The importance of reliable and comparable statistical data in the energy sector

Inogate - Roeland Mertens – 25/9/2012

The importance of reliable and comparable statistical data in the energy sector

- What are energy statistics?
- What are energy statistics used for?
- What does the development of energy statistics imply?
- What to be attentive about !

What are energy statistics?

- In a country – geographical boundaries
- About energy – not about $ nor €
- Concerns production and consumption – the energy balance
- Covers also specific themes – driven by needs
- Describes the past/present – does not forecast

What are energy statistics?

- Annual statistics
  - 160 annual questionnaires; 40 000 primary series
  - Additional derived (calculated) series and EU aggregates
- Monthly and short term statistics
  - 2200 questionnaires; 20000 time series
- Price statistics on electricity and gas
  - ~4000 time series
- Combined Heat and Power (topical data)

What are energy statistics?

Legal acts:

- Energy Statistics Regulation (EC)1099/2008
- Price statistics on electricity and gas Directive 2008/92/EC (~4000 time series)
- Combined Heat and Power Directive 2004/8/EC

27 Member States, 3 EFTA states and 5 candidate / acceding countries

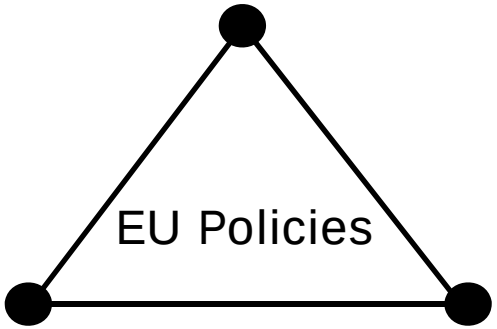
What are energy statistics used for?

- Political needs
- Environmental concerns
- Market transparency
- Forecasting algorithms and analysis

European Commission

Competitiviness

- Internal Market
- Interconnections
- Electricity & gas networks
- Research and innovation:
  - *Clean coal*
  - *Carbon sequestration*
  - *Alternative fuels*
  - *Energy efficiency*
  - *Nuclear*

