

Closing Remarks of Jane Hupe, Deputy Director, Environment

ICAO “Fuelling Aviation with Green Technology”

As the Seminar draws to a close, I would like to share with you some of my observations from the proceedings over the past two days.

Aviation has always been a sector of innovation with many technologies developed within the aerospace industry ending up with radically different applications.

From what we have heard, this pioneering spirit lives on today and the future for aviation looks truly green.

Each Session highlighted new, thought-provoking concepts and initiatives.

In session 1, speakers painted an exciting future from an aircraft technology perspective. We heard about the new generation of aircraft and future design concepts, and the future of propulsion, structural, and aerodynamic technologies. It provided insight into primary research activities which are key to starting the design cycle of delivering more efficient aircraft. The implementation of these technologies in a commercial manufacturing environment is challenging, but, we heard how aircraft manufacturers and the aviation community are striving to deliver ever more fuel efficient aircraft thtechnology.

For the first time ever at ICAO, Session two addressed aircraft scrapping and recycling; the end of the aircraft life cycle. With 12,000 passenger planes due to be retired over the next 20 years, this is an issue that we need to address with increasing determination today and in the future. Our panel highlighted the importance of this issue to aviation’s environmental discussion, and called on ICAO to step in to facilitate further discussion and work. As International Maritime Organization (IMO) has already done in the case of ships, I envisage a future ICAO framework of guidelines and best practices that are globally recognized, on aircraft end-of-life activities.

In the third Session, we learned of the importance of investing in operational improvements, not just to keep up with the rapid growth of air traffic, but to make each of those operations even more efficient than they are today. By doing this in a globally coordinated manner, we make the most of the exciting new aircraft technologies that were presented. ICAO is facilitating this coordination and working to quantify the benefits.

Session IV provided us with a sense of the variety of initiatives that exist at airports, from operational procedures for aircraft, to powering airport infrastructure and reducing emissions directly from airport operations. Presentations highlighted the new airport facilities and initiatives around the world that can provide important environmental benefits, such as the use of wind and solar panels to provide sustainable energy for an airport's needs, innovation in water management, the use of electric shuttle buses and e-taxi. ICAO/CAEP is currently updating the Airport Planning Manual Part 2 to include information on eco-airports and infrastructure to support environmentally friendly airports.

During our fifth Session, we surveyed the various types of renewable energy sources for airport operations, and then we did a deep dive into one source – solar – that is fast-growing and of potential relevance to airports worldwide. We then moved from the ground into the air, where we considered the potential of renewable jet fuels, most notably solar and liquid hydrogen.

Session 6 explored the current and future options for sustainable alternative fuels of aviation. Multi-stakeholder partnerships and meaningful investments are fundamental to advancing the development and deployment of sustainable alternative fuels, at a commercial scale. However, as the presentations illustrated, governments have a key role to play in providing incentives for investment, coordinating the public and private sectors, and in terms of facilitating policy harmonization on a global scale.

In our last Session, we heard of the number of opportunities for financial assistance available to implement measures and projects toward the achievement of environmental benefits, as well as the vital role played by various international organizations in supporting States to make environmental progress. Cooperation between ICAO and international and regional economic bodies is vital and action plans can serve as a basis to streamline cooperation with States.

As you heard from the presentations and discussions over the past 2 days, there is a growing awareness within the sector, and the international community more generally that technological progress is the key to achieving environmental sustainability.

Aircraft are increasingly more efficient, using very light composite materials, flying on sustainable alternative fuels, and research and development continues to seek further technological advances and clean energy sources. I would like to close the seminar with the though I use in the beginning of the session “The best way to predict your future is to create it”; let’s create the sustainable aviation future we want.

I wish to thank all of our panellists for their insightful and comprehensive presentations, and our moderators for each Session, who ensured that we had a meaningful discussion and fully considered the issues at hand. Please join me in giving our speakers and moderators a round of applause. I also especially wish to thank my staff in Environment for creating such a successful seminar.

Thank you all and I wish you a safe return home.