Interactions between supplementary policies and emissions trading systems

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Outline

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

➡ *To enable least-cost climate mitigation policy*

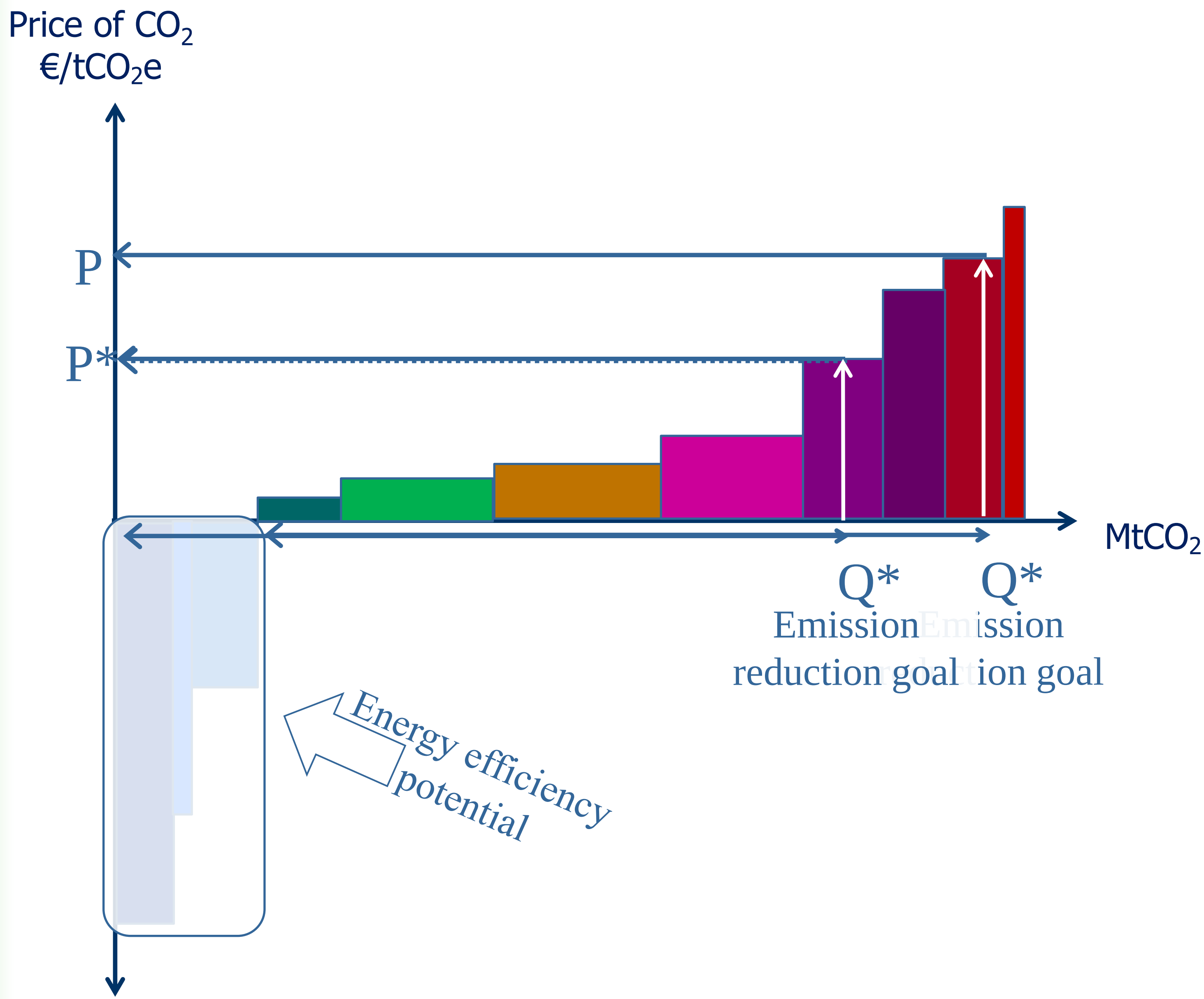
IEA work on policy combinations and policy interactions:

Conclusion 1:

Carbon pricing, supplemented by energy efficiency and technology policies to improve its short and long term efficiency are the "core" policies in a least-cost climate mitigation package.

