

Cap and Trade: Transatlantic Perspectives on Trading, Auctioning and Revenue Spending

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1. Auctioning vs. Free Allowances: a shifting debate

First empirical evidence from Emissions Trading in Europe suggests....

- a) **opportunity costs** will be factored into energy prices regardless of the allocation method: Auctioning allows governments to recycle revenues and thus redistribute the windfall profits;
- b) grandfathering results in complex allocation rules on the national level; these **non-transparent allocation rules** lead to uncertainty for investments and innovation;
- c) Free allocation is not the first answer to address general **leakage** concerns. Leakage is not an economy-wide problem but has to be dealt with on a sector-specific level.

2. Emissions Trading in Europe (I)

- EU ETS largest multi-national and multi-sectoral installation based emission trading scheme worldwide.
- EU ETS covers about 11,5000 installations in 27 EU Member States and accounts for around 40 percent of EU GHG
- Coverage: Power sector, carbon intensive industries such as cement, glass or paper (scope to be extended by 2012 (e.g. aviation))
- Member States required to develop national allocation plans (NAPs): determining national cap + allocation rules for the installations.
- Trading periods and role of auctioning:
 - (1) 2005-2007 >> up to 5% auctioning (in fact 0.13)
 - (2) 2008-2012 >> up to 10% -"- (in fact 4%)
 - (3) 2013-2020 >> up to 100% (in fact about 50%)
- From 2013 total amount of allowances will be reduced by 1.74% p.a.

2. Emissions Trading in Europe (II)

Decisions for the EU ETS after 2012:

- *Shall full auctioning be introduced only for the power sector or also for carbon intensive industries?*

The power sector will be subject to full auctioning from 2013. Industry will also have to buy a substantial (and increasing) share of needed allowances through auctioning (in 2020: 70%).

- *How can leakage concerns be adequately addressed?*

Sectors considered to be significantly exposed to carbon leakage on the basis of objective & transparent criteria (cost impact/trade exposure) will get a higher share of free allowances

- *Shall Member States with lower economic capacity benefit more from allowances sales?*

Through the establishment of a solidarity mechanism, a redistribution of 12% of the revenues is planned (from rich to poor)

3. Current Auctioning practice in Europe (I)

- Phase I: 4 smaller EU Member States (Denmark, Ireland, Hungary, and Lithuania) gained experiences with auctions 2005-2007
- Main intention: to generate revenues and cover of administrative costs of the ETS.
- Only small amounts are traded: 0.13 percent of all allowances
- Denmark decided to sell the allowances on the market via contracting agents. Hungary, Ireland and Lithuania conducted sealed-bid auctions with uniform pricing.
- Structure of a sealed-bid auction (easiest, most efficient):
 - Participants render their bids at the same time
 - On the basis of an aggregated demand curve the clearing price is determined
 - In a uniform-pricing mode, every winning bid pays the clearing price.

3. Current Auctioning practice in Europe (II)

- Phase II (from 2008): 11 EU Member States has introduced auctioning procedures (= 4% of total allowances)
- German example: German government started in 2008 to sell about 8.8 percent of its total emission allowances (= 40 Mio EUA)
- Environmental Ministry commissioned in 2007 the KfW Bankengruppe with the completion of sales (on ECX and EEX).
- 40 Mio EUA are sold for a total of about 933 Mio €/ 1300 Mio US\$ (mean price 23.33€/ 32US\$).
- From 2010 on, the selling modus will be a uniform price sealed-bid auctioning procedure
- The same quantities of allowances will be auctioned each week at one of the existing emissions trading exchanges
- In the course of 2009, an award procedure will determine which of the exchanges is most suitable.

4. Concepts of Revenue spending

- *Redistributing revenues (fully or partially) to consumers:* Objective benefits for households with low incomes (payments etc.)
- *Using revenues to relieve the tax burden on people with earned or capital income.* Objective: stimulate growth and increase prosperity
- *Compensating the plant operators involved in emission trading.* Objective: compensated for rising costs and competitiveness loss
- *Financing measures aimed at climate protection and energy security nationally.* Objective: encourage further climate friendly investments in specific areas (building, CHP in district heating)
- *Financing international projects to support climate mitigation and adaptation projects.* Objective: Build capacities to address climate change in countries that are hit most by climate change impacts

5. The German approach: The Climate Protection Initiative (I)

- A lion's share of the auctioning revenues has been used to design the German "Climate Protection Initiative" (CPI).
- €400 million (= US\$ 558 mio) of the revenues were earmarked in the federal budget to the CPI (p.a.)
- Implementation: German Ministry for the Environment in close cooperation with other ministries (e.g. Foreign Office, BMZ)
- In 2008, the CPI allocated €280 million for national climate purposes and €120 million for international activities.
- Project selections should follow strategic criteria: GHG reduction, innovative character, multiplier effect and positive economic benefits

5. The German approach: The Climate Protection Initiative (II)

In 2008 five pillars were established nationally:

- 1. Guidelines on promoting climate protection projects in municipalities and in social and cultural establishments,
- 2. Climate incentive program for the installation of mini- combined heat and power (CHP)-plants in private households and commercial enterprises,
- 3. Climate incentive program for commercial refrigeration plants,
- 4. A program for promoting projects to optimize biomass energy use, and
- 5. An extension of the existing market incentive program for renewable heat

In addition: program for single projects incl. information campaigns targeted at consumer or other interest groups.

5. The German approach: The Climate Protection Initiative (III)

- Internationally: Total of 138 projects/120 Mio under implementation as of late 2008. Among the criteria for project selection are:
 - Direct and economically efficient mitigation effects
 - Conservation of climate-relevant biodiversity (carbon sinks)
 - Adaptation to climate change
 - Innovative character of projects & multiplier effect
 - Support by the partner countries (ownership)
 - Official Development Assistance (ODA) eligibility

- Among the geographical priorities are:
 - BRICS countries Brazil, Russia, India, China, and South Africa
 - Innovative projects in other countries: e.g. Mexico, Turkey, Ukraine, Indonesia and the Mediterranean region (e.g. "plan solaire" of the EU)
 - Biodiversity conservation and avoided deforestation (so called REDD): the Amazon region, Congo Basin, and South-East Asia
 - Selected adaptation projects in LDCs and small island states

6. Conclusions

- EU Policy-makers now widely believe in auctions: Windfall profits can only be avoided by selling allowances;
- Auctioning as an allocation method is still in a learning phase but fully-fledged auctioning will be practiced (in the electricity sector) in the next phase of emissions trading starting 2013;
- EU approach shows, how to include specific concerns in the overall design of the system (e.g. leakage, levels of economic development);
- Initial experience: Simple sealed-bid uniform price auctions were held without any major problems (role of secondary markets)
- Germany has a year-long experience with regular selling of allowances on the secondary market– so far no country has sold allowances so frequently;
- Revenues resulting from auctions can support climate protection initiatives nationally & internationally >> new political resources.



Thank you very much!

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