

FLYING GREEN

Should Delta Airlines

Go All-in on SAF?



Ethical Eagles
Consulting





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Finance & Econ

'27



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Finance '26



Agenda





What is SAF?



Problem

Legal

Solutions

Ethics

Finances

Takeaways



Current

Constraints

10%
Promise

Cost
Premium

Supply
Scarcity

50% Blend
Limit



Problem

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2.5% of
global CO₂
emissions in
recent years

Current: 300
million liters

Future
demand: 450
billion liters

11th largest
emitter
globally
(country
equivalent)

Fastest CO₂
growth rate vs.
rail,
road, and
shipping

4% of global
temperature
increase
attributed to
aviation fuels



The Scale of the

Problem

Legal

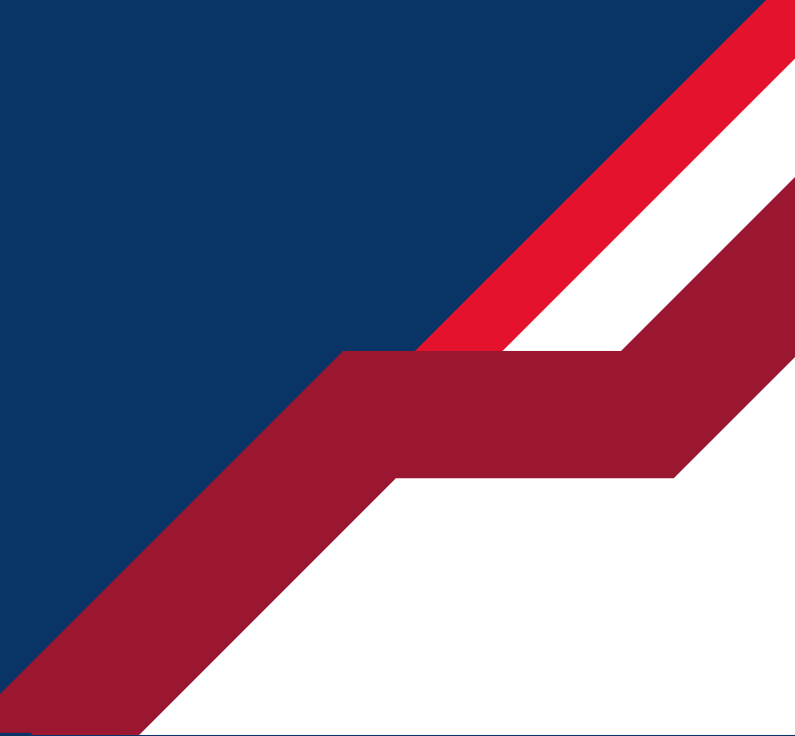
Solutions

Ethics

Finances

Takeaways

challenge



Problem

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Binding Climate Regulation

- ReFuelEU Aviation
Regulation: Mandatory SAF
blend for suppliers
- Emissions Trading System:
airlines track and pay for
CO₂ emissions



European Union

Problem

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National Incentives

- Airline Deregulation Act of 1978: No state-level SAF requirements
- Federal SAF Tax Credits
- Deception claims regarding sustainability marketing



United States

Problem

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Global Intentions

- ICAO: goal of net-zero international aviation emissions by 2050
- CORSIA: requires airlines on international routes to offset emissions via carbon credits



International Airspace

Problem

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Our
Solutio
ns

Short-Term

- Lower Carbon Aviation Fuel (LCAF)
- Scimitars
- NEO-series Aircraft

Now -
2030



Long-Term

- SAF
- Hybrid-Electric Aircraft
- Airbus Hydrogen Partnership

By
2050

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Short-Term

Lower Carbon Aviation Fuel (LCAF):

➤ Ecofriendly; Price Convenient

Scimitars:

Ø Scimitar; 3-5% fuel savings

NEO-Series Fleet Renewal:

Ø Burn up to 20% less fuel

Now -
2030



Long-Term

Problem

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Short-Term

Long-Term

SAF:

Ø EU Requirements: 6% by 2030; 20% by 2035; 70% by 2050

Hybrid-Electric Aircrafts:

Ø 30-40% CO₂ Reduction

Airbus Hydrogen Partnership:

