



**Agenda Item 7: Other Matters**

**UNITED STATES GREENHOUSE GAS EMISSIONS REDUCTION PLAN**

(Presented by the United States)

**SUMMARY**

This information paper provides an overview of the United States Greenhouse Gas (GHG) Emissions Reduction Plan detailing United States Government (USG) measures to reduce aviation GHG emissions through improved airframe and engine technology, more efficient aircraft operations, development and deployment of alternative jet fuels and policies, standards and market measures, all in support of working towards the aspirational goal of carbon-neutral growth for U.S. commercial aviation by 2020, using 2005 emissions as a baseline. The USG has prepared this State Action Plan as an update to the *2012 United States Aviation Greenhouse Gas Emissions Reduction Plan*.

**References:**

U.S. Aviation Greenhouse Gas Emissions Reduction Plan, June 2015.

**ICAO Strategic Objectives:**

*E- Environmental Protection*

**1. Introduction**

1.1 The 38th Session of the ICAO Assembly, held from 24 September to 4 October 2013, adopted Resolution A38-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection -- Climate Change. A central element of A38-18 is for States to voluntarily prepare and submit their action plans to ICAO; additionally, A38-18 included an ambitious work programme for capacity building and assistance to States in the development and implementation of their action plans to reduce emissions, which States were initially invited to submit by the 37th Session of the ICAO Assembly in October 2010. Once an action plan has been prepared, States are invited to update them every three years, on the year prior to the Assembly year preferably.

**2. Discussion**

2.1 The United States is committed to addressing the climate impacts of commercial aviation through an integrated strategy of technology, operations, and policy innovation. The U.S. action plan (which can be found online at [http://www.icao.int/environmental-protection/Lists/ActionPlan/Attachments/30/UnitedStates\\_Action\\_Plan-2015.pdf](http://www.icao.int/environmental-protection/Lists/ActionPlan/Attachments/30/UnitedStates_Action_Plan-2015.pdf)) provides an overview of the primary initiatives the United States Government (USG) – in partnership with the U.S. aviation industry – is undertaking to reduce Greenhouse Gas (GHG) emissions from U.S. aviation. Furthermore,

as shown in our updated State Action Plan, not only have we made contributions towards meeting ICAO's goals, but also to each element in ICAO's "basket of measures" to reduce international GHG emissions, including more efficient aircraft and engine technologies, operational improvements, sustainable fuels, and the development of a global market-based measure (GMBM) as a gap-filler. The USG is committed to managing the carbon footprint of U.S. aviation while simultaneously enhancing the safety and efficiency of the National Airspace System (NAS). This commitment to reducing environmental impacts is reflected in an aspirational goal of achieving carbon-neutral growth for U.S. commercial aviation by 2020, using 2005 emissions as a baseline.

2.2 The U.S. goal will contribute toward the ICAO goal for international aviation of achieving carbon neutral growth from 2020. Under the auspices of the Next Generation Air Transportation System (NextGen), the USG has laid out plans and initiatives for improvements in technology and operations; advances in development and deployment of sustainable alternative jet fuels; and policies, standards, and market measures to incentivize transition of the fleet and airspace system. The action plan details the specific programs being pursued under these areas, their expected emissions impacts, and notable achievements thus far. The USG has prepared the plan as an update to the 2012 United States Aviation Greenhouse Gas Emissions Reduction Plan. It includes both domestic and international aviation with reductions in the former being reflected in the national contributions submitted by the U.S. to the United Nations Framework Convention on Climate Change (UNFCCC). The plan discusses ongoing work to better understand and model the environmental impacts of aircraft, including climate impacts. It also presents an analysis that projects the future environmental performance of the NAS, showing the potential for significant environmental benefits from aviation system improvements that are described in the document.

2.3 The five key elements of the action plan are: 1) Aircraft and Engine Technology Improvement through which the Continuous Lower Energy, Emissions, and Noise (CLEEN) program, launched by the FAA in 2010, collaborates in partnership with industry to accelerate development and deployment of environmentally promising aircraft technologies and sustainable alternative jet fuels; 2) Operational Improvements through which the implementation of NextGen will allow for more efficient aircraft operations and reduced GHG emissions; 3) Alternative Jet Fuels Development and Deployment through which the USG is actively supporting and facilitating the development and deployment of sustainable alternative jet fuels with lower life-cycle GHG emissions than conventional petroleum fuel; 4) Policies, Standards, and Measures through which the USG is pursuing efforts that would supplement efforts in technology, operations, and alternative jet fuels to further reduce aviation emissions; and, 5) Scientific Understanding and Modeling/Analysis through which the FAA is continually improving its modeling and analysis tools in order to better understand and assess the environmental impacts of aviation.

### 3. **Conclusion**

3.1 The Meeting is invited to take note of the information provided.