

Delivering on Our Commitment to Net Zero









A World Worth Traveling Is a World Worth Protecting



- American is committed to reducing the environmental impact of air travel
- Our goal is to reach net zero emissions by 2050, together with customers and industry partners

Our team operates thousands of flights a day, transporting customers throughout the United States and to destinations around the globe. We rely on the consumption of natural resources in our operations and acknowledge the resulting environmental impact, including the contribution to climate change.

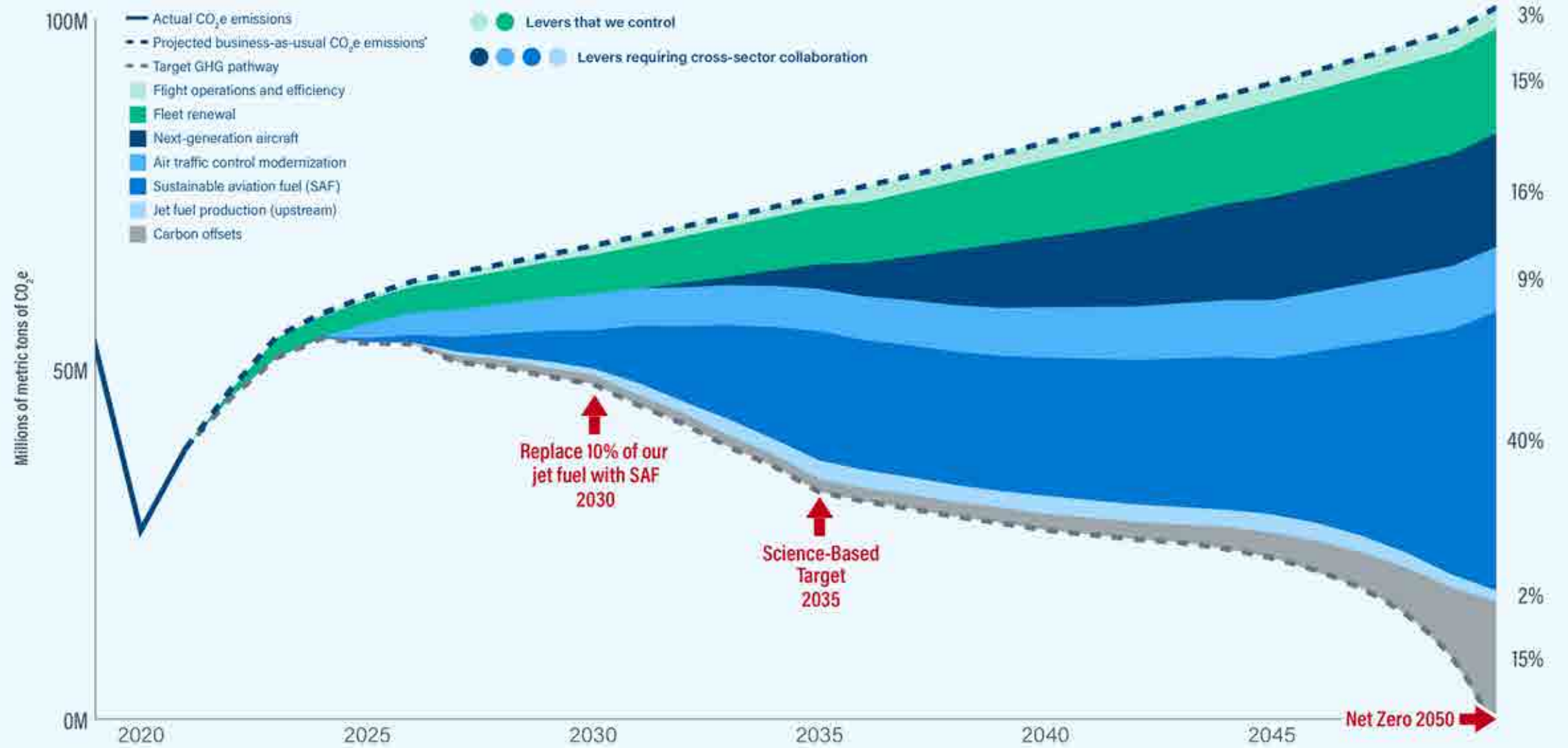
American's Sustainability Goals

Climate Goal	Target Year
 Save 50M gallons of jet fuel through fuel-efficiency initiatives	2025
 Source 2.5M gigajoules of cost-competitive renewable energy	2025
 Replace 10% of American's jet fuel with sustainable aviation fuel	2030
 Reduce 45% of GHG emissions per unit of passenger and cargo payload	2035
 Reduce 40% of Scope 2 emissions	2035
 Achieve net-zero carbon emissions	2050

