



Transport Canada Update to the ASCENT Advisory Board

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Purpose

Update on Government of Canada's priorities and Transport Canada's activities related to aviation research.





Pan-Canadian Framework on Clean Growth and Climate Change

- Announced in December 2016:
 - 4 pillars: pricing carbon pollution, reduction of emissions across the economy, adaptation and climate resilience, clean technology, innovation and jobs
- Reduction of GHG emissions by 30% below 2005 emission levels by 2030
- Implementation underway in collaboration with Provinces and Territories, and Canadians
- Central piece is carbon pricing
 - Already in place in GC, QC, ON, AB
 - Two approaches: carbon tax or cap-and-trade system



Greening Government Strategy

- Announced in December 2017
 - Reduction of GHG emissions by 40% by 2030 and by 80% by 2050
 - Carbon-neutral beyond 2050
- 28% GHG emission reduction as of April 2017 from 2005 levels
- Target fleets (air, marine and road) and buildings
- Transport Canada air emissions down from 14% in 2005 to 4% in 2017



Transport Canada Activities

- Release of the 2016 Canada's Action Plan to Reduce GHG Emissions from Aviation in December 2017:
 - Aspirational goal to improve fuel efficiency by 2% annual average until 2020 from 2005 baseline
- Clean environment and programs
 - Build in Canada Innovation Program – Challenges Initiative
 - Pre-qualified innovation for testing
 - Own specific challenge project
 - Impact Canada Initiative
 - Alternative jet fuel challenge
- Development of new contribution agreement with the FAA to support research by ASCENT – 5 years



The Sky's the Limit Challenge

- Consists of two competitions to develop new, lower-cost ways to produce biojet fuel in Canada and support the creation of a Canadian supply chain
 - Green Aviation Fuels Innovation Competition
 - \$2 million awarded to four applicants to put their plan into action and compete for the grand prize
 - \$5 million grand prize awarded to the team that will develop the best made-in-Canada biojet fuel with the best greenhouse gas (GHG) reduction, the lowest production cost, and the greatest potential for commercial scale-up
 - Cross-Canada Flight Competition
 - \$1 million awarded to first producer to provide the fuel required to complete the first cross-Canada flight using a minimum 10% blend of made-in-Canada biojet fuel



National Activities

- **Biojet fuel project at Toronto Pearson airport:**
 - On April 22nd, introduction of 230,000 litres (\approx 60,750 USG) of sustainable biofuel blended into the airport's multi-user fuel supply system
 - 22 domestic flights
 - Reduction of 160 tons of carbon emissions
- **Air Canada flight powered by biofuel**
 - On May 2nd, A320 flight between Edmonton and San Francisco
 - Air Canada's eighth biofuel-operated flight since 2012
 - 70:30 fuel blend
 - Reduction of 10 tons of carbon emissions which represents a 20% reduction for this flight



Questions ?

