#### **Emissions trading perspective ahead of COP 24**

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How to facilitate the UN climate negotiations by using the options of the reformed EU-ETS and EU-ESR to optimise the EU and member state's climate policy

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#### Structure

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# **Remarks to Paris Agreement + PAWP**

- Paris Agreement is an ambiguous set of principles needing many clarifications + rulebooks to be operational!
- To develop + to agree upon this is PAWP
- PAWP appears to be very complex + to include many independent tasks, but essentially, to bring it to the point, PAWP is to develop + to agree upon the rulebook of

a global system of tradable GHG emission rights!

But this is a taboo wording!



## Remarks to Paris Agreement + PAWP

- Why a taboo wording?
- The diplomatic successful acting of French presidency of Paris COP was to describe in the PA a Global ETS without using these words allowing all country delegations to agree,
  - delegations who had the order only to agree if ETS is in
  - = + delegations who had the order only to agree if ETS is not in!
- and Global ETS was supplemented with some sweets (money) for the ETS enemies!



# Remarks to Paris Agreement + PAWP

- Why describes PA essentially a Global ETS?
  - All countries (not only some as in the Kyoto Protocol) have quantitative limitations to emit GHG (scale: t CO<sub>2eq</sub>/y)
    - = yearly budgets of emission rights (ER) but called "National Determined Contributions" (NDC)
  - All countries can buy or sell = trade ER but called "voluntary cooperation to use internationally transferred mitigation outcomes" (ITMO)!



## **Remarks to Paris Agreement + PAWP**

- **What makes UN PAWP negotiations so difficult?** 
  - The sum of all preliminary NDCs is much higher than the available global ER budget for staying below 2°C-target!
  - NDCs must be reduced but which + how much?
  - PA give only general principles but not unambiguous criteria for determination of NDCs
  - What are fair + just national "contributions"?
- And everyone knows today that the determination of the amount of NDCs determine "who can sell + who must buy"!



# Remarks to Paris Agreement + PAWP

- Determination of NDC is determination of money
  - short term money to earn or to spent with NDC
  - long-term money to spent more or less with NDC
- The specifics of the PA rulebook also determine the total costs for global economies to keep the 2°C goal:
  - higher total costs = higher total welfare losses!
  - unnecessary costs = unnecessary welfare losses!
- Environmental economists (also IPCC) have long been arguing that global ETS would have lowest global costs!



## Basics of a global system of tradable ER

- The goal of rational environmental policies is to achieve a certain environmental quality as effectively and efficiently as possible, i.e. it should be:
  - == environmentally targeted
  - have the lowest possible macroeconomic costs!
- Environmental economists (also IPCC) have long been arguing that the best approach is a:
  - System of tradable rights to use the environment!



# Basics of a global system of tradable ER

- System of tradable emission rights:
  - **Economic efficiency** is based on the use of specific cost differences of measures for emissions reduction!
  - Differences result from specific characteristics relating to the
    - Type
    - Location
    - Time and duration of a measure!



## Basics of a global system of tradable ER

- Cost differences due to the locations of measures:
- Example: Wind or solar power generation

Even assuming the **same** absolute plant costs & **same** local conditions for wind or sunlight

differences in the specific CO<sub>2</sub>-emissions of the displaced national / regional (public) power grid

lead to different amounts of avoided CO<sub>2</sub> & thus to differing specific CO<sub>2</sub>-abatement costs!



## Basics of a global system of tradable ER

- Cost differences due to the timing / duration of a measure:
  - Costs are continually changing in a market economy depending on supply and demand!
  - New technical options may arise!

Shifts in the cost relations of measures can mean that at differing times differing measures are more economical!



# Basics of a global system of tradable ER

Via the search function of the market the system finds out not only the publicly known cheap reduction measures but also

#### the publicly unknown!

By stipulating via the market price of the emission allowances to realise only the cheapest measures to achieve the reduction target the system produces

the lowest possible macroeconomic costs!

- That is the logic of the economic efficiency of an ETS!
- This is valid for all countries developed + developing!



## Basics of a global system of tradable ER

- The greater the cost differences within the boundaries of the system then the larger is the potential saving or the potential for additional emission reductions for the same cost!
- The smaller the specific costs differences then the lower these potentials will be!
- "Boundaries" refer not only to internal sectors of one national economy but also to national boundaries!
- A regional system (EU-ETS) gives more potential savings than independent national systems +

one global system more than independent regional ones!



