

*Session 3 • Emissions Trading and National Allocation Plans*

<b>EU Emissions Trading System in an Enlarged EU</b>	<b>91</b>
<i>Stefan Moser</i>	
<b>Implications of the Linking Directive: Market Strategies for CEE/CIS Actors</b>	<b>93</b>
<i>Thomas Forth</i>	
<b>Implications of the Linking Directive: Market Strategies for CEE/CIS Countries</b>	<b>98</b>
<i>Dr. Roland Geres</i>	
<b>CO<sub>2</sub> Trading – Insights from the Trading Floor</b>	<b>101</b>
<i>Tim Czwartynski</i> <i>Udo Wappler</i>	
<b>Implementation of EU Monitoring and Reporting Guidelines : Requirements and Current Practices in Germany</b>	<b>104</b>
<i>Dr. Jürgen Landgrebe</i>	
<b>Are the New EU Member States Ready for Kyoto First Commitment Period Trading?</b>	<b>112</b>
<i>Dr. Tiit Kallaste</i>	

# EU Emissions Trading System in an Enlarged EU

Stefan Moser

European Commission, DG Environment

get to grips with  
**climate change**

**Emissions Trading and National Allocation Plans: The Follow up**

**The EU ETS in an enlarged EU: Lessons learned**

CTI Capacity Building Seminar  
Leipzig, 24 Oct 2005

Stefan Moser  
Environment DG  
European Commission

Slide 1

**The EU emissions trading scheme**

- ✓ EU ETS started on time
- ✓ As of 1 January 2005, nearly 12,000 energy intensive installations across EU-25 must monitor their CO<sub>2</sub> emissions and surrender an equivalent number of allowances
- ✓ By far the largest emissions trading scheme in the world to date
- ✓ First major building block towards an international carbon market is therefore in place
- ✓ EU ETS gives emissions reductions a **value** and extra emissions a **cost**
- ✓ Will encourage new and more effective existing technologies that reduce emissions
- ✓ Will contribute towards fulfilment of the Kyoto Protocol

Slide 2

**State of play**

- Phase I allocation: as of 20 June 2005, Commission has now made decisions on all 25 national allocation plans
- As a result of Commission scrutiny, proposed allocations were cut by over 290 million allowances for the first trading period 2005-7
- A total of close to 2.2 billion allowances will be put into circulation annually 2005-7
- An increasing number of national electronic registries are up and running (currently 11), over half of the allowances to be allocated in 2005 are already credited to companies
- <http://europa.eu.int/comm/environment/ets> : EU registries system homepage, where information on all registries and covered installations is available

Slide 3

**The next steps (1)**

- First compliance cycle is running:
- 31 March 2006: deadline for submitting verified emissions data
  - If deadline missed, Community transaction log will block transactions out of operator holding account
- 30 April 2006: deadline for surrendering allowances equal to 2005 emissions
  - If deadline missed, aside from financial penalties, Community transaction log will automatically publish the list of all non-compliant installations on 15 May

Slide 4

**The next steps (2)**


- Remaining registries need to go online, so as to ensure wider participation in the market
- Discussions on linking with other trading schemes taking place (e.g. Norway)
- Preparations for phase 2 (2008 to 2012) already underway
- Scheme will automatically expand with enlargement, as of the date of accession (Bulgaria and Romania)
- Commission preparing a review by mid-2006 that will (largely) focus on post-2012 EU ETS

Slide 5

**What can be changed when?**

- Commission will review the Directive by 30 June 2006 and make a legislative proposal, if appropriate
- The Directive itself can only be amended through "co-decision" (approximately 2 years, plus implementation time)
- Therefore, the Directive cannot be amended prior to the submission of the second round of NAPs due by 30 June 2006
- So legal basis of 2<sup>nd</sup> round allocation will be essentially the same as for 1<sup>st</sup> round, but we will have 1<sup>st</sup> round experience

Slide 6




### Review: non co-decision route

- Relevant for 2008-12 period
- Commission looking to issue further guidance for the 2008-12 period by the end of 2005
  - Fewer administrative rules, more confidence in a well-designed market (example areas: new entrants, closures, transfer rules)
  - Clarify the definition of combustion, and therefore the installations covered by the Directive
  - Assess characteristics of smaller installations
- Commission is reviewing the Monitoring and Reporting guidelines e.g.
  - Taking into consideration experience to date on using the guidelines
  - Improving accuracy wherever possible
  - Looking into possibilities for simplifying procedures for small installations and biomass installations

7

Slide 7



### Review: co-decision route

- Primarily relevant for post-2012 periods, but earlier implementation possible if technically feasible and market has sufficient notice
- Relevant areas:
  - Allocation rules may need more predictability and certainty:
    - stable baseline years
    - longer allocation period
    - derive future allocation from past allocation
  - Accreditation and verification may need further harmonisation
  - The coverage of the scheme may be expanded, regarding further sectors and gases

8

Slide 8



### Experience to date

- NAP process has been time-consuming in every Member State for several reasons
- Next time will be easier: installations covered will be known, more and better data will be available, companies will better understand emissions trading, and first solution serves as a benchmark
- Commission scrutiny has turned out to be crucial – it may have been the decisive factor ensuring scarcity and an environmental benefit in the first trading period
- *Ex-post* adjustments and over complicated administrative rules undermine the certainty that companies need for the instrument to work properly and deliver cost-effective emission reductions
- Don't aim for or expect perfect allocations: companies' actual situations will always be best known to themselves, and not to governments

9

Slide 9



### Concluding thoughts

Looking outwards:

- ✓ The world is watching the performance of the EU ETS
- ✓ Market-based instruments, including the EU ETS, are essential in the post-2012 climate policy development
- ✓ A simpler scheme will be more likely to fulfil its promise

Looking inwards:

- ✓ EU ETS has made Member States think harder about how they are actually going to meet their Kyoto obligations – in more sectors than just those covered by the EU ETS
- ✓ As a result, some Member States need to focus on making use of the Kyoto Protocol's project mechanisms
- ✓ Companies need to focus on verification arrangements and ensure they are ready to make use of the market


10

Slide 10

# Implications of the Linking Directive: Market Strategies for CEE/CIS Actors

Thomas Forth

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety




Implications of the Linking Directive:  
Market strategies for CEE/CIS actors

German Flexmex – set up  
for JI project activities

Thomas Forth  
BMU, AG Z III 6

Slide 1




## Overview

1. Organization and basic procedures on the governmental level
2. Legal basis – „ProMechG“
3. German involvement in CDM and JI project activities
4. Flexmex and German policy goals
5. Perspectives on project-based mechanisms for CEEs

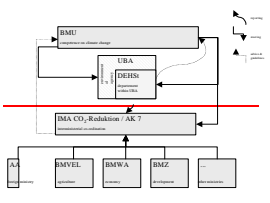
CTI Leipzig 24 10 05 2

Slide 2




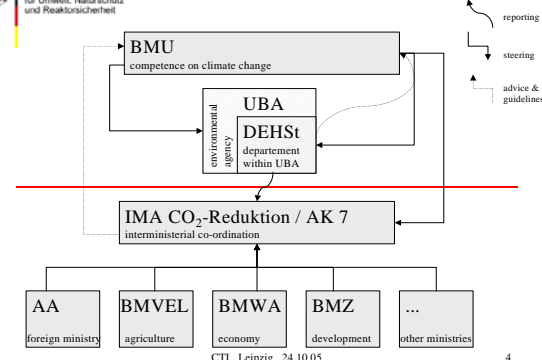
## Part 1

### Organization and basic procedures on the governmental level




CTI Leipzig 24 10 05 3

Slide 3

CTI Leipzig 24 10 05 4

Slide 4



## Duties and responsibilities of DEHSt

### DNA/dfp–functions of DEHSt according to ProMechG


### CDM/JI-applications handling

- Issuance of „Letter of Endorsement“
- Issuance of „Letter of Approval“
- Checking verification reports
- Registration

Performing CDM/JI-database, Website and preparation of other information tools

CTI Leipzig 24 10 05 5

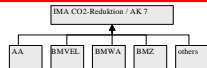
Slide 5



## Duties and responsibilities of AK 7

### interministerial working group

### Coordination of ministries



1. Regarding the performance of CDM and JI
  - Framework (legal aspects, ODA, WCD, ...)
  - Tools (database, reports, documents, ...)
2. No decisions on projects, but guidance and advice - procedures will be decided on in the near future

CTI Leipzig 24 10 05 6

Slide 6

**Project approvals and AK 7**

Actually it is not decided on the technical cooperation procedures between AK 7, BMU and DEHSt.

But it is clear project related guidance and advice should not become a routine for all projects!

Involvement seems to be reasonable in certain cases:

- Refusal of endorsements and approval
- Requests of review
- Extensions of legal space of time for approval
- Specific problems resulting from the project type

CTI Leipzig 24 10 05 7

Slide 7

**Legal basis - „ProMechG“**

ProMechG = Projekt Mechanismen Gesetz

**Short Overview**

CTI Leipzig 24 10 05 8

Slide 8

**Overview - I**

**Basic intention**

On the basis of independent reports (validation, verification) ProMechG should lead in practice to a check of plausibility of the written documents

Only in case of inconsistencies the DNA has to go for own review, primarily with requests of clarifying and not by own investigations

CTI Leipzig 24 10 05 9

Slide 9

**Overview - II**

Applications for CDM and JI projects could be made by any (authorized) project participant with postal address in Germany

**Project types**

1. for the present sink projects are excluded until the EU will have decided on (Review 2006)
2. WCD guidelines has be fulfilled when the generation capacity of hydropower installation exceeds 20 MW
3. nuclear projects are excluded

CTI Leipzig 24 10 05 10

Slide 10

**Overview - III**

**JI regulation on top of the Linking Directive**

1. 1st track requires independent validation
2. For the present only accredited DOEs could be taken as validators

JI first track is built in this manner to meet the expected JI second track criteria

**Future options on the base of statutory ordinances**

Simplified rules and criteria for small and medium-sized projects  
Authorization of other validators and verifiers than the DOEs

CTI Leipzig 24 10 05 11

Slide 11

**German involvement in CDM and JI project activities**

- The following information will give a review on all CDM/JI project activities, in which Germany is or has been involved
- The proposals in 2004/5 are getting more promising compared to older ones, but more experiences has to be gained before getting realistic figures.
- In total BMU has taken notice from 160 CDM and JI project activities, including 65 JI projects proposal to be hosted by Germany.

