Free allocation - lessons learned from the EU

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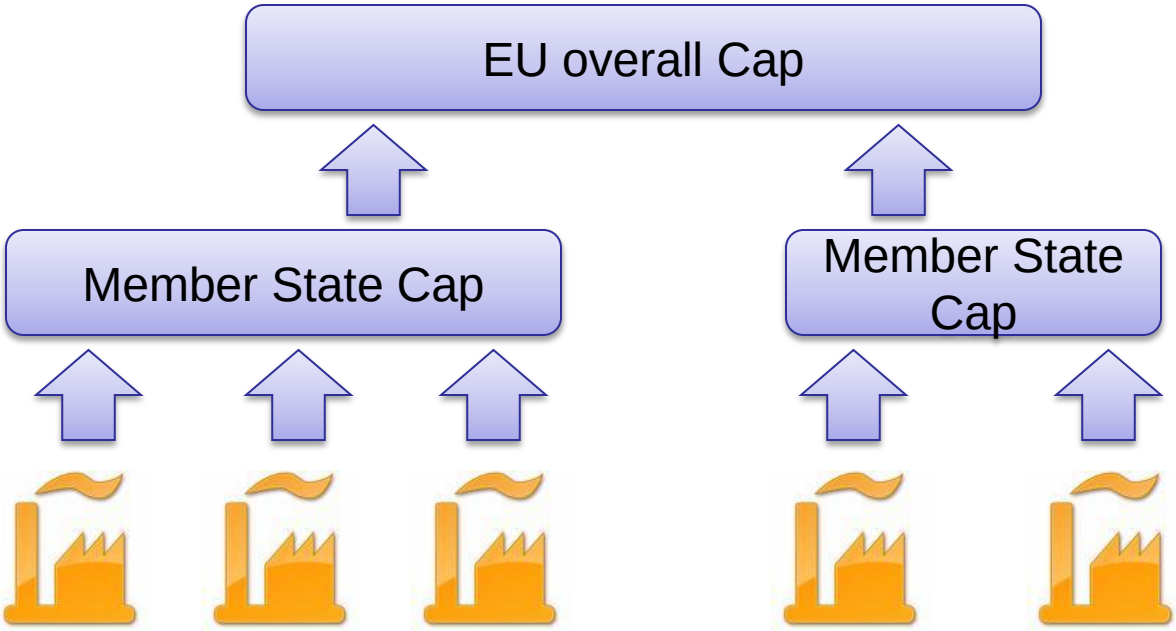
Phase I
2005-2007

Phases I & II – bottom-up approach to cap setting

- Member States set allocation to individual installations in National Allocation Plans (NAPs)
- The total of all allocations in each country sets the national level cap
- Aggregate of emissions in NAPs sets the overall cap at EU level



Phase I allocation

- Allocations determined by each Member State – set out in individual National Allocation Plans (NAPs)
- Allocations based on historical sector emissions, with growth projections
- Power Sector allocated fewer allowances (~95%): though passed through costs
- New Entrant Reserves administered by Member States
- Option for Member States to allocate annually or in one single allocation for the entire three years of Phase I

Phase I
2005-2007

Phase II
2008-
2012….

Phase II allocation

- Allocations again determined by each Member State in – National Allocation Plan, but with rigorous scrutiny by European Commission
- Introduction of auctioning (7% in UK; ~3% across EU) => reduction in overall level of free allocation
- Power Sector received less allocation than Phase I.
- Allocations based on verified historical sector emissions, with growth projections
- New Entrant Reserve set at Member State level, 6.6% of cap in UK

Lessons learned from Phases I & II

- Over-allocation will reduce the Carbon price, reducing the incentive to reduce emissions

- Allocation based on historical emissions is administratively simple => useful to bring industry on board – **but…**

