


An ever more de-carbonated Union?

Towards a better European taxation
against climate change

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Purpose of the study

- The purpose of our study: exploring the ways and means for the EU to implement a better carbon taxation in the perspective of achieving the “20-20-20” strategy goals; Our review of EU climate change strategy broader than just carbon taxes: we consider “carbon taxation”, i.e. the “social” pricing of carbon via economic instruments including EU ETS.
- Is this irrelevant after Copenhagen? On the contrary: US and China have stolen the show and we have seen the result. Global negotiations need EU leadership. “Copenhagen Accord” has EU fingerprints all over : 2°C reference, adaptation financing; **EU as global ecological power = EU at its best**;
- But we need to go further: reform climate policy to become the center of de-carbonated world;

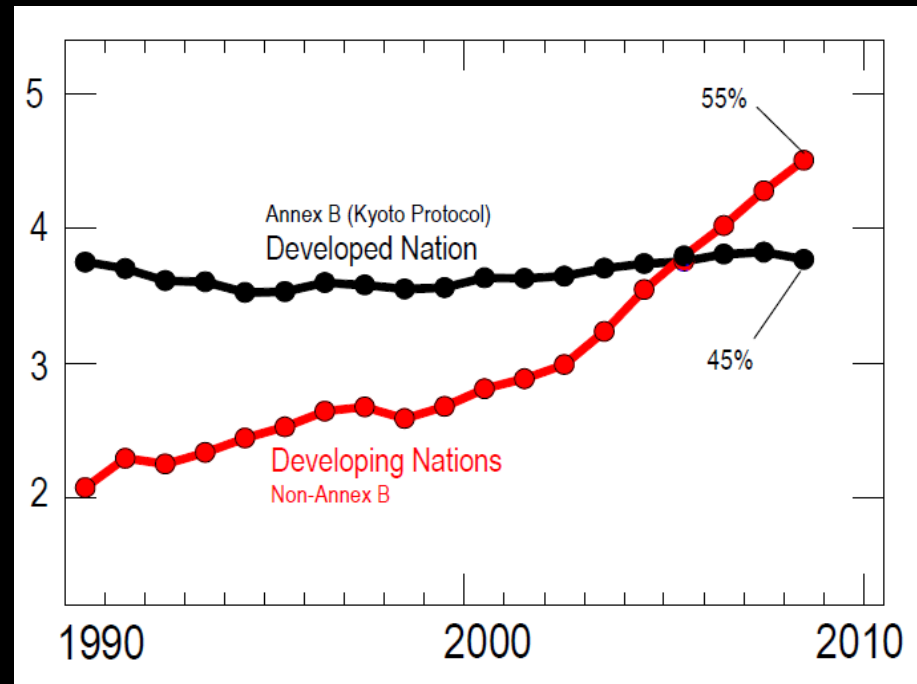
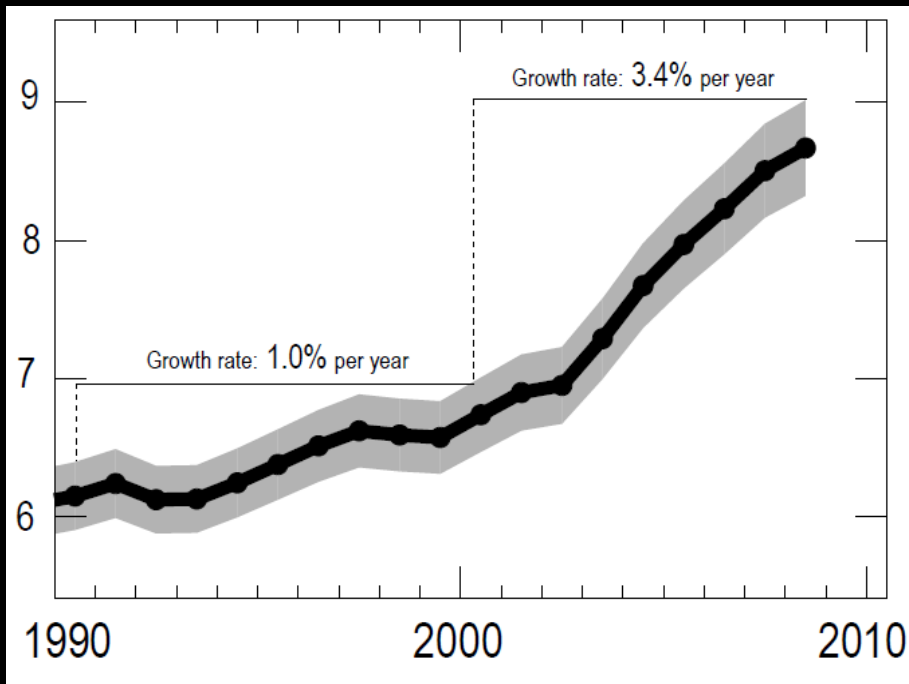


Not another Lisbon!

