

Combining carbon pricing with supplementary policies: the IEA's approach



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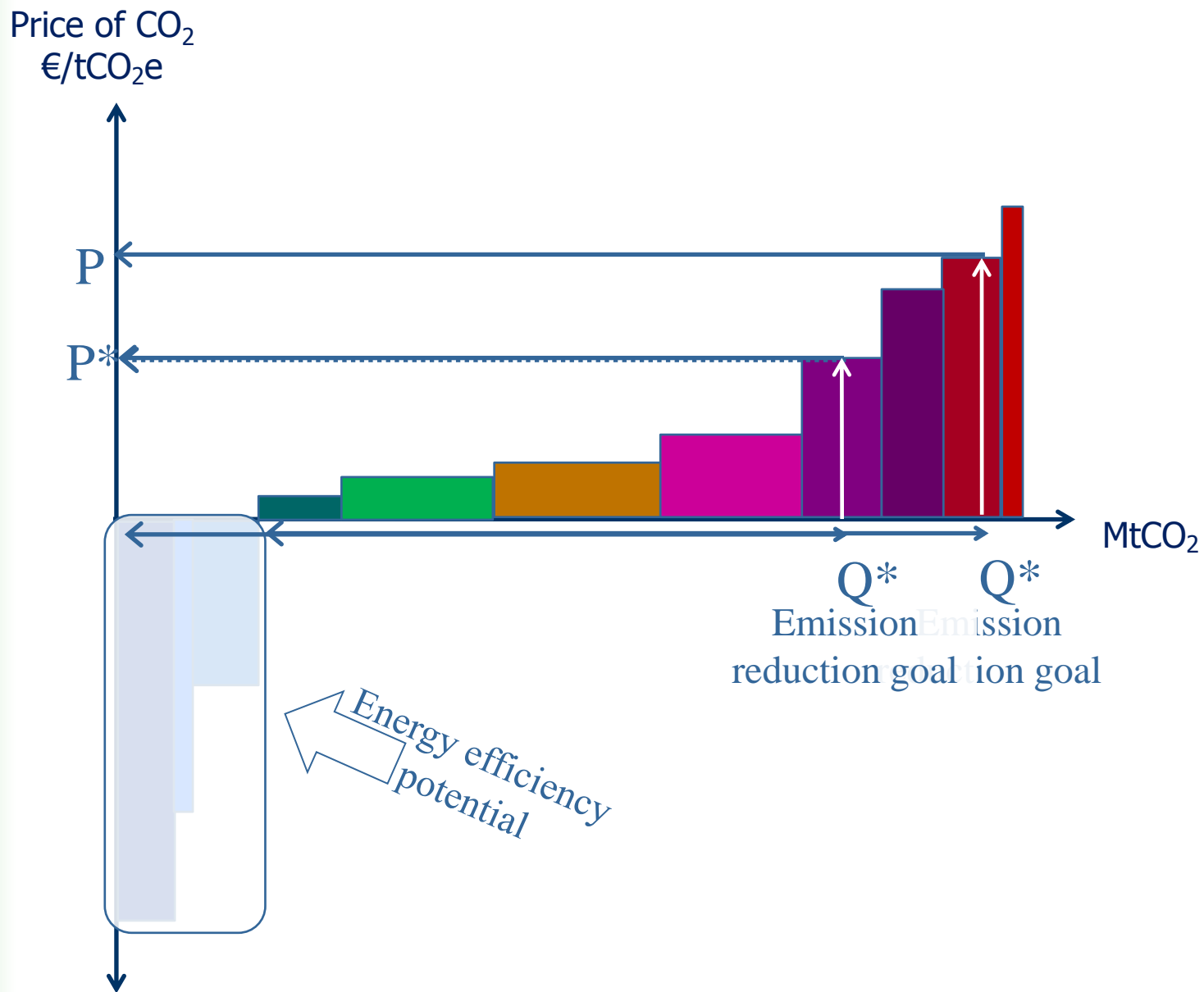
18 March 2013

