

Lecture 9 (JK AO, April 30)

Environmental Policy in the Central European Context

Time: Thursdays 3 p.m. – 6 p.m.

Location: at CERGE-EI, Room # 7

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Undergraduate Program in Central European Studies

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WEEK: TOPICS: DATE: INSTRUCTOR

1 Introduction (history/outline) Feb 19 JK/AO

2 Market failures: externalities, tragedy of the commons, enforcement as public good, also, (rise and fall) of the environmental Kuznets Curve February 26 AO

3 Interventionalist solutions to the Externality problem – Pigouvian taxes and standards and charges, also environmental labeling and incomplete consumer information in laboratory markets March 5 JK

4 Interventionalist solutions to the Externality problem – Marketable pollution permits March 12 AO

5 Non-Interventionalist solutions to the Externality problem – The Coasian solution March 19 JK

6 Non-interventionalist solutions to the Externality problem – Self-regulation March 26 AO

7 *Mid-term exam April 2*

8 (L7) Environmental Policy in the Czech Republic – History and current issues April 9 JK

9 (L8) Environmental Policy in the EU – History and current problems April 23

(April 16 falls into Semester break and on Easter Holiday) AO

10 (L9) Environmental Policy in the world context – History and Current problems April 30 JK/AO

11 (L10) Contingent valuation and related issues May 7 AO

12 (L11) To be determined by the interests of the class **(DISCUSS!)**

Final exam: to be determined (according to schedule May 18 – 21)

Also, please remember to grade articles that you read so far ...

Overdue worksheets will come tomorrow ...

Review:

Hey, EU Environmental Policies: A short history of the policy strategies

Six Environmental Action Programmes (medium-term, strategic policy documents)

- starting in 1973, following the first United Nations Conference on the Environment in Stockholm in 1972
- 1987: environmental protection received its own chapter in the Treaty ...
- “ ... a more **integrated approach [4th EAP]**. For the first time, environmental protection was not perceived as an additive, but rather as an integrated activity within the whole production process. ... to reduce energy or material inputs and to close cycles, so that waste streams could be minimized. Furthermore, pollution control was to systematically control all environmental media (water, air and soil) and involve an evaluation of the problem causing substances. ... ‘**sectoral approach**’ .. For the first time, the evaluation of the **new, incentive based instruments**, such as taxes, subsidies or tradable emissions permits was announced.” (p. 21)
- importance accorded to environmental protection over the years a function of economic developments and public sensitivity e.g., roll-back 1992 – 1995 [roughly during fifth EAP], triggered probably by
 - (1) member states not willing to follow paradigmatic change pushed by the EC
 - (2) difficulties in ratifying the Maastricht Treaty contributed to more cautious attitude of the EC
 - (3) The preference structure/focus in Germany changed because of the reunification and the emphasis on economic problems (high unemployment) that came with reunification; same true for countries that later the 2004 new members (e.g., Visegrad 4 etc.)but ... sustainability remains on the agenda
- strengthened as Community target in the Amsterdam Treaty from 1997
- strengthened by Cardiff Process (an initiative for environmental policy integration moved forward by several presidencies)
 - new complex and holistic framework legislation such as the Ambient Air Quality Directive, the Water Framework Directive, or the ICCP [Integrated Prevention and Pollution Control] Directive
 - “new target oriented legislation, setting maximum national emission ceilings for key pollutants, but leaving member states the freedom to choose how to achieve necessary reductions. ... With the 2003 Emission Trading Directive, another target-oriented policy, setting nationally differentiated CO₂ targets – the so-called burden-sharing agreement – became legally binding.” (p. 25)
 - ...
 - The introduction of many new environmental policy instruments (such as emission trading)... (p. 26)
 - New procedural legislation or the revision of existing legislation strengthening civil society rights, notably the three Aarhus pillars: freedom to information, participation rights and access to justice. (p. 26)

- “Persistent so-called environmental problems such as climate change, the loss of biodiversity, or the overconsumption of resource require a broader approach beyond environmental legislation ... “ (p. 27) [the starting point of the 6th EAP.]

Carter, Transforming environmental policy: Does Europe lead the way (EP 2007)

- review of four books published in 2004, 2005, one of them by Toelke & Torgerson a second edition
- all books about “environmental governance” – “an approach to environmental problems that involves decentralization, flexibility, a ‘hands-off’ approach to regulation, better integration of policy-making and greater dialogue and cooperation between government and non-state actors” (p. 523)
- “So where is progress towards environmental governance most advanced? In 1990, when the first edition of *Managing Leviathan: Environmental Politics and the Administrative State* was published, it was normal to look to the USA for leadership in environmental policy. Since then, as Paehlke & Torgerson observe ... the emergence on the global stage of ‘American exceptionalism’ – first visible at Rio, then fulsomely embraced by George W. Bush, in his rejection of the Kyoto Protocol. Even ... in the Clinton /Gore year ... little [was done] for the environment. Today, few people now look to the US federal government for innovation in the environmental arena, although there are still interesting developments at state [e.g., California, see p. 528] and municipal levels. Instead, most observers turn to Europe – to the pioneer nations of northern Europe and to the European Union (EU) itself – for environmental leadership and innovation.” (pp. 523 – 4)
- terms of democratic and citizen initiatives or in the use of new policy instruments.” (p. 528)

Excursion (one of the readings assigned for today, as summarized by Jana):

Kramer – Development of environmental policies in the United States and Europe: Convergence or Divergence? EUI Working Papers 2002/33

I. Different points of departure

- active protection of environment started in 1960’s in both Europe and USA (but many measures existed even before: water management, nature protection, town and country planning, waste management)
- starting in 60s more organized deliberate and planned measures giving rise to the “environmental policy” (both US and Europe)

US

- existing measures on the individual states level
- growing public concern for the environment
- gradual federalization
- since the end of 1960s a number of strong, extremely detailed and prescriptive legislative measures have been adopted, which together with federal executive institution have formed the backbone of the US environmental policy
 - ⇒ 1965-67 federal air pollution legislation, in 1970 considerably reinforced by the Clean Air Act Amendments
 - ⇒ 1972 the Federal Water Pollution Control Act Amendments federalized and sharpened water management
 - ⇒ 1970 the Environmental Protection Agency (EPA) - regulatory and enforcing functions
 - ⇒ Congress: product and process legislation (the Interstate Commerce Cause)
 - power to levy taxes and charges, introduce subsidies
 - ⇒ federal government owning about 1/3 of the land in the US – nature conservation measures without serious interference with property rights

Europe

- EU not a nation but a supranational joint-venture of nation-states
- member states with different perceptions and objectives
- environmental concerns developed at the level of member states => different subjects, variable intensity, consequences and reactions from national legislatures
- sovereignty => all sort of difficulties that slowed the integration and making of the common environmental standards
- The EC treaty (1958) did not contain any explicit reference to environment; not until the Single European Act of 1987.
 - the treaty is not a constitution, the basic competences vested in member states
 - there is no European Congress, the environmental legislation is adopted jointly by the Council of Ministers and by the European Parliament (directly elected members) => member states have a decisive influence on which environmental matters they want to have dealt with on national and on kind of "federal" level.
 - EU does not own land, member states do not own significant amounts of land either
 - EU has no power to levy environmental taxes
 - EU has practically no income of its own, it receives 1.27% (?) of the national income of member states => limited resources for economic or fiscal incentives or subsidies
- PLUS: political, economic, social, cultural and environmental differences among the member states; absence of European media, of European public opinion and of European-wide common interest

Since mid 70s US and EU: written communication to promote cooperation in environmental matters

- mainly focused on matters that concerned potential trade conflicts;
- intensive technical cooperation regarding chemical and air pollution with some good results;

Since 80s

US

Strong centralization since 70s criticized by supporters of state-level policies, economists and regulated businesses

- ⇒ deregulation started at early 80s
- ⇒ regulatory responsibilities of EPA narrowed, greater responsibility to individual states

2 factors influencing US environmental policy

- ⇒ Reagan's Executive Order 12291 required EPA and other federal regulatory agencies to adopt most economically efficient or cost-effective alternatives;
- ⇒ No special department for environmental matters existed -> the State Department and the Department of Commerce represented US at international environmental negotiations

after mid 80s US - divergence of views between Executive and Congress on basic questions paralyzing legislative measures and prevented innovation

EU

EC Treaty amendment in mid 80s – general consensus about the need for comprehensive EC environmental policy

- ⇒ EU environmental legislation was negotiated by the environmental departments
- ⇒ Environmental Dept. of EC (early 70s) -> environmental matters kept outside the direct influence of members' foreign or trade policy
- ⇒ on international level, EU had no general competence to act (represented by Environmental directorate general of EC and by environmental departments of member states) -> sometimes difficult to find common position
- ⇒ at many international conventions it was difficult for EU to uphold at least some position