Ø 100% CO₂ Reduction

By
2050



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Timeline of Implementation

Now -
2030

2050

Short-Term

Long-Term

Problem

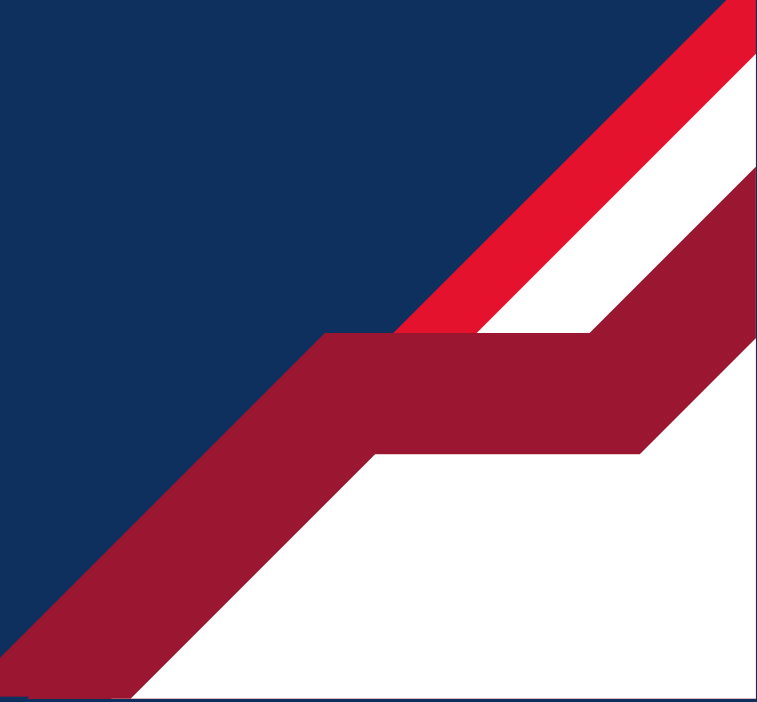
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Ethical Framework

Deontology

Duty-based Ethics

“Delta’s goal is to replace *10 percent* of its jet fuel refined from fossil fuel with sustainable aviation fuel *by the end of 2030.*”

-Delta Airlines Sustainability, 2025

“We aim to ... achieve *net-zero carbon emissions by 2050* for our airline operations.”

-Delta Airlines Sustainability, 2025



Problem

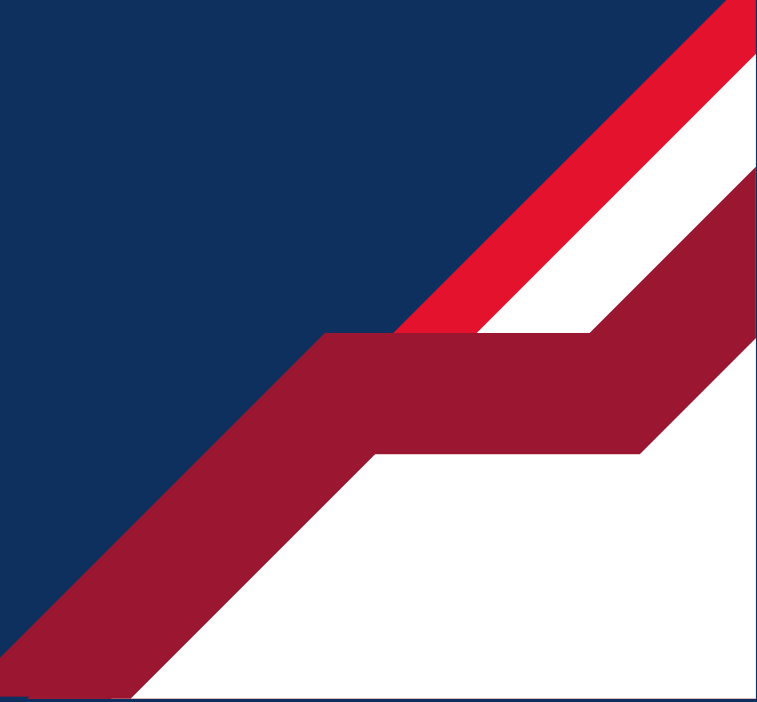
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Ethical Framework

