



Transport Canada Update to ASCENT

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Transport Canada

April 18-19, 2019





Common Objectives

- Key strategic objective for ICAO, Canada and the US
- Long history of close working relationships
- ICAO's environmental goals include reducing or minimizing:
 - aircraft noise
 - impacts on air quality
 - impacts on the global climate
- R&D is a key component
 - Improved measurement / understanding
 - Clean technology
 - Efficient operations





Research Activities

- Clean Transportation System – Research and Development Program
 - \$1.5M funding (grants) over three years
 - Projects to help reduce air pollutants and GHG emissions in the aviation, marine and rail sectors
 - 1st Phase winners to be announced
 - 2nd Phase opened April 8, 2019 (closes May 8, 2019)
 - \$100k max additional project support

<http://www.tc.gc.ca/en/programs-policies/programs/clean-transportation-system-research-development.html>



Canadian Environmental Research Priority Areas

1. Aviation Impacts on the Global Climate

- Support to ICAO CORSIA
- Aviation Emissions Impacts in the Arctic (support from FAA)
 - For info, contact Ted McDonald @ ted.mcdonald@tc.gc.ca

2. Aviation Impacts on Air Quality

- ICAO nvPM standard and methodology



Canadian Environmental Research Priority Areas

3. Aviation Alternative Fuels

- Fuel, engine and flight testing (ASCENT 001&029/GARDN/NRC)
- Support to ICAO Alternative Fuels Task Force, now FTG
- Contrail and Emissions (ASCENT 024/GARDN/NRC)
- Unleaded avgas testing (FAA PAFI/NRC/EC)

4. Noise and its Impacts

- Canadian update with AEDT
- Continued involvement in supersonic activities (ICAO)



Green Aviation Research & Development Network (GARDN II)

Public-Private Partnership (*selected projects)

- WG-21: Canada's Biojet Supply Chain Initiative
- NEC-21: Producing Biojet from Cdn forest residues
- WG-22: Biojet Contrail and Emissions Research
- QC-21: Greening the Aerospace Supply Chain
- PWC-23: Next Generation Combustor for Small Gas Turbine Engines



Green Aviation
Research & Development
Network

Groupement Aéronautique
de Recherche et Développement
en eNvironnement

gardn.org

safcommunity.org



Clean Fuel Standard Regulatory Framework

The Government of Canada aims to reduce Canada's total GHG emissions by 30% relative to 2005 emission levels by 2030

- CFS will set requirements for liquid, gaseous, solid fuels
- Includes domestic aviation as an obligated party (excludes fossil aviation gasoline and aviation fuel used internationally)
- Under consideration: credit multiplier for aviation
- Fuel Life Cycle tool: to be developed by EarthShift Global



Clean Fuel Standard Regulatory Framework

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- Draft regulation for liquid fuels will be published on Canada Gazette, Part I – spring/summer 2019
- Final regulation for liquid fuels will be published on Canada Gazette, Part II – 2020



Next Steps: Continued Opportunities for Expanded Collaborations

- TC values the work done at ASCENT
- TC open to new / continued research collaboration with our Federal agencies, airports, research institutions, etc.
- We will make the connections to support your research