- ⇒ e.g. US wanted to allow EU accession to global environmental conventions only under the following conditions:
 - a) EU would make a precise statement on the Community competence in the subject-matter dealt with by convention in question (difficult for EU as the Treaty is not a constitution and the repartition of competences between EU and member states is not static)
 - b) majority of member states would ratify the convention
- ⇒ lack of clearly defined competences sometimes stood in way of international agreement (e.g. amendment on CITES Convention on trade in endangered species to allow EUs accession – not ratified by US and many other -> EU cannot adhere to that convention and was formally barred from speaking with one voice at CITES conferences)
- ⇒ at some conventions EU was involved and occasionally it made a declaration about competence

(1978) Montreal Protocol negotiations (concerning the restrictions of production)

- ⇒ EC managed to find common language for its members and even obtained a clause which allowed joint implementation of the obligations under the protocol
- ⇒ the first negotiations on the international level at which EU and US confronted each other on environmental matters,
- ⇒ the negotiating position of EU member states greatly improved under EU without having their national interests neglected => encouragement to continue “speaking with one voice”

(1987) The Single European Act

- ⇒ laid down objectives and principles of environmental policies based on objectives and policies agreed upon by member states
- ⇒ gave EU a mandate to contribute to search for environmental solutions and clarified that EU had the competence to act internationally, aside from or jointly with members
- ⇒ obligation to find and promote high level of environmental protection – EU did not try to subordinate environmental interests to commercial or economic interests
- ⇒ EU environmental legislation covered more areas, became more coherent and gave political and legal framework to environmental measures in member states – alignment of national environmental policies

After the Single European Act

- re-evaluation of the objectives of Environmental policy,
- attempts to integrate environmental requirements into other policy areas (transport, energy, regional policy, agriculture and industry),
- attempts to align national environmental policies,
- growing attention to climate change issues
- import of some tools from US (environmental impact assessment, access to information, management systems), some tools rejected (e.g, EPA-like enforcement agency)

US seen as trying to subordinate environmental questions to economy/trade issues and to avoid any substantive environmental provisions at all

⇒ e.g. **Kyoto protocol**

- US considered it flawed b/c
 - only obligations for industrialized not developing countries to reduce GHG emissions (as a long-term problem, also developing countries should be involved)
 - it did not expressly enable industrialized countries to comply with reduction commitments by investing in reduction technologies in developing countries, i.e. in ways that would not require emission reductions at home
- EU saw it as a prolongation of the commitments accepted under the Climate Change Convention
- still not ratified by the US

MAIN DIVERGENCIES

EU	USA
<ul style="list-style-type: none"> - represented on int negotiations by environmental depts. of member states and by the EC's directorate for environmental affairs - same importance to trade issues, environmental and social concerns - multilateral solutions that are globally acceptable, not necessarily best economic interest of EU - Nation states accept regulatory role of EU and global solutions it brings. - do not rely on market too much - 	<ul style="list-style-type: none"> - delegations represented by State Dept. or the Dept. of Commerce (not env. depts.) - more emphasis on economic aspects of free trade than to environmental protection - believe in market solution, - more interests of the US industry rather than of global environment - only commitments that bring economic advantage; - no compliance mechanisms and control procedures that might impinge on national sovereignty

CAUSES OF DIVERGENCIES	
EU	USA
<ul style="list-style-type: none"> - stronger commitment to social and also environmental concerns, - history of governments interfering in social (and environmental) area - EU env. measures seen as harmonizing rather than centralizing - other than "economic" approaches – biology, geology, geography, philosophy, religion, social science...; cost-benefit and risk assessment not scientifically sound as economists failed to develop generally acceptable standards for measuring environmental harms - polls suggest care for environment, "greens" keep appearing in political life even in governments - environmental challenge seen worth investing as a new stimulus for innovation 	<ul style="list-style-type: none"> - many businesses would "philosophically" oppose to regulation and find it illegitimate - environmental policy viewed as centralizing policy – criticism by conservative circles - cost-benefit and risk analysis viewed as scientific approach - Congress (no need of cost-benefit analysis) vs. EPA (economic principles applied to regulatory measures)

[continuation of review]

Kramer, EU Enlargement and the Environment: Six Challenges

- written before the enlargement of the EU in 2004 (published in Spring 2004)
- a prospective entrant before admission had to adopt the *acquis communautaire (acquis)* – “the common body of EU legislation’ of which the environmental acquis [one of 31 thematic chapters] comprises an integral component. In the legal sense , ‘it means the complete alignment of national legislation so that it complies 100 percent with the requirements of EU legislation. And not just on paper but of course also in fact. [Commission 1997b: 3]” (p. 290) -> transposition (incorporation into national legislation), implementation, enforcement [administrative capacity], [evaluation] ... the latter two being “the much more difficult nut to crack” (p. 292, quoting Wallstroem)
- “the challenge is especially acute given the candidate countries must rely primarily on their own financial and other resources to meet it [they can at most count on about 5 percent of the cost being

defrayed by EU contributions, see p. 295] – resources already severely strained in meeting numerous other demands including those entailed in the overall accession process.” (p. 290)

- do accession countries meet those challenges? Remains an open question but probably not ... “as EU officials themselves candidly admit, all of them attach a far lower priority to protecting the environment than their attachment to entering the EU as quickly as possible and in addressing what they consider much more pressing problems of economic revitalization and growth.” (p. 291)
- a *quid pro quo* for being especially tough with them on such politically charged issues such as the free movement of labor and refugees?
- In any case, *acquis* makes for good rhetorical argument in the political national discourse, especially for environmental activists ...
- notwithstanding these challenges, substantial progress has been made ... (says Kramer)

- ad (1) the fiscal challenge (forgetting for the moment about nature and extent of transitional period):

important issue: “it seems clear that the private sector – both producers and consumers – will shoulder a heavy load in financing EU-related environmental investments. To this end, it becomes critical that candidate countries vigorously pursue the privatization of environmental services such as water and power supply and waste removal and the concomitant establishment of so-called full-cost recovery pricing – in plain English, the elimination of subsidies and the establishment of market-based prices – for them.” (pp. 296 – 7)

- ad (2) the administrative challenge:

the “administrative capacity to transpose and, even more importantly, implement and enforce the environmental *acquis* is rapidly emerging as one of the key challenges confronting the applicant countries.” (p. 297) – enough said (obviously, this is also a question of money – down to availability of copying machines -- but not only, lots of organizational issues, and that on the regional and local level)

- ad (3) the environmental challenge:

“.. the challenge of promoting sustainable development remains a work in progress.” (p. 301)

- ad (4) the ‘democratic deficit’ challenge:

“In CEE countries, as former President Havel of the Czech Republic has observed, strengthening *Vox Populi* has been a ‘difficult process’ with many public officials retaining the communist view of the citizenry as an adversary, not a partner, in the exercise of power. ... the EU itself, even if unintentionally, has managed environmental accession in such a way largely to exclude CEE environmentalists from substantial meaningful participation in it. ... initiative are underway to mitigate this bleak situation ... the EU has established a ‘Public Right to Know Project’ that works closely with environmental NGOs and private individuals to pressure CEE governments to establish minimum standards for public access to information regarding the environment.” (pp. 302 – 3)

- ad (5) the energy challenge:

energy intensities in CEE countries way too high (compared to old EU countries and US, e.g., five times higher in Bulgaria, and twice as high in Czech and Slovak Republics, in East Germany production and consumption increased yet CO₂ emission were reduced by more than half after reunification), legacy of socialism/communism; heavy reliance on nuclear power (and nuclear power plants that are wanting in their quality).

