

European Commission Proposal for a Directive on the promotion of RES

Authors:

Mario Ragwitz

Fraunhofer Institute Systems and Innovation Research

Contact ... Web: <http://www.isi.fhg.de>

Email: ragwitz@isi.fhg.de

Gustav Resch, Thomas Faber,
Christian Panzer, Reinhard Haas

– all Energy Economics Group, Vienna University of Technology

Contact ... Web: <http://eeg.tuwien.ac.at>

Email: resch@eeg.tuwien.ac.at



Renewable energy sources (RES) have become more and more relevant in the European and global energy markets.

RE technologies help ...

- decreasing import dependency
- diversifying sources of production, and
- *contribute to a sustainable development.*

Recent political developments in Europe ...

10 January 2007 ... The Commission publishes the **Renewable Energy Road Map** (COM (2006) 848 final) (as part of the *integrated energy and climate change package "Energy for a changing world"*)

9 March 2007 ... The Council of the European Union agrees ...
→ to increase **RES-share in EU energy mix up to 20% by 2020**
→ **Binding overall RES target for each Member State**
i.e. → **National targets** covering the *whole energy sector*.
→ **Minimum 10% biofuels** in each Member State.

23 January 2008 ... The Commission publishes the Proposal of the new RES directive ...
... the overall 20% target for RES was broken down into national RES targets for 2020 ...

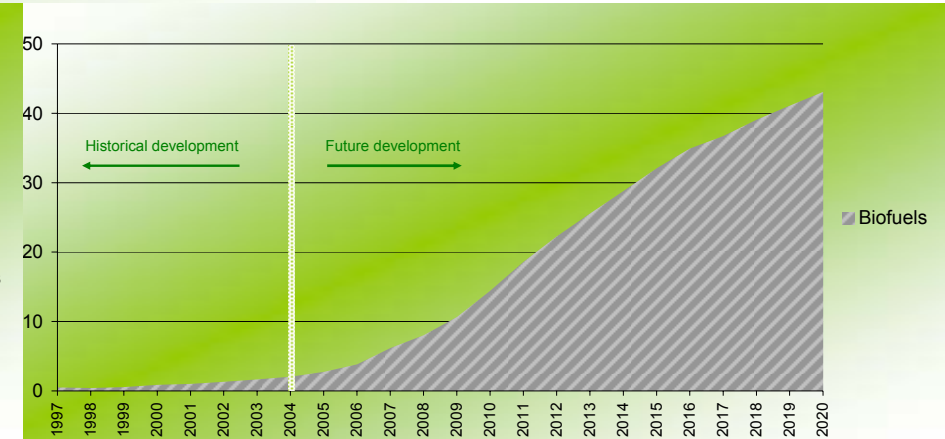
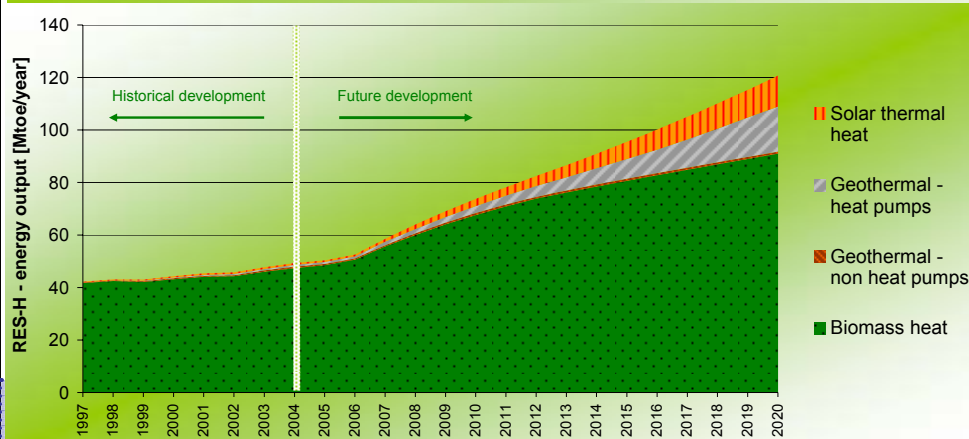
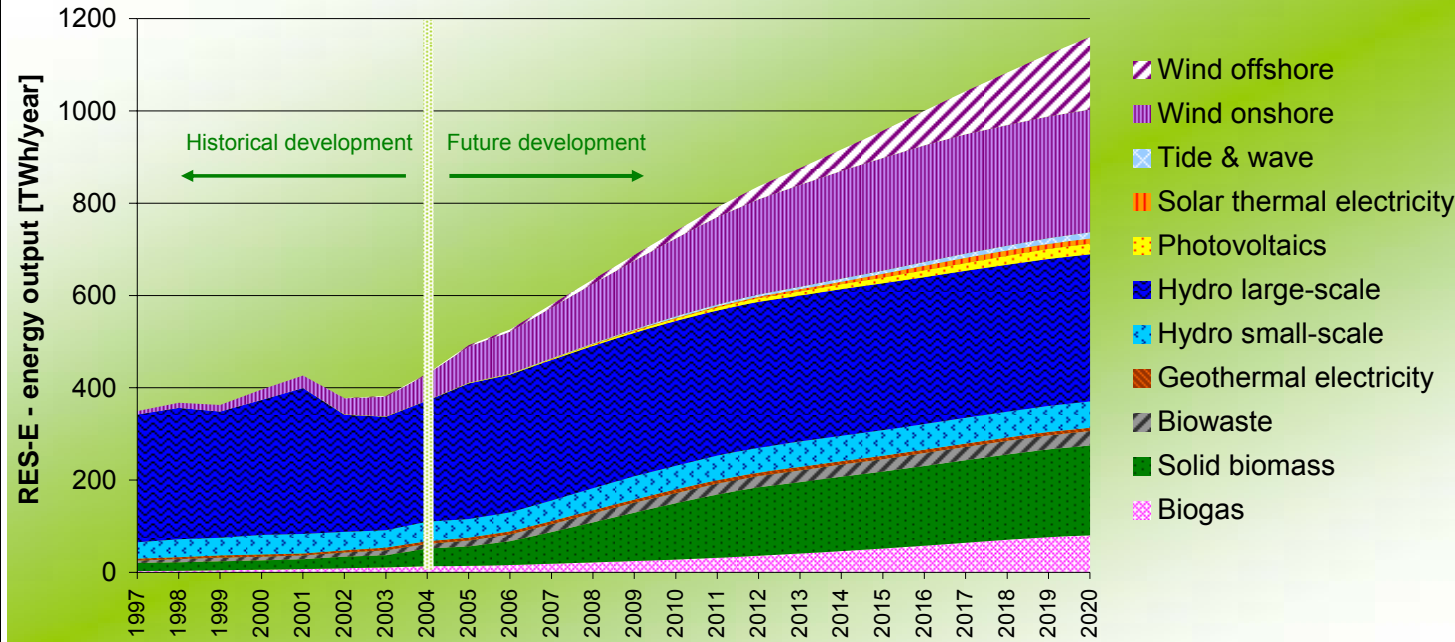
Introduction

