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ICAO SEMINAR ON
ALTERNATIVE FUELS 2017

ICAO Headquarters, Montréal, 8-9 February 2017



Canada's Biojet Supply Chain Initiative

Mena Salib

Manager, Aircraft Noise and Emissions

AIR CANADA 





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LOOKING BACK





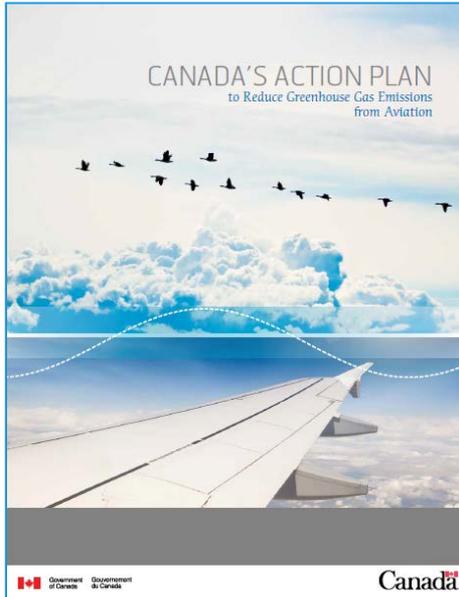
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Canada's Aviation Action Plan

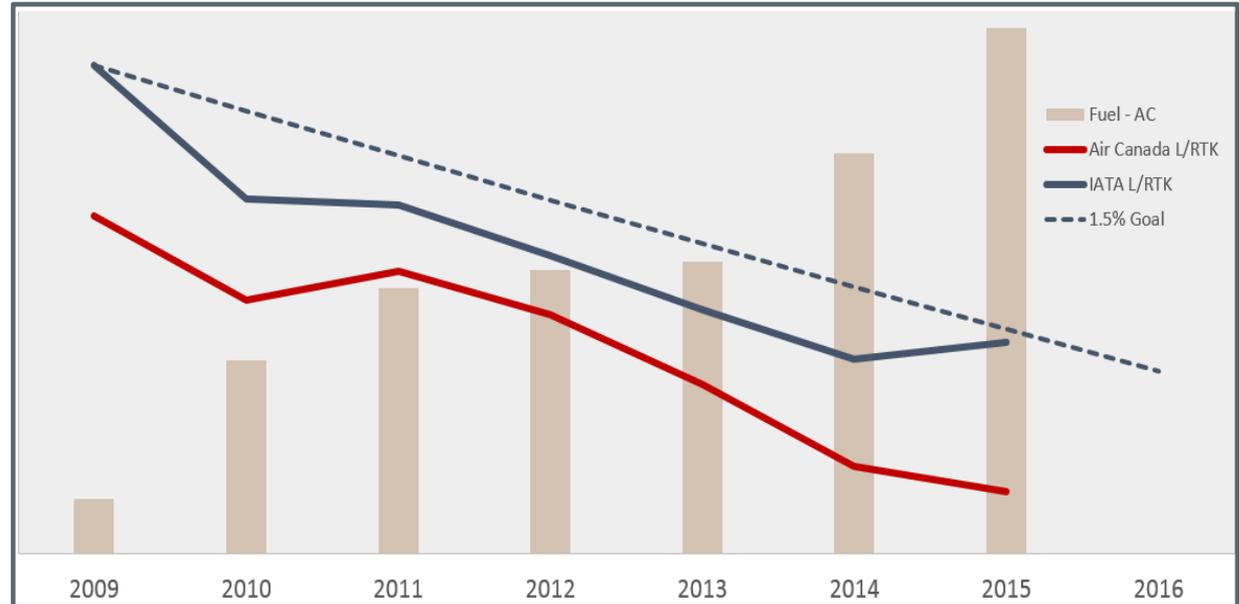


- **1.5% target** per year fuel efficiency improvement until 2020 from a 2005 baseline
- **2% aspirational goal** per year fuel efficiency improvement until 2020 from a 2005 baseline
- **Carbon neutral growth** Support for ICAO's 2020 MBMs



Fuel Efficiency Progress - AC

- Fuel Efficiency Improves
- Net emissions continues to grow with increased traffic demand





