

# OECD work on fossil fuel subsidies

Presented at the Special event in the context of the Joint SBI/SBSTA Forum on the Impact of the Implementation of Response Measures

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# Context

- Supporting fossil fuel production/use influences demand, supply ... and therefore also has economic and GHG impacts
- Current level of budgetary support to fossil fuel estimated by OECD(2011) at USD 40-60 bn per year in Annex I countries\*
- Current level of fossil fuel consumer subsides in emerging + developing economies\* estimated by IEA (2011) at USD 409 bn in 2010.
- Agreements in Kyoto Protocol (for AI) and G20 to reduce and phase out [inefficient] fossil fuel subsidies
- Removing subsidies would:
  - reduce current distortions, lower costs of GHG mitigation
  - have both domestic and international impacts



## Relevant OECD/IEA work

- Quantifying level of fossil fuel support:
  - Data for 20 Annex I countries (producer and consumer)
  - ... and for 36 non-Annex I countries + Russia (consumer only)
  - <u>Caveats</u>: data not complete (in terms of coverage, or support types), different methodologies for estimating subsidies, regional groupings that do not always match UNFCCC groupings
- For (selected) Annex I countries, identification of different types of fossil fuel support:
  - Direct and indirect; producer and consumer
- Quantifying environmental and economic effects of <u>NAI</u> fossilfuel subsidy removal
  - Introduced IEA estimates of NAI fossil-fuel consumer subsidies in 2009 into the OECD ENV-Linkages model.
- In future, plan to model effects of removing AI fossil fuel support



## Emissions impacts of fossil fuel subsidy removal

"central policy" scenario: gradual phase-out to 2020 of fossil fuel consumer subsidies in 37 emerging and developing economies



% changes in GHG emissions with respect to BAU



- •Regions in which the fossil fuel subsidies have been removed
- (1) Middle East & Northern Africa
- (2) Other Asian, African and Latin American Emerging economies

•Sources : OECD ENV-Linkages Model - Based on IEA subsidy data for the year 2009

#### Direct domestic effects of reform

Impacts on GDP in 2050 (% change from baseline)



#### Full economic impacts of multilateral reforms

# Real GDP in 2050 as % of 2010 levels, with and without reform of fossil fuel support





- (1) Middle East & Northern Africa
  (2) Other European Annex 1 countries : Turkey, Ukraine, Belarus, Croatia, ...
- •(3) Other Asian, African and Latin American Emerging economies

•Sources : OECD ENV-Linkages Model - Based IEA subsidies data for the year 2009

### Thank you!

For further information: <u>www.oecd.org/iea-oecd-ffss</u> <u>www.oecd.org/g20/fossilfuelsubsidies</u>

#### Or contact:

For OECD estimates about fossil-fuel support in OECD : <u>Ronald.Steenblik@oecd.org</u> or <u>Jehan.Sauvage@oecd.org</u>

For economic impact of reforming non-AI consumer subsidies : <u>Jean.Chateau@oecd.org</u>

