



ICAO AVIATION AND SUSTAINABLE ALTERNATIVE FUELS WORKSHOP

ICAO Headquarters, Montréal, Canada

18 to 20 October 2011

PROGRAMME

TUESDAY, 18 OCTOBER 2011	
08:00 - 09:30	Registration
09:30 - 10:00	Welcome address by ICAO Mr. Raymond Benjamin , Secretary General, International Civil Aviation Organization (ICAO)
	Keynote address Mr. Sha Zukang , Under-Secretary-General, Department of Economic and Social Affairs, Secretary-General for the United Nations Conference on Sustainable Development (UNCSD)
10:00 – 10:30	SETTING THE SCENE
	Ms. Jane Hupe (Chief, Environment Branch, ICAO) <i>“Sustainable Alternative Fuels for Aviation – Progress to date”</i>
	Mr. Ted Thrasher (Environment Officer, ICAO) <i>“Sustainable Alternative Fuels in the Basket of Measures”</i>
10:30 - 11:00	<i>Networking and refreshment break</i>
11:00 – 12:20	A VISION FOR THE SUSTAINABILITY OF ALTERNATIVE FUELS FOR AVIATION
	Recent developments, and next steps (States)
	Moderator Ms. Jane Hupe
	<ul style="list-style-type: none"> ○ Ambassador Jorge Taunay (Representative of Brazil on the Council of ICAO) ○ Mr. Zheng Xingwu, (Professor at the Institute of International Economics at Civil Aviation University of China) <i>“The Prospects for the Development of Jet Biofuels in China”</i>

	<ul style="list-style-type: none"> ○ Mr. Gilberto Lopez Meyer (Director General, Airports and Auxiliary Services – ASA, Mexico) <i>“Flight Plan towards Sustainable Aviation Biofuels in Mexico”</i>
	<ul style="list-style-type: none"> ○ Ms. Maryam Ali Ahmed Al Balooshi (on behalf of Representative of the United Arab Emirates on the Council of ICAO) <i>“A Vision for the Sustainability of Alternative Fuels for Aviation: Is there an additional role for ICAO?”</i>
	<ul style="list-style-type: none"> ○ Dr. Lourdes Maurice (Executive Director Office of Environment and Energy (AEE-1), Federal Aviation Administration, United States) <i>“A U.S. View Regarding Sustainable Alternative Aviation Fuels”</i>
	<ul style="list-style-type: none"> ○ Mr. Peter Bombay, (Head of Office, Representative of European Union to ICAO) <i>“A view from Europe”</i>
12:20 – 12:30	Questions and Answers
12:30 – 14:00	Lunch Break
14:00 – 15:00	A VISION FOR SUSTAINABILITY OF ALTERNATIVE FUELS FOR AVIATION (CONT.)
	Recent developments, and next steps (Organizations)
	Moderator Ms. Jane Hupe
	<ul style="list-style-type: none"> ○ Mr. Jeff Gazzard (Aviation Environment Federation)
	<ul style="list-style-type: none"> ○ Mr. Paul Steele (Air Transport Action Group Executive Director, ATAG) <i>“Where are we with biofuels?”</i>
	<ul style="list-style-type: none"> ○ Mr. Michael Hurd (Director of Environmental Strategy, Boeing)
	<ul style="list-style-type: none"> ○ Mr. Matthew Rudolf (Regional Manager, Americas, Roundtable on Sustainable Biofuels) <i>“A Vision for Sustainability of Alternative Fuels for Aviation”</i>
15:00 – 15:15	Questions and Answers
15:15 – 15:45	<i>Networking and refreshment break</i>