CTI Leipzig 24 10 05 12

Slide 12

**CDM projects addressed to BMU**

Total: 47 projects

Endorsements: 14

Approvals: 2

CDCF: 1 (indirect involvement)

CTI Leipzig 24 10 05 13

Slide 13

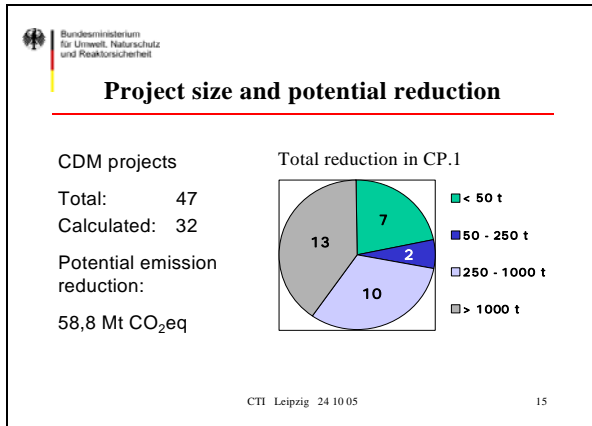
**Distribution**

**Regional**

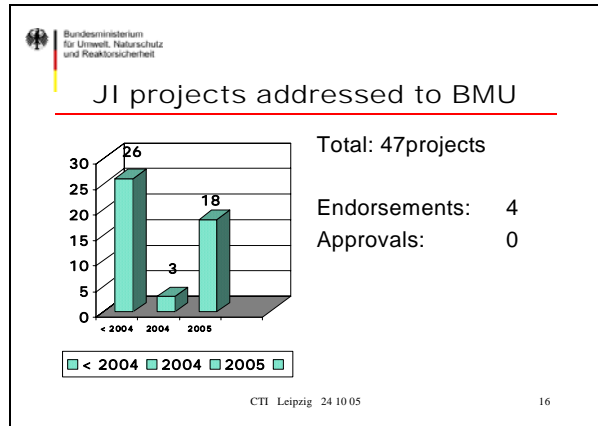
**Project types**

CTI Leipzig 24 10 05 14

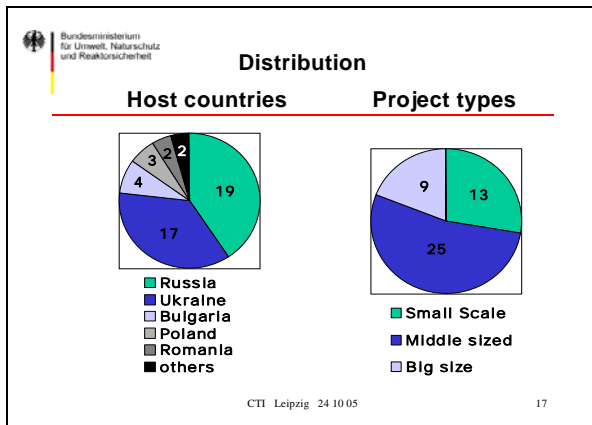
Slide 14



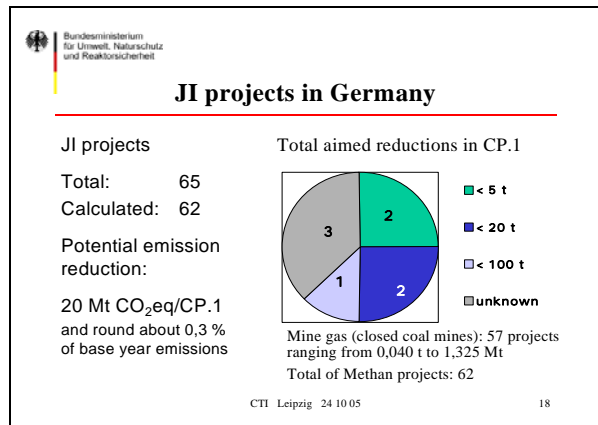
Slide 15



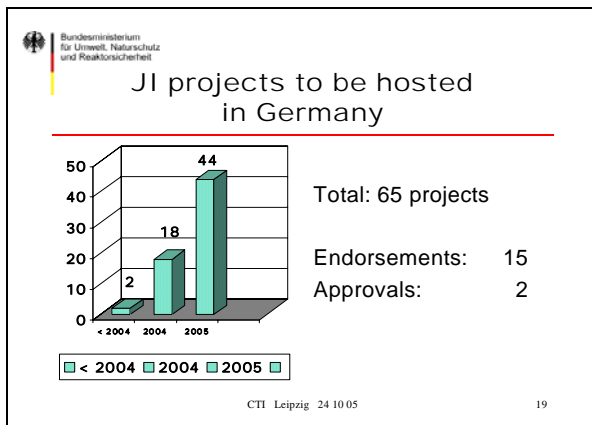
Slide 16



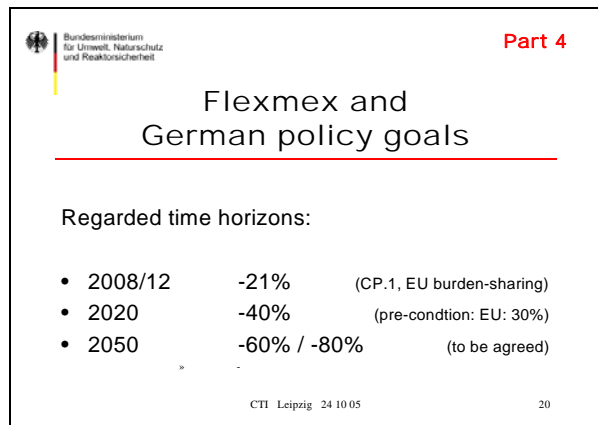
Slide 17



Slide 18



Slide 19



Slide 20

### GHG emissions in Germany

Mt CO<sub>2</sub>eq

Base year 1990/95	1995	1998	2003	2008/13
1.248,3	1.102,8	1.057,4	1.017,5	986,1
	-146	-191	-231	-262
	-11,7 %	-15,3 %	-18,5 %	-21 %

• Average 1995 – 2003 > 10,7 Mt CO<sub>2</sub>eq  
 • Average 1998 – 2003 > 8 Mt CO<sub>2</sub>eq

CTI Leipzig 24 10 05 21

Slide 21

### Energy sector / Germany

GHG emissions in Mt CO<sub>2</sub>eq

Base year	1998	1999	2000	2001	2002	2003
441,6	366,8	351,6	364,0	368,9	378,1	385,1
						+33,5 since 1999
						Corresponding to 2,7 % of total GHG base year emissions

CTI Leipzig 24 10 05 22

Slide 22

**Trends in other sectors since 1999**

	Mt CO <sub>2</sub> eq	
Industry	- 10,3	→
Transport	- 15,4	→
Households	+ 2,5	→
Trade, commerce, Services	- 2,3	→

CTI Leipzig 24 10 05 23

Slide 23

**Compliance in CP.1 with domestic actions only ?**

**Difference to target in 2003: 31,5 Mt = 2,5 %**

The gap will be closed with ongoing and new measures of the National Climate Protection Program (2000 and 2005) and the EU-ETS

**New measures in Households and Transport: 16 – 18 Mt CO<sub>2</sub>e**  
**EU-ETS: 12 Mt CO<sub>2</sub>eq**

**Total emission reduction of measures (CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFC, PFC, SF<sub>6</sub>): > 31 Mt CO<sub>2</sub>eq**

CTI Leipzig 24 10 05 24

Slide 24

**Use of CERs and ERUs in EU-ETS - I**

- The Linking Directive opens the EUA market for CERs and ERUs.
- With regard to the complementarity rule (significant level of domestic action) a cap on CERs and ERUs has to be taken.
- Germany has decided to determine this cap in NAP2 next year.
- In case Germany goes for the same cap as The Netherlands (8%) the total margin add up to 40 Mt p.a. for the optional use of CERs and ERUs or 200 Mt in the whole trading period 2008/12

CTI Leipzig 24 10 05 25

Slide 25

**Use of CERs and ERUs in EU-ETS - II**

- Compared to the total yearly cap of German installations of 8 Mt in second trading period this seems to be favourable for the German ETS as a whole, but not all companies are winners!
- From the disposibility of CERs and ERUs for 200 Mt 40 m certificates could be apportioned to the cap, but the other 160 m are also reclaimable in the second trading periode.
- That's could add to round about 3 % of the base year emissions.

Of course there are barriers for the full development of this market:

- Demand side: 160 m EUA would have been set free! Who will ask for and at what price ?
- Even recognizing the technical reduction potential as high enough it is complex and longsome to develop

CTI Leipzig 24 10 05 26

Slide 26

**GHG emissions reduction targets 2020 /2050**  
Mt CO<sub>2</sub>eq

	2003	2008/12	2020	2050	2050
	1.017,5	986	749	499	250
		-21%	-40%	-60%	-80%
		-31,5	-269	-518	-768
Average reduction 1995 – 2003 > 10,7 Mt CO <sub>2</sub> eq / y as basis for „BAU“ scenario with ambient domestic actions					
Reduction level in 2020/50			-181	-395	-395
Total emissions in 2020/50	837		623	623	
Emission target in 2020/50	749		499	250	
Difference to „BAU“			-88	-124	-373
Necessary average reduction		-16	-14	-21	
Compared to 1995/2003			-5	-3	-10

CTI Leipzig 24 10 05 27

Slide 27

**Aggregated costs for the German national economy by 2020**

**Assumptions:**

- Compliance in CP.1
- Difference to „BAU“ totally compensated by CDM and JI
- Total lack of reduction units between 2012 and 2020: 684 m
- Price per unit 8 €

**Total cost: 5,472 bn €**  
**Only in 2020: 0,704 bn €**

Not inflation-adjusted

CTI Leipzig 24 10 05 28

Slide 28

**Main conclusion**

The main conclusion is simple:

The project-based mechanisms will be used in Germany during CP1 by German companies mainly.

Actually the role of the Government is focused on setting the suitable framework for private use, but also to provide for the institutional arrangement for the future,

- especially with view to the target Germany proposes for following commitment periods,
- including for the relevant use of Flexmex for the own national commitments.

CTI Leipzig 24 10 05 29

Slide 29

**Part 5**

**Perspectives on project-based mechanisms for CEE**

What is on the table ?

