

The Surplus of AAUs

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Overview of the Issue

- Very large-scale problem, with environmental, political, and economic implications.
- *Frozen* problem currently, because the scale of AAU trades is comparatively small and AAU countries don't need them for compliance.
- The market for AAUs is small, not transparent and characterized by controversy.
- It is a systemic issue, because of the risk that post-2012 targets generate further surplus allowances.
- There is high uncertainty about the future legal form and compliance regime post-2012.

The Scale of the Issue

Environmental and financial consequences for scenarios that allow and forbid transfer, 2020

Table 3.1

2020	Environmental reduction consequences*		Financial consequences			
	Final emissions	Emission target 2020	carbon price	Total (net) revenues		
	Annex I incl. Russia & Ukraine	Russia & Ukraine**	Global	Annex I excl. Russia & Ukraine	Russia & Ukraine	non-Annex I
	% change relative to 1990 levels		USD/tCO ₂	Billion US dollar (costs*** as % GDP)		
<i>1.1 Allow transfer</i>						
<i>full banking/trading</i>	-13	-24	5	-14 (-0.03)	11 (-0.60)	-6 (-0.02)
<i>1.2 Forbid transfer</i>						
<i>a. Full cancellation of Kyoto hot air and new hot air</i>	-21	-24	24	-51 (-0.12)	12 (-0.65)	9 (-0.04)
<i>b. Cancellation of Kyoto hot air</i>	-19	-24	15	-36 (-0.09)	19 (-1.04)	0 (0.01)
<i>c. Cancellation new hot air</i>	-14	-41	9	-22 (-0.05)	13 (-0.75)	-4 (-0.02)

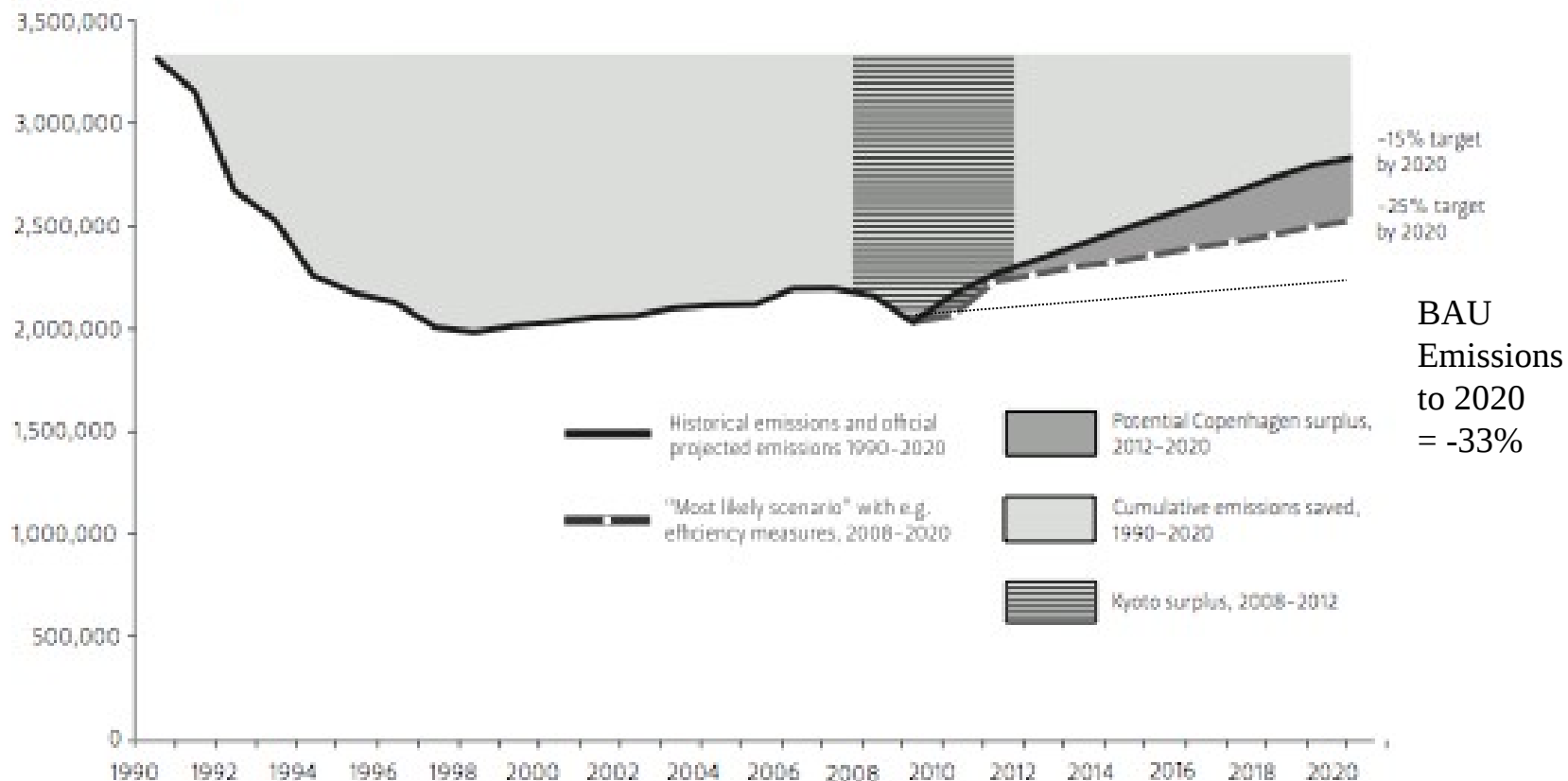
*as percentage of total reduction (excluding sinks)