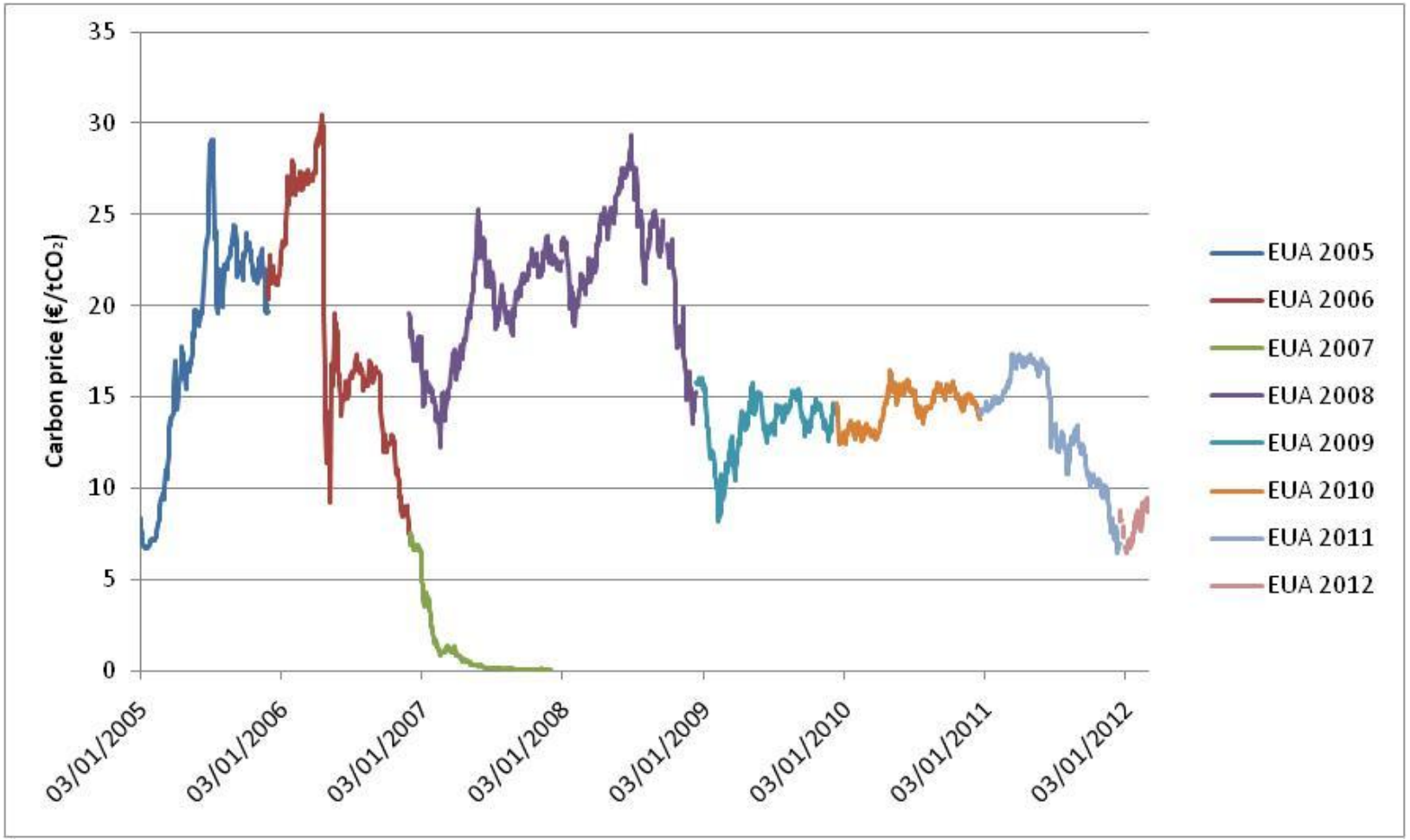
  …the approach reduces the incentive to abate emissions in long term

- The more free allocation, the less revenue from auctioning

- Some sectors (especially power sector) can pass through costs, even with free allocation

- Maintain transparency of the New Entrant Reserve to remove barriers to investment

