

Green Deal Indicators

the role of national statistics



Part I:

What IS statistics and what NOT?

National and European Statistics

Part II:

From data needs to the available quality data

Part III:

Green Deal and monitoring framework Climate Change Indicators in Slovenia



Part I

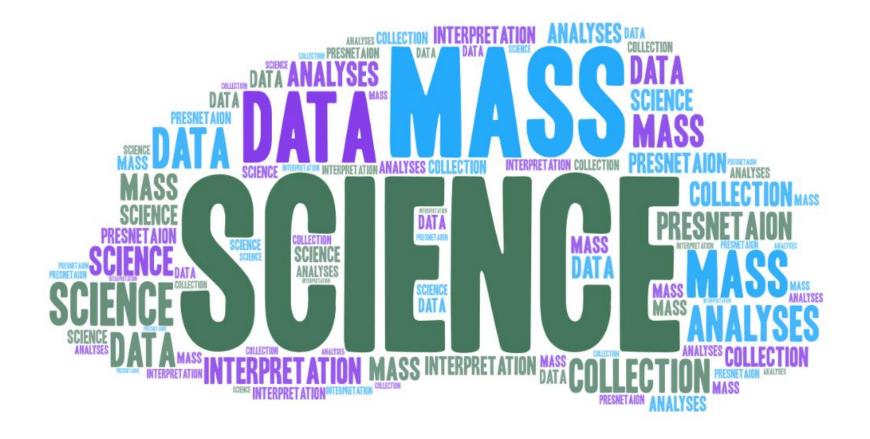


What is statistics?

- Statistics is a science that <u>quantitatively</u> studies **mass phenomena** and discovers <u>qualitative</u> connections between them.
- Statistics is the practice or science of **collecting** and **analysing** numerical data in **large quantities**, especially for the purpose of <u>inferring proportions in a whole</u> from those in a <u>representative sample</u>.
- Statistics is a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data.



What is statistics?





What is NOT statistics?











Statistical office of the Republic of Slovenia

- The main producer and coordinator of national statistics in Slovenia.
- Independent Government Service led by Director-General, Mr. Tomaž Smrekar.
- Legal basis: National Statistics Act, medium-term and annual programmes of statistical surveys.



Our vision

The vision of the Slovene national statistics is a society in which citizens, enterprises and the government use **credible information** in making **decisions**.



Our mission

The mission of the Slovene national statistics is to provide **high-quality data** on the situation and trends in the **economic**, **demographic** and **social** fields and in the field of the **environment** and **natural resources**.



System of national statistics

Statistical Office of the Republic of Slovenia

- Two authorized producers:
 - Bank of Slovenia
 - National Institute of Public Health



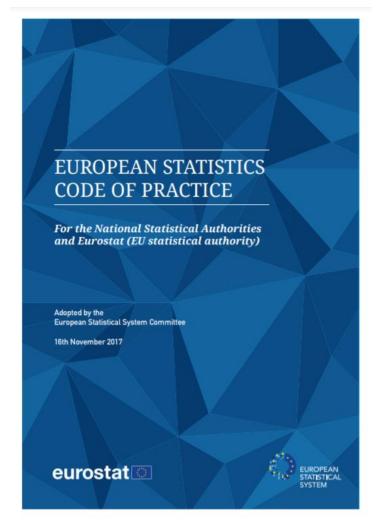
The European Statistical System

• Partnership between Eurostat — the Statistical Office of the European Union — and national statistical institutes and other national authorities responsible for the development, production and dissemination of European statistics.

• European Statistical System Committee



Data quality and Code of Practice





Data quality and Code of Practice

• SURS was **peer reviewed** in 2007 and in 2014

• Internal review of compliance with the Code of Practice in 2020

• Next peer review in 2023



Time for a quiz







Time for a quiz

DIMESA Directors' group of Sectoral and Environmental Statistics and Accounts

DGAS Directors' group of agricultural statistics

BSDG Business statistics directors' group

DSS Directors' group of social statistics

DMES Directors of macroeconomic statistics



Part II



Why do we need data?