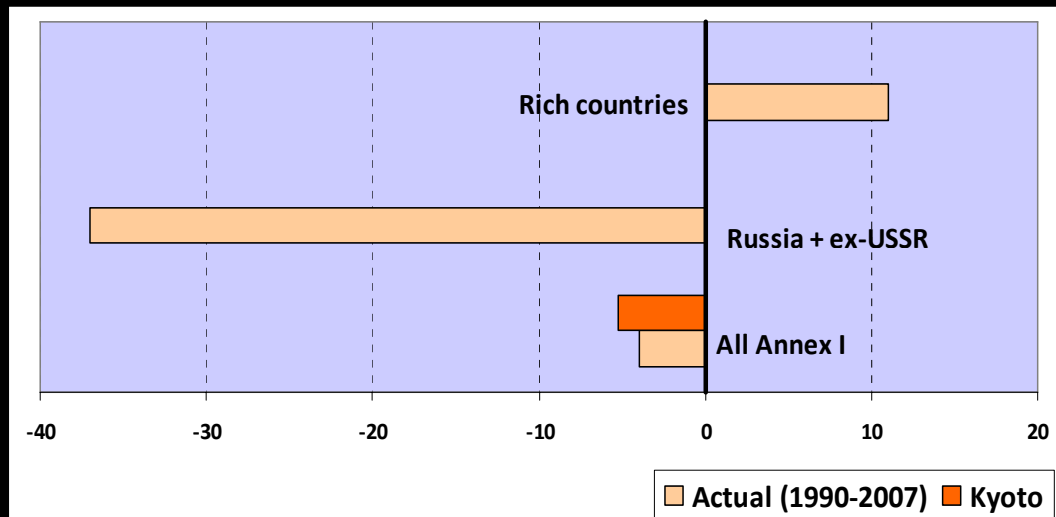
- The EU clearly wants to re-focus its development strategy on the low carbon economy. Indeed, ecology might become as important in the European identity as the welfare state (“European preference for the environment”);
- But the reason why the EU is today short of meeting the 2000 Lisbon targets is that targets and instruments have not been aligned back then. We should avoid this European “declaratory” pattern with climate change and review beforehand if we actually have the instruments to meet the very demanding goals set in March 2007.
- What we don’t do in the study: question the relevance of the “20-20-20” strategy ends; we take them for granted but discuss adequacy of means to ends (efficiency); Climate change is now a public policy question and as such an art of execution (auctioning, offsets, exemptions, etc.). We are entering the “nuts and bolts era” of CC mitigation and we have to focus on reality.

Where we are: the global chiasm

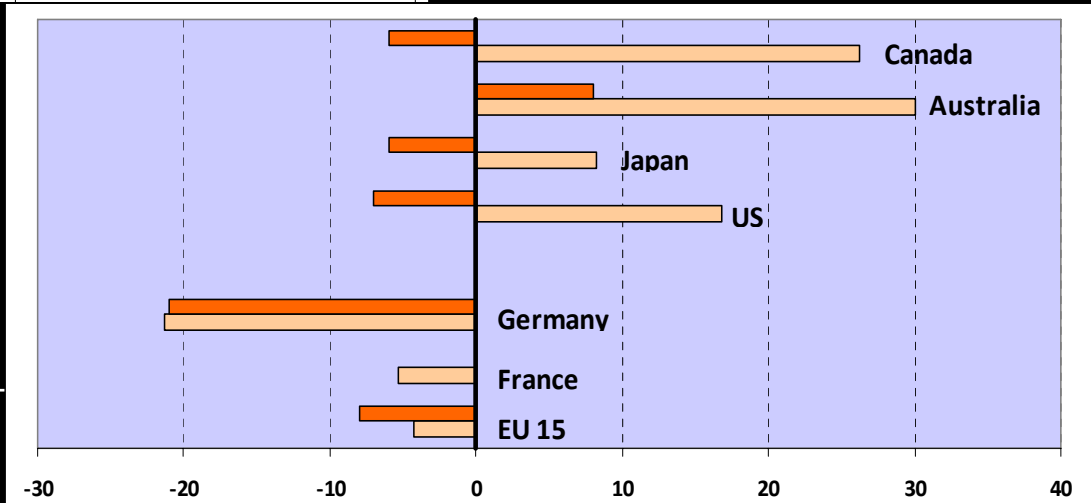
Co2 emissions from fossil fuels between 1990 and 2008: + 41%



