

# The US Approach and Policy Outline to Stimulate SAF

Characteristics and distinctions against the EU and other regions

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ISCC Regional Stakeholder Meeting – North America

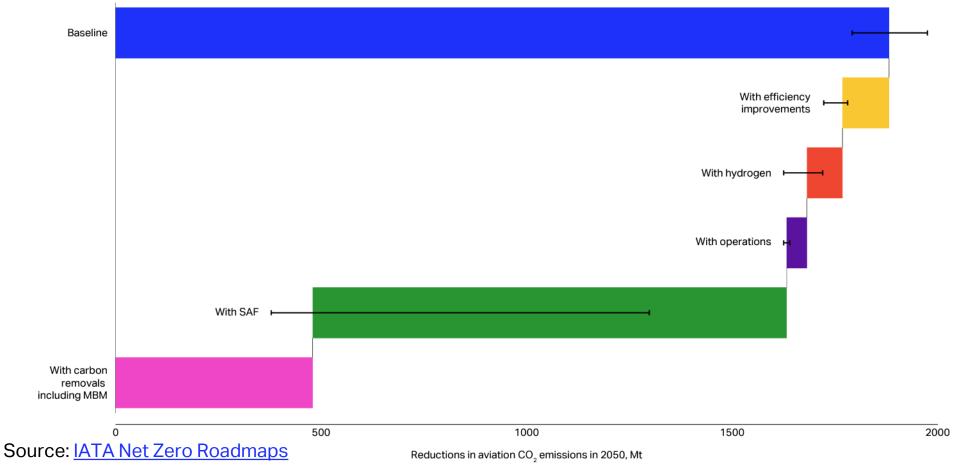






# SAF is the most significant decarbonization lever for the aviation industry

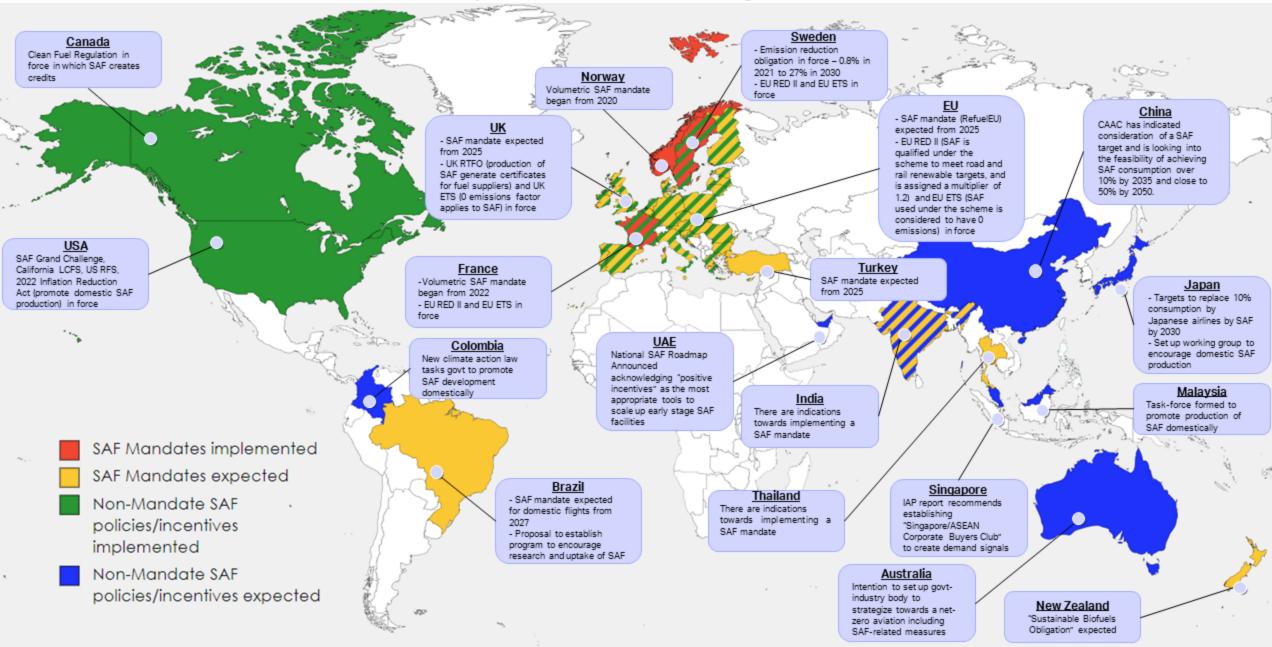
Reductions in aviation CO2 emissions in 2050, by source, Mt



