



Considerations for creating a SAF strategy



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- ✓ **Gathering data and establishing a fact base,**
- ✓ **Setting a vision for promoting SAF,**
- ✓ **Developing national SAF roadmaps or transition pathways,**
- ✓ **Flexible and inclusive policy,**
- ✓ **Managing risk,**
- ✓ **National, regional and international cooperation**

Considerations for creating a SAF strategy

- In June 2022 ICAO CAEP Published a ***Guidance on Potential Policies and Coordinated Approaches for the Development of SAF***
- ECAC recommendations are fully consistent with this Guidance



February 2023

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ECAC GUIDANCE on Sustainable Aviation Fuels (SAF)

2023



European Civil Aviation Conference

Endorsed by ECAC Directors General of Civil Aviation on
24 February 2023

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strategy

ECAC SAF Task-Group

- Formed by **29 experts from 13 ECAC States, three European organisations (EASA, EUROCONTROL, and the EC) and the ECAC Secretariat**
- ✓ Considered a wide range of policy options beyond the current European ones



Considerations for creating a SAF strategy

- The ECAC guidance on SAF contains policy options and recommendations to ECAC States, based on the ICAO Guidance, the work of the SAF-TG, and the consideration of other work, notably the **Clean Skies for Tomorrow *SAF Policy Toolkit***.



Considerations for creating a SAF strategy

- Before implementing SAF policies:
 - States to first **develop a coherent national SAF strategy** to:
 - promote SAF use and
 - stimulate investments in production.
- The following considerations may help policy direction
 - aligned with the CST Policy Toolkit
 - consider the ITF Aviation Common Interest Group suggestions as well.



Considerations for creating a SAF strategy

- ✓ **Gathering data and establishing a fact base,**
- ✓ Setting a vision for promoting SAF,
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- ✓ Flexible and inclusive policy,
- ✓ Managing risk,
- ✓ National, regional and international cooperation

Gathering data and establishing a fact base

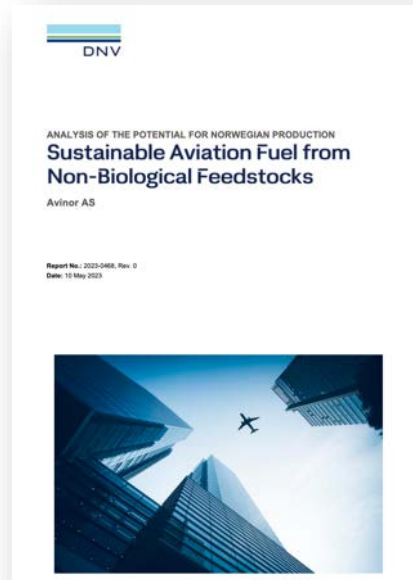
- Each country, region and market will need to develop its own fact base & analysis:
 - ✓ **Feedstock:** Available sources, production potentials, logistic, price, etc.
 - ✓ **Technology options:** Potential conversion process, capacity building, etc.
 - ✓ **Financing:** Public and private financial support options, market potentials, etc.
 - ✓ **Sustainability:** Specific applicable criteria and regulatory framework.
 - ✓ **Policy:** Policy options, government coordination, etc.

Gathering data and establishing a fact base

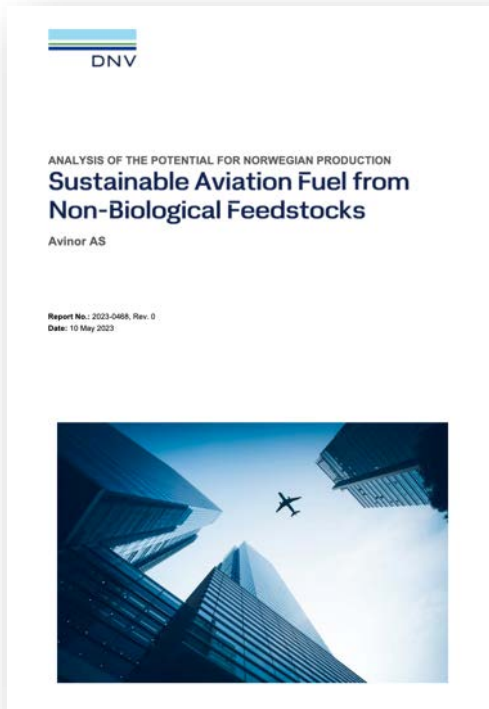
- Each country, region and market will need to develop its own fact base & analysis:

- ✓ Feedstock
- ✓ Technology options
- ✓ Financing
- ✓ Sustainability
- ✓ Policy

Feasibility Studies



Gathering data and establishing a fact base



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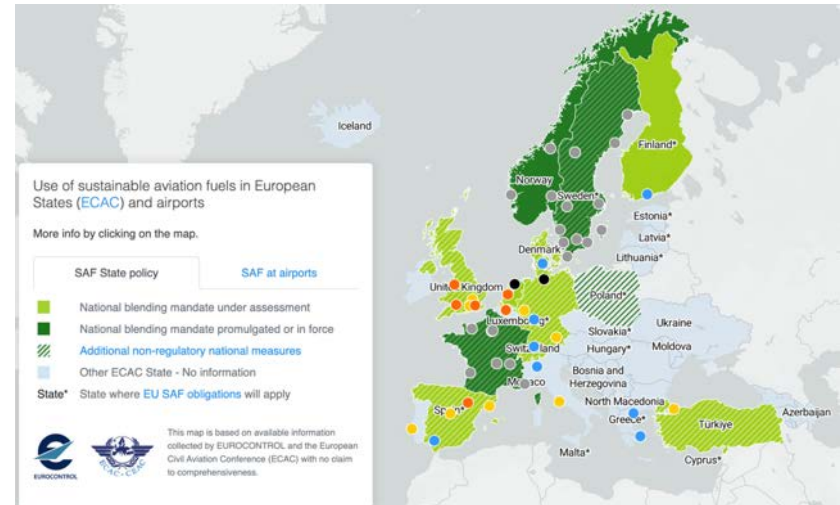
- ✓ Executive Summary
- ✓ Introduction and basis for work
- ✓ Regulatory status for SAF
- ✓ Production of SAF from Non-Biological Feedstocks
- ✓ Drivers and barriers for SAF production from Non-Biological Feedstocks
- ✓ Mongstad as a location for SAF production
- ✓ Conclusion
- ✓ Recommendations

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Setting a vision for promoting SAF

- Governments can influence market expectations by **setting ambitious targets** for SAF production and use:
 - ✓ The goals and policies should be long-term, reflecting the timeframes for investment:
 - **ReFuelEU Aviation** in the EU
 - ✓ Should reflect suitably high levels of ambition.



<https://www.eurocontrol.int/shared/saf/>

Setting a vision for promoting SAF

- ✓ **NORWAY:** blending obligation to aviation fuel suppliers for a **0.5% minimum content of advanced biofuel from 1 January 2020**. The goal is to reach 30% by 2030.
- ✓ **SWEDEN:** GHG emissions reduction obligation for jet fuel suppliers after 1st August 2021 with increasing GHG-reduction each year. SAF blend ratios will be needed to meet the reduction obligation, increasing from **1% by volume in 2021 to 30% in 2030**.
- ✓ **FRANCE:** Annual SAF blending mandate set at **1% starting in 2022**, in energy units. SAF blending mandate expected to be 2% in 2025 and 5% in 2030.
- ✓ **UK:** SAF mandate of **10% by 2030**.

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Developing national SAF roadmaps or transition pathways

- Common practice in pioneering European States, in most cases framed in wider national climate policies and objectives:
- Main final purpose > to inform policymakers on the necessary actions needed to incentivise SAF and mobilise investments.
 - ✓ Should consider short and long-term goals, and regulatory mechanisms that need to be created or adapted.

Feuille de route française pour le déploiement des biocarburants aéronautiques durables

Résumé exécutif :

La présente feuille de route a pour objectif de préciser l'ambition et la stratégie que la France pourrait développer en matière de biocarburants aéronautiques durables dès 2025. Elle a été rédigée en s'appuyant sur différentes initiatives françaises dont une étude sur les conditions d'émergence d'une filière de biocarburants aéronautiques en France.

Cette ambition et cette stratégie s'appuient sur :

- **5 principes fondamentaux** : le maintien d'un niveau optimal de sécurité des vols, l'assurance de la durabilité des carburants d'aviation produits en France, la viabilité économique de la filière, la mise en place de chaînes logistiques économes, la cohérence avec les initiatives supranationales ;
- A court et moyen terme, **une trajectoire de déploiement ambitieuse mais réaliste** : 2% en 2025 et 5% en 2030 ;
- A long terme, **un objectif de substitution de 50% du carburant conventionnel d'origine fossile par des biocarburants aéronautiques durables en 2050** cohérent avec l'atteinte de la neutralité carbone en France à cet horizon ;
- **L'identification de chantiers et de moyens** pour la mise en œuvre concrète de ces principes et objectifs.

