



# AVIATION CO<sub>2</sub> REDUCTIONS

## STOCKTAKING SEMINAR

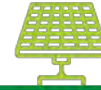
TECHNOLOGY · OPERATIONS · SUSTAINABLE AVIATION FUELS

### FACILITATOR AND SPEAKER PROFILES





# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### Keynote Speakers



#### **Valérie Plante**

Mayor of Montreal, Projet  
Montréal Leader

First elected city councillor in Saint-Marie district in 2013, Valérie Plante was chosen by Projet Montréal members to lead the party in 2016. Her contagious passion and energy have helped her rally people around her progressive vision. Deeply committed to participatory democracy, Valérie Plante has a bold plan for Montréal centered on increased access to public transit, improved urban planning and public services, the economy and the environment. Her commitment is to bridge the gap on these issues for all 19 city boroughs.

Before jumping into the political arena in 2013, Valérie Plante studied anthropology, museology, multiethnic intervention, and was actively involved with numerous community groups, such as the *Fondation Filles d'action*.

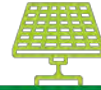
She became mayor of Montréal on November 5, 2017.

As mayor of Montréal, Valérie Plante is a member of various advisory committees and governing boards.

- Chair of the *Communauté métropolitaine de Montréal (CMM)*;
- Executive committee member of the *Union des Municipalités du Québec (UMQ)*;
- Governing board member of *Montréal international*;
- Governing board member of *Fondation Montréal inc.*;
- Member of the Big City Mayors' Caucus of the Federation of Canadian Municipalities
- Co-president of *Metropolis*



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Bertrand Piccard**

Initiator & Chairman – Solar  
Impulse Foundation

### Setting the scene: ICAO's Environmental work



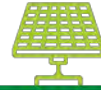
**Jane Hupe,**

Ms. Jane Hupe is the Director responsible for the Environment programme at International Civil Aviation Organization (ICAO), and serves as the Secretary of the ICAO Council's Committee on Aviation Environmental Protection (CAEP). Ms. Hupe has a vital role in providing leadership for ICAO's efforts to define and promote policies and Standards for environmentally sustainable aviation, managing a portfolio that includes aircraft noise, local air quality, global climate, clean energy and sustainable aviation fuels, adaptation, circular economy and a global market-based measure for international aviation. She currently leads the Organizations efforts on green innovation and the assessment of options for long term goals for CO<sub>2</sub> emissions reduction.

Under her leadership, the ICAO Balanced Approach to Aircraft Noise Management policy was established and various new and more stringent global Standards to reduce aircraft noise and emissions affecting local air quality and global climate were adopted, with



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Deputy Director  
Environment, ICAO

particular mention of the world's first global CO<sub>2</sub> certification standard for any industry sector, adopted in 2017.

Ms. Hupe was at the forefront of the conceptualization and development of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which was agreed in 2016 as the first global market-based mechanism for any industry sector. She ensures that "CORSIA is on track" by leading its implementation strategy, including putting in place the necessary regulatory frameworks and tools whilst ensuring that "no country is left behind" by implementing ACT-CORSIA (Assistance, Capacity Building and Training for CORSIA), one of the most ambitious assistance programmes undertaken by ICAO.

Ms. Hupe holds a Master's degree in Aviation from the École Nationale de L' Aviation Civile (ENAC), Toulouse, France, and many other post-graduate degrees, including in environmental auditing.

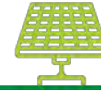
### Setting the scene: challenges, trends and energy requirements for aviation

#### **David Lee**

Professor, Atmospheric  
Science and Director, Centre  
for Aviation, Transport, and the  
Environment (CATE) –  
Manchester Metropolitan  
University, IPCC WG1



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Roger Schaufele, Jr.**

Manager, Forecasts and Performance Analysis Division – U.S. Federal Aviation Administration

Roger Schaufele, Jr. is Manager of the FAA’s Forecasts and Performance Analysis Division in the Office of Aviation Policy and Plans. He oversees the development of the FAA’s forecasts of U.S. aviation demand and activity as well as forecasts of demand and activity for individual airports contained in the Terminal Area Forecast (TAF). He has more than 35 years experience in forecasting aviation demand in various regions of the world. Mr. Schaufele joined the FAA in October 2000 as an industry economist and was promoted to his current position in 2009. Prior to coming to the FAA, Mr. Schaufele was Manager of System Forecasts at US Airways with responsibility for forecasting the carrier’s traffic and revenue. He began his career as an economist for Douglas Aircraft Company forecasting airline traffic for Latin American and Middle Eastern air carriers. Mr. Schaufele holds degrees in economics from the University of California, Berkeley and Northwestern University.

### **Neil Dickson**

Chief, Environmental Standards – ICAO

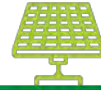
## High-level roundtable: roadmaps towards zero emissions



Drew Kodjak is the executive director of the International Council on Clean Transportation, an organization that he co-founded in 2005 to support governments in the top vehicle markets develop policies to improve the environmental performance and energy efficiency of all modes of vehicles and fuels. Prior to joining the ICCT, Mr. Kodjak served as Attorney-Advisor for the U.S. Environmental Protection Agency, during which time he contributed to regulatory developments of major rulemakings. Mr. Kodjak serves on a number of important committees and organizations related to his work on transportation and air pollution. Mr. Kodjak is a member of the Transportation Research Board Committee on Alternative Transportation Fuels and



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Drew Kodjak**

Executive Director –  
International Council on Clean  
Transportation (ICCT)

Technologies and U.S. Department of Energy's Hydrogen Fuel Cell Partnership. Mr. Kodjak previously served on the National Academies of Sciences Panel on Medium and Heavy-duty Vehicle Fuel Economy (2008 – 2010), and was co-chair of the U.S. Mobile Source Technical Advisory Committee (2010 – 2016). Mr. Kodjak is a graduate of New York University and Boston University Law School where he graduated with honors in 1991.



Val Miftakhov is a Founder & CEO of ZeroAvia, Inc, a California company developing the World's first practical zero-emission aviation powertrain. Val is a serial entrepreneur in EV space - his previous company eMotorWerks has developed the World's leading platform for EV battery aggregation to provide grid services and was acquired in 2017. Prior to that, Val held a number of senior business and product positions at Google and McKinsey & Company and was a nuclear researcher at Stanford Linear Accelerator. Val holds a Ph.D. in Physics from Princeton University, Masters in Physics from Moscow Institute of Physics and Technology, and was a two-time winner of Russian Nationwide Physics competitions. In his spare time, Val makes good use of his airplane and helicopter pilot licenses.

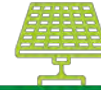
### **Val Miftakhov**

Chief Executive Officer and  
Founder – ZeroAvia

Advanced aircraft technologies



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Andreas Schaefer**

Prof. and Director, Air Transportation Systems Laboratory – University College of London

Andreas W. Schaefer is a Professor of Energy and Transport at University College London (UCL) and Director of UCL's Air Transportation Systems Laboratory ([www.ATSlab.org](http://www.ATSlab.org)). In addition to leading peer review journals, his work was published in popular science magazines, such as Scientific American and American Scientist. He is lead-author of "Transportation in a Climate-Constrained World", MIT Press (June 2009). Prior to joining UCL, he held appointments at the International Institute for Applied Systems Analysis (IIASA), the Massachusetts Institute of Technology (MIT), the University of Cambridge, and Stanford University. He holds a MSc in Aerospace Engineering and a PhD in Energy Economics, both from the University of Stuttgart, Germany.