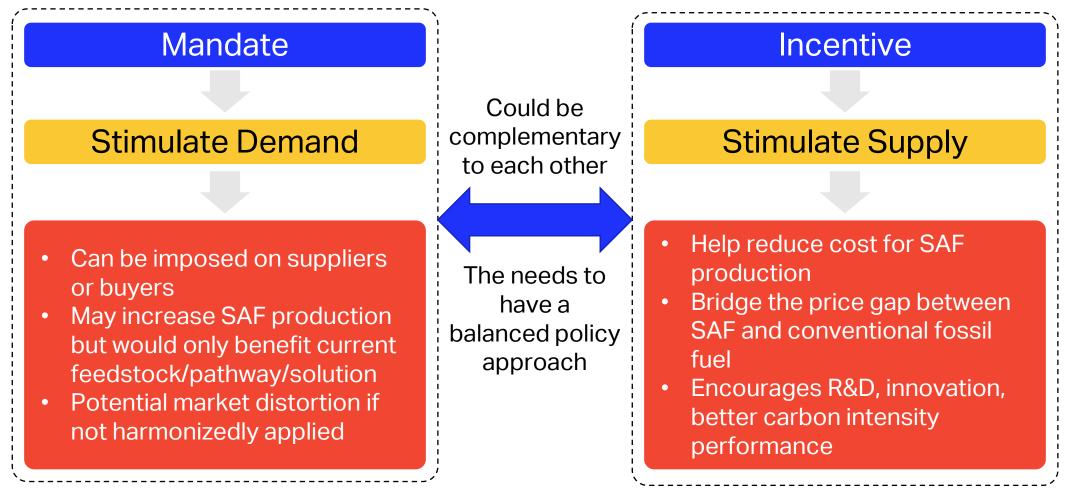
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### **Global SAF Policy Landscape**



## Most common policy approach for SAF





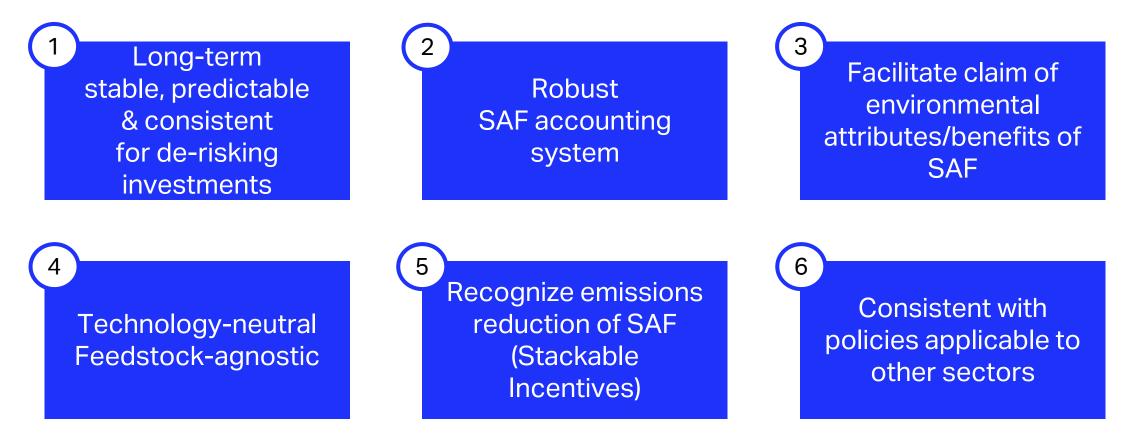
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## But there are other policy options too