Stakeholder Theory



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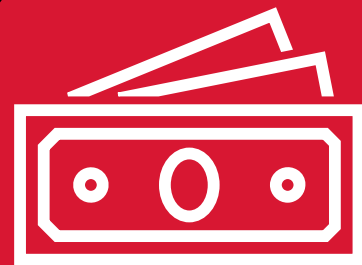
Takeaways

Employees &



Employees

Job Stability, Upskilling, Modernization



Shareholders

Disciplined Capital Allocation

Problem

Legal

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Takeaways

Community &



Community
Carbon Reduction & Local Benefits



Customers
Efficiency Without Cost Pressures

Problem

Legal

Solutions

Ethics

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Takeaways

SAF Producers &



SAF Producers
Predictable & Scalable Demand



Regulators
Meets Strictest Regulations

Problem

Legal

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Stakeholder Theory



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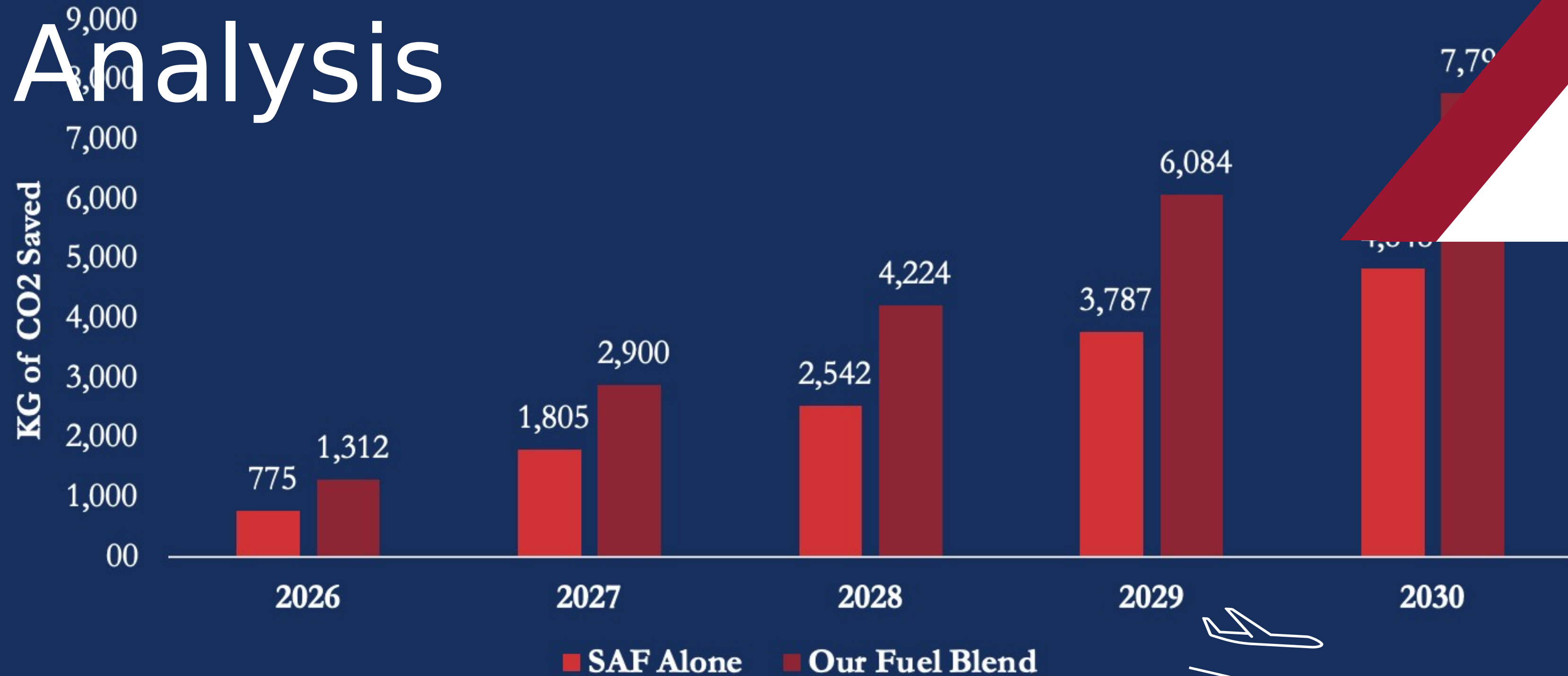
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Takeaways

