

Energy Conference
Vilnius, 5.. October 2011

District Heating and EU Energy Policy

Euroheat & Power

Birger Lauersen
President

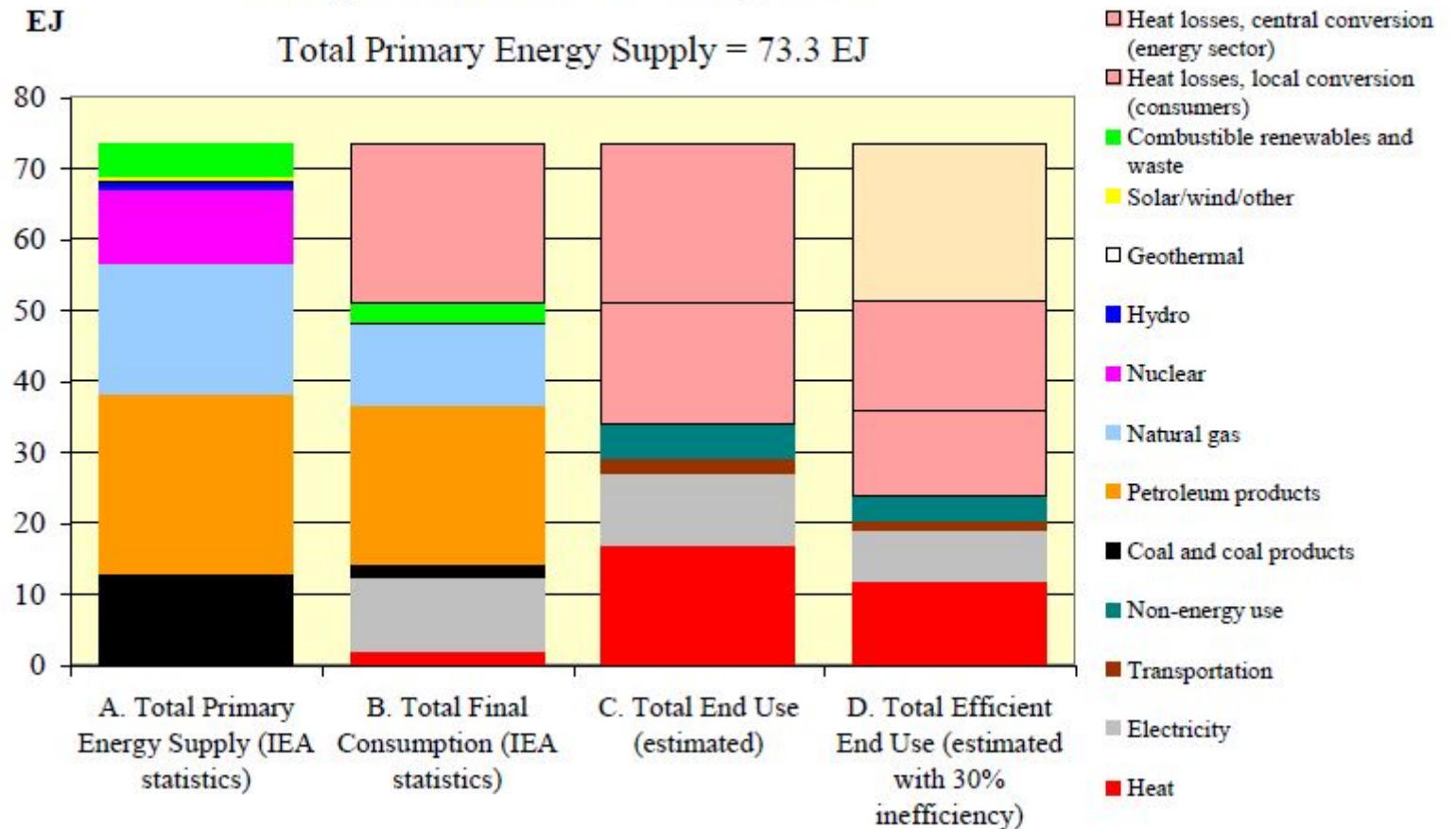
Manager International Affairs
Danish District Heatings Association



