

# A New Legal Framework for Power Plants: The EU Energy & Climate Change Package

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# Outline

- **About EPPSA**
- **The EU Energy and Climate Change Package**
- **Critical issues**
- **Conclusion**

## About EPPSA: Who we are

**EPPSA is the voice, at a European level, of companies both manufacturing components for, and constructing turnkey power plants.**

**EPPSA represents the views of its members on all core issues affecting them such as environment, energy supply, and research funding topics.**

# EPPSA Members

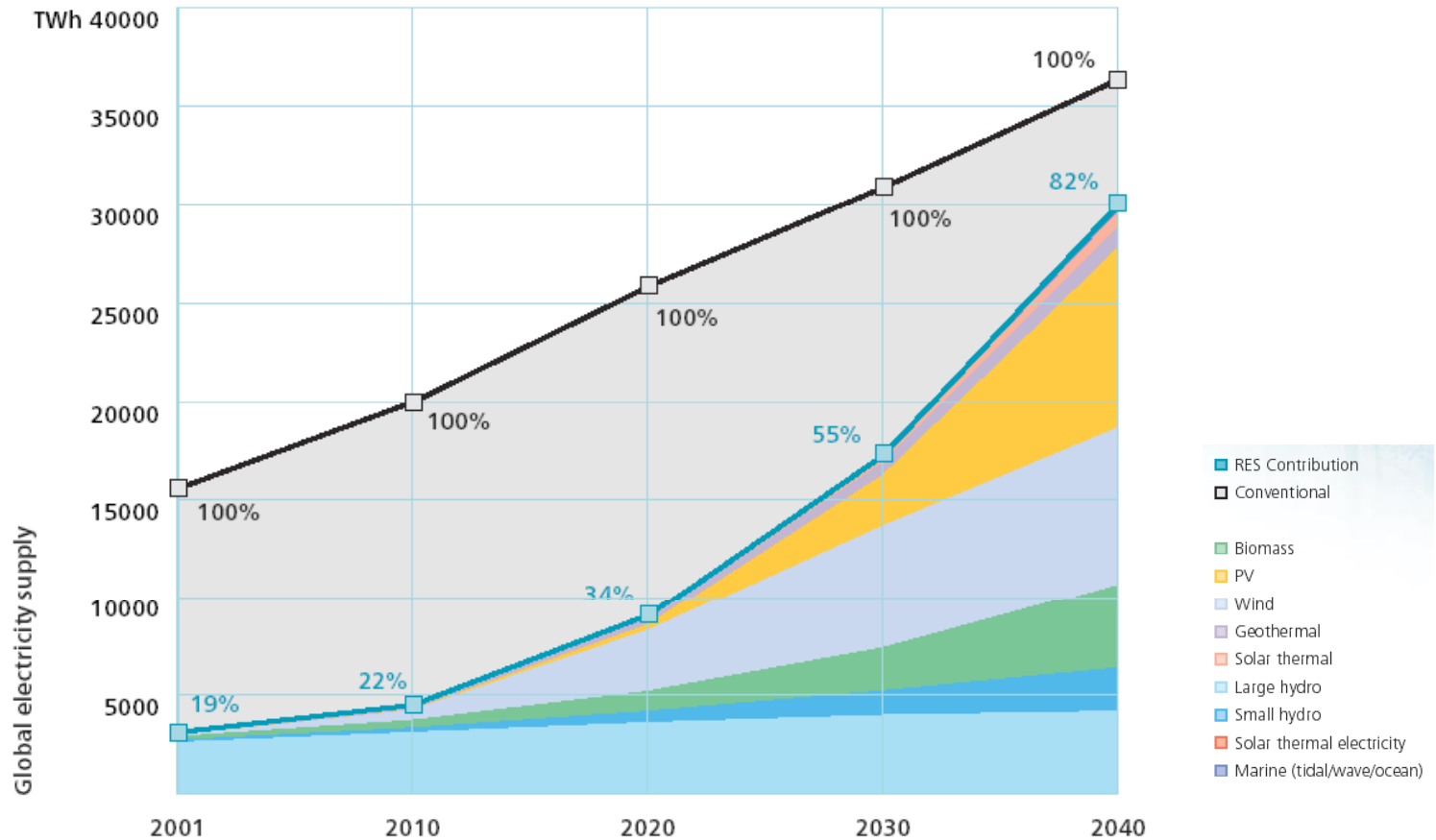


AUSTRIAN ENERGY  
& ENVIRONMENT



This leading technology branch has more than 100.000 employees and an annual turnover of over € 20 billion

