



AFRAA

Sustainable Aviation Fuels (SAF) adoption in Africa: Joint ICAO IATA/AFRAA Workshop:

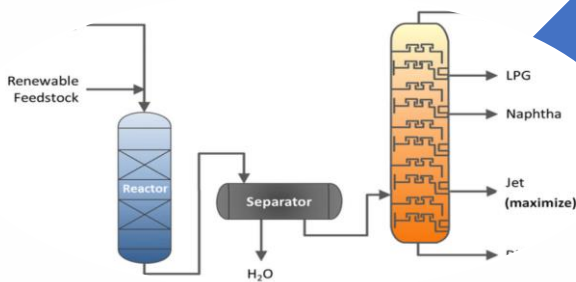
**AFRAA initiatives to accelerate the
adoption and development of SAF in
Africa.**

26/06/2024

Better Skies for Africa



AFRAA FACTSHEET AND CALL TO ACTION ON DECARBONISATION PATHWAY TO NET ZERO EMISSIONS:



Form partnerships with non-aviation technology providers

Provide incubation opportunities for new green technology start-ups

Governments to continue to fund research programmes in the sector

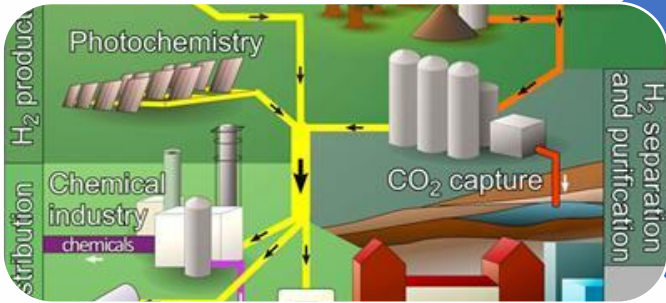
All airlines to investigate sustainable aviation fuel opportunities – start by doing test flights

Make substantial and bold SAF offtake agreements early

Invest in infrastructure

Better land policy to facilitate investment in feedstock

AFRAA FACTSHEET AND CALL TO ACTION ON DECARBONISATION PATHWAY TO NET ZERO EMISSIONS:



Implement optimized flight profiles as air traffic volumes grow

Implement fixed electrical ground power, weight-based efficiency measures, continuous approach and departure, airport collaborative decision making, aerodynamic

Collaborate to speed up investigating, testing and certification of new efficiency measures



Support ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and ensure it continues to evolve

Do not duplicate market mechanisms

Promote development of carbon capture and removal opportunities.



Importance of SAF

Why SAF?

FACT CHECK:

As Per IEA research;

- ❑ In **2021** aviation accounted for over 2% of global energy-related CO2 emissions.
- ❑ This means **Aviation related emissions** have grown faster in recent decades than **road, rail or shipping**.
- ❑ As countries emerged from Covid-19 lockdowns:
 - Aviation emissions in 2021 reached around **720 Mt**,
 - Regaining nearly **one-third of the drop from 2019** levels seen in 2020.
- ❑ **According to ICCT**; Carbon emissions from commercial flight are set to **triple by 2050** amid surging travel and freight demand.
 - Nonetheless, emissions could be **slashed by 85%** through demand **aircraft technology, fuel efficiency, and alternative fuels**.



What is the importance of SAF for the African region Context?

1. Environmental Sustainability:

- Our Members are committed to efforts towards reduction of greenhouse gases and, Mitigating the impact of aviation on climate.
- *We believe accelerated deployment of SAF in the region will play a significant role towards a greener and sustainable African aviation industry.*



What is the importance of SAF for the African region Context?