American's Pathway to Net Zero

AMERICAN'S DIRECTIONAL PATHWAY TO NET ZERO IN 2050

Updated April 2022



* Includes Scopes 1 and 2, as well as Scope 3 Category 3

Reducing Fuel Use with Efficient Operations

On the Ground

60k metric tons
of CO₂e avoided annually



Single-engine taxi
170k gallons saved



APU usage
2m gallons saved



Engine washing
3.4m gallons saved



Scheduling
870k gallons saved

Flight Weight

140k metric tons
of CO₂e avoided annually



In cabin
4.1m gallons saved



Paint
1m gallons saved



Lighter seats
6.9m gallons saved



New brakes
2.8m gallons saved

In Flight

203k metric tons
of CO₂e avoided annually

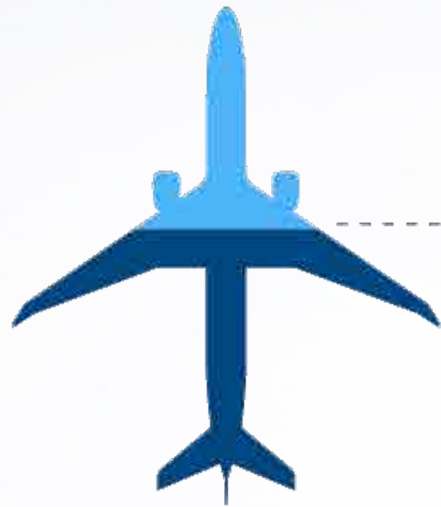


En route updates
4.1m gallons saved



Arrival fuel
17.3m gallons saved

Building a Younger, More Fuel-efficient Mainline Fleet



New narrowbody aircraft are

43.9%

more fuel efficient than the planes they replace

NEW
A321NEO B738MAX
RETIRED
B757 MD80 E190



New widebody aircraft are

20.1%

more fuel efficient than the planes they replace

NEW
B788 B789
RETIRED
A332 A333 B763



New regional aircraft are

17.5%

more fuel efficient than the planes they replace

NEW
E175 CRJ9
RETIRED
DASH-8 CRJ2 E140

Investing in Hydrogen-Electric Engine Developers



Hydrogen-electric powertrains offer many benefits

90% LOWER

life cycle emissions compared to turbines

60% LOWER

powertrain operating costs compared to turbines