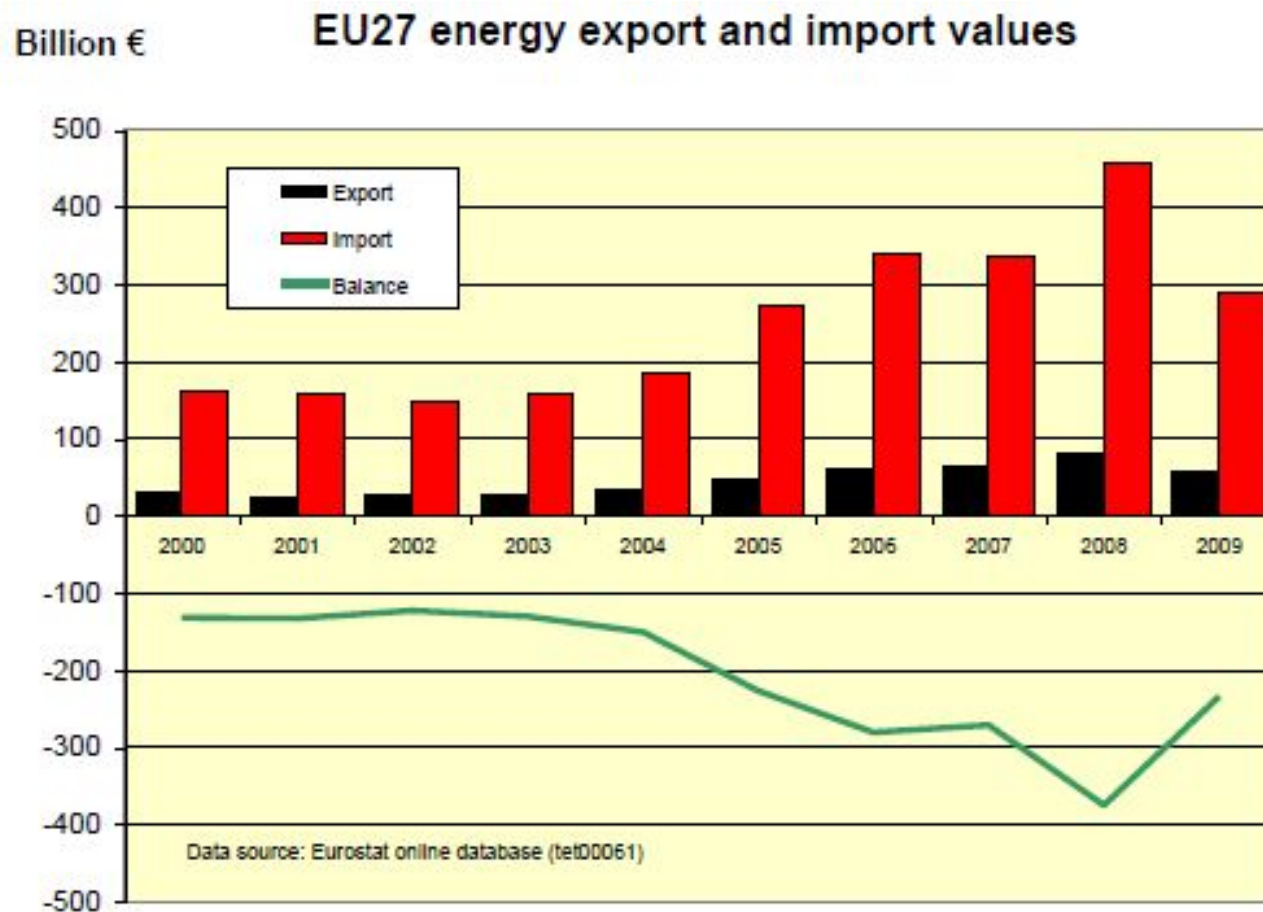
Europe's energy

European Union - 27 during 2008

Total Primary Energy Supply = 73.3 EJ



Energy Import Value





An Energy Hierarchy

Enhanced end-use efficiency

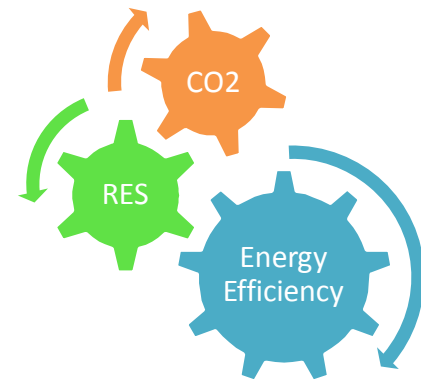
Reuse/recycle
(DHC)

