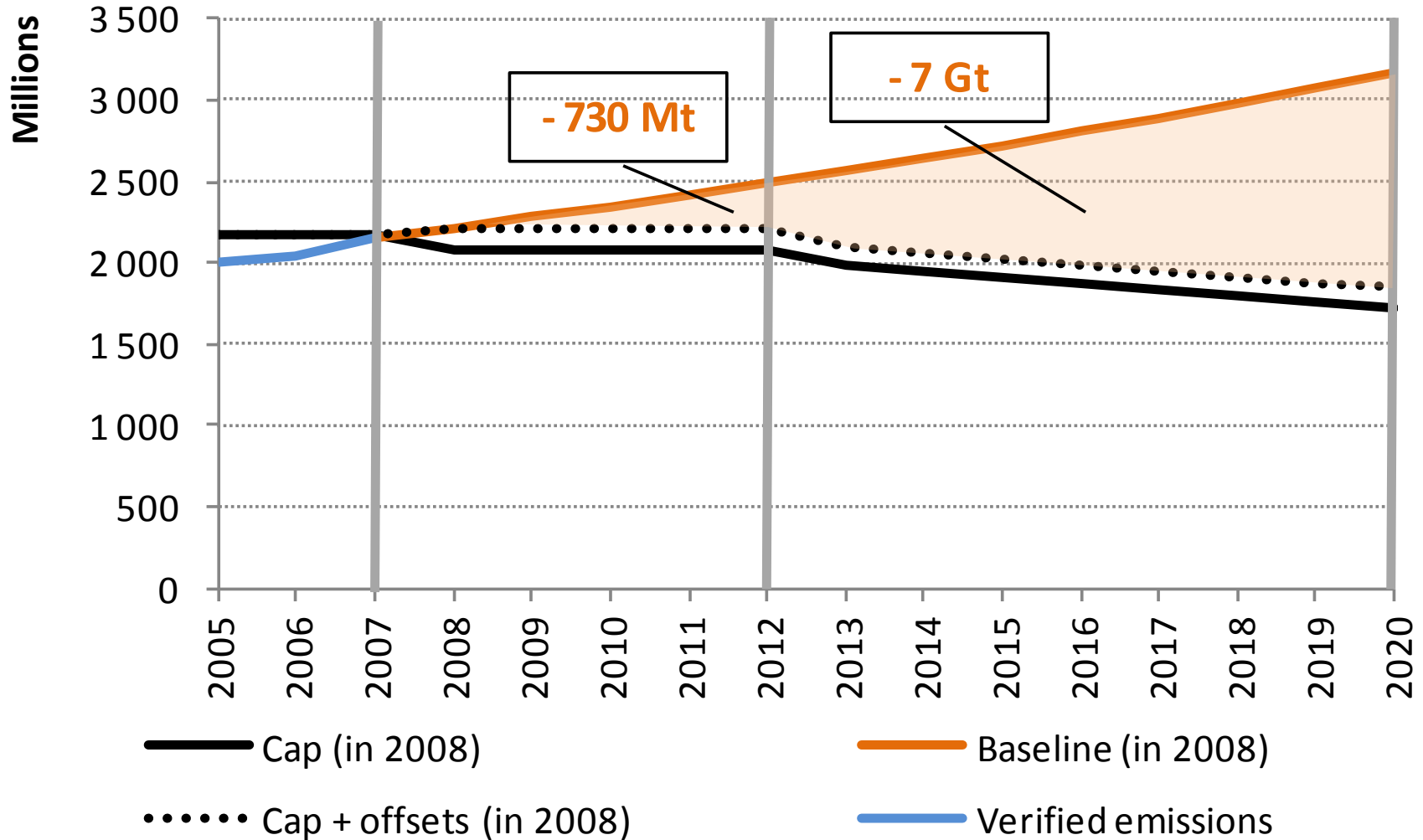