Outline

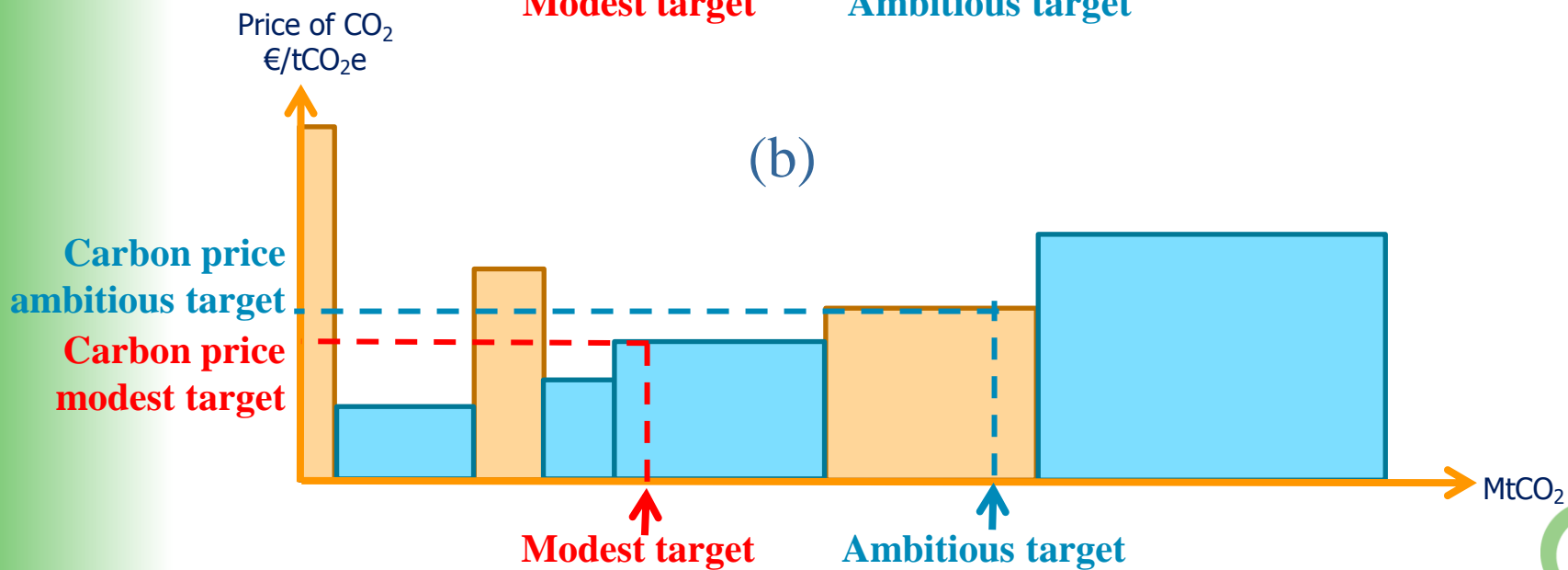
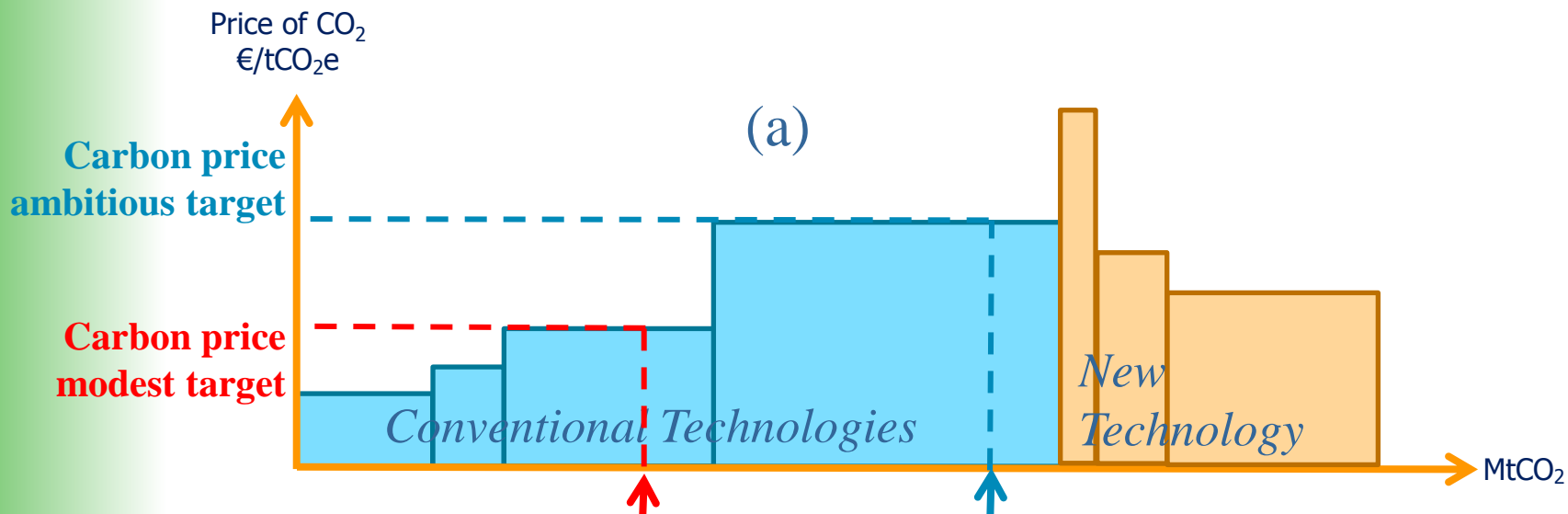
- Justifications for supplementing a carbon price
- how supplementary policies interact with carbon pricing
- Managing these interactions

