

September 22, 2026

A Take-Off into US SAF Policy and Production

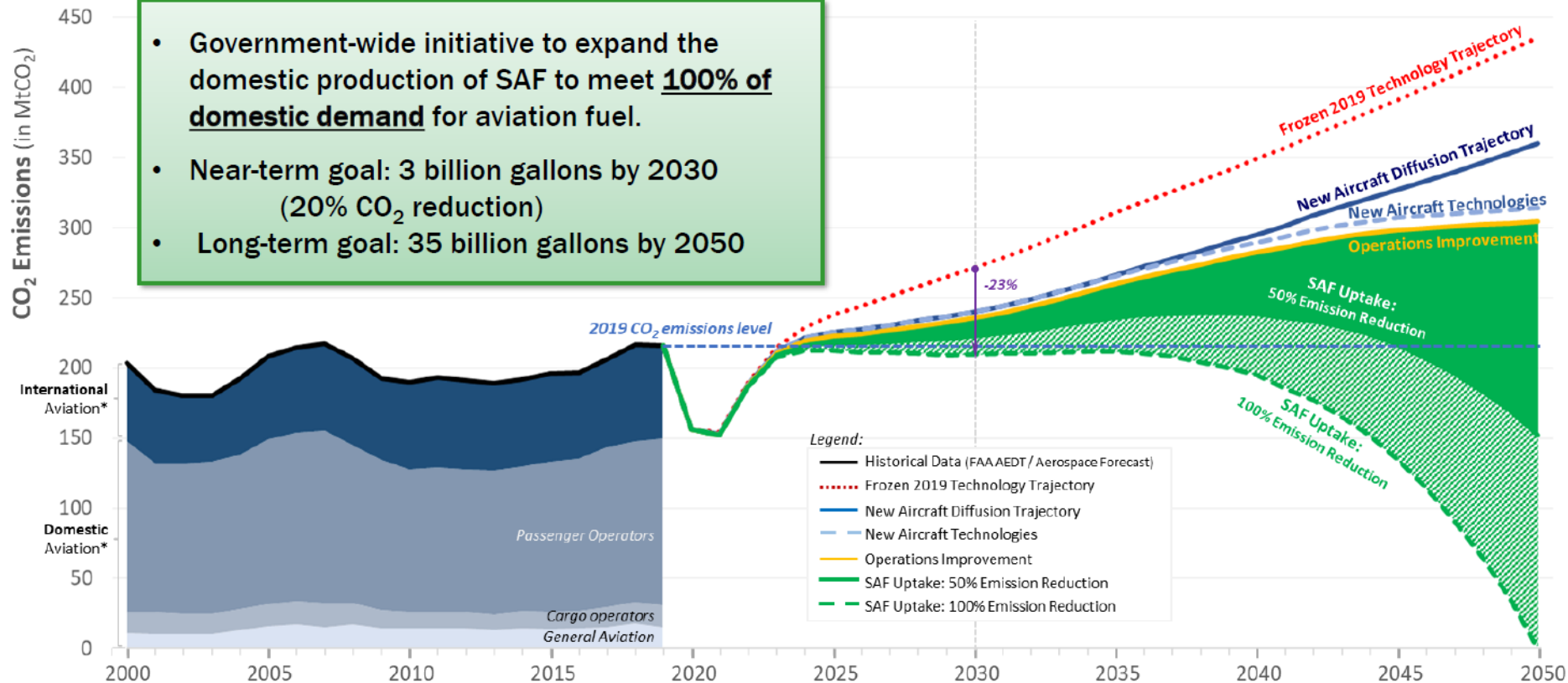


Jim Spaeth

Co-Founder & Managing Director | Aerovida Bio

Sustainable Aviation Fuel Grand Challenge

- Government-wide initiative to expand the domestic production of SAF to meet 100% of domestic demand for aviation fuel.
- Near-term goal: 3 billion gallons by 2030 (20% CO₂ reduction)
- Long-term goal: 35 billion gallons by 2050



* Note: Domestic aviation from U.S. and Foreign Carriers. International aviation from U.S. Carriers.

