent review outside SVK NIS (EU)
 - Public consultation
- **Verification and approval**
 - NFP
- **Improvement plans**
 - Updated annually based on EU findings, review recommendations, regularly planned improvements

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STRENGTHS

21

- **Higher Governmental support (legislative background mostly driven by the EU legislation);**
- **More flexibility (more experts involved) = lower vulnerability;**
- **More capacity (institutions involved) = sustainable system;**
- **Better knowledge (research institutions);**
- **Higher sharing of responsibility among ministries.**

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WEAKNESSES

22

- **Different level of engagement of ministries and knowledge of the expert institutions;**
- **Difficult coordination, very challenging;**
- **More trainings are necessary (mostly on procedural level);**
- **Not all institutions are located in the same city;**
- **Budgetary limitation, no specific allocation for the SVK NIS;**
- **Further improvement needed.**

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FURTHER INFORMATION

23

- **The Sixth National Communication of the Slovak Republic**
[http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/svk_6nc_2013\[1\].pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/svk_6nc_2013[1].pdf)
- **The First Biennial Report of the Slovak Republic**
http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/svk_br1_2013.pdf
- **The National Inventory System of the Slovak Republic for the Greenhouse Gases:** <http://ghg-inventory.shmu.sk/>
- **Action Plan for Energy Efficiency 2011-2013:** <https://www.siea.sk/>
- **National Action Plan for Biomass Use:** www.mpsr.sk/download.php?fID=1711
- **National Renewable Energy Action Plan:** www.economy.gov.sk
- **National Adaptation Strategy:** <http://www.minzp.sk/sekcie/temy-oblasti/ovzdušie/politika-zmeny-klimy/aktualne-temy/adaptacia.html>

Thank you for your attention