

ICAO Symposium on Non-CO₂ Aviation Emissions

16 — 18 September 2024 Montréal, Canada



ICAO Symposium on Non-CO₂ Aviation Emissions



INSTRUCTIONS TO DOWNLOAD THE APP

- Scan the QR code using your phone or use the following link: https://scoocs.co/icao-app/
- Select the app download button according to your device
- Download the ICAO Connect app
- Enter the email you used to register for this event, create a password and click "Sign Up"
- Fill in your networking profile and click "Continue"
- Once logged in, look for:
 ICAO Symposium on Non-CO₂
 Aviation Emissions



ACCESS ICAO PUBLIC WIFI

Network: Public@Intl. Civil Aviation

Password: ICA080th





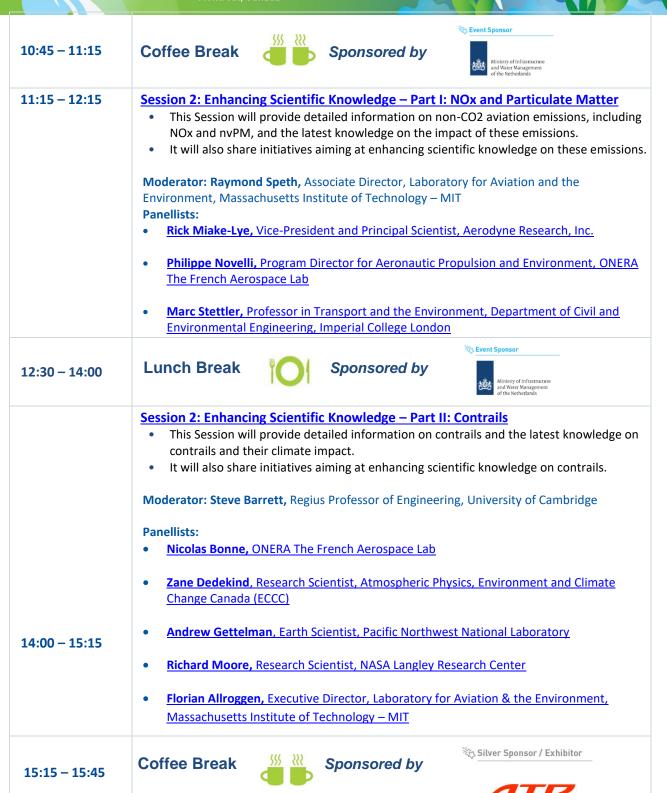


16 — 18 September 2024 Montréal, Canada

Day 1 – Monday, 16 September 2024		
07:30 - 10:30	On-Site Registration and Badge Collection Hours	
	Assembly Hall (AH)	
09:00 - 09:30	 Welcome and Opening Salvatore Sciacchitano, President of the ICAO Council, International Civil Aviation 	
	 Organization – ICAO Keynote Speech by Jan Fuglestvedt, Research Director, CICERO and Vice-Chair, Working Group III, Intergovernmental Panel on Climate Change – IPCC Mohamed Rahma, Director, Air Transport Bureau, International Civil Aviation Organization – ICAO 	
	 <u>Recorded Opening address by Brigit Gijsbers</u>, Director General of Civil Aviation and Maritime Affairs of the Netherlands 	
09:30 - 09:40	 Setting the Scene by ICAO Jane Hupe, Deputy Director, Environment, International Civil Aviation Organization – ICAO 	
09:40 - 10:45	 Session 1: Scientific Knowledge – Historical overview & State-of-the-art This introductory session will give an historical overview of non-CO₂ aviation emissions and the current state of the scientific research. It will also share information on the latest scientific knowledge amongst different organizations, including the impact modelling of non-CO₂ aviation emissions. Moderator: Neil Dickson, Chief Environmental Standards, International Civil Aviation Organization - ICAO 	
	 Panellists: David Lee, Professor of Atmospheric Science, Aviation and Climate Research Group Leader, Manchester Metropolitan University 	
	Nicolás Rivaben, Scientific Officer, Observing Networks and Measurement Division, Infrastructure Department, World Meteorological Organization - WMO	
	Alex Rap, Associate Professor, University of Leeds	
	Christiane Voigt, Professor, Head of Department of Cloud Physics, German Aerospace Center – DLR	
	Donald J. Wuebbles, Ph.D. Harry E. Preble Emeritus Professor, School of Earth, Society, and Environment, Department of Climate, Meteorology, and Atmospheric Sciences, University of Illinois	



16 — 18 September 2024
Montréal, Canada







16 — 18 September 2024 Montréal, Canada

High-Level Panel: When Policy Development meets Science

- This High-Level session will include discussions on the interaction between the state of the science and the development of policy.
- Discussions will involve the readiness of the scientific work to facilitate policy development, as well as how policy can encourage research projects and partnerships.