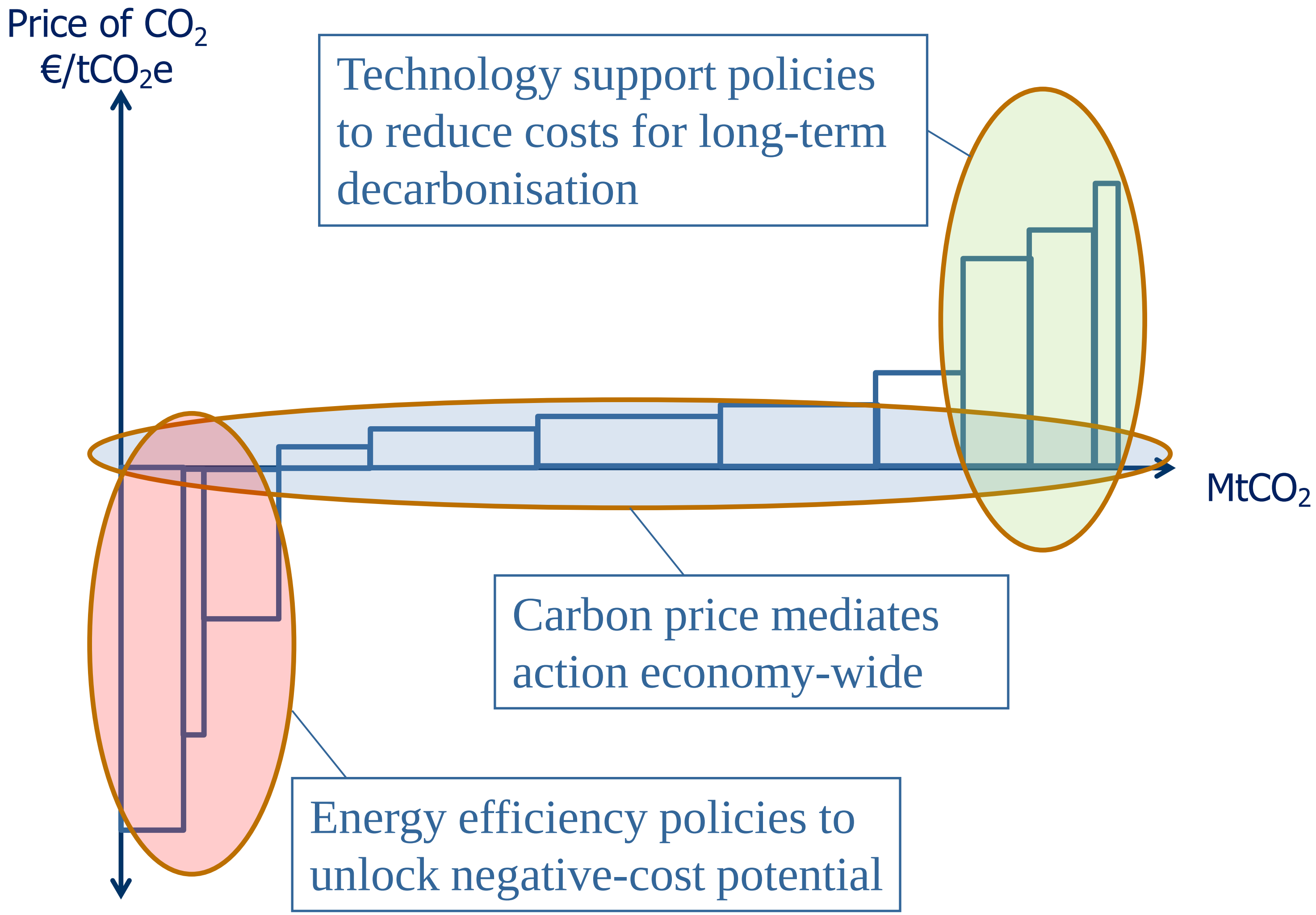
Without these supplementary policies, a higher carbon price than necessary would result now and in the future

Supplementing with Energy Efficiency Policies



Conclusion 2:

In addition to direct implementation costs of the policy package, macro-economic impacts (for example of energy price rises and the positive impacts of recycling carbon pricing revenue) and the distribution of costs should be considered.


Price of CO_2
€/tCO_2e
Technology support policies to reduce costs for long-term decarbonisation
$MtCO_2$
Carbon price mediates action economy-wide
Energy efficiency policies to unlock negative-cost potential

Conclusion 3:

The case for further supplementary policies (for example to bolster a modest or uncertain carbon price) is more complex.