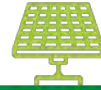
### **Cristina Garcia-Duffy**

Head of Technology – Aerospace Technology Institute (ATI)

Dr Cristina Garcia Duffy is Head of Technology at the Aerospace Technology Institute with responsibility for the Institute's Sustainability agenda. In her current role, Cristina is accountable for the development and refresh of the ATI technology strategy and for integration of technology cross-cutting areas. Prior to the ATI, Cristina held various management positions within the R&T department at Leonardo Helicopters (previously known as AgustaWestland) and previously researching and teaching positions at two universities. Cristina holds a PhD in Aerospace Engineering from Washington University in St. Louis and an MSc and BSc with honours from Saint Louis University, both in the USA.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Greg Steinmetz**

Consulting Engineer – I  
Advanced Systems &  
Preliminary/New Engine  
Design – GE Aviation

Greg is the Consulting Engineer for new commercial engine programs at GE Aviation. Greg's consulting responsibilities include driving innovation into designs, providing design technical review and approval, supporting product strategy development, and sharing best practices and lessons learned from previous programs. He brings to this role 31 years of advanced technology, new product introduction and leadership experience. Prior to this role, Greg provided early design program and technical leadership to several GEAV commercial programs – including the LEAP-1A/B/C, Passport20, and GE9X. Greg also made significant contributions to the GE90-115B, GP7000, and GEnx-1B programs. Prior to his roles in preliminary/new engine design, Greg worked in Fan & Compressor Aerodynamic design and Engineering Methods.

Greg received his bachelor's degree in Aeronautical Engineering from The Ohio State University. Greg received his master's degree in Aerospace Engineering from the University of Cincinnati. He holds several patents related to engine design.



**Marie Masson**

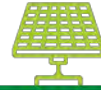
Public Affairs Manager – Lilium  
GmbH

Marie is responsible for Public Affairs at Lilium, engaging with government stakeholders globally to prepare the company's entry into service in 2025. After graduating from McGill University in Political Science, Marie spent three years working for Nobel Peace Prize Laureate Prof. Yunus and the United Nations where she drove multiple campaigns. Her interest in smart mobility led Marie to complete her MBA at ESMT Berlin and join Lilium.





# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Michael Winter**

Fellow Advanced Technology  
– Pratt & Whitney

Michael is the Senior Fellow for Advanced Technology at Pratt & Whitney, where he leads the company's technology portfolio internally and represents it externally. In over 30 years with United Technologies (now Raytheon Technologies), Michael has made numerous technical contributions working with fuel cells, lasers, HVAC, systems engineering, controls, combustion systems, and propulsion systems. He holds Doctor of Philosophy, Master of Science and Master of Philosophy degrees from Yale University, and a Bachelor of Science degree in Mechanical Engineering from Drexel University; authored more than 40 patents and more than 50 published technical articles, and serves on numerous advisory boards for universities, industry associations, and the National Academy.



**Roei Ganzarski**

CEO, magniX

Roei Ganzarski is CEO of magniX, an electric aviation propulsion company. With a vision of connecting communities with low-cost, clean air transportation, magniX is disrupting the status quo of aviation as we know it.

In addition to his role as CEO of magniX, Roei is the chairman of Eviation, the electric aircraft OEM.

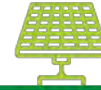
Prior to magniX, Roei was CEO of BoldIQ – a global provider of dynamic real-time scheduling optimization software. Under Roei's leadership, BoldIQ grew from a seed software startup to a multi-million-dollar profitable SaaS company.

Before BoldIQ, Roei was with the Boeing family of companies in continuously increasing roles of responsibility. His last role at Boeing was Chief Customer Officer for Boeing's Flight Services division where he led all worldwide customer and market facing organizations and was responsible for revenue growth and customer service.

Other experiences prior to Boeing include private investment banking, corporate finance, advertising, and the military.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



He is a graduate of Wharton's Advanced Management Program, earned an MBA from the University of Washington, and a BA in Economics from The University of Haifa.

Roei sits on the board of the Washington Technology Industry Association and lives with his family in Redmond, Washington, USA.



### **Stéphane Viala**

Senior Vice President  
Engineering – ATR

SVP Engineering and Head of Design Organization ATR. He was VP ATR Chief Engineer and Head of Engineering Integration in charge of technical definition and development of product, continuous improvement and continuous airworthiness since 2016.

He previously worked for AIRBUS Commercial aircraft division during more than 16 years.

He was A320 Incremental Development Chief Project Engineer in charge of Covering the Overall Physical Design, Overall A/C Design and Overall System Design defining and developing next steps for A320 program in the chief Engineering team.

He moreover participated to define the architecture and technical aspects of R&T Programs during 4 years as head of Overall a/c Design encompassing flight physics, engine, Flight Test Bed and Methods and Tools perimeter after having set up flight test demonstrator organization for R&T.

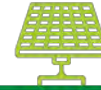
He has been also Head of A30X Flight Physics and Flight Dynamics Integrated team in charge of defining what could be a new Single Aisle a/c. The conclusion of those studies led to the launch of A320 NEO.

Prior to those roles, he has been deputy of A350 Flight Dynamics integrated team. He has been also in charge of France Aerodynamic Methods team same time supporting any development involving fluid mechanics (e.g. Aerodynamics, Aerothermic, Fuel, Bleed Air and Icing)

Furthermore, he is the owner of several patents in Aerospace field and was involved in several tiger teams supporting Airbus a/c programs.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



He obtained his Ph.D Degree on Turbulence Modeling from SUPAERO/ONERA in 1995 after graduating as an Aeronautics Engineer at ENSMA (École Nationale Supérieure de Mécanique et d'Aérotechnique) in 1992.

### High-level roundtable: a new vision for the future



**Guillaume Faury**

Chief Executive Officer –  
Airbus SAS

Guillaume Faury was appointed Airbus Chief Executive Officer in April 2019 and leads the Company's Executive Committee. He was previously President of Airbus' commercial aircraft business, a role he had held since February 2018.

Prior to this, Guillaume was Chief Executive Officer of Airbus Helicopters (2013-2018), where his achievements included restructuring its manufacturing system and introducing new technologies.

Before that, he enjoyed a four-year spell in the car industry at Peugeot (2009-2013), the French automotive manufacturer, rising to become the Executive Vice-President for Research and Development and a member of the company's management board. He presided over significant advances in Peugeot's lower-emissions hybrid-engine technology and the overhaul of the company's product range, among other accomplishments.

Between 1998 and 2008, he held various leadership positions in engineering, programmes and flight testing in Airbus' helicopter business, which at the time operated under the name of Eurocopter. He became Executive-Vice President for Programmes and a member of the Eurocopter Executive Committee, before being appointed as Executive Director for Research and Development.

Guillaume began his career in 1992 as a flight-test engineer for the Eurocopter Tiger helicopter in the Direction Générale de l'Armement (DGA), the French government agency responsible for the development and purchase of defence systems for the French armed forces.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



He graduated from the École polytechnique in Paris in 1990 and, subsequently, from the École nationale supérieure de l'aéronautique et de l'espace in Toulouse.

