

Linkages between CORSIA and the Paris Agreement



Linkages between CORSIA and the Paris Agreement

Konrad Raeschke-Kessler

E 1.6: Climate protection projects (CDM/JI DNA/DFP)

German Environment Agency/DEHSt

Berlin, 30 June 2017

The Paris Agreement and its implications for sectoral mitigation activities:

- Long-term target of well below 2°C, efforts for 1.5°C below pre-industrial levels; Art. 4.1: “reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”
- How to raise ambition in all sectors regarding the five year progression cycle?
 - E.g. EU ETS: revision clause to raise the ambition without changing the Directive via full co-decision procedure? E.g. by cancelling any surpluses via the MSR
 - => How to facilitate ambition raising and progression in CORSIA?

From Kyoto to Paris

- Kyoto Protocol, Art. 2.2: „Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.”
- 1/CP.21, para 31 (a): methodologies and common metrics assessed by the IPCC and adopted by the CMA (=> current IPCC guidelines 2006 may be updated); (b): methodological consistency between NDC communication and implementation; (c): Parties strive to include all categories of anthropogenic emissions or removals in their NDCs
- Environmental integrity in the sense of the Kyoto Protocol: a ton is a (QELRO) ton.
- Environmental integrity in the sense of the Paris Agreement: a ton is a ton that is compatible with long-term goals of PA - i.e. a 1.5°C- or 2°C-ton, not a 3°C-, 4°C- or 5°C-pathway-ton (cf. 1/CP.21, para 17)

Aviation emissions: included in inventories, information to track progress of NDCs

- Art. 13.7. Each Party shall regularly provide the following information:
 - (a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases (...)
 - (b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.
- International aviation (bunker fuels) is already now included in UNFCCC inventories (as a memo item)

How will the Global Stocktake influence CORSIA?

- “assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the “global stocktake”). It shall do so in a comprehensive and facilitative manner.”
- First global stocktake 2023, then every five years (unless otherwise decided by the PA parties)
- outcome shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action

Paris Agreement and ICAO as per ICAO 39-2

- Also cf. ICAO resolution 39-2 : “work being undertaken to explore a long term global aspirational goal for international aviation in light of the 2 °C and 1.5 °C temperature goals of the Paris Agreement” (...) “goals of more ambition are needed to deliver a sustainable path for aviation;” noting efforts “to achieve carbon neutral growth from 2020 and to reduce its carbon emissions by 50 per cent by 2050 compared to 2005 levels”
- ICAO Council to “ensure that ICAO exercise continuous leadership on environmental issues relating to international civil aviation, including GHG emissions” and to “continue to cooperate with (...) UNFCCC COP”

Paris Agreement mechanisms as a source of emissions units for CORSIA

- Internationally recognised standards and reputation (Art. 6.1: cooperation in NDC implementation to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity; Art. 6.2: ensuring environmental integrity; Art. 6.4: aiming for an overall mitigation of global emissions)
- Article 6.4 mechanism is being designed, inter alia, as an instrument to enable climate neutrality for products, services, subnational entities (e.g. cities or regions) or entire countries (e.g. Norway, Sweden) or for the partial climate neutrality for sectors (such as aviation and its climate-neutral growth from 2020 onwards), i.e. a stepping-stone on the way towards a balance between GHG emissions and removals in the second half of the century

Summary

- CORSIA participation is (explicitly or implicitly) part of NDCs
- Global stocktake and progression of NDCs will influence CORSIA reviews
- Art. 6.4 and 6.2 PA may provide sources of emissions units for CORSIA
- CORSIA could be qualified as a cooperative approach in the sense of Art. 6.2 PA

Thank you for your attention!

