

Some Current EU Directives

Jari Kostama
Finnish District Heating Association

14.6.2004
Nordic District Heating Symposium
Ålesund
NORWAY



finergy

Suomen  Kaukolämpö ry

Contents

- Making decisions in the EU
- Some directives
 - CHP
 - Emission Trading
 - (Waste Incineration)
 - (RES-E)
- Wrapping up



Making decisions in the EU 1(8)

- European Commission
 - Monopoly to propose legislation to Parliament and the Council
 - Implementing EU policies and the budget
 - Enforcing European law
 - Infringement procedure
 - Representing the EU on the international stage
 - 30 commissioners (1.11.2004: 25)
 - Directorate-Generals (DGs) and services (e.g. legal)
 - 24 000 civil servants



Making decisions in the EU 2(8)

- The Council of the European Union
 - The Council is the EU's main decision-making body
 - Responsible for passing the European law (in many fields jointly with the European Parliament (EP))
 - Co-ordinating the economic policies of the member states
 - Officially signing of international agreements
 - Approving the EU budget (together with the EP)
 - Common Foreign and Security policy (CFSP)
 - Justice and Home Affairs



Making decisions in the EU 3(8)

- The Council of the European Union
 - Decisions in the Council are taken by vote (1.11.2004-):
 - Germany, France, Italy and the United Kingdom 29
 - Spain and Poland 27
 - Netherlands 13
 - Belgium, Czech Republic, Greece, Hungary and Portugal 12
 - Austria and **Sweden** 10
 - **Denmark**, Ireland, Lithuania, Slovakia and **Finland** 7
 - Cyprus, Estonia, Latvia, Luxembourg and Slovenia 4
 - Malta 3
 - TOTAL 321



Making decisions in the EU 4(8)

- The Council of the European Union
 - Denmark, Finland and Sweden have altogether 24 votes (7,5%)
 - The most common voting procedure is majority voting
 - Majority of member states (in some cases some cases 2/3) and 72,3 % of the total (=232 votes)
 - Unanimous decisions are required for e.g.
 - CFSP
 - Taxation
 - Asylum and integration policy



Making decisions in the EU 5(8)

- The European Parliament
 - The members of the European Parliament (MEPs) sit not in national blocks but in Europe-wide political groups
 - The power to legislate (co-decision with the Council)
 - Democratic supervision over the European institutions
 - Approving the EU budget (together with the Council)
 - Preparing for the plenary session in the various committees
 - Denmark, Finland and Sweden have altogether 47 votes (6,4%)



Making decisions in the EU 7(8)

- The Court of Justice
 - The preliminary ruling
 - The EU law must be interpreted in a same way in different countries
 - Proceedings for failure to fulfil an obligation
 - Proceedings for annulment
 - If the law in question was not correctly adopted or is not correctly based on the Treaties, it may declare the law null and void.
 - Proceedings for failure to act
- => **Case law**



Making decisions in the EU 8(8)

- The future
 - The EU based legislation concerning energy and environment is increasing
 - The European Constitution proposal
 - The Union shall have shared competence with the member states on energy issues
 - Co-decision procedure
 - Majority voting
 - Energy and Environmental Taxes
 - From unanimous decisions => Majority voting?



Making decisions in the EU 6 (8)

Number of seats by country

		1999-2004	2004-2007	
• Austria	21		18	
• Belgium	25		24	
• Cyprus	-		6	
• Czech Republic	-		24	
• Denmark		16		14
• Germany		99		99
• Greece	25		24	
• Spain	64		54	
• Estonia	-		6	
• Finland	16		14	
• France	87		78	
• Hungary		-		24
• Ireland	15		13	
• Italy		87		78
• Latvia	-		9	
• Lithuania		-		13
• Luxembourg		6		6
• Malta	-		5	
• Netherlands		31		27
• Poland	-		54	
• Portugal	25		24	
• Slovakia		-		14
• Slovenia		-		7
• Sweden	22		19	
• United Kingdom	87		78	
• TOTAL	626		732	



CHP Directive 1(6)

- Policy wishes in Europe for CHP
 - IPPC Directive 1996 – CHP is BAT technology
 - CHP Strategy 1997 – 18 % target
 - Action Plan on energy efficiency 2000 – 18 % target reaffirmed
 - Directive on the incineration of waste 2000 – the potential of CHP must be evaluated
 - LCP Directive 2001 – all new combustion plants should be considered for CHP
 - Directive on the Energy Performance of Buildings 2002 – new buildings (>1000 m³) should be considered for CHP
 - ECCP Action Plan 2001 => CHP Directive 2004



CHP Directive 2(6)