- JI first track
- JI second track
- Green Investment Schemes - GIS
- Domestic emission reduction projects/ national projects (NP)

CTI Leipzig 24 10 05 30

Slide 30

**JI first track**

1. The performance of JI projects under 1st track conditions will be at risk with important JI host countries
2. The problem will persist during CP.1
3. In these cases JI projects participants should provide for 2nd track procedures
4. Germany has done it with ProMechG: especially the requirement of a validation by an independent accredited certifiers (DOEs of the CDM) should ensure to fulfil the criteria of the 2nd track
5. After establishing the JISC and the review of the Inking directive adjustments of ProMechG has to be considered
6. Simplifications of the JI 1st track depend on the fulfilment of the eligibility criteria (Marrakesh-Accords) and could be done on a bilateral level

CTI Leipzig 24 10 05 31

Slide 31

**JI second track**

1. JI 2nd should not be developed as a tool to be used in perspective
2. The 2nd track option should safeguard of investments in emission reduction projects and should encourage project participants to proceed
3. The demonstration of the project's additionality is such essential as the monitoring and the verification, but there is no reason to built it up in the way of CDM
4. It is to discuss, whether the additionality should not be limited to the environmental aspects

CTI Leipzig 24 10 05 32

Slide 32

**Green Investment Schemes - I**

1. GIS becomes more and more interesting, but only for Annex I – Countries, which getting eligible in time and which in the position to sell AAU
2. GIS could become a very powerful instrument for those countries and replace JI on the whole
3. But there are many options to built a Green Investment Scheme
4. Catchwords are hard greening and soft greening, re-investment of the payments, institutional framework including the criteria for eligible projects and monitoring)

CTI Leipzig 24 10 05 33

Slide 33

**Green Investment Schemes - II**

1. For Germany GIS could become interesting in the near future, when there are more types of certificates could be gained
2. With regard to the use in the EU-ETS EU-Allowances or ERUs are needed

**There are three options to solve the problem**

1. Linking GIS with the EU-ETS on a legal basis
2. Involving JI 1st track as a lean option for investors
3. Establishing the option „national project“ being scheduled in the Linking Directive for the upcoming review in 2006

CTI Leipzig 24 10 05 34

Slide 34

**Solution 1**

**Linking GIS and EU-ETS**

This idea could be considered seriously only if the linking will be based on Green Investment Schemes characterized by the catchword „hard greening“

**Essentials**

1. Additionality incorporated in GIS (same level as for „opt-in“-activities in the EU-ETS)

**Projected related**

1. Monitoring and verification
2. Avoiding of double counting
3. 1:1 balance of emission reductions and certificates
4. Independent verifiers

**Conclusion**

Academic, but not attractive solution.  
Additional problem: the agreement with the EU

CTI Leipzig 24 10 05 35

Slide 35

**Solution 2**

**Combining GIS and JI 1st track**

**Essentials**

1. Environmental additionality incorporated in GIS
2. Standardized monitoring and verification

**Projected related**

1. Avoiding of double counting (in any case)
2. Simplified reporting format approved by host country

**Conclusion**

Additional transaction costs could be reduced to a very low level

**To clarify**

Are there different intense work for the host country, when they have to decide to issue AAUs or ERUs

CTI Leipzig 24 10 05 36

Slide 36

**Solution 3**

**Combining GIS and „national projects“**

1. National projects (NP) or domestic emission reduction projects have been discussed controversially during the negotiation of the Linking Directive (LD)
2. Finally it has been decided to work out this instrument on a technical level (review of the LD in 2006)
3. Probably NP could not be handled so liberal like JI1st track. There is no bilateral control and therefore NP could misused to bypass the national allocation plans
4. In case this central problem of „NP“ could be regulated in an unbureaucratic manner the combination with GIS should take the same patterns as for JI 1st track (solution 2)

CTI Leipzig 24 10 05 37

Slide 37

**Main conclusion**

**Joint Implementation will play in an important role in the early years. In the long run GIS are more powerful. In host countries establishing a GIS JI will turn to an supplemental instrument.**

**The historical turning point of the role of JI depends primarily**

- the fulfilment of the eligibility criteria for „trading“
- the volume of tradable AAUs
- the international progress on the concept of GIS
- the national preparation of concrete GIS
- and maybe on the membership of th EU regarding the double counting issue which leads to a reduced potential of JI projects

CTI Leipzig 24 10 05 38

Slide 38



# Implications of the Linking Directive: Market Strategies for CEE/CIS Countries

Dr. Roland Geres

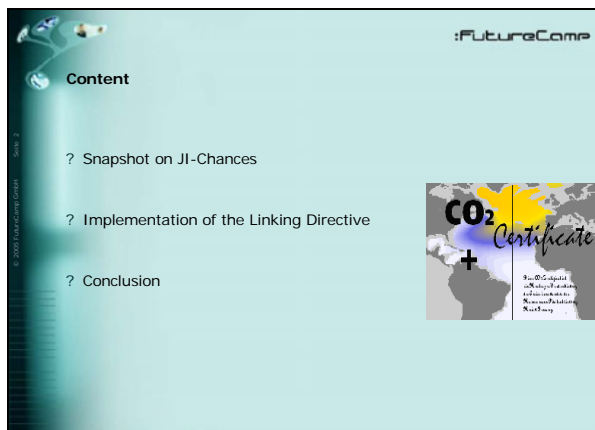
FutureCamp GmbH, Munich



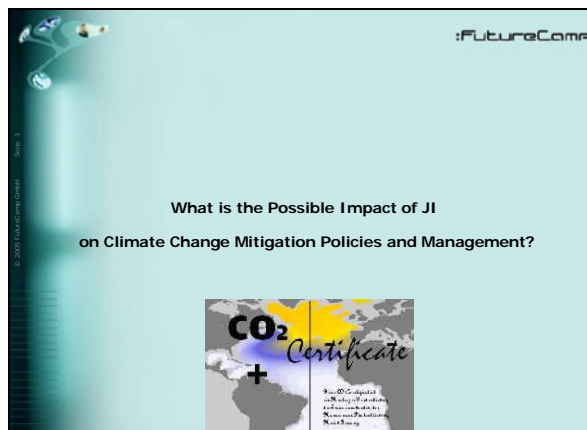
Slide 1



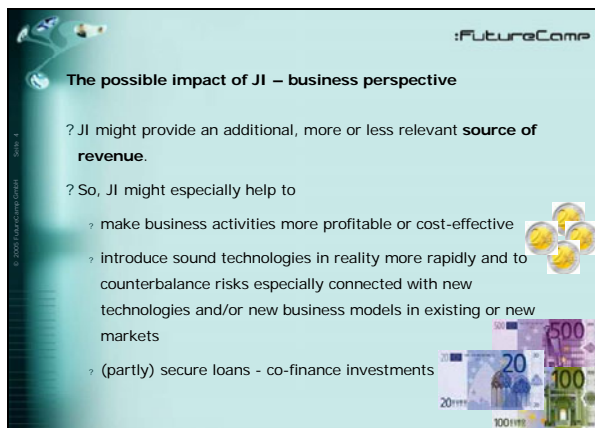
Slide 2



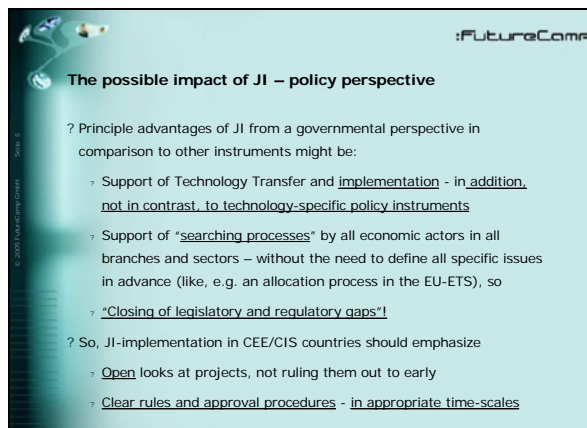
Slide 3



Slide 4




Slide 5



Slide 6

:FutureComp

**What does the Linking Directive Enable?**



Slide 7

:FutureComp

**Framework by the Linking Directive**

- ? First of all:
  - The LD ensures the utilization of ERUs in the EU-ETS, so
  - The monetary value of ERUs in the most important market
- ? For EU-Member States the LD defines some **specific rules**, esp. to
  - Avoid „Double Countings“
  - Take into account the European Legal Aquis by defining baselines
  - „Cap“ the utilization of ERUs and CERs by plant operators covered in the EU-ETS as of 2008 on

Slide 8

:FutureComp

**Proposals for avoidance of double counting (1/2)**

- ? First of all: for many possible projects double counting is not an issue given the EU-ETS today and – probably – until 2012
  - CH<sub>4</sub> (if states do not „opt-in“) and other non-CO<sub>2</sub>-gases (example: methane recovery from landfills, mine-gas etc.)
  - E.g. smaller district heating and household sector in general
  - Transport sector (example: alternative fuels),
  - Industries / small and medium sized businesses not covered by EU-ETS (example: direct energy efficiency, fuel-switches etc.)
- ? So: The issue of double-counting
  - does not argue against JI in general and
  - **Still leaves interesting potentials inside the EU**
  - Is relevant for non-EU-memberstates if they introduce own ETS-Schemes

Slide 9

:FutureComp

**Proposals for avoidance of double counting (2/2)**

- Two possible cases of double counting:
  - ? Direct Emission Reduction in installations covered by EU-ETS
    - should be ruled out in general,
    - Including sectors „opted-in“,
    - JI does not make any sense here (and is not necessary from a business perspective)
  - ? Indirect Emission Reduction in covered installations, esp. Demand side projects inside electricity systems and larger district heating systems
    - could be ruled out in general or
    - Proposal for CEE: by defining a special reserve on NAP-Level thus counterbalance double counting on national level instead of project level
    - Advantage: **Might give relevant incentives for energy saving projects thus emphasizing energy efficiency goals of EU at the same time!**

Slide 10

:FutureComp

**Proposals for (legal) baseline issues**

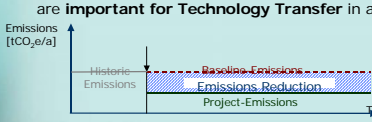
- ? The LD correctly enforces to take into account the European Law including special provisions with CEE-states
- ? This still leaves it up to member states to use JI as „**law enforcement support tool**“, e.g. by
  - Approving projects that include an **earlier** implementation of higher standards than legally enforced
    - \_ example: waste management and treatment, landfills ...
    - \_ ... as long as they are „earlier“ (and thus additional)
  - Approving projects that introduce **higher** standards than legally required
    - \_ example: law requires higher efficiency standards,
    - \_ but implementation includes fuel switches – than the switch can be treated as additional
- ? According subsidies, it is up to the member states to which extent those payments rule out JI in their territory or not

Slide 11

:FutureComp

**Proposals for (technical) baseline issues**

- ? In some of the sectors mentioned above, for cost-benefit-ratio reasons „project bundling“ is **necessary** for project owners, e.g.
  - Efficiency gains in household sector and small businesses
  - Fuel switches in smaller heating units
  - Utilization of biomass and agricultural waste
- ? Especially this projects consisting of numerous „small projects“ are **important for Technology Transfer** in all sectors!