## Basics of a global system of tradable ER

But there is a very important second reason for a global system!

## Minimizing the danger of leakage!

Between ETS countries neither carbon nor industry leakage can happen!

No carbon leakage risks drastically facilitates the rulebook of an ETS + its own administration costs!



## Simplified overview EU climate policy development

- **Before 2005 : no common EU Climate change policy**
- = 2005-2007: EU climate policy for part of EU emissions
  - EU-ETS (big stationary sources power stations + large industrial plants):
     1. period = pilot phase (build up of institutions, ER free allocation/but big oversupply/not transferable to next period/ no value at the end)
  - Non-ETS (other GHG emissions: traffic + heat sectors households etc.): total national sovereignty (but EU technical standard settings)
- = 2007-2012: "Kyoto" period: Burden Sharing Agreement
  - EU-ETS: "real" ETS, but EU system of linked national ETS (national EUA budgets/free allocation rules/MRV/registries, EUA transferable)
  - Non-ETS: national sovereignty (but limited indirectly by BSA!)



#### Simplified overview of EU climate policy development

- = 2013-2020: EU climate + energy package of 12/2008
  - **EU-ETS: real EU system** (EU budget/allocation rules/MRV/registry / few additional industrial plants / about 50% EUA auctioning / last years MSR)
  - Non-ETS: Effort Sharing Decision (ESD) (yearly national ER budgets / first years oversupply for all states / ER bankable + tradable at state level = ETS at state level / option of unilateral transfer of activities + gases to ETS)
- **2021-2030:** "Reform" of ETS + Non-ETS (decision process 2014-18)
  - **EU-ETS:** no structural changes (only increase of annual reduction of EU budget + some improvements in details, but partly counterproductive)
  - Non-ETS: further legal upgrading to ESRegulation (complete rulebook for banking/borrowing + trading between states + MRV + registry = full operational ETS at state level / new options: e.g. EUA transfer to ESR)



#### Simplified overview of EU climate policy development

- No doubt:
  - The common EU climate policy reduces the overall EU costs for reaching the common EU climate goals drastically in comparison to pure national policies!
  - And the reformed EU-ETS + EU-ESR are improving the EU climate policy further but nevertheless remaining suboptimal!
  - ESR remains at state level + not establishing internal systems on company level, not finding out internal least cost measures via the search function of the market!
  - The simultaneity of two parallel EU systems produces higher costs + higher welfare losses than only one system because of different marginal abatement costs in the 2 systems!



#### Simplified overview of EU climate policy development

- But we have just finished a 4 years lasting decision-making process in EU to reform EU-ETS + EU-ESR! Yes, but we have options to improve the systems without the need to chance EU legislation!
- Option in EU-ETS-legislation: Art. 24 allows unchanged unilateral transfer of activities from ESR to ETS!
  - very easy for traffic sector detailed proposal of bvek for years + would solve in particular Germanys problem with its own national climate targets!
  - If Germany would start other would follow + Germany would start more likely if other would join just from the beginning!



# Options to improve EU-ETS + EU-ESR could also facilitate UN PAWP negotiations

#### History of the development of ETS systems told us:

- The establishment of national ETS systems is more likely successful if they are linked just from the beginning with other national systems in the region because of reduced danger of carbon leakage + facilitations for rulebooks of national ETS!
- Common Experience facilitates the later transfer of systems of reginal linked national ETS systems to real reginal ETS system!
- Linking of national ETS systems is easier if boundaries of covered sectors + ER allocation rules + MRV are similar
- **Best would be if national ETS cover all sectors from the start!**



# Options to improve EU-ETS + EU-ESR could also facilitate UN PAWP negotiations

- The putting together of EU-ETS and EU-ESR to only one system would not only reduce overall EU cost for reaching the common EU climate goals but would also facilitate the linking with other national or regional ETS system presently under preparation or consideration!
- The readiness of one merged EU-ETS for linking would even enhance the chance of realisation of these national ETS under consideration + could create to a global dynamic leading at the end to a global ETS.
- **■** To do this is nothing else than the PAWP has to do!



# **Thank you for Your Attention!**

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