2. Security of Energy.

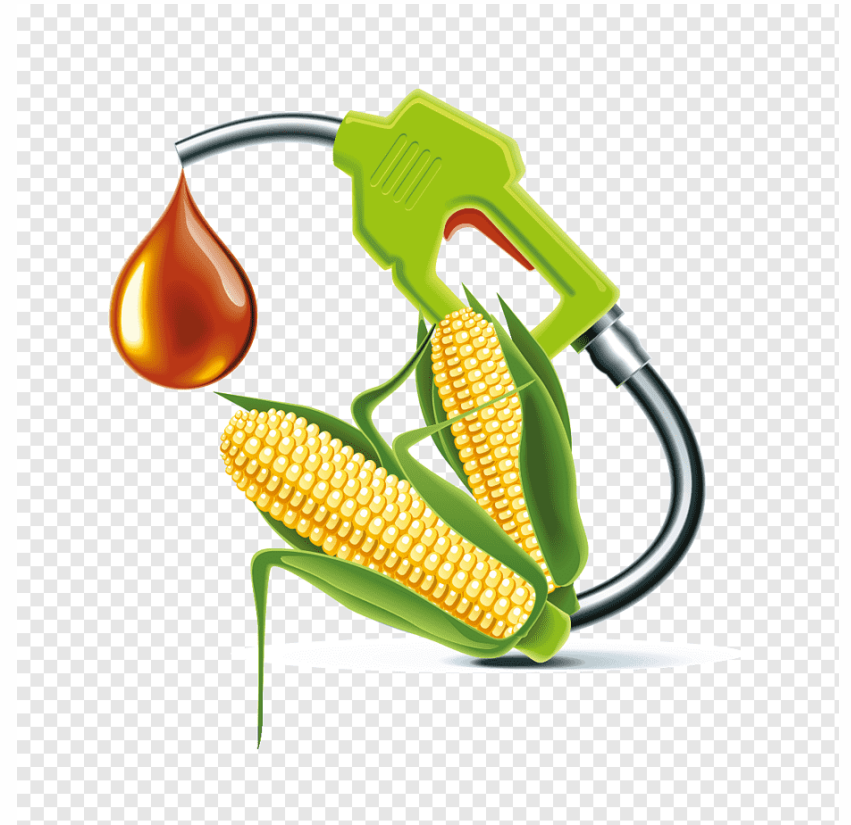
- Africa has been over-dependent on imported conventional fuels.
- Yet the region is endowed with renewable energy resources such as wind, solar and Biomass.
- By investing in production of SAF:
 - ❖ *Our airlines can gradually attain stability/security of fuel supply.*
 - ❖ *Reduce overdependence on fossil fuels and,*
 - ❖ *Diversify the continent's energy sources*



What is the importance of SAF for the African region Context?

3. Job creation and Economic development

- SAF Presents immense opportunities for Africa. New job opportunities will be realized through:
 - *Feedstock Cultivation*
 - *Research and Development*
 - *Refining and distribution*
- This will provide opportunities for technological innovation, skills development and ultimately contribute to sustainable development



What is the importance of SAF for the African region Context?

4. Reputation of African Aviation.

- As the Global Aviation industry focuses on SAF, Africa also has a huge opportunity to play by presenting itself as a leader in sustainable aviation by embracing SAF.
- This can play a big part in enhancing the reputation of our airlines at an international stage.





SAF Initiatives by African Airlines so far.



AFRAA SAF Taskforce:

AFRAA has an existing Fuel Purchase Committee which has been facilitating fuel tendering for participating members.

- ❑ **Period of Existence : 12 years**
- ❑ **Number of Current Members : 15 Airlines**
- ❑ **Size of Volumes Currently Tendered in 2023 : 850 Million liters**

In line with Resolutions adopted by the 54th AFRAA Annual General Assembly, 11 – 13 December 2022(**RES AGA 54/10**), the AFRAA Executive Committee(EXC) at the 189th meeting on **7th May 2023** took the following decision on SAF and environment for the AFRAA Secretariat to Undertake:

- *Nomination of the Taskforce Chairperson to the new Taskforce*
- *Through this Taskforce, the Secretariat to:*
 - i. work on actions on SAF leading towards the 2050 Net Zero goal*
 - ii. Embark on Campaigns to educate policymakers and create awareness*
- *prepare a policy paper with a factsheet on actions to be undertaken by airlines to attain the 2050 Net Zero targets.*

The Full resolution can be found in the AFRAA Website via the link: <https://www.afraa.org/wp-content/uploads/2023/06/AFRAA-AGA54-Resolutions-Excerpt-on-Environmnt-RES-AGA-54-10.pdf>



● SAF Initiatives by African Airlines

- We have had a few initiatives recently. The most notable ones include:
 - *KQ use of SAF for the Sky teams' Sustainable Flight Challenge on 25/05/2023*
 - *Delivery of an Aircraft powered by 30% SAF blend for ET on 28/04/2023*
 - *SAA- Mango Domestic flight operated on SAF in 2016*

Though the initiatives are few, they go a long way in setting the pace for **awareness creation**, **stakeholder engagements** and **resource mobilization** towards deployment of SAF in the continent.



