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Martinique, France, 21 to 23 June 2022

Agenda Item 8: Environmental Protection Matters

FRANCE'S SUSTAINABLE AVIATION FUEL (SAF) POLICY DEVELOPMENT AS A LTAG ENABLER

(Presented by France)

EXECUTIVE SUMMARY

France has been heavily involved in actions aimed at enabling the aviation sector to reduce its environmental footprint at national, European and international level.

At the ICAO level, France strongly supports the implementation of the four pillars of decarbonisation in air transport, one of which concerns the development of sustainable aviation fuels (SAF), allowing the aviation sector to reduce its reliance on fossil fuels.

The last ICAO Assembly in 2019 called for exploring the feasibility of a long-term aspirational goal (LTAG) for international aviation CO₂ emission reductions. This was strongly supported by France alongside the EU. The report prepared by the Committee on Aviation Environmental Protection (CAEP) shows that the development of SAF is the main path for decarbonisation.

To achieve this objective, France has launched a SAF roadmap detailing the national strategy to support the aviation sector decarbonisation. One of the key elements of this roadmap is the introduction of SAF blending objectives in 2025 and 2030 targeting biofuels produced from resources that do not compete with food production. They are an important lever to support the development of a national SAF industry.

SAF development is also a cornerstone of the European vision. At the European level, France is actively involved in the discussions on the Green Deal and the "*Refuel Europe - Aviation*" Regulation. Under the French Presidency of the Council of the European Union, during the Aviation Summit on decarbonising the air transport sector held last February in Toulouse, the European Commission, the 27 EU Member States and 10 other Member States of the European Civil Aviation Conference affirmed their support for the goal of achieving carbon neutrality in the air transport sector by 2050. Nearly 150 companies and stakeholders (federations, trade unions, etc.) from the air transport and energy also supported this commitment.

Action:	The NACC/DCA is invited to: a) note the contents of this paper b) share views regarding the position of France in relation to the long-term aspirational goal (LTAG) to be discussed in the 41 st ICAO Assembly, particularly on the subject of Sustainable Aviation Fuels (SAF) c) share views within NACC States on the capacities, possible framework and incentives for the emergence of an efficient SAF industry
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Environmental Protection
<i>References:</i>	<ul style="list-style-type: none"> • Resolution A40-18

1 Sustainable Aviation Fuels and the aviation sector decarbonisation

- 1.1 The second edition of the Industry Consultative Forum (ICF) on Sustainable Aviation Fuels (SAF) was held on 21 March 2022. Representatives of the entire SAF supply chain (manufacturers, engine manufacturers, airlines, airports, energy providers and new entrants) shared their vision of the challenges related to the deployment of SAF and their expectations both from States and from ICAO.
- 1.2 The creation of this forum is the result of an initiative put forward by France at the 40th ICAO Assembly, aiming at strengthening the ICAO in its capacity to anticipate and accommodate innovations as a standardisation body. As efforts to decarbonise aviation were deemed a priority at the forum's inaugural session, it was decided to devote its second edition to SAF.
- 1.3 The second edition of the ICF showed many expectations toward ICAO which should help define and achieve a long-term aspirational goal (LTAG).
- 1.4 At a national level, France has published a national law “climate and resilience” on 22 August 2021 as per which several actions have been initiated to follow up on the aviation sector decarbonisation. One of those is a report to be made to the Parliament by the end of 2022 on regulatory measures to support the air transport sector in its strategy to reduce its carbon footprint. This report should address the development of a SAF industry in particular.
- 1.5 Another action focuses mainly on the stakeholders’ approach and the capacity to support the sector decarbonisation. The French DGAC is co-chairing a national working group bringing together the various stakeholders of the SAF value-chain. This working group will present its roadmap for decarbonising the sector along with the government and local authorities, by the end of 2022.