Konrad Raeschke-Kessler

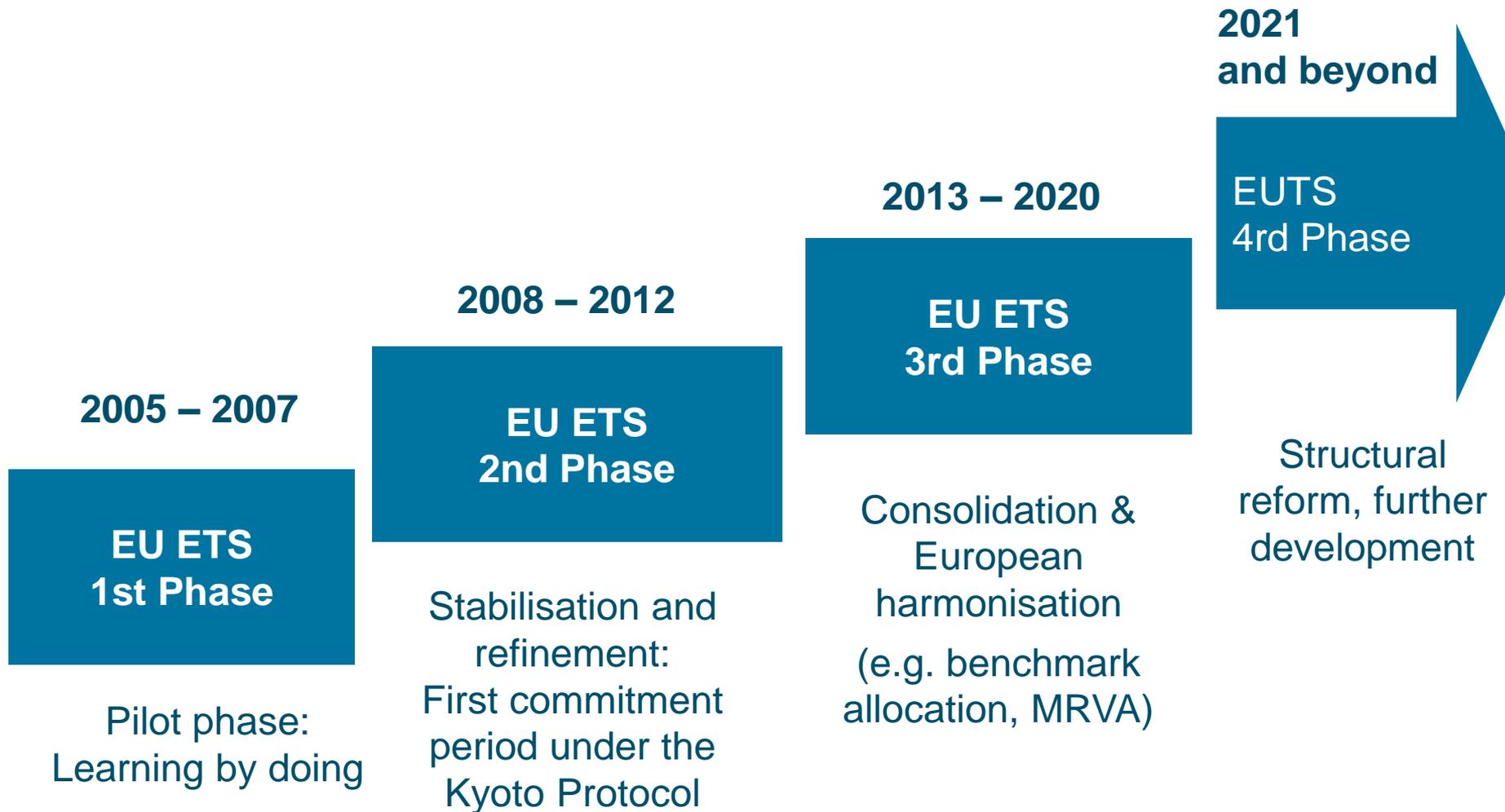
E-Mail: German.dna.dfp@dehst.de

Internet: www.dehst.de

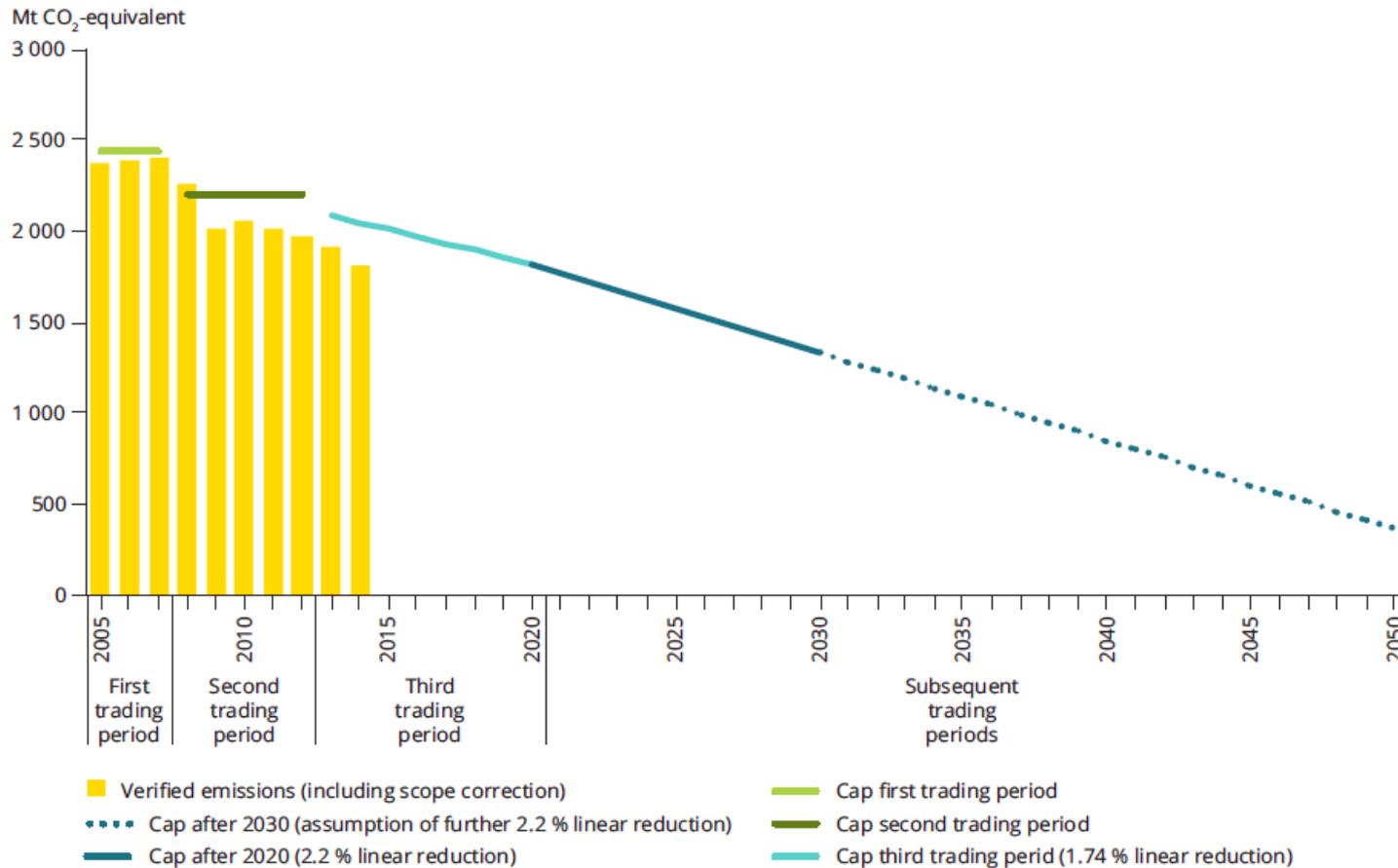
ICAO decision 39-3

- Whereas the UNFCCC and the Paris Agreement provide for mechanisms, such as the Clean Development Mechanism (CDM) and a new market mechanism under the Paris Agreement, to contribute to the mitigation of GHG emissions to support sustainable development, which benefit developing States in particular;
- Welcoming the cooperation between the United Nations Framework Convention on Climate Change (UNFCCC) and ICAO on the development of CDM methodologies for aviation;
- CORSIA “does not set a precedent for or prejudice the outcome of negotiations under the UNFCCC, the Paris Agreement, or other international agreements, nor represent the position of the Parties to the UNFCCC, the Paris Agreement, or other international agreements;”
- “Criteria for emissions units shall be regularly reviewed to ensure their compatibility with decisions taken under the Agreement”