SAF Initiatives by African Airlines

- **AFRAA Secretariat SAF Related Activities following SAF Task Force Inaugural Meeting on 2nd November 2023:**
 - ❖ Conducting detailed research on SAF production and deployment and a detailed feedstock feasibility assessment;
 - ❖ Participate actively in the formalization of the hydrogen and SAF sector by creating a regulatory framework and standards;
 - ❖ Developing appropriate capacity in terms of personnel and technology for SAF production and deployment;
 - ❖ Promoting collaborations with industrial players and international stakeholders that will enhance commitment and uptake of SAF;
 - ❖ Need for Capital investment to scale up production and an incentive policy to increase production of bioenergy using waste feedstock by 2050;



SAF Initiatives by African Airlines

- **AFRAA Secretariat SAF Related Activities**

- ❖ Enhance capacity building through technical training and Knowledge transfer, Innovation, research, and development;
- ❖ Undertake SAF pilot projects in selected countries with the highest SAF production potential
- ❖ Governments to support the energy transition and align with the industry's commitment of achieving net zero carbon emissions by 2050;
- ❖ Enhance collaborations between international organizations, research institutions and governments for the actualization of the SAF targets;
- ❖ All actors in the SAF industry to undertake increased sensitization across the industry.

- **Inclusion of SAF Task Force as a stand-alone Agenda Item during Aero Political Committee Meetings**



Opportunities for SAF in Africa

● Are there opportunity for SAF in Africa?

Answer: Yes!!!

There are immense opportunities for SAF in Africa.





● Are there opportunities for SAF in Africa?

1. Africa youthful work-force.

- This Africa's biggest Asset – the region has the youngest workforce globally. the youth are also embracing technology and innovation at a very high rate.

2. Availability of land.

- There is a huge acreage of land in the region with a potential to produce the required feedstock crops (Without the need to substitute the arable land for food production)

3. Availability of potential feedstock

- There is a huge potential for SAF in the region since there is a lot of feedstock from Non-edible oils, Hyacinth (e.g. in Lake Victoria), Agricultural waste and Algae.



● Are there opportunities for SAF in Africa?

