SUSTAINABLE
AEROSPACE
TOGETHER

Getting Aviation Decarbonisation off the Ground

Industrial Net Zero Conference 2025

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BOEING
787
DREAMLINER

Historic Growth and Efficiency Gains

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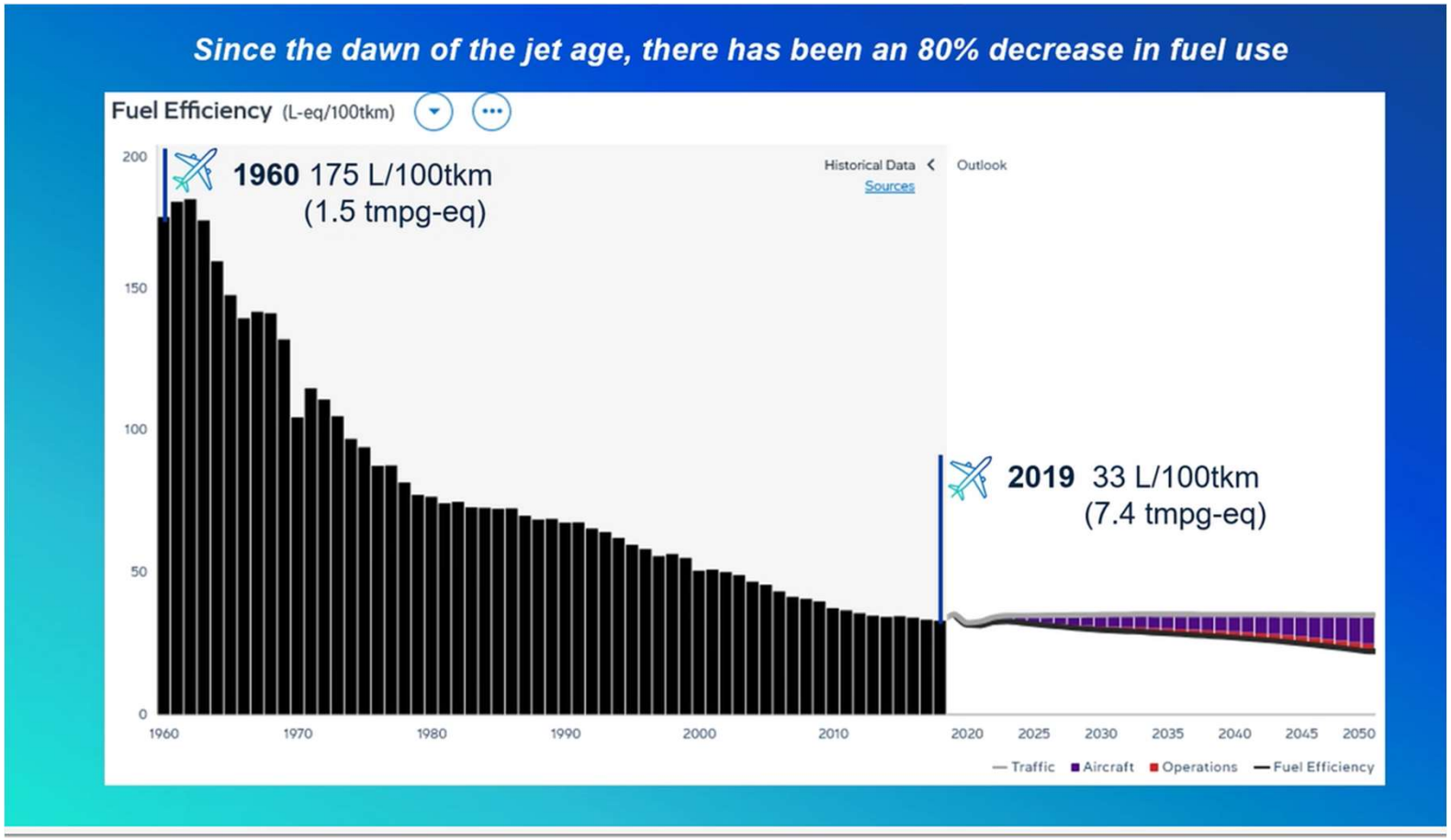