- ad (6) the political challenge:

Jehlicka & Tickle article: “after accession, the status of political will may become more problematic given that ... the EU inevitably will have diminished leverage over the former applicant countries and the latter will have more opportunity to set their own agendas and priorities, including those towards the environment.” (pp. 306 – 7)

Are the lowest anticipated benefits (134 billion Euro) really upwards of 18 percent greater than the highest estimated costs (110 billion Euro) of fully implementing the environmental *acquis*? (p. 309)

- Conclusion

“This author is cautiously optimistic that the EU is evolving in ways – albeit at times hesitantly, erratically, and perhaps overly slowly – that will make it a much more ‘environmentally friendly’ institution than it is now. The clear thrust of this evolution is towards more openness, transparency, accountability and a greater utilization of market-based solutions to environmental challenges.” (p. 310)

Kruzikova, EU Accession and Legal Change: Accomplishments and Challenges in the Czech Case

- “ ... many remaining barriers to the effective administration, implementation and enforcement of EU environmental policy are posed by the challenges of merging the existing legal cultures, expectations and practices of EU Law with those of candidate countries.” (p. 99)
- Implementation challenges stemming from the Community Law
 - The Community law itself since based on the legal culture of West European democratic countries that has been developing since the end of World War II (while CEE countries went through a 40-year breach of legal continuity), since national law is subordinated to Community law, its changing nature [the moving target problem], ...
- Implementation challenges from within the Czech Republic
 - “ ... related to attitudes, traditions and practices within the Czech Republic ... “ (p. 107)
 - “ ... a number of challenges are engendered by the rapid rush towards implementation. ... there has not been enough time or institutional capacity to establish a sufficiently conceptual and systematic approach towards the implementation of environmental law. In many respects. Czech officials have missed opportunities to improve the whole system of environmental law. ... In the Czech Republic, there are currently about 40 environmental acts, more than 30 Cabinet regulations and about 90 ministerial decrees – and these numbers change monthly. ... The rush towards implementation has left overlapping, and potentially contradictory, legislation and administrative procedures to be carried out under the law. This is likely to result in unclear interpretations of law.” (p. 109)
- The ECJ as a Potential Surprise
 - When a member state does not comply with the ECJ’s judgements, the Court – after another action of the Commission – may impose penalties (this goes back to Treaty of Rome 1956) (p. 111)
 - The ECJ has historically, through its rulings, contributed to the progressive, participatory democratic nature of environmental law and decision making. (p. 111)

Jehliaka & Tickle, Environmental Implications of Eastern Enlargement: The End of Progressive EU Environmental Policy?

- the authors ask whether indeed the one-way process of CEE adaptation to EU requirements, and the management of this process by EU institutions, justifies the “Europeanisation” perspective of CEE national environmental policy, or whether indeed this top-down process, especially after accession, is supplemented by a bottom-up process reflecting national preferences.
- Finding: “Despite initial evidence of a proactive approach to international environmental policy in the V4 countries, this model became quickly subsumed by the ‘hierarchical imposition’ of EU requirements, which since has become the dominant framework for the development of their domestic environmental policy.” (p. 92) And, “Owing to the weak domestic base of environmental policy [remember what we learned about the Greens in the Czech Republic!] as a hegemonic model, it is highly unlikely that V4 states are, in the short run, capable of adopting a proactive approach to environmental policymaking at the EU level when they become full members. ... We also find that V4 states have not, and do not seem likely to coordinate their strategies – either among themselves or with environmentally ‘laggard’ member states. Instead, it appears that they would rather align themselves with the north-western ‘pioneer’ member states that have been most active in transferring environmental know-how and have made environmental policy discourse in V4 countries largely compatible with their policy models.” (p. 93) -> No danger of watering down of European environmental policy.

Carmin & Vandever, Enlarging EU Environments: Central and Eastern Europe from Transition to Accession

- Essentially this is introduction to special issue of *Environmental Politics*; hence there is much overlap and reliance on the article that were discussed above in more detail.
- On pp. 19 – 20, the authors summarize the key themes and arguments.

Update on political developments in the Czech Republic

[23.04.2009 18:59 UTC] Ian Willoughby

Czech economy to contract by 3.5 percent this year, says IMF

The International Monetary Fund says the Czech Republic’s economy is likely to shrink by 3.5 percent in 2009. In a global forecast that predicted world GDP contraction of 1.3 percent this year, the IMF said the Czech economy was likely to grow again in 2010, but only by 0.1 percent.

Only seven ministers turn up for meeting held as part of Czech EU presidency

Only seven of the European Union’s regional development ministers turned up for an informal meeting being held in Mariánské Lázně as part of the Czech presidency of the 27-member bloc. The event’s host, Czech Regional Development Minister Cyril Svoboda, said one reason for the poor attendance was the fact everybody in Europe knows that the Czech government is in resignation. The two-day gathering is set to conclude on Friday afternoon.

[24.04.2009] - Current Affairs - Ian Willoughby

Low turnout at meeting of ministers confirms lame duck nature of Czech EU presidency since fall of government

If there were any doubts that the Czech Republic's presidency of the EU effectively ended when the country's government fell last month, they were dispelled on Thursday, when only a handful of the bloc's regional development ministers came to a Czech-hosted meeting. <snip>

The Czech government was voted out of office on March 24, less than half way through the country's six-month presidency of the European Union. Czech officials tried to put a brave face on things, saying the administrative mechanisms were in place to ensure the remainder of the presidency went smoothly.

However, most observers insisted the fall of the government meant the Czech Republic's EU presidency was to all intents and purposes dead in the water.

Confirmation of that assertion came on Thursday, when only seven of the 26 invited EU regional development ministers turned up for an informal meeting in Mariánské Lázně. Though informal, such gatherings are normally attended by ministers.

Czech Regional Development Minister Cyril Svoboda, hosting the two-day meeting, admitted the low turnout was partly due to the "drama" of the Czech government being voted out of office. Everybody in Europe knows, he said, that the country's cabinet is in resignation. <snip>

[25.04.2009 17:48 UTC] Ian Willoughby

President Klaus to lead EU delegation at summit with Japan

The Czech president, Václav Klaus, will lead the European Union delegation at an EU-Japan summit in Prague on May 4 as part of the Czech presidency of the 27-member bloc. Jan Fischer, who is to be appointed head of a caretaker Czech cabinet on May 8, will attend a working lunch with the Japanese delegation. The announcement was made on the website of Mr Klaus, who is a Eurosceptic and also says mankind is not to blame for climate change. Japan is to buy Czech carbon credits under a deal signed last month.

[27.04.2009] - Current Affairs - Daniela Lazarová

Will the interim government give President Klaus a bigger role in the Czech EU presidency?

With a caretaker government due to take over on May 8, there is growing concern as to how the Czech Republic will handle the remainder of its EU presidency. Can the country's little-known and relatively inexperienced new prime minister Jan Fisher stand up to the pressure – or is this a chance for the country's Eurosceptic president Václav Klaus to exert a far greater influence on EU affairs? Political analyst Jiří Pehe says the fears of what Mr. Klaus can do are greatly exaggerated.



[Václav Klaus \(left\) and Jan Fischer, photo: CTK](#)

“The Czech Constitution is quite clear in this respect –it says that it is the government that is predominantly responsible for foreign policy and also it is clear that within the context of the European Union it is the prime minister who is responsible for representing the country in the European Council. So in my opinion it is really up to the chief players in Parliament – the Social and Civic Democrats to decide who will represent the Czech Republic and Mr. Klaus does not have much chance of opposing that decision. The worst thing that could happen is the Polish scenario, where the prime minister and the president would both try to be present at a summit but in the end I think the other European leaders understand that it is the prime minister – however inexperienced – who leads the EU delegation or presides over the EU when that country is leading the EU. ”

So who will now decide which summits will be chaired by whom? It was agreed earlier that President Klaus would preside over the EU-Russia summit – what happens now?

“I think there will be meetings, I presume those meetings will be quite civilized and Mr. Klaus will offer to help. I think that his role at the EU-Russia summit is given, as far as the June summit (on the Lisbon treaty and climate change) is concerned that still has to be decided and maybe it will be some kind of cooperation between the prime minister and the president – they may divide their roles and while officially the country is represented by the prime minister Mr. Klaus may have a role to play. At the same time, it is clear that under the Czech Constitution the president is really not responsible for formulating the official stances of the Czech Republic on issues such as global warming or the future of the Lisbon treaty. So Mr. Klaus may voice his personal opinions but the country’s opinion is represented by the government.”

Meaning that he would not have much leverage on the outcome of the summit?

“I think that Mr. Klaus would have almost no leverage on the outcome of the summit and moreover if the fears that he could have some leverage prove justified the EU will find ways to by-pass Mr. Klaus. It has happened in the past and they will simply postpone some of the decisions until the first summit headed by Sweden which is next in line for the EU presidency.”

How do you see the Czech EU presidency at the present time? Is there any chance of salvaging the country’s good reputation in view of all that has come about?

“I am very skeptical. I think that the Czech EU presidency ended on the day that the government fell. That ended the political leadership of the Czech Republic. It is clear that the Czech Republic will continue administering the presidency until the end of June, but politically it has been really marginalized and it will be very difficult to recover any influence on the political leadership in the European Union. That is why I am not too afraid of Mr. Klaus’ role, because I think by now the centre of gravity when it comes to political decisions has moved away from the Czech Republic to Brussels and the big European players - who will do their best to marginalize Mr. Klaus.”

United Nations Framework Convention on Climate Change

<http://unfccc.int/2860.php>

Negotiations in 2009 leading to Copenhagen

2009 is a crucial year in the international effort to address climate change, culminating in the United Nations Climate Change Conference in **Copenhagen, 7-18 December**. In 2007, Parties agreed to shape an ambitious and effective international response to climate change, to be agreed at Copenhagen.

The Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol ([AWG-KP](#)) and the Ad Hoc Working Group on Long-term Cooperative Action under the Convention ([AWG-LCA](#)) will operate in full negotiating mode in 2009 to advance work towards meeting their respective mandates.
<snip>

Kyoto Protocol



The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions. These amount to an average of five per cent against 1990 levels over the five-year period 2008-2012.

The major distinction between the Protocol and the Convention is that while the Convention **encouraged** industrialised countries to stabilize GHG emissions, the Protocol **commits** them to do so.
Delegates celebrated adoption of the Protocol in 1997.

Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. 184 Parties of the Convention have ratified its Protocol to date. The detailed rules for the implementation of the Protocol were adopted at COP 7 in Marrakesh in 2001, and are called the “Marrakesh Accords.”

The Kyoto mechanisms

Under the Treaty, countries must meet their targets primarily through national measures. However, the Kyoto Protocol offers them an additional means of meeting their targets by way of three market-based [mechanisms](#).

The Kyoto mechanisms are:

- [Emissions trading](#) – known as “the carbon market”

- [Clean development mechanism \(CDM\)](#)
- [Joint implementation \(JI\)](#).

Monitoring emission targets

Under the Protocol, countries' actual emissions have to be monitored and precise records have to be kept of the trades carried out.

[Registry systems](#) track and record transactions by Parties under the mechanisms. The UN Climate Change Secretariat, based in Bonn, Germany, keeps an [international transaction log](#) to verify that transactions are consistent with the rules of the Protocol.

[Reporting](#) is done by Parties by way of submitting annual emission inventories and national reports under the Protocol at regular intervals.

A [compliance](#) system ensures that Parties are meeting their commitments and helps them to meet their commitments if they have problems doing so.

[Adaptation](#)

The Kyoto Protocol, like the Convention, is also designed to assist countries in adapting to the adverse effects of climate change. It facilitates the development and deployment of techniques that can help increase resilience to the impacts of climate change.

The [Adaptation Fund](#) was established to finance adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol. The Fund is financed mainly with a share of proceeds from CDM project activities.

The road ahead

The Kyoto Protocol is generally seen as an important first step towards a truly global emission reduction regime that will stabilize GHG emissions, and provides the essential architecture for any future international agreement on climate change.

By the end of the first commitment period of the Kyoto Protocol in 2012, a new international framework needs to have been negotiated and ratified that can deliver the stringent emission reductions the [Intergovernmental Panel on Climate Change \(IPCC\)](#) has clearly indicated are needed.

Clean Development Mechanism (CDM)

The Clean Development Mechanism (CDM), defined in Article 12 of the Protocol, allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can be counted towards meeting Kyoto targets.

The mechanism is seen by many as a trailblazer. It is the first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument, CERs.

A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy-efficient boilers.

The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets.

Operating details of the CDM

A CDM project must provide emission reductions that are additional to what would otherwise have occurred. The projects must qualify through a rigorous and public registration and issuance process. Approval is given by the [Designated National Authorities](#). Public funding for CDM project activities must not result in the diversion of official development assistance.

The mechanism is overseen by the [CDM Executive Board](#), answerable ultimately to the countries that have ratified the Kyoto Protocol.

Operational since the beginning of 2006, the mechanism has already registered more than 1,000 projects and is anticipated to produce CERs amounting to more than 2.7 billion tonnes of CO₂ equivalent in the first commitment period of the Kyoto Protocol, 2008–2012.

Joint Implementation (JI)

The mechanism known as “joint implementation,” defined in Article 6 of the Kyoto Protocol, allows a country with an emission reduction or limitation commitment under the Kyoto Protocol (Annex B Party) to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another Annex B Party, each equivalent to one tonne of CO₂, which can be counted towards meeting its Kyoto target.

Joint implementation offers Parties a flexible and cost-efficient means of fulfilling a part of their Kyoto commitments, while the host Party benefits from foreign investment and technology transfer.

For up-to-date information on JI, see the [UNFCCC JI website](#).

<http://en.cop15.dk/about+cop15>

The essentials in Copenhagen

[Rather than getting every small detail of a new global climate treaty done in Copenhagen, UN climate chief Yvo de Boer hopes the conference will reach agreements on four political essentials.](#)

Michael von Bülow *16/03/2009 10:30*

The UN climate conference in Copenhagen in December this year may not yield a new global climate treaty with every minor detail in place. But hopefully it will close with agreements on four political essentials, thereby creating a clarity the world – not least the financially struck business world – needs.

The wish for clarity is expressed by Yvo de Boer, executive secretary of the United Nations Framework Convention on Climate Change (UNFCCC), in an interview with Environment & Energy Publishing (E&E). According to Yvo de Boer, the four essentials calling for an international agreement in Copenhagen are:

1. How much are the industrialized countries willing to reduce their emissions of greenhouse gases?
2. How much are major developing countries such as China and India willing to do to limit the growth of their emissions?
3. How is the help needed by developing countries to engage in reducing their emissions and adapting to the impacts of climate change going to be financed?
4. How is that money going to be managed?

“If Copenhagen can deliver on those four points I’d be happy,” says Yvo de Boer.

He sees a need to get something signed and agreed in Copenhagen, but he thinks it will be very difficult to get every final, small detail of a whole new treaty done. The new climate treaty will be replacing the Kyoto Protocol which was adopted in Kyoto, Japan, in December 1997 and entered into force on 16 February 2005.

The Kyoto Protocol which sets binding targets for the reduction of greenhouse gas emissions has been signed and ratified by 184 parties of the UN Climate Convention. One notable exception is the United States, and Yvo de Boer is “really happy” to see the US back in the international climate change process and that the US is also engaging domestically in the process.

“My big lesson from the Kyoto era is that it's really important that the government delegation that represents the United States is in close touch with the Senate, with the elected officials on what's acceptable and what's not,” says de Boer, and he adds:

“I think that a major shortcoming of Kyoto was that the official delegation came back with a treaty they knew was never going to make it through the Senate. And this time I have the feeling that the communication is much stronger, that the Senate Foreign Relations Committee, through John Kerry, is really expressing strongly what they feel needs to be done in Copenhagen.”

Yvo de Boer thinks the Kyoto Protocol was rejected by the US for mainly two reasons. Firstly, because it did not involve action on the part of major developing countries. Secondly, because it was felt by the Bush administration that Kyoto would be harmful to the US economy.

Copenhagen will be a whole different scenario, and de Boer feels confident that President Barack Obama can successfully engage China and India and convince them to sign the next treaty.

“I think that Secretary of State Clinton's visit to Beijing was a really important and encouraging step to get us moving on that road,” says Yvo de Boer.

Asked about the global recession, de Boer thinks it will certainly have an impact on the negotiations in Copenhagen.

“You see already that investments in renewable energy projects are going down, partly because of the oil price going down and partly because of the economic activity going down,” he says.

But even though greenhouse gas emissions are expected to slow down as a result of shrinking industrial activities, de Boer does not believe it will lessen the pressure on countries to act and sign a new treaty.

“I get the impression talking to business people that they still want clarity from Copenhagen. If you're making investments now, for example in the energy sector, in power plants that are going to be around for the next 30 to 50 years, you can't really afford to keep waiting and waiting and waiting for governments to say where they're going to go on this issue.”

<http://www.ceem.unsw.edu.au/content/Index.cfm?ss=1>

Emissions trading vs Carbon tax ???

OECD (February 2007 Policy Brief, summarizing a 200 pages document): The Political Economy of Environmentally Related Taxes

Taxes can be a useful tool, especially on the macro level but not necessarily on the micro level:

“While using taxes to achieve environmental objectives is clearly efficient for the economy as a whole [one can essentially buy time to make changes so that one does not have to pay taxes in the future, AO], however, in practice individual businesses or sectors may resist because they will be ‘losers’ in the equation.” (p. 1)

So, how then can government use them as policy instruments?