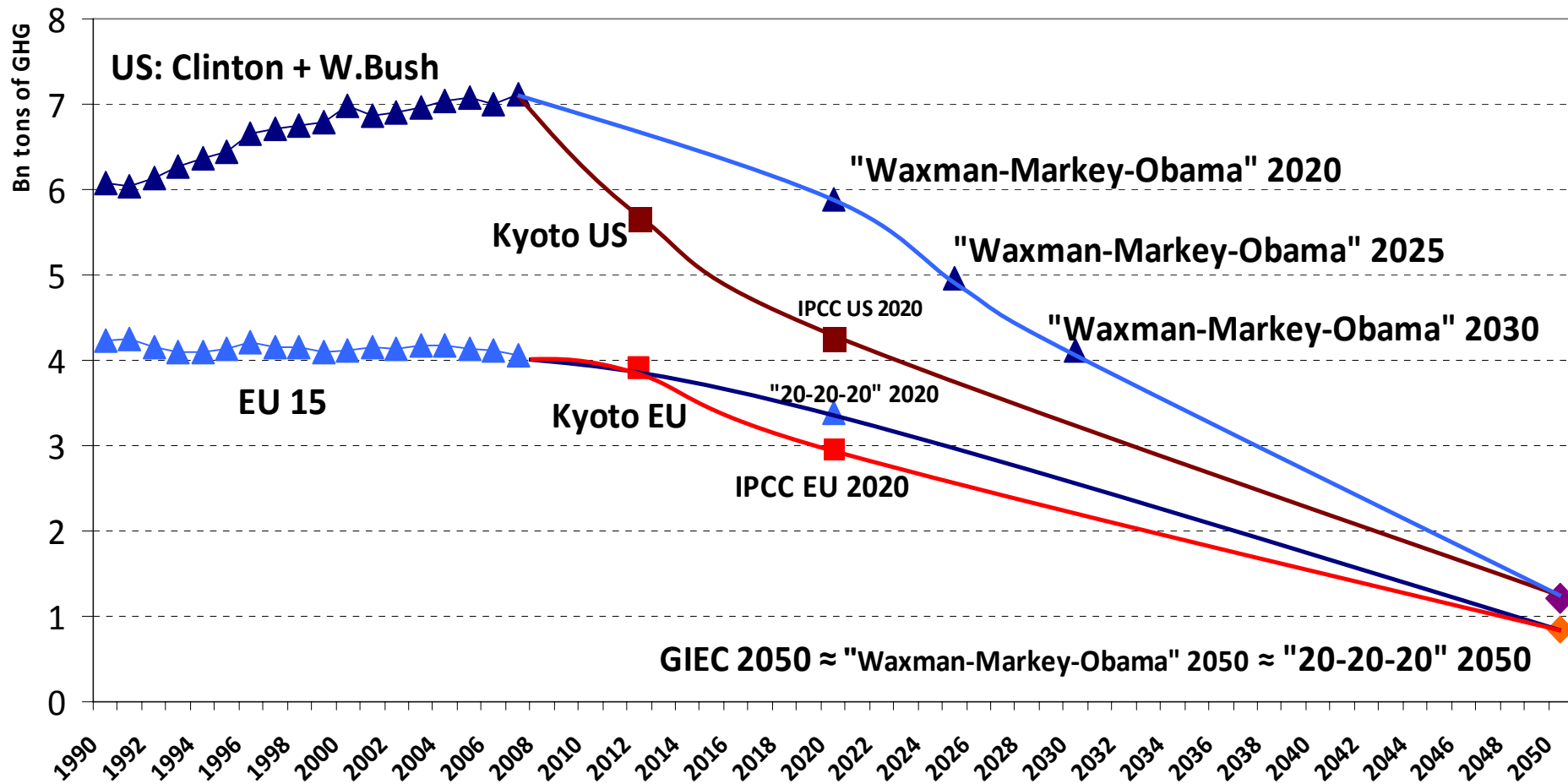
The Kyoto “crisis of credibility”