# Future World's Electricity Supply



***Renewables will contribute more than 80% to the total global electricity supply in 2040!!!***

Source: Renewable Energy Scenario to 2040 – Half of the global energy supply from renewables in 2040, EREC

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P. Clerens; New Build Europe - Munich, 01.07.2009

# EU Energy & Climate Change Package

March 2007

European Council adopts an **Action Plan** based on the Commission's Communication "**An Energy Policy for Europe**" setting the 20-20-20 targets



January 2008

European Commission adopts **Energy & Climate Change Package**



December 2008

Final adoption of legislative compromise via **Trilogue** (European Parliament, European Council and European Commission, 17.12.2008)

# EU Energy & Climate Change Package

The climate-energy legislative package includes the following acts:

**-New rules promoting the use of energy from renewable sources (RES)**

**-Regulatory framework for Carbon Capture & Storage**

-EU Member States share the effort to make carbon emissions reductions

-New rules for cleaner cars in Europe

-New environmental quality standards for fuels and biofuels

**-Revised EU Emission Trading System for GHG**

# EU Energy & Climate Change Package

## Directive on energy from renewable sources (RES)

-Clear definition of Biomass (*Art. 2e*)

-Biomass is recognised as an important component and is entitled to proper subsidies

-***Sustainability Criteria***: assessment to ensure the sustainability of the biomass burnt for energy:

***The Commission shall report on requirements for a sustainability scheme for energy uses of biomass, other than biofuels and bioliquids, by 31 December 2009. (art 17.9)***

-The GHG footprint of the energy from biomass has to be between 35 to 60% lower than the energy source it replaces. The RES Directive gives a formula for Biofuels' sustainability calculation - may give suggestion on how it will evolve. (*Annex V*)

# EU Energy & Climate Change Package

## Directive on Geological Storage of CO<sub>2</sub>

i. The Council rejected the Parliament's proposal for mandatory capture of CO<sub>2</sub> from 2015 onwards

ii. No proof of storage capacity or capture ready proof is required for new plants

- Only combustion plants of **300MW or more** need to assess whether suitable storage sites are available, CO<sub>2</sub> transport is technically and economically feasible and it is technically and economically feasible to retrofit for CO<sub>2</sub> capture (*Art 32 inserting Art. 9a Nr. 1*)

- **if** these conditions are met, suitable space on the installation site for the equipment necessary to capture and compress CO<sub>2</sub> has to be set aside (*Art 32 inserting Art. 9a Nr. 2*)

- This means that if a plant is in a position that does not allow an economic retrofit of CCS, **no obligation** is placed on its plant operator

iii. Purity of the CO<sub>2</sub> stream is not defined in % but by exclusion:

- It may not contain waste and may not affect the integrity of the storage site or transport network as well as pose significant risk to the environment or human health (*Art. 12*)

# EU Energy & Climate Change Package

## EPS /ELVs (Emission Performance Standard / Emission Limit Values)

- Environment Committee of the European Parliament (EP) decided to introduce an EPS (ELV) of 500 g CO<sub>2</sub>/kWh in the CCS Directive.
- Via Trilogue reached political compromise that no ELVs for CO<sub>2</sub> would be included in the directive or in the Energy and Climate Change Package.

## HOWEVER

- Opponents to agreement wish to see emissions values integrated in the new Industrial Emissions Directive (IPPC recast), which sets limits on pollutants (excluding GHG). It is likely that discussion will come up again!
- Actual status of IED regarding CO<sub>2</sub>:
  - Preamble states that IED only for non-greenhouse gases
  - But: *Art. 33f* inserted the “capture ready obligation” from storage directive

# EU Energy & Climate Change Package

## Directive on the revised European Emissions Trading System (EU-ETS)

i. Addresses trading period 2013-2020

ii. **Article 28** foresees that the already ambitious targets will be adapted to a 30% reduction following a Commission report, in the event that an international agreement is reached with a mandatory reduction of GHG exceeding 20%

iii. The **power sector** will be obliged to acquire all of their emissions allowances at auctions. No free allocation will be given to electricity generators, except for modernisation if conditions met (mainly new Member States)

iv. Up to **300 million emission allowances** will be set aside until 31 December 2015 for the financing of clean technologies, namely to stimulate the construction and operation of up to 12 commercial demonstration plants (*art. 10a(8)*):