Guillaume's love of flying and aviation dates back to his childhood. He is a qualified light-aircraft pilot and helicopter flight-test engineer with 1,300 hours of flying experience.

He was born in 1968 in Cherbourg, Normandy, and is married with three children.



**Jean-Francois Brouckaert**

Chief Scientific Officer – Clean Sky Joint Undertaking

Jean- François Brouckaert graduated in 1994 from the Faculté Polytechnique de Mons (Belgium) as a Mechanical Engineer. He holds a Master-after-Master in Fluid Dynamics & Turbomachinery from the von Karman Institute and holds a PhD in Unsteady Measurement Techniques (Fast Response Pressure Probes) from the Université Libre de Bruxelles.

Jean-François has been working for 20 years at the von Karman Institute as a Research Engineer, Assistant Professor and Associate Professor in the Turbomachinery and Propulsion Department.

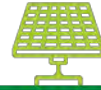
He has been a founding member and Secretary General of EVI-GTI (European Virtual Institute for Gas Turbine Instrumentation) from 2004 to 2014. He also served as Co-Chair of several NATO and ISA Working Groups on Gas Turbine Instrumentation AVT-180, AVT-229, ISA 107.5 until 2014. As an ASME member, he has been actively involved in the IGTI/Turbo Expo Conference Committees and reviews, likewise with the European Turbomachinery Conferences.

In November 2014, he joined the Clean Sky Joint Undertaking as a Project Officer, responsible for the engine research programmes SAGE and ENG. In September 2018, he became Team Leader, responsible for Engines, Systems and Technology Evaluator.

In May 2019, he has been appointed Chief Scientific Officer.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Martin Haigh**

Senior Energy and Climate Change Adviser – Shell

Martin has been working for Shell for 16 years, and has been a member of the Shell Scenarios Team for the last 14.

He has led the development of Shell's World Energy Model, which has underpinned the last two Shell scenario rounds and built on Shell's 50-year history in scenario planning. Martin was also a principal contributor to the team's Sky scenario looking at a most plausible pathway for meeting the goals of the Paris Climate Agreement.

He speaks frequently on the scenario approach as well as energy-related issues, for a variety of audiences. He is a judge for Shell's UK-wide schools competition, The Bright Ideas Challenge. He takes particular interest in energy technology development and environmental change. He has jointly authored papers on energy technology deployment, and the long-term potential for renewables. Martin works with many institutions, including MIT's Climate Science team, the IEA, and several UK universities. He is a Fellow of the Royal Geographic Society.

Martin's background is mathematics, with experience in mathematical and economic modelling in the transport and telecoms industries, as well as for energy.

### **Paul Stein**

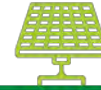
Chief Technology Officer – Rolls Royce

### **Sheila Remes**

Vice President of Strategy for Commercial Airplanes – Boeing



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Susan Ying**

Senior Vice President, Global Partnerships – Ampaire

Dr. Ying has devoted over three decades to the aerospace industry, with experience at NASA, Boeing, the Commercial Aircraft Corporation of China, and most recently an electric aircraft start-up, Ampaire. She is the Senior Vice President of Ampaire, responsible for global partnerships. She is also a board member of the Lindbergh Foundation.

Demonstrating success both at individual and team levels, Dr. Ying has been the recipient of many honors, including the [People's Republic of China Friendship Award](#), Asian American Engineer of the Year Award, Boeing Professional Excellence Award from the CTO, NASA Group Achievement Award, AIAA Applied Aerodynamics Best Paper Award, and the Professional Achievement Award for Women of Color in Technology. Dr. Ying is the immediate past President of the [International Council of the Aeronautical Sciences \(ICAS\)](#), serving on the Executive Committee which leads in shaping the agenda of this multinational professional aerospace organization. Dr. Ying is recognized as a Fellow of the AIAA and Fellow of the [Royal Aeronautical Society \(RAeS\)](#).

With a deep passion for flight, Dr. Ying holds a Commercial Pilot License and is a FAA-Certified Flight Instructor (CFI). She received her PhD degree in Aeronautics and Astronautics from Stanford University and BS from Cornell University.

## Novel aircraft technological concepts



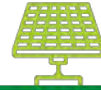
**Bobby Sethi**

Dr. Bobby Sethi (FHEA, PhD) is the Deputy Director of Research for the Cranfield University, School of Aerospace, Transport and Manufacturing. He is a Senior Lecturer in Gas Turbine Combustion and Environmental Impact as well as the Leader of the Cranfield University Technoeconomic Environmental Risk Assessment (TERA) for civil aviation in the Propulsion Engineering Centre. He is also a Fellow of the UK Higher Education Academy.

His research is focussed on investigating the technical and economic benefits, environmental impact and risks associated with novel, low emissions, more efficient propulsion technologies and asset management strategies for civil aviation. He is the coordinator of the ongoing EU H2020 ENABLEH2 project and has made significant



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Deputy Director of Research -  
School of Aerospace,  
Transport and Manufacturing –  
Cranfield University

contributions to a number of past EU H2020 and Framework Program projects including ULTIMATE, LEMCOTEC, CLEAN SKY 1 (SGO-ITD and TE), CLEAN SKY 2 (DEMOS), DREAM, NEWAC, VITAL and VIVACE. He has co-authored 32 journal and 72 conference papers and has supervised 23 PhD and 130+ MSc students.



**Grazia Vittadini**

Chief Technology Officer –  
Airbus SAS

Grazia Vittadini has been appointed Chief Technology Officer (CTO) of Airbus and member of the Airbus Executive Committee, effective May 1st, 2018.

Previously, Vittadini was Executive Vice President Head of Engineering from January 2017 and member of the Executive Committee of Airbus Defence and Space.

Prior to this position, she had been Senior Vice President Head of Corporate Audit & Forensic, responsible for Airbus Group audit activities worldwide.

Starting January 2013 and for one year and a half, Grazia was Vice President Head of Airframe Design and Technical Authority for all Airbus aircraft.

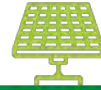
Always leading transnational teams in multiple locations, she also served as Chief Engineer on the Wing High Lift Devices of the A380 in Bremen from First Flight to In-Service (2005-2009) and then contributed to securing First Flight and Type Certification of the A350 XWB aircraft as Head of Major Structural Tests in Hamburg. The Major Tests for A320 Extended Service Goal, A380 and A400M were also in her scope.

Vittadini began her professional career on the Italian side of the Eurofighter Consortium, before joining Airbus Operations in Germany in 2002 and setting on her path towards senior management positions.

Grazia Vittadini graduated in Aeronautical Engineering and she specialized in Aerodynamics from the Politecnico di Milano.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Henri Werij**

Dean of Faculty of Aerospace Engineering – Delft University of Technology (TU Delft)

Henri Werij obtained his MSc in experimental physics and PhD in atomic physics and quantum optics at Leiden University (both cum laude). After spending several years in Boulder, Colorado (JILA) and Amsterdam as a postdoc, he started working at the Dutch research organisation TNO in the field of satellite instrumentation for Earth atmosphere monitoring. His last position at TNO before moving to Delft University of Technology in 2017 was Director of Space and Scientific Instrumentation. Since then he is Professor and Dean at the Faculty of Aerospace Engineering. Here, together with a scientific staff of more than 100 professors in aerospace engineering and over 300 postdocs, researchers and PhD candidates, he aims to vastly accelerate the transition towards truly sustainable aviation. Interdisciplinary world-class research, international collaboration and excellent education to the many and highly motivated students at the Faculty are the cornerstones of his policy.