Phase II – EUA price following market fundamentals

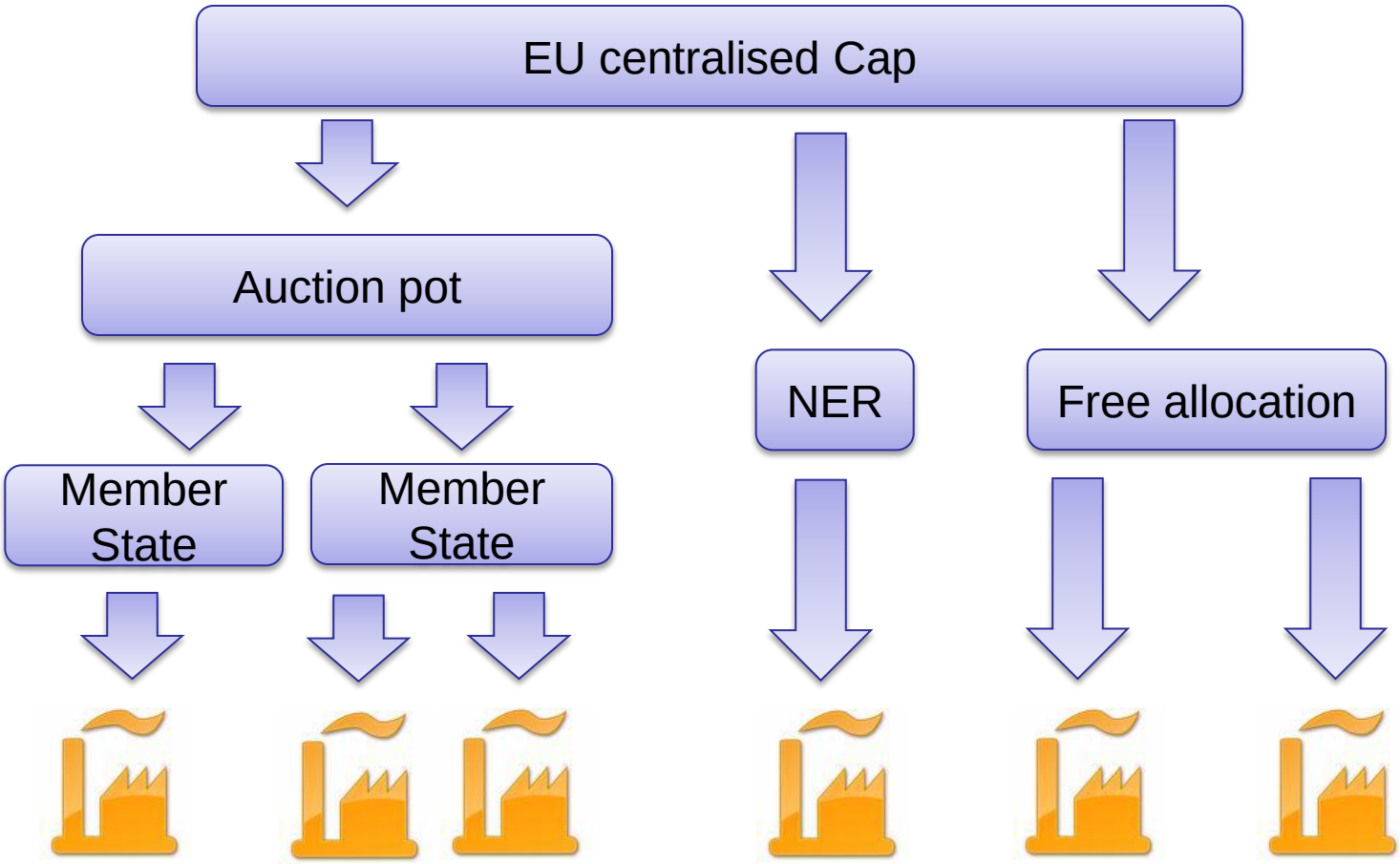


Phase I
2005-2007

Phase II
2008-2012

Phase III
2013-
2020.....

