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WORKING PAPER

THIRD CONFERENCE ON AVIATION AND ALTERNATIVE FUELS (CAAF/3)

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Agenda Item 5: Reviewing the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy for aviation, in order to define a global framework

ANALYSIS METHODOLOGY FOR DESIGNING THE PROCESS OF AN ACCURATE GLOBAL AND COLLECTIVE FRAMEWORK FOR THE DEVELOPMENT, PRODUCTION AND DEPLOYMENT OF SAF, LCAF AND OTHER CLEANER TECHNOLOGIES

(Presented by Qatar)

SUMMARY

This working paper proposes a methodology for providing an analysis of the ICAO Global Framework for Aviation Cleaner Energies beyond the CAAF/3 that can refine the implementation efforts accurately to achieve its targeted goals in a timely manner.

Action by the Conference is in paragraph 3.

1. INTRODUCTION

1.1 During the pre-CAAF/3 event that was held in Montréal, Canada from 25 to 26 September 2023 consultation among States took place in order to determine possible CAAF/3 outcomes. We all are now at a crucial juncture after proving it beyond doubt that the Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other aviation cleaner energies are expected to have the largest contribution to aviation CO2 emissions reduction by 2050. At the same time there is now a widespread recognition that the current production levels of all these fuels are still extremely low at only 0.2 per cent usage by the total aviation sector.

1.2 Before the pre-CAAF/3 outcomes consultation event, a draft structure and ideas were framed by ICAO, which will serve as the basis for the future ICAO global framework. The draft ICAO global framework will be considered by the States and Organizations while they provide their views at

CAAF/3. The draft ICAO global framework is based on the following four building blocks, forming the foundation of the deliberations at CAAF/3:

Building Block 1: Policy and planning;

Building Block 2: Regulatory framework;

Building Block 3: Implementation support; and

Building Block 4: Financing.

1.3 The dovetailing of Block 1 initiatives with the other Building Blocks 2, 3 and 4 need to synergise targeted outcomes closely as deserved by a collective global ambition for global adaptation at the anticipated levels and scales. Additionally, the Block 1 should particularly address the total breadth of challenges to the global scaleup of all the cleaner aviation fuels under consideration.

1.4 Individual Block-wise Events, Milestones and their dates of accomplishment need to be determined as a contributary element to the final outcome of the Global Framework for Aviation Cleaner Energies. In this regard, our collective LTAG experiences of the development of a methodological process to independently allocate and assess the contributary aspects of Technology, Operations and Fuels to reach a final collective and global goal as envisaged in the LTAG-TG report can inspire us to have in place similar approach for the four Building Blocks.

2. DISCUSSION

2.1 Under the Block 1, a collective global ambition for a wide-spread scaling-up of SAF, LCAF and other aviation cleaner energies is being designed. This has to be driven by a global framework, that essentially needs to be quantified based on a methodology to factor in all the outcomes from the rest of the Blocks 2, 3 and 4.

2.2 The LTAG-TG in its report considered separate methodologies to assess the in-sector scenarios of Technology, Fuels and Operations individually and an integrated scenario was proposed to accurately, envision the LTAG goal based on the parameters of timing, readiness, attainability, and aspiration. Since the quantification of a global ambition has already perceived to be a challenge as mentioned above, an approach similar to that of the LTAG can be a fruitful way forward.

2.3 The development of all the principles and elements underlying this methodology requires a thorough homework and assessment prior to the final flagging-off of the Global Framework for Aviation Cleaner Energies. However besides providing a robust support for the framework, it comes with the great advantages of avoiding any drawbacks or failures that can arise along our way.

2.4 The final quantified target, supported by its methodology put in place well in advance, shall primarily aid in the accessing of necessary means of implementation across all the Building Blocks uniformly. This is significant in order to send a plausible, clear and the positive market signal where it is needed the most.

2.5 The fact that, even post-CAAF/2, a very limited number of States have come up to provide examples of successful clean aviation energy and SAF policy implementation case studies; results and possible lessons learned is an indicator of a need for such a robust methodology.

3. ACTION BY THE CAAF/3

3.1 The CAAF/3 is invited to:

a) consider the need to review and adopt lessons learnt from the work done during the LTAG-TG process, for progressing our ambitious collaborative work in this area beyond 2023; and

b) adopt a methodological process similar to the one adopted for the LTAG to monitor and assess the implementation and progress of its pillars namely- Technology, Fuels and Operations, to monitor and assess the timing, readiness, attainability, and aspiration for the Building Blocks 2, 3 and 4 (i.e., Regulatory Framework, Implementation Support and Financing), in parallel to feed in the design process of an accurate Global and Collective framework for the development, production and deployment of SAF, LCAF and other cleaner technologies.

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