**James Heidmann**

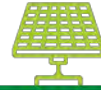
Manager, Advanced Air Transport Technology (AATT) Project – NASA

Dr. James (Jim) Heidmann currently serves as Manager of NASA's Advanced Air Transport Technology Project. In this capacity, he leads NASA's technology development for subsonic transport aircraft. Prior to this role, he served as Acting Deputy Director of NASA's Advanced Air Vehicles Program, managed NASA's Advanced Air Transport Technology and Transformational Tools & Technologies Projects, and also served as Chief of the Turbomachinery and Heat Transfer Branch. In addition to these management roles, Dr. Heidmann spent 20 years as an Aerospace Research Engineer, publishing over 20 papers and journal articles in the area of turbomachinery aerodynamics and heat transfer. He was elected Fellow of the American Society of Mechanical Engineers (ASME) in 2007, Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA) in 2015, and received the Outstanding Mechanical Engineer (OME) Award from Purdue University School of Mechanical Engineering in 2017. Dr. Heidmann received a Bachelor of Science in Mechanical Engineering from the University of Toledo in 1986, Master of Science in Mechanical Engineering from Purdue University in 1988, and Doctorate in





# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Mechanical and Aerospace Engineering from Case Western Reserve University in 1997.



### **Tine Tomazic**

Chief Technical Officer –  
Pipistrel

Dr. Tine Tomažič (male) was born in 1983 and received B.Sc. and Ph.D. in electrical engineering from University of Ljubljana in 2007 and 2014 respectively. His work in systems automation and human machine interfaces ranges from autopilot technologies for unmanned aerial vehicles to electric and hybrid-electric propulsion systems. Tomažič was involved in development of world's first 2-seat and world's first electric 4-seat aircraft, the Taurus Electro and the Taurus G4. His current research is in the field of certifiable hybrid-electric propulsion systems and their intuitive user interfaces, where besides being involved in the development, Tomazic is active in the working group with ASTM F44.40 to rewrite current General Aviation design standards to allow proliferation of electric flight. He is also a member of SAE, EASA T4S Technology for Safety and a recognised global expert in the field of electric flight. He is the CTO of Pipistrel.

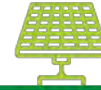
### **Tom Grundy**

Chief Executive Officer –  
Hybrid Air Vehicles

Air operations



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Alexandre Feray**  
CEO – Open Airlines

Alexandre Feray has 25 years of experience in the Software and Airline Industry, not including his teen years when he invented a programming language that was awarded and commercialized by Apple. He holds an MSc in Engineering and IT from École Centrale Paris and started his career at IBM Thomas J. Watson Research Center in New York, USA working on the first multimedia email system for the Internet. He managed complex IT systems at Alcatel Lucent and at Air France where he was the head architect of Air France Operations Control Center's reengineering program and head of Air France Crew Management IT Department, leading a team of 50 people.

In 2006, he founded OpenAirlines, an innovative company that provides consulting and software solutions to reduce the costs of the airline operations. Drawing on 8 years of R&D, SkyBreathe® eco-flying software comes out on the market in 2013. Rewarded with numerous prizes, SkyBreathe® is today the most widely used eco-flying solution in the world. Its active community federates more than 42 airlines across the planet, including Air France, Transavia, Malaysia Airlines, Norwegian, Cebu Pacific, flydubai, and Atlas Air.

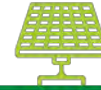


**Arthur Orton**  
Deputy Program Manager,  
Continuous Lower Energy,  
Emissions and Noise (CLEEN)  
Program – United States

Mr. Orton is the Deputy Program Manager for the United States Federal Aviation Administration's (FAA) Continuous Lower Energy, Emissions and Noise (CLEEN) Program. This program is the FAA's principal environmental effort to accelerate the development of new aircraft and engine technologies to reduce noise, emissions, and fuel burn. Until recently he managed a portfolio of NextGen air traffic modernization research within the FAA, focused on improving the throughput, efficiency, predictability, and flexibility of air traffic operations by moving the United States National Airspace System towards use of trajectory-based operations.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Federal Aviation Administration (FAA)



**Boni Dibate**

Regional Director Africa Affairs – CANSO Africa

I hold a BA Social Science and a MSC degree in Clinical Psychology from the Medical University of South Africa. Having obtained a Top Management Program for Public Enterprises in South Africa, a certificate at the National University of Singapore. Senior Executive Development Program certificate from Harvard/Wits Business Schools. Airline Management Integration Program certificate from IATA Aviation Training and Development Institute in Singapore, also a Creative Airline Alliances and Strategic Partnerships certificate from Amman Jordan.

Obtained a Diploma in International Coaching from Newfield Network Boulder in USA, and a member of IOD SA. She held positions as an Executive Human Resources Manager at Transwerk, Chief Executive officer of both Esselenpark Centre of Excellence and South African Express Airways. Group Executive Manager Support Services at TRANSTEL, Chief Operating Officer, and Executive Manager Service Delivery at the Air Traffic and Navigation Services (ATNS) and currently the Director CANSO Africa Affairs.

Having sat an array of boards I have been the Chairperson of Tourism Business Council of SA, East Gate Airport, President of the Business Women Association. Including being a board member of the University of Pretoria and one of the Directors of Dark Fiber Africa (DFA) and South African Express Airways where I held the position of being the chairperson of the Ethics and Transformation Committee.



**Daniel White**

Daniel White is a behavioral and environmental expert with extensive experience creating successful innovations to save large amounts of carbon, quickly. His company Signal, is founded upon peer-reviewed research with Virgin Atlantic, which in 8 months saved over \$6m of fuel, 24,000 mt of CO<sub>2</sub> and made pilots feel better, a unique triple bottom line. This work is quoted as the lowest ever measured cost to reduce carbon.

Dan's first innovation 'rappel insulation', was his catalyst to becoming an entrepreneur, this created a new \$50m industry for the UK. More recently, Dan has been at the forefront of applied behavioral science, to drive substantial, quick, and measurable changes in environmental



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### CEO – Signal

outputs. This led to Signal, a ‘fitbit for work’, which is a unique scalable software to improve operational efficiency and motivation using rigorous behavioural economics and data analytics.

Before launching Signal, he managed the UK's first Energy Natural Field Experiment and was previously CEO and Co-Founder of ‘The Behavioralist’, a successful USA/UK based research consultancy startup working with corporations and governments to integrate behavioral economics to solve internal challenges. Clients included Centrica, National Grid, Virgin Atlantic Airways, NATS Holdings, Castaic Lake Water Agency, and UK Local and National Government.

