Kenya's Role in the Global Effort on Aviation Environmental Protection and Sustainable Aviation Fuels (SAF) development, Strengthened by International Support and Collaboration

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a) Kenya's Environmental Initiatives in Aviation

Kenya, through its Civil Aviation Authority, has for a long time understood the need to balance the growth of its aviation sector with the needs of environmental protection. In the wake of global climate change, KCAA has put in place policies that will ensure that the aviation sector complies with both local and international environmental standards (Annex 16). At the core of these efforts is a desire to minimise the carbon emissions of aviation and encourage sustainable economic growth.

KCAA's environmental management system functions on an integrated basis, where economic, environmental, and social objectives are balanced. This approach guarantees that the aviation industry does not hinder the development of the country at the expense of future generations' ability to meet their needs. Notably, Kenya has been a proactive player in the global efforts to mitigate aviation emissions, in line with ICAO's vision of achieving net-zero carbon emissions for international aviation by 2050. This ambitious goal can be also achieved through partnership with international partners, attendance in high-level climate conferences such as COP28, CAAF/3 and active participation in ACT-CORSIA and ACT-SAF Programmes.

b) Key Achievements from 2022 to 2025

KCAA's environmental successes have been a continuation of its efforts to minimise the carbon footprint of aviation. One of the main areas of attention has been the reduction of carbon emissions from aircraft and airports, an area that it actively promotes through various international forums.

i. CORSIA participation

As a contribution to the global efforts to combat climate change, Kenya actively participated in the CORSIA pilot phase (2021-2023) and submitted carbon emissions data for Kenyan operators through the CORSIA Central Registry, as required. Kenya remains engaged in the CORSIA first Phase (2024-2026) and continues to implement the measures outlined in its State Action plan (2022-2028).

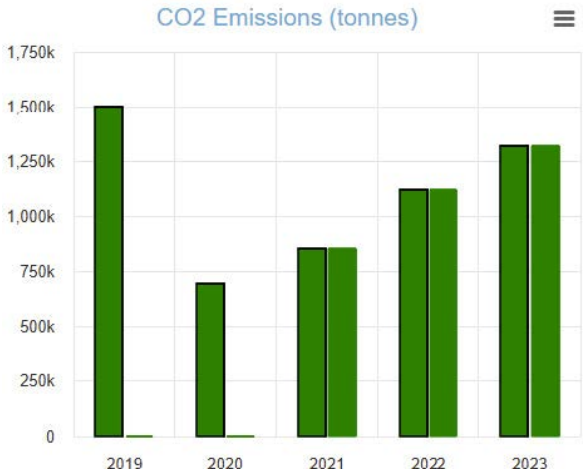


FIGURE 1: CO_2 emission for international flights from 2019-2023

ii. ACT-CORSIA initiative

Kenya and UK CORSIA Experts continued to provide training to CORSIA Buddy Partnership countries namely: Ethiopia, Seychelles, South Sudan, Tanzania, and Uganda. The training was delivered in physical, online, and hybrid formats, with monthly meetings held with each country through March 2025. Key topics covered included: Updates to the CORSIA Regulatory Framework, CERT 2024, CCR Reporting for 2025, CEF, CAAF/3, and ACT-SAF materials, CEEEU and TAB 2025 review. Further Kenyan Stakeholders received training from EASA ACT-CORSIA during the review period.

iii. SAF Initiative

Kenya has played a significant role in advancing the development and promotion of Sustainable Aviation Fuels (SAF) that is one of the key measure established in the State action plan. As a promising alternative to conventional jet fuel, SAF offers substantial reductions