- part of estimated value (€6 to 9 billion) earmarked to low CO<sub>2</sub> technologies
- the other part will be available to demonstration projects for innovative renewable energy technologies
- no project may obtain more than 15% of the total 300 million allowances and grants shall be complementary to substantial co-financing by the operator of the installation

# EU Energy & Climate Change Package

**IMPLEMENTATION STEPS** as prepared by the European Commission – February 2009

Area	Task for the Commission	Deadline	Procedure
<b>Auctioning</b>	<b>Adopt the Auctioning Regulation</b> 1.Outline of Regulation in Sep/Oct 2009 2.Draft Regulation in Jan/Feb 2010 3.Adoption in June 2010	30.06.2010	Comitology
	Publish estimated amount to be auctioned	31.12.2010	
<b>Free allocation</b>	<b>Adopt guidance on the allocation of free allowances for the power sector</b> 1.Final adoption possibly by summer 2010 2.First discussion in WG3 possibly in autumn 2009	(31.03.2011)	Comitology
	Assess applications for the derogation from auctioning for the power sector	31.03.2012	Commission
	Potentially propose to offset distributional effects of free allocation	31.03.2011	Co-decision
<b>Cap</b>	Publish the absolute Community-wide quantity of allowances for 2013, based on allocations to installations in the period 2008-2012, excluding opt-ins	30.06.2010	
	Publish the absolute Community-wide quantity adjusted for opt-ins during 2008-2012 and new installations from 2013	30.09.2010	

# EU Energy & Climate Change Package

<b>NIMs</b>	Consider and potentially reject national implementation measures	(As from 30.09.2011)	Commission
<b>Functioning of carbon market</b>	<b>Examine need and potentially propose measures to avoid insider dealings and market manipulation</b>	31.12.2010	Co-decision
	Report on the functioning of the carbon market, including implementation of the auctions, liquidity and the volumes traded.	Every year	Commission
	Report on any malfunctioning and propose measures as appropriate	As needed	Co-decision
	Propose measures to address excessive price fluctuations, which do not correspond to changing market fundamentals	As needed	Comitology
<b>Carbon leakage</b>	<b>Determine sectors and sub-sectors deemed to be exposed to carbon leakage</b>	31.12.2009	Comitology
	Review list of sectors or sub-sectors Potentially add to the list of sectors or sub-sectors	Every 5 years Every year	Comitology
	<b>Report and make any appropriate proposals which may include:</b> -Adjusting the proportion of allowances received free of charge by sectors or sub-sectors under Article 10a	30.06.2010	Co-decision

# EU Energy & Climate Change Package

<b>Monitoring &amp; Reporting</b>	Adopt Regulation for the monitoring and reporting of emission, including for new sectors and gases as from 2013, e.g. PFCs from aluminium	31.12.2011	Comitology
<b>JI / CDM</b>	Set the exact quantitative levels on the use of JI/CDM up to 50% of emissions reductions below 2005 levels in 2008-2020	(31.12.2010)	Comitology
	Potentially set JI/CDM quality criteria	Scrutiny taking place now. Timing to be decided	Comitology
<b>Adjustment from 20 to 30%</b>	Report and submit legislative proposal to amend the Directive following the international agreement	3 months after signature	Co-decision
<b>CCS + RES funding</b>	Adopt criteria and modalities	End 2009	Comitology

# Carbon Capture Ready? ELVs for CO<sub>2</sub>?

## EPPSA advocates:

### Mandatory Carbon Capture-Readiness for new builds

- Size limit of 300MW (= LCPD)
- To meet targets set, retrofit must be done in future!!!

*For more details see EPPSA Presentation at Power-Gen Europe 2009*

[www.eppsa.eu](http://www.eppsa.eu)

### Mandatory ELVs for CO<sub>2</sub>

Always based on **BAT** as defined in the Industrial Emissions Directive and taking into consideration size, fuel and location of each specific power plant.

# Conclusions

## In the EU context, industry has an unequivocal path ahead...

- Clear targets for CO<sub>2</sub> emission reduction set for the next 10 years  
=> 20% (poss. 30%)
- CCS demonstration projects will be co-funded by the EU

## If global agreement is achieved in Copenhagen in December 2009...

- Global ETS constraints will be known => gives legal security and allows power industry to define medium and long term plans!

Developing the Future



***THANK YOU  
FOR YOUR ATTENTION!***

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