Marginal Abatement Cost Curves

From MAC curves to scenarios

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MAC curves are sensitive

- Baseline assumptions
- If derived from system model, order of implementation affects results
- Discount rate for costs
MAC curves are sensitive

Discount rate changes costs

![Graph showing marginal abatement cost for avoided emissions at different discount rates.]

DR = 10%

DR = 30%
MAC curves are sensitive

If model based, order of actions matters

Low-flow shower heads first

Solar water heaters first
Moving from MAC curves to scenarios

- MAC curves show two dimensions: costs and reductions
  - Typically used to *choose between* options
  - Technology-centered
- Key parameters, but not all the criteria that inform decision-making
  - Especially when making plans that *combine* different options
  - System-centered
- Plans or scenarios tend to consider broader issues, how actions might interact, or fit into a portfolio
Moving from MAC curves to scenarios

Snapshots and projections

- MAC curves are snapshots in time
  - single year
- Scenarios in modeling terms are projected over a period of time
  - E.g. 2010 – 2030 (or 2050, or ...)
- If MAC curves are derived from modeling (atypically), then projections may exist
- Scenarios may be built by packaging different mitigation options (or NAMA’s)
LTMS: Four strategic options
LTMS: Four strategic options
Questions and comments

- What has been useful / not useful about MAC curves in your experience?
- Packaging actions (mitigation options) is one possible way of getting from MAC curves
  - What options do you see in getting from MAC curves to scenarios?
Further reading

Backup slides
Broader information scenarios

Decision-makers may ask

- Will it ruin the economy?
- Will the poor be negatively affected?
- Will it make industry less competitive?
- Will it increase unemployment?

Need info in addition to MAC curves to answer these questions
The world is fixated on MACCs

People will look at data without reading the surrounding text – what are the implications thereof in terms of how you use them

How decision makers might use MACCs to make decisions (related to previous point)
Thank You

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