

# Monitoring of Environmental Performance, Sustainable Development Indicators

Gábor Valkó – [Gabor.Valko@ksh.hu](mailto:Gabor.Valko@ksh.hu)

Hungarian Central Statistical Office  
Rural Development, Agriculture and Environment Statistics  
Department

# Institutions involved

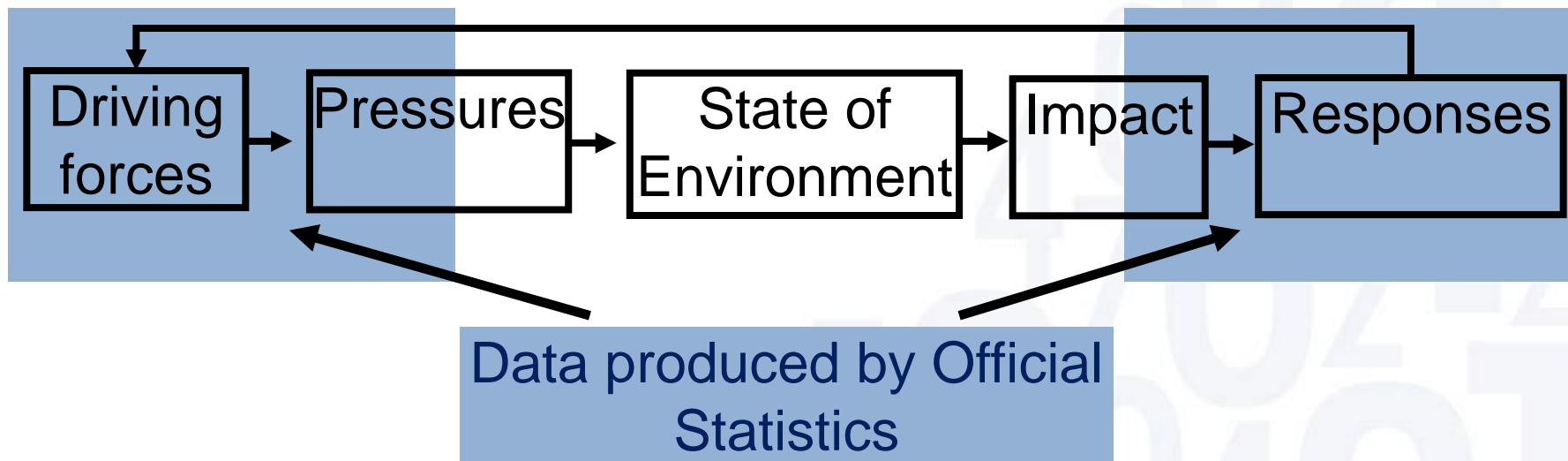
- Statistical office
  - Ministries
  - Authorities
  - Research institutions
- 
- Both statistical and administrative data
  - Cooperation agreements

# Data Sources

- Statistical data collection
  - Administrative data
  - Measurements (e.g. quality)
  - Estimates
- 
- Different sources, methods and producers of data



# Official Statistics and Environment



NSI role in  
coordination  
data delivery  
compilation of accounts

# Statistical data collections in HCSO

- Public utilities (waste, water, waste water)  
– supply data from 50's
- Environmental pressures (waste, waste water) – volume from 70's
- Environmental expenditure – from 90's



KÖZPONTI  
STATISZTIKAI  
HIVATAL

# Hierarchy of information

Key indicators,  
aggregated  
indices

Indicators

Analysed data,  
accounts

Primary data

# Statistical areas

- Environmental conditions, quality
- Environmental resources and their use
- Environmental protection and management
- Residuals
- Environmental relations (agriculture, transport, health...)
- Energy

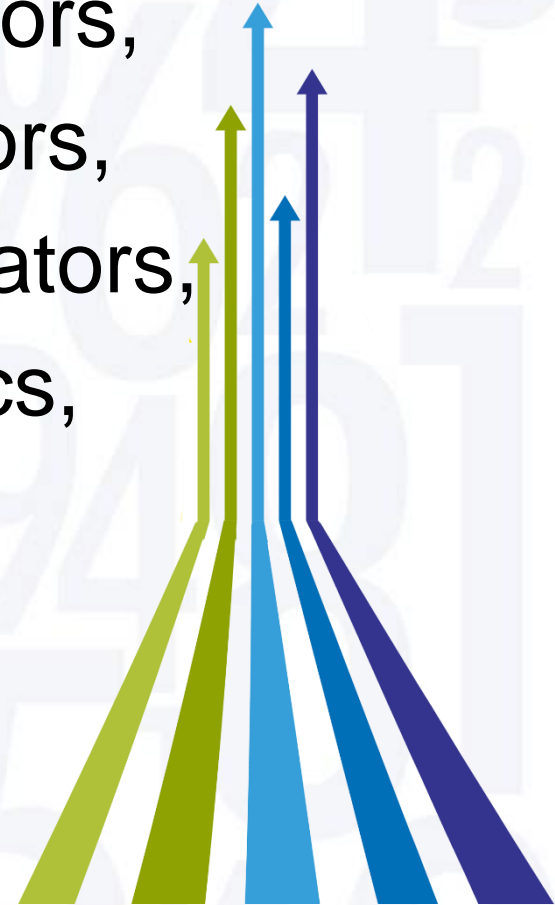
# Development of environmental accounts in Hungary

Natural resources accounts	Physical and monetary Supply-Use tables (NAMEA)	Economic environmental accounts
Forest accounts	Economy wide material flow accounts	Environmental taxes
Land accounts	Air emission accounts	Environmental protection expenditure accounts
Water assets accounts	Energy accounts	Environmental goods and services
Subsoil asset accounts	Waste accounts	Resources use and management expenditure accounts
Fish and fisheries accounts	Water emission accounts	Other economic instruments
Eco-systems accounts	Water flow accounts	Natural and technological disasters expenditure
	Use of raw materials accounts	



# Environment related indicators

- Environmental pressure indicators,
- Sectoral environmental indicators,
- Sustainable development indicators,
- Climate change related statistics,
- „Well-being” indicators.