➔ *To enable least-cost climate mitigation policy*

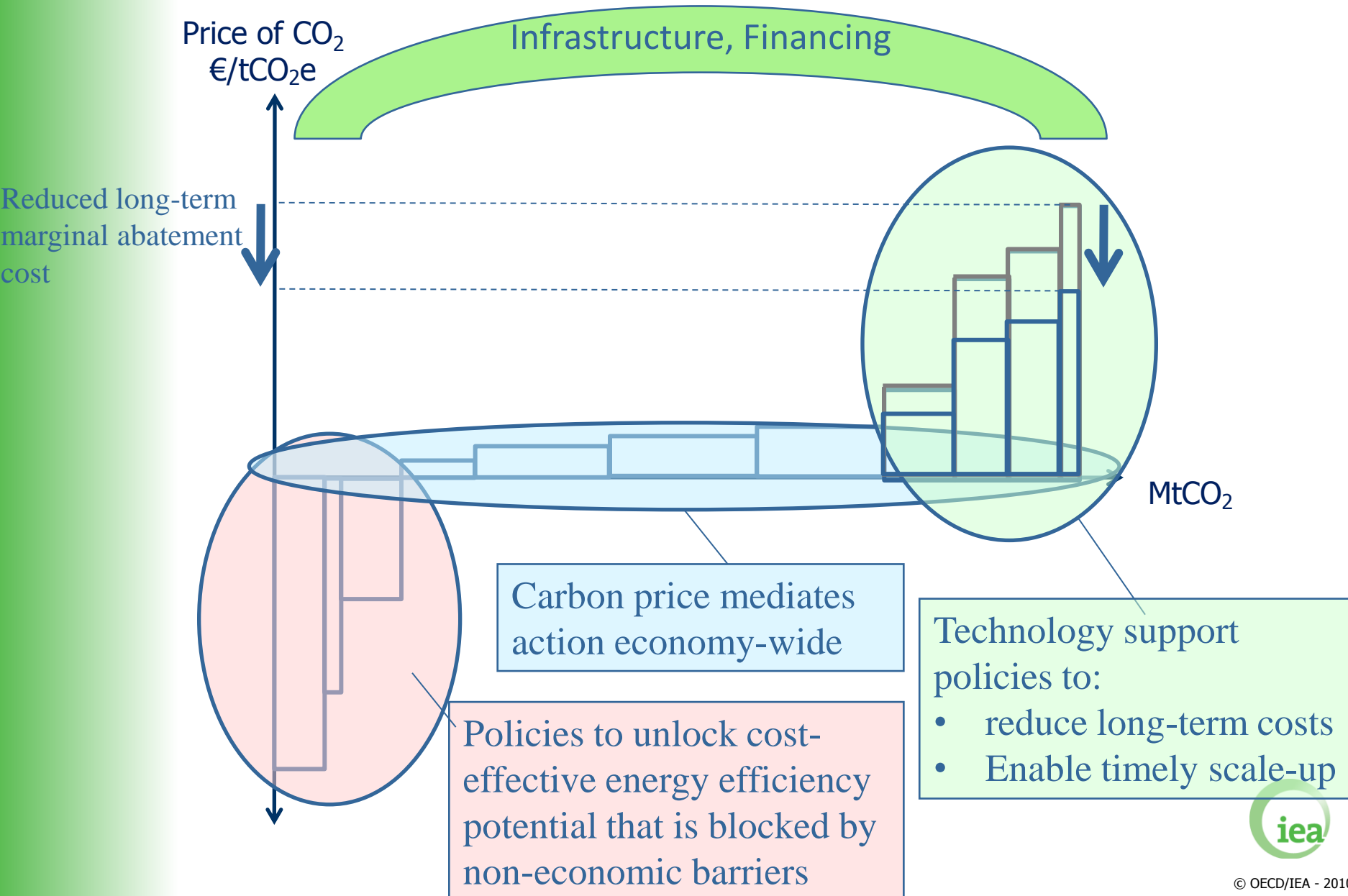
Supplementing with Energy Efficiency Policies



