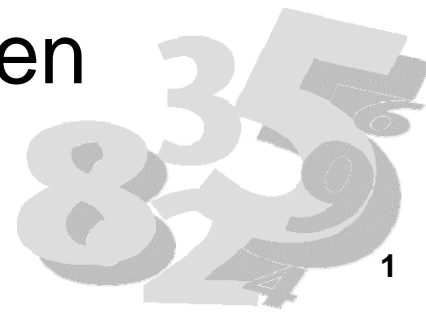


# Environmental - Economic instruments in the Environmental Accounts

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Viveka Palm, Statistics Sweden



# Agenda today

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- Purpose: Show progress since last meeting
- Environmental taxes, outcome paper
- Resource taxes for next meeting
- Environmental transfers, outcome paper I
- Countries to test methods



# Instruments

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- Economic instruments
  - Taxes
  - Transfers (earlier Subsidies)
  - Emission permits, green certificates
- *Legal instruments*
  - *Sanctions*
  - *Crimes*
  - *Regulations*
- *Informative instruments*
  - *Labelling*



# OECD/EEA database on instruments for environmental policy and resource management

[www2.oecd.org/econinst/queries/index.htm](http://www2.oecd.org/econinst/queries/index.htm)

Economic Instruments database - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites

Address http://www2.oecd.org/econinst/queries/index.htm

European Environment Agency OECD

Home Queries

Taxbases--Main Characteristics

Select 1 or several countries, or all countries or a country grouping

Submit

OECD member countries

<input type="checkbox"/> Australia	<input type="checkbox"/> Austria	<input type="checkbox"/> Belgium	<input type="checkbox"/> Canada	<input type="checkbox"/> Czech Republic
<input type="checkbox"/> Denmark	<input type="checkbox"/> Finland	<input type="checkbox"/> France	<input type="checkbox"/> Germany	<input type="checkbox"/> Greece
<input type="checkbox"/> Hungary	<input type="checkbox"/> Iceland	<input type="checkbox"/> Ireland	<input type="checkbox"/> Italy	<input type="checkbox"/> Japan
<input type="checkbox"/> Korea	<input type="checkbox"/> Luxembourg	<input type="checkbox"/> Mexico	<input type="checkbox"/> Netherlands	<input type="checkbox"/> New Zealand
<input type="checkbox"/> Norway	<input type="checkbox"/> Poland	<input type="checkbox"/> Portugal	<input type="checkbox"/> Slovak Republic	<input type="checkbox"/> Spain
<input type="checkbox"/> Sweden	<input type="checkbox"/> Switzerland	<input type="checkbox"/> Turkey	<input type="checkbox"/> United Kingdom	<input type="checkbox"/> United States

Other EEA countries

<input type="checkbox"/> Albania	<input type="checkbox"/> Bosnia-Herzegovina	<input type="checkbox"/> Bulgaria	<input type="checkbox"/> Croatia	<input type="checkbox"/> Cyprus
<input type="checkbox"/> Estonia	<input type="checkbox"/> Latvia	<input type="checkbox"/> Liechtenstein	<input type="checkbox"/> Lithuania	<input type="checkbox"/> FYR of Macedonia
<input type="checkbox"/> Malta	<input type="checkbox"/> Romania	<input type="checkbox"/> Montenegro	<input type="checkbox"/> Serbia	<input type="checkbox"/> Slovenia

Other countries

<input type="checkbox"/> Israel	<input type="checkbox"/> South Africa
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Country groupings

All Countries  OECD Member countries  EU Member States  EEA member countries

Deselect All

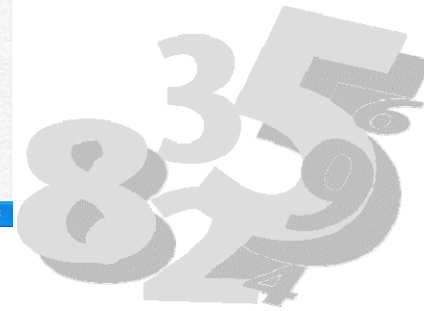
Use the "buttons" below to choose whether the query should find only the taxes, only the fees and charges or both the taxes, fees and charges included in the database. (See the introduction for an explanation of the different types of levy.)