Evolution of GHG emissions
1990-2007, in %



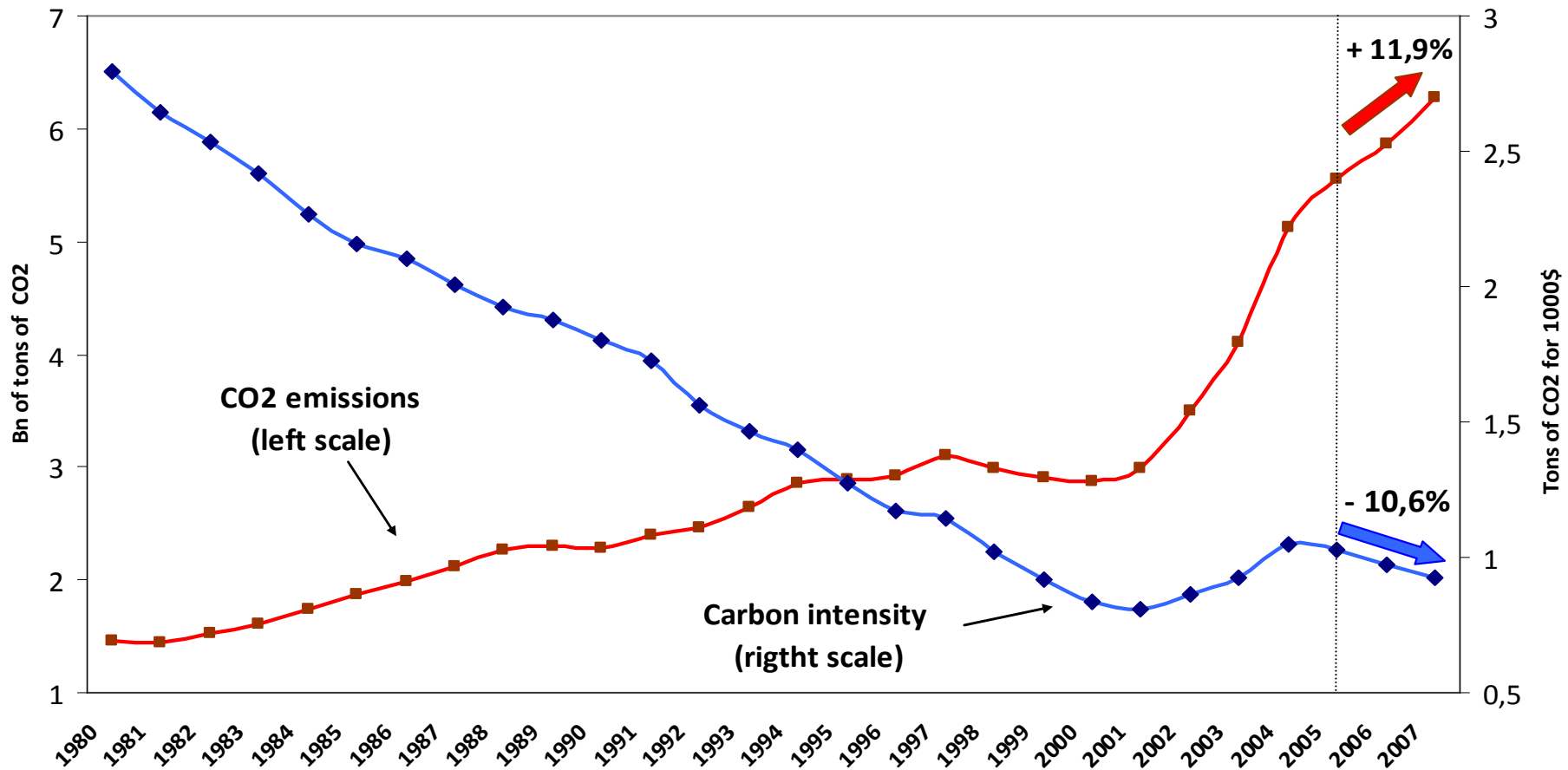
How do the EU and the US compare?



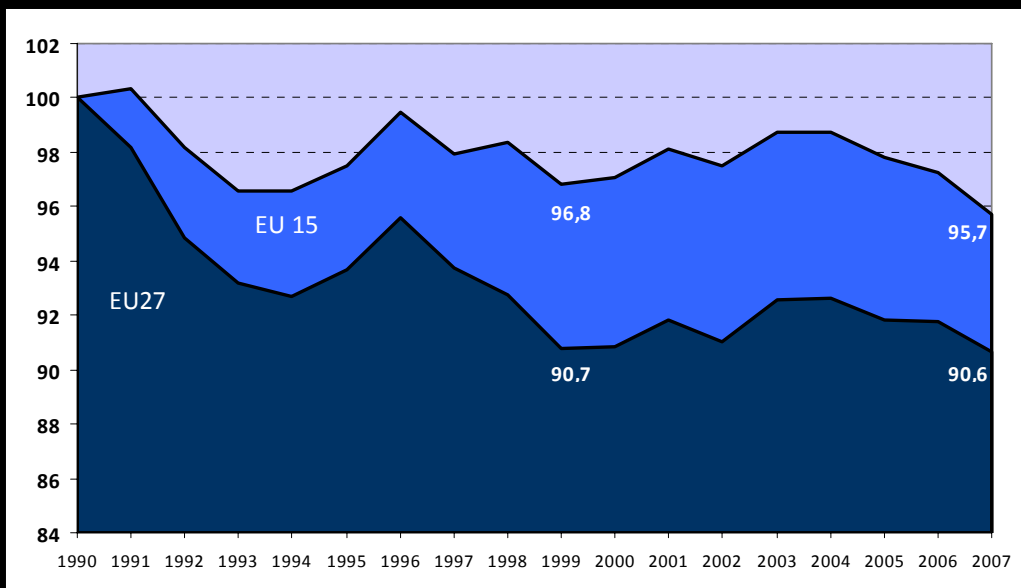
The EU 15 emits 40% less GHG than the US with a GDP 10% higher and a population 20% higher; gap between US and EU GHG dynamic between 1990 and 2007 = **over 21 percentage points**.