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Air Canada's Bio Fuel Flights - 2012

Perfect Flight: Rio+20 UN Sustainable Development

- Airbus and SkyNRG
- AC991 Toronto-Mexico City
- Airbus A319
- 40% CO₂ emission reduction

Olympic Biofuel Flight

- Flew Canadian Olympic Team Members to London Games
- AC864 Montreal-London
- Airbus A330
- 10% CO₂ emission reduction





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CANADA'S SUSTAINABLE AVIATION BIO-FUELS



OPPORTUNITY



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Canada's Opportunity

With Canada's abundance in natural resources, scientific leadership and experience with fuel refinement, we believe there is a Canadian potential for:

- Canadian sourced feedstock
- Refinement of final product in Canada
- Supply fulfill all types of energy demands

This can be achieved with the development of the right policy and government incentives.



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CANADA'S BIOJET SUPPLY CHAIN INITIATIVE





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Project Overview

- Sourcing a sustainable feedstock
- Having it refined into Bio Jet fuel
- Transportation
- Mixing with conventional fuel to meet specification
- Introducing the blended mix into a shared tank – 400,000 liters
- Life cycle analysis



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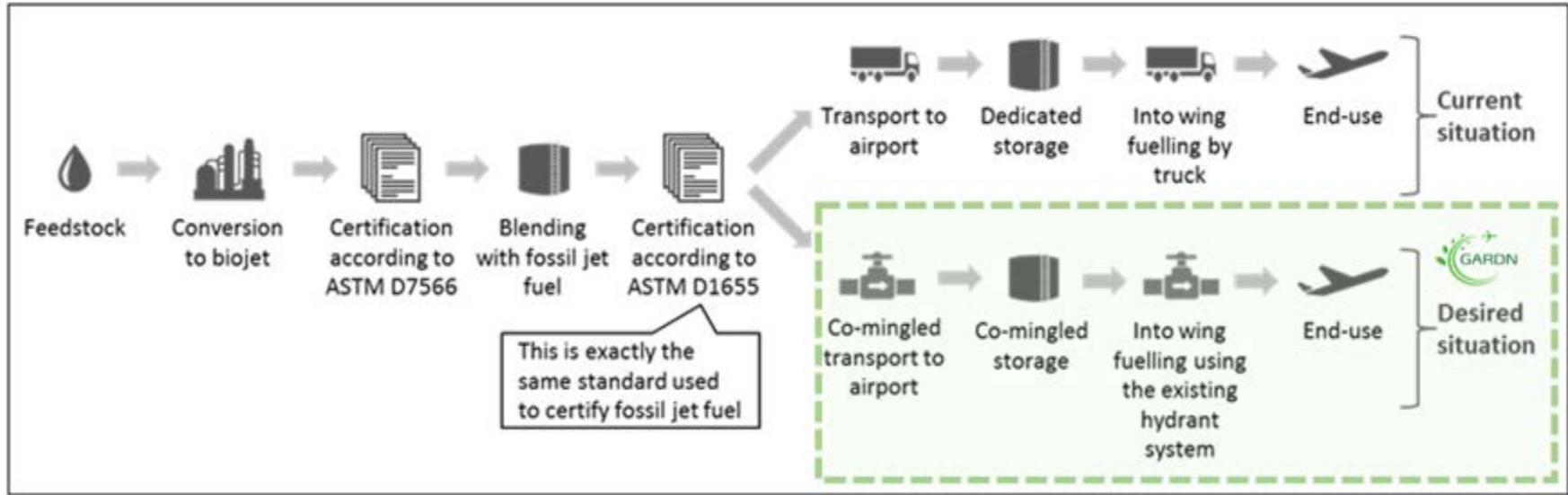


Project Goals

- Understand what are the missing parts of the supply chain
- Life cycle analysis study
- Transportation logistics of biofuel
- Experience with mixing and meeting specification
- Experience of not segregating the fuel for a specific flight



Project Overview





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Partners



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waterfall
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GARDN

Green Aviation
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Groupement Aéronautique
de Recherche et Développement
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ARC CNRC





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THANK YOU