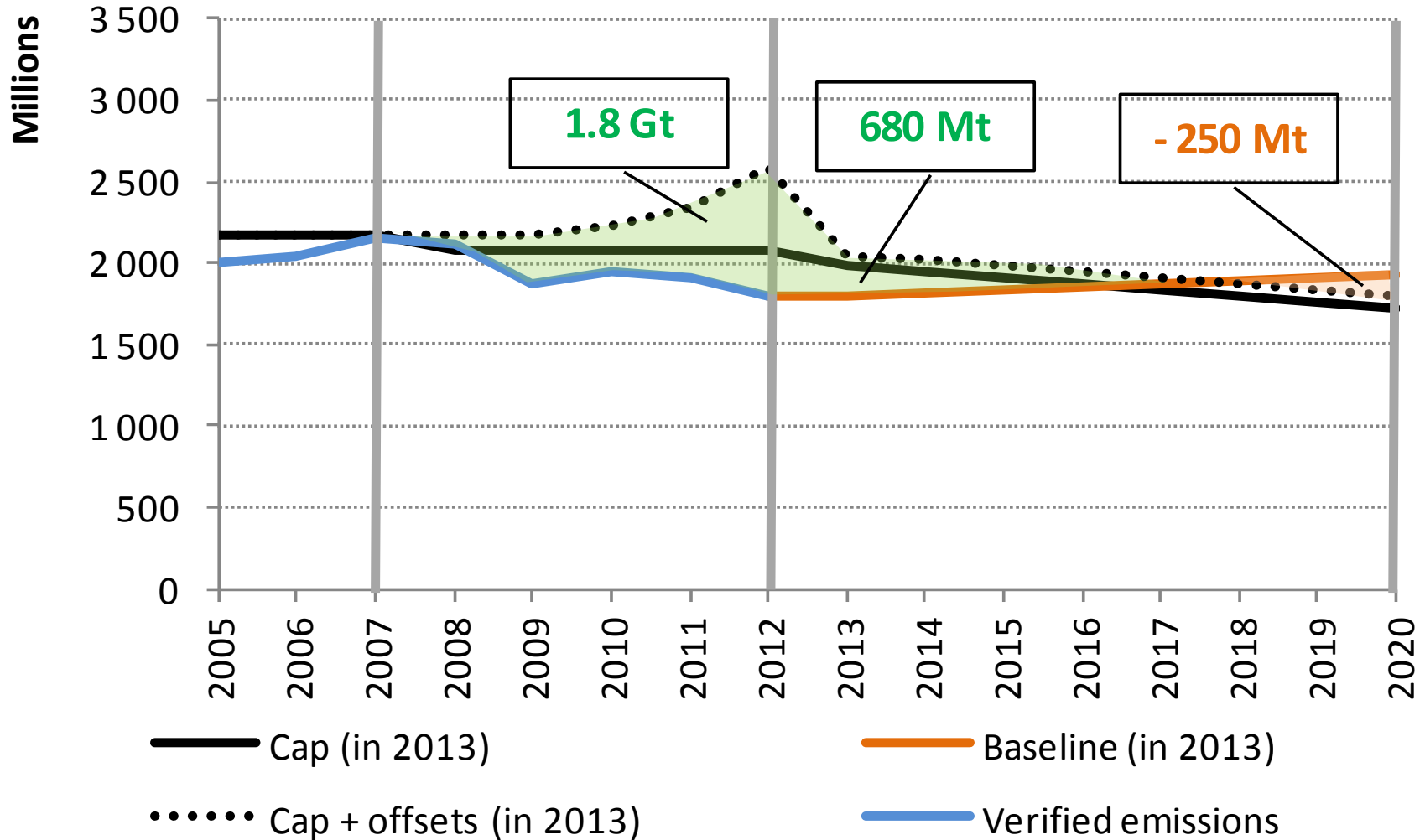