Commercial Market Outlook

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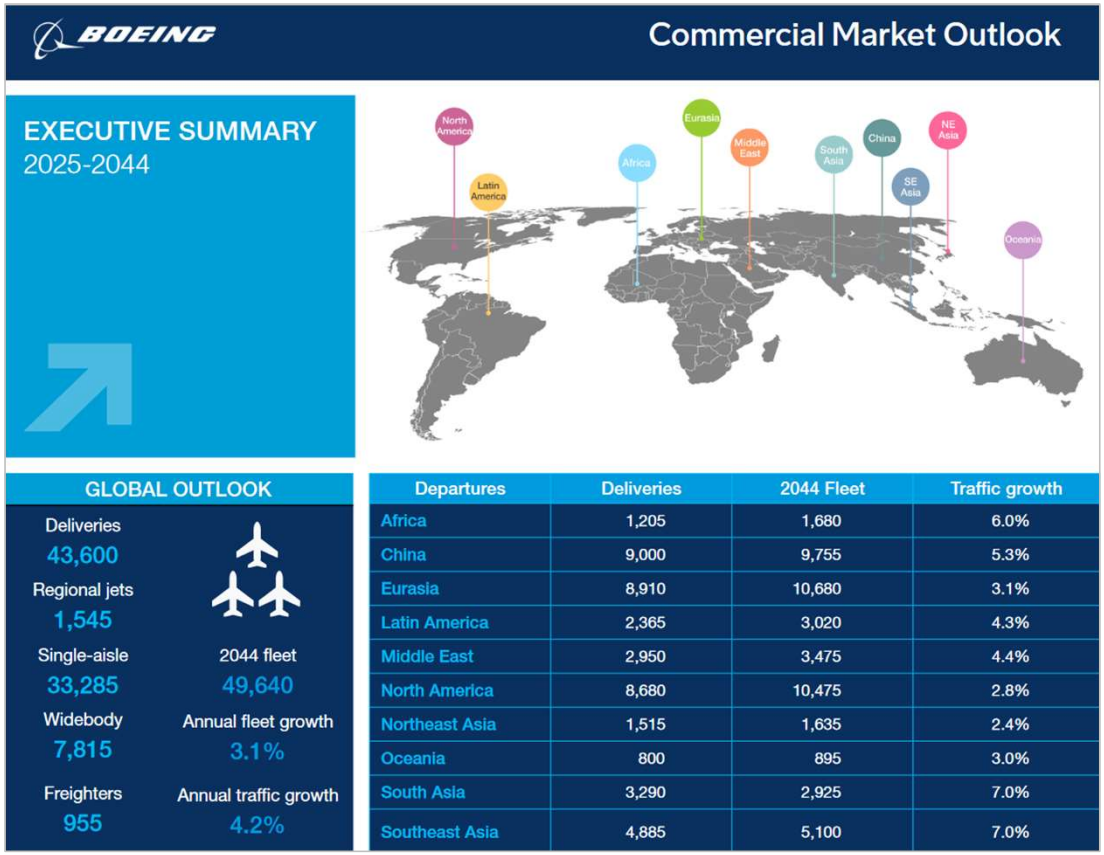
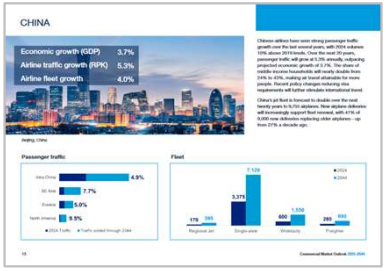


Departures	Deliveries	2044 Fleet	Traffic growth
Africa	1,205	1,680	6.0%
China	9,000	9,755	5.3%
Eurasia	8,910	10,680	3.1%
Latin America	2,365	3,020	4.3%
Middle East	2,950	3,475	4.4%
North America	8,680	10,475	2.8%
Northeast Asia	1,515	1,635	2.4%
Oceania	800	895	3.0%
South Asia	3,290	2,925	7.0%
Southeast Asia	4,885	5,100	7.0%