50% IN 2024 100% IN 2026

range compared to that of the standard turboprop engines with the same payload



SAF will play the key role in American's decarbonization

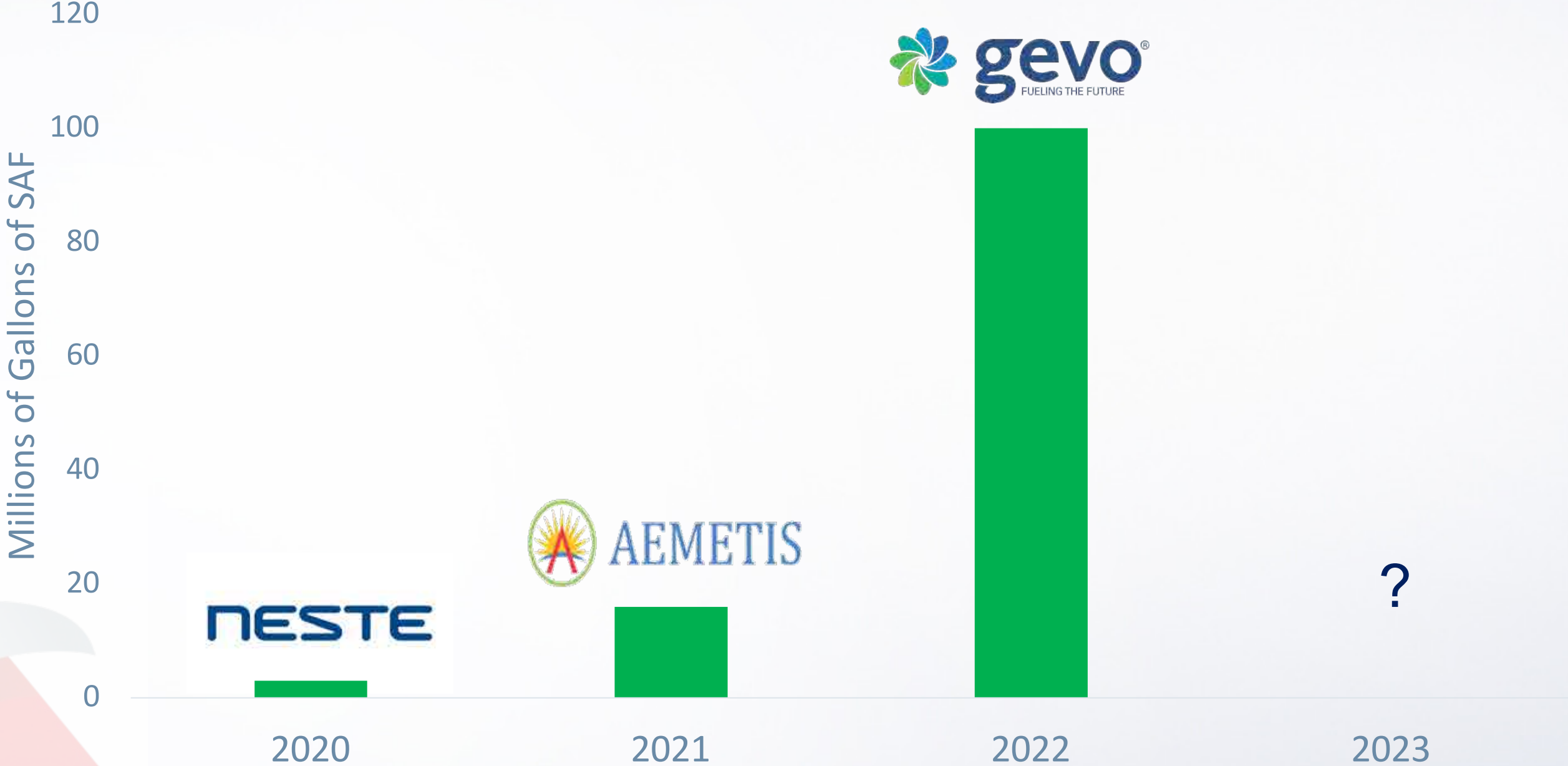
Targeting ~500 million gallons of SAF by 2030

While constrained by:

- Feedstock availability
 - ✓ Sustainability
 - ✓ Support ambition to use lower CI feedstock
- Available incentives
 - ✓ What is beyond California?
 - ✓ CORSIA
- Risk

American's SAF Sourcing Agreements

Signed SAF Off-take Agreements



American
Airlines



Breakthrough Energy
Catalyst

Anchor partner to Breakthrough Energy Catalyst focusing on four new technologies:



Sustainable aviation fuel (SAF)



Green hydrogen



Direct air capture (DAC)



Long-duration batteries

- American is investing \$100M in this groundbreaking collaborative effort
- Helps finance first-of-its-kind technologies to reduce risk and drive down costs
- Accelerates the development of pivotal emission reduction solutions like SAF

oneworld®: Net Zero 2050

First and only global alliance to set goal of net zero emissions by 2050

- All oneworld® member airlines recognize urgent need to face the challenge of climate change
- All oneworld® member airlines commit to net zero carbon emissions by 2050
- The oneworld® Alliance supports Clean Skies for Tomorrow's goal of 10% sustainable aviation fuel (SAF) by 2030
- Each oneworld® airline has outlined its own roadmap



