EMF 22: Subgroup Transitional Climate Policy

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Transitional Climate Policies

Scenario Clusters

- Cap&Trade Policies
  (EU ETS-type approaches)

- Carbon Tax Policies
  (e.g. Stiglitz-Proposal)

- Technology Scenarios
  (e.g. AP6-type agreements)

- Domestic Policy Priorities

- Other transitional climate regimes (e.g. L20, …)

EMF 22 – Transition: State of the Play

Overview on current participation:

	Cap&Trade	Carbon Tax	Technology	Dom. Pol. Priorities	Add. Regimes (Global)
GRACE	Yes	Yes		(Yes)	
PACE	Yes	Yes			Yes (L20)
GTEM	Yes	Yes	Yes	Selective	
AMIGA/MARS		Yes	Yes	Yes	
WIAGEM	Yes	No	No	Yes (R&D)	Yes (e.g. EU-ETS)
GRAPE	Yes	Yes	Yes	on hold	on hold
SGM	Yes	Yes			
GEMINI-E3	Yes	Yes	Yes	Yes	Yes
POLES					
MARKAL			*Tba*		
MERGE	Yes				

EMF 22 – Transition: Synthesis (I)

Options:

- Option 1: Comparison of selected scenarios across models
  - Pro: robust insights (EMF tradition)
  - Con: limitations in coverage and policy appeal

- Option 2: "Scenarios à la carte"
  - Pro: broader participation and potential higher policy impact
  - Con: more narrow base for policy conclusions

- Option X: ….

EMF 22 – Transition: Synthesis (II)

Efficiency versus feasibility of transitional policy (TP)

- At least "in-model" comparison with model-specific "efficient" policy
  - Compute emission reduction of TP scenario
  - Compare with "most efficient" policy in model framework (BMK)

- Example 1: TP with single-country bottom-up model
  (e.g. technology standards for the automobile sector in the USA)

  ➔ BMK: Uniform carbon tax achieving the same level of reduction

- Example 2: TP with global coverage

  ➔ BMK Alternative1: Model-internal efficient path
  ➔ BMK Alternative2: "Some" external efficient path

EMF 22 – Transition: Next Steps

- Depending on choice of option
- For example – Option 2 ("Scenarios à la carte")
  - finalize list of participants (until end of 2006)
  - submit simulations and background paper in the run-up to the next meeting (date xx.yy.zz)
  - compile and synthesize (date xx.yy.zz)
- Dissemination:

  - peer-reviewed journals
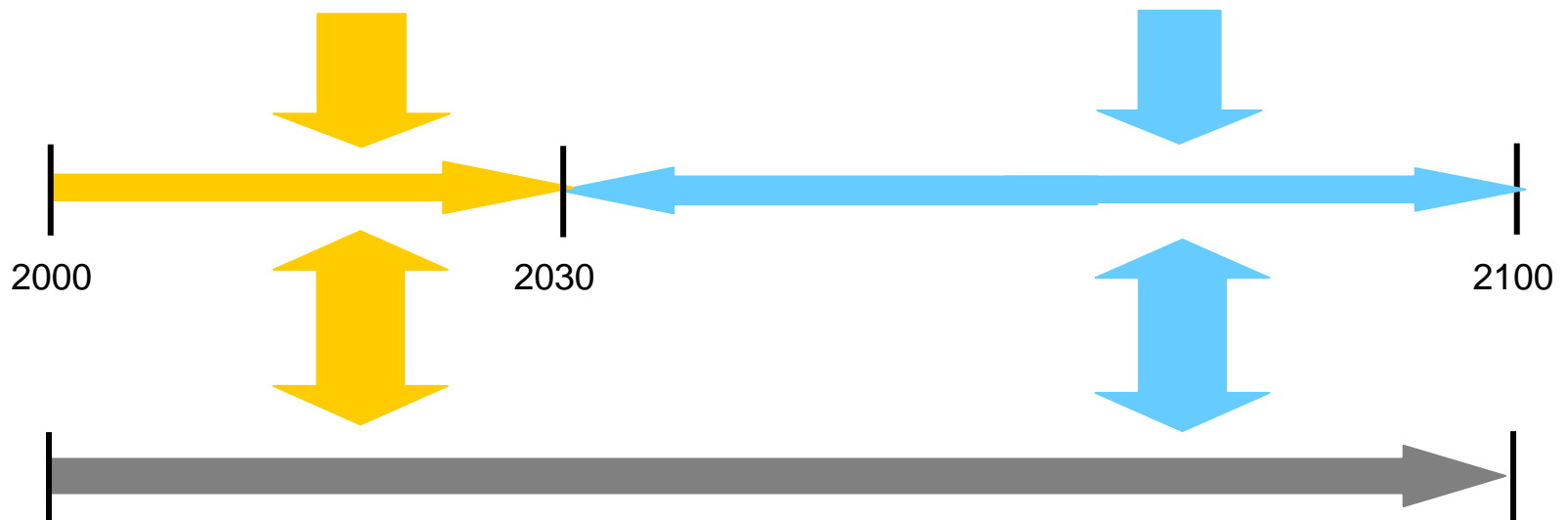
  - conference (policy maker focus)

  - …

Backup

Approach: Transitional Climate Policy

Transitional policy:

"Politically feasible" policy options (e.g. up to 2030)

Residual efficient policy:

"Efficient" residual policies from 2030 to meet given long-term climate policy target

2000   2030   2100

Long-term integrated analysis:

$$(\overline{E}_{2000}, \ldots, \overline{E}_{2030}, \ldots, \overline{E}_{2100})$$

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Transition to Long-Term Climate Policy

Dimensions

- Time horizon: "window" of long-term horizon

- Regional coverage: global versus subglobal

- Key sectors: agriculture, primary energy sectors, electricity, transport, etc.

- Policies: market-based (e.g. cap and trade regimes - sectoral/regional), command & control (e.g. technology-specific policies)

- Instruments to represent policies (taxes/subsidies, permits, standards)