CO2 Savings



Analysis



Problem

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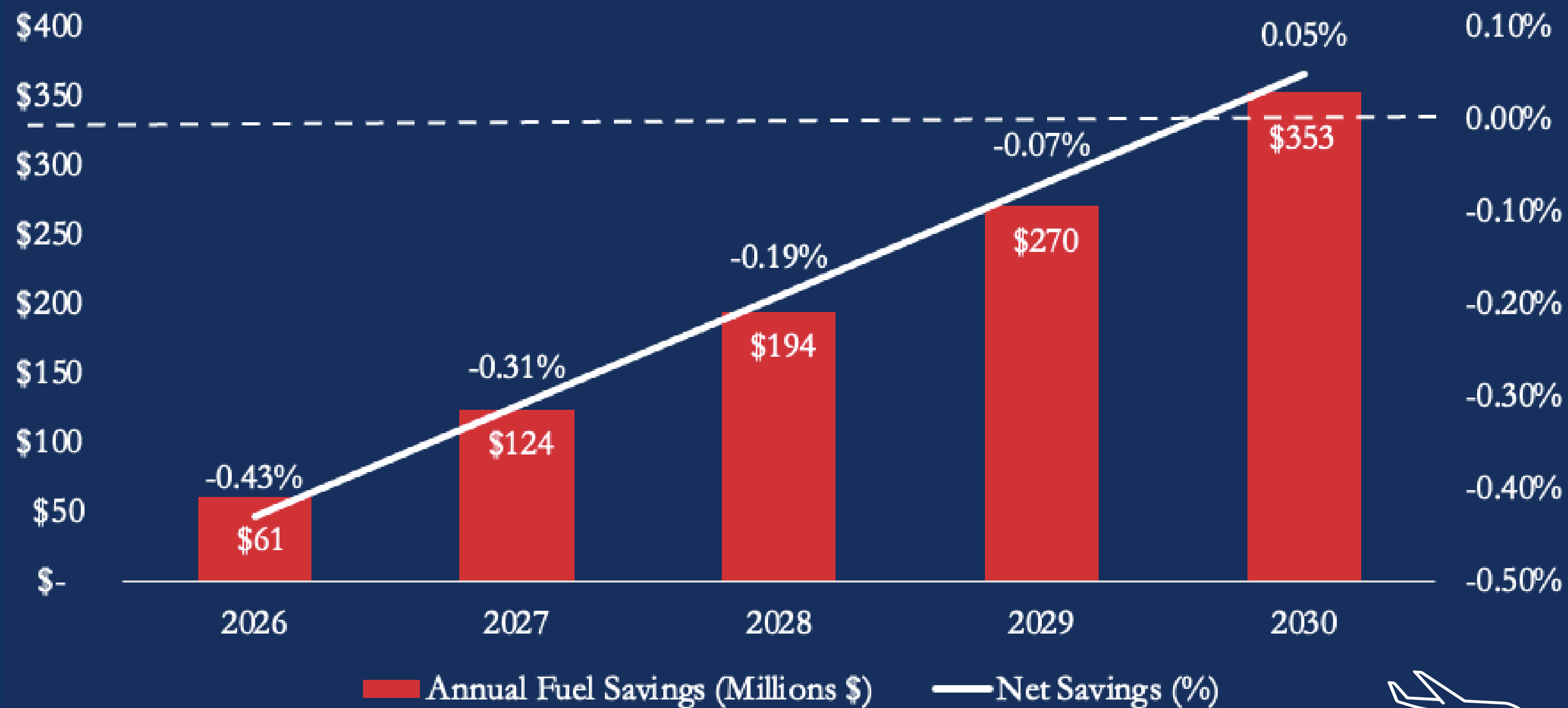
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Financial



Investing in scimitars results in long-term fuel savings and a positive ROIC by 2030



Problem

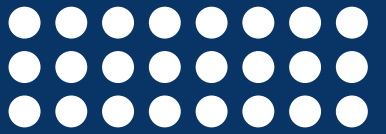
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Key Takeaways