EU ETS learning curve

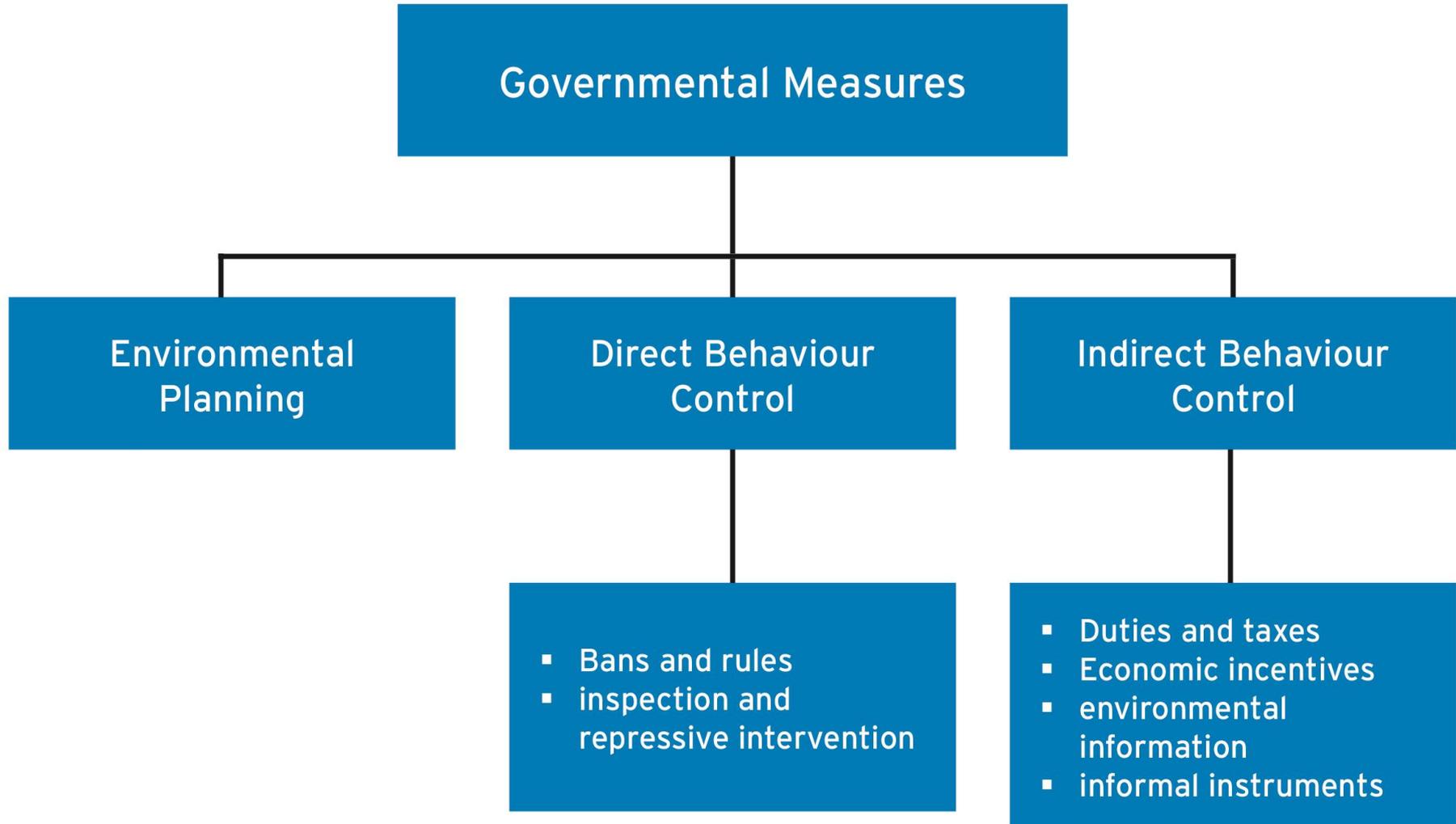


EU-ETS emissions and the EU 2050 roadmap



Source: EEA, 2015d.