- Targets
 - To promote CHP
 - To save primary energy
 - To reduce emissions, in particular of greenhouse gases
 - To assist reaching Kyoto protocol obligations
 - To improve the security of energy supply in Europe
 - To improve the competitive situation of EU member states
 - To harmonise the basis of CHP support schemes in EU member states
 - To ensure the origin of high-efficiency CHP electricity



CHP Directive 3(6)

- Contents
 - Definitions
 - CHP electricity – annual overall efficiency 75/80 %
 - Efficiency criteria for CHP
 - Primary energy savings min. 10/0 %, alternative
 - Harmonised reference values???
 - Guarantee of origin for CHP electricity – on request
 - Analysis of national potentials
 - Fair conditions for grid access
 - Support schemes
 - Alternative possibilities to calculate PES
 - Committee to assist the Commission



CHP Directive 4(6)

- Implementation in member states
 - Establish the necessary legal basis for implementation
 - Establish a system for guarantee of origin
 - Consider the support mechanisms
 - Report statistics annually
 - Regular reporting on development
 - Initiate the analysis of potential
 - Identify heating and cooling demands
 - Feasible potential for CHP
 - Fuel availability, technologies e.g. micro CHP
 - Identify national barriers



CHP Directive 5(6)

- Instruments
 - Guarantee of origin as a market tool for a producer
 - National analyses of potential
 - Member states have to prepare well documented analyses
 - Identified potentials will immediately call for action
 - Safeguard for fair and reasonable conditions
 - Grid access
 - Administrative procedures
 - Monitoring of development and taking new initiatives



CHP Directive 6(6)

- The future
 - The Directive provides a framework for future CHP and introduces some instruments
 - The work of the Committee will be very important
 - Issues to be solved
 - Determination of CHP
 - CEN/CENELEC Manual gives a good starting basis for future work
 - Comparing CHP to separate production
 - Must be fair, based on empirical data and find the balance between accuracy and simplicity (=mission impossible!)
 - National potentials
 - Promoting CHP and exploiting the national potentials in practise



ET Directive 1(13)

- Background for climate policy and the ET Directive
 - Strengthening of greenhouse phenomenon is a scientific and political fact and the connection with human activity is indisputable
 - Consequences are most likely world wide and serious
 - To reduce greenhouse gases will be one of the pivotal changes in the operating environment
 - The obligations of Kyoto are just the modest first signs of the change
 - The climate policy has become a part of trade policy and perhaps of global policy
- => Emission Trading Directive 2003



ET Directive 2(13)

- Definitions (shortened)
 - Allowance means an allowance to emit 1 tonne of CO₂ equivalent during a specified period
 - Installation means a stationary technical unit where one or more activities listed in Annex I are carried out and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect in emissions and pollution
 - Operator means any person who operates or controls an installation or...to whom decisive economic power over the technical functioning of the installation has been delegated



ET Directive 3(13)

- The principles of the EU emission trading
 - Operators get greenhouse gas emissions permits
 - It's not possible to operate an installation without it
 - Greenhouse gas emissions permit
 - Obligation to surrender a number of allowances equal to the total emissions from that installation during the preceding calendar year
 - Obligation to monitor, report and verify emissions
 - If an operator doesn't surrender sufficient allowances, an excess emissions penalty follows
 - 2005 – 2007: 40 € / tCO₂
 - 2008 – 2012: 100 € / tCO₂
 - It doesn't release the operator from the obligation to surrender a number of allowances equal to the total emissions from that installation during the preceding calendar year



ET Directive 4(13)

- Activities (installations), which are included in
 - Energy activities
 - Combustion installations with a rated thermal input exceeding 20 MW (except hazardous or municipal waste installations)
 - Mineral oil refineries and coke ovens
 - Production and processing of ferrous metals
 - Mineral industry
 - Other activities
 - Note! Pulp and paper industry



ET Directive 5(13)

- Allocation of emission allowances
 - Minimum of 95 % free of charge in 2005 to 2007
 - Minimum of 90 % free of charge in 2008 to 2012
 - Member states develop [national allocation plans](#) (NAPs)
 - NAP is a statement of intent of how many allowances a member state will allocate in total and per installation in the period (and per year)
 - NAP is a public document (transparency)
 - Commission scrutiny
 - Within 3 months after submission
 - Commission can reject the plan in whole or in part
 - Conformity with requirements in the Directive
 - Compatibility with state aid rules



ET Directive 9(13)

- The schedule of implementation
 - The national legislation shall be in force 31.12.2003
 - All member states failed
 - National allocation plans shall be notified to the Commission by 31.3.2004 at latest
 - Only 5 countries notified NAPs in time
 - 10.6.2004: Still 11 countries haven't delivered their NAP
 - The final decision on allocation shall be taken at least 3 months before 1.1.2005
 - Most of the countries will have difficulties to act in time
 - The 1st period shall commence 1.1.2005
 - That will be the day!



