Danish Energy Accounts and Energy Statistics

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Data on energy

- Increasing demand
  - Security of energy supply
  - Deregulation of energy markets
  - Increasing energy prices
  - Climate change

- Different frameworks
  - SNA / SEEA
  - International Energy Agency / Eurostat
  - UNFCCC / IPCC

Different frameworks

- Causes confusion
- Few are familiar with the differences
- Wrong use of the data is often seen
- Important to understand the differences
- Bridge tables are needed

Energy accounts

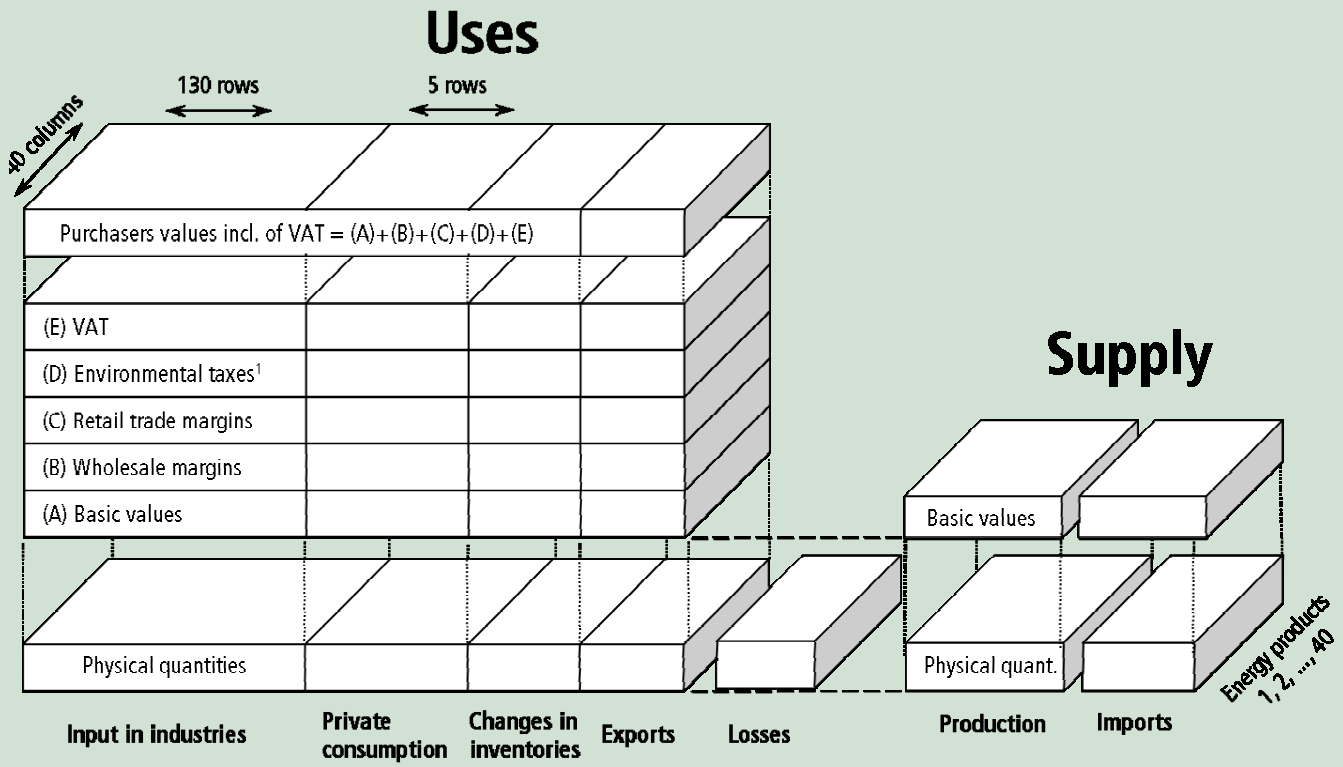
- Energy accounts are one of the satellites of the national accounts
- Same definitions and classification as national accounts.
- Fully consistent with national accounts

Energy statistics

- Energy statistics are the main source of data for energy accounts

- However, energy statistics must be complemented with additional data
  - Data on international transport
  - Data on values, prices etc