EU ETS structural reform

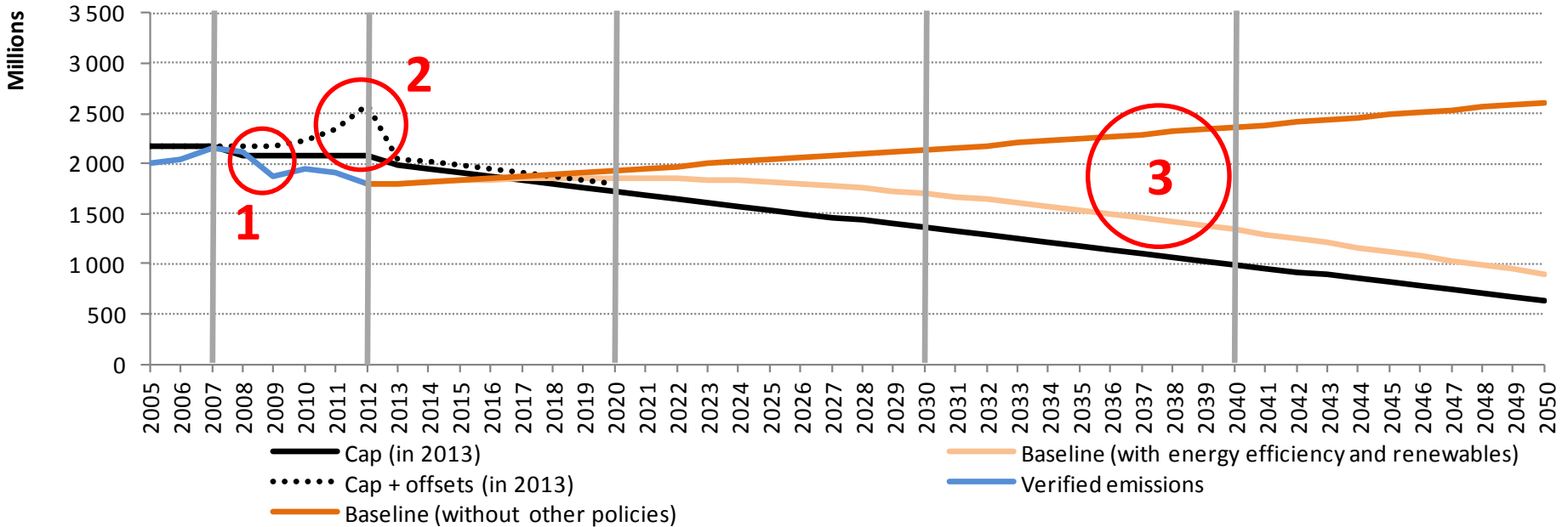
The Case for an Independent Carbon Market Authority ?

Bruegel – May 23rd, 2013
Raphael Trotignon, Climate Economics Chair
raphael.trotignon@chaireconomieduclimat.org

In 2008...







1. Economic downturn since end-2008 and deteriorating growth outlook

ETS Emissions declined by around 15% compared to 2005

2. Abundance of **carbon offsets** due to the unexpected evolution of the Kyoto system + effect of unexpected restrictions

Amount of offsets used : ~40% of today's banking

3. Interactions with the **other energy and climate policies (RE, EE)**

Could cut EU ETS emissions by 50-100 Mt/yr independently of the price 4

- Surplus is the symptom, not the root of problems
Ex: SO₂ market (surplus can coexist with high prices)
- The EU ETS must deal mainly with two influences :
Economic conditions (countercyclical): **desirable**
Structural conditions (uncontrolled policy overlap): **not desirable**
- Allowances are artificial assets, which value relies on the credibility of the instrument
Must reflect a **credible constraint**
in the short term (management of existing capital)
as well as in the long term (investment decisions)
Must be **complementary of other policy** instruments

- Backloading alone would not solve the issues
 - Price can rise in the short term, but will fall lower in the longer term
 - Nevertheless can be a strong political signal to start with (probably the starting point of any reform)

- Only the options giving more visibility and credibility to the longer term constraint are able to restore the market durably

- None of the proposed options allow for the control of policy overlap and the timing of offsets, by far the major issues
 - Will there be years-long discussions on intervention for every price change?

- Two aspects to the solution: policy ambition and governance
 - ETS target corridor** for 2030, 2040 and 2050
 - Establishment of a **predictable intervention framework**

| Function | Associated actions |
|--|--|
| Continuous monitoring and information transparency | <ul style="list-style-type: none"> • Collect, analyze and share data on market transactions and prices, emission trajectories, compliance behavior, low carbon investments, competitiveness effects • Motivate and justify its decisions |
| Liquidity and market functioning in the short term | <ul style="list-style-type: none"> • Primary market: dynamic management of auctions • No need for secondary market interventions |
| Credibility of the medium to long term constraint over time | <p>The public authority determines the emissions target, and the policy tools to achieve this target</p> <p>The ICMA implement the political target in the covered sectors and can dynamically adapt the EU ETS cap in two cases:</p> <ul style="list-style-type: none"> • Ensure consistency with other policy instruments over time • Control unexpected effects of offsets and non-EU allowances <p>No need for price corridors or price management reserve</p> |
| Accountability | <ul style="list-style-type: none"> • Periodic hearings by EU bodies • Public reporting |