- Decisions (personal and professional) consequences
- Planning monitoring
- Systems interdependences

 Consequences immediately and in the future - impact on present and future generations



Production of official statistics

Generic Statistical Business Process Model (GSBPM) = set of business processes required to produce official statistics



Generic Statistical Business Process Model

- 1. Needs and requirements analysis
- 2. Planning and preparation of a statistical survey
- 3. Selection of units
- 4. Data collecting
- 5. Statistical data processing
- 6. Data analysis
- 7. Dissemination and storage of statistical data
- 8. Documentation and evaluation



Before data collecting (GSBPM 1-3)

- 1. Needs and requirements analysis good and continuous collaboration with data users; role of statistical advisory committees
- 2. Planning and preparation of a statistical survey content, variables, and results; target population, data sources and method of data collection; annual programme of statistical surveys
- 3. Selection of units



Data collecting and ... (GSBPM 4-6)

- 4. Data collecting
 - direct (questionnaires, interviews)
 - administrative sources
 - Big data
 - combination

5. & 6. Data processing and data analysis

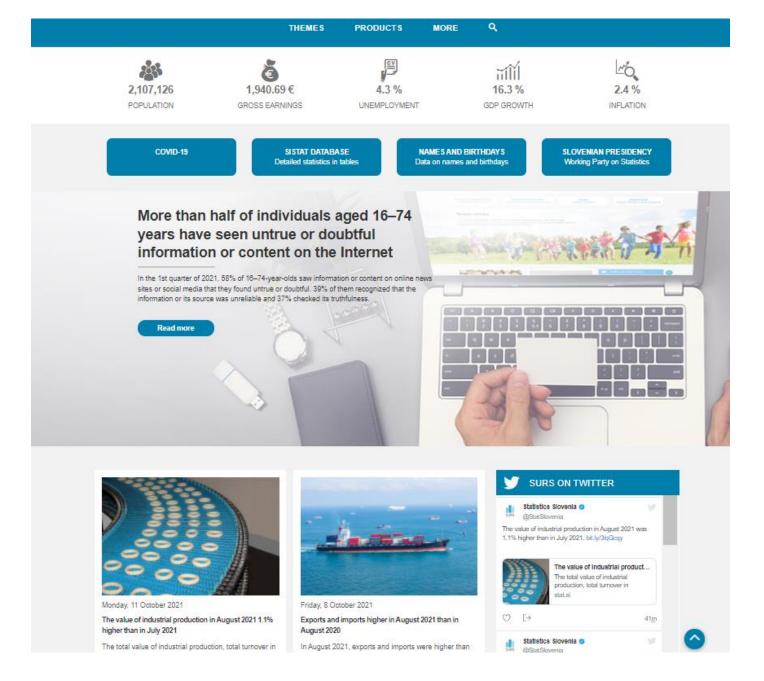
Data dissemination and... (GSBPM 7-8)

7. Dissemination and storage of statistical data

8. Documentation and evaluation



https://www.stat.si/StatWeb/en

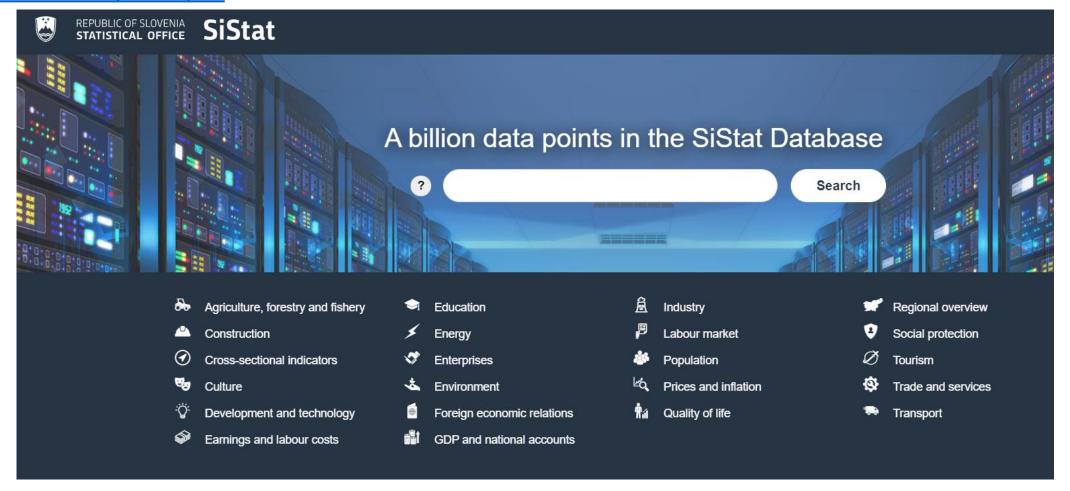




REPUBLIC OF SLOVENIA STATISTICAL OFFICE	THEMES	PR	ODUCTS	MORE	Q		
₽-	Agriculture, Forestry and Fishery	<	Enterprises			Řá	Quality of Life
<u> </u>	Construction	*	Environment			<u>R</u>	Regional Overview
*	COVID-19	•	Foreign Econo	mic Relations		0	Social Protection
₩,	Culture	a t	GDP and Natio	onal Accounts		Ø	Tourism
*	Development and Technology	Â	Industry			\$	Trade and Services
\$	Earnings and Labour Cost	F	Labour Market			-	Transport
	Education	**	Population		i	o'	European data
*	Energy	μQ	Prices and Infl	ation			



https://pxweb.stat.si/SiStat/en





Web applications
 Names and birthdays
 https://www.stat.si/ImenaRojstva/en/#/names/topNames
 STAGE geospatial data
 https://gis.stat.si/#lang=en
 SDG indicators,....
 https://www.stat.si/Pages/en/goals