Technology support *can* lower long-term carbon prices



From MACC curves to policy packages



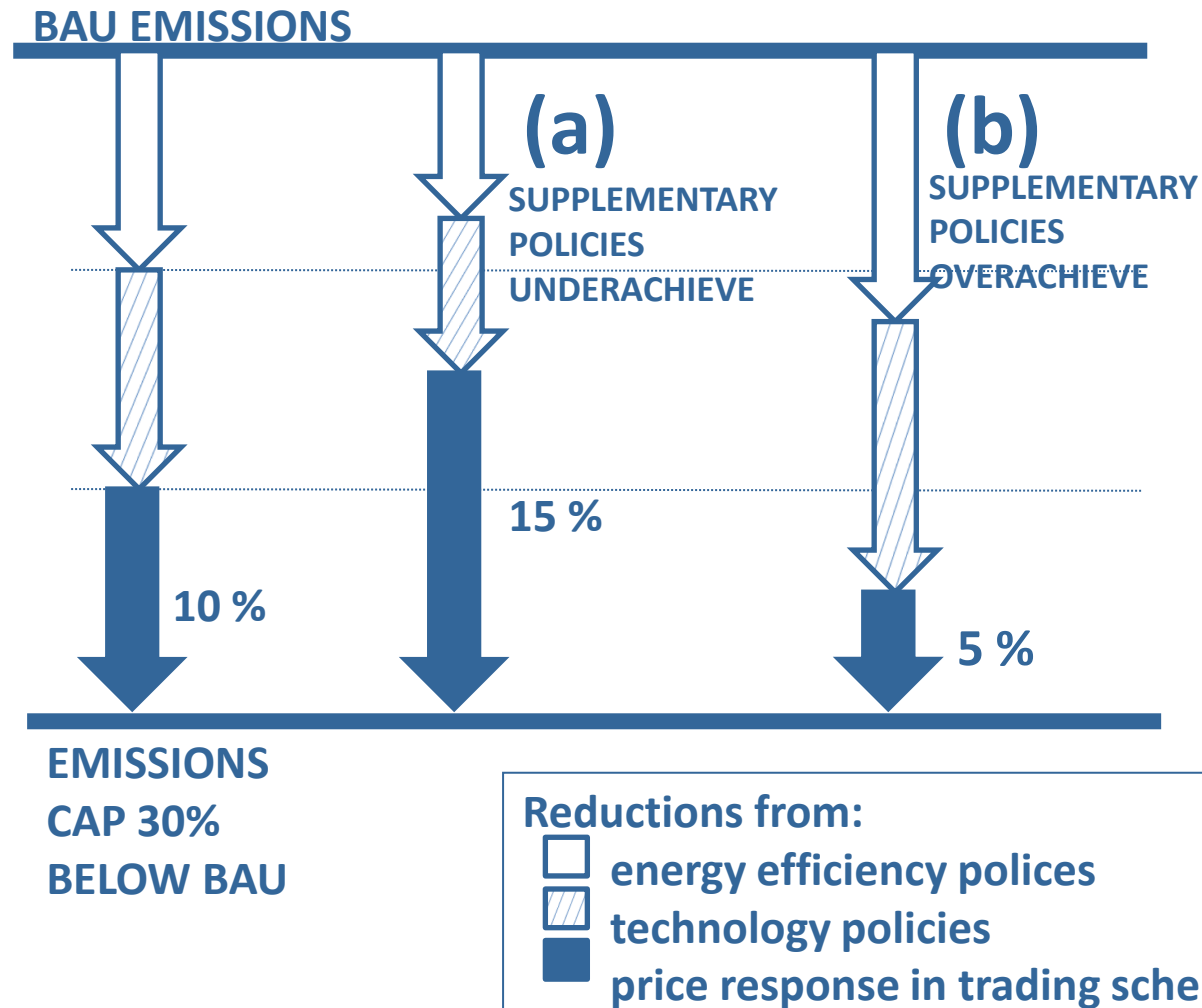
Further supplementary policies?

There is a trade-off between the benefits of early action in reducing the cost of the decarbonisation transition, and the potential to undermine the carbon pricing policy.