Getting from reduction potentials to actual reductions: The Policy Toolbox



Indirect measures including economic incentives

Indirect Behaviour Control

Economic Incentives

- Schemes of certificates (emissions trading)
- duties and taxes
- price settings
- contract placing

Informal Instruments

- Commitments
- Recommendations
- Warnings

- Environmental information
- Environmental auditing (EMAS)

The Policy Mix for Carbon Emissions: management by objectives and/or by incentives and barriers

- Macro management: **quantitative limits** for emissions leading to long-term reduction goal (2° target) broken down to economic sectors directly (e.g. ETS), leaving details to the market. Issues to consider:
 - Sufficiently ambitious mitigation targets (embodied in caps)
 - Sufficiently steady internalization of external costs (predictable price signal, investment certainty)
- Micro management: influence **specific economics** of activities involving emissions in order to reach quantitative objectives indirectly. Issues to consider:
 - potentially incomplete / asymmetric information on effects
 - How to ensure transparency
 - How to tap potential of markets to assess information and to innovate

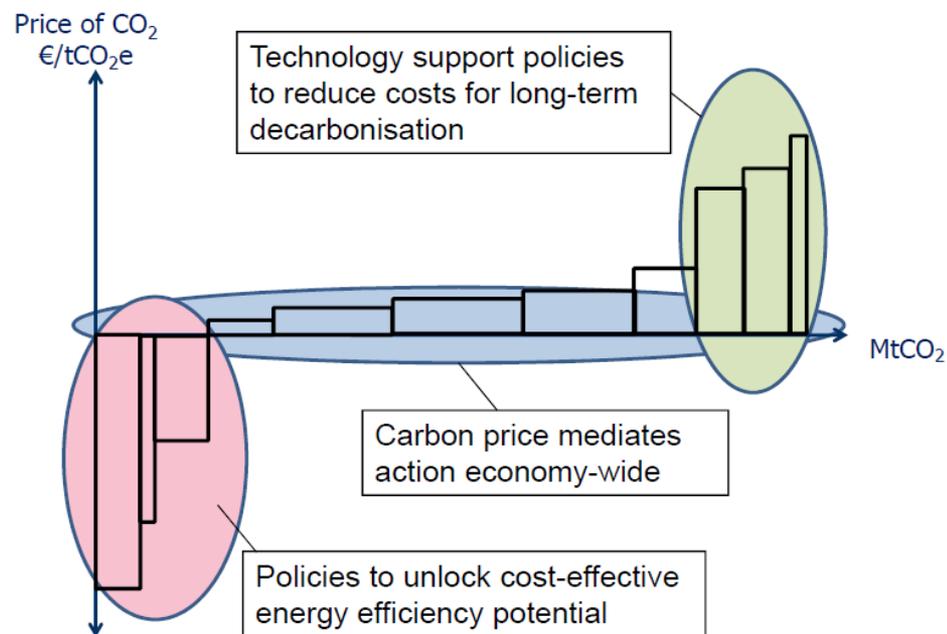
The Policy Mix for Carbon Emissions: management by objectives and/or incentives and barriers

- Manage **specific economics** of activities involving emissions
 - Introducing incentives for low-carbon-activities (e.g. price-based instruments such as feed-in tariffs; subsidies)
 - Removing disincentives / economic barriers for low-carbon activities (e.g. taxes on low-carbon products)
 - Removing incentives for carbon-intensive activities (e.g. scrapping fossil-fuel subsidies)
 - Introducing disincentives / economic barriers for carbon-intensive activities (e.g. specific greenhouse gas taxes)
- Remove **non-economic barriers** for low-carbon activities; e.g. Informational barriers (by product labelling / online tools / info campaigns...), legal barriers (e.g. safety standards for solar panels on buildings instead of general prohibition)
- Introduce **non-economic barriers for specific high-carbon / obligations for specific low-carbon activities** (e.g. fuel quality standards, fuel use prescriptions (e.g. CNG use obligations for certain vehicle types))

