

INTRODUCTION INTO WORKSHOP ON FINAL ENERGY CONSUMPTION STATISTICS

Training on energy statistics
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Alenka Kinderman Lončarević

Introduction (1):

Energy statistics is very complex and specific kind of statistics: it is statistics of all legal and private persons in a country

Unified approach to the energy statistics activities are needed in because of various reasons:

- it help policy makers in decision making process based on accurate, quality and consistent data;
- it reduces administrative workload in data collection, compilation and dissemination;
- it reduces appearance of errors and differences between similar datasets;
- it helps general public to understand energy situation in their country.

Unified approach enables monitoring, evaluation and verification of current situation and trends in energy sector at local, national, regional and global level!!!

Introduction (2):

Institutional framework for energy statistics ensures sustainability of producing energy statistics over time;

An effective energy statistics system requires the existence of strong legal framework complemented by appropriate institutional arrangements between all relevant stakeholders.

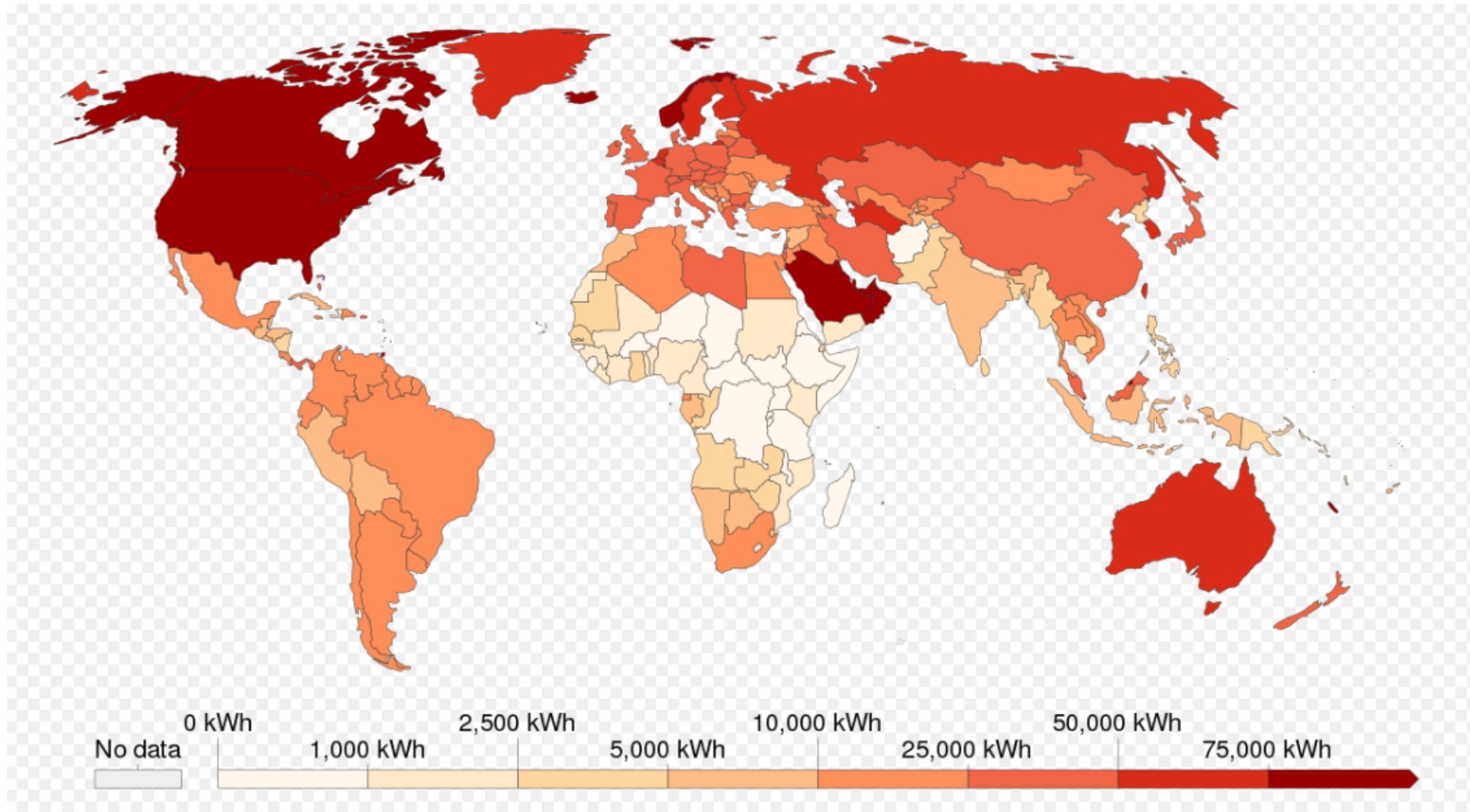
The **legal framework** is a set of laws and regulations that specify the rights and responsibilities of organization that collect, produce, disseminate or use statistics or statistics outputs.

