GOVERNMENTAL RESPONSE TO THE SUSTAINABLE ENERGY ISSUE

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3) Instruments used to manage the energy policy/programmes
4) Example on impact from the Czech Republic
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Introductory questions

Are there any provisions following from international agreements or treaties that are obligatory for my country?

How is the field of sustainable energy regulated by national legislation in my country?

Does my country have policies/programmes regarding sustainable energy?

What to do if my country has no energy policy/programme?

What instrument does my country use to address the environmental impacts of energy production?

What instruments does my country use to manage the energy policy/programme?
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Main risks
- Environmental damages
- Emissions, waste, landscape, human health...
- Limited natural resources
- Political dependence
- Social shocks
- Capacity disproportions

Main measures
- Legislative changes
- Supportive programmes
- Energy saving technologies
- “Green” taxes
- Price regulation
- Educational programmes

Legal framework:
- International
- National

State policies:
- Energy
- Economy
- Industry
- Environmental
- Social

Supply and demand

Research and innovation

Energy consumption

Energy supply

Energy generation

Energy sources
- Non-renewable
- Renewable

Conceptual framework

Energy framework

Sustainable development
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Sources of audit criteria:

a) international agreements

b) national legislation
Are there any provisions following from international agreements or treaties that are obligatory for my country?

International agreements:

- The United Nations Framework Convention on Climate Change (UNFCCC)
- The UNFCCC Kyoto Protocol
- Johannesburg Declaration on Sustainable Development and Implementation Plan (World Summit on Sustainable development 2002)
International agreements:

- **The United Nations Framework Convention on Climate Change (UNFCCC)** – example of criteria

  - All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:
    
    ... 

  - Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change.
How is the field of sustainable energy regulated by national legislation in my country?

National legislation:

- Acts;
  - in the area of environmental protection (e.g., water protection, Environmental Impact Assessment);
  - support to sustainable energy;
  - state budget and the management of state funds;
  - accounting;
  - taxation;
  - public procurement;
- implementing provisions/executive regulation pursuant to Acts;
- governmental policies/programmes in sustainable energy area.
Does my country have policies/programmes regarding sustainable energy?

Energy policies/programmes and possibilities of their management
What instrument does my country use to address the environmental impacts of energy production?

**Strategic Environmental Assessments**

**Environmental Impact Assessments**
What instrument does my country use to address the environmental impacts of energy production?

Examples of international and regional agreements concerning environmental assessments:

- **The Convention on Environmental Impact assessment in a Transboundary Context** (1991, Espoo Convention);

- **The Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context** (2003, the Kiev Protocol);

- **Rio Declaration on Environment and Development** (1992, United Nations Conference on Environment and Development);

- **The European Union Directive 2001/42/EC**.
What instruments does my country use to manage the energy policy/programme?

**Instruments used to influence energy management**

a) direct support

b) indirect support

c) energy-related services provided directly by government

d) regulating the energy sector

e) energy efficiency and energy savings measures

f) other instruments
Instruments used to influence energy management

A. DIRECT SUPPORT:

- State programmes:
  - Energy-economic programmes
  - Environmental-social programmes
- Support of research, development, and innovation
- Investment incentives
Instruments used to influence energy management

B. INDIRECT SUPPORT:

- Environmental aspects of the tax system
- Public Private Partnership
Instruments used to influence energy management

C. ENERGY-RELATED SERVICES PROVIDED DIRECTLY BY GOVERNMENT
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Instruments used to influence energy management

D. REGULATING THE ENERGY SECTOR

- Price regulation
- Other regulatory measures
- Feed-in tariffs
- Supplier obligations
- Net metering (net billing)
- Green certificates
Instruments used to influence energy management

E. ENERGY EFFICIENCY AND ENERGY SAVINGS MEASURES

- energy transformations

- end-consumers:
  - in processing industries
  - in households
  - in transportation
Instruments used to influence energy management

E. ENERGY EFFICIENCY AND ENERGY SAVINGS MEASURES

- Further potential instruments to achieve energy savings such as:
  - Introducing an environmental tax reform
  - Green bonuses
  - Guarantees extended in respect of payback on investment
  - Monitoring and targeting
  - Information and awareness-raising campaigns
  - Educational activities focused on school establishments
  - Technologically more exacting methods of production
Instruments used to influence energy management

F. Other instruments
Economic, social and environmental impacts of energy policies

EXAMPLE FROM CZECH REPUBLIC

What is the problem?

Feed-in tariffs for production solar energy
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Share on production

- Biomass: 33%
- Water: 27%
- Wind: 19%
- Biogas: 14%
- Solar: 7%

EUROSAI WGEA – Training seminar on sustainable energy
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Share on support

- Solar: 40%
- Biomass: 20%
- Biogas: 16%
- Water: 12%
- Wind: 12%

EUROSAI WGEA – Training seminar on sustainable energy
Feed-in tariffs for production solar energy

- feed-in tariffs were originally passed in 2005
- purchase solar energy prices approximately on 520 Euro per megawatt hour until 2025
- prices of photovoltaic panels have decreased on half level during last 5 years
- more than 24 000 percent increase in Czech solar energy plants (from 9 to 2230)
What are the impacts of this support?

- price of electricity for final consumers will increase
- possible grid instability
- solar plants misuse agriculture lands
- decrease in tariffs will limit the number of new projects of solar plants
Thank you for your attention