** joined emission target for Russia and the Ukraine

*** negative values indicate costs and positive values represent gains

The Russian Example

Figure 1. Source: Authors



The Russian Example

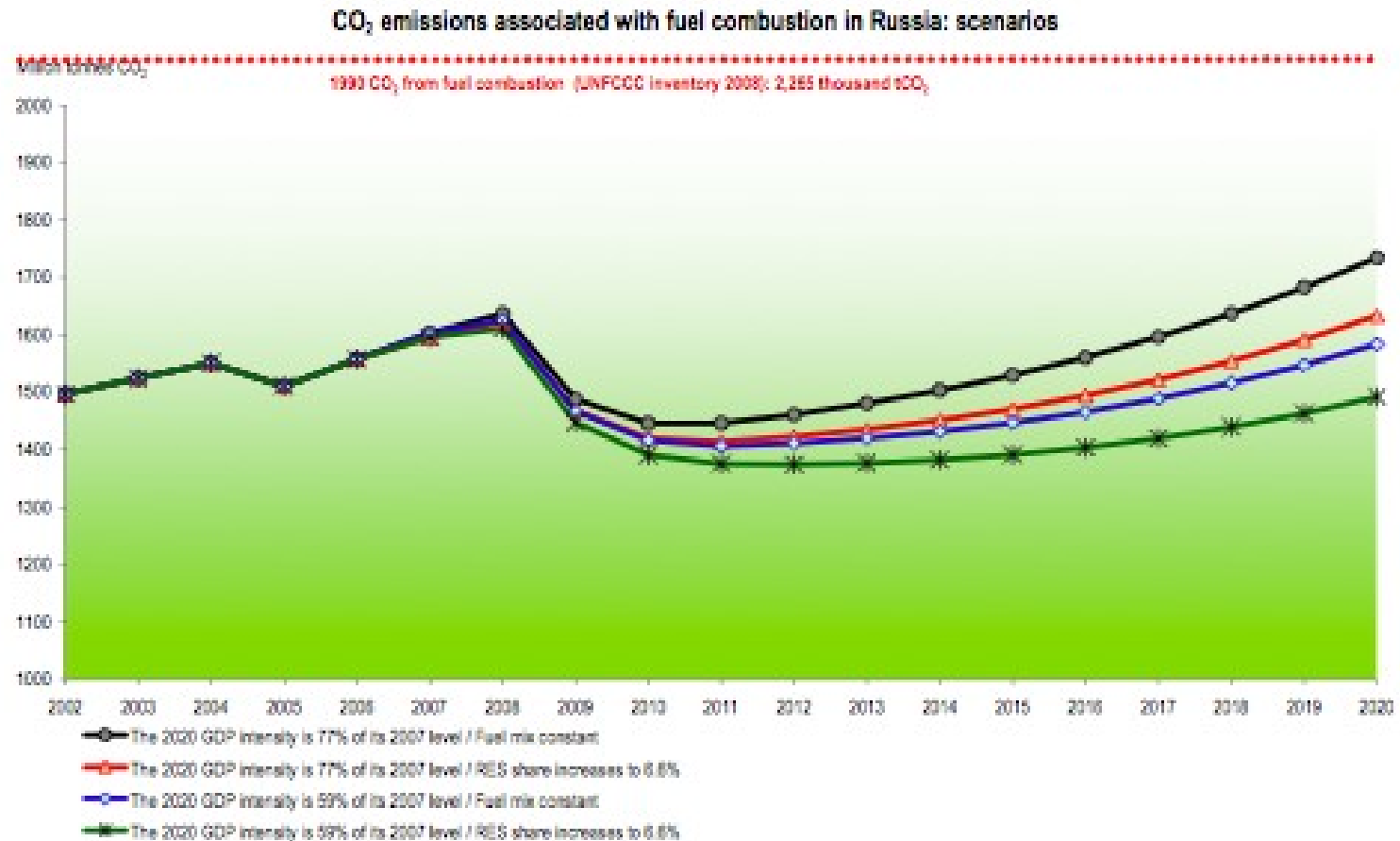
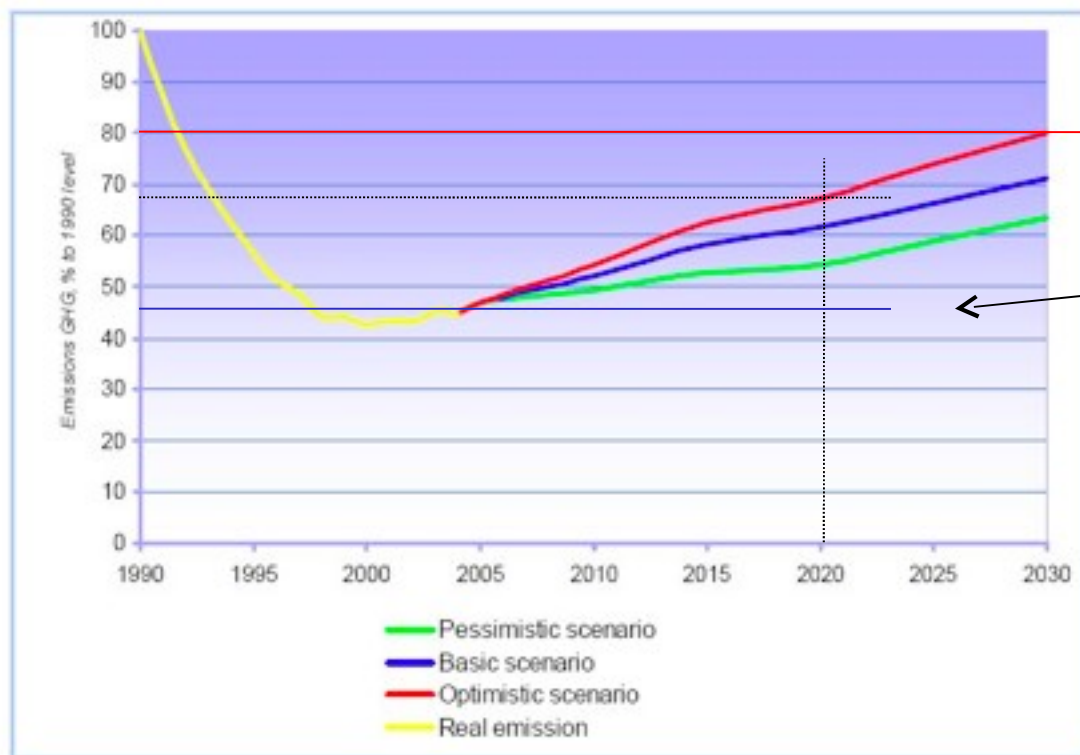