Taxes:  Fees/Charges:  Taxes, Fees and Charges:

Submit

Queries

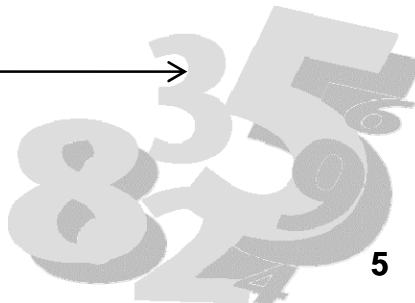
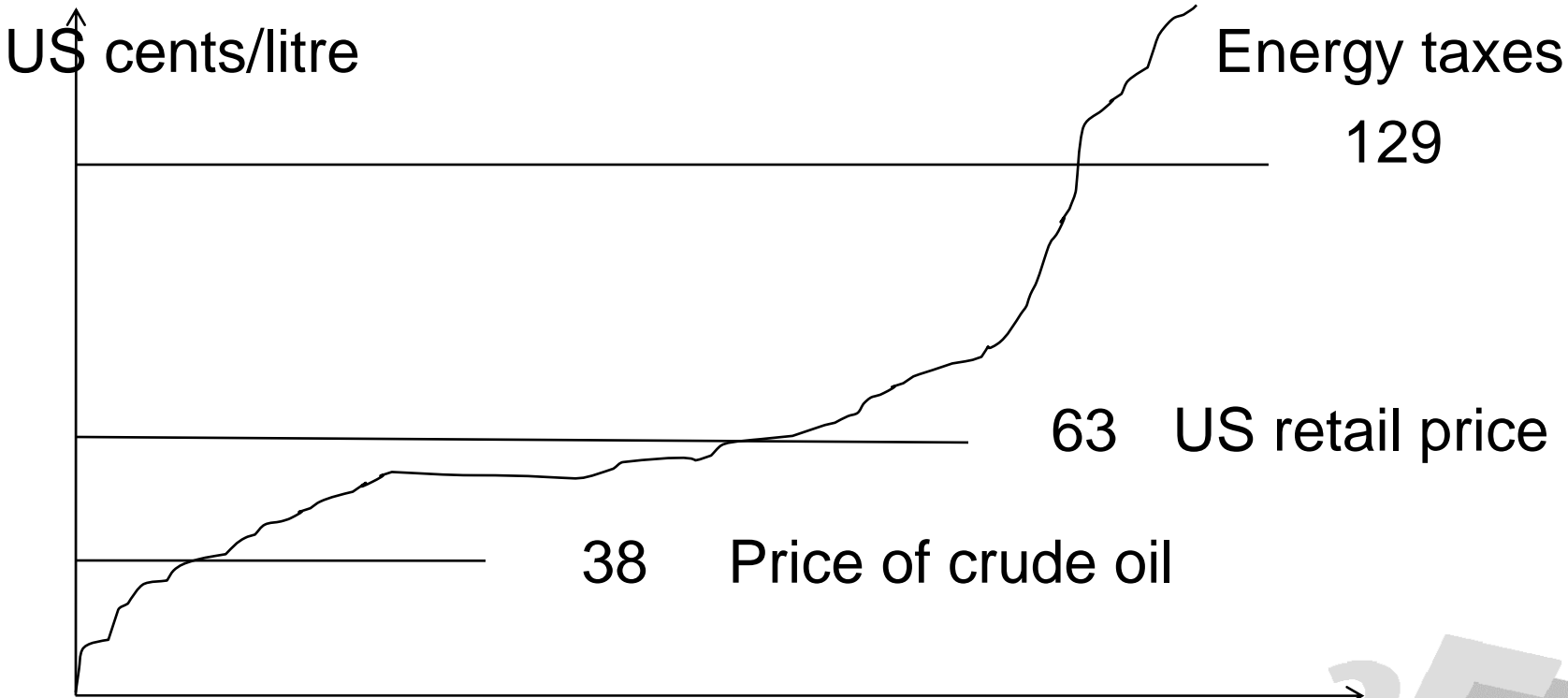
start Economic Instrument... SCICNET - DG Interp... Microsoft Excel - Tab... Document1 - Microsof... FR 11:05