Social media



Part III



Green Deal and monitoring framework

 Monitoring framework for GD with headline indicators is in preparation (EC)

- WS for stakeholders, 8 October 2021 (3 documents):
 - Draft 8EAP (GD) indicator set
 - Headline indicators
 - Pool indicators



Green Deal and monitoring framework

- 8 objectives
- 46 indicators
 - proposals for headline indicators (16)

Pool indicators for more complete assessment



Climate change mitigation

GHG emissions
Soil organic carbon or net LULUCF
(land use, land-use change and forestry) emissions

Climate change adaptation

Climate related economic losses

Risk to droughts



Circular economy

Material footprint (Raw Material Consumption)

Zero pollution

Premature deaths/Years of Life Lost due to PM2.5



Biodiversity

Common birds

Land take

Reducing environmental and climate change pressures

Energy consumption per capita

Circular material use

Share of buses and trains in total passenger transport

Organic farming



Enabling framework

Share of green taxes

Eco-innovation index

Living well within planetary boundaries – Regenerative economy

Consumption footprint

Green economy (Employment and Gross Added Value)

GD headline indicators - available within ESS

8 objectives

46 indicators

proposals for headline indicators (16)

7 available within ESS



GD headline indicators - available within ESS

7 available headline indicators within ESS:

Material footprint (Raw Material Consumption)

Energy consumption per capita

Circular material use

Share of buses and trains in total passenger transport

Organic farming

Share of green taxes

Green economy



Climate Change Indicators

Case of good cooperation btw:

Statistical Office of the Republic of Slovenia (SURS)
Statistical data producer

Slovene Environmental Agency (SEA)
GHG inventory producer



SURS - statistical data producer

- Annual and monthly statistical surveys
- Administrative data:
 - energy: Ministry of Infrastructure, Energy Directorate,
 - agriculture: Ministry of Agriculture, Forestry and Food, Agency for Agriculture Market and Rural Development, The Administration for Food Safety, Veterinary and Plant Protection,...
 - waste: Ministry of the Environment
- Data modelling (energy consumption in households by end use)



SEA – GHG inventory producer

- Primary source of data for GHG inventory: statistical data (energy, agriculture, waste, transport, industry).
- Other data sources:
 - Slovenian Infrastructure Agency: density of transport,
 - ETS data,
 - Slovenian Forestry Institute: forestry data,
 - various sources: land use data,
 - SEA's environmental database.



Co-operation loop

- Data flow in both ways.
- In the process of emission calculation SEA estimates data on fuel use in agriculture and forestry.
- Estimations provided to SURS data included in the energy balance.
- SURS involved in inventory reviews data consistency and improvements.



Climate Change Statistics

SURS	SURS in cooperation with SEA	SEA
Total energy intensity of production activities	Total primary energy supply	Occurrence of extreme weather events
Energy consumption by households / capita	Share of fossil fuels in total primary energy supply	
Proportion of population living in dwellings with air conditioners or air conditioning	Renewable energy share in the total final energy consumption	
Proportion of agricultural area under productive and sustainable agriculture		



Climate Change Statistics

SURS	SEA in cooperation with SURS	SEA
	Emission intensity of agricultural commodities	
	Total GHG emissions	
	CO ₂ emissions from fuel combustion	
	GHG emissions from land use	
	Total GHG emissions of production activities	
	GHG emission intensity of production activities	
	Direct GHG emissions from households	
	Level of water stress	
	CO ₂ intensity of energy for the economy	



Recommendations

- Be in touch with your national statistical office
- Use official statistics
- Express new data needs early enough
- When creating new policy think about monitoring of its implementation
- Look for solutions that will allow you to use data for multiple purposes
 - administrative and statistical



We estimate that one in three Slovenian witches flies on an imported broom.





Useful links

- https://www.stat.si/statweb
- https://ec.europa.eu/eurostat
- https://ec.europa.eu/environment/news/stakeholder-workshop-8th-eap-monitoring-framework-2021-09-21 en
- https://ec.europa.eu/environment/pdf/8EAP/2021/Draft_8EAP_headline_i ndicator_fiches.pdf
- https://ec.europa.eu/environment/pdf/8EAP/2021/Draft_8EAP_pool_indic ator_fiches.pdf
- https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7?t=1528447068000