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58%
Energy and industry

2%
Aviation

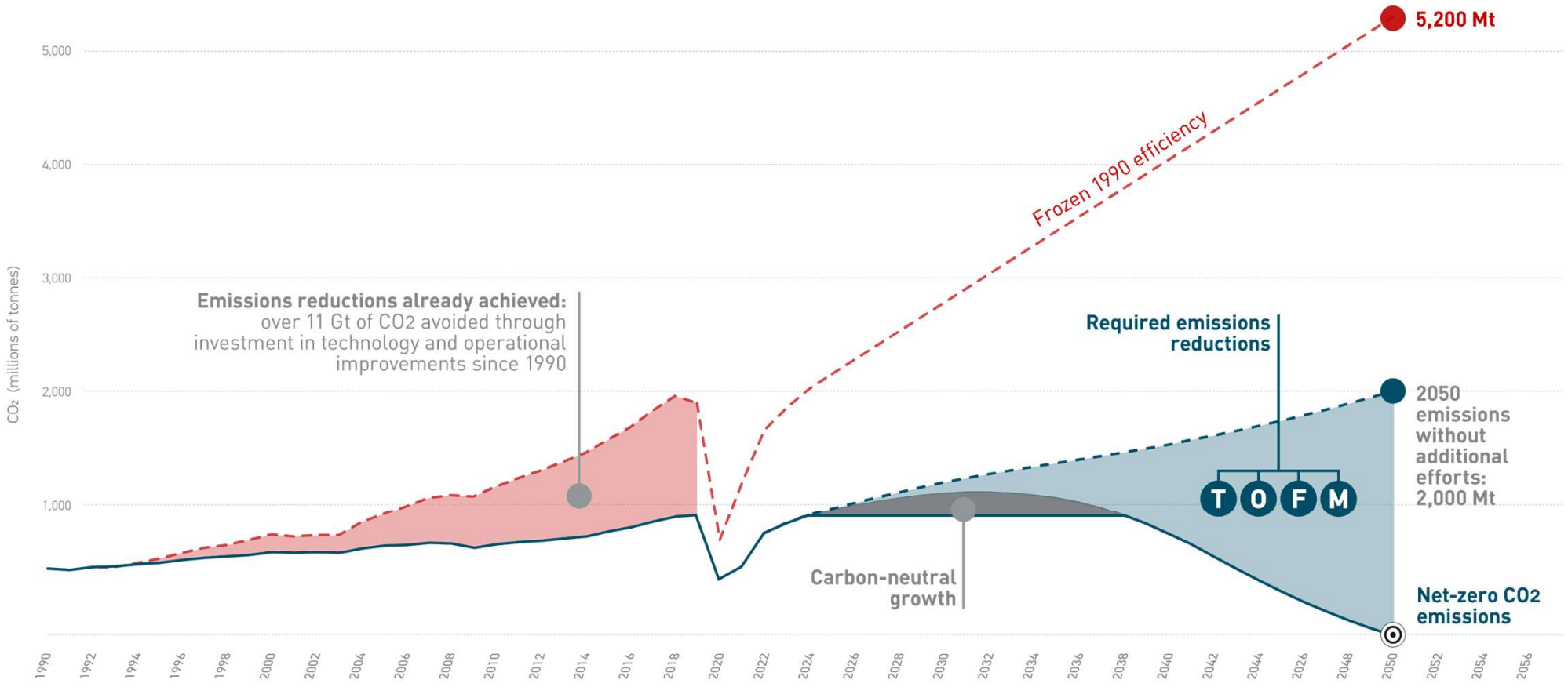
15%
Other transportation

10%
Other

15%
Agriculture and land use

Source: World Resources Institute

Charting a course for 2050: net-zero globally (the wedge chart)



Strategies for Sustainable Growth

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FLEET RENEWAL

OPERATIONAL EFFICIENCY

RENEWABLE ENERGY

ADVANCED TECHNOLOGY

MARKET-BASED MEASURES

CORSIA

Emissions Reduction Contributions

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	2020	2025	2030	2035	2040	2045	2050	
Commuter » 9-50 seats » <60 minute flights » <1% of industry CO_2	**SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	~27% of CO_2 emissions
Regional » 50-100 seats » 30-90 minute flights » ~3% of industry CO_2	**SAF**	**SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	**Electric** or **hydrogen fuel cell** and/or **SAF**	
Short-haul » 100-150 seats » 45-120 minute flights » ~24% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF** potentially some **hydrogen**	**Hydrogen** and/or **SAF**	**Hydrogen** and/or **SAF**	**Hydrogen** and/or **SAF**	
Medium-haul » 100-250 seats » 60-150 minute flights » ~43% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF** potentially some **hydrogen**	~73% of CO_2
Long-haul » 250+ seats » 150 minute + flights » ~30% of industry CO_2	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	**SAF**	

What is Sustainable Aviation Fuel (SAF)?