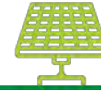
### David Brain

Operational expert –  
EUROCONTROL

David previously worked as an Area Air Traffic Controller in the UK and has 25 years experience in ATC, ATM and Project Management. David currently leads EUROCONTROL's environmental efforts on reducing aviation's operational impacts. David chairs the European CCO/CDO Taskforce as well as leading several other European operational projects and is also a co-rapporteur of the ICAO-CAEP Airport and Operations Working Group. David was previously responsible for estimating the global environmental benefits following the planned implementation of the operational concepts within ICAO's ASBU framework and also led the first ever global flight efficiency analysis using a harmonised surveillance data source. David has a private pilot's license, a degree in Geography, a Master's degree in Sustainable Aviation and enjoys travelling across Siberia in his spare time.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Eric Perrin**

Policy Officer – European Commission - Single European Sky (SES) Unit of the Directorate-General for Mobility and Transport (DG MOVE)

Eric is an experienced aviation professional with over 25 years' experience of service in Air Traffic Management. On completing his Engineering degree in Aeronautics and Computer Science from the French Civil Aviation School (ENAC), he worked at Inmarsat (UK) on the first evaluations of Automatic Dependent Surveillance-Contract (ADS-C) flight tracking in the North Atlantic area. He then started his career as Project Manager specializing in the design and development of aeronautical mobile communication systems. In late 1997, he took up employment with the European GNSS Tripartite Secretariat (European Space Agency, the European Commission and EUROCONTROL). His work was related to the development of the mission requirements for EGNOS, liaising with the ICAO regional offices for EGNOS expansions. He joined EUROCONTROL in 2002 as Ground-Based Augmentation System (GBAS) CAT-I Project Manager. From 2004 to 2016, he has taken up successive safety management positions at EUROCONTROL and in European collaborative development programmes, including SESAR. Since 2017, on secondment from EUROCONTROL, he has served as policy officer within the Single European Sky Unit of the European Commission's Directorate-General for Mobility and Transport where he supports regulatory development and knowledge sharing work in the fields of performance and charging, environmental sustainability, artificial intelligence, drones and higher airspace operations.



**Jean Brice Dumont**

Jean-Brice Dumont was appointed Executive Vice President Engineering at Airbus in April 2019 and is a member of the company's Executive Committee.

With over two decades of industry experience, he joined Airbus Commercial Aircraft in this role in January 2018 after six successful years as Executive Vice President, Engineering and Chief Technical Officer at Airbus Helicopters. Beyond his Engineering leadership, Jean-Brice strongly promotes diversity, teamwork and core human values such as humility and respect.

Jean-Brice Dumont joined Eurocopter, the predecessor company to Airbus Helicopters, in February 2004. There, he worked as an Engineer and Development Project Manager for the NH90 programme, prior to becoming the NH90 Chief Engineer and NH Industries' Technical Director from 2008 to 2012.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



EVP Engineering – Airbus SAS

A licensed French Army Aviation pilot, Dumont started his career with the country's DGA military procurement agency in 1996, where he worked on the Tiger and Super Puma rotorcraft programs before ultimately being appointed the organization's Chief Test Director for the Tiger helicopter in 2002.

Jean-Brice Dumont is a graduate of France's École Polytechnique and of the ISAE Aerospace Institute. He was born in 1971, is married with two sons and enjoys running marathons and swimming.



Robert Brons was born in Rotterdam, the Netherlands, on May 23<sup>rd</sup>, 1965. He graduated as MSc from Delft University of Aerospace Engineering in 1989, on human-machine interface design and human modelling. He completed his airline pilot training on the Rijksluchtvaartschool in Eelde (1990) and attained his engineering-pilot post-graduate degree at Delft University (1991).

In 1991 he started as airline pilot for KLM, Royal Dutch Airlines, based in Amsterdam. Flying experience ranges from Cessna C500, DC-10, A310, B767, B737 to A330; since 2002 as a captain. At present he is captain on the Airbus A330, conducting intercontinental flights. He has been flight instructor/type rating examiner from 1996 until 2002. He accumulated over 14000 hrs flying hours.

### Robert Brons

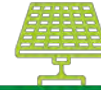
Captain – Representing:  
IFALPA, International  
Federation of Airline Pilots'  
Associations

Since 1993 Robert Brons acted as policy advisor and director in several technical committees, both in the national ALPA, the European Cockpit Association, the Dutch Birdstrike Committee and IFALPA. Since 1999, R.C. Brons is member of the Aircraft Design and Operations Committee of IFALPA, the International Federation of Airline Pilots' Associations. Since 2004, he represents IFALPA at ICAO CAEP, the Committee on Environmental Protection. IFALPA represents over 100.000 airline pilots from 101 Member Associations around the globe.

He is specialised in aircraft operations, bird control, crosswind operations, environmental sustainability and safety management.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Tor Iversen**  
Project Manager –  
Greenflyway Test Arena

Mr. Iversen has an extensive career within media, communications and aviation, spanning three decades. From 2008 to 2016 he held the position as Communications Director with the Norwegian Civil Aviation Authority. After leaving the CAA he established his own company, offering strategic consultancy services in a broad spectrum of services within strategy, communications and networking. He has delivered several feasibility studies, reports for municipalities and regional authorities in Norway and Sweden, amongst these are the initial feasibility study on the Green Flyway project. He therefore has extensive knowledge on the development of sustainable aviation in Norway and Sweden.

He is now part time project manager (aviation matters) in Green Flyway, a joint interregional project in Mid-Sweden and Mid-Norway. The project is developing a world class, one-of-a-kind test arena test arena for electric aircraft, UAS, ATS and ground support located in the middle of the countries. With state-of-the-art test environments, two international and several other airports offering the possibility to fly point to point cross border, the area also offers stable conditions for winter testing. The area also offers two international universities, research institutions and aviation industry actors within sustainable aviation development, autonomy and more.

### Ground operations

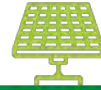


Leigh is Adelaide Airport's Sustainability Manager and has over 15 years' experience as an environmental professional across the waste, infrastructure and aviation sectors. Leigh takes a strategic approach to sustainability and seeks to highlight the commercial benefits of pursuing sustainable objectives.

Leigh has led a number of sustainability initiatives at Adelaide Airport including an airside irrigation trial looking at benefits that cooling with irrigation can deliver including improved aircraft performance, leading the transition to the use of all compostable foodservice ware in the terminal and developing a suite of long term performance based sustainability targets, including science based carbon emission



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### Leigh Gapp

Sustainability Manager –  
Adelaide Airport

reduction targets. Leigh also led AAL’s sustainability ratings to support its A\$50 million 7-year Sustainability Performance Linked Loan with ANZ, the first loan in Australia that incentivized a borrower to even further improve its performance against a set of Environment, Social and Governance (ESG) criteria.

Leigh is a member of the Airport Council International Asia Pacific Environment Committee.



### Susan Nambusi

Fuel Data Analyst & Carbon  
Emissions Lead – Kenya  
Airways PLC

Susan Nambusi is an Aviation Environment specialist with a focus in Fuel Data Analysis, Fuel efficiency and Carbon emissions reduction at Kenya Airways where she drives resource and process optimization through recommendation of policy and process improvement. She oversees Kenya Airways critical data collection and coordinates with the Kenya CAA in the review of State action plan for CO<sub>2</sub> mitigation activities in accordance with Doc9988.

Her tenure has seen the airline achieve savings through:

- Removal of Flight Level Allocation scheme (FLAS) restrictions which hindered use of optimum flight levels on the Asia-pacific route
- Implementation of redispach flight planning policy
- Reduction of contingency fuel from 5% to 3%

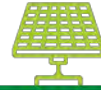
She is a licensed Flight Dispatcher with over 9 years extensive technical knowledge in Boeing and Embraer aircraft performance which has complemented her current role.