The **institutional arrangements is** organisation of the work on energy statistics among the relevant energy statistics stakeholders (coordination, division of work, data sharing, planning of the new activities, consultancies).

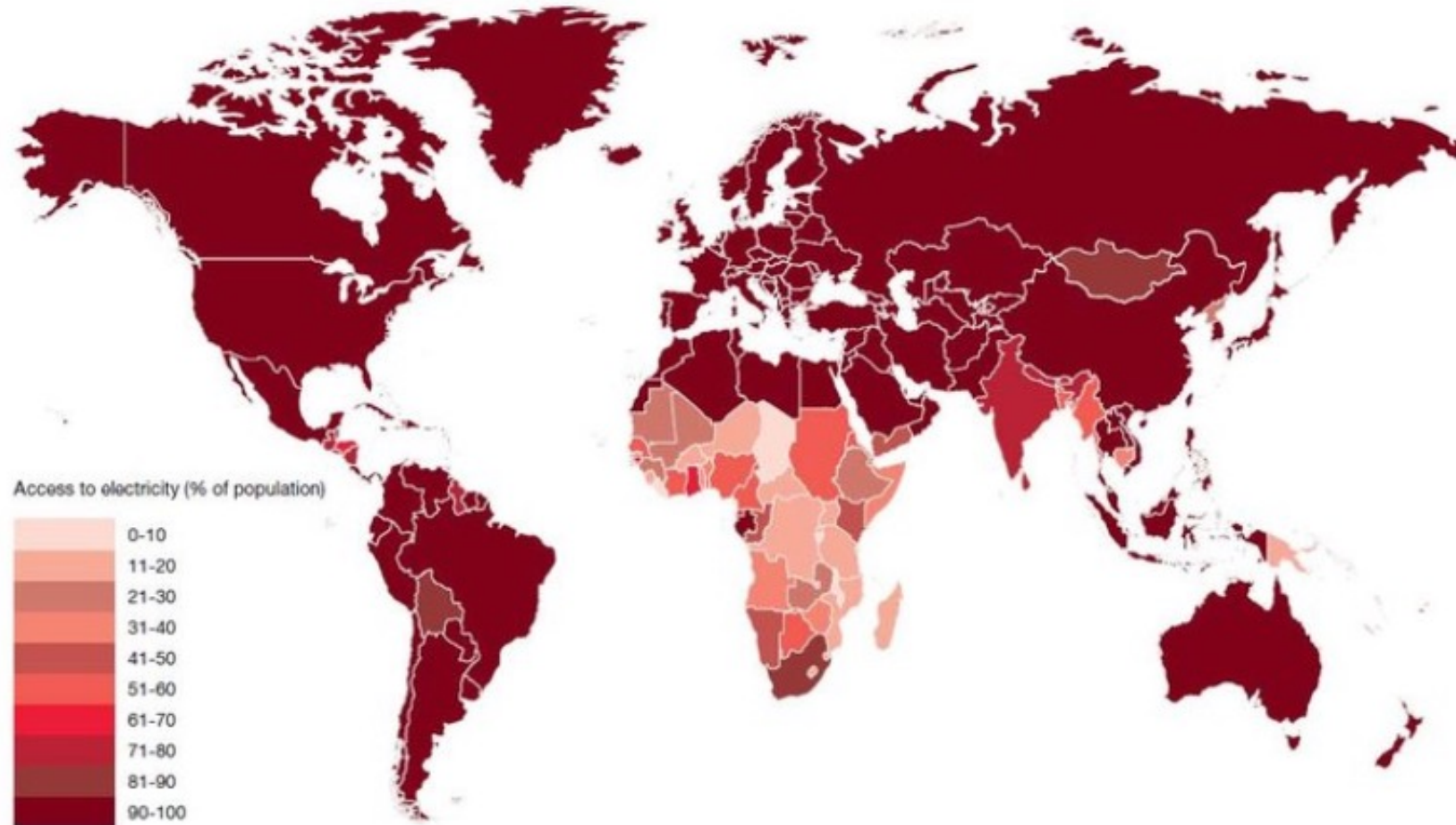
Importance of energy statistics in global context