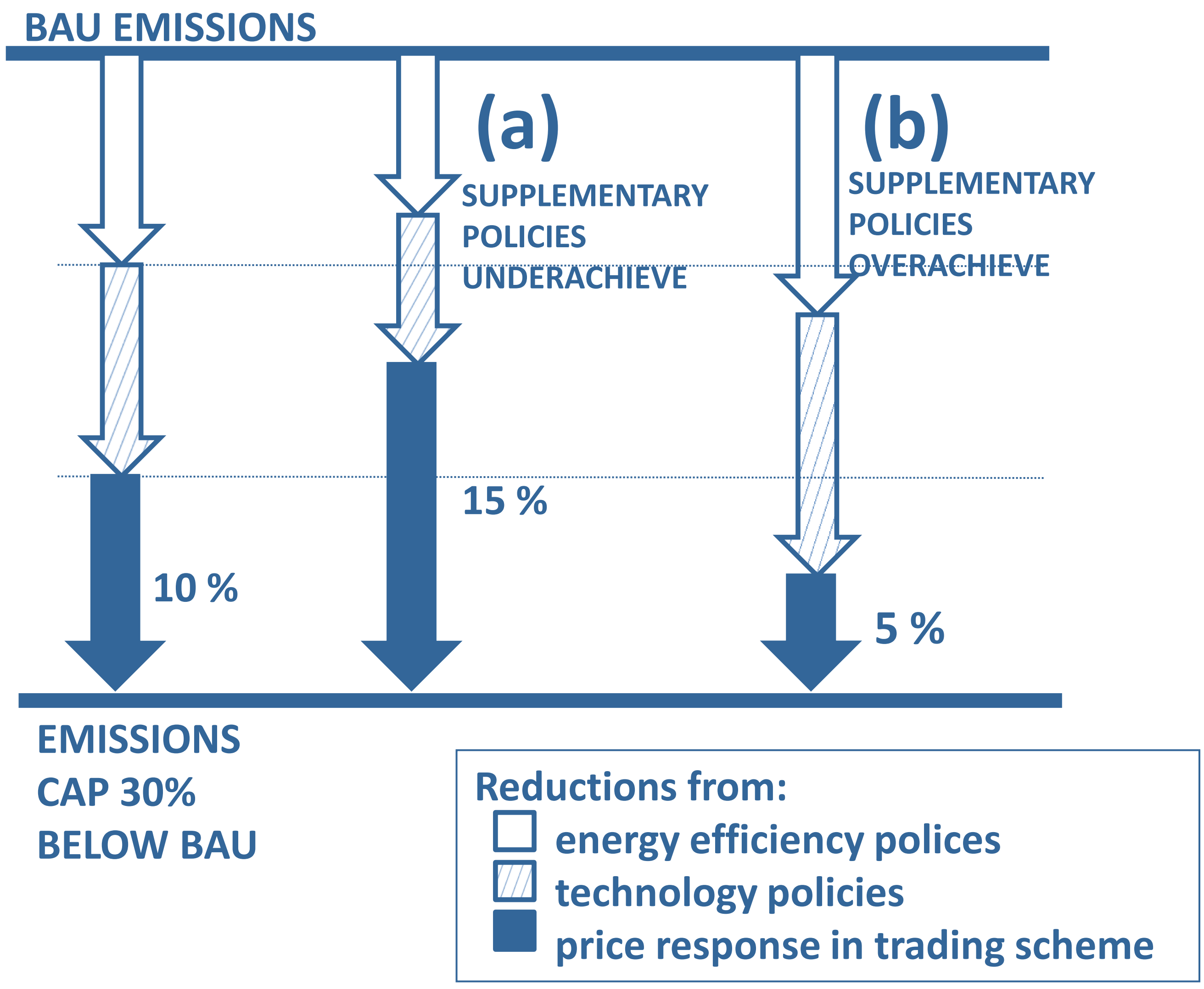
There is a trade-off between the benefits of early action in reducing the cost of the decarbonisation transition, and the potential to undermine the carbon pricing policy which would increase costs in the longer term.