Slide 12

:FutureComp

**Proposals for (technical) baseline issues**

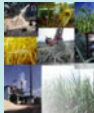
- Thus, host countries in principle should be **open** to the bundling approach, including the fact that in many cases not all participants (could be single households, families!) can be identified in advance
- ? **This does not harm JI** as long as
  - The project owner defines technical and regional project boundaries and the participants as e.g. „target group“,
  - a clear content of the project (e.g. fuel switch),
  - clear and general baseline and project emission calculation procedures and
  - a suitable monitoring approach enabling verifiers and authorities to control ex-post before ERUs are endorsed
- ? Methodological experience can be very helpful for later „Opt-Ins“ or „Green Investment Schemes“

Slide 13

:FutureComp

**Examples for pilot “project bundling”-activities in Germany**

- ? Decentralised small biomass units (60-660 kW)
  - 2001 start with 15 units, now > 10.000 t CO<sub>2</sub>/yr. (CH<sub>4</sub>)
  - Project owner: Technology Provider
  - Utilization only as “VER” - but still additional income for plant owners (farmers)
- ? Energy Efficiency and fuel switch oil-gas in small heating systems < 120 kw
  - First project in 2001/2 – meanwhile two running, three in development, reductions between 1.000 and 20.000 t CO<sub>2</sub>/yr, growing
  - Project owners: Regional Natural Gas Utilities
  - No direct utilization for project owner, reduction-based payment for building owner to overcome investment barriers
- ? Geothermal heat supply replacing oil/gas, running since 2004
  - Reduction appr. 8.000 CO<sub>2</sub>/yr., growing through new customers
  - Project owners: Contracting company and municipality



Slide 14

:FutureCamp

**Proposals for „Capping“ and „Risk Management“ (1/2)**

- ? The LD enforces member states to define a „cap“ or „ceiling“ according to the use of CERs and ERUs by installations covered by EU-ETS as of 2008 on
  - Expressed as percentage of allowances allocated („e.g. 8%“)
  - Up to now different implementations, e.g.:
    - \_ Germany: no ceiling until 2007, 2008 is up to decision in NAP 2 – but Germany does not plan to buy as a state
    - \_ Netherlands: already defined 8% for installations – but already is buying as a state
- ? Proposal: CEE/CIS states are expected as host countries – percentage mentioned here seems not to be so important, decision therefore could be left to second NAP

Slide 15

:FutureCamp

**Proposals for „Capping“ and „Risk Management“ (2/2)**

- ? Other issue: Governmental Risk Management on ERUs
- ? Possible Problem: ERUs are legally acknowledged to be issued in 2008-12 (and possible beyond) to an extent that endangers the state to miss his Kyoto-Target
- ? Is this a realistic risk for CEE/CIS? Usually not.
- ? If it is a danger, there are two possibilities:
  - 1: „Capping“ of ERUs to be issued to a certain amount (e.g. in the Second NAP) or
  - 2: „Observation“ of ERU-Amounts and legal possibility to restrict approval of new projects (not already approved) as soon as described risk becomes real (e.g. like the German „Mengenbeobachtung“)
- ? Proposal here: If seen as relevant, than the observation approach
  - Enables more flexibility
  - „Capping“ will influence expectations towards JI very negatively

Slide 16

:FutureCamp

**Conclusion**

- ? Interesting opportunities for JI exist even inside the EU
- ? JI can be performed by very different project owners in different sizes and can be combined with different policy goals as well as different business models
- ? States should act as enablers and not overload JI
- ? Implementation of the LD is possible following the idea of making JI feasible widely without harming the EU-ETS
- ? It is up to the implementation in the states
  - whether JI will play a relevant and positive role for states and policies as well as for businesses and economic efficiency
  - Or will end up as a nice idea never really worked and rolled out

Slide 17

:FutureCamp

**Contact**

**Dr. Roland Geres**

FutureCamp GmbH  
Chiemgastr. 116  
D-81549 Munich

Tel +49 (89) 68 008-330  
Fax +49 (89) 68 008-333  
roland.geres@future-camp.de  
[www.future-camp.de](http://www.future-camp.de)

Slide 18

## **CO<sub>2</sub> Trading – Insights from the Trading Floor**

**Tim Czwartynski**  
**Udo Wappler**

*EEX European Energy Exchange AG, Leipzig*

The EEX European Energy Exchange is continental Europe's largest power exchange, based in Germany. It offers both Spot and Derivatives markets for power and EU Emission Allowances, as well as offering OTC clearing services to the market.

The European Energy Exchange currently has 128 participants from 16 countries, with 117 members on the Spot Market and 58 on the Derivatives Market.

In the trading of EU Emission Allowances (EUA), the so called CO<sub>2</sub> certificates, the EEX has offered a Spot Market as of March 2005 and a Derivatives Market as of October 2005. Both markets are complemented by OTC clearing, which allows parties to bilaterally trade, with the counterparty risk taken over by the EEX clearing house.

The products currently traded on the exchange are EU Emission Allowances for the first and second EU compliance periods. Both markets offer continuous trading, with financial settlement through EEX clearing members, members which financially settle all Non Clearing Member transactions on the exchange. In the Spot Market, once a trade has occurred, the settlement payment versus delivery takes place at t+2, two days after the transaction has occurred. In the Derivatives Market however, delivery takes place at a later fixed date.

Being a new market, trading volumes over exchanges are relatively low, but increasing week by week. The EEX has been seeing trading volumes of 300.000 EUA/month over the previous few months. The number of trades is also on the increase.

Further information on the Spot and Derivatives markets can be downloaded from [http://eex.de/info\\_center/downloads/dl\\_spot/booklet\\_e.pdf](http://eex.de/info_center/downloads/dl_spot/booklet_e.pdf) for the Spot Market and [http://eex.de/info\\_center/downloads/dl\\_futures/booklet\\_e.pdf](http://eex.de/info_center/downloads/dl_futures/booklet_e.pdf) for the Derivatives Market.

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**CO<sub>2</sub> Trading**  
- Insights from the Trading Floor -

Tim Czwartynski  
CTI Capacity Building Seminar

Slide 1

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**European Energy Exchange**  
Ownership

Energieversorger 14.1 %  
2 Börsen  
Eurox Zürich AG 23.2 %  
Handelsfirmen 4.5 %  
Industrielle Verbraucher 2.0 %  
Finanzdienstleister 3.3 %  
Stadtwerke 4.0 %  
Nord Pool ASA 17.4 %  
Sonstige 4.7 %  
Stadt Leipzig 5.7 %  
Freistaat Sachsen 3.7 %  
Sachsen LB 17.4 %  
45 Provisionsgeber

CTI Capacity Building Seminar 2

Slide 2

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**European Energy Exchange**  
Participants

128 Participants from 16 Countries

117 Participants on the Spot Market  
58 Participants on the Derivatives Market  
81 Participants OTC Clearing  
10 General Clearing Member  
5 Broker  
5 Market Maker  
5 Transmission System Operators

as of 29.09.05

CTI Capacity Building Seminar 3

Slide 3

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**European Energy Exchange**  
Products

**Derivatives Market**

Power Futures DE & FR  
Power Options DE  
EU Emission Allowances

Exchange Trading & Clearing  
OTC Clearing

**Spot Market**

Power DE & AT  
EU Emission Allowances

Exchange Trading & Clearing  
OTC Clearing

CTI Capacity Building Seminar 4

Slide 4

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**European Energy Exchange**  
Overview Emissions Trading

- Allocation according to German National Allocation Plan (NAP)
  - 495m certificates per year in the first compliance period
  - Provision for installations with a thermal output of more than 20MW in the energy and industrial sectors
- Goal is to reduce greenhouse gas emissions until 2012 by 21% in comparison to 1990

**Individual goals reached through:**

- Investment (technology, processes)
- Trading of emission allowances
  - Bilateral (IETA, ISDA, EFET)
  - Through broker
  - Over an exchange
- Compensation projects
  - Clean Development Mechanism
  - Joint Implementation

**Number of European participating installations**

Belgium	63
Denmark	300
Czech Republic	127
Finland	113
France	142
Sweden	71
Ireland	105
UK	155
Italy	140
Germany	1643

CTI Capacity Building Seminar 5

Slide 5

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**Trading in EUAs**  
Contract Specification – Spot Market

- Product**
  - EU Emission Allowance (EUA) for the first EU compliance period 2005-2007
- Trading**
  - Quotation in €/EUA to 2 decimal places
  - Continuous Trading with Intraday Auction
- Settlement**
  - Payment versus Delivery
  - Delivery through credit and debit of EUA on internal accounts of the Clearing Members and exchange participants at t+2
  - Payment through Clearing Member at t+2

CTI Capacity Building Seminar 6

Slide 6

**EEEX**  
EUROPEAN ENERGY EXCHANGE

**Trading in EUAs**  
Contract Specification – Derivatives Market

- Product**
  - Delivery and/or Purchase of EU Emission Allowances
  - for the three year period beginning January 1st, 2005 (First Period European Carbon Future) and
  - for the three year period beginning January 1st, 2008 (Second Period European Carbon Future)
- Handel**
  - Quotation in €/EUA to 2 decimal places
  - Continuous Trading
  - Eurex-System (integrated system for power and EUA's)
- Settlement**
  - Upon the payment, the buyer of a contract purchases on the delivery day the corresponding proportionate part of the total stock of EU Allowances which are booked in the account of EEX AG at DEHST.
  - The seller of a contract transfers his corresponding proportionate part of the total stock, which is booked in the account of EEX AG at DEHST.

CTI Capacity Building Seminar 7

Slide 7

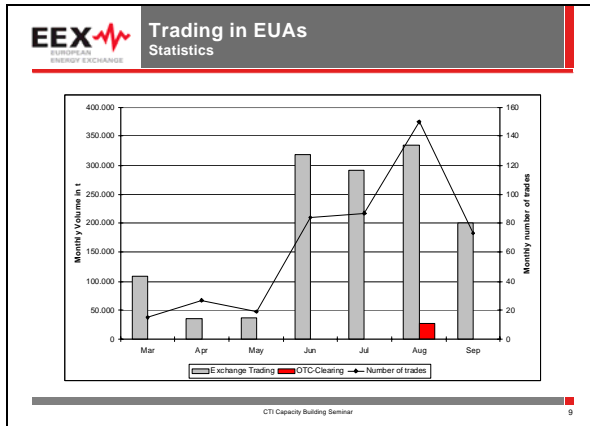
**EEEX**  
EUROPEAN ENERGY EXCHANGE

**Trading in EUAs**  
Spot Market – Trading Process

Pre-trading	Main-trading					Post-trading	Batch-processing
<ul style="list-style-type: none"> <li>Entering, deleting, changing and retrieving of orders</li> <li>Closed order book</li> </ul>	Opening auction	Continuous trading	Intra day auction	Continuous trading	Closing auction	<ul style="list-style-type: none"> <li>Trade administration</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of reports</li> <li>Master data management</li> <li>Data archiving</li> </ul>
	<ul style="list-style-type: none"> <li>Entering, deleting, changing and retrieving of orders (in auction only during call phase)</li> <li>Open order book (in auction without market depth)</li> <li>Pricing</li> <li>Trade administration</li> </ul>						
08:30 - 09:00 am	09:00 - 09:01 am	09:01 - 10:30 am	10:30 - 10:35 am	10:35 - 17:00 pm	17:00 - 17:01 pm	17:01 - 17:30 pm	evening