The Chinese proposition on CE

Co2 emissions from fossil fuels between 1990 and 2007



EU 15 and EU 27 since 1990: climate fatigue?

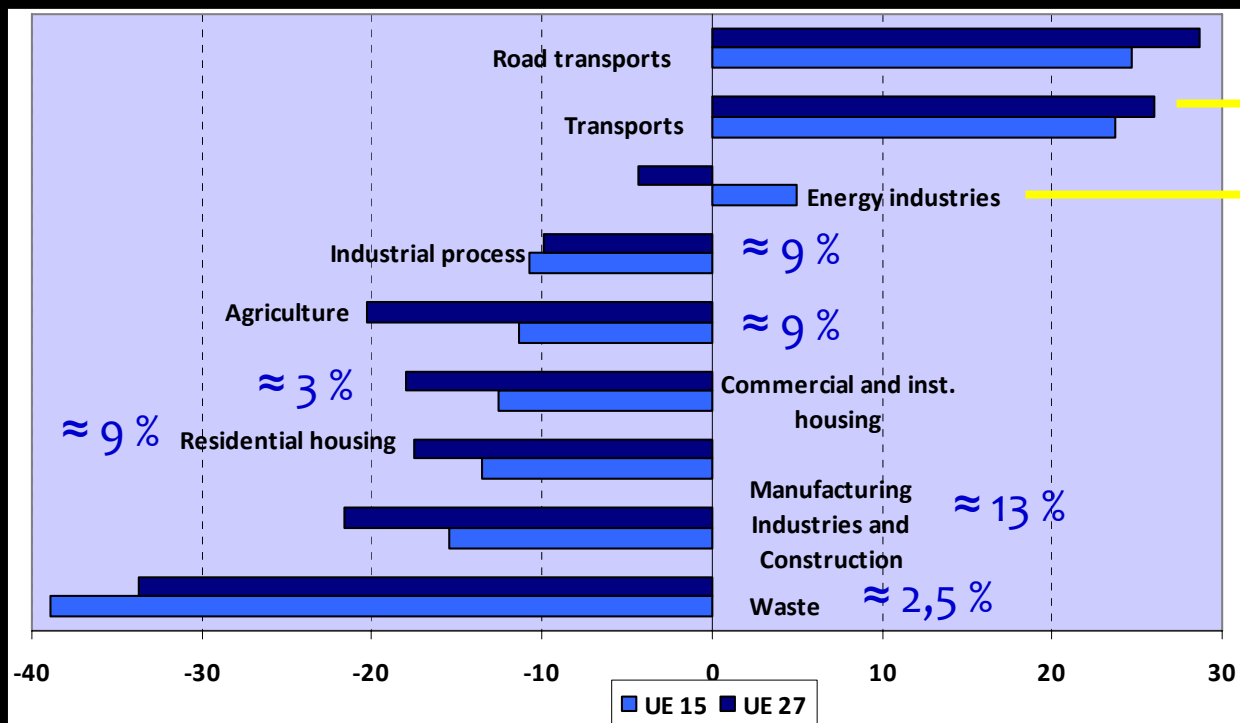


	1990-1999	since 2000
EU 15	-3,2	-1,1
EU 27	-9,2	-0,1

	1990-2000	since 2000
Germany	-16,8	-4,2
UK	-12,6	-4,7

Drivers of emissions

GHG emissions dynamic, 1990-2007, in %

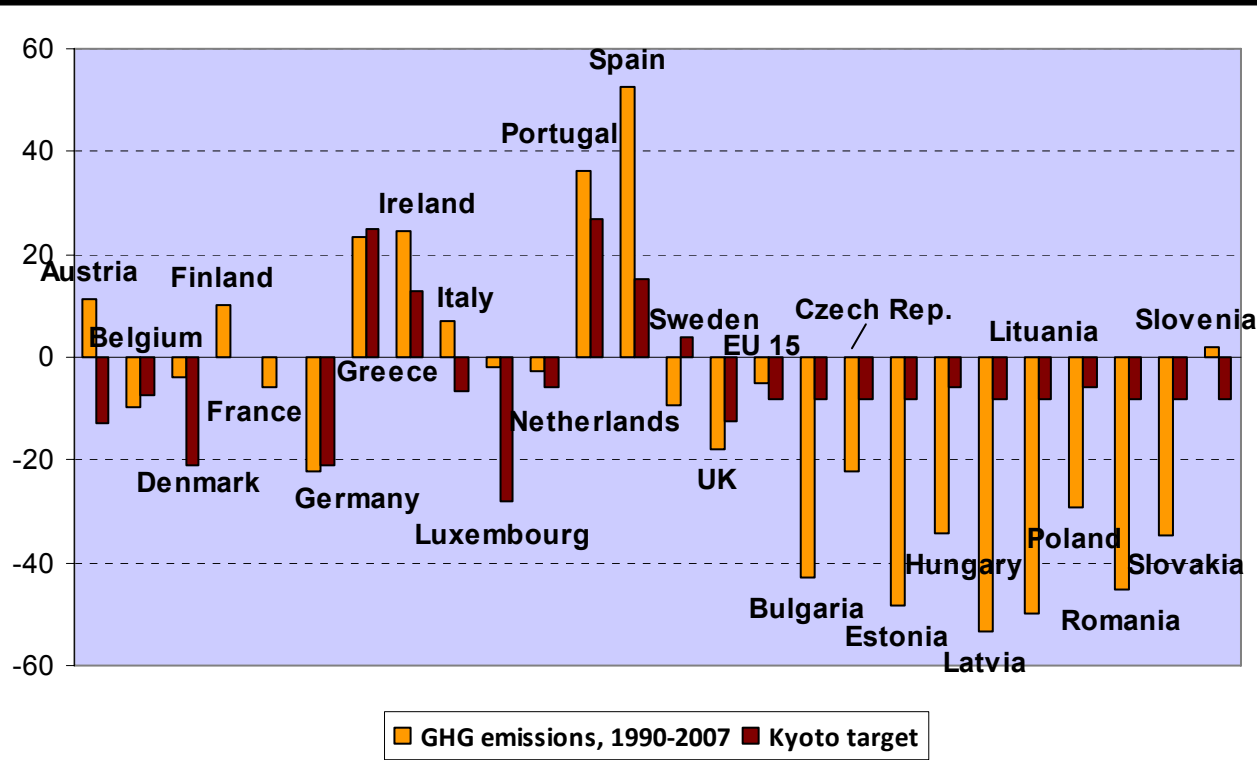


≈ 20 % of total

≈ 30 % of total

Transports emissions = 92%
road transport emissions

Decreasing apart



	Share of EU GHS %	« Kyoto gap »
Germany	19	-
UK	12,6	-
Italy	11	++
France	10,5	-
Spain	8,8	+++
Poland	7,9	---
Netherlands	4,1	+
Romania	3	---
Total	77	



The state of the Union's policies

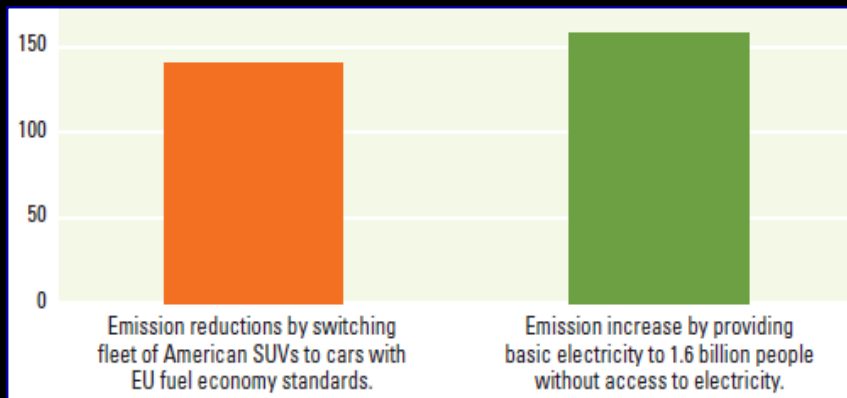
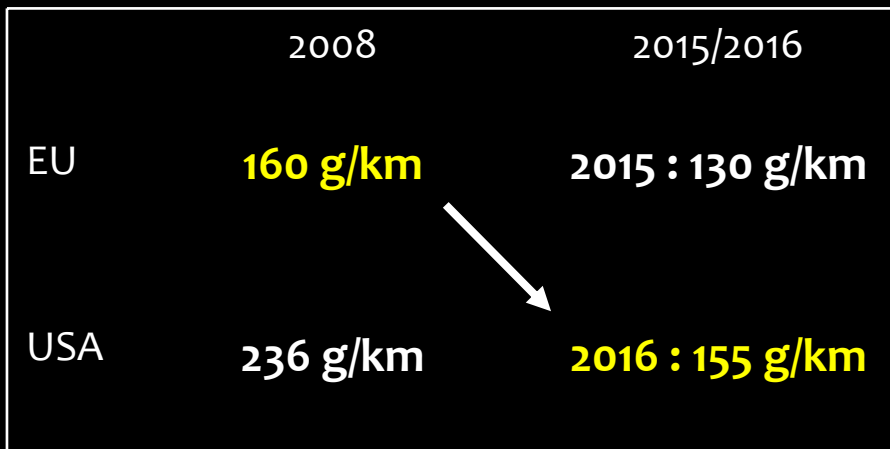
- The centerpiece: EU ETS. 64% of world carbon markets. Volume increased 66% between 2007 and 2008. Covers 40% of EU emissions. Will eventually cover 50%. But price signal too low, unstable + “carbon leakage” and offsets. Not good enough as incentive for “green growth”, not good enough as benchmark for national carbon taxes (e.g. **France: CT = 17€/t** while experts recommended 32 €/t);
 - “Command and control” policy: regulation of light vehicles’ emissions. But can not contain road transportation problem: real problem is volume of traffic, not technological quality of cars (Jevons paradox problem).
 - Carbon taxes at national level: at present too modest to be really efficient, even declining in EU tax systems (never more than 3% of GDP).
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Is the EU ETS ecologically efficient?