Moderator: Ambassador Michel Arslanian, Permanent Representative of Brazil on the ICAO Council

15:45 - 17:00

Panellists:

- Ben Foulser, Partner, Future Mobility, KPMG LLP
- Valérie Guénon, Vice President, Product Environment Policies, Safran Aircraft Engines
- Jim Hileman, Vice President and Chief Engineer of Sustainability and Future Mobility, Boeing
- Philippe Mattei, Aviation & Environment Expert, Airbus
- Maxime Meijers, Co-Founder & Chief Executive Officer, Estuaire
- Matteo Mirolo, Head of Contrail Policy & Strategy, Breakthrough Energy
- Adam Morton, Head of Technology Sustainability and Strategy, Aerospace Technology Institute – ATI

Welcome Reception by





17:00 – 19:00

Ceremony with

- Ambassador Florence Cormon, Representative of France on the ICAO Council
- Ambassador Sergio Martes, Representative of Italy on the ICAO Council
- Mr. Nicolas Granier, Head of Public Affairs & Sustainability, ATR
- **Salvatore Sciacchitano,** President of the ICAO Council, International Civil Aviation Organization ICAO
- Juan Carlos Salazar, Secretary General, International Civil Aviation Organization ICAO

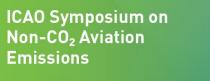
End of Day 1





Day 2 – Tuesday, 17 September 2024

08:00 - 10:00	On-Site Registration and Badge Collection Hours
	Assembly Hall (AH)
09:00 - 09:45	Setting the Scene by the Industry
	Moderator: Capt. Claude Hurley, Director, Environment & Flight Operations, International Business Aviation Council - IBAC
	Panellists: • Michelle Bishop, Director, Programmes, Civil Air Navigation Services Organisation - CANSO
	Alejandro Block Novelo, Manager, New Technologies, International Air Transport Association - IATA
	Charles Renard, Senior Emissions Advisor, International Coordinating Council of Aerospace Industries Associations - ICCAIA
	Michael Rossell, Advisor, International Relations, Airports Council International – ACI World
09:45 - 11:00	 Session 3: Mitigating Non-CO₂ Aviation Emissions – What is possible – Part I: Innovative Technologies This Session will showcase ongoing and future initiatives on innovative technologies to mitigate Non-CO2 Aviation Emissions. Moderator: Bethan Owen, Professor of Aviation and Environment, Department of Natural Sciences, Manchester Metropolitan University - MMU Panellists: Peter de Bock, Program Director, US Department of Energy, Advanced Research Projects Agency – Energy (ARPA-E) David Ostdiek, RISE Program Systems Senior Engineer, GE Aerospace Raphael Felipe Gama Ribeiro, Conceptual Studies Lead, Embraer Energia Theo Rindlisbacher, Federal Office of Civil Aviation Switzerland - FOCA
	Feijia Yin, Assistant Professor, Climate Effects of Aviation, Faculty of Aerospace Engineering, TU Delft
11:00 – 11:30	Coffee Break sponsored by Bombardier



16 — 18 September 2024 Montréal, Canada





15:45 – 17:00	High-Level Panel: Mitigating Non-CO ₂ Aviation Emissions – What is possible: Policy development This High-Level Session will provide the opportunity for stakeholders to discuss the latest work on policy developments on non-CO ₂ emissions from international aviation.
	Moderator: Ambassador Anita Adjei-Nmashie, Permanent Representative of the Republic of Ghana on the ICAO Council Panellists: Michelle Bishop, Director, Programmes, Civil Air Navigation Services Organisation - CANSO
	 Jill Blickstein, Vice President, Sustainability, American Airlines Denis Bonnet, PhD, Vice President Research, Technology & Innovation, Thales AVS
	 Andrei Mungiu, CAEP European Union Observer, DG MOVE, European Commission Cesar Augusto Souto Pereira, Advisor, Sustainability Strategy, Embraer Lukas Söffing, R&D Engineer, Royal Netherlands Aerospace Center (NLR)
17:00 – 19:00	Networking Reception sponsored by Ministry of Infrastructure and Water Management of the Netherlands
End of Day 2	