15:45 – 17:30	CONSORTIA
	Moderator Mr. Sandy Webb
	<ul style="list-style-type: none"> ○ Mr. Guilherme Freire (Environmental Strategies Director Embraer and ABRABA Executive Director) <i>“Aviation Biofuels Development”</i> ○ Mr. Alexander Zschocke for Joachim Buse (Deputy Chairman, Aviation Initiative for Renewable Energy in Germany, AIREG) <i>“Aviation Initiative for Renewable Energy in Germany”</i> ○ Dr. Nicolas Jeuland (Head of Department Fuels and Lubricants at IFP New Energies in France, and member of the Alfa-Bird Steering Committee) <i>“Alternative Fuels and Biofuels for Aircraft Development”</i> ○ Mr. Richard L. Altman (Executive Director, Commercial Aviation Alternative Fuels Initiative – CAAFI) <i>“Sustainable Aviation Fuels. Defining and Implementing the Next Steps”</i> ○ Ms. Linden Coppell (Head of Environmental Affairs, Etihad Airways, on behalf of the Masdar Institute Sustainable Bioenergy Research Consortium) <i>“Saltwater tolerant biomass as source of aviation fuel – a way forward for Abu Dhabi?”</i> ○ Mr. Philippe Novelli (ONERA - France, coordinator of the SWAFEA European study) <i>“SWAFEA European study on Alternative fuels for aviation - Main outcomes”</i>
17:30 – 17:45	Questions and Answers
WEDNESDAY, 19 OCTOBER 2011	
09:00 –11:00	RESEARCH
	<ul style="list-style-type: none"> ○ New developments in research and qualification of sustainable alternative fuels ○ What has been done, what remains, progress measurement, and perspectives on the need for research ○ Short and medium-term – emerging feedstocks; long-term
	Moderator Mr. Jim Rekoske

	<ul style="list-style-type: none"> ○ Dr. Christiane Bruynooghe (Directorate-General for Research and Innovation, European Commission) <i>“European Commission’s framework for sustainable biofuels for aviation. Associated Initiatives and R&D”</i>
	<ul style="list-style-type: none"> ○ Dr. Jennifer Holmgren (Chief Executive Officer, Lanzatech) <i>“Mill to Wing: New Low Carbon Route to Aviation Fuel”</i>
	<ul style="list-style-type: none"> ○ Dr. Delia Dimitriu (Manchester Metropolitan University – MMU-CATE) and Mr. Frederic Eychenne (New Energies Programme Manager, Airbus) <i>“The Romanian Camelina Value Chain: Case study on Land Use Change”</i>
	<ul style="list-style-type: none"> ○ Mr. Andy Kershaw (Manager Environmental Policy, British Airways) <i>“London biojet project”</i>
	<ul style="list-style-type: none"> ○ Mr. Dirk Kronemeijer (Managing Director, SkyNRG) <i>“Sustainable Jet Fuel: just do it First insights after 4 launches with commercial airlines”</i> ○ Dr. Andreas Sizmann (Head of Future Technologies and Ecology of Aviation, Bauhaus Luftfahrt) <i>“Long-term renewable energy perspectives in aviation”</i>
	<ul style="list-style-type: none"> ○ Dr. Fayette Collier (Project Manager, NASA’s Environmentally Responsible Aviation – ERA) <i>“NASA’s Integrated Systems Research Program (ISRP) Environmentally Responsible Aviation Project”</i>
11:00 – 11:15	Questions and Answers
11:15 – 11:45	<i>Networking and refreshment break</i>
11:45 – 12:15	QUALIFICATION
	<ul style="list-style-type: none"> ○ Qualification process ○ Fuel evolution and certification/approval process ○ Aviation fuels specifications ○ Relationship between fuels properties and engine performances
	Moderator Mr. Theodore Thrasher
	<ul style="list-style-type: none"> ○ Mr. Mark Rumizen (ASTM/Commercial Aviation Alternative Fuels Initiative, Aviation Fuels Specialist, CAAFI) <i>“The Path to Qualification of Sustainable Alternative Aviation Fuels”</i>
	<ul style="list-style-type: none"> ○ Mr. Kevin Weiss (Chief Executive Officer of Byogy Renewables, Inc.) <i>“Alcohol To Jet” : Emerging Through ASTM”</i>