Currently, Susan sits as a member, in the Airline’s Occupational Safety and health committee where she champions the improvement of employees working environment and also sits as an observer, in the IATA Sustainability and Environment Advisory Council (SEAC) where she champions inclusivity of Africa member airlines.





# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### Vincent Metz

Executive Vice President,  
Business Development –  
Smart Airport Systems

Vincent Metz is Executive Vice President Business Development at Smart Airport Systems (SAS). He joined SAS on February 1, 2020, after having worked 22 years in the aviation industry for KLM Royal Dutch Airlines in many leadership roles. Decision to join SAS was driven by realization that Sustainability is one of Aviation's biggest challenges today. But where many of the potential solutions will take a long time to "make it to plane", SAS has a couple that only wait for market acceptance and implementation.

In KLM his last position was Head of Strategy, Marketing & Communication of Air France Industries KLM Engineering & Maintenance. Before that he held positions as VP Commercial Asia Pacific and in Revenue Management as Director Pricing Long Haul Flights in the AFKL passenger business. Earlier in his career he has been Director Component repair and Area Manager Asia & Americas for KLM Engineering & Maintenance.

### TBC

GMR Group

## Clean energy



Mr. Brice Lalonde is the president of the Business and Climate Summit, an annual gathering of companies tackling climate change, and of EDEN Balance of energies, an organization devoted to decarbonizing the European economy. He also chairs the Water Academy of France. Earlier, he was advisor to the UN Global Compact, Undersecretary of the United Nations in charge of the Rio+20 Conference, and, before, the French ambassador for climate change negotiations.

Prior to this, he served as French minister for the Environment from 1988 to 1992, and was strongly involved in global issues. Afterwards he chaired the Round Table for Sustainable Development at the OECD. He was the elected mayor of his village in Brittany for thirteen years.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Brice Lalonde**

Chair – EDEN Balance of Energies

Mr. Lalonde also served as chair of the French chapter of Friends of the Earth in the seventies. He stood in the French presidential election in 1981.



### **Frauke Pleines-Schmidt**

Director environmental protection and consumer rights in aviation, airport coordination, aircraft noise, aircraft accidents, aeronautical research – German Ministry of Transport and Digital Infrastructure

From 1990 – 1997 Frauke studied technical environmental protection at the Technical University of Berlin and holds a degree in Technical Environmental Engineering. She started to work for the German air traffic control (DFS) in 1998 in Offenbach, Düsseldorf and Langen (near Frankfurt). She was mainly responsible for calculating minimum noise departure routes for major German airports. In 2006 she changed to the German Ministry of Transport and Digital Infrastructure in Bonn and became the German ICAO CAEP (Committee on Aviation Environmental Protection) Member. Her focus was and still is on environmental issues in aviation, noise and emissions. In 2018 she became director of her division and now also deals with consumer rights, airport coordination (slots) and aircraft accidents.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Maria Fiskerud**

Clustermanager for the Swedish innovation cluster Fossil-free aviation 2045 – Research Institute of Sweden

Maria Fiskerud a pioneer in sustainable aviation, business developer and entrepreneur, with more than 20 years' experience, from industry leaders to start-ups. Award winning with a proven track record. Multidiscipline skills in information design, change management, crisis communication, reputation management, project management, marketing and business development. A personal drive for innovation, sustainability and a passionate futurist. Demonstrated know-how in multicultural environments and geographically spread teams; building partnerships to reach results.



### **Xavier Vigor**

Vice-President Technologies and Industrial Management – Air Liquide

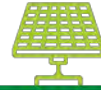
Xavier Vigor began his professional career in 1988 within the Air Liquide Group. He has successively held positions in research and development, sales, engineering and management, always in innovative fields. In particular, he has been Managing Director of the Chicago and the Loges-en-Josas (near Paris) Research Centers, of small standard production plants Engineering, of the Group industrial IT. Recently he was the Managing Director of Air Liquide advanced Technologies in Grenoble.

Today, he is Vice-President Technologies (CTO) and Industrial Management of the Air Liquide World Business Line for Hydrogen Energy

Xavier Vigor is a graduate of the Ecole Centrale des Arts et Manufactures.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### Speaker TBC

International Renewable Energy Agency (IRENA)

## Sustainable Aviation Fuels (SAF) – Introduction and Frequently Asked Questions



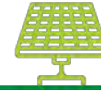
### Jim Herbertson

Technical Director, Climate and Energy – IPIECA

Jim joined IPIECA in 2017 as Technical Director, Climate and Energy, after nearly 40 years in the oil and gas industry. He graduated in Chemistry from Oxford University and spent the first part of his career in various technology roles. During that time he worked in the UK, France and the USA and led global teams developing new fuels and lubricants and providing support to refining and marketing. More recently, he worked on environmental and safety for the upstream business functions with a focus on policy development.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**James Hileman**

Chief Scientific and Technical Advisor for Environment and Energy – U.S. FAA (CAEP-FTG Co-Rapporteur)

Dr. James (Jim) Hileman is the Chief Scientific and Technical Advisor for Environment and Energy for the Federal Aviation Administration. He has responsibility for the Environment and Energy research portfolio of the FAA, which includes the CLEEN Program, the ASCENT Center of Excellence, and the Commercial Aviation Alternative Fuels Initiative (CAAFI), among other efforts. In addition to being a Chief Scientist for the FAA, Dr. Hileman is the co-rapporteur of the Fuels Task Group of the International Civil Aviation Organization (ICAO) Committee on Aviation Environmental Protection (CAEP). Prior to joining the FAA, Dr. Hileman was a Principal Research Engineer within the Department of Aeronautics and Astronautics at MIT. His research focused on alternative jet fuels and innovative aircraft concepts that could reduce the impacts of aviation on noise, air quality and global climate change. He holds a B.S., M.S., and Ph.D. in Mechanical Engineering from the Ohio State University.

### Sustainable Aviation Fuels



**Alexander Mahler**

Alexander Mahler works as an Advisor at the International PtX Hub Berlin. The International PtX Hub is implemented by GIZ and is funded by the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Jointly with its partner countries and organisations, the PtX Hub aims to catalyse a global breakthrough in the adoption of sustainably produced synthetic Power to X (PtX) fuels and feedstock in sectors that cannot directly use renewable electricity. At the PtX Hub, Alexander mainly works on sustainable fuels for aviation and shipping.

Before joining the International PtX Hub and GIZ in 2019, Alexander was Deputy Managing Director and Head of Transport and Agriculture Policy at Green Budget Germany (GBG), a non-partisan economic think tank in Berlin. During his time at GBG he focused on economic instruments in environmental policy and advised governmental bodies, NGOs, foundations and political parties in Germany and Europe.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Advisor Sustainable Fuels –  
International PtX Hub Berlin |  
Deutsche Gesellschaft für  
Internationales  
Zusammenarbeit (German  
Association of International  
Cooperation) GmbH (GIZ)

He has a background in geography and economics and gained his first professional experiences in 2009 at the UNEP Headquarters in Nairobi.