CTI Capacity Building Seminar 8

Slide 8



Slide 9

- ✦ The majority of EEX trading participants are interested in trading EUA's as well as power.
- ✦ Trading participants from 16 countries corresponds to the European characteristic of the EU Emission Allowances
- ✦ Integrated trading system for power and EUA's
- ✦ Clearing house allows Cross Margining und Cross Collateralization

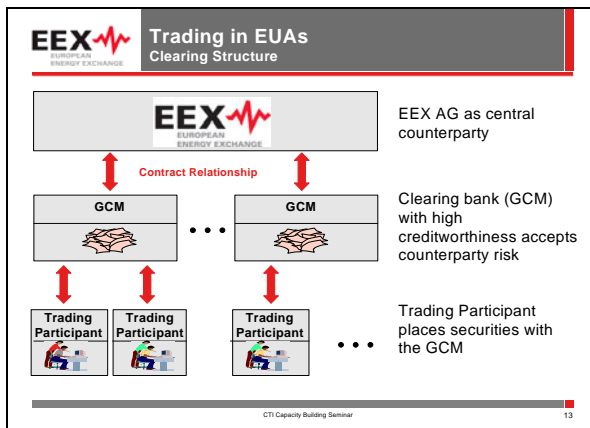
Slide 10

- ✦ Registration of broker- arranged or bilateral OTC transactions in the EEX system
- ✦ Advantages, for example.:
  - Transfer of counterparty risk to the EEX Clearing House
  - Reduction of impact of securities through Cross Margining effect with power contracts
  - Reduction of administrative outlay
  - Access to better market depth
  - Reduced transaction fee
- ✦ Cooperation with OTC brokers GFI, ICAP, Prebon, Spectron and TFS
- ✦ Registered OTC trades are settled the same as exchange transactions

Slide 11

Spot trading	Derivatives trading
<b>For</b>	<b>For</b>
✦ Easy market access through low regulation	✦ Trading of non-assignedEUA's
✦ Low risk due to direct settlement	✦ Hedging, Arbitrage and Speculation possible
✦ Easy balancing	<b>Against</b>
✦ Easy settlement	✦ Extra regulation for market access
✦ Hedging and Arbitrage	✦ High counterparty risk
<b>Against</b>	✦ Difficult balancing
✦ Only trading of assigned EUA's possible (Register)	✦ Extensive settlement
✦ Speculation difficult	

Slide 12



Slide 13

- ✦ With current Spot and /or Derivatives market membership
- ✦ With new membership to Spot and/or Derivatives market
  - 50,000 € equity capital
  - Examination for Spot and Derivatives markets
  - Technical connection (PC, Internet)
  - Membership 12,500 €/Year
  - Clearing agreement with clearing member
- ✦ Through a bank (Clearing member)

Slide 14

**Questions and Answers**

**Contact:**  
 Tim Czwartynski  
 Business Development  
 European Energy Exchange AG  
 Telephone: 0341-21 56 551  
 Email: tim.czwartynski@eex.de

Slide 15

# Implementation of EU Monitoring and Reporting Guidelines: Requirements and Current Practices in Germany

**Dr. Jürgen Landgrebe**

*German Emissions Trading Authority – Deutsche Emissionshandelsstelle (DEHSt)*

## Introduction

On 31 March of each year, operators of installations covered by the European Emissions Trading Directive (Directive 2003/87/EC) are obliged to submit emission monitoring reports in accordance with the Monitoring and Reporting Guidelines – MRG (EC–Commission decision from 29 January 2004). The MRG shall ensure a complete, transparent and accurate monitoring and reporting of greenhouse gas emissions. They contain detailed criteria in form and content for

- the monitoring and reporting of emissions resulting from the activities listed in Annex 1 of the Emission Trading Directive,
- the controlling and acceptance of the reporting system (monitoring concepts) by the competent authority and
- the verification of the reports submitted by the operators. The operators are obliged to establish an effective data management system as part of their monitoring concepts.

The operators had to substantiate the tier approach for each installation and to elaborate individual monitoring concepts before 1 January 2005.

The specific requirements of the MRG, e.g. resulting from the tier approach, are ambitious and time-challenging. Furthermore, the MRG include various parts with opening clauses or parts that provide scope for interpretation which require clearer definition in individual cases – and in some cases the approval or permission of competent authorities. While this allows a greater flexibility with respect to the interpretation of the requirements of the MRG in the individual member states, at the same time it can lead to major inequalities of treatment between and within the individual member states. Such inequalities in interpretation give rise to significant market distortions among the operators of installations of a given sector in different member states.

## Implementation of Monitoring and Reporting Requirements in Germany

Due to the shared tasks stipulated in the MRG among operators, verifiers and competent authorities as well as the split competences in the German Greenhouse

Gas Emission Trading Act (Treibhausgas-Emissionshandelsgesetz - TEHG) between federal and regional authorities, a National Working Group on technical questions of the Monitoring and Reporting Guidelines was established already in 2004. The participants are the German Emissions Trading Authority (DEHSt), the Federal Environment Ministry and the Länder Authorities. The target of the DEHSt / Länder competent authorities team is to achieve a harmonized implementation of the requirements on the national level in order

- to avoid distortion of competition due to varying implementation of the MRG in the Länder (Federal States),
- to avoid distortion of competition due to different measuring and evaluation instructions by allocation and reporting,
- to secure high legal certainty and low transaction costs for enterprises and independent verifiers,
- to minimize administration efforts for the concerned competent authorities
- to elaborate common positions to the EC-Commission for improvements and further harmonization of reporting obligations and requirements on the European level, and
- to develop a uniform (digital) reporting format for cost-efficient communication via electronic interfaces.

### **Tasks and results of the DEHSt / Länder competent authorities team**

Numerous issues concerning the implementation of the Monitoring Guidelines have been addressed – both by the affected industrial associations and by Länder competent authorities involved in the assessment of monitoring concepts - and decided on in the DEHSt / Länder competent authorities team up to now. This very time-consuming process of coordination and adjustment is still well under way in Germany.

As a first result of the DEHSt / Länder competent authorities team, the form and content of a monitoring concept was exactly defined and a template (in German language only) was created and published on the internet (<http://www.dehst.de>). The template is not mandatory, but well accepted and more and more used by the operators. In addition, many frequently asked questions (FAQ) concerning the requirements of the MRG have been addressed and discussed, such as

- necessity of ISO 17025 - accreditation for laboratories,
- frequency for representative sampling and criteria,
- consistency of emission and oxidation factors used for reporting and allocation application,
- criteria and benchmarks for “economically not reasonable” measures in cases where the operator wants to fall below the specified tier approach.

More than 60 FAQ in the context of monitoring are already answered and all the answers are published in the FAQ-sector on the website (<http://www.dehst.de>). Stepwise all published FAQ will be translated into English. Please find the first translations of FAQ in Annex I.

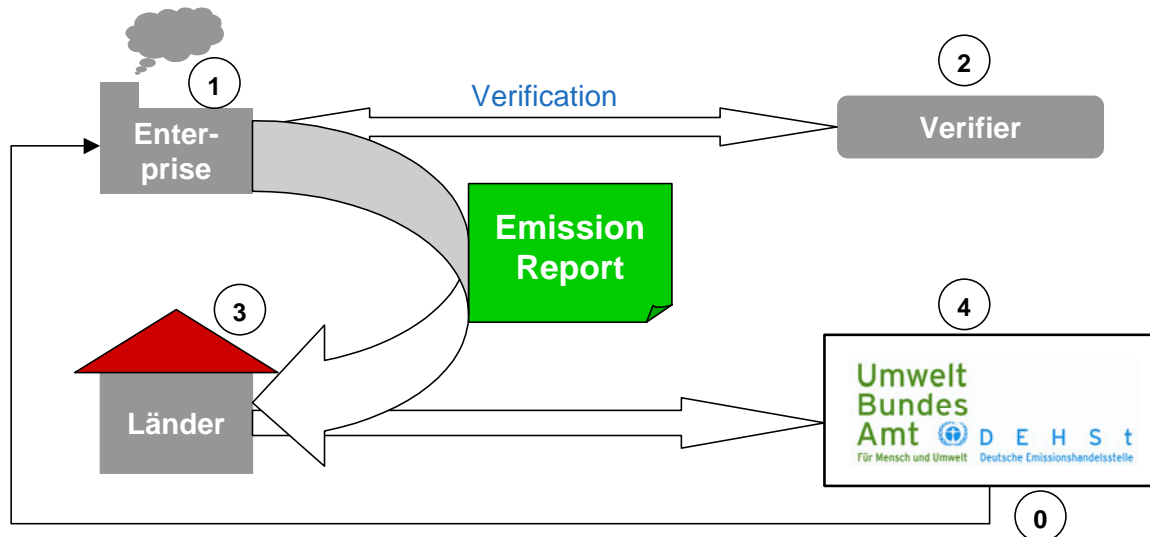
The results and decisions of the DEHSt / Länder competent authorities team are as well used to give an input to the review process of the MRG. The European



Commission has initiated the European review process set out in the Monitoring Guidelines by issuing a wide-ranging questionnaire and due for completion by 31 December 2006. The review is intended to take into account experiences in applying the MRG in the member states, with a view to any changes that might be taking effect from 1 January 2008. The DEHSt / Länder competent authorities team welcomes the initiative of the European Commission to undertake a review of the MRG, and in particular the plan to integrate all stakeholders into this process on a broad basis. On 15 April 2005, the DEHSt / Länder competent authorities team has finalized a Position Paper on the review of the MRG and sent to the European Commission. Enclosed, please find this Position Paper in Annex II. Furthermore, the team is integrated in the ongoing discussion on the review of the MRG.

Currently the attention of the DEHSt / Länder competent authorities team is occupied by important issues relating to the preparations for reporting emissions in March 2006 – the form and content of emission reports, electronic reporting format – and their verification. As well as in 2004, when the German Emissions Trading Authority was receiving verified allocation applications and issuing 1,849 allocation notices, it is intended to communicate entirely paper-less by the use of electronic data-exchange (see picture 1) between operators, independent verifiers, Länder competent authorities and the German Emissions Trading Authority. The monitoring software will be a server-based solution. Prototypes are currently under development and will be delivered to the operators on 1 December 2005.

Fig. 1: Communication channels for electronic monitoring reports



Last but not least guidelines on verification will be elaborated by the DEHSt / Länder competent authorities team and published to make sure that the independent verifiers contribute effectively to assess the data submitted by the operators. The role of the verifiers is, of course, to focus on all site-specific aspects of the monitoring reports and to verify the data in comparison with the monitoring concepts including acceptable uncertainties for individual fuel or material streams. The main focus of the Länder Authorities will be to validate the consistency of the monitoring reports with the IPPC permits (e.g. are all sources covered?). Furthermore, they will take random samples to control the work of the verifiers that are active in their country.