12:15 – 12:30	Questions and Answers
12:30 – 14:00	Lunch Break - SPONSORED BY BOEING
14:00 – 16:00	DEPLOYMENT
	<ul style="list-style-type: none"> ○ Challenges in deploying alternative sustainable fuels ○ Commercialisation of sustainable alternative fuels and scaling up production of biofuels ○ Achievements, what remains and progress measurement ○ Infrastructural challenges related to global distribution ○ Distribution perspectives: farm, feedstock processor, refinery, airport (pipeline/tank)
	Moderator Mr. Philippe Novelli
	<ul style="list-style-type: none"> ○ Mr. Thilo Zelt (Business Development Agent, Platform for Sustainable Aviation Fuels, Leuphana University Lüneburg) <i>“Bio Aviation Fuel Feedstock Supply - Challenges, Strategies and Recent Developments”</i>
	<ul style="list-style-type: none"> ○ Mr. Cesar Velarde, (Observatory of Sustainability in Aviation – OBSA, SENASA, Spain) <i>“European Roadmap”</i>
	<ul style="list-style-type: none"> ○ Mr. John Plaza (President and CEO, Imperium Renewables) <i>“Commercialization Path of Renewable Jet Fuels from the Biofuel Producer’s Perspective”</i>
	<ul style="list-style-type: none"> ○ Mr. John Lo (General Manager HSSE, Operations & Technical, Shell Aviation) <i>“Aviation Alternative Fuels – Practical Deployment Hurdles”</i>
	<ul style="list-style-type: none"> ○ Mr. Jim Rekoske (Vice President and General Manager of the Renewable Energy and Chemicals Business Unit at Honeywell’s UOP) <i>“Building the Value Chain to Build the Business”</i>
	<ul style="list-style-type: none"> ○ Mr. Xavier Oh (Senior Manager Environment and ICAO Liaison, ACI) <i>“Fuel Infrastructure at Airports”</i>
	<ul style="list-style-type: none"> ○ Ms. Nancy Young (Vice President for Environmental Affairs, Air Transport Association of America – ATA) <i>“Buying & Flying Sustainable Alternative Aviation Fuels – Deployment from an Airline Perspective”</i>

	<ul style="list-style-type: none"> ○ Mr. David White (Manager Sustainability & Climate Change, Virgin Australia Airlines) <i>"Sustainable aviation fuel road mapping study for the Australasian region"</i>
16:00 – 16:15	Questions and Answers
16:15 – 16:45	<i>Networking and refreshment break - SPONSORED BY BOMBARDIER</i>
16:45 – 17:45	PARTNERSHIP AND COOPERATION
	Recent developments, experiences and plans: domestic and international
	Moderator Mr. Richard Altman
	<ul style="list-style-type: none"> ○ Dr. Lourdes Maurice (Executive Director Office of Environment and Energy (AEE-1), FAA, United States) <i>"Domestic cooperative partnership programs for alternative aviation fuels"</i>
	<ul style="list-style-type: none"> ○ Ms. Amy Bann (Director, Environment Policy - Boeing) <i>"Global and regional collaboration and partnerships"</i>
	<ul style="list-style-type: none"> ○ Mr. Cesar Velarde (OBSA-Spain) and Mr. Alejandro Ríos (Aeropuertos y Servicios Auxiliares, ASA-Mexico) <i>"Positive social impacts related to biofuels deployment – creating employment and development in rural areas"</i>
17:45– 18:00	Questions and Answers
THURSDAY, 20 OCTOBER 2011	
09:00 - 10:15	LEGAL AND REGULATORY FRAMEWORK
	<ul style="list-style-type: none"> ○ Policies on biofuels ○ Availability of biofuels to aviation and incentives to market creation
	Moderator Mr. Ruwantissa Abeyratne , Senior Legal Officer, ICAO
	<ul style="list-style-type: none"> ○ Ms. Jane Hupe (ICAO Secretariat, Chief Environment Branch)
	<ul style="list-style-type: none"> ○ Mr. Alejandro Rios (Director, Fuel Services, Aeropuertos y Servicios Auxiliares, ASA – Mexico) <i>"Moving forward on the scalability of sustainable aviation biofuels: the case of Mexico"</i>