**Erasmo Carlos Battistella**  
CEO – ECB Group

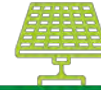
- Graduated in Business Administration and Agriculture;
- More than 20 years of experience in Fuels, Oil, Gas and Agro Energy operations;
- Founder of BSBIOS in 2005 and CEO since then;
- Founder and CEO of ECB Group;
- Co-Founder and President of the Association of Brazilian Biofuels Producers (APROBIO);
- Among the 100 most influential people in the Brazilian agribusiness sector, according to magazine "THIS IS MONEY" 2013 until 2017;
- Young Leadership Award for Agribusiness – 2012;
- Guri Trophy - Awarded by the RBS Group – 2013;
- Trophy the Equilibrist - Awarded by IBEF / RS – 2018.

### **Jocelyn Goodwin**

Organic Chemist – Advanced  
Research Associates (ARA)



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Kevin Weiss**

Chief Executive Officer –  
Byogy Renewables, Inc.

Kevin Weiss is a co-founder of Byogy and serves as CEO. He has over 25 years' experience as a CEO with a record of operational excellence, financial discipline, and exponential revenue growth.

Formerly CEO for 18 years of a Silicon Valley Engineering firm in San Jose, California, he has worked on more than 2,000 infrastructure and development projects in both public and private sectors developing some of the leading environmental engineering criteria for Net Zero Green, water quality and sustainable energy design specifications currently used throughout the United States and abroad.

Kevin's knowledge of sustainable and environmental design and processing has enhanced his abilities to be at the forefront of renewable energy implementation. He has held numerous leadership positions by providing seminar discussions for both the private sector and local government environmental agencies on sustainable practices.

Kevin is a licensed Professional Engineer and holds BS degrees in Civil Engineering, Physics, and Math from Penn State University.



**Norimitsu Kaneko**

Assistant Manager (Process  
Development), IHI Corporation

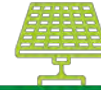
I am an engineer and a researcher of renewable fuel production process development in IHI's Algae-Based Biofuel Group.

After earning a master's degree in Chemical Engineering from the University of Tokyo in 2009, I started my career at R&D center of IHI and I had worked with Bio ethanol production process development from cellulosic feedstocks from 2009 to 2013. I was mainly in charge of chemical process development and whole process evaluation in terms of cost and energy.

After that, I joined the algal biofuel project in 2014, and have worked with algal biofuel production process development. I am mainly in charge of chemical process development, whole process evaluation of algal biofuel production process in terms of GHG emission, cost and energy, analyses of algal feedstock and products.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### SAF competitiveness and scale-up



**Bruno Miller**

Managing Director, Fuels and Regulatory Affairs – Fulcrum BioEnergy

Dr. Bruno Miller is Managing Director of Fuels and Regulatory Affairs at Fulcrum Bioenergy, a pioneer in the development of a reliable and efficient process for transforming everyday household garbage into low-carbon transportation fuels including jet fuel and diesel. He is responsible for directing Fulcrum's fuels activities including sales, logistics, regulatory compliance, and sustainability. Dr. Miller has more than 20 years of experience in the air transportation industry. As a strategic sourcing manager in the fuel department at Northwest and Delta Airlines, he was responsible for the airline's fuel supply chain in the U.S. Northeast, Latin America, and Africa. He has consulted for global airlines, leading fuel producers, the National Academy of Science, the FAA, and other government entities with respect to aviation sustainability, environmental performance, energy transition, and regulatory mechanisms. He has successfully led fuel registrations and fuel specification changes with US regulatory agencies and ASTM International, respectively. He holds a Ph.D. in Air Transportation Systems from the Massachusetts Institute of Technology (MIT).



**Cesar Velarde**

César Velarde is an Aviation and Environment Consultant, which main activity is supporting the Spanish Air Safety Agency (AESA) through the State Company SENASA.

Appointed by Spain, he is expert and co-rapporteur of the International Civil Aviation Organization (ICAO) Committee on Aviation and Environmental Protection (CAEP) Fuels Task Group (FTG) and advisor of the Spanish CAEP member, and has been involved on several Sustainable Aviation Fuels (SAF) initiatives and projects in Spain, Europe, and worldwide.

He has supported ICAO as trainer for the ICAO ACT-CORSIA program and between 2014 and 2018 he was ICAO Technical Cooperation Bureau staff based in Jakarta (Indonesia) as international expert and Project Coordinator, providing technical support to the Indonesia Civil





# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Advisor of Spanish Civil Aviation authorities – Spanish Aviation Safety Agency (AESA)

Aviation Authority on the development of an aviation and environment regulatory framework structure, as well as supporting the country's contributions to ICAO CAEP work.

He holds an engineering degree from the Madrid University and prior to joining SENASA he spent most of his career in the environmental assessment of transport infrastructures and ecological restoration.



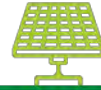
**Jean Paquin**

CEO – SAF+ Consortium

Jean has over 25 years of experience in developing and managing renewable energy projects worldwide. After several entrepreneurial experiences in Europe (Spain-France), he became Director of Business Development for one of the world's leading wind energy consultants. Subsequently, he became director of the hydroelectric generation department and senior director of business development for one of the largest independent power generators in Canada. Jean cofounded SAF+ in 2019 to bring his deep expertise to the development of a large commercial SAF project in east-end Montréal. An outstanding communicator, he is regularly solicited as a speaker. Jean holds an eMBA from the John Molson School of Business and a degree in Civil Engineering (B.Sc.) from Concordia University.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Jimmy Samartzis**  
CEO – LanzaJet

Jimmy Samartzis is the Chief Executive Officer of LanzaJet, Inc., a global leader in sustainable energy technology and production of low-carbon aviation fuel and diesel. He is leading the company through scale-up and commercialization, with sustainable fuel production plants being planned on multiple continents with the first one operational in 2022. The majority of his 20+ year career has focused on climate change, advancing the decarbonization of industries reliant on fossil fuels.

While in the airline industry, his contributions led to pioneering test flights, the first commercial-scale sustainable jet fuel deal and commercial production, and to a global industry agreement to enable a reduction in aviation emissions and adoption of low-carbon fuels. Additionally, he established a global coalition of stakeholders across the value chain to break down the barriers associated with the commercialization of sustainable fuels.

He currently serves on the Board of Directors for the Fermi National Accelerator Laboratory, a global leader in high-energy particle physics. He previously served as chief executive of a \$2B business unit at United Airlines, and as an executive advisor to clients globally through his work with Oliver Wyman, Booz Allen Hamilton, and Slalom.

He earned his M.B.A. from the Saïd Business School at the University of Oxford, a M.A. from John Hopkins University, and an B.A. from the University of Chicago.



**Matthias Spoettle**

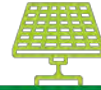
Matthias Spoettle (Dipl.-Pol.) has 13 years of experience in sustainability of renewable fuels. After graduating with a diploma in political science and Islamic science in 2006 he gained in-depth experience in international development cooperation, before he started to work as a freelancer within the field of sustainability and renewable fuels.

From 2011 - 2019 Matthias was working on decarbonising the transport sector at Ecofys/Navigant, with a special focus on biofuels and e-mobility in road transport but also sustainable aviation fuels (SAF). For the International Air Transport Association (IATA) Matthias was steering a project on developing a sustainability umbrella standard for SAF as well as on design options for SAF reporting and accounting.

Since February 2020 Matthias is Programme Manager Renewable Fuels at NOW GmbH, a company fully owned by the German Government, with a focus on sustainable aviation fuels. Matthias is



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Manager Renewable Fuels,  
NOW GmbH (National  
Organisation Hydrogen and  
Fuel Cell Technology)

supporting the German Ministry of Transport and Digital Infrastructure (BMVI) in developing a funding regime for advanced biofuels and Power-to-X fuels.