Federal - Section 45Z Clean Fuel Production Credit (1)

Credit Availability

- To clean transportation fuel produced in the U.S. and sold from January 1, 2025 through Dec. 31, 2029

Regulatory Status

- Treasury and IRS issued proposed regulations in February 2026, updated in May and June 2026
- Rules implement changes from the **One Big Beautiful Bill (OBBB)**, including:
 - The SAF \$1.00/gallon credit no longer exists.
 - Restricting feedstocks to U.S./Mexico/Canada.
 - Indirect land-use change (ILUC) emissions are excluded.
 - Negative emissions rates are prohibited except for fuels derived from animal manure

45ZCF-GREET

- The model calculates life-cycle GHG emissions for each fuel pathway to determine the credit value under §45Z.
- It is pathway-specific, feedstock-specific, and designed solely for 45Z compliance.

Provisional Emissions Rate (PER) Process Formalized

- If a fuel type isn't listed in Treasury's annual emissions table:
 - Producers must request an Emissions Value Request (EVR) from DOE.
 - DOE issues an emissions value letter.
 - Producers then submit a PER request to Treasury

Federal - Section 45Z Clean Fuel Production Credit (2)

What This Means for Producers

- 45Z credit value is directly tied to the **life-cycle emissions rate** calculated by 45ZCF-GREET. Even small changes in:
 - electricity sourcing, hydrogen production, feedstock origin, process energy
- can shift the CI score enough to materially change the credit value

Ethanol (Corn & Cellulosic)

- Removal of ILUC significantly improves CI scores.
- More granular modeling inputs allow optimized plant-specific CI reductions.

Renewable Diesel & SAF

- SAF loses its special 45Z rate, but modeling is now more consistent.
- Hydrogen sourcing becomes a major CI driver.