Thank you for your attention

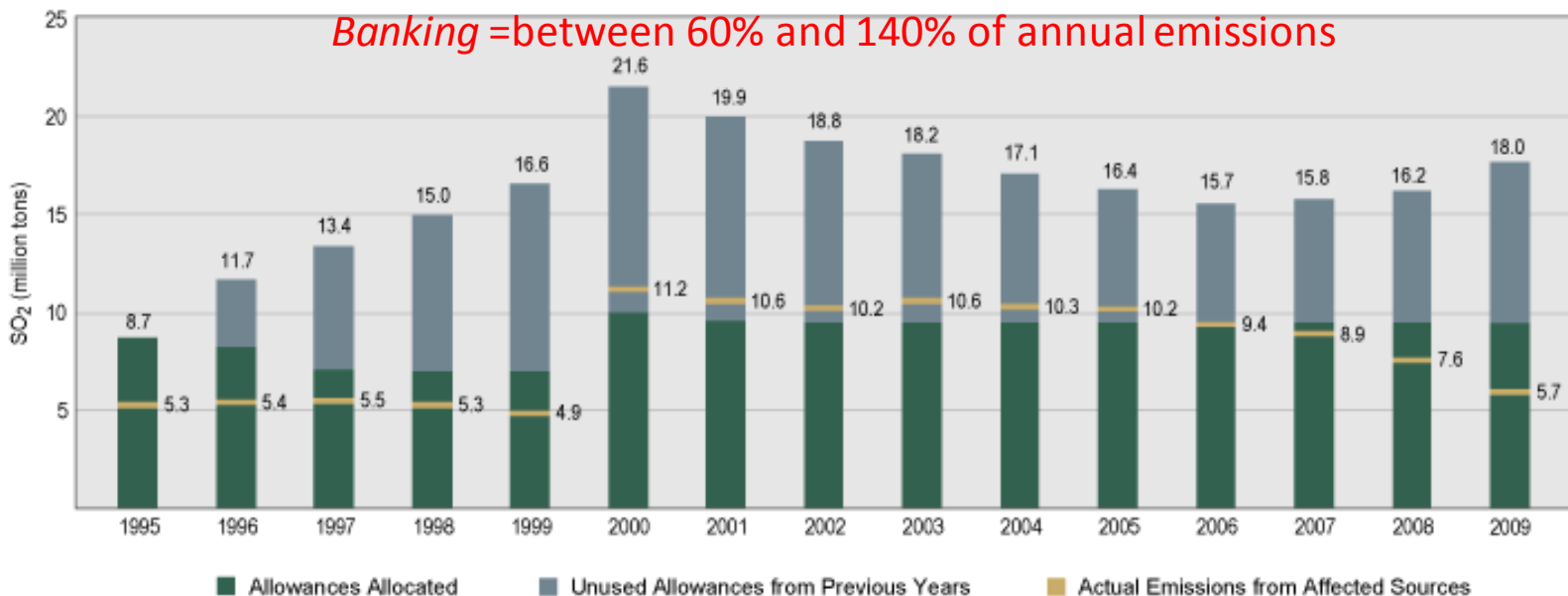
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