



# Overview of FAA Alternative Jet Fuel Efforts

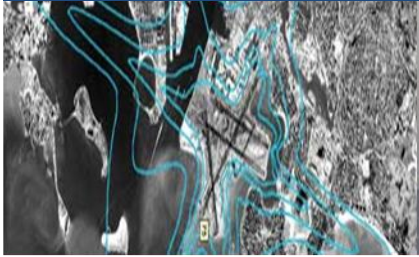
Federal Aviation Administration's (FAA) Office of Environment and Energy (AEE)

Pat Moran



# Aviation Environmental Challenges

## NOISE



## AIR QUALITY



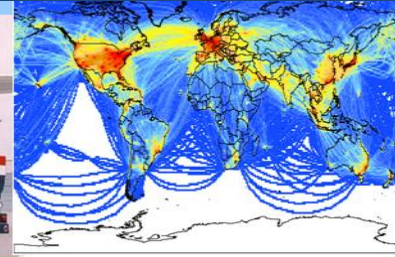
## WATER QUALITY



## ENERGY



## GLOBAL CLIMATE



- Aviation impacts community noise, air quality, water quality, energy usage, and climate change
- Environmental impacts from aviation emissions could pose a critical constraint on capacity growth
- Alternative jet fuels could reduce the environmental impact of aviation:
  - Carbon neutral growth by 2020 compared to 2005
  - 1 billion gallons of renewable jet fuel in use by aviation by 2018



## Alternative Fuels Principles – FAA view

- Alternative Jet Fuels must be “drop-in”, have equivalent safety and better environmental performance than petroleum Jet fuel
- Government role to address key barriers
- Enable all possible fuels that meet criteria
- Work through Public-Private Partnerships
- Address the whole supply chain
- Leverage expertise and programs of other States
- Aviation should be a lead user of alternative fuels



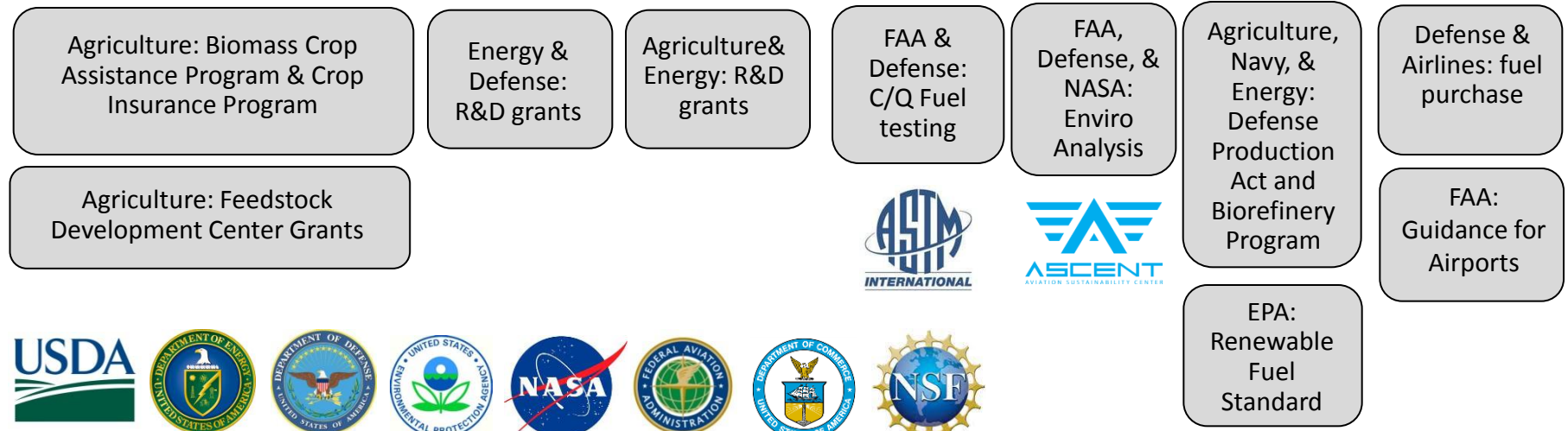
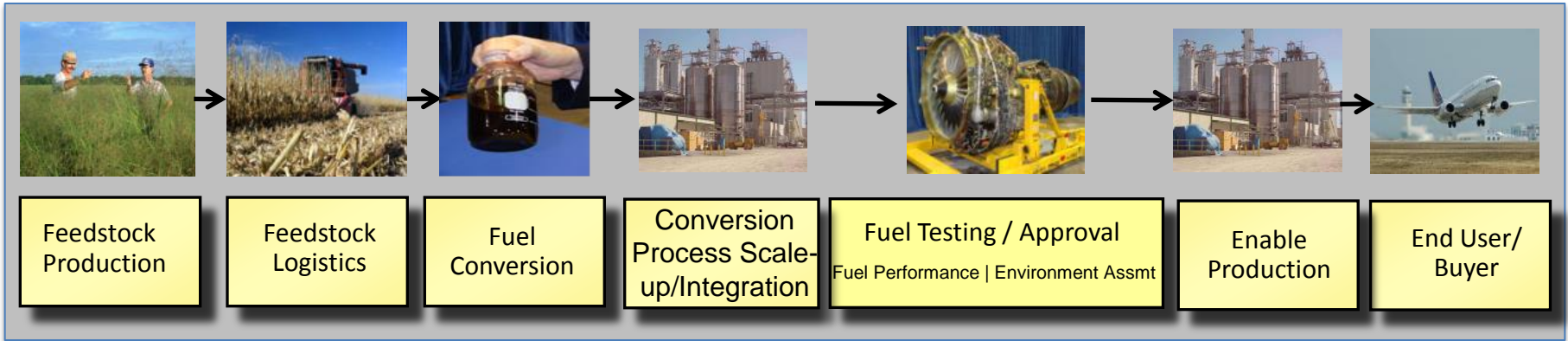
## Current FAA Alternative Jet Fuel Activities