Objective: Attracting investment capital for new SAF facility		Objective: Reduce cost of SAF production		Objective: Create a robust market enabling tool	
<ul> <li>Contracts for Difference (C</li> <li>Green Bonds</li> <li>Capital Grants</li> <li>Government funding for SA research, development, demonstration and deploy</li> <li>Tax exemption</li> </ul>	AF ment	<ul> <li>Blending Incentives</li> <li>Production Incentive</li> <li>Local Feedstock Ince</li> <li>Feedstock priority to (reducing feedstock competitions betwee</li> <li>Tax exemption</li> </ul>	entives wards SAF en sectors) Objective: (	framework custody: re attribute o • Recognize 3 environn	SAF accounting with a robust chain to eady for environmental wnership and transfer stacking of SAF scope nental attributes Objective: Create
government leadership in SAF	emissions reduction		into existing renewable energy policy		demand for SAF
<ul> <li>Government commitment to SAF use and carbon-neutral air travel</li> <li>Policy statement to establish SAF's strategic</li> </ul>	<ul> <li>Recognize eligible SAF as zero emissions (E.g. EU ETS)</li> <li>Recognize SAF environmental benefits under carbon taxation</li> </ul>		<ul> <li>Incorporate SAF into existing renewable energy policy at regional, national, state or local level.</li> </ul>		<ul> <li>Volumetric-based mandate</li> <li>Emissions reduction- based mandate</li> </ul>
direction					



### Building blocks for an effective SAF policy framework



- There is no one size fits all solution, nor right/wrong policy options *per se*.
- Successful SAF policy making may require a customized strategy specific to each State's own circumstances.



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# The US approach to SAF policy



The US approach to incentivize Sustainable Aviation Fuel (SAF)

#### The US SAF Grand Challenge

- Objectives: To reduce cost, improve sustainability and expand supply and end-use for SAF to achieve 3 billion gallons of domestic SAF production in 2030 and put US on a trajectory to 35 billion gallons of SAF by 2050 (representing 100% of projected domestic aviation jet fuel use by 2050).
- ✓ The SAF must achieve at least 50% of Greenhouse Gas (GHG) emissions reduction.
- 245 million grants for SAF projects relating to production, transportation, blending or storage of SAF
- Identified 6 action areas address barriers across the entire supply chain from innovations in feedstock supply through end use:

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- Feedstock Innovation
- Conversion Technology
   Innovation
- Building Supply Chains
- Policy Valuation Analysis
  - Enabling End Use
- Communicating Progress &
- Building Support

2022 US Inflation Reduction Act (IRA)

US Government production support through 2027:

- ✓ From 2023 to 2024: SAF-specific blender credits (BTC)
  - \$1.25 per gallon SAF that achieves 50% reduction in GHG relative to conventional jet fuel (CJF)
  - \$0.01 additional for every 1% improvement up to a maximum of \$1.75 per gallon SAF

#### ✓ From 2025-2027: Clean fuel production credits (CFPC)

- \$0.01 per gallon of fuel achieving carbon intensity of 49.8 kg CO2e/mmBTU, a 47% reduction in GHG
- \$0.11 per gallon of fuel achieving carbon intensity of 47 kg CO2e/mmBTU, a 50% reduction in GHG
- \$1.75 per gallon of fuel achieving carbon intensity of 0 kg CO2e/mmBTU, a 100% reduction in GHG
- FAST-Tech Program: provide \$46.5 million in grants to develop and demonstrate new aviation technologies to improve fuel efficiency and reduce emissions.



# The EU approach to SAF policy



**European Commission** 

- The European Green Deal: the EU Commission adopted a package of proposals to make the EU's climate, energy, land use, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.
- The EU fit for 55 package: contains an interconnected set of proposals:
  - A stronger **EU Emissions Trading System** to accelerate transition
  - Refuel EU Aviation proposal:
    - Foster ramp-up of SAF supply in the EU
    - Guarantee a level-playing field for aviation
  - The Energy Taxation Directives (ETD):
    - aims at making cleaner fuels more attractive in all transport modes
    - For aviation: end of all fossil-fuel subsidies and a revision of current tax exemptions for jet fuel on intra-EU flights

Deep dive of the ReFuel EU Aviation proposal – how it works?