4. Considerable investment in other renewable energy projects

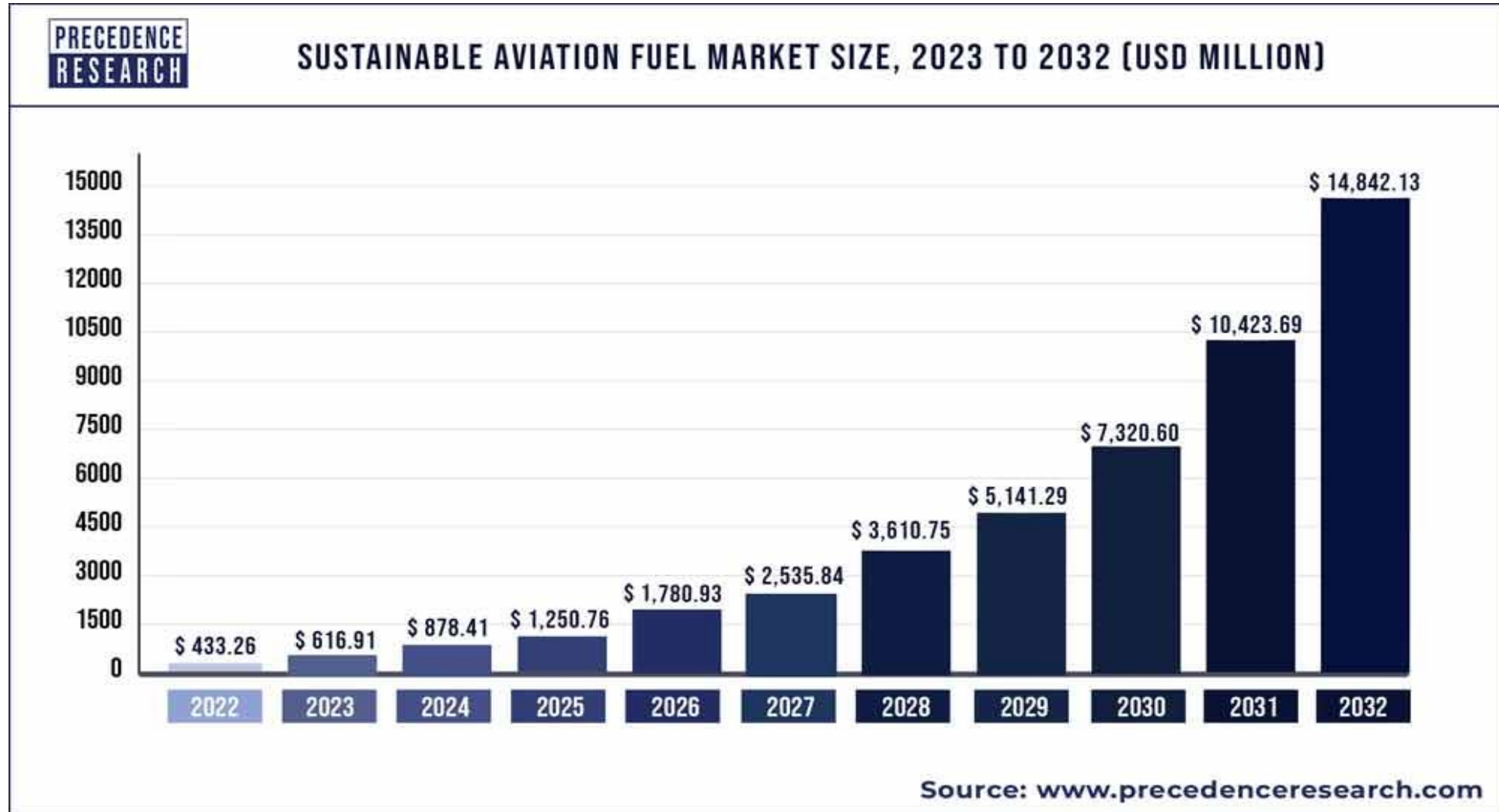
- There is good investment of **Geothermal Power Projects**, especially in the East Africa Rift Valley System.
- **Wind energy projects** are also doing well in Kenya, SA, Egypt and Morocco.
- Such projects have set the pace for further investment in more renewable energy projects such as SAF

5. Favorable Climate.

Africa has a considerable good climate that favors agro-processing. This presents good conditions for feedstock growth and also good working conditions.

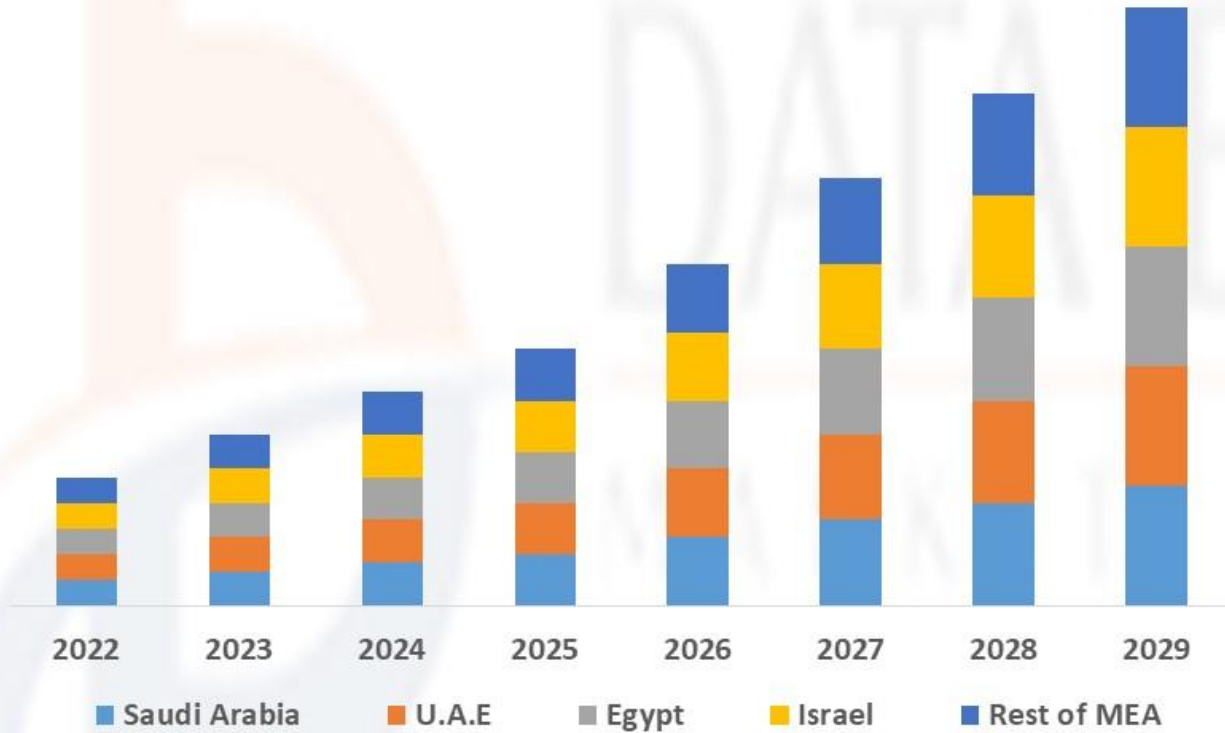
For the full potential in acceleration of SAF Deployment in Africa, AFRAA calls upon the AU to ensure that there is a national SAF implementation program at state levels.