# International gasoline prices 2007, by country, [www.gtz.de/fuelprices](http://www.gtz.de/fuelprices)

Statistiska centralbyrån Statistics Sweden



# Environmentally relevant economic instruments



- Environmental taxes (Official statistics)
  - Environmental transfers (Official statistics)
    - Environmentally motivated
    - *Potentially environmentally harmful, pilots*
- Coming :
- Emission permits

# Environmental taxes

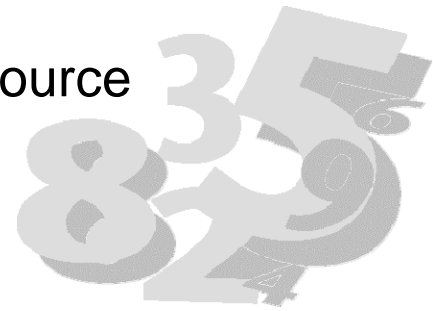
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- Identify taxes under the OECD and EUROSTAT (2001) definition:

*“...it has been chosen to single out the **tax bases** that seem to have a particular environmental relevance, and to consider all taxes levied on these tax bases as environmentally related regardless of the motives behind their introduction, their names etc.”*

*→ Motive not of concern*

*→ Depend on the tax base and increases of price*
- Allocate environmental taxes by industry
- Classify as Energy, Transport, Pollution and Resource





#### **Measured or estimated emissions to air**

- Measured or estimated NO<sub>x</sub> emissions
- SO<sub>2</sub> content of fossil fuels
- Other measured or estimated emissions to air

#### **Ozone depleting substances (e.g. CFC or halon)**

#### **Measured or estimated effluents to water**

- Measured or estimated effluents of oxydizeable matters (BOD, COD)
- Other measured or estimated effluents to water
- Effluent collection and treatment, fixed annual taxes

#### **Certain non-point sources of water pollution**

- Pesticides (Based on e.g. chemical content, price or volume)
- Artificial fertilisers (Based e.g. on phosphorus or nitrogen content or price)
- Manure

#### **Waste management**

- Waste management in general (e.g. collection or treatment taxes)
- Waste management, individual products (e.g. packaging, beverage containers)

#### **Noise (e.g. aircraft take-off and landings)**

#### **Energy products**

- Energy products used for transport purposes
  - Unleaded petrol
  - Leaded petrol
  - Diesel
  - Other energy products for transport purposes (e.g. LPG or natural gas)
- Energy products used for stationary purposes
  - Light fuel oil
  - Heavy fuel oil
  - Natural gas
  - Coal
  - Coke
  - Biofuels
  - Other fuels for stationary use
  - Electricity consumption
  - Electricity production
  - District heat consumption
  - District heat production

#### **Transport**

- Motor vehicles, one-off import or sales taxes
- Registration or use of motor vehicles, recurrent (e.g. yearly) taxes