• Scope and obligations

	<b>Aviation fuel suppliers</b>	Union airports			
Who	All aviation fuel suppliers	<u>&gt;</u> 800 000 passengers			
	supplying to Union airports	> 100 000 tonnes freight			
		Opt-in for airports below the threshold, and those in outermost regions			
What	to supply increasing amounts of SAF at each Union airport with flexibility 2025-34	to facilitate access to SAF			
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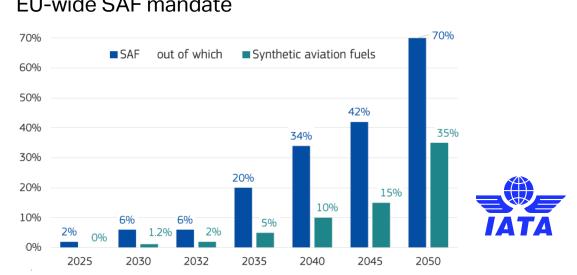


Aircraft operators

> 500 passengers flights

> 52 all-cargo flights Opt-in for other commercial flights and for non-commercial flights

to uplift aviation fuels at Union airports without 'tankering' practices

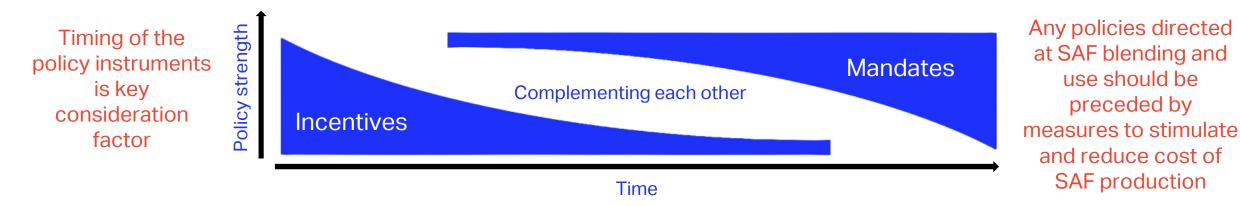


# Challenges with SAF mandate esp. when introduced as a standalone policy option– from airline perspectives

- A SAF mandate is typically obligated to a fuel supplier supplying jet fuel in airports. Failure to comply may result to a non-compliance fee (paid by the non-complying fuel supplier).
- Fuel supplier that attempted to fulfill the mandate will **automatically pass on the additional cost of SAF** to its airline customers. **Airlines loses the ability to voluntarily purchase the SAF**.
- Proof of Sustainability (PoS) for SAF can only be generated once, they are passed on the State authority to proof
  compliance. Airlines were not given the PoS and again, loses the ability to claim emissions reduction from SAF
  despite paying for the additional cost.
- Subsequently, fuel suppliers that did not meet the mandate would also tend to automatically pass the non-compliance fee to its airline customers with no PoS generated, despite airline paying for the cost for the non-compliance, when it can be used to purchase SAF and accounted for decarbonization.
- At the national level, SAF mandate may be met but there is a **lack of transparency** to how this mandate was met, i.e., by one major fuel supplier or all fuel suppliers in the country. Despite the State being able to meet the mandate, evidently some airlines are still paying for the non-compliance fee and not presented with the PoS to claim emissions reduction.
- While a SAF mandate may increase availability of SAF (though it doesn't necessarily guarantee this), **affordability** may still become an issue as the price of SAF is still **significantly higher** than the price of conventional fossil fuel.
- Hence, the incentive approach of reducing production cost for SAF is more preferred than a mandated approach. Mandate should only be pursued when complemented with incentives or other supportive policy options that reduces SAF production cost.



### The need for a balanced policy approach for SAF



- Create a functioning market first through incentives
- Stimulate new players and the diversification of SAF production (pathway and feedstock)
- Facilitate innovation + reduce unit cost + support 'firstof-a-kind' production facilities
- Reduce complexity / increase flexibility in claiming SAF emissions reduction by cross-referring to internationally recognized and robust SAF sustainability standards, i.e., CORSIA.

Read IATA SAF Policy Brief and key considerations to policy makers:





## Thank you!



#### **Questions? Send your questions to:** Azim Norazmi, Climate Policy Manager, IATA





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