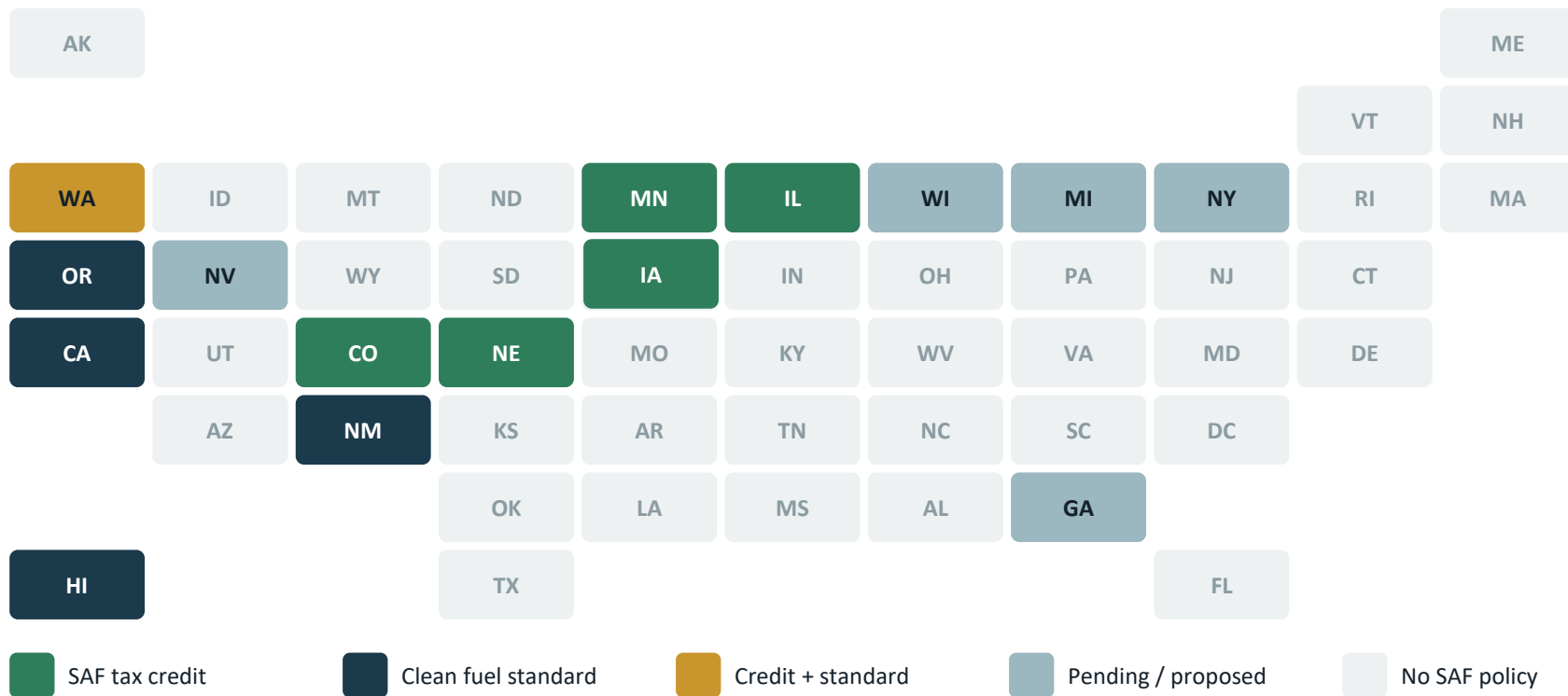
RNG

- Manure-based RNG retains negative CI potential.
- Landfill gas and other RNG pathways face tighter modeling rules

Hydrogen Producers

- Must use 45Z hydrogen pathways, not 45V.
- CCS options can materially reduce CI.

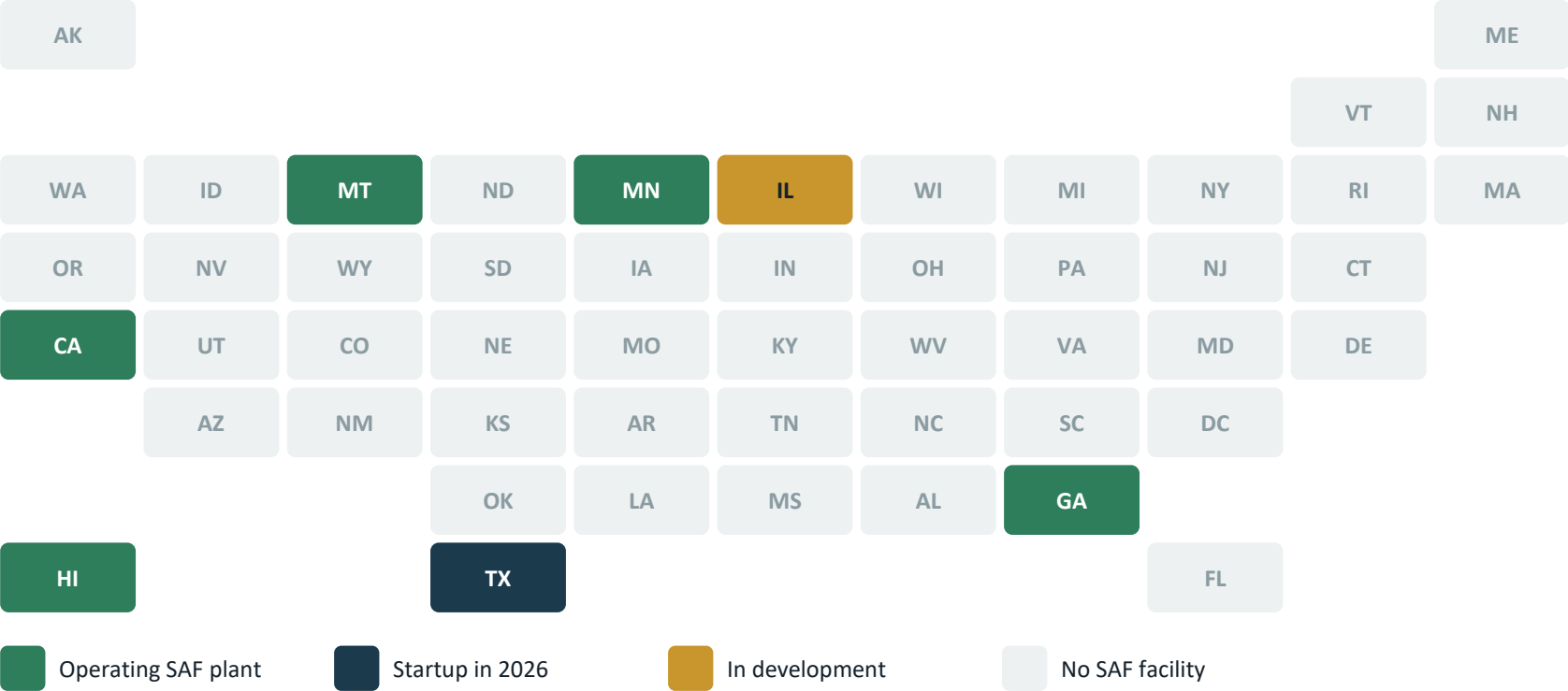
State SAF Policy Map – Credits vs. Clean Fuel Standards