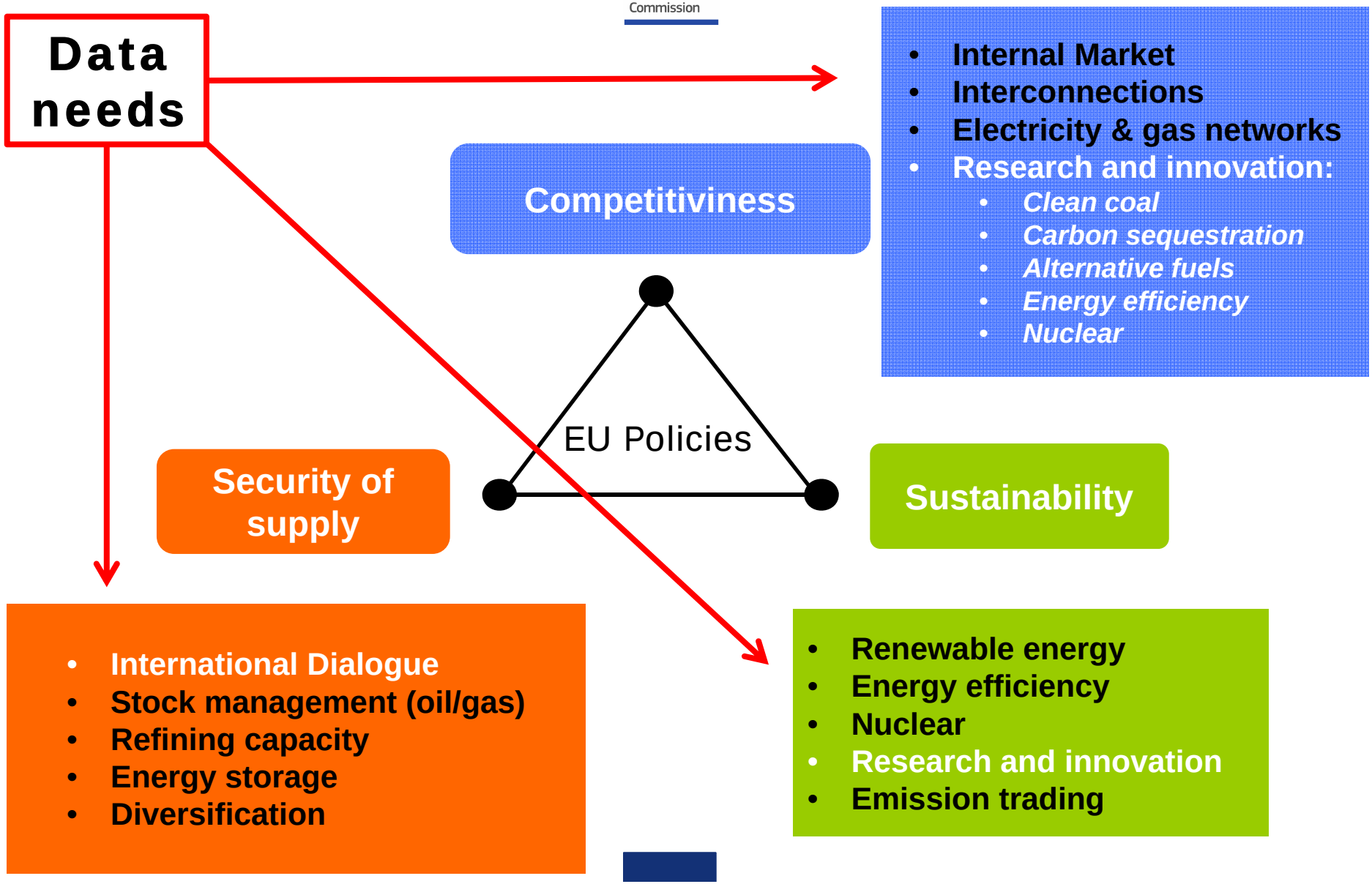


Security of supply

- International Dialogue
- Stock management (oil/gas)
- Refining capacity
- Energy storage
- Diversification

Sustainability

- Renewable energy
- Energy efficiency
- Nuclear
- Research and innovation
- Emission trading


European Commission
Data needs
Competitiviness
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Interconnections
Electricity & gas networks
Research and innovation:
Clean coal
Carbon sequestration
Alternative fuels
Energy efficiency
Nuclear
EU Policies
Security of supply
Sustainability
International Dialogue
Stock management (oil/gas)
Refining capacity
Energy storage
Diversification
Renewable energy
Energy efficiency
Nuclear
Research and innovation
Emission trading

Political prorities

- Achieving an energy efficient Europe
- Building a truly pan-European integrated market
- Secure, safe and affordable energy for consumers
- Supporting European technology and innovation
- **Strengthening the external dimension:**
  - Market integration with neighbours
  - Privileged partnerships with key partners
  - Promoting the EU's global role in low carbon energy
  - Promoting legally binding nuclear safety, security and non-proliferation standards worldwide

Politics have huge needs for detailed energy data

Politics with concrete statistical goals / needs

- Europe 2020:
  - Greenhouse gas emissions: -20%
  - Share of renewable energy: +20%
  - Energy efficiency: +20%
- Buildings, renewables in transport …
- Recent EU requiring energy statistics:
  - The Directive on the promotion of energy from renewable sources (2009/28/EC)
  - The Directive on minimum stocks of oil and petroleum products (2009/119/EC)
  - The Regulation on the security of gas supply (994/2010)
  - The Directive on energy efficiency (agreed by Council/EP)

What does the development of energy statistics imply?

- A national administration

  Business registers, customs, regulation

- A formal and independent authority

  Official mandate, political independence, commitments to facts, … and to facts only, dissemination

- A strong sense for international cooperation

  Without international methodology, no comparable data

- A commitment to statistical quality

  Internal coherence (energy balance!), timeliness, …

What to be attentive about !

What is making it more complex?

- Liberalisation of the energy market
- Ever increasing needs for more and faster data
- Resources following suit ... !?

Conclusions

- Energy data are the fundamental input for
  - Analysis
  - Forecasting for policymaking/investment planning
  - Production of energy balances
  - Calculation of CO_2 emissions (reference approach)
  - Production of important indicators to monitor policies

- Keep in mind that you need data – and that they’re not for free!