

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.





Transport Canada Activities

- Development of new umbrella agreement between Transport Canada and the FAA that defines the collaboration between the two agencies
 - New agreement just signed !
 - Memorandum of Cooperation NAT-I-0603
- Replaces the Volpe-Jamieson agreement in place since 1970
- Each collaborative R&D activity like ASCENT is covered by an Annex and an Appendix that contain details of each activity
 - Annex: defines implementation
 - Appendix: defines scope of work and financial provisions



Recent Announcements

- Creation of an independent advisory board in February 2021
 - Net-Zero Emissions by 2050
- Joint Statement by Transport Canada and the U.S. Department of Transportation in February 2021
 - ...we are committed to reinvigorate our bilateral cooperation to fight climate change and limit the environmental impacts from our transportation networks—on land, air and sea.



Recent Announcements

- PM Trudeau keynote speech at Globe Forum 2022:
 - 2030 Emissions Reduction Plan: Canada's Next Steps to Clean Air and a Strong Economy;
 - Sector-by-sector approach;
 - Canada to reach its new climate target of cutting emissions by 40 per cent below 2005 levels by 2030;
 - Interim greenhouse gas emissions objective of 20 per cent below the 2005 level for 2026
 - Put us on track toward our goal of achieving net-zero emissions by 2050, including oil and gas sector;



The Sky's the Limit Challenge

1. Green Aviation Fuels Innovation Competition

- \$2 million awarded to four applicants to put their plan into action and compete for the grand prize
 - Four finalists announced on May 31, 2019:
 - Carbon Engineering, Enerkem, Forge Hydrocarbons, SAF+ Consortium
 - 10 liters (2.6 USG) of biojet fuel submitted by August 1, 2021
 - Evaluated by Natural Resources Canada
- March 30, 2022: Enerkem announced as the team that developed the best made-in-Canada biojet fuel. The company wins the \$5 million grand prize.



Other National Activities

- Harbour Air all electric seaplane:
 - Development continues
 - A second plane is being converted
 - BC Government provided C\$ 1.6 M
 - Transport Canada certification by 2022
 - Commercial flights



Source: Harbour Air



Other National Activities

- National Research Council of Canada
 - Conversion of a Cessna 337 (Skymaster) to hybrid electric power
 - Aft engine replaced by an electrical motor, battery and control system
 - Original 210 hp (157 kW) IO-360 Continental engine replaced by EMRAX 348 motor 282 hp (210 kW) cont. power
 - First flight in February 2022



Source: NRC



Questions ?