► *Future perspectives: ... a scenario on how to meet the new challenge ...* **Renewable Energy Roadmap**

(European Commission, January 2007)
European Union

20% Renewable Energies by 2020

Green-X balanced scenario



Introduction



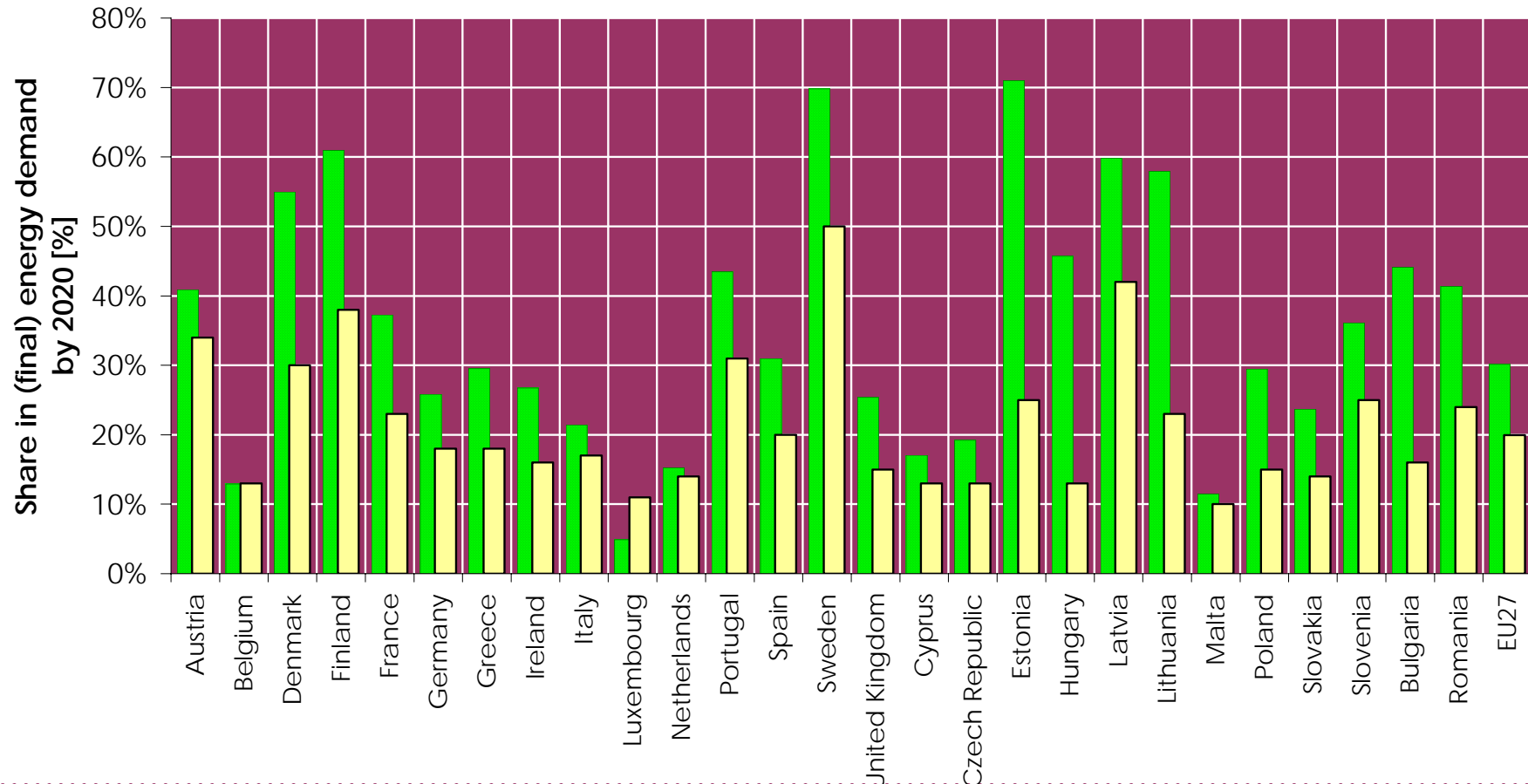
► National RES targets for 2020 - the proposed definition

20% RES by 2020

- proposed national RES targets

■ Total realisable RES potential up to 2020

■ Proposed RES targets for 2020



How the European Commission set the targets ... „FLAT RATE“ & „GDP-Variation“

... i.e.: $RES\text{-target}_{2020} = RES_{2005\%} + 50\% * RES_{NEW\%} + 50\% * "RES_{NEW\%} GDP\text{-weighting}" - "first\ mover\ bonus"$

***Elements of the new proposal for
a RES directive
- Discussion on GO trade -***

In order to give MS a maximum of flexibility for reaching their targets different options for trade of guarantees of origin are foreseen

Main Challenges:

- ▶ National governments need national targets to deliver necessary regime for planning, grid access, balancing and congestion management
- ▶ Investment risk to be minimised in a very complex policy environment
- ▶ One support price creates potentially large windfall profits and fails to support technology portfolio

► Flexibility by means of GO-trade - *Why?*

Rationale of European GO trade

- Renewable energy potentials are distributed unevenly across Europe.
 - A trading option could help MS with low RE potential to achieve their targets at lower societal cost (depending on the trade design).
 - Potentially, this could lead to lower overall costs for reaching the European 2020 targets.
 - Using standardised GOs for trade and disclosure may avoid double counting and double selling of RE.

- ▶ Flexibility by means of GO-trade - *design options*

General design options under discussion

- ▶ Trade by Member States or *private parties*?
- ▶ Restriction of trade?
 - Restriction to safeguard national support systems?
 - Trade only allowed after interim target is reached?
 - Restriction of *import* or also *export*?
 - GO trade of RES-E, or also *RES-H*?
- ▶ Further specifications?

