









# Mapping the Future

A VISON FOR THE FUTURE
OF AVIATION ALTERNATIVE FUELS

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THE BEST WAY TO PREDICT 





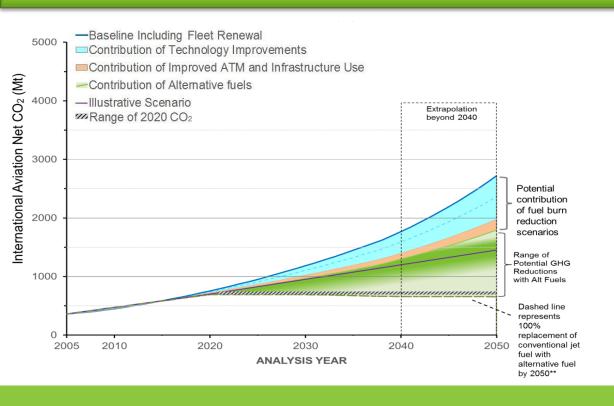
## ICAO SEMINAR ON ALTERNATIVE FUELS 2017

ICAO Headquarters, Montréal, 8-9 February 2017





### **ICAO CAEP Trends – Contribution of alternative fuels**



- Aspirational goal: carbon neutral growth from 2020
- To be achieved through a basket of measures, including MBM as a complementary measure to bridge the emissions gap
- Sustainable alternative fuels have significant potentials, but also significant uncertainties exist in the long-term



### **ENVIRONMENT**

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## **ICAO Sectoral Aspirational Goals:**

- 2% per year fuel efficiency improvement
- Carbon neutral growth from 2020

#### **ICAO Basket of Measures:**

- Technology improvements
- Operational changes
- Alternative fuels,
- Market-based measures









### **UN SDG Goal for Clean Energy**

## 7 AFFORDABLE AND CLEAN ENERGY



### **SE4All objectives by 2030**

- Ensure universal access to modern energy services.
- Double the global rate of improvement in energy efficiency.
- Double the share of renewable energy in the global energy mix.









#### Recommendations to facilitate the development and deployment of alternative fuels

- allow regional flexibility
- avoid market distortion
- carbon price
- certificate trading
- consistent policy frameworks

- level playing field
- leverage expertise of stakeholders
- policy frameworks
- prioritize means that cant be electrified
- public-private partnerships

- reduce financial risks
- supporting policies
- sustainability requirements
- sustainable supply chain
- use existing schemes

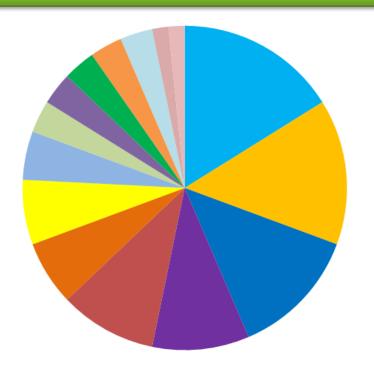








## Recommendations to facilitate the development and deployment of alternative fuels - From speakers presentations -



- reduce financial risks
- supporting policies
- level playing field
- public-private partnerships
- sustainable supply chain











Recommendations to facilitate the development and deployment of alternative fuels





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#### Policies requests - word cloud



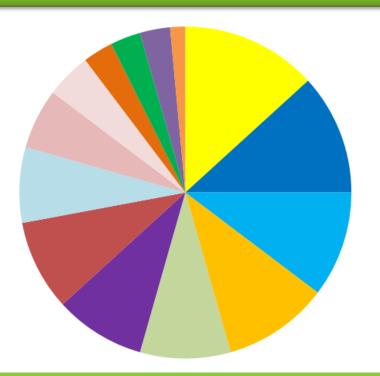








Recommendations to facilitate the development and deployment of alternative fuels
- From meeting participants -



- policy frameworks
- level playing field
- reduce financial risks
- supporting policies
- carbon price



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