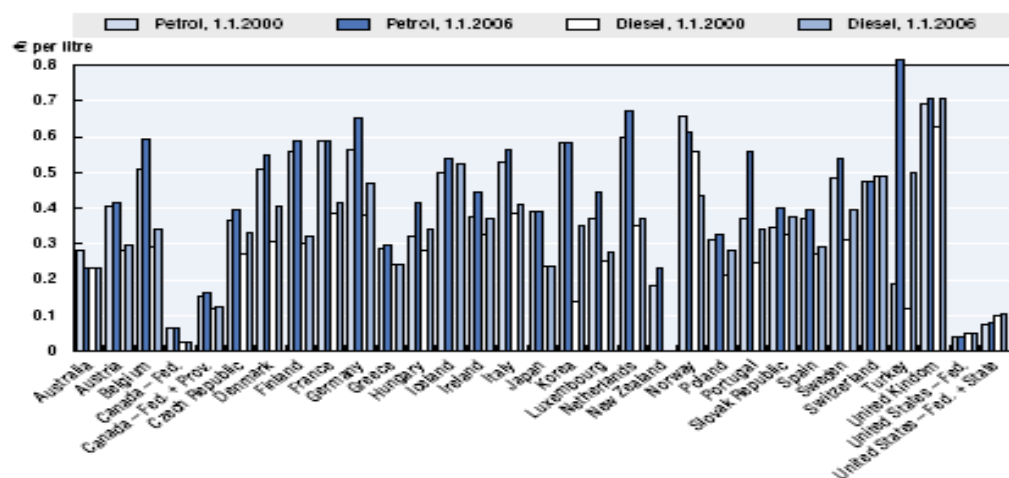
Currently about 375 environmentally related taxes in OECD countries (not counting other measure such as – about 250 – environmentally related fees and charges.

About 90 % of the revenues from environmentally related taxes stems from taxes on motor vehicle fuels and motor vehicles.

They raise, on average, about 2 – 2.5 % of GDP.

Tax rates (Euro per litre) applied to petrol and diesel vary hugely across OECD countries):

Figure 1.
TAX RATES ON UNLEADED PETROL AND DIESEL IN OECD MEMBER COUNTRIES
1.1.2000 and 1.1.2006



Taxes do affect behavior ... through the price mechanism ... (e.g., charging a fee on shopping bags does make people reuse plastic bags, or the like)

That said, while uncontroversial on the macro level, they can negatively affect industrial (energy-intensive, export-oriented) sectors, or countries, or individuals/households. Exemptions can affect these problems but ... they also make environmentally related taxes less effective.

Case studies of hypothetical studies taxes being applied to CO₂ emissions in the steel and the cement sectors, both highly energy-intensive ... (pp. 3 – 4)

A number of lessons can be drawn from these case studies:

- Individual firms within a given sector will not be affected in the same way by any use of environmentally related taxes because they use different input combinations and have different emission profiles.
- It is important to take into account possible adjustments in related markets when considering the impacts of a given policy on a particular sector. A part of any initial tax burden placed on a sector is likely to be passed on to input suppliers or to customers.
- If an OECD-wide tax were applied to combat climate change, significant global reductions in carbon emissions could be achieved, despite some element of "carbon leakage", such as emissions increase in other countries.

- The larger the group of countries that put similar policies in place, the more limited the impact on sectoral competitiveness would be. For example, the steel case study indicated that an OECD-wide carbon tax would reduce steel production in Japan by around 9%, while a unilateral tax in Japan would reduce steel production there by almost 18%. The differences in impacts were found to be especially important for the large, energy-intensive, basic oxygen furnace steel makers.
- It is possible to largely overcome the negative sectoral competitiveness impacts by recycling (part of) the tax revenues raised back to the most affected sectors. The way any recycling is done would have different impacts on different firms. However, such an approach would also tend to reduce the environmental effectiveness of the tax. ■

Environmentally related taxes *can* have regressive impact on the income distribution (e.g., heating). Some strategies to overcome this effect ["mitigation practices" such as lower tax rates, in contrast to increased personal allowances, for example,] undermine the purpose of the tax]. The fairness of a tax may affect the public's view of it.

Administrative costs are not given; they can be influenced by good design (e.g., taxes on petroleum products are usually levied on a limited number of petroleum refineries and depots rather than thousands of gas stations, the Irish tax on plastic bags was levied at the point of sale, also for psychological reasons.)

In practice, environmentally related taxes are not used in isolation. "The mere existence of such instrument mixes, however, does not constitute proof of their environmental effectiveness and economic efficiency." (p. 6)

Requirement 1: a good understanding of the environmental issue to be addressed

Requirement 2: a good understanding of the links with other policy areas

A third requirement is to have a *good understanding of the interactions between the different instruments in the mix*. Various instruments can interact with environmentally related taxes in a number of ways; for example:

- A labelling system can help increase the effectiveness of a tax by providing better information to the users on relevant characteristics of different products the tax applies to, e.g. the energy efficiency of appliances. This will increase the price-sensitivity of demand for the product.
- The combination of a tax and a voluntary approach can increase the “political acceptability” of the former – by limiting any negative impacts on sectoral competitiveness – but at the cost of reduced environmental effectiveness or increased economic burdens placed on other economic actors.
- Combining a tax and a tradable permits system can help limit compliance cost uncertainty – compared to the application of a trading system in isolation. On the other hand, such a combination could increase the uncertainty related to environmental effectiveness – unless additional provisions are put in place.
- A regulatory instrument applied alongside an environmentally related tax might unnecessarily restrain the flexibility for polluters to find cost-effective abatement options offered by a tax. ■

(p. 7)

More on allowances trading in the CR/Europe ...

Emissions trading within EU:

- producers are, within EU Emission Trading Scheme, allocated certain amounts of EU Allowances (1 Allowance=1 ton of CO₂) - EUA
- allocation of allowances according to National Allocation Plans. NAPs have to be approved by European Commission
- trading => new market commodity EUA
- every company that is part of the National Allowance Plan NAP has an account to which its allocated EUAs are automatically credited
- even entities (dealers, brokers, banks.... simply the traders) that are not part of the NAP can trade – they ask NPA for a “personal account” and use it for transactions
- one of the important trading sites is European energy exchange. Data about trades can be found <http://www.eex.de/>.
- So, how does it work in reality:
 - CR joined EU ETS in 2005-2007. Trading started 1. 1. 2008 and the first phase will end in 2012 central registry necessary for trading: ITL (International Transaction Log – international evidence of transactions), administered by **UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE**
 - European allowances EUA, valid only in EU are recorded in CITL (Community Independent Transaction Log – independent registry of community transactions), and administered by European commission
 - registries on national levels, EU levels and Kyoto levels are interconnected
 - in member states, national electronic registries to provide update info on all allowances (re)distribution – not a market just information

more info at:

http://ec.europa.eu/environment/climat/emission/index_en.htm

http://ec.europa.eu/environment/climat/emission/2nd_phase_ep.htm

http://ec.europa.eu/environment/climat/pdf/nap2006/cz_decision_en.pdf

Translations of some environmental legislation:

<http://www.env.cz/ris/vis-leqcz-en.nsf/>

CZECH REPUBLIC:

More on how does it work in CR at www.povolenky.cz

BASIC TERMS AND FACTS

Permission – a decree issued by the Ministry of Environment of CR (MECR) which

- 1) permits emission of GHG to the extent of allocated allowances
- 2) sets the conditions for assessment, declaration and verification of emissions

Allowance (“povolenka”) – asset value equivalent to the right to emit 1 ton of CO₂ (or equivalent = for other GHGs amount that has the same GH effect as 1 ton of CO₂) to the atmosphere in given calendar year

Trading periods:

- 1st trading period – 1.1.2005- 31.12.2007
- further trading periods – 5-year periods, 1.1.2008-31.12.2012, etc...

Procedure:

1. Apply for permission
2. Permission issued by the MECR, contains conditions for assessment, specification of methodology and frequency of assessment; conditions for declaration and public disclosure of emissions
3. Administrator of the facility assesses and declares emissions, declaration must be submitted to the MECR by Feb 28 of the next calendar year
4. Administrator of the facility is responsible for verification of emissions by the authorized person (which must be accredited, later on that...); a certificate must be submitted to the MECR by March 31 (if not, MECR informs the administrator of the national registry for allowances trading who then does not transfer new allowances before certification)

Trading:

For each trading period, MECR together with the Ministry of Industry and Trade prepare a proposal of the National Allocation Plan (NAP) in which total number of allowances and also their distribution to individual facilities is specified for given trading period. The proposal is published at public portal where (Facilities can respond by 30 days, if they don't it means they agree);

Final version of the proposal is approved by the government, then it goes for approval to European Commission and it is also sent to other member states at least 18 months before the relevant trading period starts. If there are any objections, the process repeats.

For each trading period, the administrator of the registry issues and allocates the allowances to individual facilities according to NAP by Feb 28.

In the first trading period, MECR can issue additional allowances to facilities whose increased need is caused by unavoidable event unrelated to operation of the facility, if such practice is approved by EC. Such allowances are then non-transferable. New additional allowances are assigned by the administrator of the registry according to pre-specified rules.

In general, allowances can be traded, in case of death or dissolution the allowances are transferred to the legal successor.