## Future tasks

The first monitoring reports are expected in March 2006. The German Emissions Trading Authority will then validate the emissions reports provided by the operators, verified by the verifiers and – random sampling likewise – checked by Länder authorities. The German Emissions Trading Authority will also validate whether the operators' CO<sub>2</sub> emissions tally with the allowances they hold, and – if not – will serve sanctions. To set up the Emission Trading as environmentally and economically effective as possible, the German Emissions Trading Authority will continue

- to harmonize monitoring and reporting on emissions in Germany (implementation of MRG and coordination with international reports on climate protection),
- to develop proposals for future harmonization on EU level (e.g. definition of a site, BAT-benchmarks/benchmarks, monitoring and reporting),
- to evaluate the experiences with regard to NAP II (2008-2012) and national legislation,
- to integrate Kyoto mechanisms CDM and JI and
- to implement new software (for „new entrants“, monitoring reporting, IT-workflow system for IT-based administrative proceeding).


Implementation of EU Monitoring and Reporting Guidelines

– Requirements and current practices in Germany –

Dr Jürgen Landgrebe

German Emissions Trading Authority (DEHSt)  
Umweltbundesamt Berlin

CTI Capacity Building Seminar for CEE/CIS Countries - 24 October 2005




Slide 1

**OUTLINE**

- Legal Framework
  - Requirements of Monitoring and Reporting Guidelines
- Implementation in Germany
  - Monitoring concepts
  - FAQ
  - First Reporting in 2006

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005




Slide 2

**German Emissions Trading Authority: TASKS (1)**

to allocate allowances (✓) *December 2004*

- total amount of allowances allocated: 499 Mio. EUA per year (including 3 Mio./a EUA national reserve) to 1,849 installations
- compliance factor: 0.9709 (reduction of 2.91%)
- allocation methodology for existing installations:
  - Grandfathering, based on emissions in 2000-2002, or
  - based on BAT-Benchmarks (compliance factor: 1.0)
- special rules for early action, process emissions, CHP, hardship provisions (compliance factor: 1.0)

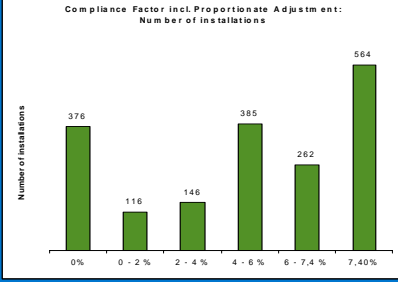
CTI Capacity Building Seminar for CEE/CIS Countries - October 2005



Slide 3

**RESULTS OF ALLOCATION 2004 (3)**

Compliance Factor incl. Proportionate Adjustment:  
Number of installations




Number of installations

376 116 146 385 262 564

0% 0 - 2 % 2 - 4 % 4 - 6 % 6 - 7,4 % 7,40 %

About a quarter of installations received allowances with a reduction of less than 2 %, two thirds with a reduction of more than 4 %

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005




Slide 4

### German Emissions Trading Authority: TASKS (2)

to operate the registry (✓) *March 2005*

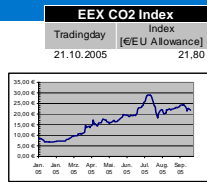
- to open and to activate accounts:
  - 1,849 operator accounts
  - 100 personal accounts
- to issue allowances
  - >494 Mio. EUA to operator accounts
- to facilitate trading
  - transactions: 11.6 Mio. EUA

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 


Slide 5

### German Emissions Trading Authority: TASKS (2)

to operate the registry (✓)



- to open and to activate accounts:
  - 1,849 operator accounts
  - 100 personal accounts
- to issue allowances
  - >494 Mio. EUA to 1,849 operator accounts
- to facilitate trading
  - transactions: 11.6 Mio. EUA


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 6

### German Emissions Trading Authority: TASKS (3)

to control operator's monitoring reports (*March 2006*)

- to evaluate the data submitted
- to serve sanctions (*March - April 2006*)
  - freeze accounts
  - in cases of non-compliance: collect payments of €40/t

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 7

### Monitoring - Legal framework: EU

**Emission trading directive (Sec. 14 and 15):**

- Art. 14, Sec 1: basis for the specification of guidelines for monitoring and reporting of emissions (Annex IV and monitoring and reporting guidelines)
- Art. 14, Sec. 2 and 3: the member states shall ensure that emissions are monitored in accordance with the guidelines and that operator reports after the end of the each year
- Art. 15: reports submitted by operators shall be verified in accordance with criteria set out in Annex V


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 8

### Monitoring - Legal framework: EU

**Monitoring and Reporting Guidelines (EC-Commission decision from 29 January 2004):**


- shall ensure a complete, transparent and accurate monitoring and reporting of greenhouse gas emissions
- contain detailed criteria in form and content for
  - the monitoring and reporting of emissions resulting from the activities listed in Annex 1 of the emissions trading directive
  - the controlling and acceptance of the reporting system by the competent authority and
  - the verification of the reports submitted by the operators.

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 9

### Monitoring Guidelines

- Monitoring concept
- Tier approach
- Determination of greenhouse gas emission (calculation or measurement)
- Reporting of emission: data format and content
- Quality assurance


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 10

### Content of the MR Guidelines (1)

**Monitoring concept:**

- has to be elaborated by the operator before 01.01.2005
- has to substantiate the tier approach for each installation
- shall be approved by the competent authority, in all cases of deviation from the specified tier approach or given methods


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 11

### Content of the MR Guidelines (2)

**Tier approach:**

- principle: a higher tier-number represents a higher level of accuracy for the determination of emissions
- the operator has to choose the tier with the highest number – resp. the higher accuracy requirement – if technical feasible and economically reasonable
- Table 1 of MRG specified minimal tier approach for different activities and plant size (total annual emission) for the period 2005/2007

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

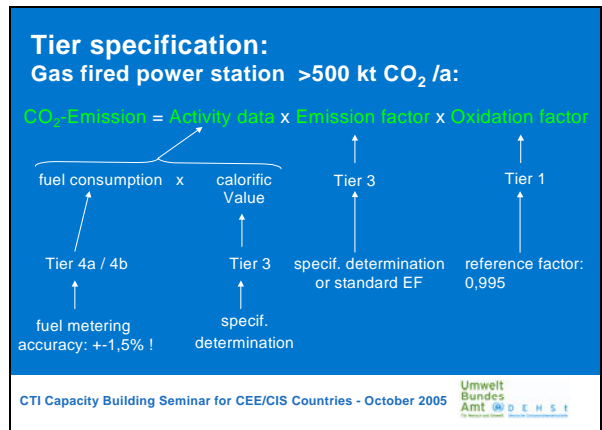
Slide 12

### Specified Tier approach (Table 1)

**Tabelle 1:**  
 Spalte A: jährliche Gesamtemissionen <math>\leq 50\text{ kt}</math>  
 Spalte B: 50 kt <math>< \leq</math> jährliche Gesamtemissionen <math>\leq 500\text{ kt}</math>  
 Spalte C: jährliche Gesamtemissionen > 500 kt

Tätigkeit	Lagerdaten			spezifischer Heizwert			Emissionsfaktor			Zusammensetzungsgas			Oxidationsfaktor			Umsetzungsfaktor		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
<b>B. Verbrennung</b>																		
Verbrennung (gasförmige, flüssige Brennstoffe)	2a/2b	3a/3c	4a/4c	2	3	3	2a/2b	3a/3c	3	100% 100% 100%	100% 100% 100%	100% 100% 100%	1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%
Verbrennung (feststofflich)	1	2a/2b	3a/3c	2	3	3	2a/2b	3	3	100% 100% 100%	100% 100% 100%	100% 100% 100%	1	2	2	100% 100% 100%	100% 100% 100%	100% 100% 100%
Fackeln	2	3	3				1	2	2	100% 100% 100%	100% 100% 100%	100% 100% 100%	1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%
Flüchte Kohlenöl	1	1	1	1	1	1	1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%	1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%
Glips	1	1	1				1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%	1	1	1	100% 100% 100%	100% 100% 100%	100% 100% 100%

Slide 13



Slide 14

### Legal framework: Germany (1)

#### Split competences between Federal (DEHSt) and Länder Authorities

- (16) Länder Immission Control Authorities:
  - permitting
  - approval of monitoring concepts
  - validation of monitoring reports (focus: site-specific aspects)
- German Emission Trading Authority
  - evaluation of data submitted (focus: emission factors etc.)
  - enforcement of monitoring requirements / sanctioning

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 15

### Legal framework: Germany (2)

#### Monitoring Guidelines are directly legally binding to plant operators !

- some specific requirements of the MRG are ambitious and time-challenging
- MRG include various opening clauses and parts providing scope for interpretation

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 16

### Harmonized implementation in Germany

#### Reasons:

- to avoid distortion of competition due to varying implementation of the MRG in the (16) Länder
- to avoid distortion of competition due to different measuring and evaluation instructions by allocation and reporting
- to secure high legal certainty and low transaction costs for enterprises and independent verifiers
- to minimize administration efforts for the concerned competent authorities

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 17

### Harmonized implementation in Germany

#### Organisation:

DEHSt/Länder-Task Force (Nov. 2004)  
 to discuss and to decide on technical questions  
Tasks were to decide on ...

- form and contents of monitoring concepts (template),
- criteria for the interpretation of the opening clauses,
- form and contents of monitoring reports,
- requirements for verification,
- a uniform digital reporting format for cost-efficient communication via electronic interfaces.

Results (templates, >60 FAQ, ...) are published: [www.dehst.de](http://www.dehst.de)

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 18

### Questions and Answers (1)

Which tier approach must operators apply during the allocation period 2005-2007 and in which cases deviations from tier approach must be approved by competent authorities?

- Generally, MRG always requires the maximum tier approach
- For allocation period 2005-2007, table 1 MRG lists the tiers to be applied as a minimum
- In Germany, deviation from table 1 must be approved by the competent authority; operators have to justify that necessary measures to meet the accuracy requirements of the tier are in the individual case not technically feasible or would lead to unreasonably high costs.

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 19

### Questions and Answers (>60)

Further questions and answers ...

... are discussed and decided continuously in the DEHSt/Länder competent authority team and

... will be published as FAQ on the DEHSt-homepage [www.dehst.de](http://www.dehst.de).


