

Baltic Sea Region

- Innovative Solutions for the Energy and Climate Change Challenge

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Ea Energy Analyses
Warsaw, 21 May 2008

Energy Scenarios for the EU parl.

- Resources
- Technologies
- Energy efficiency
- Renewables
- R&D&D
- Infrastructure
- Market
- Intelligent energy s
- Coordination

Future Energy Scenarios for EU27 in 2030



Towards
50% oil reduction
50% CO2 emissions reduction
Security of supply

Prepared by

The Danish Board of Technology
RISØ DTU

Ea Energy Analyses

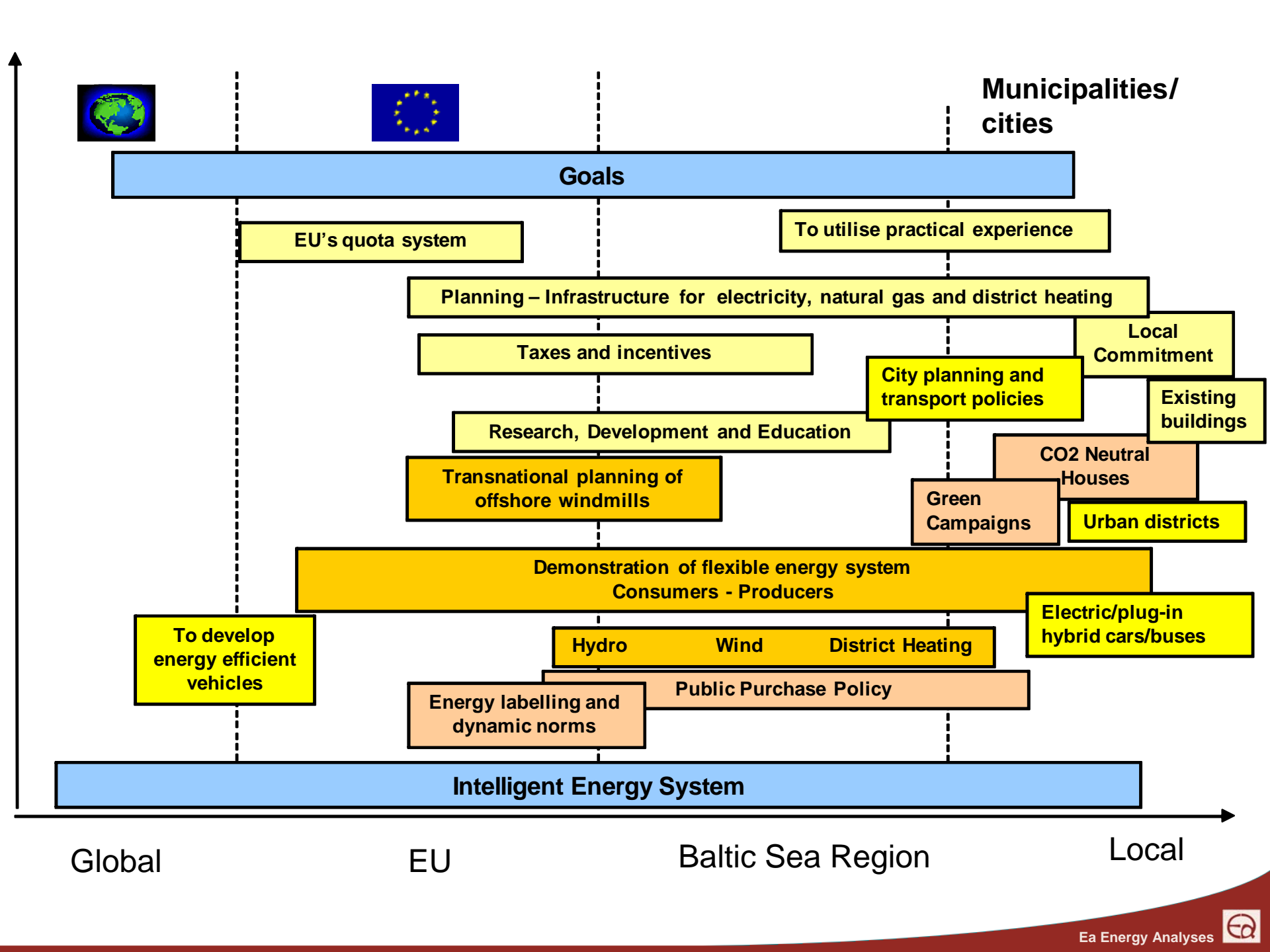
Strasbourg, 23 April 2008

For more information:

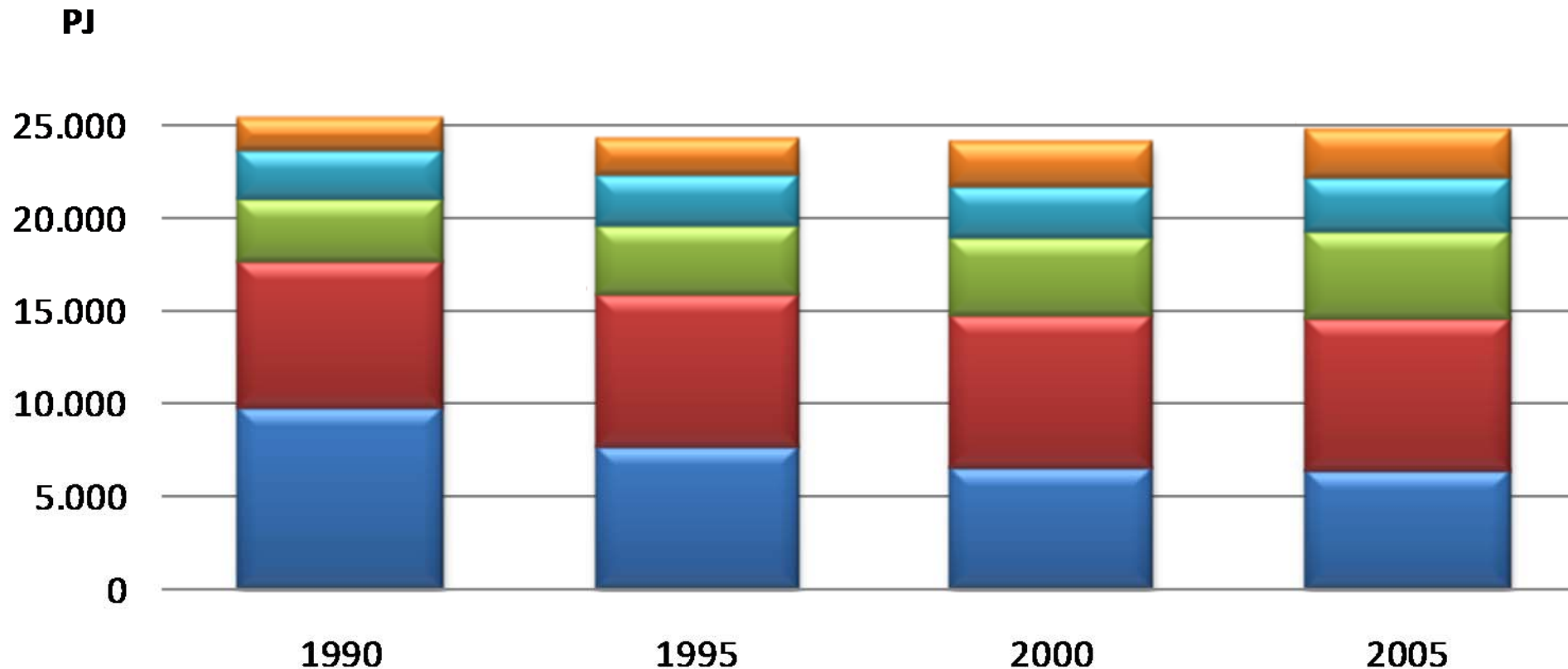
http://www.europarl.europa.eu/stoa/default_en.htm

Process of dialogue





Gross Energy Consumption



Not including North West Russia

Coal Oil Natural gas Nuclear Renewable Energy forms

Final Energy Demand Per GDP

TJ/M€('00)