By April 30, every facility is responsible for removing from trading the number of allowances that corresponds to their emissions in the preceding calendar year.

MECR and the Czech inspection of Environment are the governing bodies

MECR is responsible for

- state supervision (to make sure the law is obeyed)
- permission issuance and changes approvals
- certifies persons authorized to verify emissions
- submits NAP proposal
- decides about issuance and assignment of additional allowances
- assigns number of allowances to new facilities (emerging after NAP approval)
- discloses the blacklist of facilities that have not complied with their obligations (to report)
- coordinates adoption and implementation of European law
- deals with offences

Czech inspection of Environment

- controls compliance with obligations and fulfillment of conditions set in permission(s)
- controls compliance with obligations related to certification of authorization to verify emission
- sets corrective measures
- deals with offences such as:
 - operation without permission or in conflict with permission (fine up to CZK 5mln)
 - failure to report change of conditions that may require change of permission (fine up to CZK 0.5 mln)
 - failure to report change of facility data/background information (fine up to CZK 0.1mln)
 - reports the data in conflict with permission or with law (fine up to CZK 2mln)
 - failure to remove corresponding number of allowances from trading (fine: in the 1st reporting period EUR 40, in the 2nd rp EUR 100 for each ton of CO2 equivalent not removed) (fines are collected and enforced by the competent customs office; 70% go to the state environmental fund, 30% to corresponding district)

Types of facilities involved

(typically, there is a threshold on production capacity, only those exceeding given threshold are involved)

- A. Power industry
 - a. combustion plant
 - b. mineral oil refinery
 - c. Coke oven plants
- B. production and processing of metals
 - a. processing of iron ore
 - b. production of iron and steel
- C. processing of minerals
 - a. production of cement and lime in rotary ovens
 - b. production of glass and glass fiber
 - c. ceramic production
- D. other – Manufacturing plants producing
 - a. cellulose from wood or other materials
 - b. paper or cardboard

Verification of emissions:

Emission verification is based on the emission report prepared by the facility. Reliability, credibility and precision of the data is checked (data about the activity, measurements, computations, choice of emission factors, used measurement methodology).

Verification is performed by an authorized person (auditor). Full access to the facility and to the data must be allowed. Auditor issues a report about verification for the facility.

Whole process of assessment, declaration and verification of emission is in detail described in corresponding gvmr regulation (procedure, methodology for measurement and computation; precision level, declaration, administration of the data, control mechanisms to ensure quality of the data, methodological directives for the authorized person, etc...)

Certification of auditors:

Candidate must get a license/certificate from the Czech institute of accreditation (ČIA – www.cia.cz). CIA's team of referees evaluates auditors' "specialized skills" and methods of verification. They check ex-ante competence and equipment, as well as "on-site" performance (so-called "witness audit"). The certificate is issued for the period of 3 years, with yearly "on-site" checks.

First certificate was issued to "Technické služby ochrany ovzduší Praha" (Prague technical services for air protection).

National allocation plan of the Czech Republic for period 2008-2012:

- must be in line with CR's commitment to reduce emissions based on the Kyoto protocol
- number of allowances must be based on true and on expected progress towards fulfillment of the commitment and must take into account the possibilities (financial, technical, looking at average emissions) of given facility
- cannot discriminate among facilities
- contains full list of facilities and allocated allowances

Total # of allowances for each calendar year of the current trading period

Celkové množství povolenek, které bude vydáno v každém kalendářním roce obchodovacího období	
Celkové množství povolenek pro stávající zařízení <small>TOTAL # OF ALLOWANCES FOR EXISTING FACILITIES</small>	85 445 875
Rezerva pro projekty společné realizace <small>RESERVE FOR JOINT IMPLEMENTATION PROJECTS</small>	99 389
Rezerva pro nová zařízení <small>RESERVE FOR NEW FACILITIES</small>	1 290 000
Celkem <small>TOTAL</small>	86 835 264

Recall - Joint Implementation (JI)

The mechanism known as "joint implementation," defined in Article 6 of the Kyoto Protocol, allows a country with an emission reduction or limitation commitment under the Kyoto Protocol (Annex B Party) to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another Annex B Party, each equivalent to one ton of CO2, which can be counted towards meeting its Kyoto target. Joint implementation offers Parties a flexible and cost-efficient means of fulfilling a part of their Kyoto commitments, while the host Party benefits from foreign investment and technology transfer. A JI project must provide a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to what would otherwise have occurred. Projects must have approval of the host Party and participants have to be authorized to participate by a Party involved in the project.

More details from NAP

- total allocated number of allowances for the period of 2008 - 2012 is 5 times the yearly quota set by the European Commission that is 86 835 264 allowances.
- 1 allowance is a right to emit 1 ton of CO₂
- all allowances are distributed free of charge except of unused reserve allowances for new facilities, which will be sold in auction at the end of the second trading period.
- Volume of CO₂ emissions in EU ETS allocated to CR for existing facilities corresponds to cca 61,5 % of predicted total emissions in CR in 2010.
- Basic allocation is based on the emissions between 2005 and 2006 that were certified by an independent auditor and on total emissions set for CR by EC
- reserve for new facilities is 1.29mln of allowances per year
- allowances can be transferred to the next year (banking), in fact, they can be used over given trading period, until the limit for given facility is reached

Assignment of allowances (facility level)

- there is 394 facilities registered in EU ETS system. 303 of those emitted in 2005-2006 less than 50 thousand tons of CO₂ – small facilities. Altogether, small facilities produced 4.6% of total 2005 emissions and 4.4% of total 2006 emissions.
- Remaining 95 facilities produced 95.4% (95.6%) of all emissions in 2004 (2006) – large facilities. It was also shown that between 2005 and 2006 for large emitters the trading is very efficient tool for reduction; it motivates facilities to search and implement saving measures and increases the use of renewable energy sources.
- small facilities are more complicated, smaller diversity of production (and customers), lower elasticity of energetic efficiency of their production, higher transaction and administration cost together with limited yield from trading, limited capital reserves (to use for modernization); their emissions are more volatile => more difficult to predict
 - ⇒ therefore the classification for the purpose of assignment of allowances is based on size of the facility, not on the field
 - ⇒ For small facilities - average (small) 2005-2006 emissions +7%
 - ⇒ For large facilities - average (large) 2005-2006 emissions +1.279%
 - ⇒ for facilities with large year-on-year deviation (more than 20%) – upwards correction

MEETING OF ENVIRONMENTAL MINISTERS IN PRAGUE

EU environment ministers tackle climate change in Prague

[15-04-2009 14:27 UTC] By [Chris Johnstone](#)

EU environment ministers came to the end of a two **day informal meeting in Prague** on Wednesday. The talks have been dominated by one subject - climate change – which is a major issue for the Czech EU presidency.

The talks broke down into two areas. The first concerns moves at European level **to better prepare countries for the impact of climate change** which looks like it will be much more varied across the continent and, for some regions, much more severe than first predicted.

The **second looks forward to a key global climate change conference at the end of the year in Copenhagen which should thrash out what commitments countries give over cutting greenhouse gases.** EU ministers are attempting to work out exactly what they can put on the table.

Recent findings **suggest that climate change will be swifter and more severe in Europe than suggested two years ago.** Even if Europe keeps to its pledge of cutting greenhouse gases over the next decades, those emissions already out there will still be having an impact. Violent weather changes are predicted across the board.

Some areas will be worse hit. Coastal areas will be threatened by floods from rising sea levels. **Alpine glaciers** will retreat quicker and major changes in rainfall patterns mean those living near rivers are more likely to face flooding. **Southern Europe will be faced by more droughts** with the more than a third of Europe facing severe **water supply problems by 2070.**

Less water is likely to flow into the Czech Republic's famous lakes and ponds threatening them with stagnation and the country's forests are also likely to suffer.

The ministers are at the early stages of piecing together what is described as an adaptation strategy at EU level, which should be ready within three years. This will be very far reaching covering everything from agricultural policy, to health and business. There are economic questions for example whether public insurance schemes should be created for people living in flood plains because private insurance companies might simply refuse them cover. Of course, a lot of preparations will be done at national and regional level with some countries having already drafted their own national plans for tackling climate change.

At the global level, the EU prides itself in setting the world agenda on climate change. So, ministers are at the moment trying to thrash out what they can bring to the table at the United Nations climate change conference in Copenhagen in December. It is hoped that the conference will result in a new global deal setting out what cuts in greenhouse gases will be made by developed countries, including the US, and what promises will be made by fast growing developing countries like India and China to help them curb growth in their emissions.