The Danish energy accounts



[1]The environmental taxes on energy are made up of CO_2- SO_2- and energy taxes

Similarities and differences (I)

- Residence vs. territory principle
  - International transport
- Classification of activities
  - Activities in the energy accounts are classified by the industries main product or service output (ISIC)
  - Treatment of transportation

Similarities and differences (II)

- Classification of products
  - Products classified by Harmonized System (HS) and Central Product Classification (CPC)

- Different data sources
  - Foreign trade statistics
  - Commodity Statistics
  - Different versions

Requirements of the bridge table

- Explain the differences in boundaries
- Explain the differences in supply and use
- The product dimension should be included

Bridge table

- The general idea
  - To show how to go from energy statistics to energy accounts
  - To show the differences
- Vertical dimension
  - Supply and use
- Horizontal dimension
  - What causes the differences?

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Bridge table I Denmark 2004

		Danish Energy Accounts	Differences between the energy accounts and the energy statistics	Non-energy related use of energy not accounted for in the energy accounts	Other renewable energy not accounted for in the Energy Accounts	Danish Energy Statistics
	Gross energy consumption (TJ)	(1)	(2)	(3)	(4)	(5)=(1)-...-(4)
I	**Production**	**1 912 894**	**169**	**-76**	**-7 357**	**1 920 158**
II = II.1,.. + ..,II.3	**Imports**	**959 893**	**386 051**	**-12 049**	**-**	**585 892**
II.1	Of which Danish ships bunkering of fuel oil abroad	332 146	332 146	-	-	-
II.2	Of which Danish planes bunkering of JP1 abroad	7 128	7 128	-	-	-
II.3	Of which imports of other energy products	620 619	46 777	-12 049	-	585 892
III = I + II	**Total supply**	**2 872 787**	**386 220**	**-12 126**	**-7 357**	**2 506 050**
IV = IV.1 + IV.2	**Exports**	**1 080 456**	**61 948**	**- 229**	**-2 444**	**1 021 180**
IV.1	Of which foreigners bunkering in Denmark	49 739	49 739	-	-	-
IV.2	Of which other exports	1 030 717	12 210	-229	-2 444	1 021 180
V	**Adjustment for international sea transport**	**-**	**67 970**	**83**	**-**	**-68 054**
VI = III - IV + V	**Disposable within the economy / the territory**	**1 792 331**	**392 242**	**-11 814**	**-4 913**	**1 416 817**
VII	**Total energy consumption**	**1 744 045**	**378 524**	**-12 172**	**-4 913**	**1 382 607**
VIII	**Changes in stocks, loses and discrepancy**	**48 286**	**13 718**	**359**	**-**	**34 209**
IX = IV - V + VII + VIII	**Total use**	**2 872 787**	**386 220**	**-12 126**	**-7 357**	**2 506 050**

Bridge table II Denmark 2004

	Framework	TJ
I	**System of National Accounts (SNA / SEEA)**	**1 744 045**
II = II.1,.. + ..,II.3	Differences between the energy accounts and the energy statistics	378 524
II.1	Of which Danish ships bunkering of fuel oil abroad	332 146
II.2	Of which Danish planes bunkering of JP1 abroad	7 128
II.3	Of which international sea transport	33 450
II.4	Of which other differences	5 800
IV	Non-energy related use of energy not accounted for in the energy accounts	-12 172
IV.2	Other renewable energy not accounted for in the energy accounts	-4 913
V = I - II - III - IV	**International Energy Agency (IEA)**	**1 417 127**
VI	International air transport	34 520
VII = V – VI	**United Nations Framework Convention on Climate Change (UNFCCC)**	**1 382 607**

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Bridge tables are a useful tool

- Show how to produce the energy accounts
- Explain the differences (and show similarities)
- Different levels of aggregation are possible
- Quality control and checks

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Summary

- Different frameworks causes confusion
- Bridge tables are needed
- More similarities than differences between energy accounts and energy statistics
  - International transportation is an important difference
- Bridge tables provide a useful tool

Contact information

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