



POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

Multilevel climate governance – EU ETS and national preferences and what this means for Paris

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EU as a laboratory for international negotiations

- There are frontrunners in the EU; there are countries that are more ambitious
 - There are countries who block a joint EU energy and climate policy
 - There are countries that prefer renewable energies and those who prefer nuclear power
 - There are countries who form their own clubs within the EU27
 - There are rich and poor countries within the EU27; financial transfers are a fundamental part of EU climate & energy policy
- ➔ Are there lessons to be learned from the EU experience for the global level?

European situation

Climate policy on the EU-level:

- In 2005 implementation of EU-wide emission trading system (EU ETS)
 - total amount of emissions fixed,
 - permit price determined by market.



- EU ETS **equalizes marginal abatement costs** across
 - the EU ETS-sector
 - and the EU Member States.

→ Cost-efficient instrument to regulate GHG-emissions.

→ **But are preferences of Member States efficiently represented?**

EU Member States also engage in climate policy

Examples for existing individual Member States' policies action:

- **U.K.'s Climate Change Levy**
includes carbon floor price in addition to EU ETS
 - **German Energiewende**
policy package supporting long-term mitigation
 - **Sweden's carbon tax**
- Before and after EU ETS implementation member state policies were/are present.
- **Reflect different preferences + ability to pay for mitigation.**



EU emissions trading scheme (ETS) ignores national preferences

- Different national willingness and/or abilities-to-pay for mitigation, but ETS neglects these preferences
- ETS needs optimal transfers (difficult to implement + estimate and could even be negative)
- If national preferences should be integrated: Departure from European-wide ETS (equalization of marginal abatement costs) towards country-wise differentiable prices allows for integration of more ambitious national preferences

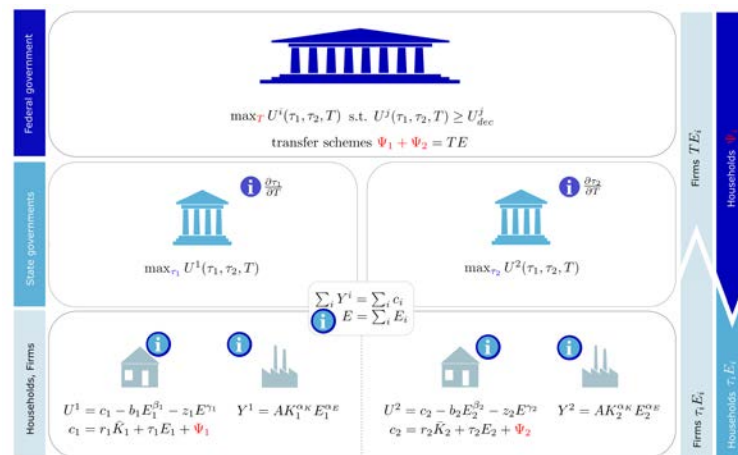
New ETS perspective: Ongoing work

Multilevel climate governance in a second best world and the integration of Member State preferences

Objective: Recommendations for multilevel instrument design with **EU-wide minimum price and Member State policies.**

Findings:

- We can identify even **simple transfer rules** so that EU-wide minimum price is agreeable by all Member States (makes all Member States better off).
- Total emissions might be higher than first-best but multilevel architecture represents the Member States' **willingness and abilities-to-pay** and is more efficient than an ETS which does not consider preferences.



Conclusion for design of climate policies in multilevel governance systems

EU ETS

- Minimizes marginal abatement costs,
- Member States' preferences and policies for more mitigation are not efficiently integrated.

Minimum price in EU ETS – two advantages

- Known: stabilization effect
- **New: can integrate more ambitious member state policies without weakening EU policy (allocative efficiency)**



