

# Building back better: a crucial opportunity for green recovery for aviation

By ICAO Secretariat

Over the past three years since the publication of the 2019 ICAO Environment Report, the aviation sector has faced one of the most critical challenges in its history; the novel coronavirus (COVID-19) pandemic. The world passenger traffic experienced an unprecedented decline in history, with an overall reduction of over 2.7 billion passengers (-60%) and an approximate USD 372 billion loss of gross passenger operating revenues of airlines in 2020 alone, compared to 2019 levels<sup>1</sup>. With the virus evolving into new variants and spreading with varying speed and impact around the world, the industry and the world is far from a full recovery and a return to the new normal.

In the midst of all, what has emerged along with travel restrictions and new public health measures was the sharp realization of the new opportunity to transform the economy into a greener and sustainable future. The United Nations Secretary-General, Mr. António Guterres, termed the pandemic as an unprecedented “wake-up call” to turn the recovery into a real opportunity to do things right for the future. A number of governments and world leaders followed suit and called for green recovery to build back better including several business leaders. Promises of green recovery dominated public debates across much of the world’s leading economies.

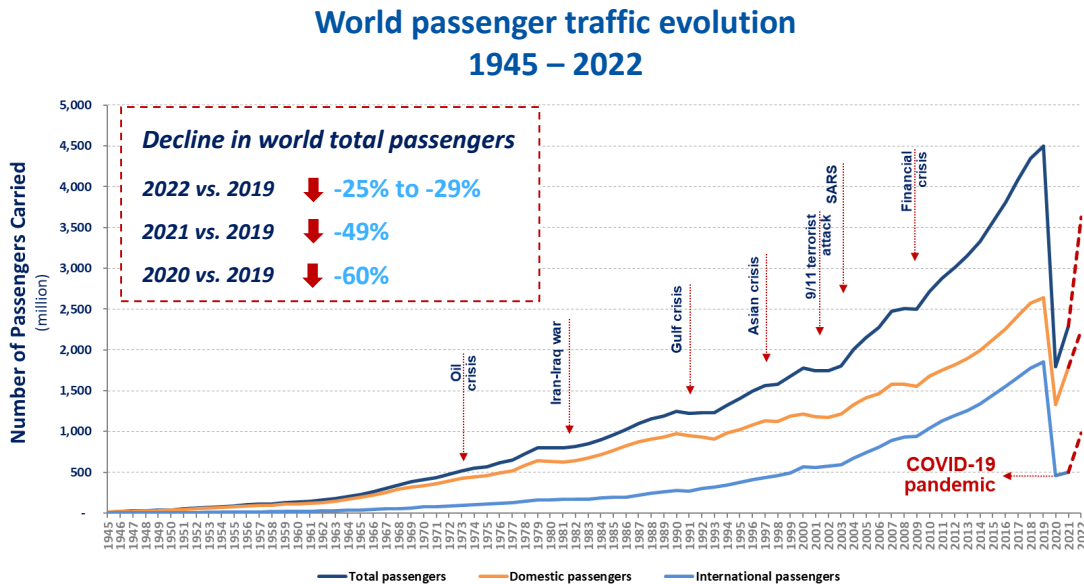
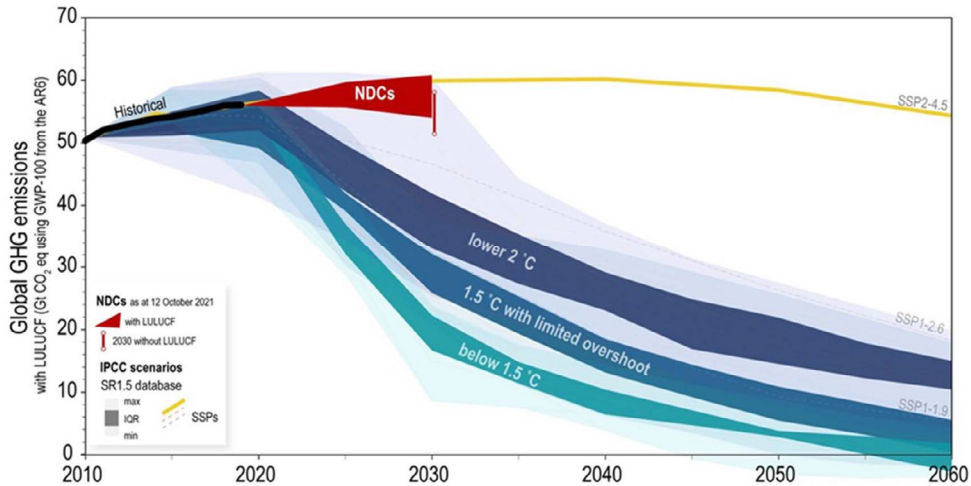


