

MIT Center for Energy and Environmental Policy Research







European Energy & Climate Outlook for 2030:

Is the EU ETS up to the

Task? Michael Mehling 2 July 2014

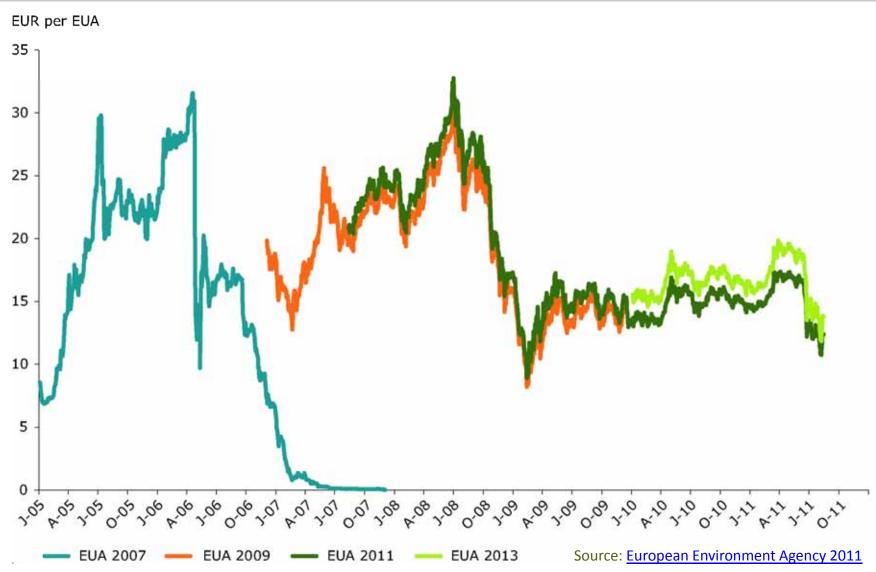


# The EU ETS at 10: A Retrospective

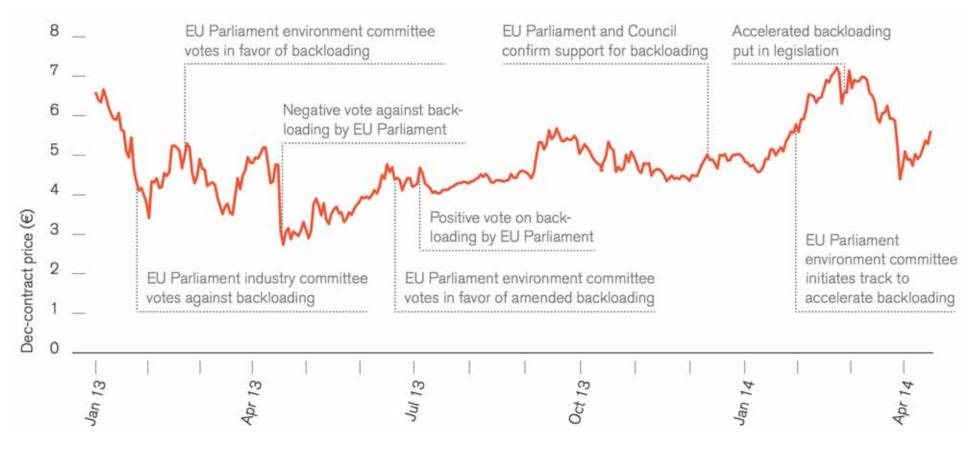
- Volatility and "supply and demand imbalance"
- Overlap with complementary policy instruments
- Balancing competitiveness concerns and political rent seeking
- Governance challenges
- Global expansion and integration