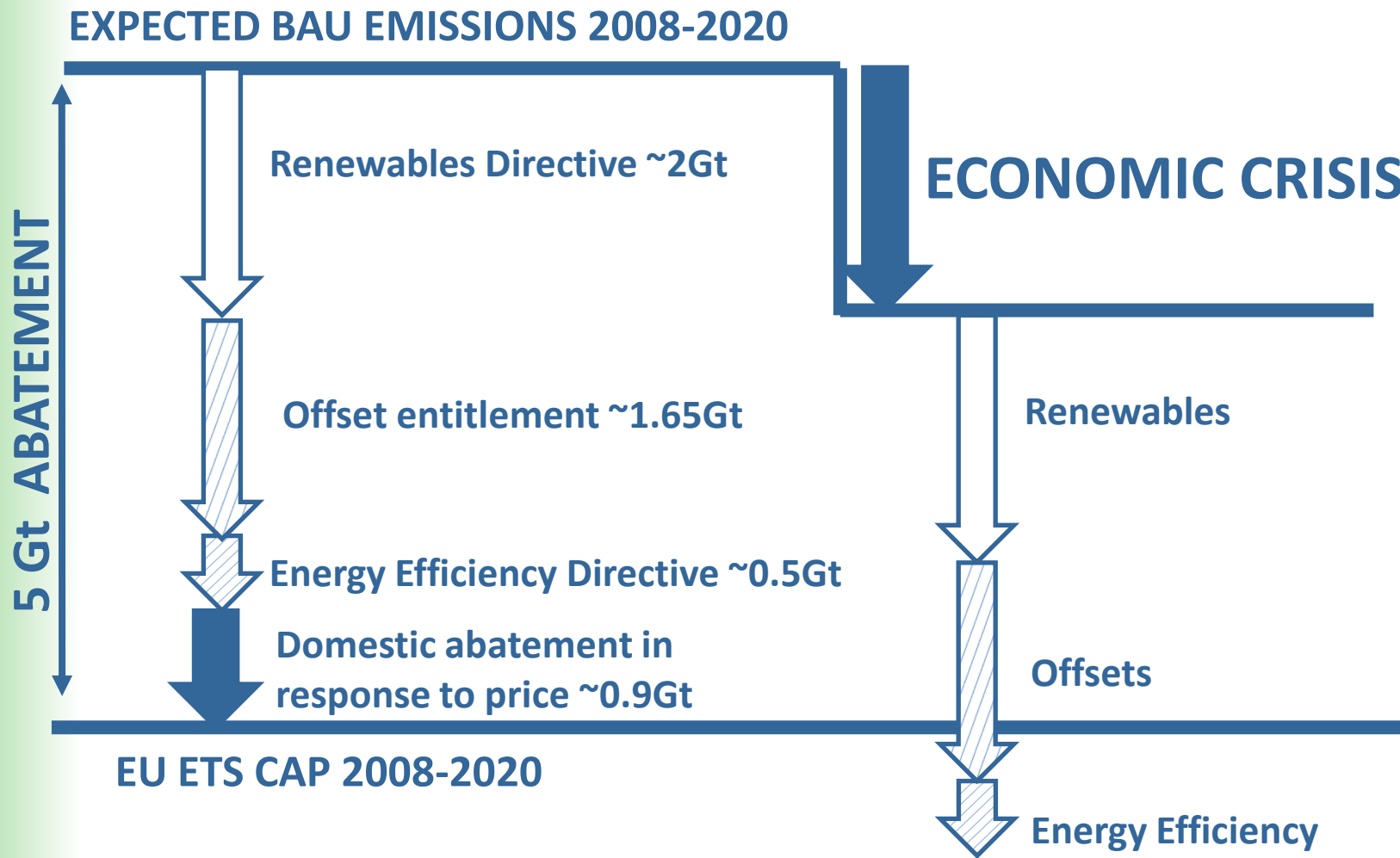
Key issue: lock-in of long-lived infrastructure

Policies interact, so design as a package

e.g. Carbon price level depends on supplementary policy delivery



e.g. Carbon price level more sensitive to economic conditions with supplementary policies [2008 EU Package]