Figure 5 Scenarios of CO₂ emissions to 2020 for different efficiency and fuel mix cases (GDP growth is linked to oil price, steady increase up to 6.6% in 2020)

The Case of the Ukraine

GHG emissions projections by 2030 in percentage to 1990 level for the scenarios of economic development



cf. Den Elzen et al.
“Pledges and Actions”;
WEO 2009.

Source: Second National Communication of Ukraine on Climate Change, Kiev, 2006

The Case of the EU

Potential annual surplus or deficit of AAUs over the 2008-2012 period

Kyoto period 2008-2012 (Gt CO ₂ eq)	target 2008-2012	base year	1990	2008-2012 average annual emissions	2008-2012 average annual target	Average annual surplus (+), deficit (-)
EU15	-8.0%	4.36	4.34	4.09	4.01	-0.08
EU10	-7.0%	1.70	1.52	1.03	1.58	0.55
Russia	0.0%	3.48	3.48	2.04	3.48	1.44
Ukraine	0.0%	1.10	1.10	0.48	1.10	0.61
New Zealand & Australia	7.0%	0.51	0.51	0.66	0.55	-0.11
Japan	-6.0%	1.20	1.21	1.21	1.12	-0.09
Canada	-6.0%	0.60	0.60	0.70	0.56	-0.14
Net surplus		12.90	12.76	10.21	12.40	2.19
Gross surplus						2.60
Gross deficit						-0.42

Potential annual surplus or deficit of AAUs over the 2008-2012 period, using our baseline emissions including the impact of the economic crisis, for all Annex I countries or regions (as included in our model) (excluding the United States)

Options to Deal With the Surplus

1. Cancel and Discount
 2. Higher targets, proportionally for surplus holding countries and countries not in compliance.
 3. Monetization, e.g. as part of surplus holding countries' financial commitments or through a formalized GIS mechanism.
 4. Time-bound risk reserve.
- Environmental, political and economic integrity must be preserved.

Negotiating Text on the Table

- To article 7.4. “§34.The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, prior to the second commitment period, decide upon modalities for the accounting of assigned amounts for that commitment period”.
(FCCC/KP/AWG/2009/10/Add.2)
 - 48.Decides that the carry-over of Kyoto units beyond the second commitment period shall be limited to [...];
§42, FCCC/KP/AWG/2009/10/Add.3/Rev.2
- Limits to trading and future carry over.

Conclusions

- Surplus issue is potentially a very large problem for environmental, political and economic integrity.
- It is a systemic issue, in particular for transition economies.
- There are approaches on the table, but high uncertainty about the future regime.
- What are the pros and cons of bringing up this issue here in Copenhagen?

Further Reading

- Anna Korppoo and Thomas Spencer, “The Dead Souls: How to deal with the Russian surplus?”, the Finnish Institute of Foreign Affairs.
<http://www.upi-fiia.fi/en/publication/84/>
- Anna Korppoo and Thomas Spencer, “The Layers of the Doll Exploring the Russian position for Copenhagen”, the Finnish Institute of Foreign Affairs. <http://www.upi-fiia.fi/en/publication/93/>
- Point Carbon, “Assigned Amount Unit: Seller/Buyer Analysis and Impact on Post-2012 Climate Regime”.
http://www.climnet.org/index.php?option=com_docman&task=doc_download&gid=1512&I
- Den Elzen et al, “Too hot to handle? The emission surplus in the Copenhagen negotiations”, The Netherlands Environmental Assessment Agency.
http://www.pbl.nl/en/publications/2009/Too-hot-to-handle_-The-emission-surplus-in-the-C