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1 Feedstock is collected from multiple sources e.g. cooking oil, agricultural waste

2 Feedstock then converted into Sustainable Aviation Fuel (SAF)

Sustainable Aviation Fuel (SAF) can effectively reduce lifecycle emissions of typical aviation fuel by up to

80%

4 The blended fuel is delivered to airports and into planes

3 The SAF is then blended with traditional jet fuel

SAF Analysis Across Asia Pacific

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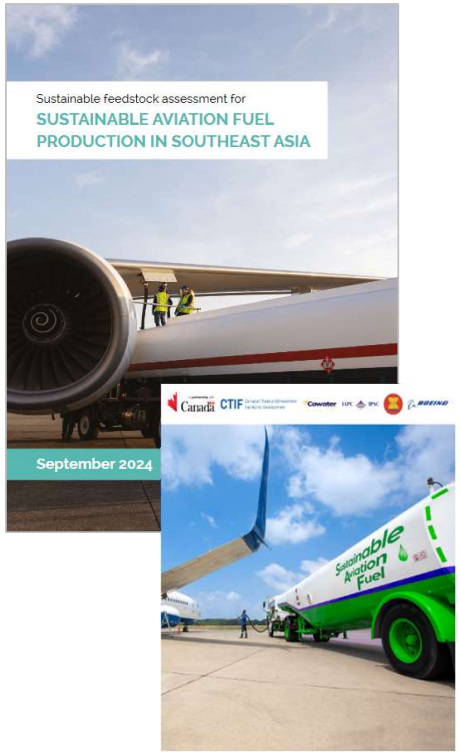
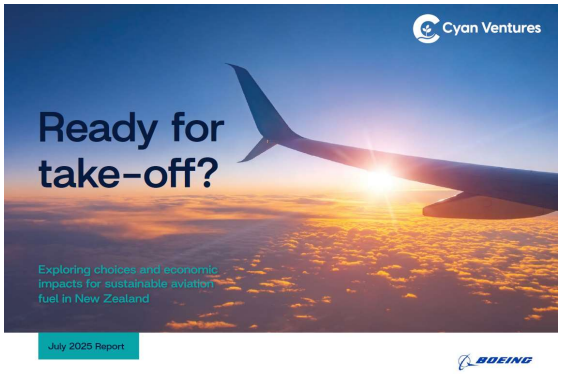


ASEAN Agricultural Waste to SAF Technoeconomic Report



The Australian Context

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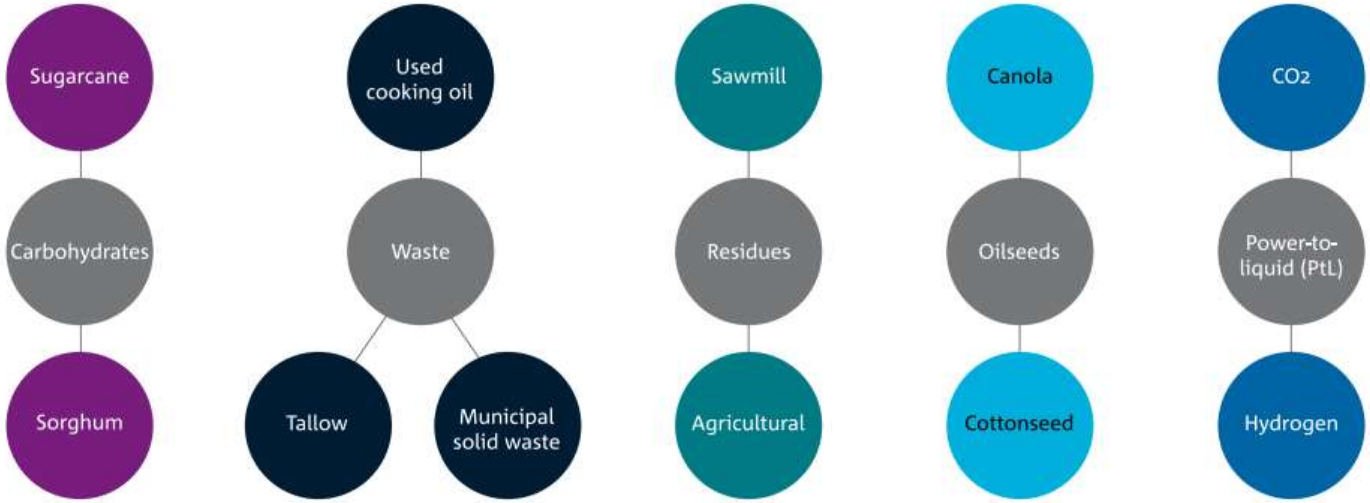
Australia has a significant opportunity to develop a diversified portfolio of feedstocks for a domestic SAF industry