FIGURE 2: ACT-CORSIA with EU 2025

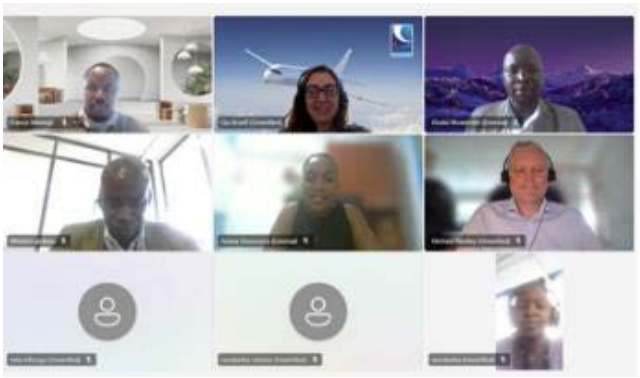
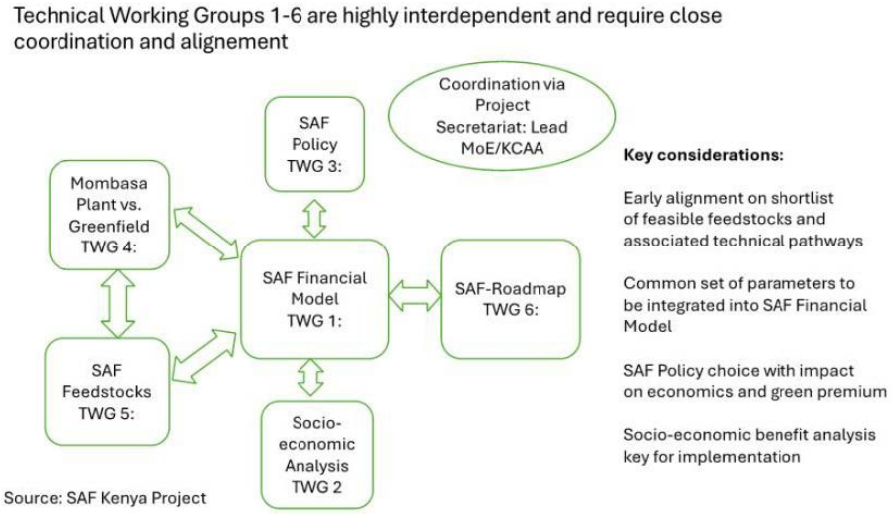


FIGURE 3: ACT-CORSIA under buddy programme 2025

in lifecycle greenhouse gas emissions. A major milestone was achieved in 2018 when Kenya participated in a SAF feasibility study funded by the International Civil Aviation Organization (ICAO) and the European Union. This study marked an important step toward building domestic SAF production capacity. In support of this initiative, the Kenya Civil Aviation Authority (KCAA) has organized workshops aimed at disseminating findings, engaging stakeholders, and harmonizing policy frameworks. These efforts underscore Kenya's commitment to a collaborative, multi-stakeholder approach to SAF development. To further institutionalize this effort, Kenya has established a national SAF Steering Committee. This committee is overseeing SAF implementation through specialized Technical Working Groups (TWGs), which focus on key areas including:

a) SAF Finance Case for Kenya
b) Socio-Economic Benefits Study
c) SAF Policies (Energy Policy)
d) Mombasa Refinery and Fuel Blending, and Certification
e) Feedstock Sourcing Assessment
f) SAF Roadmap



These TWGs are working in coordination to develop a comprehensive and actionable strategy for SAF deployment in Kenya. The global drive for decarbonization has triggered innovation, whereby there are improvements in cleaner technologies and alternative fuels. **By collaborating and with support from ICAO, GIZ, WB, FAA, Netherland, EASA, Hasselt University and MIT through Ascent 93 and other international organisations, Kenya has a chance to lead the way in sustainable aviation practices in Africa.** The establishment of local SAF production capacities, as well as the increase of renewable energy projects at airports, can make Kenya a regional center for sustainable aviation.

FIGURE 4: 1st SAF workshop Aug 2022

FIGURE 5: Second SAF workshop, October 2023

FIGURE 6: Stakeholder engagement with KPC on SAF agenda

FIGURE 7:ENI-AFI conference April 2025

FIGURE 8: Visit to Geothermal Plant for feasibility on SAF supported by ICAO through Netherlands funding

FIGURE 9: 1st Regional workshop and 3rd Kenya workshop under EASA ACT_SAF in Mombasa, Kenya in 30 Sept-2nd Oct 2024

FIGURE 10: 1st SAF Steering Committee meeting on 29th May 2024

FIGURE 11: 2nd SAF NSC meeting in Mombasa, Kenya- 2nd to 4th October 2024

FIGURE 12: TWG Meeting April 2025

FIGURE 13: 3rd SAF NSC meeting in Naivasha- 19-21st May 2025

vii. CAEP Participation

Kenya continues to actively participate in the CAEP Meeting and currently holds the position of the Vice Chairperson for the region. Kenya has also been actively participating in the COP meetings under UNFCCC to push the agenda on Article 6 and CORSIA.

viii. Solar at the gate project.