#### EUA Future Prices 2005-2011



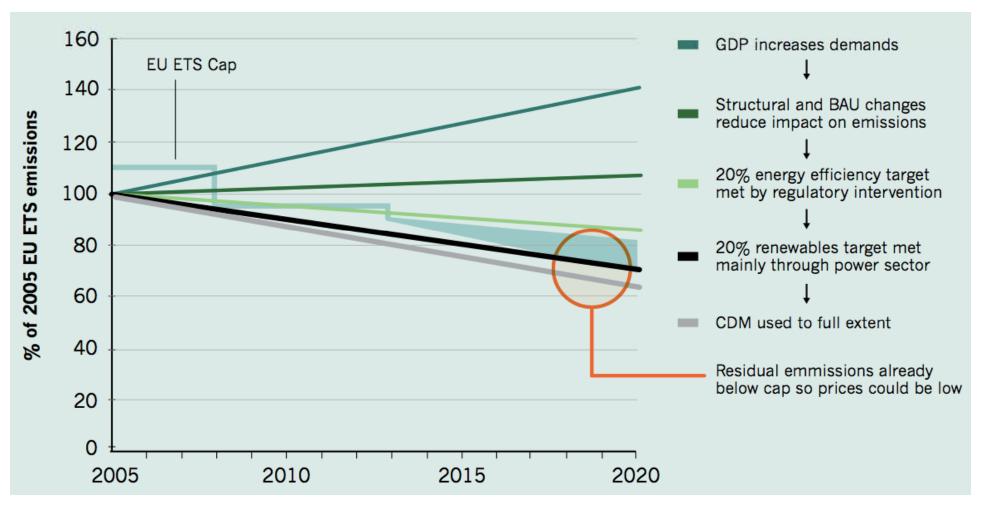
#### **EUA Spot Prices 2013-2014**



Source: World Bank, 2014



#### **Instrument Overlap**



Source: Climate Strategies, 2012



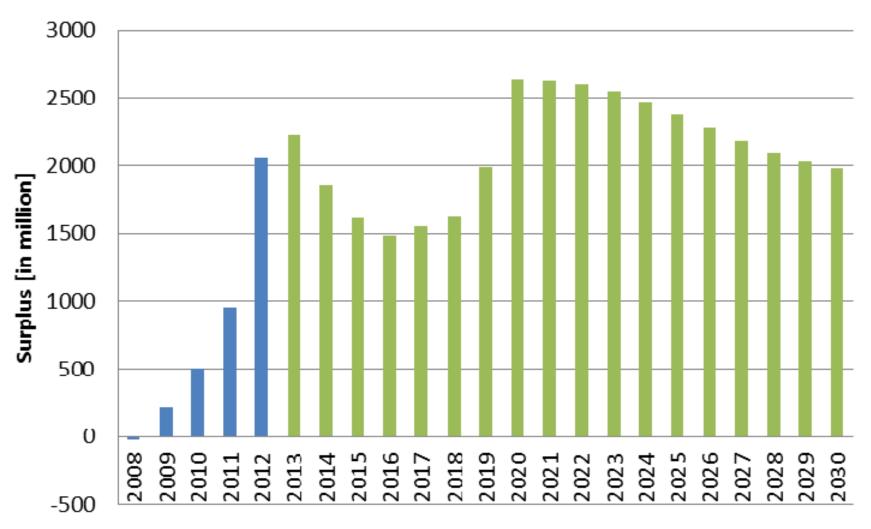
#### **Short-term Response**

#### "Backloading"

- Postponement of allowance auctions scheduled for 2013, 2014 and 2015 until 2019 and 2020 to decrease short-term supply by 900 million EUAs
- 400 million EUAs will be withheld from scheduled auctions in 2014, 300 million EUAs in 2015, and 200 million EUAs in 2016
- Withheld EUAs are reintroduced towards the end of the Third Trading Period: 300 million in 2019 and 600 million in 2020



# EUA Surplus to 2030



Source: European Commission, 2014



# Long-term Response

- European Commission communication of 14 November 2012 sets out six options for long-term structural reform
  - Increasing the EU's greenhouse gas emissions reduction target for 2020 from 20% to 30% below 1990 levels
  - Retiring a certain number of phase three allowances permanently
  - Revising the 1.74% annual reduction in the number of allowances to make it steeper
  - Bringing more sectors into the EU ETS
  - Limiting access to international credits
  - Introducing discretionary price management mechanisms such as a price management reserve
- Legislative proposal of the European Commission of January 2014 opts for establishment of a Market Stability Reserve, to start in 2021



#### **Market Stability Reserve**

- 12% of EUAs in circulation (i.e. the surplus) from year n-2, as published in May n-1, will be moved into a reserve each year, unless the number of allowances to enter the reserve would be less than 100m (i.e. surplus that year below 833m)
- If surplus falls below 400 million EUAs, 100 million EUAs allowances from the reserve would re-enter the market through auctioning
- If Art 29a of ETS Directive is triggered (price of EUAs more than 3 times the average price of allowances during the two preceding years), then 100m allowances would be released from the reserve into the market