The negotiations are still very much a poker game with countries still keeping their offers close to their chests. However, Czech Environment Minister Martin Bursík seemed upbeat. Part of that optimism stems from the fact that the new US administration of President Barack Obama is serious about tackling climate change and seems ready to make a serious offer to cut its emissions. But the EU will not be saying for a few months yet how many tens of billions of dollars it will give developing countries to cut their emissions to get them on board as well against climate change.

- 10 out of 14 planned informal meetings during the Czech EU presidency
- EU27 ministers of environment discussing climate changes and possibility of joint strategy, or more formal legal arrangement
- preparation for OSN Copenhagen conference in December which should bring new targets of GHG emissions reductions (after 2012)
- also to discuss possible negotiations with USA (formal discussions planned for end of April in Washington DC; as a preparation for Copenhagen)– to join the program of emissions reduction, details not clear yet (Obama's delegate for climate changes said in Bonn that Washington wants to reduce by 16% over next decade – this is much less than in other industrial countries; EU committed to a reduction of 20%, if other countries join, it could be 30%; developing countries should, according to the commission recommendation, reduce by 15-30%) – www.ecolist.cz;

What was discussed:

- need to further reduce GHG emissions, need for new strategies =>
- need for set of measures to increase the immunity against impacts of climate change, integration of environmental thinking into political systems
- experience with adapting to the climate changes; 8 countries (Denmark, Finland, France, Hungary, Germany, Netherlands, Spain, and Great Britain) have already adopted national adaptation strategies
- welcomed the "White book" published on April 1 by the EC, which suggest that climate changes will have different impact on different region and therefore adaptation strategies have to be prepared and approved on national level. Nevertheless, there are reasons for coordination:
 - cross border impacts (river basins, coasts, mountain areas...)
 - common policies and regulations for certain production sectors (agriculture, water management, fishing,...)
 - solidarity among member states
- need to improve information quality and exchange (establishment of the so-called Clearing House Mechanism, proposed by EC)
- revise and improve current programs (e.g. Natura 2000) to be better fit for (updated) expected impacts of climate changes
- Copenhagen meeting should produce formal agreement to protect climate, role of EU not only coordination, but also its share in financial support (adaptation strategies and reduction policies)
- economies like China, India, Brazil will need financial support from developed economies to be able to reduce emissions – financial support, necessary investment and cooperation need to be discussed (in Copenhagen)
- part of the program – prizes for environmental projects:

- 1st place: energy-saving project in Barma (solar energy for hospital and refugees) – Energy Globe Award
- 2nd place: drinking-water-supply project in Tanzania
- 3rd place: cleaner transportation project in Burgos (Spain) – free bike renting in the city center
- 4 more informal meetings (3 in April under the “old government, 4th in May/June, new government)

EU ETS applies to installations in the energy and industry sectors ... (but not non-ET sectors like household, tertiary, and transport); it is the world's largest emissions trading system and the first international trading system; it covers around 12,000 large greenhouse gas emitting installations in the energy and industry sectors ... it covers about 50% of Europe's CO₂ emissions and 40% of the total greenhouse gas emissions; the working of the system should be known: companies are issued – essentially for free and historic precedent -- emission allowances that they can trade. Essentially, they have to make sure to have enough allowances as production warrants, intertemporally smoothed.,

Authors

- analyze the National Allocation Plans (NAPs) of the 27 EU member states (MS) for phases 1 (2005 – 7), 2 (2008 – 12, coincides with the Kyoto commitment period), and 3 (2013 – 20)
 - find that the price and cost effects for improvements in carbon and energy efficiency will be stronger in phase 2 than in phase 1 (but only because the European Commission reduced “substantially” the number of allowances to be allocated by the MSs)
 - find that domestic efficiency improvements in the targeted sectors may remain limited since companies can make substantial use of credits from the Kyoto Mechanisms
- “Nevertheless, there is still ample scope to further improve the EU-ETS so that the full potential for energy efficiency can be realized.” (p. 1)

Abbreviations

BAT	best available technology
BM	benchmark
CCGT	combined gas cycle turbines
CDM	clean development mechanism
CHP	combined heat and power
CITL	community independent transaction log
CO ₂ e	CO ₂ equivalents
EC	European Commission
ET	emissions trading
EU	European Union
EUA	European Union allowance
EU ETS	EU Emissions Trading Scheme
Jl	joint implementation
KM	Kyoto Mechanisms (i.e. Jl, CDM)
NAP	National Allocation Plan
VET	verified emissions table

“Because ET systems allow for static and dynamic efficiency, they are often considered to be superior to other types of regulation [such as taxes].” (p. 2)

- static eff: if all participants face the same marginal abatement cost, overall reduction costs are minimized
- dynamic eff: incentives to adopt/develop more energy- and carbon-efficient technologies

So much for the theory ...

Some key design elements of the scheme are governed by the EU Emission Trading Directive (e.g., the total allowances budget available, or cap, and how they are allocated across countries) and others are determined by country-specific NAPs (e.g., how these allowances are allocated to individual installations, to what extent they are auctioned off etc.) A complication is the use of credits from Kyoto Mechanisms.

“More stringent ET budgets will lead to higher prices for European Union Allowances (EUAs) and thus greater incentives to improve energy and carbon efficiency, *ceteris paribus*. In the first phase, these incentives were low since the ET budgets turn out to be rather lenient, resulting in low prices for EUAs.” (p. 3)

There are various ways to come to that conclusions (“stringency criteria”):

The difference between the notified (and approved) ET budgets for phase 2 to

- verified historical emissions in 2005
- the size of the ET budgets in phase 1
- projected emissions in 2010

“For phase 1, verified emissions data revealed that very few countries allocated EUAs in 2005 below the actual 2005 emission levels of the ET sector (Austria, Greece, Italy, Ireland, Spain, and the UK). As a consequence of this surplus allowance, in May 2006, prices for EUAs plummeted from around Euro26/EUA to around Euro10/EUA and to well below Euro1/EUA towards the end of the first trading period. According to Kettner et al. (2007), the surplus for 2005 amounts to about 100 million EUA. Since the emission level in the absence of the EU ETS cannot be determined (it is counterfactual), the real extent of possible overallocation cannot be determined.” (p. 4) Ellerman and Buchner (2008) suggest that “a substantial part of the surplus may have resulted from abatement activities.” (p. 4) In other words, the ETS as such might have spurred innovations/abatement activities, and hence was more effective since trading prices seem to suggest. (That may be so – see analogue of self-regulatory organizations trying to stave of regulatory action.)

“Nevertheless, the surplus of EUAs and the correspondingly low price provided little additional incentive to improve energy and carbon efficiency in phase 1. Together with high uncertainty about governments’ commitment to long-term targets, this meant that firms were not strongly motivated to develop energy-efficient and low-carbon technologies and service in phase 1 (Montgomery 2005).” (p. 4)

“For phase 2, therefore, the Commission developed its own criterion, based on 2005 verified emissions data, economic growth, and carbon intensity trends. Applying this criterion has led the EC to require budget cuts in all but four of the assessed plans (Denmark, France, the UK, Slovenia). ... The EC reduced the total cap by 10.4% ... In absolute terms, the budget adjustments were highest for Poland and Germany. In percentage terms, the budgets of Latvia (~56%), Estonia (~48%), and Lithuania (~47%) were reduced the most. ... The required budget cuts were much higher for the new EU-12 MSs (... -25.4%) than for the EU-15 MSs (... -4.1%).” (pp. 4 – 5)

“The European Commission not only adjusted the ET budgets but also set a maximum amount of credits from Kyoto Mechanisms that companies may use to cover their emissions. ... Whether companies will purchase these credits crucially depends on their costs relative to the price for EUAs which in turn depends on the stringency of the ET budgets.” (p. 5)

For details of the stringency of ET budgets (according to the three stringency criteria discussed earlier), see pp. 5 – 8, especially Figures 1 – 3.