Expected Global Growth of SAF Market size



Expected MEA Growth of SAF Market size

Middle East and Africa Sustainable Aviation Fuel Market is Expected to Account EURO 465.34 Million by 2029



Middle East and Africa Sustainable Aviation Fuel Market, By 2029




DATA BRIDGE MARKET RESEARCH





Challenges facing SAFs and Appeal for Assistance



What are some of the Challenges affecting SAF deployment for airlines?

Airlines face many challenges as far as SAF production and deployment is concerned. The challenges include:

- Policy and Regulatory Framework
- High Costs
- Infrastructure Development
- Commercial Viability

- Availability and Sustainability of feedstock
- Proof of sustainability
- Public Awareness and Acceptance of SAF



Appeal for Support/Assistance for airlines:

- African carriers faces many Challenges that require immediate interventions and therefore take priority.
- Successful SAF deployment in the region will require huge financial, technical and technological resources

- Promote collective understandings and collaboration
- Capacity Building and Training
- Advocate for SAF incentives

- Collaborate with airlines on infrastructure Development & Technology Transfer
- Support airlines and their fuel producers during initial SAF deployment at an airport
- Funding of SAF Initiatives



Conclusion:

*A multi-stakeholder approach involving governments, fuel suppliers, airlines, **Financial Institutions**, international organizations and research institutions is required to address these challenges.*

Africa can overcome these obstacles and establish a sustainable aviation fuels industry that contributes to both environmental and economic goals through collaboration.

Africa needs assistance (Financial, Technical and Technological) to overcome the challenges highlighted herein and accelerate the development and adoption of sustainable aviation fuels.

*We therefore call for Assistance from **FDIs, OEMs** and other development partners to assist Africa overcome the challenges above.*

Conclusion:

AFRAA's Call to African Governments Regarding Sustainable Aviation Fuel (SAF)

AFRAA urges African governments to actively participate in SAF discussions and take the following actions:

- ❖ *Develop and Implement Policies, Roadmaps, and Regulations to support the adoption and growth of Sustainable Aviation Fuel (SAF).*
- ❖ *Invest in SAF Research and Production by providing sponsorships and forming partnerships with training institutions.*
- ❖ *Enhance Capacity in the SAF Value Chain through measures aimed at developing human resources.*
- ❖ *Advocate for Technology Transfer to facilitate the production of SAF within the region.*
- ❖ *Provide Incentives for SAF Producers and ensure the allocation of adequate funding for SAF production.*

Lastly; AFRAA is very much aligned with the Aviation industry and all the stakeholders on the actions to be undertaken by our member airlines to attain the 2050 Net Zero targets.

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**THANK
YOU**



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