Optimizing the Policy Mix: choosing a viable combination of measures

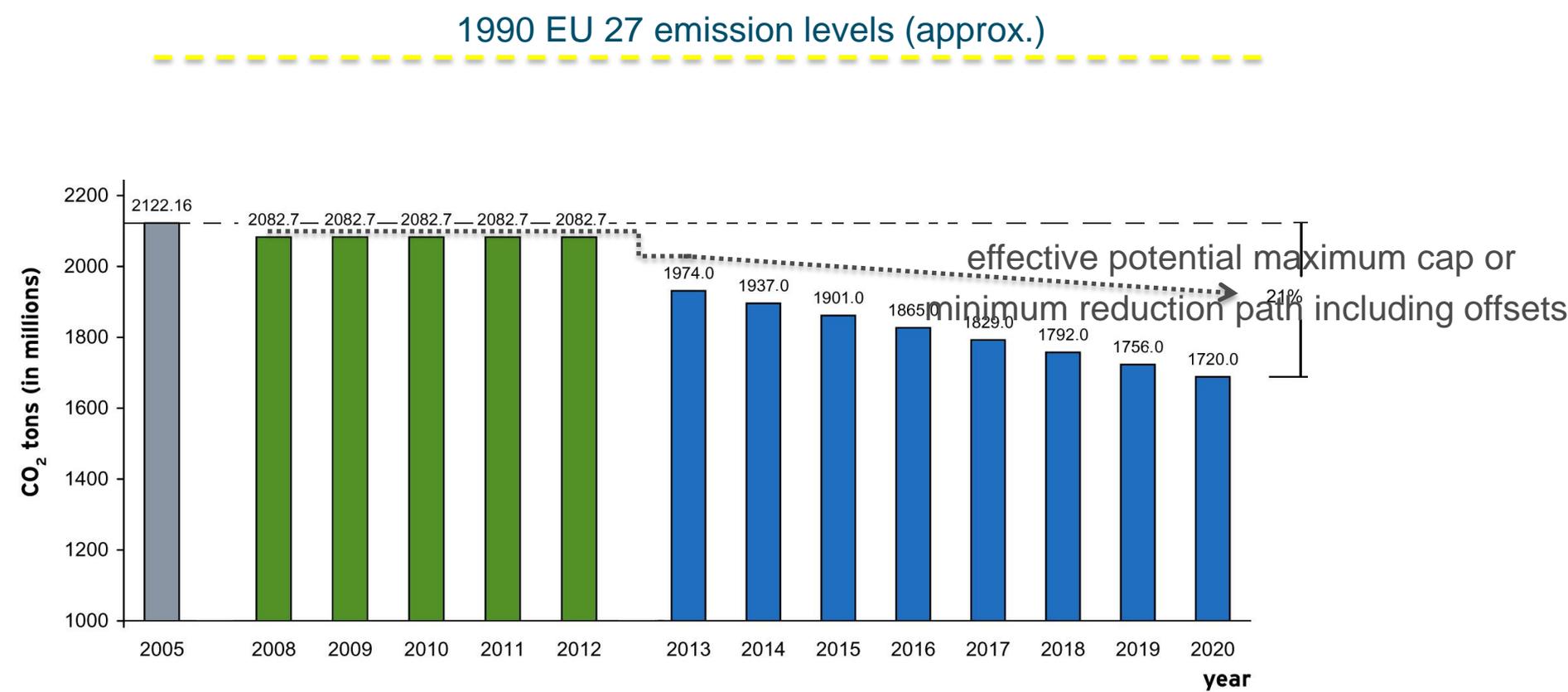
- As usual: no “silver bullet”
- An ETS can be combined with other instruments of climate policy (e.g. promotion of renewable energies, greening of the tax system, efficiency standards)
- Regarding effects of other instruments on the capped emissions, e.g. on the high end of the cost curve (bringing down long-term overall reduction costs) and the low end of the cost curve (addressing non-economic barriers), the cap needs to be adjusted to harmonize the instruments

Figure 1 The core policy mix: a carbon price, energy efficiency and technology policies



source: Summing up the Parts (IEA, 2011)

Effects of Offsets for the EU ETS Cap until 2020



-21% by 2020 compared to 2005,
 Supplimentarity: offset use limited to 50 % of the reductions compared to 2005
 (i.e. only approx. 15 to 25 % of the reductions compared to 1990 => 75 % to 85 % percent of reduction effort happen domestically inside of the EU)