Are complimentary policies necessary?

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What do complimentary policies (CPs) do?

(Cap and trade will limit emissions and should encourage the cheapest available mitigation options.)

- Perhaps nothing (CPs “slack”)
- Mitigation under CPs more than without CPs (CPs “binding”)
  - Same total emissions.
  - Emissions outside of CPs higher and mitigation action weaker.
  - Lower allowance prices.
  - Higher total mitigation costs.

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Are total emissions the same with CPs?

- Lower allowance prices may lead to more ambitious targets.
  - Reserve price in CA, RGGI.
  - Backloading in EU ETS
  - Long-term target setting in RGGI and EU.
- Long-term price expectations and banking.
- If you had a carbon tax…

Even if emissions are the same and costs are higher with CPs: Higher total cost ≠ higher cost for everyone

- Distribution of costs is different.
- Cost of CPs is often less transparent.

Are costs higher? Other market failures?

- Emission leakage (abroad and to unregulated sectors). (2009 Fischer and Fox)
- Tax interactions.
- Network externalities.
- Other pollution. (3.2₵/kwh for coal, 2010 NAS Hidden Cost Study)
- Technology spillovers. (2008 Fischer and Newell)

The presence of other market failures does not mean complimentary policies are effectively addressing them

Do complimentary policies add price uncertainty?

- Background paper: Uncertainty about CPs might lead to more uncertainty about allowance price and required reductions.
- Is CP uncertainty correlated across CPs and with other uncertainty (e.g., economic growth)?
- Effects of banking, price floors and ceilings, policy revisions.
- Futures contracts.

Closing thoughts

- There may be non-CO2 market failures; not clear CPs hitting them.
- Over some period of time, market-based policies probably constrained in terms of maximum and minimum price; caps will be adjusted. CPs probably get you more mitigation at higher cost.
- Higher cost is less transparent but does not involve shuffling distribution with allowances.
- Higher cost mitigation may still pass cost-benefit: Government estimates SCC at $21/tCO2 in 2020. Yours may be higher (or lower).
- At the same time, CPs open the door to wasting a lot of money if
  - Other market failures are not addressed
  - Could have *gotten* cheaper reductions elsewhere.
  - Cost of complimentary policies is higher than benefits.
- Uncertainty?