#### **Resources**

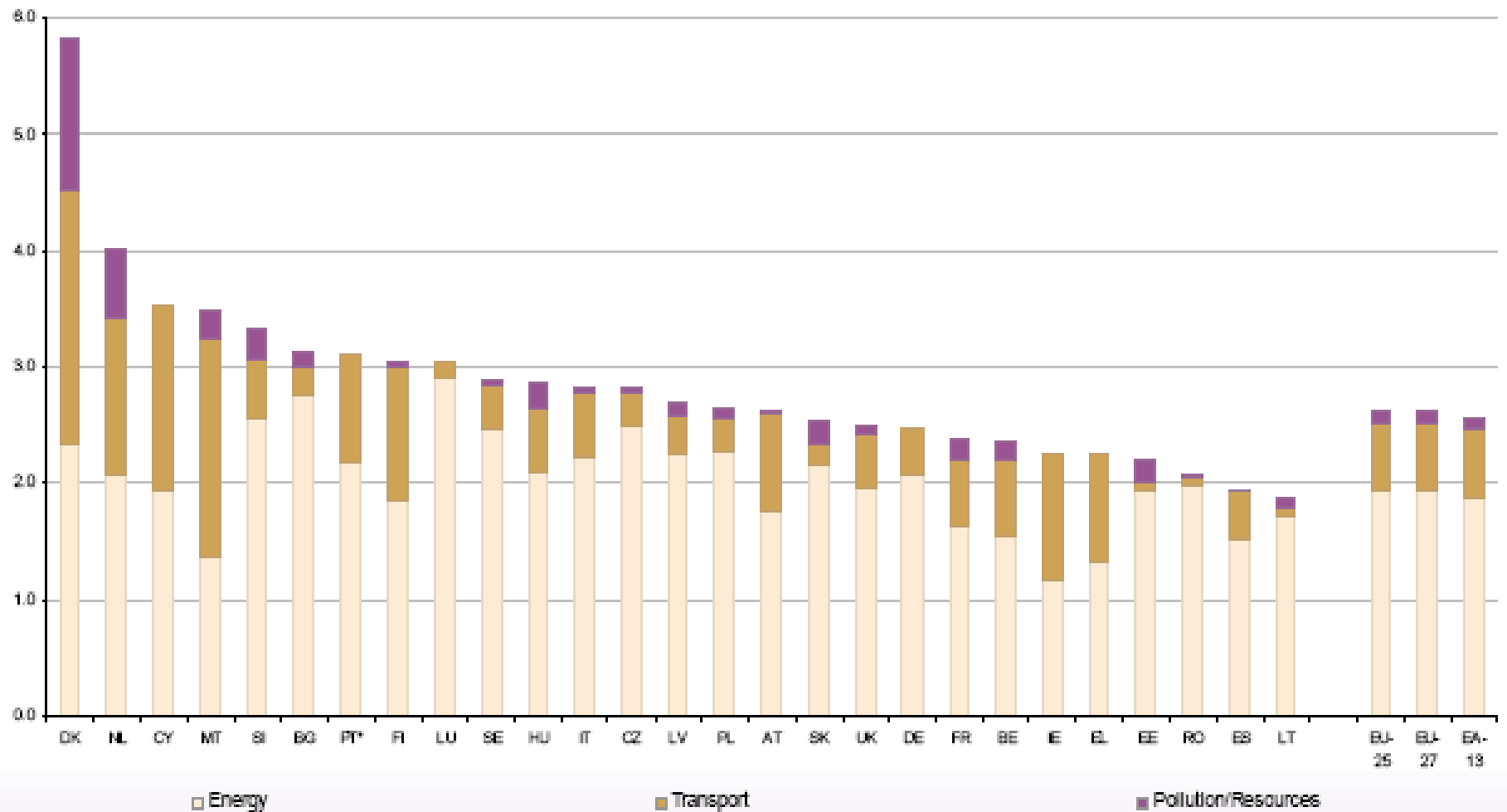
- Water abstraction
- Extraction of raw materials (except oil and gas)
- Other resources (e.g. forests)