Implementation of GO trade in the Directive proposal

- ▶ Directive aims to open the opportunity for both private party trade as well as MS trade
- ▶ The default option is private participant trade according to art. 8.1 (b), 8.2 and 9.3
- ▶ MS may restrict private participant trade using "prior authorisation" based on art. 9.2 - it is however unclear, whether such restrictions will be effectively possible under EU law
- ▶ Trade between MS is possible based on art. 8.1 (a) and 9.1 - only between MS, which have reached their interim targets

Trade of Guarantees of Origin - studying one possible case:

trade between private companies

**(according to art. 8.1, 8.2 and 9.3 of the
Directive)**

- ▶ Ecofys, Fraunhofer ISI and Vienna University of Technology, EEG examined concepts, critical issues and design options of European GO trade in a briefing paper for the German BMU. (Klessmann et al., October 2007)

► *Assessment: Case study ...*

... **Unrestricted GO-trade by private parties**

Critical issues of GO trade are discussed for the case of unrestricted trade by private parties, i.e. in the case that Member States are not able to effectively restrict trade

- RES-E producers can choose to sell their RES-E domestically or to governments and utilities in other MS
 - RES-E producers can participate in the support scheme of another MS, if they have not received support in their own country
- No further specification

Note: This is the most extreme case; alternative trade designs may limit critical effects.

► *Critical issue: Time frame for trade*

„Cherry-picking” between support schemes

► If producers can choose the support system which pays the highest support every year, they undermine the long term concept of most European support systems.

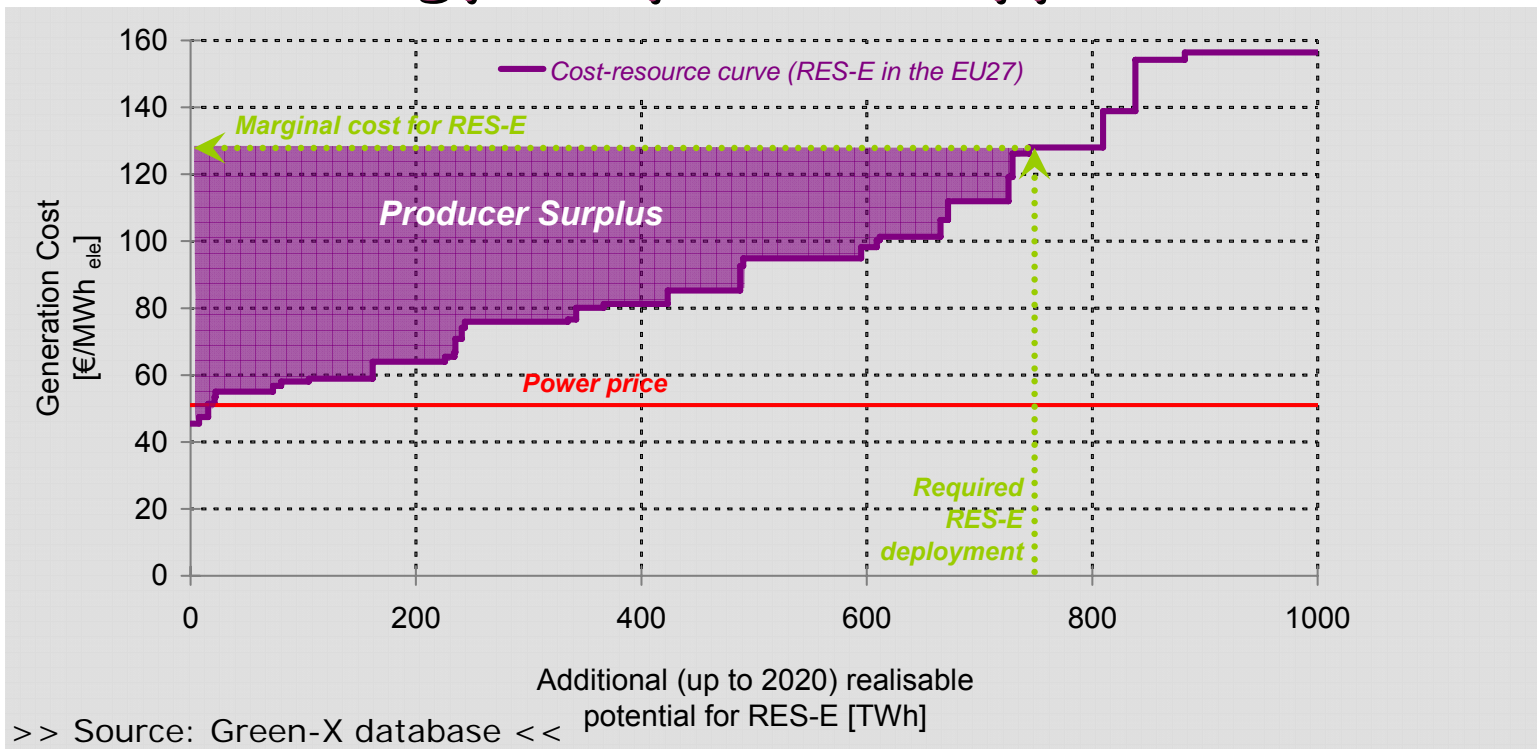
► The Directive proposal aims to exclude such a situation based on article 8.2:

Where an operator has submitted one or more guarantees of origin to a competent body in accordance with paragraphs 1(a) or (b), the operator shall:

(a) request guarantees of origin, in accordance with Article 6(1), for all future production of renewable energy sources from the same installation;

(b) submit these guarantees of origin for cancellation to the same competent body.

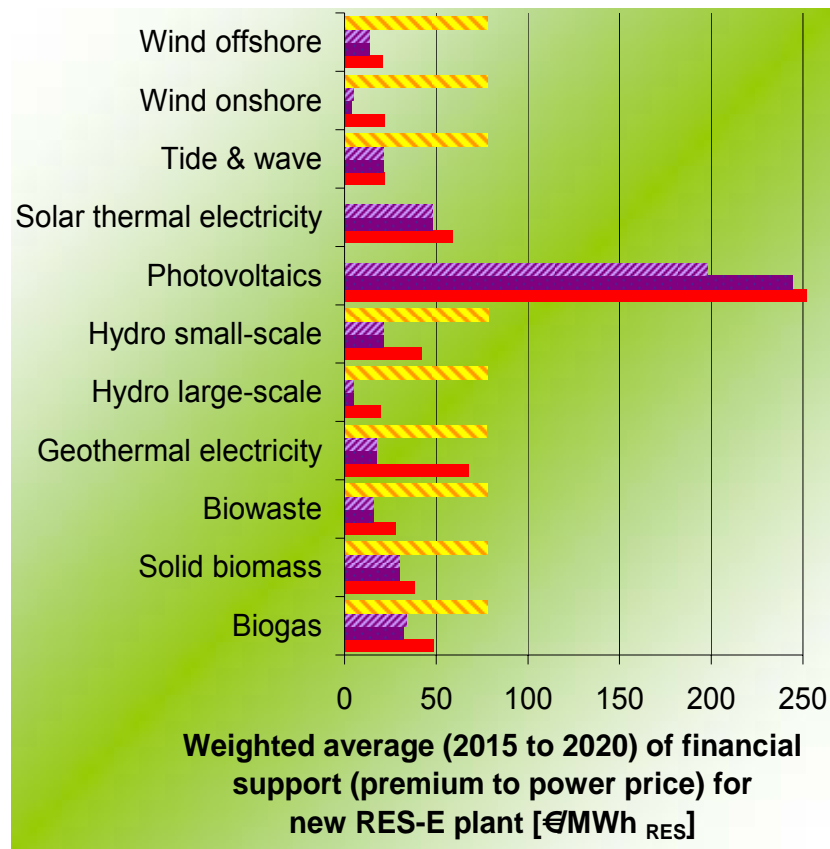
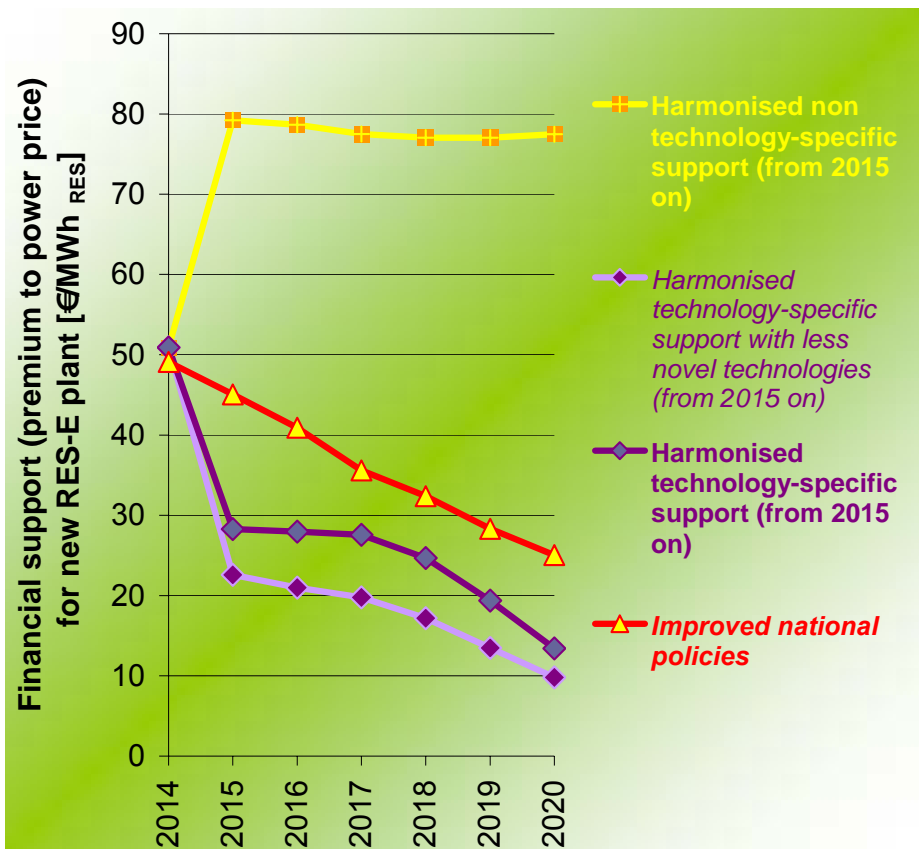
► Critical issue: **Technology unspecific support (GO trade)**