- **IEA** Member countries have an obligation to hold 90 days of stocks (net imports/consumption)
 - ✓ Need reliable and timely data on imports, consumption and stocks
- **OPEC** Member countries: production vs quota
 - ✓ Need reliable and timely data on production
- **European Commission:** obligation to have a minimum share of electricity consumption coming from renewables by 2030
 - ✓ Need reliable data on electricity generation from renewables
 - ✓ Need reliable data on renewable energy consumption and its share in total consumption

Annual total energy consumption per capita

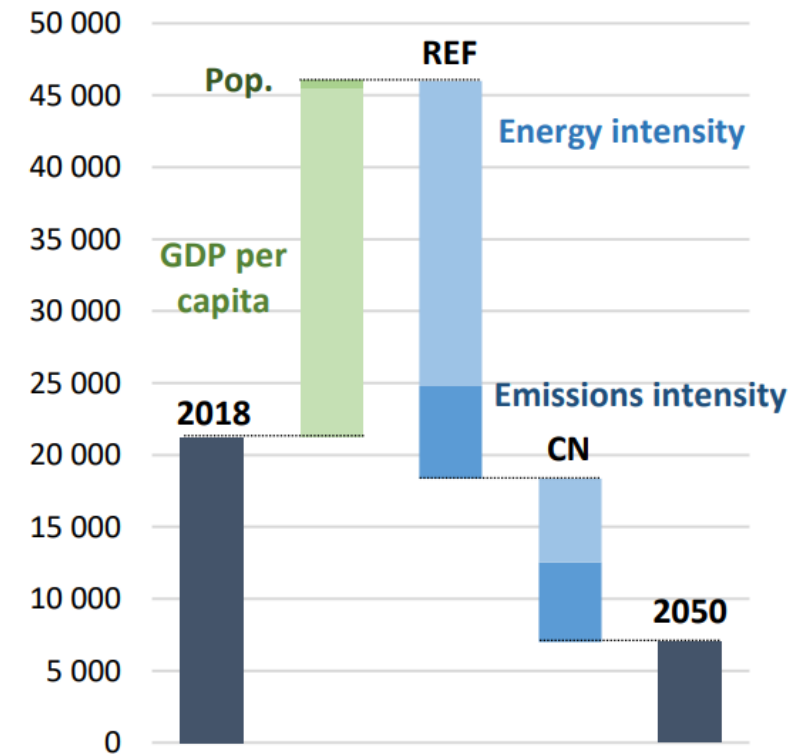
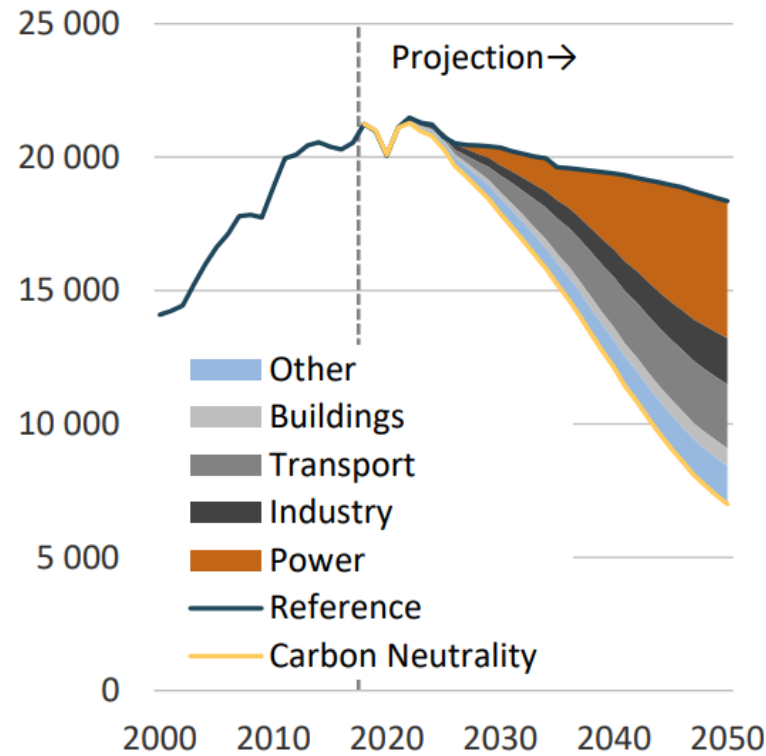
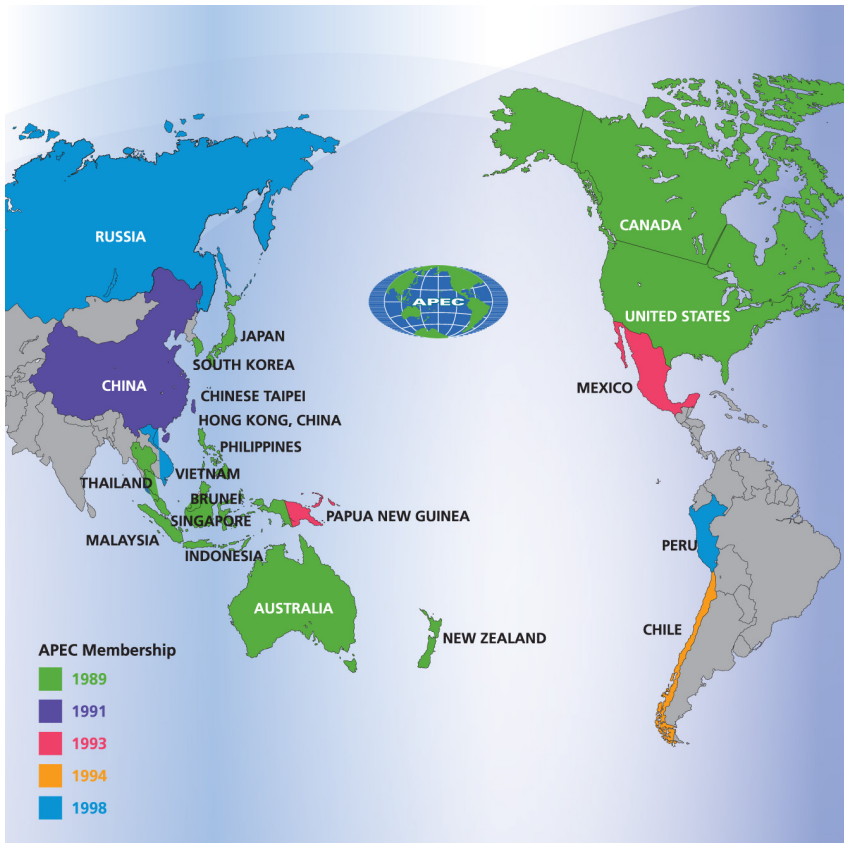