- Testing
  - Material compatibility
  - Certification / Qualification
  - Emissions measurements
- Analysis
  - Environmental sustainability
  - Techno-economic analysis
  - Future scenarios
- Coordination
  - Interagency
  - Public-Private
  - State & Regional
  - International





# Coordinating Agency Efforts across Supply Chain Facilitating Deployment and Investment





# Commercial Aviation Alternative Fuels Initiative

- **Public-Private coalition for commercial aviation to engage the emerging alternative fuels industry**
- **Coordinate development of alt jet fuels:**
  - Equivalent safety/performance (drop-in)
  - Comparable cost
  - Environmental improvement
  - Security of Energy supply
- **Four teams for key issues:**
  - Environment Team
  - Certification-Qualification Team
  - R&D Team
  - Business Team
- **State and Regional Support**
- **International Cooperation**

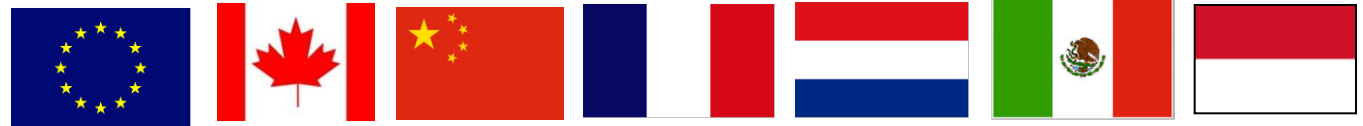
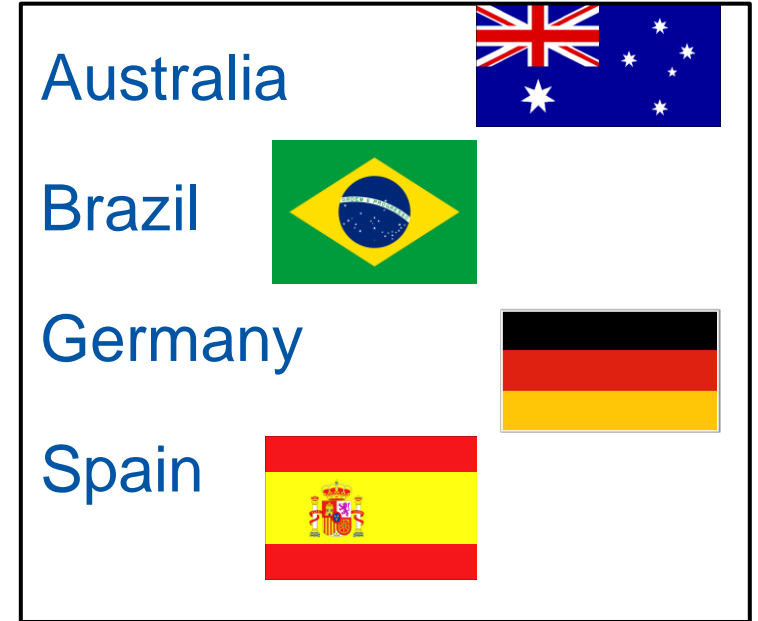


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# International Engagement

- Bilateral Cooperation Agreements
- Coordination with counterparts, and R&D organizations
- U.N. International Civil Aviation Organization



## Summary

- Advancing use of alternative jet fuels is key for meeting U.S. environmental goals
- Testing efforts accelerate alt fuel technology development
- Analysis efforts improve environmental impacts quantification and decision-making
- Coordination among government agencies and across the supply chain is key to deployment
- Partnership between government & industry vital to success
- Global engagement will support sector goals







ICAO

ENVIRONMENT

# Thank You

