



United Arab Emirates

**DELEGATION OF THE UNITED ARAB EMIRATES ON
THE COUNCIL OF ICAO**

**المكتب التمثيلي لدولة الإمارات العربية المتحدة
لدى الايكاو**

Vision for the Sustainability of Alternative Fuels for Aviation: Is there an Additional Role for ICAO ?

**Eng. Mariam Al Balooshi
UAE General Civil Aviation Authority**

**ICAO Aviation & Sustainable Alternative Fuels Workshop
Montreal, Canada
18-20 October 2011**



ICAO – Aviation and Sustainable Alternative Fuels

Agenda

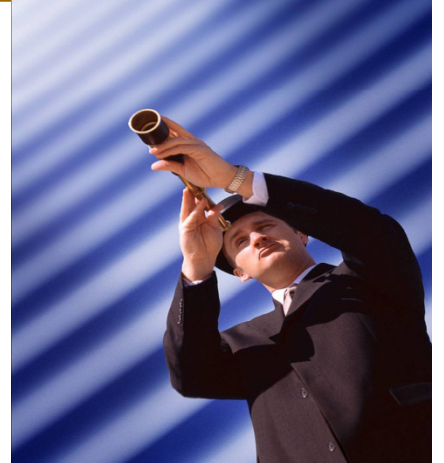
- General Observations
- Challenges Ahead
- The Big Dilemma
- ICAO's Work on Alternative Fuels
- Is There an Additional Role for ICAO?
- Some Ideas for a Model Legal Framework
- Concluding Remarks



ICAO – Aviation and Sustainable Alternative Fuels

General Observations

- Aviation – catalysis – fosters economic and social development
- 3-4% annual CO₂ emissions growth
- Alternative Fuels could reduce civil aviation's carbon footprint





ICAO – Aviation and Sustainable Alternative Fuels

Challenges Ahead

- A number of challenges ahead
 - Sustainability Criteria
 - GHGs Lifecycle
 - Scale-up production
 - Sufficient allocation to civil aviation**
 - Aviation will compete with other modes of transportation





ICAO – Aviation and Sustainable Alternative Fuels

And the Big Dilemma is.....

- Assuming that all other pending issues are resolved (sustainability criteria, lifecycle, scale-up production), how do we ensure that alternative fuels are allocated to civil aviation in sufficient quantities to achieve meaningful reductions of CO2 emissions?



- Other modes of transportation most likely will attempt to lay hands on the trophy....
- These modes of transportation may have significant lobbying power
- Very difficult to envision “aviation” as the “only” preferred buyer...



ICAO – Aviation and Sustainable Alternative Fuels

ICAO's Work.

- ICAO Workshop Aviation and Alternative Fuels (10-12 February 2009)
- ICAO Conference on Aviation Alternative Fuels (CAAF – Rio de Janeiro, 16-18 November 2009)
- A37-19 “Climate Change” Resolution
- ICAO Aviation and Sustainable Alternative Fuels Workshop (Montreal, 18-20 October 2011)
- Hitherto ICAO's Role: Forum to exchange information





ICAO – Aviation and Sustainable Alternative Fuels

Is there an Additional Role for ICAO?





ICAO – Aviation and Sustainable Alternative Fuels

Is there an Additional Role for ICAO?

- Yes there is.....

- ICAO could draft guidance materials or a model legal framework that would assist Member States in ensuring that alternative fuels are earmarked in sufficient quantities for the aviation sector;

- ICAO could engage further Member States participation in alternative fuels development.





ICAO – Aviation and Sustainable Alternative Fuels

The Legal Framework

- Legal Framework should:
 - Indicate why it is relevant
 - Set general principles for research, development and deployment;
 - **Ensure that sufficient supply is earmarked for the aviation sector;**
 - Provide a robust economic incentive structure;
 - Tax reliefs – tax exemption programs





ICAO – Aviation and Sustainable Alternative Fuels

The Legal Framework

- Legal Framework should:
 - Establish a regulatory body, defining its jurisdiction and main prerogatives
 - Induce public / private participation & cooperation
- Legal Framework should not:
 - Impose a heavy administrative burden that may jeopardize production





ICAO – Aviation and Sustainable Alternative Fuels

Concluding remarks

- An Additional Role for ICAO:

- The organization’s activities should move from a forum seeking to facilitate exchange of information to concrete actions that may further assist Member States to profit from potential benefits of alternative fuels.



- This may include:

- Inducing further Member States participation & engagement;
- Designing cooperation schemes; and
- Developing guidance materials – model regulatory framework
 - This will most likely be one element but certainly not the whole equation
 - other factors will also need to be considered



United Arab Emirates

DELEGATION OF THE UNITED ARAB EMIRATES ON
THE COUNCIL OF ICAO

المكتب التمثيلي لدولة الإمارات العربية المتحدة
لدى الايكاو

Thank You