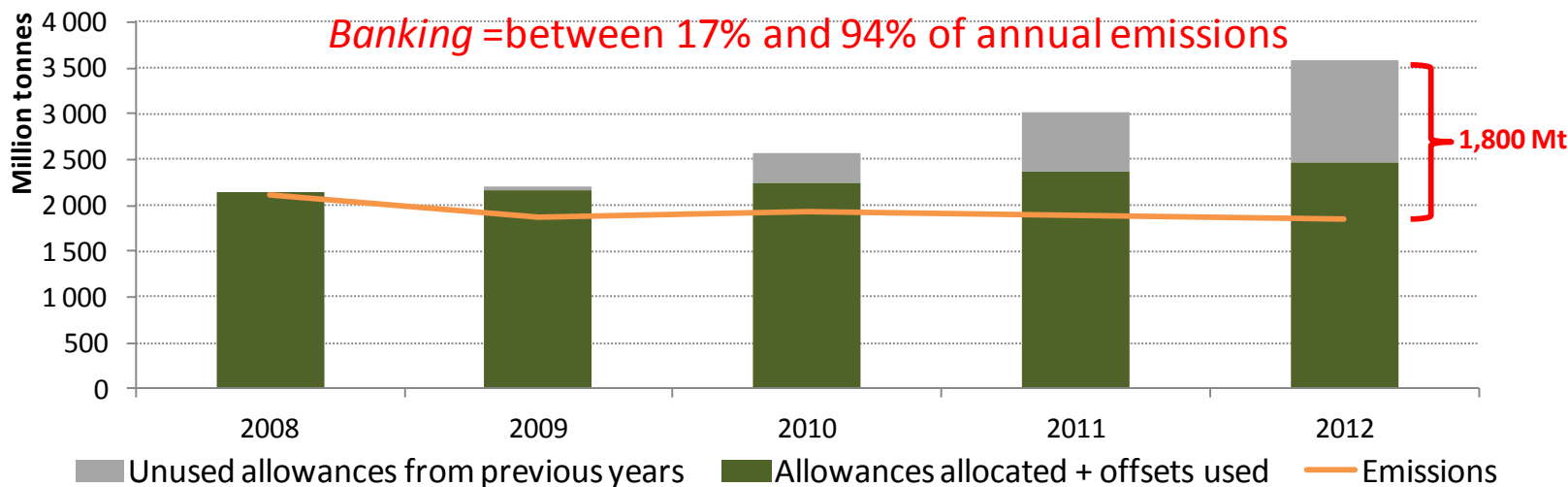
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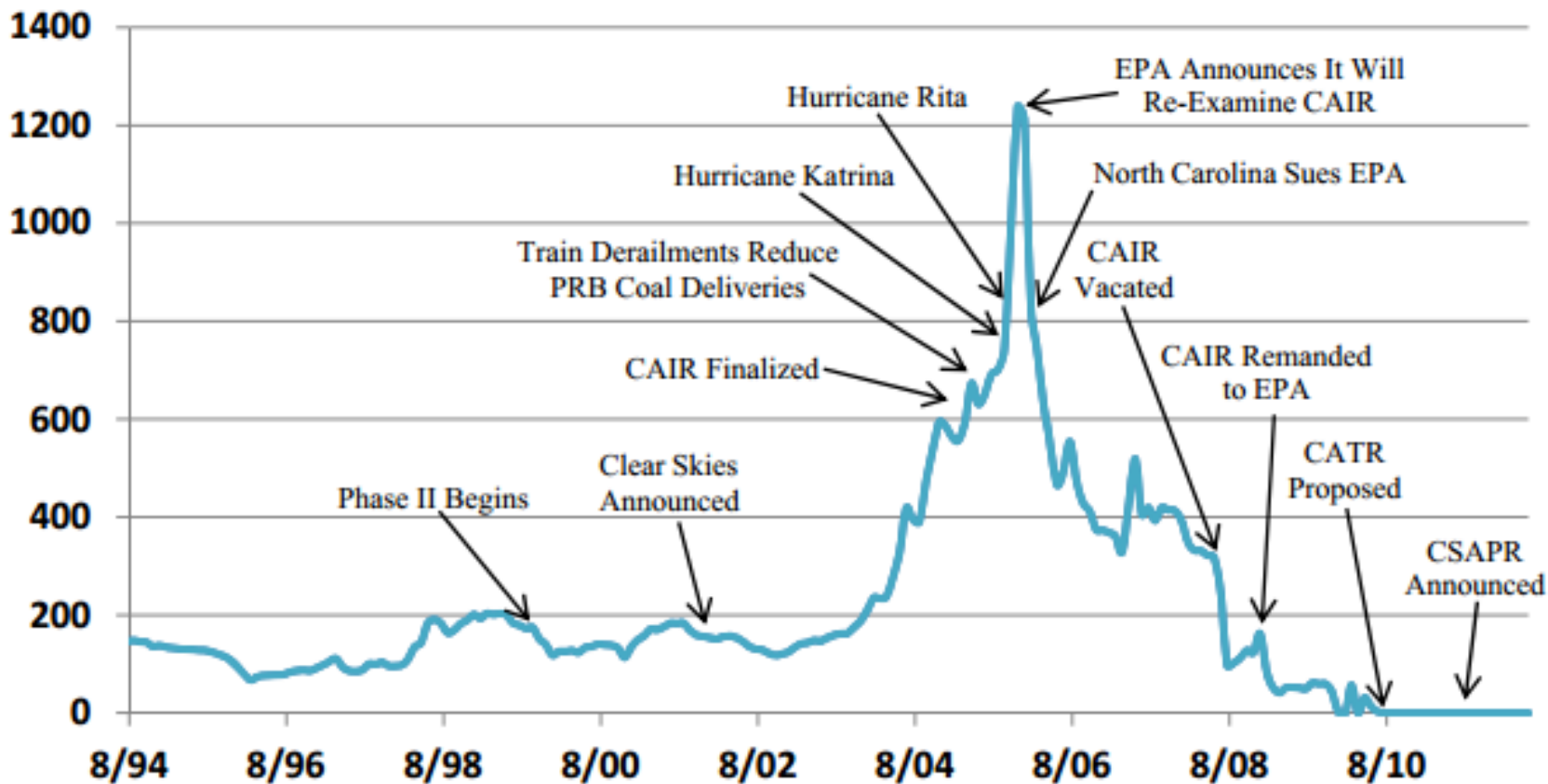
US SO₂ Trading Program