2 Long Term Aspirational Goal (LTAG) for Aviation for the 41st ICAO Assembly

- 2.1 At the ICAO level, the International Aviation Climate Ambition Coalition (IACAC), launched at COP26, has initiated the reflexions in order to reduce aviation CO₂ emissions and support the adoption of a LTAG. In May 2022, the IACAC included 28 States. This coalition complements a growing number of long-standing initiatives, whether they set a specific and quantified objective (e.g. IATA's Waypoint 2050 or Europe's industry Destination 2050) or promote sustainability of the international aviation, like the ICAO Global Coalition for Sustainable Aviation.
- 2.2 The experts of the Committee on Aviation Environmental Protection (CAEP) have prepared a report on "*the feasibility of an ambitious long-term goal for CO₂ emissions reduction*" which was unanimously approved by the plenary session of the CAEP in February 2022. The report will be formally considered by the ICAO Council in June 2022.
- 2.3 The experts developed three scenarios for 2050 based on the level of ambition and the degree of maturity and feasibility of technologies in the areas of aircraft, operations and fuels, three of the main pillars of decarbonisation in air transport. While none of the scenarios achieves net carbon neutrality through in-sector measures alone, the reductions in CO₂ emissions are significant, with residual emissions in 2050 ranging from 200 MtCO₂ for the most ambitious scenario to 950 MtCO₂ for the less stringent, compared to the 1,500 MtCO₂ that would be emitted in 2050 in a business-as-usual evolution of the traffic. Sustainable aviation fuels are the main path for decarbonisation, accounting for up to 55% of emission reductions in the most ambitious scenario.
- 2.4 It is up to the next ICAO Assembly in September/October 2022 to explore the feasibility of a long-term target for CO₂ emissions reductions and to set the contours of that target. The LTAG-Global aviation dialogues (GLADs) carried out at the end of March and beginning of April allowed an increased awareness and exchange of views on the ICAO work on LTAG. A High-Level Meeting is scheduled by ICAO late July 2022 to further elaborate on this objective and prepare the discussions at the next Assembly.
- 2.5 At the European level, beginning of February, the French Presidency of the European Union proposed the adoption of the "*Toulouse Declaration on the sustainable development and decarbonisation of aviation*", which complements the IACAC. Signed to date by the 27 EU Member States, as well as by 10 States of the European Civil Aviation Conference (ECAC) and nearly 150 private stakeholders in the civil aviation industry, this declaration sets the objective of achieving net zero carbon emissions by 2050.
- 2.6 At the French level, the law of 8 November 2019 on "*energy and climate*" sets the objective of achieving carbon neutrality by 2050 in accordance with the Paris Agreement, requiring greenhouse gas emissions to be divided by six at least. One of the tools implemented to reach this objective is the National Low Carbon Strategy (SNBC). It transposes the law objective in "*carbon budgets*", expressed in tonnes of CO₂, that the various sectors of activity should not exceed in order to meet the target. It will soon have

to take into account the increase in the European GHG reduction target of -55% in 2030 compared to 1990. The decarbonisation of air transport is part of this process.

3 Deployment of sustainable aviation fuels

- 3.1 Sustainable aviation fuels, and more precisely waste-based and synthetic aviation fuels, offer significant emissions gains compared to jet fuel, do not compete with food production and do not lead to deforestation when produced according to robust sustainability criteria. As such, they are one of the essential levers for decarbonising air transport in the short and medium terms.
- 3.2 France set up a public-private partnership gathering the main stakeholders of the sector via a dedicated Green Growth Commitment. Its work was delivered in early 2020¹, paving the way for the publication of the French governmental roadmap for the deployment of SAF soon afterwards. The blending targets proposed in the roadmap is a biofuel incorporation rate of 2% in 2025 and 5% in 2030. This roadmap complements the long-term target of 50% biofuels by 2050 set out in the national low carbon strategy. These targets may be superseded by European objectives (see below).
- 3.3 To make the roadmap operational, an incentive mechanism for the consumption of these products has been implemented through the upgrade of an existing fiscal tool designed to support the uptake of renewable energy in the transport sector². To give a clear signal to economic players, a 1% blending mandate for fuel providers has been therefore implemented since January 2022.
- 3.4 A call for expression of interest (CEI) has been launched in 2020 to assess stakeholders' interests and needs regarding the development of a national SAF industry. It allowed the identification of 15 innovative industrial projects with detailed valuable information to build the additional tools needed to support the development of a French SAF production sector.
- 3.5 Following the CEI, a call for proposals (CfP) was launched mid-2021 to provide short-term investment aids on both engineering work that target projects implementing mature manufacturing processes and demonstration work targeting projects with a lower level of maturity. A maximum budget of 200 M€ has been earmarked to help financing the engineering studies and demonstrators selected within the framework of this CfP.

¹ <https://www.ecologie.gouv.fr/sites/default/files/ECV%20-%20Mise%20en%20place%20d%27une%20fili%C3%A8re%20de%20biocarburants%20a%C3%A9ronautiques%20en%20France.pdf>

² The incentive tax for the use of renewable energy in the transport sector (TIRUERT)

- 3.6 The next step is to set up production units, in order to have SAF quantities available on the national territory to achieve the blending objective of 2% in 2025. A working group has been set up in April 2022 to work with the main stakeholders of the sector on the support needed for the industrialisation phase as an extension of the current CfP.
- 3.7 At the European level, France is actively involved in the on-going discussions on the Green Deal and the "*Refuel Europe - Aviation*" Regulation, which is part of the "*Fit For 55*" package. The objective of the proposed regulation is to stimulate the production and use of SAF. Measures will apply on fuel suppliers, airports and airlines. Fuel suppliers will have to provide SAF (including synthetic aviation fuels) according to increasing targets (2% in 2025, 5% in 2030, 20% in 2035 and 63% in 2050 according to the European Commission's proposal of July 2021).
- 3.8 France supports this European initiative which will provide a common shared framework and should initiate the large-scale deployment of SAF within the region. The negotiations are still pending at the EU level.

4 Actions

- 4.1 The NACC/DCA is invited to:
- a) note the contents of this paper
 - b) share views regarding the position of France in relation to the long-term aspirational goal (LTAG) to be discussed in the 41st Assembly, particularly on the subject of Sustainable Aviation Fuels (SAF)
 - c) share views within NACC States on the capacities, possible framework and incentives for the emergence of an efficient SAF industry