- ❑ The “signal” is hard to catch: collapse of 65% between April 18 and May 12 2006, then re-collapse of 75% between July 2008 and February 2009. Too unstable. Fell by 9% after Copenhagen.
- ❑ Biggest quantities bought when prices are lowest: avg. price between 2005 and 2007 = 10,36 euros, but price controlled for volumes = 9,16 euros; same between 2008 and May 2009: 18,96 euros on average, but real price = 13,54 euros. Too low as incentive and benchmark.
- ❑ Overall ecological efficiency: total decrease of emissions by EU ETS sectors = 1,2% since creation. Target for 2020: -21% (-1,75% per year). Too weak an instrument.
- ❑ To make things worse: “carbon leakage” (loose conditions of eligibility) and carbon offsets (up to 50% until 2020) in “climate-energy package” final deal of Dec. 2008 (Poland, Germany, Italy).
- ❑ EU ETS: financial market or public/social market?

The limits of “command and control”

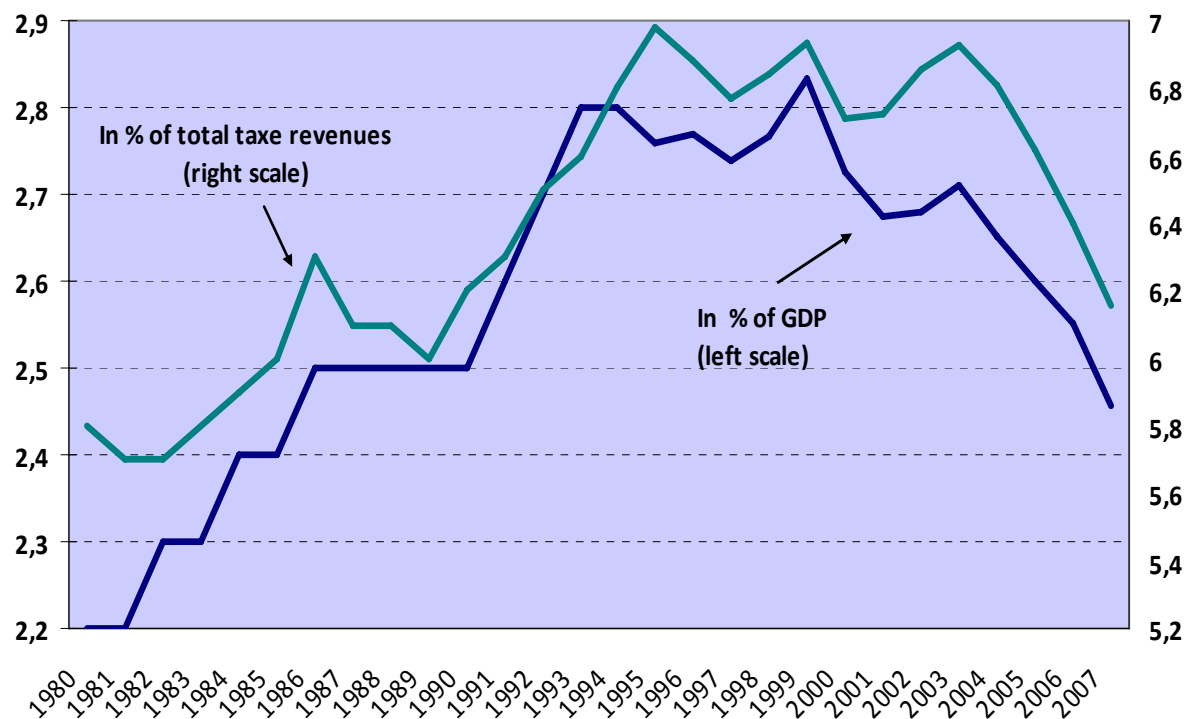


Combustion intensity of road vehicles has improved by 40% in the EU from 1990 to 2005 + carbon intensity is 2% lower. But number of km driven has increased by 100% and number of private cars by 10%. Same evolution with freight: 80% increase in volume, with a decrease of 2% of carbon intensity and 30% of combustion intensity.