FIGURE 1: World passenger traffic evolution, 1945–2022

1 Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis (5 May 2022), Economic Development, Air Transport Bureau, ICAO  
 2 Ibid.

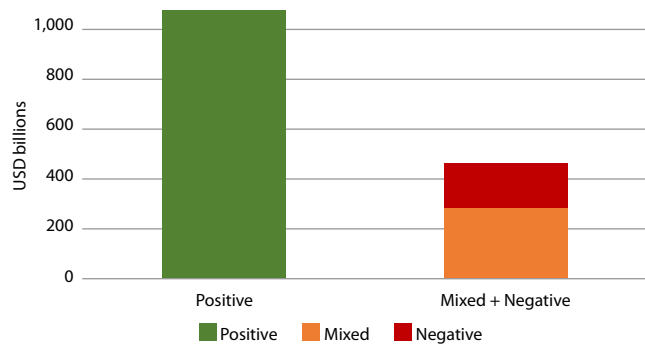


**FIGURE 2:** Comparison of global emissions under scenarios assessed in the IPCC Special Report on Global Warming of 1.5 °C with total global emissions according to nationally determined contributions, NDC Synthesis Report, UNFCCC Secretariat<sup>6</sup>

*“This is a moment of truth for people and planet alike. COVID and climate have brought us to a threshold. We cannot go back to the old normal of inequality, injustice, and heedless dominion over the Earth. Instead, we must step towards a safer, more sustainable, and equitable path. The door is open; the solutions are there. Now is the time to transform humankind’s relationship with the natural world – and with each other. And we must do so together. Solidarity is humanity. Solidarity is survival. –Mr. António Guterres, United Nations Secretary-General<sup>3</sup>”*

Indeed, the Sixth Assessment Report (AR6) by the Intergovernmental Panel on Climate Change (IPCC)<sup>4</sup> as well as the synthesis report on Nationally Determined Contributions (NDC) by the UNFCCC Secretariat<sup>5</sup> highlighted the current lack of global commitment contained in the latest Nationally Determined Contributions (NDCs). Limiting the temperature increase in line with the goals of the Paris Agreement is likely unattainable unless an immediate and significant increase in the level of emissions reduction is achieved to reach net zero in the near future.

According to OECD Green Recovery Database<sup>7</sup>, out of the USD 3,300 billion that has been allocated to recovery measures by the world’s government, a close to one-third is allocated to recovery measures with direct positive environmental impact. A bulk of such measures with positive environmental impact represents grants or loans with clear environmental implications, with some with tax reductions or subsidies and regulatory changes, including toward the transport and energy sector.



**FIGURE 3:** Total recovery funding allocated by environmental categorization, OECD Green Recovery Database<sup>9</sup>

3 UN Secretary-General’s speech on the state of the planet <https://www.un.org/en/climatechange/un-secretary-general-speaks-state-planet>  
 4 Third part of the Sixth Assessment Report, Climate Change 2022: Mitigation of Climate Change, the Working Group III contribution.  
 5 Revised synthesis report on the nationally determined contributions under the Paris Agreement, UNFCCC secretariat [https://unfccc.int/sites/default/files/resource/cma2021\\_08r01\\_E.pdf](https://unfccc.int/sites/default/files/resource/cma2021_08r01_E.pdf)  
 6 Ibid.  
 7 <https://www.oecd.org/coronavirus/en/themes/green-recovery>

Private sector investors' and financial stakeholders' interests in considering environmental, social and governance (ESG) criteria when making investment decisions have been even more prominent than that of the governments. According to Gartner<sup>8</sup>, over 85% of investors considered ESG factors in making their investment decisions in 2020, with 91% of banks monitoring ESG factors and over 90% of insurers.