### Neville Hargreaves

Vice President, Waste to Fuels  
– Velocys

Neville is responsible for Velocys' waste to fuels business, including the commercial, financial and corporate development of the Altolto waste-to-jet-fuel project in the UK. This project is planned to take half a million tonnes of municipal and commercial solid waste, otherwise destined for landfill or incineration, and use it to make sustainable aviation fuel.

Neville has over 30 years' experience in the oil, renewable energy and consulting industries, including 12 years with Exxon and 4 years with Bain and Company, the strategy consulting firm. At Exxon he led technical and commercial teams in areas including marine fuels and product development, bringing over 70 new products to market. He has delivered complex projects with many stakeholders across global public companies, contributing hundreds of millions of dollars to corporate value; he has also led two small businesses and launched a successful innovation programme for the UK government.

He holds an MA in chemistry from Cambridge University and a PhD from University College London, and is a Fellow of the Royal Society of Chemistry. He is a member of the Jet Zero Council, set up by the UK Government to oversee the path to zero-carbon aviation.

### Speaker TBC

SpiceJet

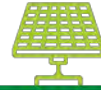
### Speaker TBC

Neste

Enabling a green aviation transition



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



**Charlotte Hardenbol**

Head of Customer Programs –  
SkyNRG

Charlotte Hardenbol is Head of Programs & Solutions at SkyNRG, focusing on the development and growth of initiatives that help bridge the price gap between conventional and sustainable aviation fuel and support market development. Before joining SkyNRG, Charlotte worked as a senior consultant at Spring Associates, a strategy consulting firm with expertise in Energy and Sustainability. Charlotte holds a Master's degree in Economics from the University of Amsterdam, specializing in Econometrics & Management Science.



**Malek Kacem**

Project Manager and Business development, Green Aviation Research and Development Network in Canada (GARDN)

Malek Kacem has been in charge of projects and business development for GARDN since September 2017. His position has placed him at the forefront of project coordination in several areas of green aviation including the development of new aircraft configurations, additive manufacturing, the greening of aerospace value chains, biofuels and many others.

Malek completed a Bachelor of Commerce degree in Finance from the University of Ottawa and a graduate degree in Management at HEC Montreal before joining GARDN.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Mohammed Boutouba**

Project Portfolio Manager -  
Green Aviation and Industrial  
Efficiency – Consortium for  
Research and Innovation in  
Aerospace in Quebec (CRIAQ)

Mohammed Boutouba holds a Master of Business Administration in International Management (M.B.A.) from Laval University. He joined the Consortium for Research and Innovation in Aerospace in Quebec (CRIAQ) in April 2019 as a Project Portfolio Manager. His role is to put companies in contact with each other and with academic researchers around project ideas as well as to accompany them in setting up and carrying out the research project.

Prior to joining CRIAQ, Mohammed held various management, sales and business development positions within several organizations. Organized, curious, rational and competitive, he is always eager to deepen his knowledge and constantly seeks to improve his skills. Thanks to these qualities, Mohammed wishes to support innovative projects that will have an impact on the aerospace industry, especially those that are part of green aviation and contribute to the reduction of greenhouse gases.



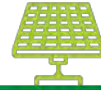
### **Stephen Arrowsmith**

Chief Expert – Environmental  
Protection – European

Mr Arrowsmith began his career at Dowty Aerospace before moving to the UK Civil Aviation Authority and then subsequently to the European Aviation Safety Agency (EASA) in 2005. He has worked in a variety of areas covering aviation environmental protection, including the development of ICAO SARPs on aircraft engine NOX emissions, aeroplane CO<sub>2</sub> emissions and CORSIA. Over the past 5 years, he has helped develop the triennial EASA European Aviation Environmental Report, which provides an objective overview on the environmental performance of the European aviation sector and considers options to address the gaps with European policy objectives.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Aviation Safety Agency  
(EASA)

**Remona van der Zon**  
Sustainability & Reporting  
Manager – KLM

**Neil Dickson**  
Chief, Environmental  
Standards – ICAO

### Boosting innovation and implementation



**Gregory Blatt**  
Partner Relations Director –  
Solar Impulse Foundation

Gregory began his journey with Solar Impulse in 2009 where he was Managing Director for Marketing, Communications and External Relations. Gregory worked directly with both the Chairman and CEO, with responsibilities in marketing and communications, fund raising, partnership development, mission planning and coordinating relations with governments, airports and other stakeholders.

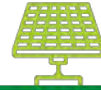
Gregory began his career at the World Economic Forum where he rose to the position of Director and Member of the Executive Board. From there he moved into media and technology, occupying senior management positions whereby he played a key role positively impacting revenue and growth through spearheading business expansion which included entering new markets, developing new products, managing group wide marketing, and making acquisitions in technology, content and e-commerce companies.

Educated in Canada, the USA, and Switzerland, Gregory holds postgraduate degrees in economics, diplomacy and negotiations.

At the Solar Impulse Foundation, Gregory is Director of Partner relations and development.



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



Gregory is also one of the Co-Founders of H55, a technological spin-off born from the Solar Impulse project developing electric propulsion solutions for clean, quiet and efficient aviation. At H55 Gregory head's up business development, marketing, government relations, worldwide certification and relations with technical and institutional partners.



**Kurt Edwards**

Director General –  
International Business Aviation  
Coalition

Kurt Edwards joined IBAC as the Director General in September 2012. He has overseen IBAC's increased outreach to industry, greater engagement with the International Civil Aviation Organization, and growth of IBAC's codes of best safety practices for business aircraft operators and ground handlers. Prior to IBAC, Mr. Edwards held various senior-level positions in the U.S. Federal Aviation Administration (FAA) responsible for liaison with European authorities and for global environmental matters.



Marie-Hélène BAROUX started to work in DGA in 1993 as SATCOM task leader. In 1999, she worked in the domain of Electromagnetic compatibility and vulnerability in a DGA test center.

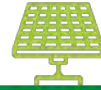
In 2003, she became part of the A400M OCCAR Programme Division, taking all security and cyber-related activities on aircraft and ground systems.

In 2008 she was designated as technical director of a DGA Test center: DGA Aeronautical systems. She was in charge of all the test center production, expertise strategy and process.

In 2013, she took the head of the CERES program team (satellite constellation for electromagnetic intelligence, DGA program), and launched the production of the system in 2014. She also was in charge



# AVIATION CO<sub>2</sub> REDUCTIONS



## STOCKTAKING SEMINAR

TECHNOLOGY - OPERATIONS - SUSTAINABLE AVIATION FUELS



### **Marie-Hélène Barroux**

Head of Sustainable Development – ISAE-SUPAERO

of the ELISA demonstrator, using micro-satellites for electromagnetic intelligence.

In 2015, she was appointed director of DGA aeronautical systems (650 people, 53 M€ turnover), and managed the modernization of facilities and processes of the unit.

In 2017 she worked in the Strategy Directorate of DGA. She was also the French representative to the European Defense Industry Development Plan (EDIDP) Programme Committee.

Since August 2019, she is now deputy president of ISAE-SUPAERO, in charge of Sustainable development strategy of ISAE-SUPAERO.

Closing High-Level Roundtable