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005  
 Umwelt Bundes Amt DEHSt

Slide 20

### Review Process of Monitoring Guidelines ... launched by COM in 2005

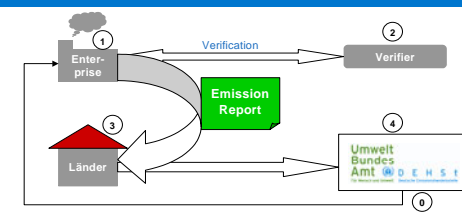
**Recommendations by the DEHSt/Länder Working Group ...**

- clearer definitions in parts that contain opening clauses
  - what is a "batch"?
  - issue of frequency of sampling and analysis
  - definition of "economically unreasonable cost"
- simplifications ⇒ increasing cost-effectiveness
  - for labs non-accredited accredited to EN ISO 17025
  - **oxidation factors**: uniform fixed value of 1.0 should be set!
  - **emission factors**: more flexibility to use standard factors!
- lighter monitoring requirements for Small Installations and emissions resulting from use of pure biomass


CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 21

### REPORTING 2006 Electronic communication

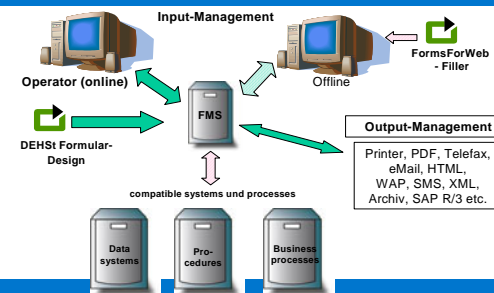



Communication channels for electronic monitoring reports

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 22

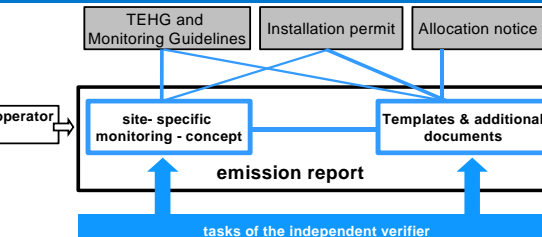
### Reporting Software: Formular-Management-System (FMS)




CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 23

### Verification of monitoring reports Tasks of the independent verifier:




CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 24

### Verification of monitoring reports Tasks of the independent verifier:


1. Has the submitted data been collected according to the methodology described in the approved monitoring concept?
2. Does the report meet the requirements of the Monitoring Guidelines?
3. Is the data consistent to data basis of the Allocation Notice?
4. Are all sources / fuel and material streams covered?
5. Are all the documents, templates and full information submitted?
6. Is the submitted data and information reliable ?

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 25

### Conclusions

- Implementation of MRG has been very time-challenging!
- Market distortions should be avoided by
  - harmonized implementation on national level
  - further harmonization and simplification of requirements on international level
- DEHSt will continue ...
  - to answer FAQ
  - to contribute to the EU review process
  - to publish national guidelines on verification
  - to supply operators with monitoring software on 1 Dec. 2005

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 


Slide 26

### Thank you very much for your attention!

Dr Jürgen Landgrebe

German Emissions Trading Authority (DEHSt)  
Umweltbundesamt Berlin

juergen.landgrebe@uba.de




Slide 27

### Questions and Answers (2)

What is the magnitude of total annual emissions for classification of an installation in columns A, B, or C?

- The forecasted maximum total annual CO<sub>2</sub> emissions of the installation in the period 2005-2007.
- The operator must submit a substantiated forecast along with the monitoring concepts.

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 28

### Questions and Answers (3)

Do apply the requirements of the tier approach resp. the defined tier for single variables for all sources and/or fuel or material streams of an installation?

- Generally, all sources and/or fuel or material streams must be considered.
- The MRG differentiate between major, minor, „de minimis“ sources and pure biomass fuels.
- For minor and de minimis sources as well as for pure biomass fuels (exception: CEMS) the MRG require less stringent accuracy requirements .

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 29

### Major, Minor and „de minimis“ Sources

- **Major sources:** classified in descending order account for at least 95 % of the annual CO<sub>2</sub> emission of the installation  
→ tier approach according to table 1 is essential !
- **Minor sources:** account – cumulatively – for less than 5 % or for maximum 2,5 kt CO<sub>2</sub> of the annual CO<sub>2</sub> emission of the installation – the greater absolute value is applied.  
→ the nearest lower tier according to table 1 is essential; approval by the competent authority.
- **„de minimis“ sources:** account – cumulatively – for less than 1 % or for maximum 0,5 kt CO<sub>2</sub> of the annual CO<sub>2</sub> emission of the installation – the greater absolute values applied.  
→ tier-independent estimation; approval by the competent authority.

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 30

### Questions and Answers (4)

How is „batch“ defined in the Monitoring and Reporting Guidelines?

- „batch“ means a shipment of fuel or material of uniform and identical sources in defined units, for example delivery by train or ship in case of imported coal or expressed as the delivery period for in pipeline-bound fuels as well as fixed supply relationships between mines and power plant
- A „batch“ is subject to representative sampling in order to determine the average energy and carbon content as well as other relevant aspects of the chemical composition“ (see annex I, Cap. 2 of MRG).

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 31

### Questions and Answers (5)

Are EN ISO 17025 accredited testing laboratories to be used in all cases?

- In allocation period 2005-2007 non-accredited external and company internal labs may also perform sampling and analysis, provided that ...
- accredited labs carry out additional test in order to compare the values and the equipment and procedural methods of the labs are assessed by an accredited lab at regular intervals
  - the exact procedures and the frequency of these measures should be determined in accordance with the accuracy requirements of the installation (measures should however be carried out at least once a year).

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 32

### Questions and Answers (6)

Which emission factor (EF) is to be proved in the monitoring?

- For commercial fuels those EF must be proved, who are used for the CO<sub>2</sub> calculation in the allocation process.
- A change of the calculation base – from activity specific determination of the factor to standard factor and vice versa – is only possible, as the factor used in the monitoring is not lower than the one used in the allocation process.
- If an EF is not used within the allocation process, the operator can choose between standard factor and activity specific determination of the factor .
- For non-commercial fuels additional facilities are provided for small emitters (total annual emission < 50 kt/a).

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 33

### Questions and Answers (7)

Which oxidation factor (OF) is to be proved in the monitoring?

- Generally, those OF must be proved, who are used for the CO<sub>2</sub> calculation in the allocation process.
- A change of the calculation base – from activity specific determination of factor to standard factor and vice versa – is only possible, as the factor used in the monitoring is not lower than the one used in the allocation process.
- If an OF is not used within the allocation process, the operator can choose between standard factor and activity specific determination of the factor. However he have prove that the activity specific determination is more precisely.

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 34

### Questions and Answers (8)

What must be considered by the determination of the net calorific value?

- The net calorific value must be determined specific in all cases.
- As a general rule, the net calorific value must not be analysed, but rather can be taken from the document of the fuel supplier (if necessary, the value must converted form the gross to the net calorific value for natural gas).
- If the allocations based von § 7 ZuG 2007 and the same fuel is still used clear deviations of the net calorific value between the allocation process and the monitoring must be explained; especially if the value still characterise the fuel).
- additional facilities are provided for special cases (tier 2 - weighted median calorific value proved in the allocation process if the same fuel is used within allocation process and monitoring).

CTI Capacity Building Seminar for CEE/CIS Countries - October 2005 

Slide 35

# Are the New EU Member States Ready for Kyoto First Commitment Period Trading?

Dr. Tiit Kallaste

Stockholm Environment Institute SEI – Tallinn Centre

**Are the *new* EU Member States ready for Kyoto first commitment period trading**

Tiit Kallaste  
Stockholm Environment Institute  
SEI-Tallinn Centre

SEI

Oct 22-26, 2005. Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU

Slide 1

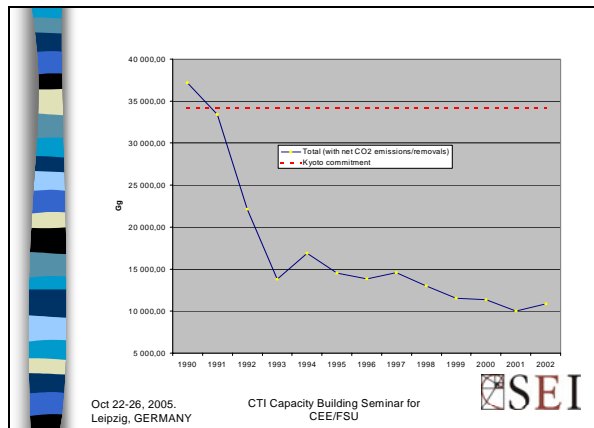
**Different starting positions**

- 8 *new* MS are principally in different situation compared to 15 *old* MS with their CO<sub>2</sub> emissions reduction target and relevant development trends compared to *old* MS.
- All former EIT countries but Slovenia, are well below of the Kyoto target (see for example the GHG emission trends and Kyoto target for Estonia). The same trends with different absolute figures could be drawn for Latvia and Lithuania. Also for the majority of new MS. This sets up principally different approach for the construction of NAP2
- Old* MS have set target to reach the Kyoto target **being above the target**, *new* MS approaching it **being below**.
- New* MS have formally no need to "reach" Kyoto target as requested in the Directive and in Guidelines! (As they already reached it in the course of economic transition from centrally planned to market economy!)

SEI

Oct 22-26, 2005. Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU

Slide 2



Slide 3

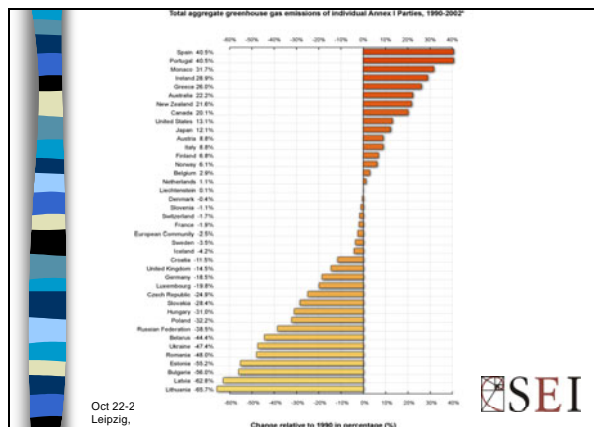
**Amendments to Directive 2003/87/EC**

- Art 1 of the Directive 2004/101/EC, so called **Linking Directive**, says: "*Annex I Party* means a Party listed in Annex I to the UN FCCC that has ratified the Kyoto Protocol as specified in Art 1(7) of the Kyoto Protocol

SEI

Oct 22-26, 2005. Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU

Slide 4



Slide 5

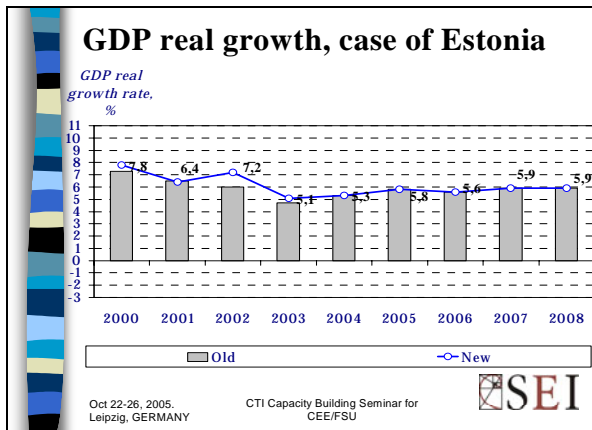
**Different GHG situation in new MS**

- Nevertheless, EIT countries are below Kyoto target, we all know the big differences in **carbon content of goods and services**, also in many other indicators in new MS compared to old MS. This is actually the major challenge for new MS, countries in economic transition
- New* MS as a rule have **higher GDP growth rates** compared to old MS. Estonia's figure is close to 7% for 9 months in 2005. The same high growth rates are in other Baltic States.
- This emphasise on pragmatic allocation of allowances at state, sectoral and installation level.