So if road transportation is to be kept in check, volumes have to go down.

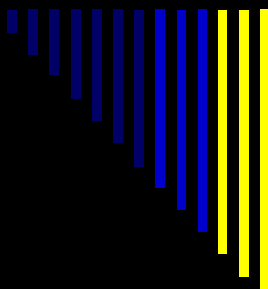
The drift from the « green shift »

Environmental taxation in the EU (wgt'd avg)



Three phases: increase in energy taxes in the early 1980s unrelated to climate change concern; introduction of first « climate change » taxes in early 1990s in Scandinavian countries; decline since, even with the second wave of carbon taxes in early 2000s. Never more than **7% of tax revenues** and **3% of GDP** in the last three decades.

Energy taxes (75% of environmental taxation): 1,8% of GDP in 1980, 2,1% in 1993 and then back to 1,8% in 2007.



Four scenarios towards a better European carbon taxation

- First scenario: “Taxify” the EU ETS: make price more stable and higher. Scrap “carbon leakage” and limit and control carbon offsets. Introduce floor in cap-and-trade (public intervention). Auction all permits faster (3% now, 20% in 2013, 70% in 2020) to pay for adaptation in developing countries (100bn needed annually). **Decision of French CC censuring carbon tax: problem of free permits.** Exclude EU ETS sectors from carbon taxes. Problems: it deals with only half of the emissions problem + international competition.
- Second scenario: Sc.1 + “Climatize” the national tax systems. Convert existing energy taxes into climate change taxes (France, Sweden). European Commission (2007): hybrid national taxes. Problem: multiple prices for carbon + tax competition.



Four scenarios toward a better European carbon taxation

- Third scenario: “European green shift”. Sc.1 + single European Union carbon/energy tax. Problem: institutional feasibility (unanimity required on tax matters). But possibility of “enhanced cooperation” in Lisbon treaty. But still, international competition: carbon tariff (WTO-compatible)?
 - Fourth scenario : European carbon added tax (ECAT). Single carbon price for all goods, not only energy. Problem of technical feasibility on top of institutional feasibility (more difficult than introduction of VAT?). Unlike carbon tariff, ECAT can prevent trade war because integrated tax system: no discrimination between domestic and foreign goods.
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What benefits can we expect?

- Geopolitical. Credibility post-Copenhagen + possibly avoiding “carbon trade war” + ending carbon dependency is good for energy security (Russia : 18% of primary energy of EU, 54% of imports);
- Economic. Raising carbon price is good for “green growth” in the EU. The EU will lead and influence the world (power of the norm, **single market: EU true foreign policy**);
- Democratic. More fairness for EU citizens if climate change is curbed: heat wave in 2003 = over 30 000 people dead in Europe (8th most deadly disaster in the last 30 years, latest estimate: **70 000 dead**);
- Political. For EU itself: new horizon, new institutional laboratory (like ECSC for Rome Treaty)



What scenarios for an EU carbon tariff (on Chinese imports)?

- Two debates : EU carbon tax/EU carbon tariff, but they are related; Need to put things in context; it does not make much sense to be for or against an EU carbon tariff in absolute ;
 - 1st best: ECAT = carbon tax + carbon tariff, WTO compatible, legitimate;
 - 2nd best: Ambitious international agreement in 2010 including China + abolition of “carbon leakage” in EU law. No need to have a carbon tariff;
 - 3rd best: Insufficient international agreement in 2010 + no abolition of “carbon leakage”, but then EU carbon tariff difficult (even if WTO compatible) because China will argue that imports include outsourced GHG emissions from EU; Carbon tariff must be minimal and can still open “carbon trade war”;
 - In other words, EU carbon tariff must be considered in relation to international negotiations, WTO and “carbon leakage”.
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20 more years?

“With the completion of the Internal Market, the European Community will be the biggest economic/trading partner in the world with the potential to exercise an important level of moral, economic and political influence and authority. As such the Community owes it to both present and future generations to put its own house in order and to provide both leadership and example to developed and developing countries alike in relation to protection of the environment and the sustainable use of natural resources.”

“A Community Strategy to limit Carbon Dioxide emissions and to improve energy efficiency”,
European Commission, 1991.
