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International Aviation and Emissions Trading: A U.S. Perspective

Presented to: ICAO Colloquium on Aviation and Climate Change
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• Market Signals Work
• Some U.S. Developments on Carbon Emissions Trading
• Some Special Challenges Facing International Aviation
• Some Closing Observations
Growing Role of Fuel Prices in Operating Costs

Fuel vs. Labor Costs

Year

Fuel Costs Per Available Seat Mile

Labor Cost Per Available Seat Mile

Source: ATA
Price Incentive Translates into Lower Fuel Consumption

U.S. Commercial Aviation Fuel Use

Source: BTS
Some Developments on U.S. Carbon Emissions Trading

- **Private Sector**
  - Chicago Climate Exchange – 2003

- **States**
  - Regional Greenhouse Gas Initiative (RGGI) – 2003
  - California Global Warming Solutions Act (AB-32) – 2006
  - Western Climate Initiative -2007

- **Federal**
  - Election of Obama Administration – 2009
  - Senate: Kerry-Lieberman 2010?
International Aviation Challenges: Competing Legislation

- **ICAO Chicago Convention**
  - U.N. standard setting body for aviation, including environmental ones
  - Bilateral Air Services Agreements

- **United Nation Framework Convention on Climate Change (UNFCCC)**
  - General commitment to reduce certain greenhouse gas emissions

- **Kyoto Protocol**
  - Specific targets for reductions
  - Developing countries exempt
  - Coverage of domestic aviation up to each country
  - International aviation subject to ICAO plan

- **Regional ETS Schemes Developing**
  - U.S.
  - EU
  - Australia
  - New Zealand
  - Japan
International Aviation Challenge: Some Design Issues

- Competing Treaties & Legislation
- Whose Goals
- Allocating Stakeholder Contribution
- Monitoring, Verification, Reporting
- Avoiding Multiple Charges
- Potential Technology Penalty
Some Closing Observations

- Market-based measures like emissions trading are a crucial tool to address the climate change challenge.

- Emissions trading is not the solution for everyone. Cost and effectiveness should be weighed carefully.

- Design is essential.
  - Nations determine goals for their airlines.
  - You need proper data.
  - You only pay once.
  - Avoid perverse incentives.
  - Application is negotiated.

- ICAO is the right venue to develop common principles and the way forward.