EU ETS



SO₂ Allowance Prices and the Regulatory Environment, 1994-2012
(1995 \$ per ton)



| Scenario | Prix en 2015 | Prix en 2020 | EU auction revenues in P3 |
|--|-----------------------|-----------------------|---------------------------|
| Reference | 6 €/tCO ₂ | 13 €/tCO ₂ | 78 G€ |
| Backloading only | 16 €/tCO ₂ | 3 €/tCO ₂ | 92 G€ |
| (a) -34% in 2020 | 17 €/tCO ₂ | 27 €/tCO ₂ | 187 G€ |
| (b)+(c) Retirement in Phase 3 and revision of the linear reduction factor in Phase 4 compatible with Roadmap | 16 €/tCO ₂ | 24 €/tCO ₂ | 176 G€ |

- A back-loading is not useful unless it leads to a change in the cap
- Only the options that change the long term cap have a lasting effect on the price
- The proposals are limited by a taboo on governance issues, which make a dynamic management of the supply impossible in the short term (auctions) and in the medium and long term (adjustments to the cap)

- Start with a backloading + ETS target corridors to 2050
 - Caution with the 2030 package and energy targets
- Implementation of a predictable intervention framework (Phase 4 ?)
 - Mandate to an existing organization (energy regulator?)
 - Or to an independent organism (dedicated and resilient)
 - Mandate based only on quantities, to avoid any artificial setting of a price disconnected from markets fundamentals
 - Attention should go not to the price level, but to the examination of its realization (compliance behavior, effect of policies on emission trajectories and low-carbon investments, on competitiveness...)

- « The SO₂ Allowance Trading System: The Ironic History of a Grand Policy Experiment », R. Schmalensee and R. Stavins, FEEM WP n°60.2012
<http://www.feem.it/userfiles/attach/201294102324NDL2012-060.pdf>
- « The European CO₂ allowances market: issues in the transition to Phase III », Christian de Perthuis and Raphaël Trotignon, Information and debates N°14, Climate Economics Chair, March 2012
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- « Markets for Tradable Pollution Allowances: What are the (New) Lessons ? », by Larry Goulder, Journal of Economic Perspectives, Volume 27, Number 1, Winter 2013, Pages 87–102
- « CO₂ Abatement from Renewable Energy Injections in the German Electricity Sector: Does a CO₂ Price Help? » by Hannes Weigt, Erik Delarue and Denny Ellerman, EUI Working Papers, April 2012
<http://fsr.eui.eu/Publications/WORKINGPAPERS/Energy/2012/WP201218.aspx>
- « Climate Policy Foundations: Science and Economics with Lessons from Monetary Regulation », by William C. Whitesell, Cambridge University Press, 2012
- « Carbon Markets 15 Years After Kyoto: Lessons Learned, New Challenges », by Richard G. Newell, William A. Pizer, and Daniel Raimi, Journal of Economic Perspectives, Volume 27, Number 1, Winter 2013, Pages 123-146.