Day 3 – Wednesday, 18 September 2024		
	Assembly Hall (AH)	
08:00 - 09:00	Networking Coffee sponsored by AIRBUS	
09:00 - 10:30	 Session 4: Partnerships to act on (Part I) Research and Monitoring This Session will discuss the role of each stakeholder and partnerships to increase research on Non-CO₂ Aviation Emissions. Moderator: Urs Ziegler, Head Environmental Affairs Section, Federal Department of Environment, Transport, Energy and Communications DETEC, Federal Office of Civil Aviation Switzerland - FOCA 	
	 Panellists: Pervez Canteenwalla, Program Lead – Low Emission Aviation, National Research Council Canada – NRC Nicole Didyk Wells, Environmental Engineer, Office of Environment and Energy – Emission Division, U.S. Federal Aviation Administration Adam Durant, Chief Executive Officer, SATAVIA Ltd. Jayant Mukhopadhaya, Senior researcher, Aviation, the International Council on Clean Transportation - ICCT Dimitar Nikov, Policy officer, European Commission 	



ICAO Symposium on Non-CO₂ Aviation



15:45 – 16:45	 High-Level Panel: Way Forward on Non-CO₂ Aviation Emissions This High-Level Session will provide the opportunity for ICAO Member States and Industry to discuss what the sector can do now and in the future on non-CO₂ emissions from international aviation. Moderator: Ms. Jane Hupe, Deputy Director, Environment, International Civil Aviation Organization – ICAO Panellists: Holly Greig, Deputy Director, Aviation Decarbonisation Division, UK Department for Transport Julie Marks, Executive Director, Office of Environment and Energy, U.S. Federal Aviation Administration Charity Muthoni Musila, Alternate Representative of Kenya to ICAO Richard Ossendorp, Representative of the Kingdom of the Netherlands to ICAO Rachid Rahim, Acting Head of Aviation Environmental Protection, Qatar Civil Aviation Authority - QCAA
16:45 – 17:00	 Closing Session Jan Fuglestvedt, Research Director, CICERO and Vice-Chair, Working Group III, Intergovernmental Panel on Climate Change – IPCC Closing Speech by Juan Carlos Salazar, Secretary General, International Civil Aviation Organization – ICAO

End of the ICAO Symposium on Non-CO₂ Aviation Emissions





Ministry of Infrastructure and Water Management of the Netherlands

Description

The Dutch Ministry of Infrastructure and Water Management is committed to improving quality of life, access and mobility in a clean, safe and sustainable environment. The Ministry strives to create an efficient network of roads, railways, waterways and airways, effective water management to protect against flooding, and improved air and water quality. The Dutch Ministry of Infrastructure and Water Management is responsible for Dutch aviation policy.

Contact details

Evelien Korbee

<u>Evelien.korbee@minienw.nl</u>

Louis Leestemaker

<u>Louis.leestemaker@minienw.nl</u>

Website

Ministry of Infrastructure and Water Management | Government.nl

AIRBUS



Airbus - Booth #17

Company description

Airbus is a global pioneer in the aerospace industry, operating in the commercial aircraft, helicopters, defence and space sectors. Airbus is a leader in designing, manufacturing and delivering aerospace products, services and solutions to customers on a worldwide scale.

With around 150,000 employees and as the largest aeronautics and space company in Europe and a worldwide leader, Airbus is at the forefront of the aviation industry. We build the most innovative commercial aircraft and consistently capture about half of all commercial airliner orders. Thanks to our deep understanding of changing market needs, customer focus and technological innovation, we offer products that connect people and places via air and space.

Contact information

Catherine Guillemart catherine.guillemart@airbus.com

Website

www.airbus.com





ATR - Booth #10

Company description

ATR, a joint-venture between Airbus and Leonardo, is the world number one regional aircraft manufacturer with its ATR 42 and 72, the best-selling aircraft in their market segment. The vision of the company is to accelerate sustainable connections for people, communities and businesses, no matter how remote. Flown by 200 airlines in over 100 countries, ATR aircraft opened 160 routes in 2023, facilitating the development of territories and enabling access to crucial services like healthcare and education. ATR aircraft are the most advanced, versatile, cost-effective and lowest-emission regional aircraft on the market, emitting 45% less CO2 than similar-size regional jets.

