

A faint world map is visible in the background of the slide, centered behind the text.

Presentation by
The Kingdom of Saudi Arabia
to the
Ad-hoc Working Group
Round Table
on Mitigation Potentials
Risks and Uncertainties

Bonn

May 14, 2007

Mr. Fared Al-Asaly

Content

❖ Spillover of implemented policies

- IPCC TAR (2001)
- McKay Study (2006)

❖ Case study on Saudi Arabia

- Policy Choices by Annex I
- Policy Choices by Energy Exporters

IPCC TAR 2001

- ❖ Emission Constraints on developed Countries have well-established spill-over effects on developing Countries. Analysis report reduction in both projected GDP and reduction in projected oil revenue for oil exporting developing Countries

MacKay Consultants and IPA 2006

Impact of Climate Change Policies on National Oil Companies:

- ❖ Initiated by the National Oil Companies Forum (NOC),
 - Qualitative Assessment of over 2500 Climate Change related policies in 40 countries
 - Focused on 13 Countries that Account for >80% of Global GDP: UK, Germany, Italy, France, Spain, Japan, USA, Canada, China, India, South Korea, Brazil and Russia (plus EU15)
 - Selected 19 Policies where Climate Change Regulations can be developed and Applied, Drawn from:
 - ✓ Taxation
 - ✓ Fuel Switching
 - ✓ Energy Efficiency
 - ✓ Technology Developments

MacKay Consultants and IPA 2006

Climate Change Polices	UK	Germany	Italy	France	Spain	EU15	Japan	S Korea	USA	Canada	China	India	Brazil	Russia Federation
Tax-Related Policies														
Local Carbon Tax	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-
Energy Tax	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓✓	✓✓
Excise tax on oil products/fossil fuels	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓	✓✓
Tax credits for renewable energy projects	✓	✓	✓	✓	✓	✓	✓	✓	✓✓*	✓✓	✓	✓	✓✓	-
Border adjusted taxes	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
Fuel Switching														
Policies to encourage use of Nuclear Power	✓✓	-	✓	✓✓✓	✓✓	-	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓	✓✓	✓	✓✓✓
Policies to encourage use of renewable energy	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓✓	✓✓
Biofuels	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	-	✓✓✓	✓✓✓	✓	✓	✓✓✓*	✓✓
Natural Gas	✓✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓*

✓✓✓	Major Impact
✓✓	Medium Impact
✓	Minor Impact
-	Not Applicable

MacKay Consultants and IPA 2006

Climate Change Policies	UK	Germany	Italy	France	Spain	EU15	Japan	S Korea	USA	Canada	China	India	Brazil	Russia Federation
Energy Efficiency														
Investment in Private Households	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓	✓	✓	✓
Investment in Industry	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓✓*	✓✓✓	✓✓	✓✓✓
Voluntary Agreements	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓✓	✓✓	✓✓	✓
Energy from CHP	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	✓	✓	✓	✓	✓✓✓
Technology Developments														
Hydrogen/Fuel Cells	✓	✓✓	✓	✓	✓	✓	✓✓	-	✓✓	✓✓	✓	✓	-	✓
Carbon Capture & Storage	✓	✓	✓	✓	✓	✓	✓	-	✓✓	✓✓	✓	✓	✓	✓
Other Policy Measures														
EU Emissions Trading	✓✓✓	✓✓✓	✓✓✓	✓✓*	✓✓✓	✓✓✓	-	-	-	-	-	-	-	-
Non-EU Emissions Trading	-	-	-	-	-	-	✓✓	✓✓	✓✓	✓✓	✓	-	-	✓
CDM and JI Projects	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	-	✓✓	✓✓	✓✓	✓✓	✓
Green Certificates	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-	-

✓✓✓	Major Impact
✓✓	Medium Impact
✓	Minor Impact
-	Not Applicable

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Case Study on Saudi Arabia

- ❖ Saudi Arabia is vulnerable to both Climate Change impacts and to response measures
- ❖ Actions to deal with the impacts of response measures include efforts to:
 - increase financial resilience, such as economic diversification for the long term,
 - insurance and financial risk management tools (i.e. hedging) for the short term

Impacts of mitigation actions: Energy Exporters

❖ Policy choices by Annex I make a difference

- Fuel bias (conventional vs renewable):
 - ✓ Policies that favor specific fuels create market distortions
 - ✓ Pushing too much on renewables creates negative market signals on investment and supply of conventional fuels with clear risks for future energy security

- Flexibility mechanisms (CDM, JI, Trading) should be encouraged to lower implementation costs and minimize response impacts

- Treatment of pre-existing fuel taxes and subsidies:
 - ✓ Partial or complete removal of pre-existing taxes and subsidies lower implementation costs and the impact of mitigation policy

Impacts of mitigation actions:

Continued ...

- ❖ **Policy choices by Annex I make a difference**
 - **Selection of policies should take into account minimizing the adverse effects of response measures on developing countries**
 - **Sector-specific policies are costly and inflict greater burden:**
 - ✓ **Specific policies that target oil-intensive sectors such as transportation have greater negative impacts on the economy**
 - ✓ **Comprehensiveness in treatments of all GHG gases (not only CO₂) will have lower negative impacts**
 - ✓ **Carbon intensity tax has lower impact, than petroleum products tax**
 - ✓ **Carbon Capture and storage technology provide win-win mitigation option**

Impacts of mitigation actions:

Continued ...

❖ Policy choices by energy exporters

➤ Diversification

- ✓ Short and medium terms options include development of downstream products (petrochemical) and energy/capital intensive manufacturing due to comparative advantages
- ✓ long term options include services such as high tech and knowledge intensive, tourism, transport services, finance and insurance, desalination technologies and renewables

Impacts of mitigation actions:

Continued ...

➤ Competitiveness

- ✓ Successful diversification depends on being competitive at the international level
- ✓ Needs for market access during the transition, and favorable terms of trade
- ✓ Needs for technology transfer, foreign direct investment and partnership to strengthen competitive capabilities

➤ Incentives by Annex I is essential for the success of economic diversification

Concluding Key Points

- ❖ **Bottom up approaches have less spillover effects on developing countries**
- ❖ **Magnitude of economic consequences on developing countries will depend on the policy choices by Annex I countries**
- ❖ **Success of economic diversification policies in developing countries requires incentives from Annex I countries**