SEI

Oct 22-26, 2005. Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU

Slide 6



Slide 7

### New MS far below their Kyoto targets

- Estonia, for example, is today up to ~ 3-fold below of Kyoto target;
  - **10,85 Mt of CO<sub>2</sub>** considering LUCF in 2002 vs **34,20 Mt of CO<sub>2</sub> (Kyoto target for Estonia)**, see the following Figure! Actual figure for 2004 will be close to **12,5 Mt**, it will be included in NC4 report
- The same is valid for Latvia and Lithuania. Also for the rest of 4 CEE countries; Poland, Hungary, Czech Republic and Slovak Republic.

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

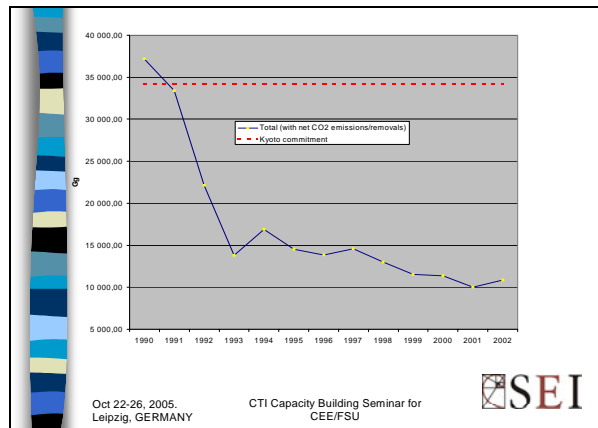
Slide 8

### Important changes in new MS GHG emission trends

- The important change towards the **raise in the GHG emission trends** has appeared during recent years. The fast economic development brings with the significant growth of GHG emissions. Estonia's increase in emissions is ~10,6 %, Latvia and Lithuania both stand for the growth rate about 15 %
- New inventories and forecasts** are in process at present. Estonia will accomplish NC4 in Nov. and submit it to UN FCCC Secretariat in Bonn to the end of year. **It is of high importance to have updated GHG emission forecasts while working on NAP, see the Figure!**

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

Slide 9



Slide 10

### Specific issues

- Pooling issue** comes to the picture. It has been skipped for the first trading period. Pooling as an approach for sharing the market has high importance in particular for heating sector where the grids overlap.
- OPT-IN** and **OPT-OUT** of installations must be handled similarly in MS.
- Reserve** for new entrants
- Accounting of **AAUs** and **ERUs** in NAP-2

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

Slide 11

### Main principles for new NAP

- General approach – **Bottom Up!** As there are no sectoral targets set. New MS have their AA fixed. There is still a national reserve available, which means, no specific restrictions in allocation process...
- The Old MS use the **Top Down** approach. This makes a difference!
- Which allocation mode is to be preferred? **Grandfathering, benchmarking...**
- Should the allowances allocated free of charge, or should there be the auctioning up to 10%?

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

Slide 12

### The profile of market participants

- Number of installations in NAP-1 has been relatively small in Baltics compared to old MS. In Estonia, e.g. - 43, in Latvia - 95, in Lithuania - 93. However, in Poland it reached 1000.
- Not all four sectors foreseen by the Directive are included. In case of Estonia and Lithuania **the metal processing sector** does not have any installations to be included to scheme. Latvia has only one installation included in this sector.
- Only recently here has been discussion in EC **whether or not to include more sectors to NAP-2**. For example, **the chemical industry** which could significantly widen the scope other gases beyond the CO<sub>2</sub>. Also the number of installations.

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

Slide 13

### “Open ends”

- There are still many “open ends” to be solved and harmonised. Just some of them:
  - Opting out** (and in) of installations. Is it fixed by now? What rules will be in force? When opting out the installation still must proceed the monitoring and reporting procedures and complete the verification report?! This may cost a lot to a small installation.
  - New entrants** issue. It is important how to define new entrant. The Directive defines it in very general terms.... Could the reconstructed installation be just added to the existing list of installations in new NAP?!
  - Harmonised criteria for assessment of **the national reserve** in NAP-2. **Could it be 1% or 25%...?!**

Oct 22-26, 2005, Leipzig, GERMANY CTI Capacity Building Seminar for CEE/FSU SEI

Slide 14




### Early Action in NAP-1 & NAP-2

- Early Action is foreseen by the Directive.
- Early action in Estonia's NAP-1 was applied in cases of;
  - fuel switch from fossil fuel to biomass in DH subgroup,
  - energy saving in electricity transfer grids,
  - actions taken towards increasing the share of CHP replacing HOB (heat only boilers).
- For the first NAP no old MS accommodated this provision.
- In case of New MS it is the case when it will be possible to grant allowances to those installations who have done voluntary activities to reduce the GHG emissions before submission of NAP to European Commission. New MS have still the reserve to go up till Kyoto target! No need to cut relevant amount from another actors.
- What about the defining Early Action for the NAP-2 ?**

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 15

### The Linking Directive

- Directive 2004/101/EC of 27 Oct 2004 amends the Directive 2003/83/EC establishing the scheme for GHG emission allowance trading
- Are the MS ready to implement LD? It says in the Art. 2 of LD "...MS shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by **13 th of November 2005...**"
- The Linking Directive says: use of ERUs by operator is allowed starting from 2008 **up to a percentage of the allocation to each installation, to be specified by each MS in its national allocation plan.** Specified on which basis?

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 16

### Linking Directive implementation

- Art 1 of LD amending Art 11b of Trading Directive, says in p. 3 "Until 31 Dec 2012, for JI and CDM project activities which reduce or limit directly the emissions of an installation falling within the scope of this Directive, ERUs and CERs may be issued only, if an equal number of allowances is cancelled by the operator of that installation."
- In p.4 it says "...ERUs and CERs may be issued only if an equal number of allowances is cancelled from the national registry of the Member State of the ERUs' or CERs' origin."
- So, 1 ERU = 1 EUA ?? Sounds like nice profit-making?!
- May be it would better to emphasise more to "national projects"?**

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 17

### Should we keep the hopes on more instructions?

- Would there be a new set of instructions according to changed situation with the NAP-2? Yet, I have not seen any!
- OPT-IN and OPT-OUT of installations must be handled similarly in MS.
- We still keep the same 32 pages **COMMUNICATION FROM THE COMMISSION** on guidance to assist Member States in the implementation of the criteria listed in Annex III to Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading, what says no word about the new MS.

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 18

### Real situation today

- Real spot trading based on NAP-1 has not actually started yet in any new MS. There are a number of different reasons for that.
- At the same time new MS are the ones who bring most of the "stuff", tradable allowances to the market...
- As the gov-t has failed to launch the registries in good time, we may criticise that it has thus hindered the juridical and private persons actual trading on EUAs spot market.
- Estonia has been the first new MS (the 12th in EU 25) what has got "*the green light*" from European Commission on the 5th of October 2005. However, "*the devil is hidden in details*"

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 19

### Some new MS still puzzling on the NAP-1

- Not all new MS ready with the NAP-1 yet, e.g. Poland is still negotiating with the industry as the EC request to cut 16.5% from the Brussels is hard for gov-t to reach the consensus with industry.
- Poland will be happy to reach NAP-1 final approval by gov-t in November only.
- Thereafter it will be high time to start looking around to buy a lisenca for some Registry.... and start adjusting the technical details to get it running. It may take more time as expected.

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU



Slide 20


### QUESTION?

How realistic will be the NAP-2 deadline – 1.07.2006?!

Could the new Member States be in time with NAP-2, when there is a situation where hardly any gov-t has started with the work?

Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU




Slide 21

### Are the EU ETS, Trading Directive, Linking Directive and NAP-2 construction principles clear enough to every operator and market participant?


Oct 22-26, 2005. Leipzig, GERMANY

CTI Capacity Building Seminar for CEE/FSU



Slide 22

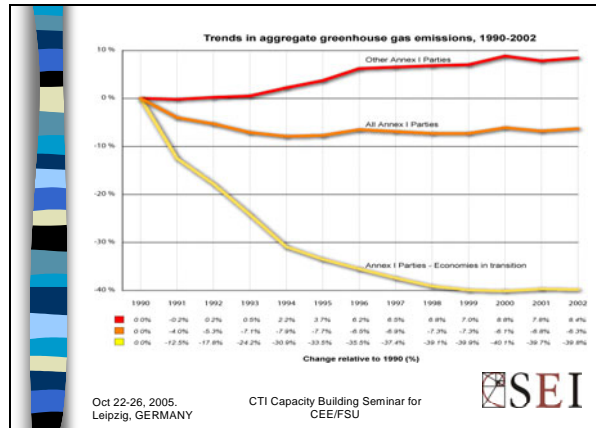
It is obviously *the high time* for capacity building, in particular within the EIT and CIS countries, see the following graph!



Oct 22-26, 2005.  
Leipzig, GERMANY

CTI Capacity Building Seminar for  
CEE/FSU


Slide 23



Slide 24

### Conclusions from the last year meeting

- Next NAP is designed to be ready to July 2006. This means the gov-ts should start the relevant activities in good time next year!
- Significantly more experts in New MS should be involved to NAP construction!
- More public informing must take place!
- More emphasis to be put on dialog with the operators of installations.
- Gov-ts in New MS must make climate change mitigation and carbon intensity high priority!



Oct 22-26, 2005.  
Leipzig, GERMANY

CTI Capacity Building Seminar for  
CEE/FSU

Slide 25

### Conclusions

- When preparing to merge EU Trading Directive and the Linking Directive **more emphasis has to be put on New MS specifics!**
- More clear and detailed instructions well needed from side of European Commission!
- **Further capacity building** in New MS is needed 1. For the governmental officials coordinating the implementation of EU ETS; 2. For the operators of installations on principles of NAP-2 construction, functioning of ETL (Registry) and in envisaging the further GHG emission reduction potential.



Oct 22-26, 2005.  
Leipzig, GERMANY

CTI Capacity Building Seminar for  
CEE/FSU

Slide 26

Thank you!

**Contact:**  
**Dr Tiit Kallaste**  
**SEI-Tallinn**  
**BOX 160**  
**10 502 TALLINN**  
**tiit.kallaste@seit.ee**  
[www.seit.ee](http://www.seit.ee)  
 Tel: +372 62 76 100



Oct 22-26, 2005.  
Leipzig, GERMANY

CTI Capacity Building Seminar for  
CEE/FSU

Slide 27