RES



Energy Revolution

- Limit temperature rise to 2° C
 - By 2020
 - Reduce CO2 by 20% or 30%
 - **Improve energy efficiency by 20%**
 - Increase renewables to 20% (3/4 to come from biomass)
 - Increase biofuels to 10%
 - By 2050
 - Reduce CO2 by 80%
 - 100% carbon free electricity





Energy Efficiency Directive

Follows the latest calls for action by the European Council (4th February 2011), Energy Council (10th June 2011) and European Parliament to achieve the objective to reduce by 20% the EU's anticipated energy consumption for 2020.





Background

- Heat & cooling is responsible for half of the energy consumption
- No possibility to reach CO2 and RES targets without a much stronger focus on energy efficiency
- No possibility to reach the energy efficiency target without stronger focus on heating and cooling
- Today's forecast: only 11% instead of 20% by 2020



Process

- Published in June by the Commission
- Debated in the Parliament and Council NOW!
- Draft EP report by end of September, Amendments by end of October
- First reading to be finalised under Danish Presidency
- Adoption 2nd half 2012



Main Components

- Role of public sector: 3% refurbishment of public buildings
- Role of utilities: 1,5% reduction of consumption at final customers
- Role of power sector: Recover waste heat
- Role of industry: Recover waste heat



Definitions

- *‘Energy service’ means the physical benefit, utility or good derived from a combination of energy with energy efficient technology or with action, which may include the operations, maintenance and control necessary to deliver the service, which is delivered on the basis of a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement or primary energy savings;*

Is DHC an energy service?



Measures

- Member States to promote efficient DHC
- CHP should become default
- Priority grid access
- Waste heat recovery becomes default
- Heating and cooling plans
- Authorisation and permitting procedures
- Review of efficiency of energy networks
- Metering and billing

Ecoheat4EU

- Ecoheat4EU aims to create the preconditions and initiate a transformation of national legislative frameworks towards the effective promotion of modern district heating and cooling (DHC) systems.
- For national policy-makers: A comprehensive toolbox to inform and guide policy decisions in the heating and cooling markets
- For EU policy-makers: Feedback on the effects current EC measures produce on DHC, so as to contribute to present and future initiatives
- For DHC stakeholders: A wealth of categorized and analysed information, valuable for activities and longer-term
- 16 partners and 14 target countries



Recommendations

- Consolidation Countries
- **Refurbishment Countries**
- Expansion Countries
- New Development Countries

DHC Legislation

Number of relevant legislative frameworks
by country group and legislative group.

| Count of recommendation group | Country group | | | | Grand Total |
|--|---------------|---------------|-----------|-----------------|-------------|
| | Consolidated | Refurbishment | Expansion | New development | |
| Apply investments grants | 1 | 5 | 4 | 3 | 13 |
| Recognise DHC benefits in National Energy Policies | 1 | 3 | 4 | 3 | 11 |
| Avoid building code distortion | 3 | 2 | 1 | | 6 |
| Apply heat planning | 1 | 2 | 1 | 2 | 5 |
| Avoid ETS distortion problem | 1 | 2 | 1 | | 4 |
| Avoid policy incoherence | 1 | 1 | | | 3 |
| Facilitate DHC financing | | | 2 | | 3 |
| Apply DHC action plan | | | 1 | 2 | 2 |
| Apply DHC legislation | | | | 1 | 2 |
| Apply tax deduction | | 1 | | 1 | 2 |
| Avoid policy incoherence | | 1 | | 1 | 2 |
| Avoid price regulation distortion | | 2 | | | 2 |
| Revise energy taxation | 1 | | 1 | | 2 |
| Support DHC research | 1 | | 1 | | 1 |
| Apply best practice support measures | | | 1 | | 1 |
| Apply DHC dissemination | | | 1 | | 1 |
| Avoid allocation distortion | | | 1 | | 1 |
| Avoid ownership distortion | | | 1 | | 1 |
| Facilitate CHP electricity distribution | | | | 1 | 1 |
| Facilitate investment grants | | | 1 | | 1 |
| Grand total | 11 | 19 | 21 | 14 | 65 |