Aviation sector is one of the most hard-to-abate sectors thereby playing a vital role in fighting the challenges of climate change and achieving the 1.5°C and 2°C temperature goals of the Paris Agreement. Support and investment from governments and the financial sector, in addition to those within the sector, are crucial in raising the emissions reduction ambition on a global scale. Innovations in aircraft technology including advanced aircraft configuration and energy systems require substantial investments from governments and aircraft manufacturers. Investments in airports and air navigation service providers are needed to bring about improvements in operations. Scaling the production of sustainable aviation fuels and other energy sources requires substantial investment and financial support from both fuel suppliers and governments on top of what would be needed for associated infrastructural changes. This is particularly important, considering that the drop-in fuels have the largest potential to reduce the overall emission from international aviation by 2050, according to the recent ICAO Report on the feasibility of a Long-Term Aspirational Goal (LTAG) for international civil aviation CO<sub>2</sub> emission reductions (*refer to the LTAG article in Chapter 4 of this report and to the LTAG Special Supplement*).

In view of the above, the ICAO Secretariat organized the Aviation Green Recovery Seminar in 2020 to provide a holistic view of the potential opportunities for aviation to take concrete measures to reduce its emissions footprint as the sector sought to build back better. The seminar not only highlighted ongoing works by ICAO and the aviation community vis-a-vis green recovery and sustainability but also provided a forum for representatives of ICAO member states to discuss how the green aviation future could be shaped.

During the seminar, several heads- and high-level officials of United Nations agencies, governments, industry, and academia participated and shared their thoughts on the critical importance of urgent climate action on aviation, policies, and measures that need to be in place within and outside aviation to support its decarbonization path. The seminar also showcased how innovative aviation solutions help shape the future within the sector as well as outside the sector to cope with the environmental and humanitarian crises worldwide.<sup>10</sup>

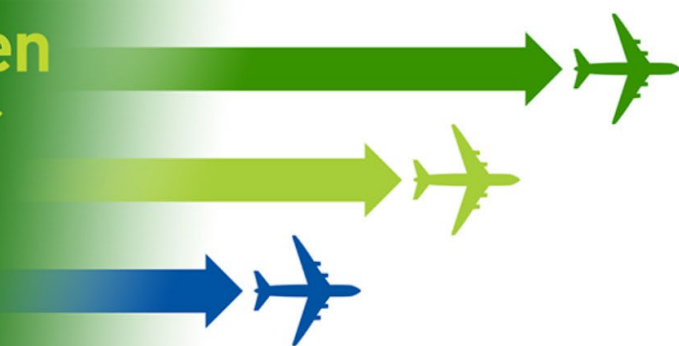
The journey to green recovery for aviation has just begun. The support for aviation green recovery plans should scale further in the face of other pressures and competing priorities. The ICAO LTAG report has shed light on the scale of investment needed to ensure much-needed innovation and scaling are achieved in the coming future. As the Secretary-General of the United Nations has said, the door is open and the solutions are there, and now is the time for solidarity to transform for a greener future.

## ICAO Aviation Green Recovery Seminar

TIME TO BUILD BACK BETTER

Virtual event | 23 - 24 NOVEMBER 2020

#GreenRecovery



8 <https://www.gartner.com/smarterwithgartner/the-esg-imperative-7-factors-for-finance-leaders-to-consider>

9 OECD Policy Responses to Coronavirus (COVID-19): Assessing environmental impact of measures in the OECD Green Recovery Database, 21 April 2022 <https://www.oecd.org/coronavirus/policy-responses/assessing-environmental-impact-of-measures-in-the-oecd-green-recovery-database-3f7e2670/#section-d1e146>

10 <https://www.icao.int/Meetings/GreenRecoverySeminar/Pages/default.aspx>