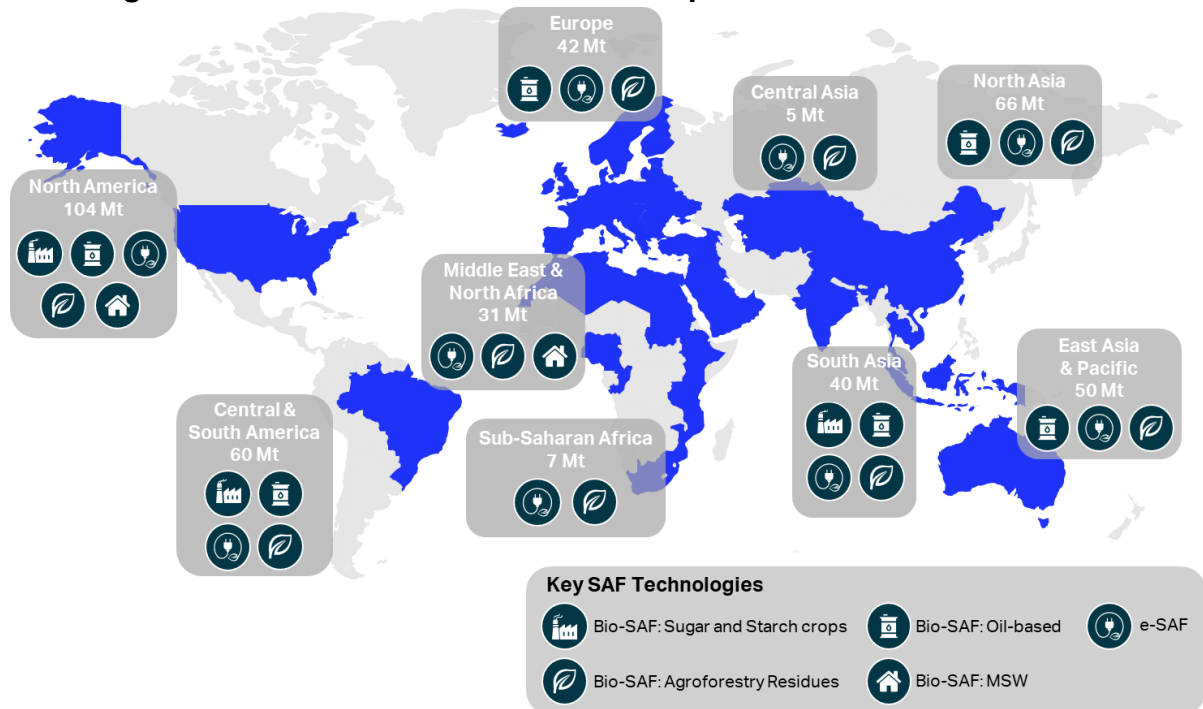


Regional Leadership for Global Impact: Accelerating SAF Deployment

Estimated regional sustainable aviation fuel (SAF) production in 2050



Source: IATA Sustainability and Economics, Worley Consulting

- The air transport industry will require around 500 Mt of sustainable aviation fuel (SAF) in 2050 to achieve net zero CO₂ emissions. In comparison, global SAF production in 2025 is estimated at just 2 Mt. [A study by IATA and Worley Consulting](#) estimates that SAF production could reach 400 Mt by 2050 in its core forecast*. While contributions from all regions will be essential, a large share of global output will need to come from a few leading regions.
- North America is projected to lead with more than 100 Mt of potential SAF by 2050, supported by abundant biomass feedstocks and proven incentive-based policy frameworks. Central & South America, North Asia, and South Asia are also expected to contribute significantly, driven by strong biomass resources and leadership from Brazil, China, and India. Together with Europe and East Asia & Pacific, these regions will form the backbone of global SAF production, accounting for around 360 Mt, or nearly 90% of the total forecast.
- The Middle East & North Africa also show substantial potential, while Central Asia and Sub-Saharan Africa are expected to contribute more modestly. These lower projected volumes reflect infrastructure gaps, limited supply chain readiness, and less mature policy frameworks. However, both regions hold untapped feedstock resources that could enable higher contributions if the right conditions are established.
- Globally, the main bottleneck is not feedstock availability, but the pace of technology rollout. Scaling up both bio-SAF and e-SAF will require multiple technology routes. While achieving net zero and reaching 500 Mt of SAF production by 2050 is possible, it will require urgent acceleration in technology readiness, expanded access to sustainable feedstocks, and robust policy frameworks to ensure investment certainty.

*The core forecast considers 236 Mt of bio-SAF out of a theoretical maximum of ~300 Mt. e-SAF covers the remaining volume.

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