Phase III – top-down approach to cap-setting and harmonised allocation



Phase III allocation
… fundamental changes

- Allocations determined by single EU-wide rules, fixed over the Phase
- Based on greenhouse gas efficiency benchmarks => rewards early action taken to abate emissions
- Decrease in level of allocation over 2013-2020, except for sectors at risk of Carbon Leakage as temporary measure
- Commitment to end free allocation by 2027
- No allocation to power sector (100% auctioning), although some allowed to fund modernisation in some Member States
- Significant increase in auctioning across the ETS as a whole (~50%)
- Single EU New Entrant Reserve, 5% of the cap, with harmonised procedures for application
- Deduction in allocations for reductions in capacity and activity

Two difficult discussions

- Which sectors are at risk of carbon leakage?
- How do we set the benchmarks?

Carbon Leakage

"production locates outside the EU as a result of the carbon price"

- Big issue for many Member States in the absence of globally-binding agreement.
- Real risk, but considered by many to be over-stated (UK research showed just 7 sectors in UK at risk of leakage, responsible for <1% GDP).
- General view: the ETS Directive has right criteria, but loose thresholds
- Quantitative and qualitative criteria
- 167 sectors 'at risk' - reviews planned 2014 and 2019.

How to set benchmarks

- Required data on greenhouse gas efficiency from industry
- 52 “Product benchmarks” set as the average of top 10% performers in a sector
  (=> ~95% of installations fall below benchmark)
- An example: Ammonia NH_3 = 1.619 allowances / tonne of production
- Benchmarks consistent across EU
- Where a benchmark was not possible, alternative benchmarks based on heat or fuel
- Installation’s allocation = benchmark x historical production

Lessons learned

- New data required to determine benchmarks, not previously held by Member States – a heavy reliance on industry sectors to provide data
- Fundamental change in approach from Phases I and II – required effort to ensure common and consistent understanding
- Providing data was a burden on installations
- Great value in having a harmonised set of rules => though have to ensure are applied consistently
- All data require third-party verification to prevent manipulation
- Industry lobbying on benchmark values => through finite limit on overall allocation minimised this

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END

Further detail …

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Further reading

- European Commission's benchmarking pages: http://ec.europa.eu/clima/policies/ets/benchmarking/documentation_en.htm
- European Commission's pages on Carbon Leakage http://ec.europa.eu/clima/policies/ets/leakage/index_en.htm
- UK Phase I information: http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/phase_1/phase_1.aspx
- UK Phase II information: http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/euets_phase_ii/euets_phase_ii.aspx
- UK Phase III information: http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/phase_iii/phase_iii.aspx

What are the Phase III benchmarks?

1. 52 Product benchmarks
2. Heat benchmarking (62.3 allowances/TJ heat consumption or export)
3. Fuel benchmarking (56.1 allowances/TJ fuel consumption)
4. Process emissions approach (0.97 allowances/tCO_2 process emissions)

- Product benchmarks include:

  iron, steel, cement clinker, nitric acid, paper, bricks, lime, coke, aluminium…

- Installations covered by more than one benchmark are broken into sub installations => total allocation is sum of sub-installations

Levels of allocation in Phase III

- Power sector
  - no free-allocation (except to allow for modernisation of infrastructure in Eastern Europe)

- Industry not exposed to Carbon Leakage
  - 80% of benchmark 2013

    … decreasing to…
  - 30% of benchmark 2020

- Industry exposed to carbon leakage
  - 100% of benchmark

Phase III allocation rules

- Allocation for each installation is determined on production in a baseline (either 2005-08 or 2009-10)
- Complexities include:
  - Heat transferred between different installations
  - Changes in production capacity during the baseline
- Once determined, allocations can only be increased if the installation increases production capacity >10%
- Allocations can be reduced if production capacity is reduced, or if production decreases

Phase III New Entrant Reserve

- “First come first served” – to prevent speculative applications (i.e. applications before installations are built)
- Allocation determined via benchmarks coupled with production over an initial phase of production
- Centrally administered
- Once 50% of allowances depleted, consideration of a queuing system to ensure sufficient allowances throughout Phase.
- Any remaining allowances will be auctioned.

Phase I EU ETS – market response to over allocation – learning by doing