State SAF Policies – 2026 Updates

STATE	ACTION	VALUE	STATUS	KEY NOTES
MN	SF 1312 – credit expanded	\$1.50/gal + supplemental	Advancing, 2026 session	Supplemental credit effective TY2025; larger annual allocations from TY2026. Winter cover crop feedstocks a focus.
CA	Governor's 2026-27 budget trailer bill	\$1.00/gal, +\$0.02/gal per 1% CI cut below 50%	Proposed	Credit against fuel excise tax; estimated at \$165M/year rising to \$300M.
CO	HB 26-1289 signed Jun 3, 2026	≥\$1.50/gal, +1¢ per 1% CI cut above 50%	Enacted, effective Jan 1, 2027	Purchase-side credit capped \$3M/year through 2032; repeals prior SAF facility construction credit.
WA	Cascadia Sustainable Aviation Accelerator	\$20M state investment	Launched Jan 2026	Pairs with SB 5447 credit (up to \$2.00/gal once production starts) and streamlined permitting.
NM	Clean Transportation Fuel Program	LCFS-style credit value	Rules adopted Jan 2026; in force Apr 1, 2026	Fourth state clean fuel standard after CA, OR, WA. Opens a new book-and-claim credit market.
HI	SB 2999 clean fuel standard signed Jul 16, 2026	CI reduction: 10% by 2035, 50% by 2045	Enacted; rules due Jan 1, 2028	Diesel and gasoline phase begins 2029. Separate SAF tax credit bill (SB 2027) died in committee.
MI / NE / NY	Producer and blender credit bills	\$0.75–\$2.00/gal	Mixed	MI SB 235/236 passed Senate, House pending. NE LB 937 (\$0.75/gal) in effect. NY S1229 (\$1.25–\$1.50/gal) in committee.

U.S. SAF Production Facility Map



U.S. SAF Production Facilities – Status by State

LOCATION	FACILITY / OPERATOR	PATHWAY	CAPACITY	STATUS
California	Paramount — World Energy	HEFA	340 MGY expansion target	Not operating; expansion on hold
California	Rodeo Renewed — Phillips 66	HEFA	~800 MGY renewable fuels; SAF share ramping	Operating; conversion complete
Montana	Great Falls — Montana Renewables	HEFA	70M gal SAF supply pact with World Energy	Operating; expansion underway
Georgia	Freedom Pines — LanzaJet	Alcohol-to-jet	10 MGY	Operating; first ethanol-to-jet plant
Hawaii	Kapolei — Par Pacific	HEFA	61 MGY renewable fuels including SAF	Commercial operations began April 2026
Texas	Port Arthur — Diamond Green Diesel	HEFA	235 MGY SAF within 470 MGY plant	SAF unit complete; startup 2026
Illinois / Washington / Minnesota	IL - Marquis–LanzaJet; WA – SkyNRG; MN SAF Hub	ATJ; RNG; Blending & logistics	Up to 120 MGY (IL)	IL and WA in development; MSP hub open

AEROVIDA BIO

AEROVIDA BIO - Who We Are

Five principals who have run the plants, signed the offtakes and carried the P&L



Jim Spaeth

20 years at the DOE Bioenergy Technologies Office, running national SAF technology development. Chaired IEA Bioenergy and the Biofuture Clean Energy Ministerial. Former Boeing.



Gene Cotten

Operations and technology executive across HEFA and ATJ. President, NXTClean Fuels. Honeywell UOP. Led Valero refinery operations and multi-billion-dollar capital projects.



Dan Kim

Former COO, Crysalis (ATJ) and CSO, NXTClean (HEFA). Built fuel platforms at Pilot Flying J (Berkshire). Former CFO, World Energy. ExxonMobil and Morgan Stanley.



Carrie Song

SVP, Neste Global Renewable Products, a \$9B P&L. Former Sales Director, BP Americas and APAC. GM, Cummins power generation. London School of Economics.



Lance Baird

35 years in hydrocarbon process engineering. Principal Engineer at Honeywell UOP. 21 patents and 16 published applications. Operations manager for 60+ pilot plants.

SAF Producers

NESTE



SAF Developers

**NXTCLEAN
FUELS**



Fuel Suppliers



Technology/EPC

**Honeywell
UOP**



Government & Policy



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