### **Addressing Leakage Concerns**

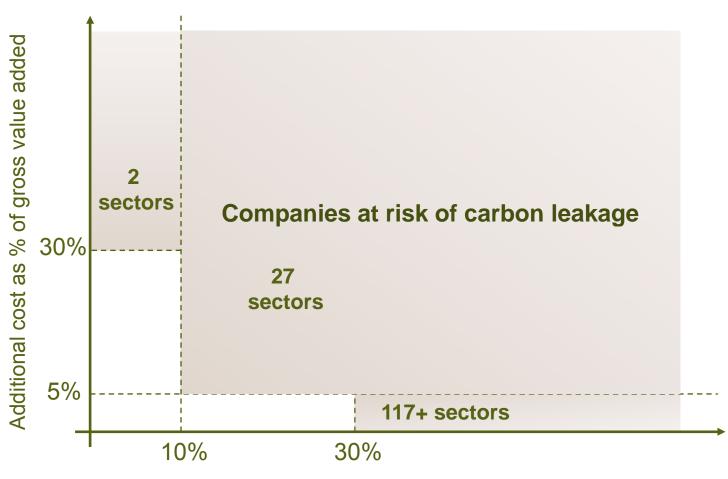
Allocation formula to vulnerable sectors:

$$A = Bm_e x P[x \alpha_{cap}]$$

- A: free allocation [EUA]
- BM<sub>6</sub>: emission benchmark [t CO<sub>2</sub>/t product]
- P: historic production
- $\alpha_{cap}$ : adjustment factor to adjust allocation to the cap
- Determining trade exposure and leakage risk:
  - 5% cost increase and 10% trade exposure
  - 30% for one of the two



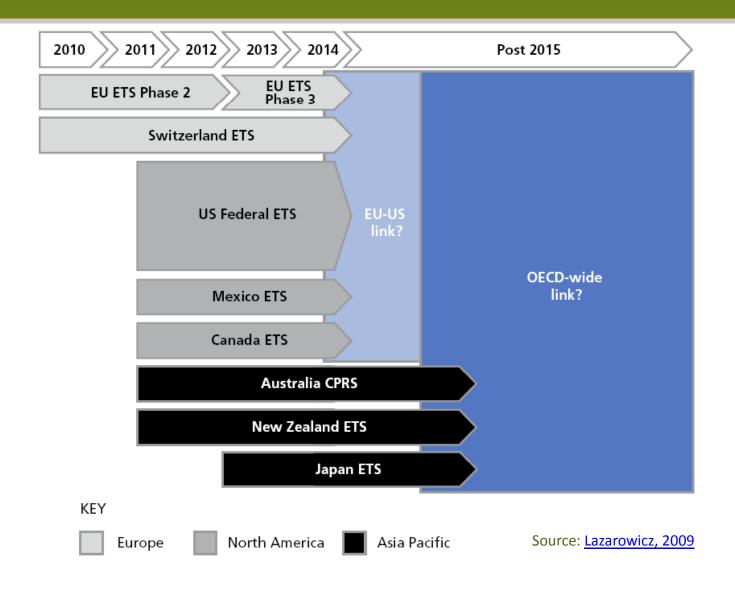
# **Leakage and Rent-Seeking**







#### **Linking – A Way to Level the Playing Field?**





# Linking: Vision vs. Reality

- Existing links only between largely identical emissions trading systems
  - Norway-EU ETS in Phase 1
  - California-Quebec
- Linking between largely compatible systems more difficult than expected:
  - 2012 linking agreement with Australia in question following 2013 Australian election outcome
  - Ongoing negotiations with Switzerland have proven difficult



#### **Persistent Questions**

- Uniform target vs. uniform instrument
- Quantity control vs. price control/ short-term vs. long-term perspective
- Options for increased ambition and safeguarding competitiveness



# Thank you for your attention!

Questions?

mmehling@mit.edu







#### MIT Center for Energy and Environmental Policy Research

# **Center for Energy and Environmental Policy Research**

Massachusetts Institute of Technology (MIT) MIT Building E19-411 400 Main Street, 4th Floor Cambridge, MA 02142-1017

@ ceepr@mit.edu

**617-253-3551** 617-253-9845