Developing national SAF roadmaps



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2019



2023

UK Sustainable Aviation SAF Roadmap



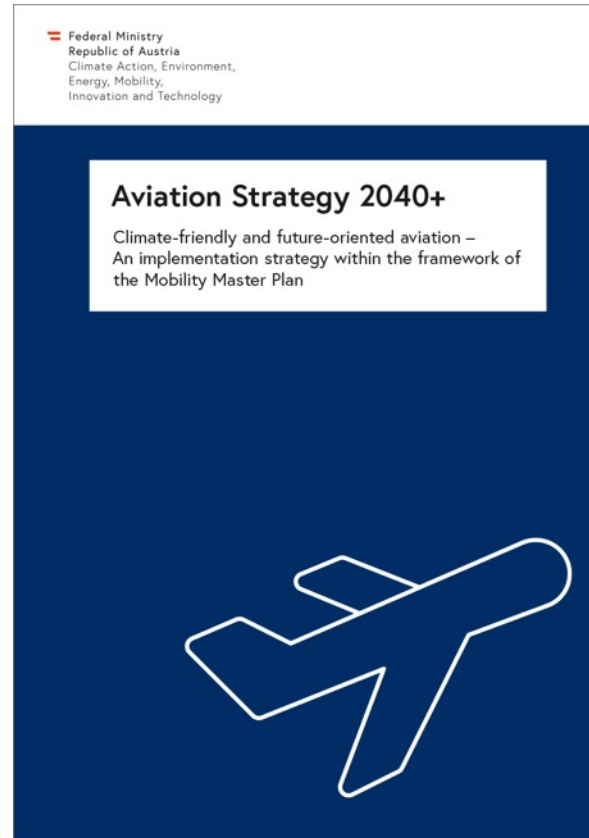
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Developing national SAF roadmaps

Austrian SAF Roadmap:

Case-study of developing a national SAF strategy



Developing national SAF roadmaps or transition pathways

- The value of partnerships:
 - ✓ The SAF transition relies on **strong partnerships** between **governments** and **industry stakeholders**.



Developing national SAF roadmaps or transition pathways

- Benefits beyond emission reductions: Countries that promote SAF may profit from **domestic industrial development**.

UK Sustainable Aviation SAF Roadmap

Mobility and connectivity are fundamental to a sustainable economy. Over a third of the UK's ex-EU trade by value is sent by air, with air transport essential for perishable and time-sensitive goods such as food and medical supplies⁶. **Developing a sustainable way for the aviation industry to continue serving communities and businesses will provide significant environmental, economic, and social benefit for the UK.**

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Flexible and inclusive policy

- States will need to consider whether their vision and roadmap should be sector-specific or whether aviation will form a part of a broader national strategy.
 - ✓ **SAF in holistic decarbonisation strategies:**
 - **Strategies that embrace all transport modes** and available technology options **maximise emission reductions** across transport sectors.
 - Policy **experience in road can help SAF** promotion.
 - **Directing available drop-in fuels to hard-to-abate sectors**, including aviation can maximise emission reductions across the economy.

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Managing risk

- SAF development also imply risks:
 - ✓ harming **biodiversity**,
 - ✓ adding to **pollution** and **resource** depletion
 - ✓ conflicts over **land use**,
 - ✓ negative **social** impacts.
 - **Any policy must acknowledge, assess and mitigate these risks**

Sustainability Themes

1. Greenhouse Gases (GHG)
2. Carbon stock
3. GHG reduction permanence
4. Water
5. Soil
6. Air
7. Conservation
8. Waste and Chemicals
9. Seismic and Vibrational Impacts
10. Human and labour rights
11. Land use rights and land use
12. Water use rights
13. Local and social development
14. Food security

Managing risk

- States should explore ways to identify and mitigate the associated risks deriving from their SAF strategy.
 - ✓ **Safeguarding credible emission reductions:**
 - Sustainability framework
 - Quantified emissions reductions rather than only volumes of SAF

Delta Air Lines faces lawsuit over \$1bn carbon neutrality claim

US airline pledged to go carbon neutral but plaintiffs say it is relying on offsets that do almost nothing to mitigate global heating



The case argues that there is a market premium for green products and that Delta has profited from a misleading environmental claim. Photograph: Jetlinerimages/Getty Images

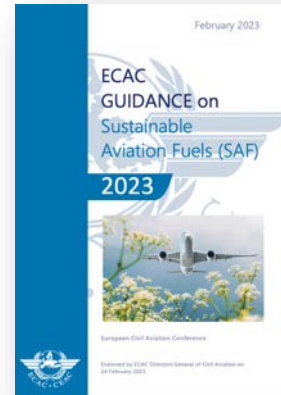
Delta Air Lines is facing a lawsuit over its \$1bn carbon neutrality claim which plaintiffs say is “false and misleading” as it relies on offsets that do little to mitigate global heating.

National, regional and international cooperation

- The entire value chain creates a SAF market:

- Extensive **multilateral and peer- to-peer interaction between governments, industry, consumers and NGOs** will be needed to accelerate SAF deployment:

- ✓ aligning best practices, 
- ✓ sustainability standards
- ✓ closing the price gap
 - **Regional and international dialogue to facilitate harmonisation** 



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**Thank you for your
attention!**



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