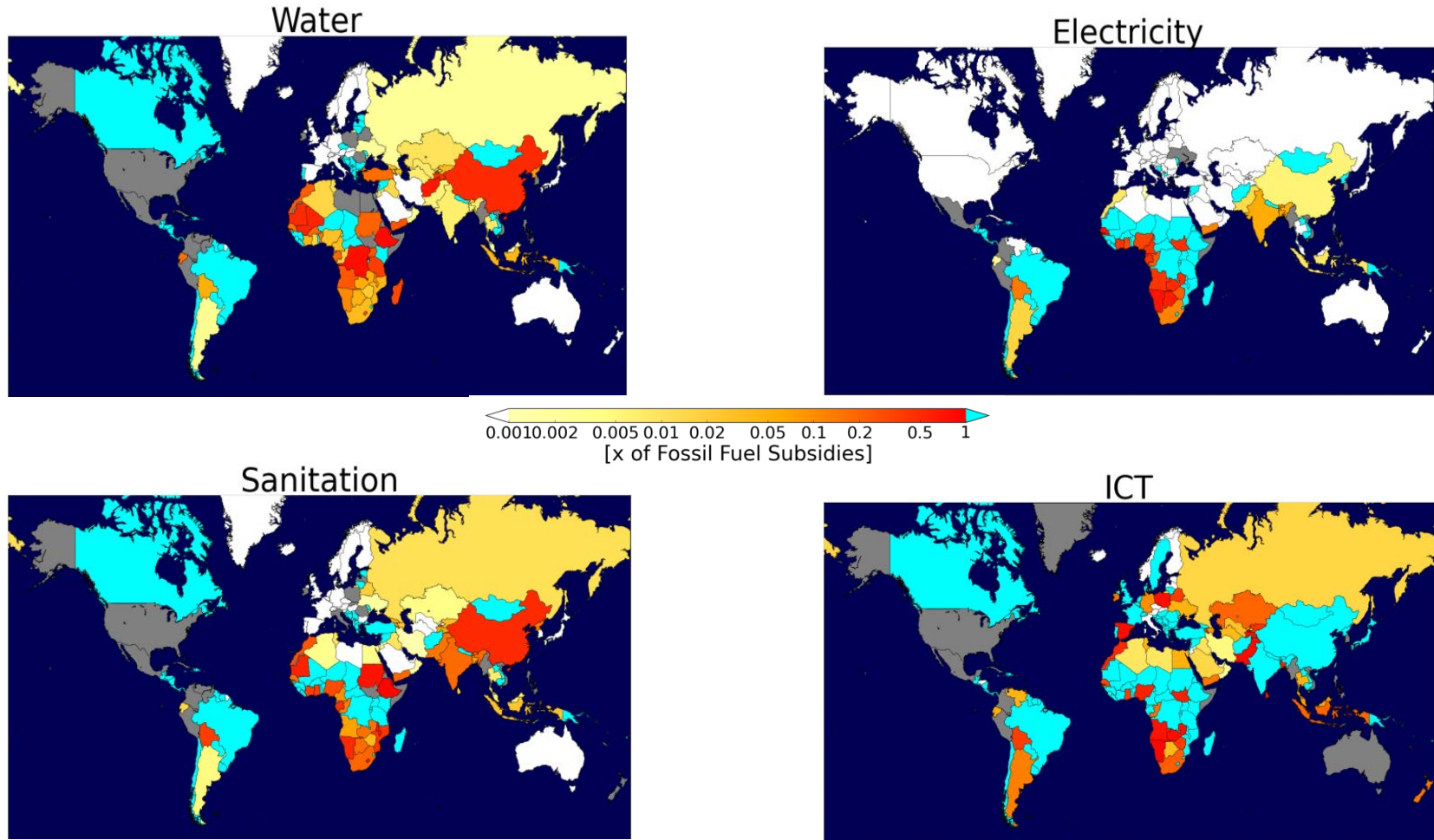
Conclusions for the EU

1. Current **EU ETS cannot well integrate different national preferences** for greenhouse gas mitigation.
2. Consideration of **multilevel climate governance is a key element for success of EU ETS reform**
 - Benefits from **minimum prices / price floors** on the upper governmental level.
 - Model results indicate that European wide mitigation increases, if EU ETS has a price floor and Germany implements additional climate policies.
3. **Transfer design crucial element**, but easier with minimum price than with ETS:
 - If Member States' are more ambitious than EU even with simple vertical transfers all Member States can be made better off.

Lessons learned for COP21 in Paris

- Pricing emissions is crucial for climate policy.
- In a multilevel governance setting, taxes (or ETS in combination with minimum prices) allow expressing national preference without undermining overall efficiency.
- A globally uniform CO₂ price is currently not realistic. But coordination across a minimum price could be a first step.
- Generous subsidies for fossil fuels currently lead to a negative CO₂ price. A price of zero would already be a step forward.
- Tax revenues are a crucial element that should deserve more attention e.g. for financing infrastructure.

Abolishing Fossil Fuel Subsidies allows for universal access to basic infrastructure services



Jakob et al. (submitted)

Closing the Emission Price Gap: Paving the way to COP21 in Paris