Contact information

Nicolas GRANIER

Head of Public Affairs & Sustainability

Mobile +33 607320024

Email: nicolas.granier@atr-aircraft.com

Website

www.atr-aircraft.com





Bombardier - Booth #12

Company description

Bombardier is a global leader in aviation, focused on designing, building, modifying and maintaining the best-performing aircraft for the world's most discerning people, businesses, governments and militaries. Headquartered in Montréal, Canada, Bombardier employs more than 18,000 worldwide and operates engineering, aerostructure, assembly, completion and service facilities in Canada, the United States, Mexico and several other locations around the world. Bombardier aircraft are also trusted internationally in government and military special-mission roles, leveraging Bombardier Defense's proven expertise.

Bombardier is committed to pioneering the future of aviation - innovating to make flying more reliable, efficient and sustainable. This unwavering commitment to sustainability is demonstrated through the company's EcoJet research project, as well as its engagement to cover all its flight operations with Sustainable Aviation Fuel (SAF) utilizing the Book and Claim system.

Contact information

Mr. Bruce Parry bruce.parry@aero.bombardier.com

Website

https://bombardier.com/en





Représentation Française auprès de l'OACI

Company description

Acteur clé de l'aéronautique et membre fondateur de l'Organisation de l'Aviation Civile Internationale, la France siège au Conseil de l'OACI depuis la création de l'Organisation. Elle joue à ce titre un rôle reconnu et de première importance dans toutes ses activités et dans la mise en œuvre de ses objectifs stratégiques (sécurité, sûreté, navigation aérienne, environnement, développement économique).

La France dispose d'une Représentation permanente à Montréal placée sous l'autorité de l'Ambassadrice Florence Cormon-Veyssiere afin de gérer les relations avec l'OACI. En étroite collaboration avec le Ministère de l'Europe et des Affaires Étrangères et la Direction Générale de l'Aviation Civile, cette mission coordonne les positions de la France avec ses partenaires européens. Elle apporte en outre tout son soutien aux experts français actifs dans les différents Panels et veille à la présence française au sein de l'OACI.

Website

https://oaci.delegfrance.org





Permanent Representation of Italy to ICAO

Company description

Italy ratified the Chicago Convention on 1948 and has been member of the ICAO Council since 1950, elected as one of the States of chief importance in air transport. Italy plays an active role in ICAO by a large participation in the groups of experts which are the precious foundation of global standardisation.

As member of the governing body the delegation of Italy does believe in modernization of ICAO, in collaboration across various fields of international aviation, in strategic alignment of policies, in capacity building with the aim of "No Country Left Behind". As a member of both the European Union (EU) and the European Civil Aviation Conference (ECAC), Italy shares a collective view that environmental issue is key factor in the future development of international aviation. Together with ICAO, Italy is committed in addressing the challenges posed by climate change, aiming for a more sustainable future in the global air transport sector.

Website

https://www.esteri.it/en/

Estuaire – Booth #9

Company description





Created in 2023, Estuaire is a tech company based in Paris that aims to reduce the climate impact of aviation. Estuaire specializes on non-CO2 effects such as contrails. Its main product is an end to end contrail management platform that empowers its users to quickly achieve climate impact savings.

Founded by ex-Airbus employees and MIT grads and backed by institutions such as Safran and Station F, Estuaire supports companies across the aviation value chain take actions to reduce their impact on the environment.

Contact information

Maxime Meijers, <u>maxime.meijers@estuaire.dev</u>

Website

https://estuaire.dev

SESAR Joint Undertaking - Booth #11





Contact information

Christine Stewart, christine.stewart@sesarju.eu

Website

www.sesarju.eu





IFAR– Booth #6

Company description

IFAR, the International Forum for Aviation Research, is the world's only network of publicly-funded aviation research establishments. IFAR was founded in 2010 and now has 26 active members globally. IFAR aims to enable the information exchange and communication on aviation research activities, to create among its members a shared understanding on challenges faced by the global aviation research community, and to develop views and recommendations on future research strategies. There are several working groups on various topics. Advanced Air Mobility is one of them, which generated a Scientific Assessment to consolidate IFAR members' perspectives on gaps and future priorities in technology, operational and societal acceptance areas.

Contact information

June Sun, Jun.Sun@nrc-cnrc.gc.ca

Website

https://ifar.aero/

Gathering pace towards sustainable aerospace

AIRBUS



We are shaping the future of aviation