20

15

10

5

0

1990

1995

2000

2005

— New Democracies

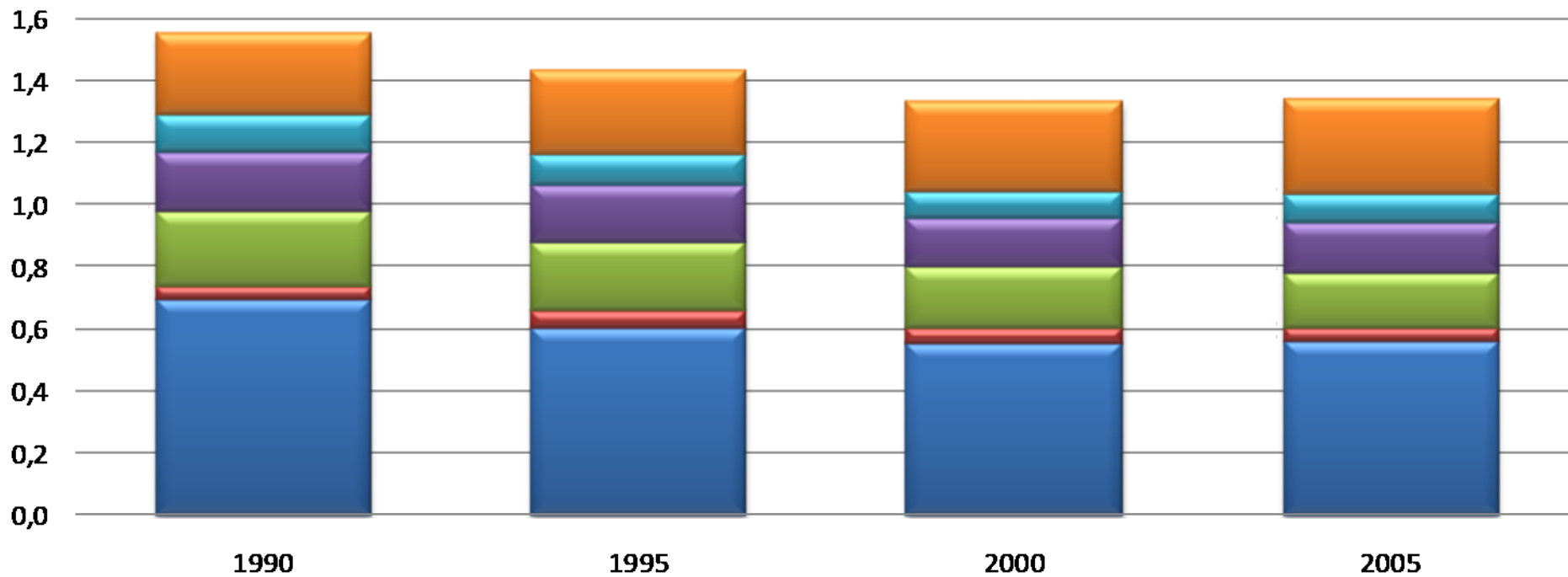
— Old Democracies

Not including North West Russia



CO2-emissions by sector

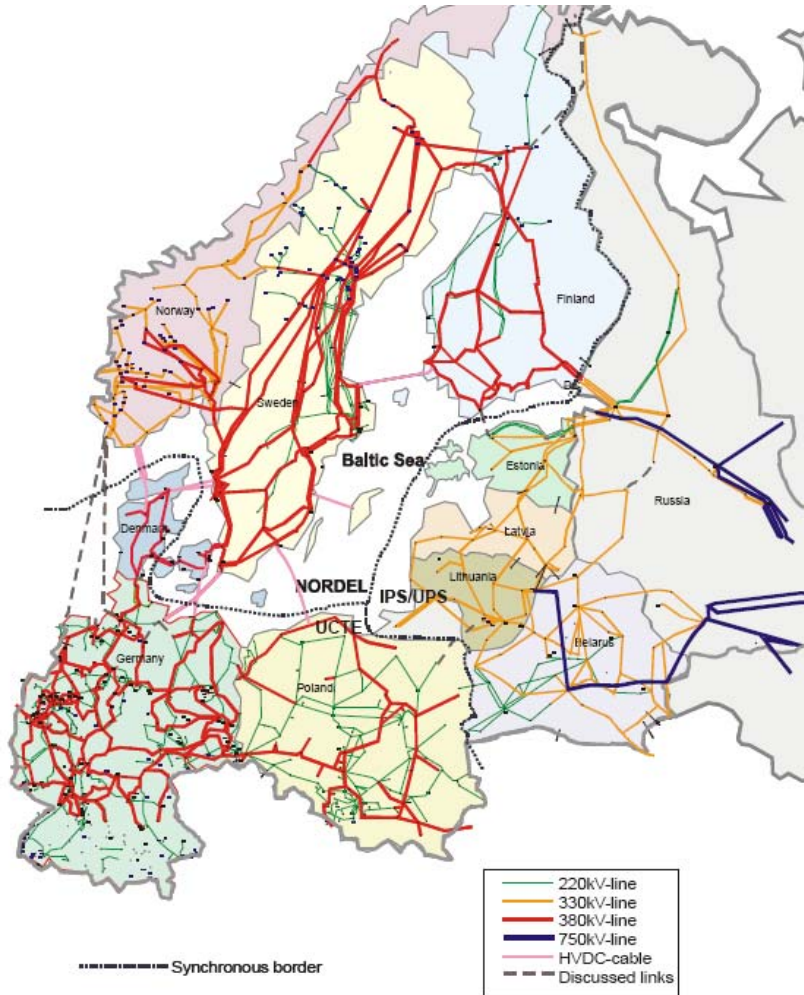
Gt of CO2



Not including North West Russia

■ Power generation/District heating ■ Energy Branch ■ Industry ■ Residential ■ Tertiary ■ Transport

Infrastructure



Baltic Sea Region

- Energy resources
- Infrastructure
- Technologies
- Industries
- R&D&D – universities
- Energy companies
- Cooperation
 - Baltic Sea Council
 - Baltic Sea Parliament
 - Union of the Baltic Cities
 - Baltrel



Scenarios – proceses of dialogue



Scenarios



- Targets: CO2 and security of supply
- Requires
 - Efficiency improvements incl. transport sector
 - Utilization of available RE resources
 - Infrastructure (electricity, district heating)
 - Intelligent energy system
 - Research, development and demonstration
- Economy
 - Sensitive to fuel and CO2-prices

- Road-map
- R&D&D
- Prioritised project
 - Energy efficiency
 - CCS
 - Off-shore wind
 - Bioenergy
 - District heating and CHP
 - ...