# Indicators of Sustainable Development for Hungary

- EU SDI; National Strategy; SDG
- SDI Hungary
  - 2004 first issue
  - 2006 main indicators (EU SDI)
  - 2008 all indicators (EU SDI)
  - 2010 additional indicators with national interest
  - 2012 different structure
  - 2014 evaluation
  - 2016 link to strategy





# Indicators of Sustainable Development for Hungary

- Structure
  - Human capital
  - Social capital
  - Natural resources
  - Economic resources
- Analysis
  - main indicator,
  - relevance, commentary, international outlook, details, definitions,
  - further information (online tables).

# Indicators of Sustainable Development for Hungary

- Evaluation of indicators



- Type 1: a target value to be achieved by a particular year is set for the indicator.
- Type 2: a target value with no target date is set for the indicator.
- Type 3: no target value is set for the indicator, but the desirable direction of change can be determined.

# Indicators of Sustainable Development for Hungary

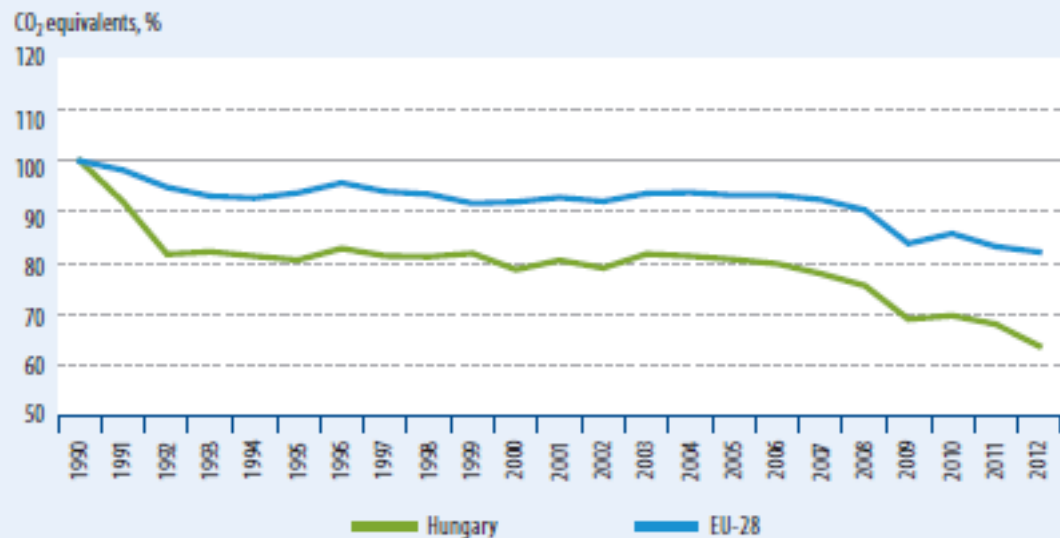
## Greenhouse gas (GHG) emissions

Keywords: greenhouse gas emissions, carbon dioxide (CO<sub>2</sub>) emissions, transport, road transport

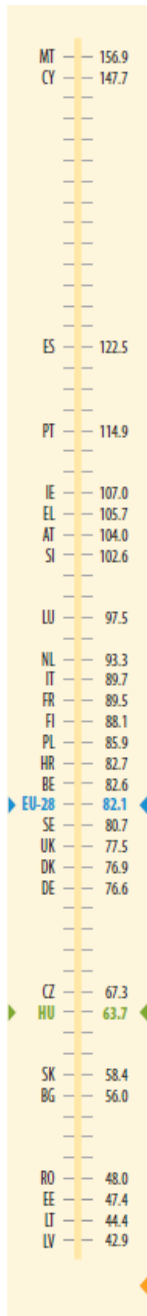


Figure 1.1.1. Greenhouse gas emissions

(1990=100.0)



*GHG emissions in Hungary are lower than emissions in EU-28 countries compared to 1990.*



*Greenhouse gas emissions in CO<sub>2</sub> equivalents in the European Union, 2012 (1990=100.0), %*

# Methodological development

- With the support of EU Grants
  - environmental accounts
- Data collection
  - simplified, electronic
- Administrative data
  - extended use

# New areas

- Climate change related statistics
- Natural capital accounts
- Ecosystem accounts
- Circular Economy
- GIS & Statistics
  
- NSI – partial data but access to micro data

# History of dissemination

- 1986 – „State and Protection of Environment”
- 1996-2005 Yearbook of Environmental Statistics
- 2000-2006 – „Environmental indicators in OECD Countries”
- 2003, 2006 „Environmental pressure indicators in Hungary”



# Main publications

- Indicators of Sustainable Development (2004-)
- Environmental Report (2006-)



# Main publications

- Environmental expenditure and environmental industry
- Air emission accounts
- Statistical yearbook, pocketbook
- Online tables (STADAT)
- Dissemination database