ET Directive 10(13)

- Impacts on energy market
 - Pressure to increase prices of electricity and heat
 - The energy intensive industry will be substantially influenced
 - Competition positions of fuels will strongly change
 - Effects on energy investments
 - Liaison with current and forthcoming measures based on energy and environmental policies (taxes, subsidies)
 - Impact of allocation of allowances (NAPs)
 - Especially the competition positions of different companies
 - Insecurities of implementation

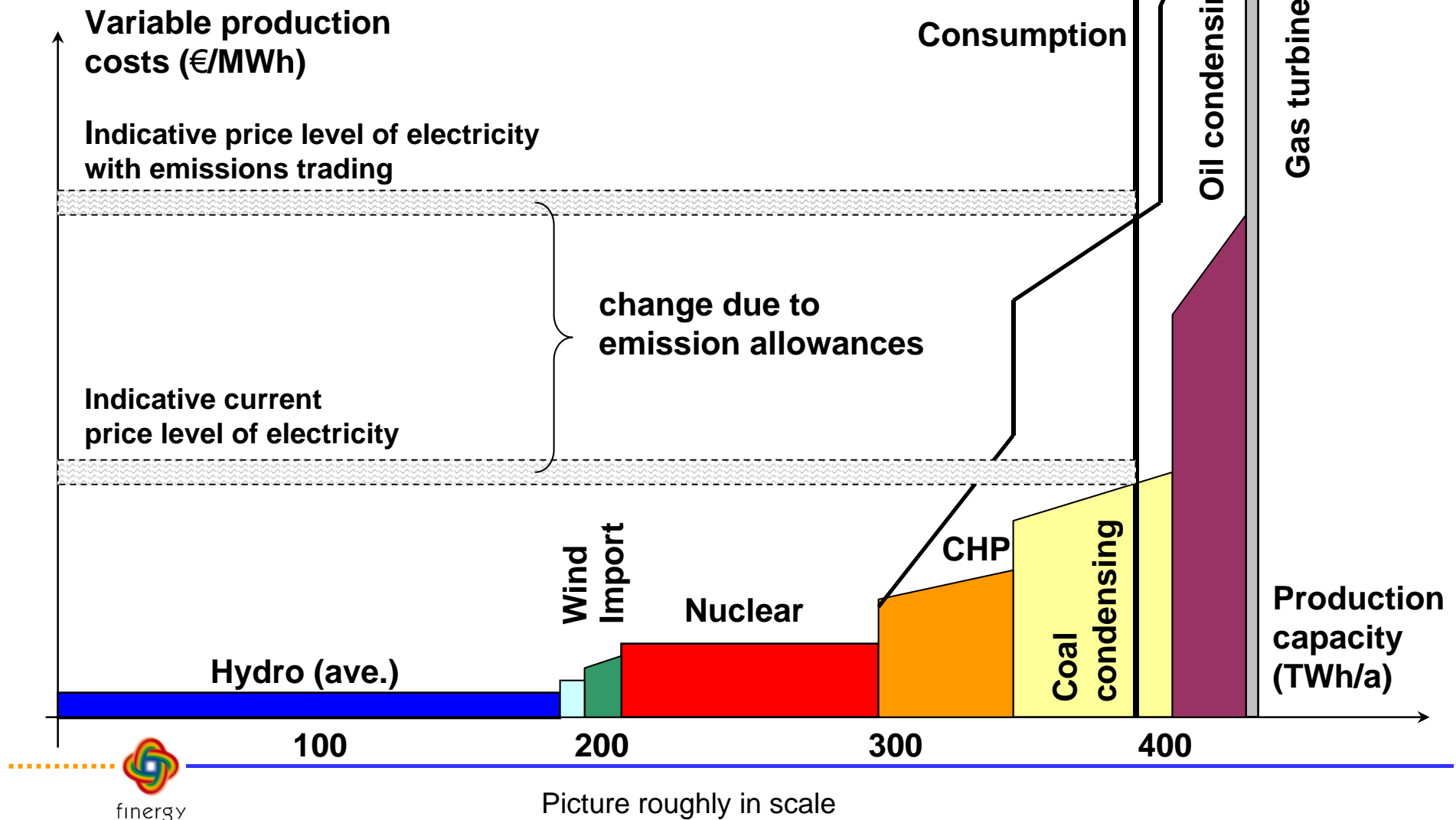


ET Directive 13(13)