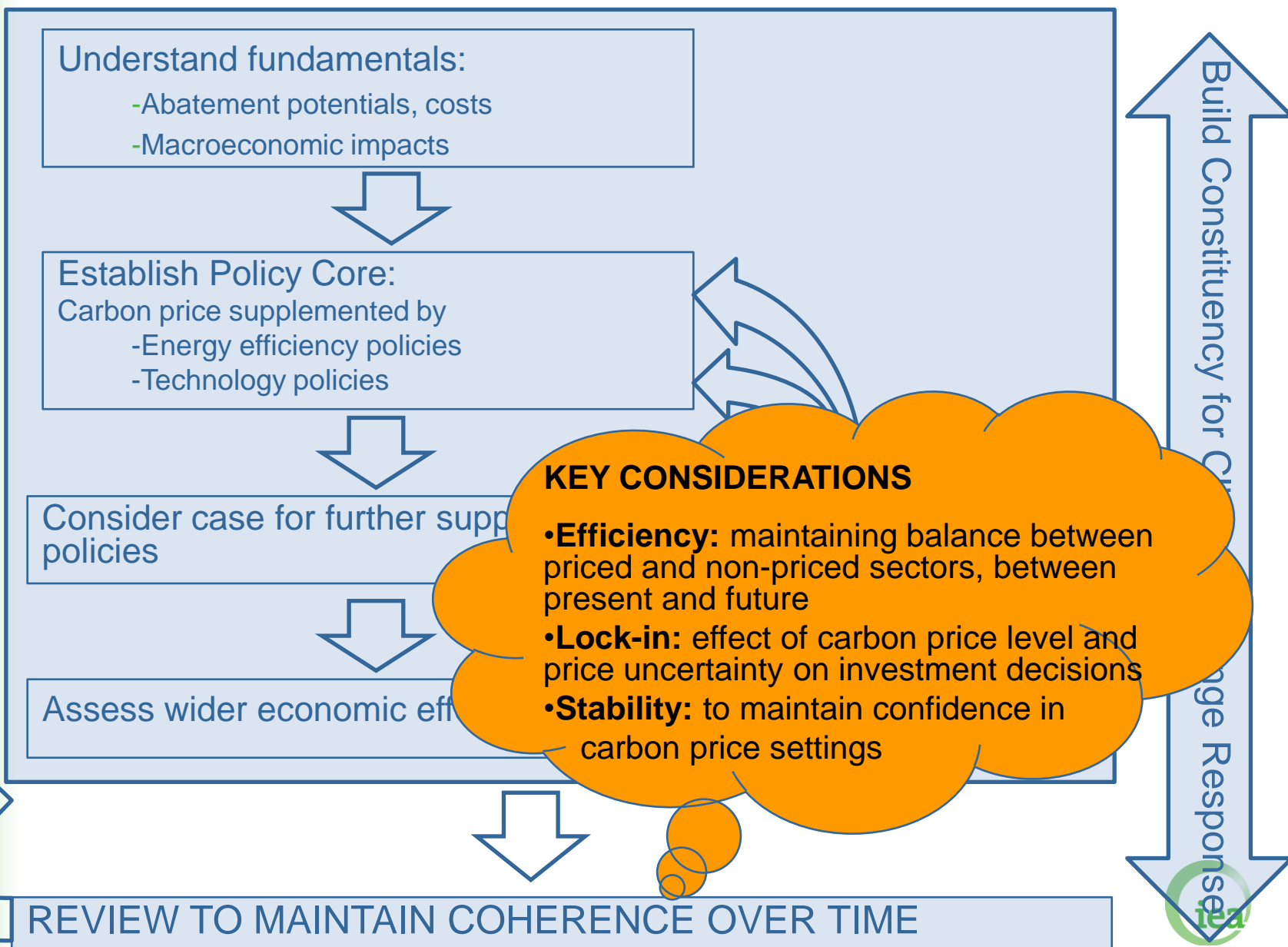


Data Source: *Energy Efficiency, renewable energy and CO2 allowances in Europe: a need for coordination*, CDC Climat ClimateBrief No18, Nicolas Berghmans

Policy interactions with a carbon tax:

- Policy interactions not as severe, as carbon price does not respond automatically to supplementary policy delivery or economic conditions
- Cost-effective supplementary policies give:
 - More abatement for a given tax level, or
 - Lower required tax level for a given abatement target.
- Can be strong interaction if carbon tax is adjusted to meet climate targets/carbon budgets

The Policy Process



Lessons:

- Design carbon price and complementary policies as integrated package
 - Including impact of other regulations such as for conventional pollutants
- Give the carbon pricing policy room to function
- Design complementary policies for certainty of emissions reductions
- Build in reviews/adjustment mechanisms

Questions:

- How to balance maximising cost-effective abatement vs. having a simpler, easier to manage package ?
- Why only renewables – what other key technologies to bring forward (CCS)?
- What kind of ongoing review or adjustment mechanism to keep package aligned over time?
- Can the carbon price alone provide sufficient certainty for investment (and retirement) – and if not, what?
- How to manage interactions between complementary policies and electricity markets?

Thank you

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