# Tax bases:

From the OECD/  
Eurostat definition in  
2001



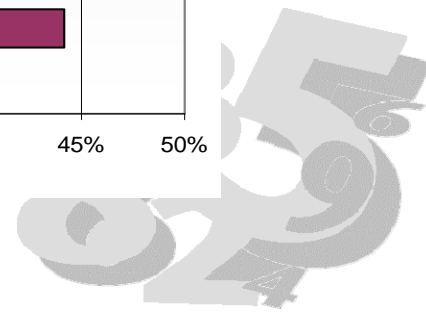
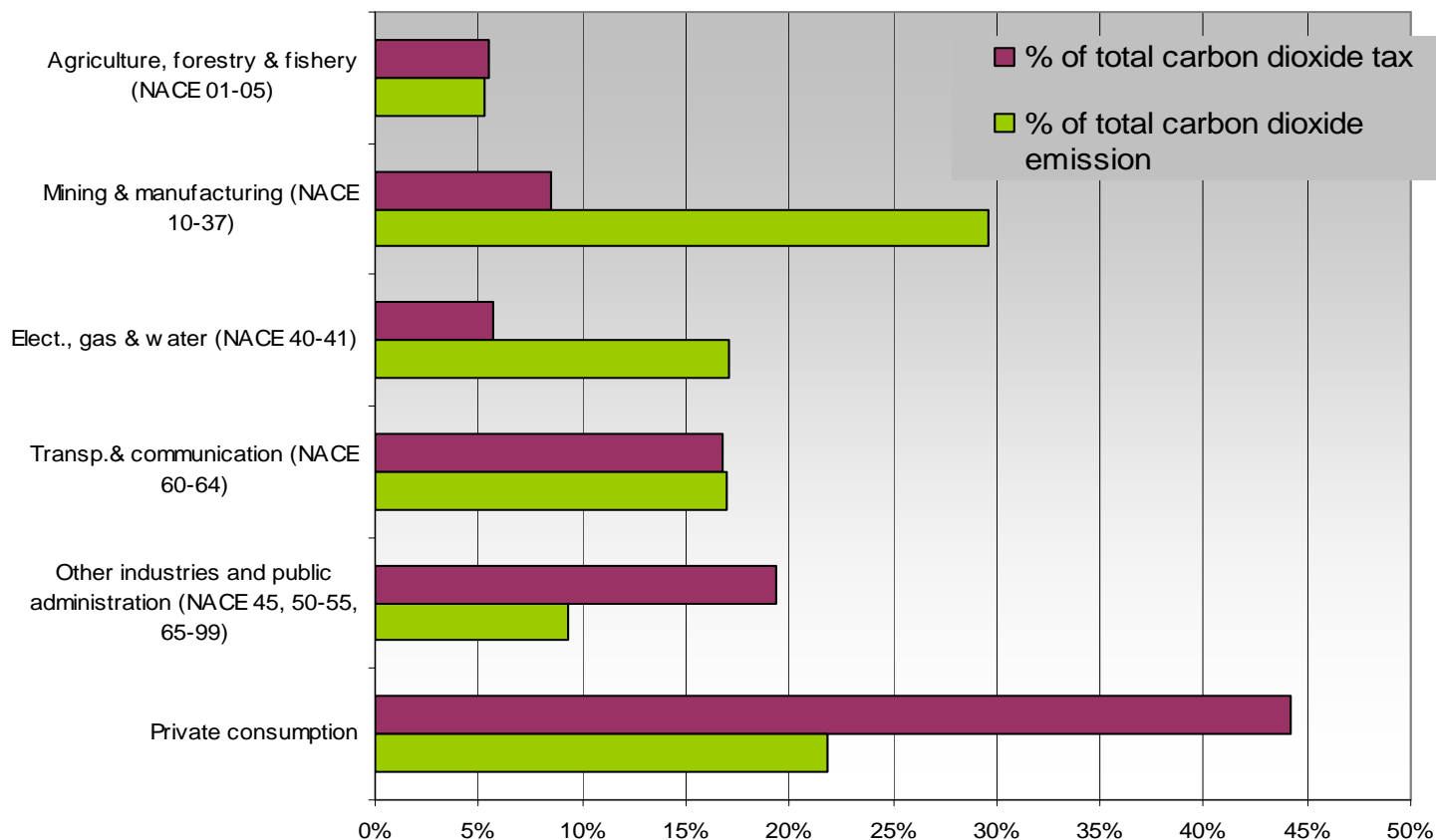
# Environmental taxes, EU



Note: \*PT: 2004. EU-25, EU-27, EA-13: weighted average.

Source: Commission Services

# CO2 tax and CO2 emissions - by industry



# Outcome paper on taxes

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- Keep the Environmental tax definition
- VAT can be included when related to physical use

To do for Nov 2009 meeting:

- Taxes vs fees to be clarified in accordance with SNA rev
- Add clarification on resource taxes



# Environmental transfers

## Three areas

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- 1 – SEEA transfers: SNA-defined subsidies, plus selected SNA transfers to households, municipalities, etc



- 2 – SEEA transfers – environmental policy related

- 3 – SEEA – potentially damaging to the environment



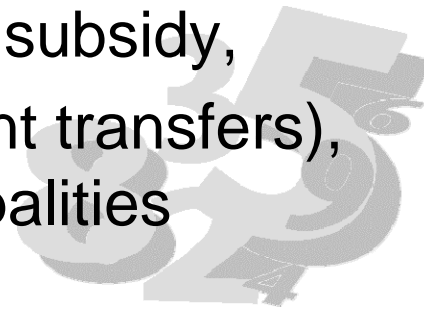
# 1 – What is a subsidy/transfer?