- The future
 - The emission trading is probably the most important factor influencing the European energy industry in the future
 - Starting the scheme is slow
 - The real functioning of the emission trading is still a question mark
 - The need to buy allowances will increase district heat and electricity prices
 - The emission trading promotes carbon free energy sources like nuclear, hydro and renewables
 - Liaison with other energy and environmental policy measures need careful consideration



Electricity price in Nordic countries and CO₂ emissions trading



NAP of Denmark

- Combination of grandfathering (1998-2002) & benchmarking
- Allocation 33,5 Mill. tCO₂/y
- 5 % auction of allowances
 - Revenues will be used for JI/CDM projects & costs of administering the ET scheme
- Reduction compared to business-as-usual –scenario 2005-2007 is 14,8 %
- Energy sector
 - For district heating allowance allocation will correspond to historical emissions (-7%)
 - Electricity production bears the most of the reduction burden (-26%)
 - 1,3 Mill. tCO₂ less than current emissions quota of national emission trading scheme
 - Benchmarking is used for electricity production; comparison to natural gas combined cycle plants
- Reservation for new entrants 1,0 Mill. tCO₂/y
- No opt in/opt out



finergy

NAP of Sweden

- Grandfathering and projections (1998-2001)
- Allocation 22,9 Mill. tCO₂/y
- Reduction compared to business-as-usual –scenario 2005-2007 is 13,9 %
- Energy sector
 - Energy production will get around 80 % of the needed allowances
 - New entrants:
 - Benchmarking
 - Electricity 265 tCO₂/GWh
 - Heat 83 tCO₂/GWh
- Reservation for new entrants 1,8 Mill. tCO₂/y
- Opt in: If the total thermal capacity of DH plants of a DH network is at least 20 MW, all the DH plants of that network belong to the scheme



Draft NAP of Finland

- Mainly grandfathering (1998-2002)
 - Condensing power production (2000-2003)
- Allocation 45,5 Mill. tCO₂/y
- Reduction compared to business-as-usual –scenario 2005-2007 is 2,5 %
- Energy sector
 - For district heating allowance allocation will correspond to historical emissions
 - Temperature correction
 - DH network: Customer heat load correction
 - Condensing power production bears the most of the reduction burden
 - New entrants:
 - DH base/peak load 6000/500 h
 - Condensing power 6000 h
 - Specific emission coefficient
 - Liquid/gas 100% gas
 - Solid 70% peat / 30% wood
- Reservation for new entrants 0,8 Mill. tCO₂/y
- Opt in: All the DH plants belong to the scheme, if one of the plants of the same DH network belongs to the ET scheme and produces mainly DH



finergy

Heat market and emission trading

- Electric heating

- Difficult to estimate the increase of electricity price, but we know the direction
- Probably weakens the position of electric heating

- Individual boiler heating

- Other measures?
- Increase of taxation of oil?
- The change in wood fuel price? Subsidies still needed?

- District heating

- Customers will pay the cost of buying allowances, magnitude depends on fuels and NAPs
- How to set price for new customers?

- Heat pumps

- From the emission trading point of view a form of electric heating, with lower market risks



Waste Incineration Directive

- Scope
 - Incineration and co-incineration plants
 - Excluded ...(iii) wastes of pulp and paper industry, if it is co-incinerated and the heat generated is recovered
 - => Tens of millions of Euros annual savings for Nordic pulp and paper industry
- A lot of technical details...not handled here!
- Impact on energy incl. DH production
 - Co-incineration becomes uneconomical in most of the combustion plants
 - Treatment of process gas from gasification plant still open?
 - Waste incineration plants decrease the CHP electricity potential



RES-E Directive

- Contents

- Definitions

- National indicative targets for Member States

	RES-E % 1997	RES-E % 2010
• Denmark	8,7	29,0
• Finland	24,7	31,5
• Sweden	49,1	60,0
• EU	13,9	22,0

- Support schemes, Guarantee of origin,
Administrative procedures, Grid access

=> Liaison with the emission trading?



Conclusions

- EU legislation based regulation is increasing rapidly
- Especially environmental questions become more and more important...
 - Prevention of Climate Change (ECCP)
 - CHP -Directive (in force)
 - RES-E -Directive (in force)
 - Emission Trading –Directive (in force)
 - Energy End-use Efficiency & Energy Services –Directive (proposal)
 - RES-H –Directive (planned)
 - Etc.
 - Other environmental norms
 - IPPC –Directive
 - LCP –Directive
 - Waste Incineration -Directive
 - Etc.



Thank you for your
attention!



finergy
7.6.2004/JKo



Suomen Kaukolämpö ry

This document was created with Win2PDF available at <http://www.daneprairie.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.