Access to electricity – percentage of population %



Importance of energy statistics at regional level

APEC energy-related CO2 emissions (million tonnes) and components
 *source Outlook 2021



Importance of energy statistics at national level

- Development of energy policies, strategies and plans
- Adoption of National Energy and Climate Plans (NECPs) are obligatory for EU countries – content and structure is prescribed
- Targets for Croatia to achieve necessary CO2 emission reductions! (NECP 2019, revision 2023)

Shares of renewable energy sources in Croatia, %	Achieved 2021.	Targets 2030.
In gross final energy consumption	31,7	42,5
In gross final electricity consumption	53,5	73,6
In gross final energy consumption for heating and cooling	38,0	47,1
In final energy consumption in transport sectors	7,1	21,6

- To calculate, monitor, validate and verify of the achieved targets, detailed final energy consumption is necessary!

Importance of energy statistics at local level

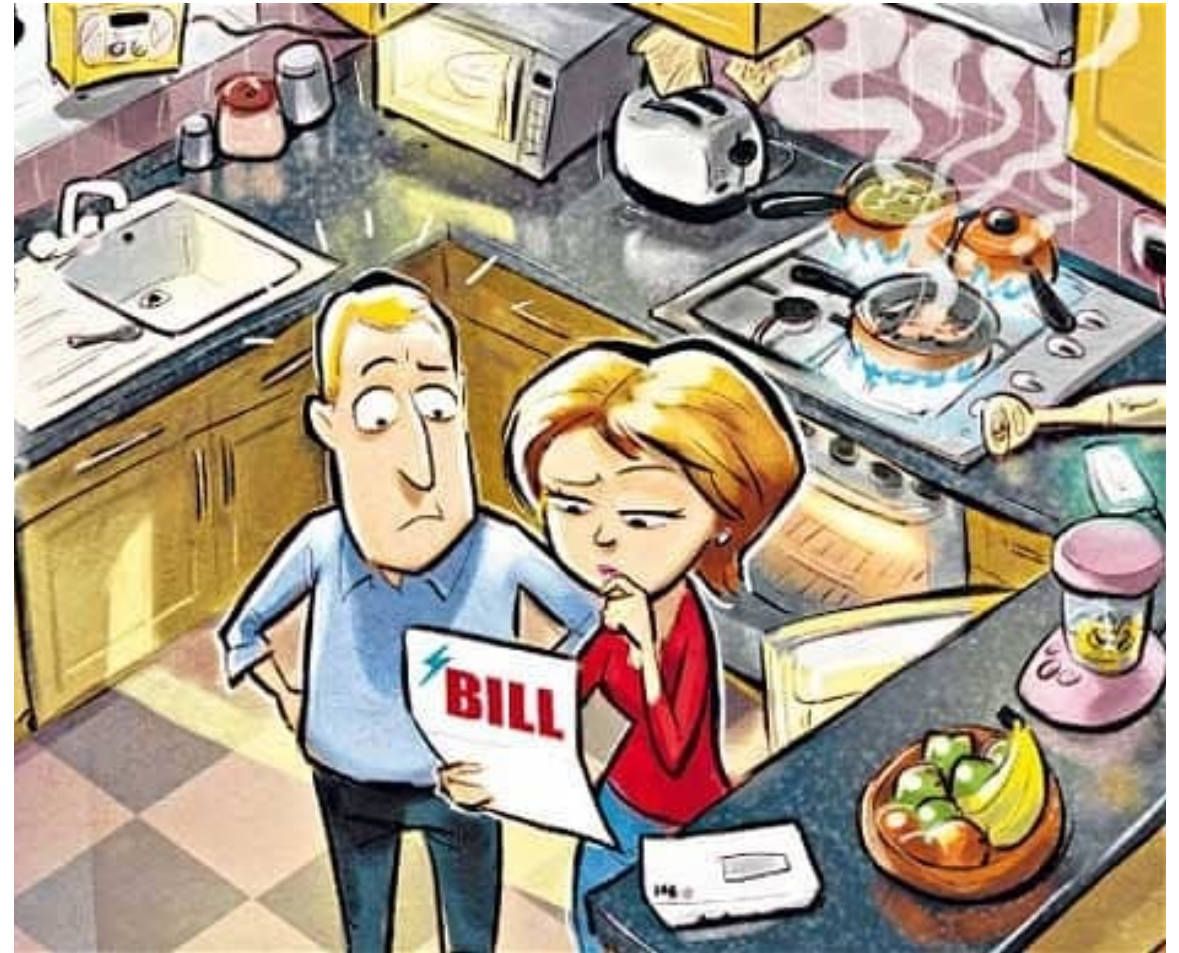
Sustainable Energy and Climate Action Plan in local communities

- initiated by the Covenant of Mayors initiative in EU
- provides a detailed overview of energy consumption and greenhouse gas emissions, defines measurable and concrete activities to reduce emissions, identifies energy efficiency measures, includes targets for the use of renewable energy sources, measures for energy poverty mitigation.



Importance of energy data and information for users

- prices, costs
- fuel substitution options
- savings and efficiency improvement options
- new technologies impacts



Energy statistics is the key for energy policies and strategies

1. Understand situation and desired outcomes

- Do we really understand what the problem or issue is? Are you sure there is a gap? What policy or evidence is already out there & what are others doing? What outcome would indicate success ?

2. Develop scenario options

- Understand, quantify & analyze impacts, costs, risks & benefits of policy options, including on GHGs;
- Address evidence gaps & identify research & analysis required

3. Prepare implementation activities

- Undertake pilots & collect good practice
- Benchmark against other schemes
- Put in place policy monitoring, evaluation & reporting mechanisms

4. Implementation, monitoring, revision

- Monitoring performance indicators and expected benefits
- Evaluation and reporting, eg. greenhouse gas emissions, energy efficiency improvement, RES shares

Conclusions

Energy statistics:

- is necessary platform for development of the energy and other related policies
- requires establishment of appropriate institutional and organizational frameworks
- should be based on internationally comparable standards