A pilot project was implemented in at the Moi International Airport, Mombasa, Kenya with strong support from the International Civil Aviation Organisation (ICAO). This initiative targeted 14 African and Caribbean states. Twelve (12) States were from the African Region and two from the

FIGURE 14: COP 28 participation in Dubai, 2023

FIGURE 15: CAEP participation in Japan

FIGURE 16: kenya key negotiators on climate change

FIGURE 17:CAEP participation in Montreal 2025

FIGURE 18: Hosting of CAEP WG4 in Nairobi in 2024

Caribbean Region. This project was implemented by the Kenya Civil Aviation Authority (KCAA) and the Kenya Airport Authority (KAA). It was funded by the European Union and the Government of Kenya at a cost of USD 1,501,132.22 which was part of the €6.5 million initiative, entitled "Capacity Building for CO_2 Mitigation from International Aviation". It consisted of a ground-mounted photovoltaic system of 507kW solar power generation facility and mobile airport gate electric equipment and was launched on 12th December 2018. This solar farm not only helps in carbon reduction but also leads to significant savings in electricity bills for the airport, which is an average of USD 25,000 (Ksh 2.5 million) per month. These initiatives have made MIA a model for sustainable airport operations in Africa. The project continues to generate Solar energy for use in the Airport.

https://archives.greenairnews.com/www.greenaironline.com/news5633.html?viewStory=2557.

FIGURE 19: Solar panel at MIA

FIGURE 20: Dashboard for usage and generation

ix. State Action Plan and progress

Kenya is focused on environmental sustainability as a key aspect of its operations. The establishment of a specialised Environmental Protection Department in the CAA is one of the most important developments. In accordance with its obligations to CORSIA and other international agreements, Kenya has been attending high-level forums like the ICAO Conference on Aviation Alternative Fuels (CAAF/3) in Dubai in 2023. These international engagements are essential for knowledge sharing, the development of new technologies, and global cooperation. KCAA is also dedicated to promoting Kenya's overall environmental objectives. In accordance with the national goal of planting 15 billion trees by the year 2032, the KCAA Board has committed to planting 32,500 trees every year. During the 2023/24 period, the Authority managed to plant more than 52,000 trees in different parts of Kenya, helping in reforestation and carbon sequestration, and this year, 100,644 trees have been planted and in is a work in progress.

FIGURE 21:CAAF/3 participation in Dubai

FIGURE 22: Tree planting in 2024

Conclusion

By taking part in global initiatives such as CORSIA, promoting SAF, and introducing renewable energy projects, KCAA has made Kenya a leader in the drive for sustainable aviation in Africa. However, the problems that the industry faces are significant, and there is a lot to be done to achieve the global goal of net-zero emissions by 2050. Further international collaboration, innovation, and investment in sustainable technologies will be critical for the aviation industry to contribute to climate change mitigation. As Kenya continues to move forward, it is an example of how a developing country can be a leader in environmental stewardship in the aviation industry.

By actively participating in global initiatives such as CORSIA and ACT-SAF, promoting Sustainable Aviation Fuels (SAF), and investing in renewable energy projects, Kenya is positioned as continental leader in the pursuit of sustainable aviation. Despite this progress, the aviation sector still faces substantial challenges on the path to achieving the global target of net-zero emissions by 2050.

Realizing this ambition will require not only continued international collaboration, innovation, and investment in sustainable technologies but also clear and trusted partnerships that foster inclusive progress. Strengthening collaboration with stakeholders, locally and globally, is essential to ensure that climate action in aviation also delivers tangible socio-economic benefits to communities and enhances energy security. As Kenya moves forward, it stands as a compelling example of how a developing country can lead by example in environmental stewardship, demonstrating that sustainability and inclusive development can go hand in hand in the global transition to net zero by 2050.