

Introduction

- EMF** Forum established at Stanford University for discussing energy and environmental issues
 ⇒ *Ad hoc* working groups
 ⇒ Comparison of the results of different models
- EMF-22** Climate Policy Scenarios for Stabilization and Transition
 ⇒ Focus on comprehensive analyses of long-run climate stabilization policies under uncertainty and intermediate-term transition policies (2010-2040)
- ETSAP** Collaboration started in 2004
 Reinforce collaboration with other BU and TD modelers
 Access to data
 Visibility

Four Study Groups

- Hedging** Evaluate hedging policies with climate and GDP uncertainty
- Transition Policies** Simulate policies that could be applied in the 2010-2040 period
- Black Carbon** Study the effects of including black (warming) and organic carbon (cooling)* in a cap-and-trade regime - *Produced during combustion of fossil fuels (RPP, coal) and biomass*
- Land-Use** Provide a detailed inventory and projections to 2050 of land uses and emissions as well as quantitative information on mitigation options

Transition Policies: Policy-Driven Policies proposed by EMF

Cap&Trade scenario

Sectoral or regional (only Annex 1?) cap-and-trade with annual cutback from 2015 to 2035 (0.5%; 1%; 1.5% wrt 2015) ; constant CO2 limit after 2035

Tax scenario

Linear increasing carbon tax between 2015 (7 \$ per tC) and 2035 (30 \$ per tC); constant thereafter; sectoral or regional application (only Annex 1?)

Regional permit trading systems

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Transition Policies: Policy-Driven Policies proposed by EMF

Technology scenarios: Gradual increase of efficiency standards

- Decrease of carbon intensity of electricity (1.3%; 2% per year until 2035; constant thereafter)
- Increase of fuel efficiency (whole fleet) from basecase level in 2015 to 120 g CO2 per kilometer
- Increase of fuel efficiency by 1% and 2% per year for the whole fleet from 2015 onwards



What are the effects on climate and costs of these different policies?

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