Conclusion 4:

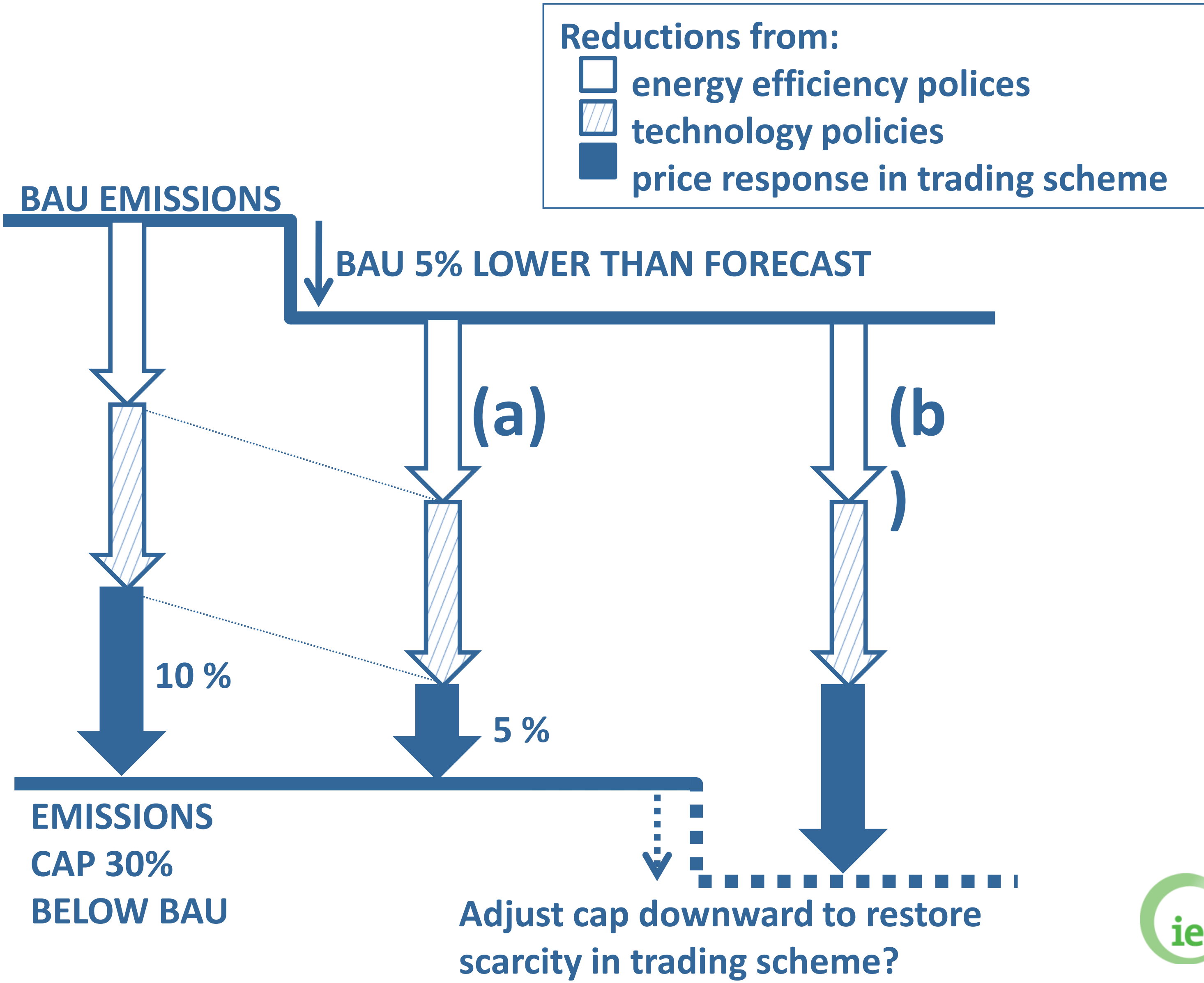
Supplementary policies and carbon pricing (particularly emissions trading schemes) interact and have the potential to undermine one another, so policies need to be designed as a package, taking interactions into account.

In emissions trading systems, if supplementary policies deliver too much of the required emissions reductions, this introduces uncertainty in the carbon price: the price has increased vulnerability to economic conditions, and to the delivery of the supplementary policies.