► A uniform European GO price for all RES-E would be set by the marginal price of the most expensive technology sold.

→ high producer surplus („windfall profits”)
for low cost RES-E options

► **Critical issue: Technology unspecific support (GO trade)**



→ **High public transfer cost may arise
(high consumer expenditures)**

► Critical issue? **Economic efficiency**

+: higher cost-effectiveness from the static viewpoint with regard to generation cost ... static least cost allocation of RES-E potentials all over Europe!

[2020: -3 ... 9 billion € (EU27)]

-: decreased dynamic efficiency!

... delayed deployment of innovative RES-E options

→ only at higher cost applicable when needed in the long-run!

-: decreased efficiency with regard to public cost (i.e. transfer cost for consumer) ... high producer profits may lead to a dramatic increase of consumer expenditures

[2020: ... up to +30 billion € (EU25)]

► Critical issue: „Cross-border subsidies“
... "sell-out" of low-cost RE potentials

- Net exporting countries would lose their low-cost RE potential. Their cost for achieving their RE target would increase.
- The cost for net importing countries would decrease.

→ Net exporting countries would **cross-subsidize** net importing countries.

But: benefits for their local industries, GHG reduction,
less air pollutant

In addition: The generated electricity still needs to be integrated into the power system of the exporting country (grid connection, reinforcement etc.) → integration cost, interconnectors needed?

► Concluding remarks

GO-trade at company / private level ...

- **Effective** trade restriction (Import / Export) for private trade are necessary!
- **Technology-specification of support is highly recommended**, but difficult to realise if private trade becomes the default case!

In general ...

- **(Unrestricted) private trade = hidden harmonisation!**
 - A public debate on pro's and con's as well as with regard to the choice of support instrument (TGC/GO vs. Premium-FITs) is needed!
- **Remove of non-economic barriers** for an accelerated RE deployment is necessary in order to assure the achieving of the 20% target at low public cost!
- **GO-trade at Member State level is preferential** → offers increased flexibility and contributes to a low cost solution!

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Forthcoming events: Regional workshops ...

Ljubljana, 11 April 2008

*London, 25 April 2008 ... Focus: joint efforts to promote
offshore wind in the North Sea?*

Rome, May 2008

Germany, June 2008

Final conference ... Brussels, November 2008

*Thanks for your
attention!*

In case of questions / remarks ...

▶ *Email: resch@eeg.tuwien.ac.at*

▶ *Phone: +43-1-58801-37354*

▶ *www.futures-e.org*

or <http://eeg.tuwien.ac.at>