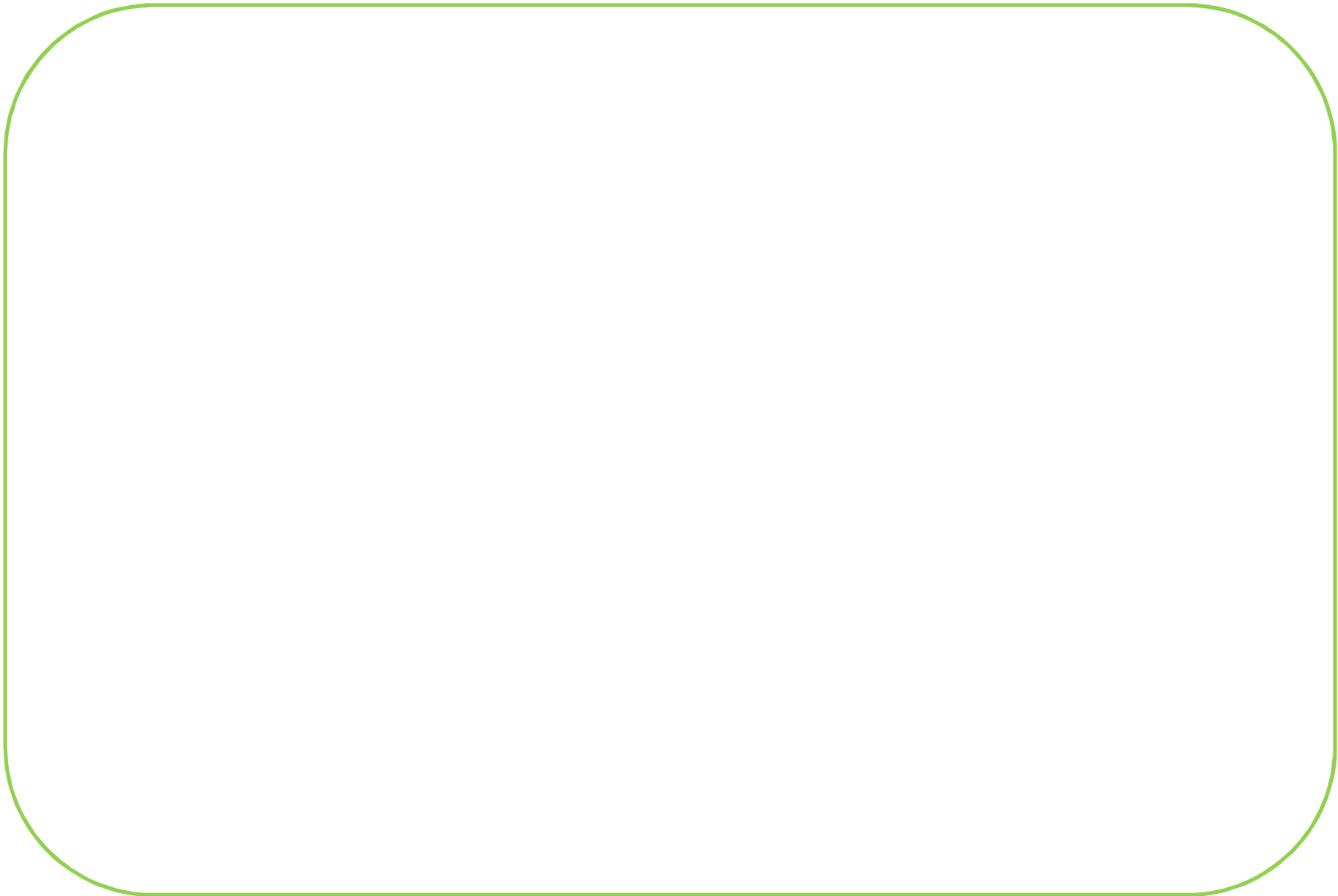


Refurbishment Countries

- Importance of national energy strategy that has clarity, is based on long-term strategic planning
- Recognition of DH benefits and renewables integration potential
- Investment support especially for network modernisation and integration of renewables
- Improvement of heat tariff system, to enable modernisation
- Avoid double taxation on DH (CO2 taxes and EUETS)



**EUROHEAT
& POWER**



Thank you for your attention!

Birger Lauersen
Manager International Affaires
Danish District Heating Association
Contact: bl@danskfjernvarme.dk