**Commit and
Comply**

**SAF Is Necessary,
but Not Sufficient**

**A Phased Strategy Is
Most Effective**

Problem

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Ethics

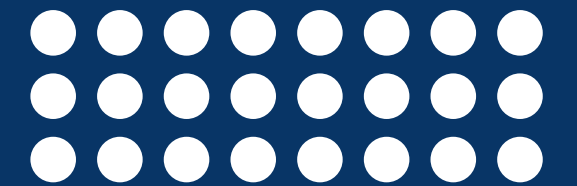
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THANK



Assumptions: CO2 Savings Analysis

	2026		2027		2028		2029		2030
NI With SAF Alone	\$	4,453.47	\$	4,605.38	\$	5,056.78	\$	5,311.77	\$ 5,632.91
NI With LCAF Included	\$	4,397.80	\$	4,490.24	\$	4,867.15	\$	5,046.18	\$ 5,280.86
Percent Difference		-1.25%		-2.50%		-3.75%		-5.00%	-6.25%
Emission Savings with SAF		-1.44%		-3.29%		-4.53%		-6.58%	-8.23%
Emission Savings with our Plan		-2.44%		-5.29%		-7.52%		-10.58%	-13.22%
SAF Co2 Savings in KGs		-774.61		-1804.75		-2541.76		-3786.84	-4848.45
Fuel Blend Co2 Savings in KGs		-1311.67		-2899.61		-4223.91		-6084.15	-7789.78

Assumptions: Scimitar ROIC

	\$ 318.78	\$ 318.78	\$ 318.78	\$ 318.78	\$ 318.78
Operating Income with Scimitar Cost	\$ 60,257.13	\$ 63,051.43	\$ 66,188.06	\$ 69,481.53	\$ 72,939.66
%	-0.532%	-0.508%	-0.484%	-0.461%	-0.439%
Fuel Cost	\$ 10,048.12	\$ 10,242.22	\$ 10,805.54	\$ 11,399.85	\$ 12,026.84
	\$ 1,733.30	\$ 3,533.57	\$ 5,591.87	\$ 7,865.89	\$ 10,373.15
Fuel Savings	\$ 60.67	\$ 123.67	\$ 195.72	\$ 275.31	\$ 363.06
New Opr. Adj	\$ 60,196.46	\$ 62,927.76	\$ 65,992.35	\$ 69,206.22	\$ 72,576.60
Percent Savings	-0.431%	-0.311%	-0.187%	-0.063%	0.061%

Assumptions: Scimitar NPV

Year-by-Year Cash Flow Analysis					
	Year 1 2026	Year 2 2027	Year 3 2028	Year 4 2029	Year 5 2030
Scimitars installed this year	41.4	41.4	41.4	41.4	41.4
Cumulative scimitars installed	41.4	82.8	124.2	165.6	207.0
Investment this year (\$M)	-\$31.88	-\$31.88	-\$31.88	-\$31.88	-\$31.88
Cumulative fuel savings (\$M)	\$12.13	\$24.87	\$38.23	\$52.25	\$66.95
Annual fuel savings growth adj.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total annual savings (\$M)	\$12.13	\$24.87	\$38.23	\$52.25	\$66.95
Net annual cash flow (\$M)	-\$19.75	-\$7.01	\$6.35	\$20.37	\$35.07
Discount factor (9%)	0.9174	0.8417	0.7722	0.7084	0.6499
Discounted cash flow (\$M)	-\$18.12	-\$5.90	\$4.91	\$14.43	\$22.79
Cumulative DCF (\$M)	-\$18.12	-\$24.02	-\$19.11	-\$4.68	\$18.11
NPV Summary					
Total Investment (\$M)	-\$159.39				
Total Fuel Savings (\$M)	\$194.43				
NPV of Project (\$M)	\$18.11				
NPV Positive?	YES - Positive NPV				

Scimitar Winglet NPV Analysis	
Assumptions	
Scimitar cost per unit	\$470,000
Installation fee per unit	\$300,000
Total cost per aircraft	\$770,000
Total eligible aircraft	207
Installation per year	41.4
Installation period (years)	5
Fuel savings per scimitar/yr (\$M)	\$0.293
Discount rate	9.0%
Annual fuel cost growth	2.5%