	<ul style="list-style-type: none"> ○ Mr. Nate Brown (Executive Director Office of Environment and Energy (AEE-1), FAA, United States)
	<ul style="list-style-type: none"> ○ Mr. Andy Kershaw (Sustainable Aviation Fuel Users Group – SAFUG) <i>“Government support for biojet”</i>
10:15 - 10:30	Questions and Answers
10:30 - 11:00	<i>Networking and refreshment break</i>
11:00 – 12:15	ACCOUNTING, LIFE-CYCLE ANALYSIS, SUSTAINABILITY
	<ul style="list-style-type: none"> ○ Accounting ○ Life-cycle analysis ○ Sustainability
	Moderator Mr. Theodore Thrasher
	<ul style="list-style-type: none"> ○ Ms. Nancy Young (Vice President, Environmental Affairs, ATA) <i>“The role that LCA and sustainability play in deployment of aviation alternative fuels”</i>
	<ul style="list-style-type: none"> ○ Mr. Matthew Rudolf (Regional Manager, Americas, Roundtable on Sustainable Biofuels) <i>“RSB criteria, tools and certification process”</i>
	<ul style="list-style-type: none"> ○ Dr Chris Malins (Clean Fuels Program Lead for the International Council on Clean Transportation) <i>“The indirect effects of biofuels: Identifying truly sustainable alternative aviation fuels pathways”</i>
	<ul style="list-style-type: none"> ○ Mr. Russell Stratton (Department of Aeronautics and Astronautics, Massachusetts Institute of Technology – MIT) <i>“Understanding variability in the life cycle GHG inventories of alternative fuels for aviation”</i>
12:15 – 12:30	Questions and Answers
12:30 – 14:00	Lunch Break
14:00 – 16:00	FINANCING ALTERNATIVE FUELS
	<ul style="list-style-type: none"> ○ Streamlining/harmonizing financial application process: banks’ case studies from States

	<ul style="list-style-type: none"> ○ Corporate and project financing for biofuels: current situation and future trends ○ Volatility in the market price of commodities, a risk and/or a threat to the feedstock, by-products and biofuels production and distribution chain ○ Insuring investments in sustainable biofuels: the scope and coverage of governmental and private insurance ○ Risks and opportunities in second generation biofuels investment: multilateral financial institutions; public funding; private banks
	Moderator Mr. Donald Schenk
	<ul style="list-style-type: none"> ○ Mr. Donald P. Schenk (President, ACA Associates, Inc.)
	<ul style="list-style-type: none"> ○ Mr. Arnaldo Vieira de Carvalho (Lead Sustainable Energy Specialist at the Energy Division, Inter-American Development Bank – IDB)
	<ul style="list-style-type: none"> ○ Mr. Ravin Appadoo (President of Aviation Fuel Solutions Inc) <i>"The volatility in the market price of commodities – impact on biofuels production and supply"</i>
	<ul style="list-style-type: none"> ○ Ms. Cindy Thyfault (President, Westar Trade Resources) <i>"Financing Strategies and Opportunities for Alternative Fuels"</i>
	<ul style="list-style-type: none"> ○ Mr. Salim Morsy (Bioenergy Analyst, Bloomberg New Energy Finance) <i>"Bringing capital to biofuel technologies"</i>
16:00 – 16:15	Questions and Answers
	Workshop wrap-up
	Ms. Jane Hupe , Chief Environment Branch, ICAO