“In conclusion, the price and cost incentives to improve energy and carbon efficiency are likely to be substantially higher in phase 2 than they were in phase 1. However, the need for domestic emission reductions via improved energy and carbon efficiency in the energy and industry sectors may still be rather low. This is revealed by comparing the maximum amount of credits from the Kyoto Mechanisms that companies may use to cover their emissions under the EU ETS with the reduction requirements implied by the three criteria.” (p. 7)

Incentives for energy efficiency at the micro level (the cap etc. being the macro level):

- [Assessment based on economic theory]
- Auctioning vs free allocation for existing installations

- Economists prefer auctions to gratis allocation because (p. 10)
 - the “polluter-pays” principle holds
 - windfall profits [which come about when companies manage to pass on additional marginal costs to consumers] are avoided, which might have public policy implications.
 - auction revenues could be used for other purposes, including funding for R&D or investment in energy- and carbon-efficient technologies
 - the correct pricing that comes out of auctions, increases the incentives to innovate
- Carbon costs pass through in the power market
 - Higher product price resulting from the pass through of carbon costs translate into stronger incentives for energy efficiency on the demand side. (p. 10)
- Early price signals and planning reliability for investment
 - Auctioning off part of the budget right at the beginning of the trading period may generate robust early price signals that reflect the scarcity of allowances on the market since participants base their bidding behavior on their marginal abatement costs. (p. 11)

“... auctions tend to be associated with higher innovation effects than the typical grandfathering, where allowances are allocated free of charge based on historical emissions. Allocating allowances for free, however, is politically more palatable since the costs for companies directly covered by the EU ETS are lower.” (p. 12)

The reality ... (p. 12)

- Directive allows MSs to auction off up to 5% of the ET budget in phase 1 and up to 10% in phase 2
- Phase 1 only Denmark, Hungary, Ireland, and Lithuania took that option to some extent.
- Phase 2 about one third of the MSs have declared their intention to take that option to some extent.
- Total auction share in the EU ETS around 0.2 percent in phase 1
- Total auction share in the EU ETS around probably around 3 percent in phase 2, and that number driven by high level of auctioning in Germany and the UK.
- Most MSs allocate allowances to existing installations for free based on historical emissions (based on 2005 data).

The conclusions

“Our analysis at the macrolevel suggests that, on average, ET budgets for phase 2 are about 12.8% lower than historical emissions in 2005, 12.9% lower than the budgets in phase 1 (2005-2007), and 15.7% lower than projected emissions in 2010. Thus the ET budgets for phase 2 are much stricter than for phase 1. ... Prices for EUAs for phase 2 of currently around Euro20 support this view. ... The tighter budgets for phase 2 are primarily the outcome of the EC’s decision to substantially cut the ET budgets in the notified NAPs [a centralized setting of the cap, AO] rather than the result of MS’ efforts to curtail greenhouse gas emissions using the EU ETS. ... according to the EC’s proposal for phase 3, the future EU ETS will no longer require NAPs. Instead, there will be an EU-wide cap which corresponds to a reduction of 21% in 2020 compared to 1990 emission levels (or 14% compared to 2005 levels), ... “ (p. 15)

“Phase 3 is scheduled to last for 8 years (2013-2020) rather than five. ... Since longer phases better match companies’ investment cycles and reduce uncertainty about the profitability of new investments, they are likely to increase the diffusion and development of carbon- and energy-efficient technologies. Longer phases, however, also limit the system’s flexibility to react to unexpected developments, such as technological breakthroughs, sudden changes in climate policy, or improved knowledge about the causes and effects of climate change. ... “ (p. 16)

“to sum up, the incentives for carbon and energy efficiency generated through the EU ETS have significantly improved at the macrolevel, but only slightly at the microlevel between phase 1 and phase 2. The EC’s proposal for phase 3 implies increased incentives for carbon and energy efficiency, in particular at the microlevel. ... “ (p. 17)

Godby & Shogren, *Caveat emptor (buyer beware) Kyoto – Comparing buyer and seller liability in carbon emission trading*

- Kyoto Protocol requires that leading industrialized countries reduce their GHG emissions by an average of 5 percent below 1990 levels by 2008-12.
- ET allows regulated emitters to buy emission reduction efforts from other emitters
- The effectiveness of global trading depends on the rules of enforcement and sanctions for nations that shirk on their emission commitments.
- Domestic trading programs in the United States and elsewhere have relied on strong enforcement and sanctioning frameworks to ensure market compliance but that can not be relied on automatically in international contexts (see Phase 2 notified voluntary restrictions within the EU ETS)
- The Kyoto Treaty ignores enforcement (although it really is the main challenge)
- The critical issue: Who should be held responsible for overselling permits beyond quotas – the seller or the buyer country?
 - Weak under-compliance penalties and ineffective monitoring methods create the incentive for selling nations to oversell permits (and shirk on their emission reduction commitments)
 - An advantage of seller liability: there is only one price because for the buyer it does not matter where the licence to pollute comes from.
 - An advantage of buyer liability: buyers would have an incentive to ensure emission compliance through various means (including reputational enforcement, collaterals of various kinds, etc.) Inevitably that would mean that we now talk about different prices because various risk factors would play a role in the determination of the price. (On the positive side, monitoring and enforcement costs could be dramatically reduced.) “The working hypothesis is that buyer liability leads to greater climate protection, as markets form to capture the gains from trade and reputations work to police market behavior.” (p. 49)
- The authors test experimentally the comparative advantages of three liability rules: seller, buyer, and buyer and refund (seller non-performance inflicts sanctions on buyers only, while sellers forfeit any permit revenues, say by way of escrow accounts [bonds].)
- Sneak preview: They find that “buyer liability under relatively weak international enforcement leads to the worst possible outcome – less climate protection at greater costs.” (p. 49) This result is robust to various robustness checks.
- The experimental details:

- Stylized Kyoto emission market double auction experiment in which liability rules are the treatment
- There is no calibration, the experiment is a “concept experiment”
- Each session with eight participants who
 - were told that they represented a firm producing and selling a product at an announced market price, with production costs varying and being private information.
 - were to choose a production level each period (which would materialize somewhat randomly)
 - were expected to produce only when they held a permit to do so (but that “it was possible to produce without a permit – but each faced a fixed and known probability of being monitored individually to determine if they held enough permits to cover their production. If found to have produced without enough permits to cover production, individual subjects faced a fixed fine for every unit produced in excess of their permit inventory.” (pp. 51 – 53)
 - Each session used all three treatments (but in different orders; see Table 3.1. on page 52)
- A total of 12 sessions, for a total of 96 participants
- Each session took about 2.5 – 3 hours to complete.
- Individual earnings ranged from \$27 to \$73, with a mean payment of \$45.70
- Session procedure:

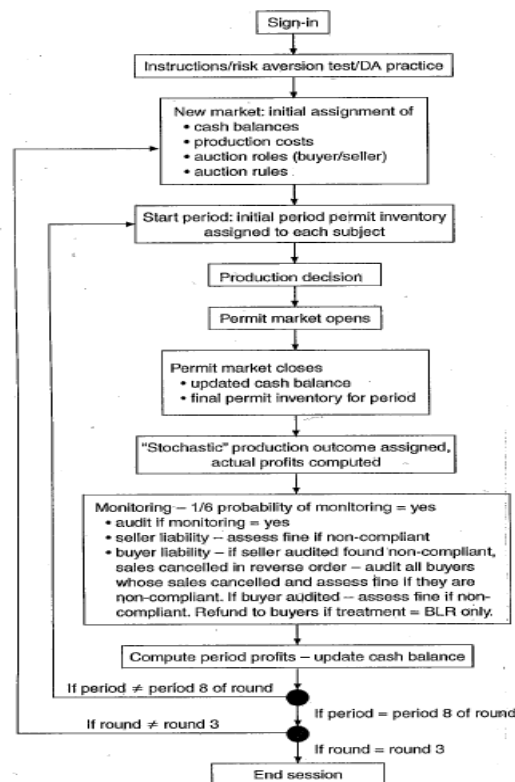


Figure 3.1 Session procedure.

- Results (somewhat surprising and contradicting intuition, especially as regards the BLR treatment):

○

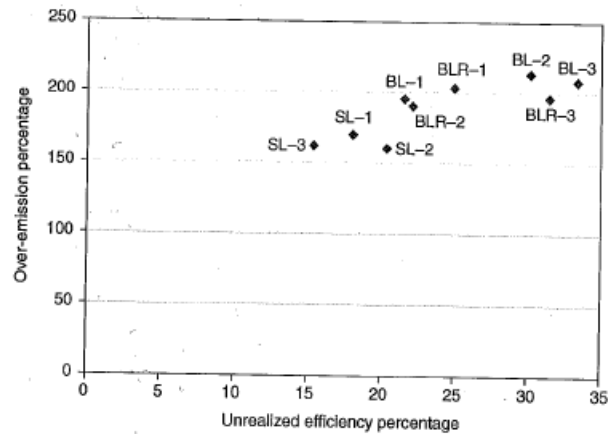


Figure 3.2 Efficiency and emission outcomes by treatment.

○

- “Promoting a *caveat emptor* liability rule backfired in our experiment on both economic and environmental criteria. Holding the subjects that represented high-emission buyer nations responsible for climate shirking rather than holding the relatively poorer low-emission seller nation subjects responsible resulted in average emission levels exceeding those observed under seller liability by nearly 34 to 40 percent. The imposition of an escrow-like refund system did not alter this result; and neither did the introduction of tighter enforcement or conditions that could create stronger seller reputations. Our findings support the notion that buyer liability in global emission trading might lead to less climate protection at greater cost.” (pp. 73-74)