Carbon price level depends on supplementary policy delivery



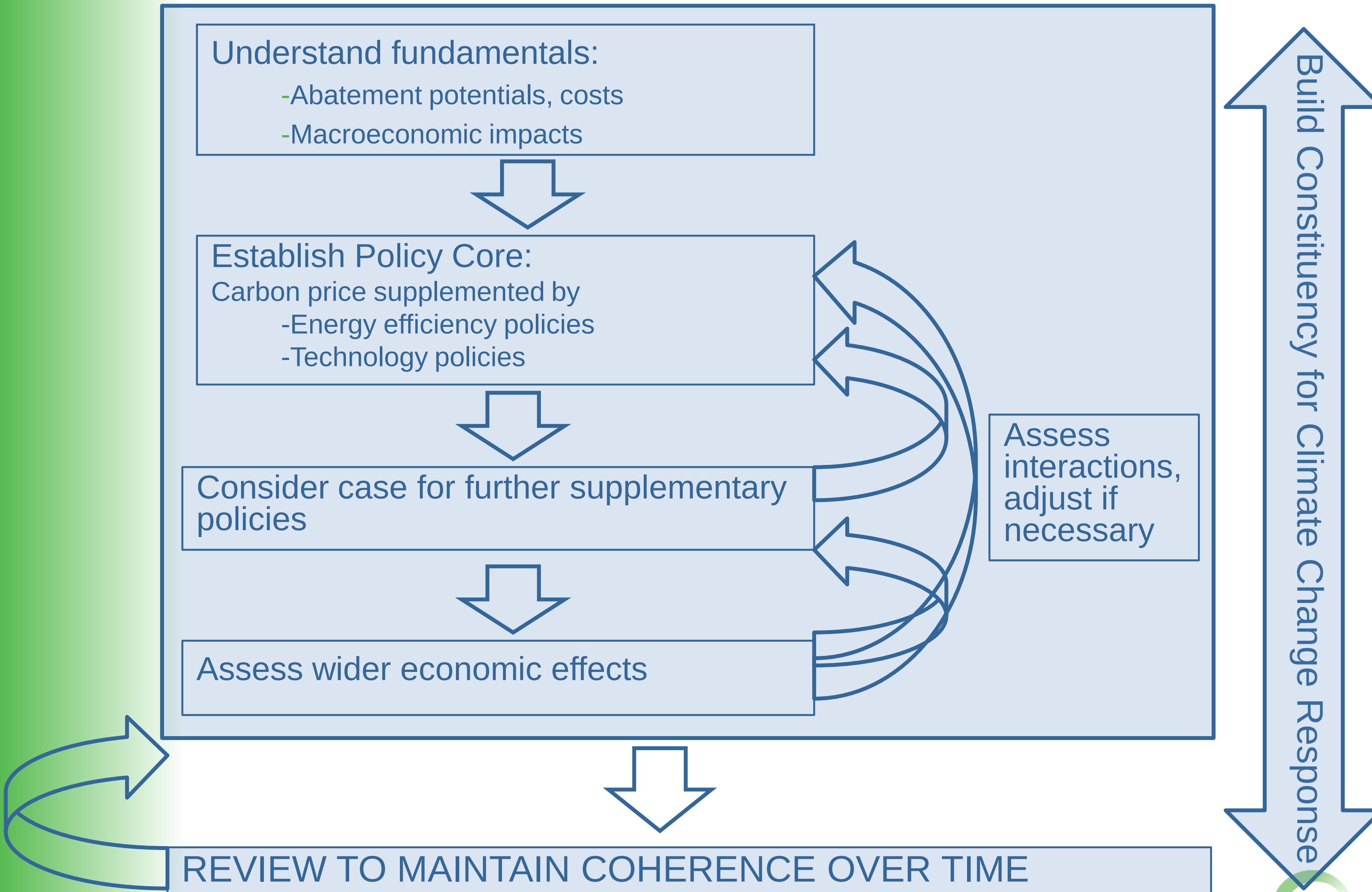
Carbon price level more sensitive to economic conditions with supplementary policies



Conclusion 5:

Policy packages should be regularly reviewed to maintain coherence over time, particularly if policies interact strongly. To promote investment certainty, reviews should generally be limited to scheduled intervals and follow understood criteria.

In the event of a major unforeseen shock, a judgement is needed on whether the benefits of more quickly restoring policy balance outweigh the damage to investment certainty caused by intervening. Having pre-established criteria for such interventions could assist in maintaining confidence.



Understand fundamentals:
-Abatement potentials, costs
-Macroeconomic impacts
Establish Policy Core:
Carbon price supplemented by
-Energy efficiency policies
-Technology policies
Consider case for further supplementary policies
Assess wider economic effects
Assess interactions, adjust if necessary
REVIEW TO MAINTAIN COHERENCE OVER TIME
Build Constituency for Climate Change Response