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- International definitions
  - OECD: ” *any measure that keeps prices for consumers below market levels, or for producers above market levels, or that reduces costs for consumers and producers*”
  - WTO (in short): including for example direct transfers, loan guarantees, tax credits and more...

→ *All good, but hard to base statistics on*

**Suggestion to define SEEA transfers:** Start out from National Accounts definition of subsidy, add more information (capital and current transfers), transfers to households and municipalities



# What industries are receiving transfers? Examples:

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## 2 - Environmentally related transfers

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- Two different definitions
  - Motive/purpose-based (environmental policy related)
  - Effect-based (related to other policies)
- Both definition approaches are used today in other contexts
  - Purpose in the environmental protection costs
  - Effect on price in the environmental taxes



# Work in countries 2009

Eurostat financed and self-financed country work

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- Austria – grant for harmful subsidies
- Germany – testing a methods for environmental subsidies
- Sweden & Netherlands, distribute subsidies on industries
- Sweden, Norway, Denmark – Nordic report
- UK – grant for environmental subsidies





# Eurostat TASK FORCE?

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- **YES! If approved by DIMESA**



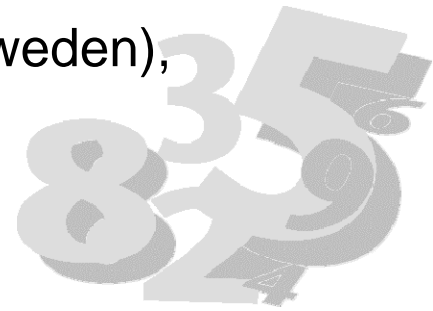
- Need to discuss transfers in detail
- Based on growing knowledge in countries
- → gather & compare data
- Outcome to be: tested methodology



# Thanks to reflection group....

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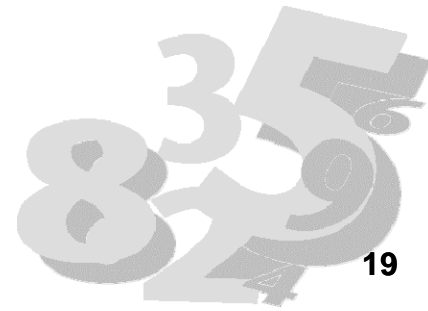
*Ute Roewer (Eurostat), Marina Anda Georgescu (Eurostat),  
Federico Falcitelli (Italy), Alexandra Wegscheider-Pichler (Austria),  
Sacha Baud (Austria), Tone Smith (Norway),  
Dennis Hansen (Denmark), Marietta Leni Jeppe (Denmark),  
Cor Graveland (Netherlands), Sjoerd Schenau (Netherlands),  
Maria Luisa Egido (Spain), Ursula Lauber (Germany),  
Irina Piradashvili (Germany), Ian Gazley (UK), Donna Livesey (UK),  
Rocky Harris (UK), Hans Vos (EEA) and Ronald Steenblik (OECD),  
Viveka Palm (Sweden), Nancy Steinbach (Sweden),  
Maja Cederlund (Sweden)*



# Outcome paper SEEA transfers

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**The on-budget SEEA transfers are formed by adding the SNA-subsidies, the current transfers not included in the SNA-subsidy (for example to municipalities and to households), and to also include the capital transfers.**



# Outcome paper SEEA transfers continued

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- Environmentally related transfers are suggested to be divided into two groups
- Selection criteria for environmental policy SEEA-transfer is suggested to be the primary motive/purpose, as a first step
- Further selection criteria to be tested in Task Force and in the 2009 country projects. New outcome paper to be written on the results.