Feedstock Distribution

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The Liquid Fuel Transition

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Australia

Has feedstock to meet 60% now and 90% in 2050

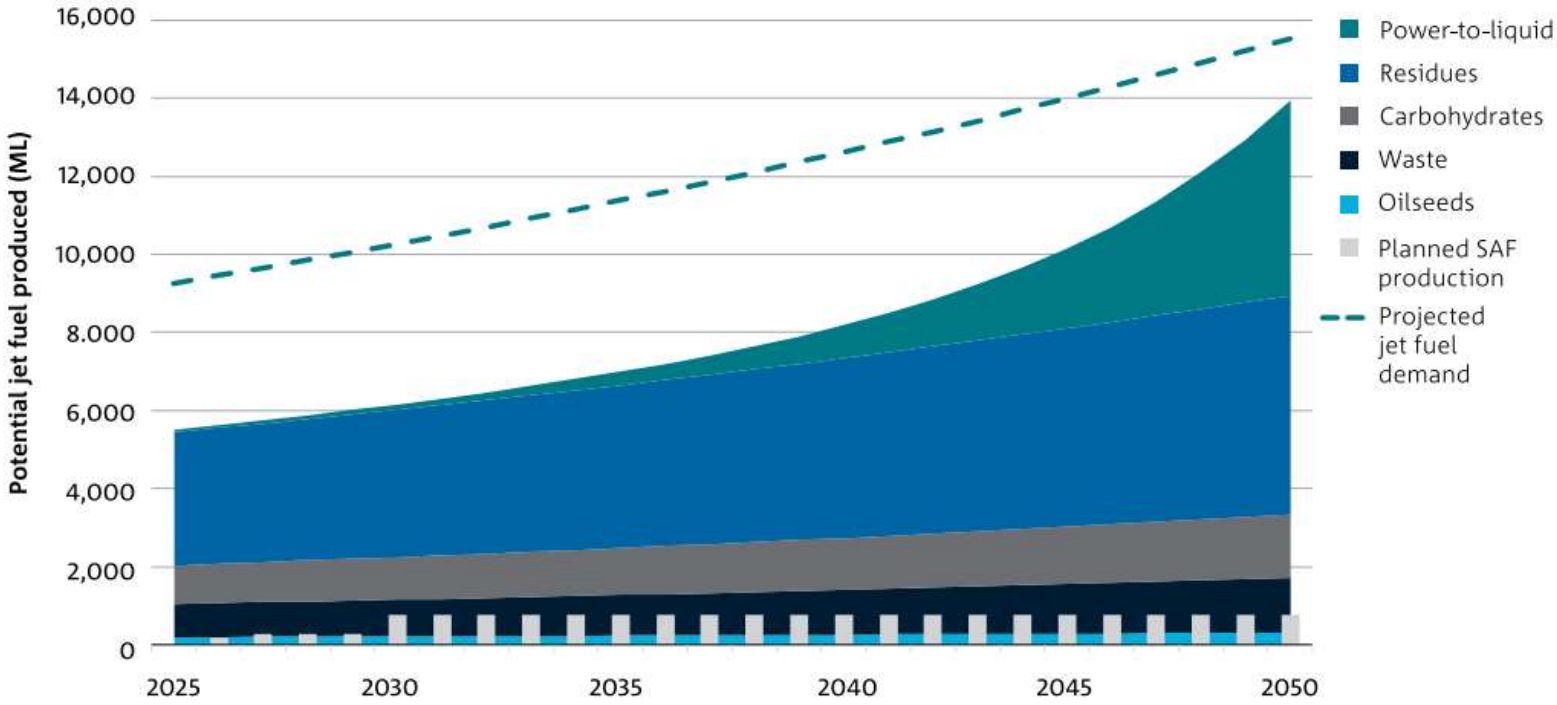
By 2050 Australia needs

26 nth scale SAF refineries

$123 billion in financing

$34.8 billion (Aviation portion)

$111 million per month



Projected Production Costs

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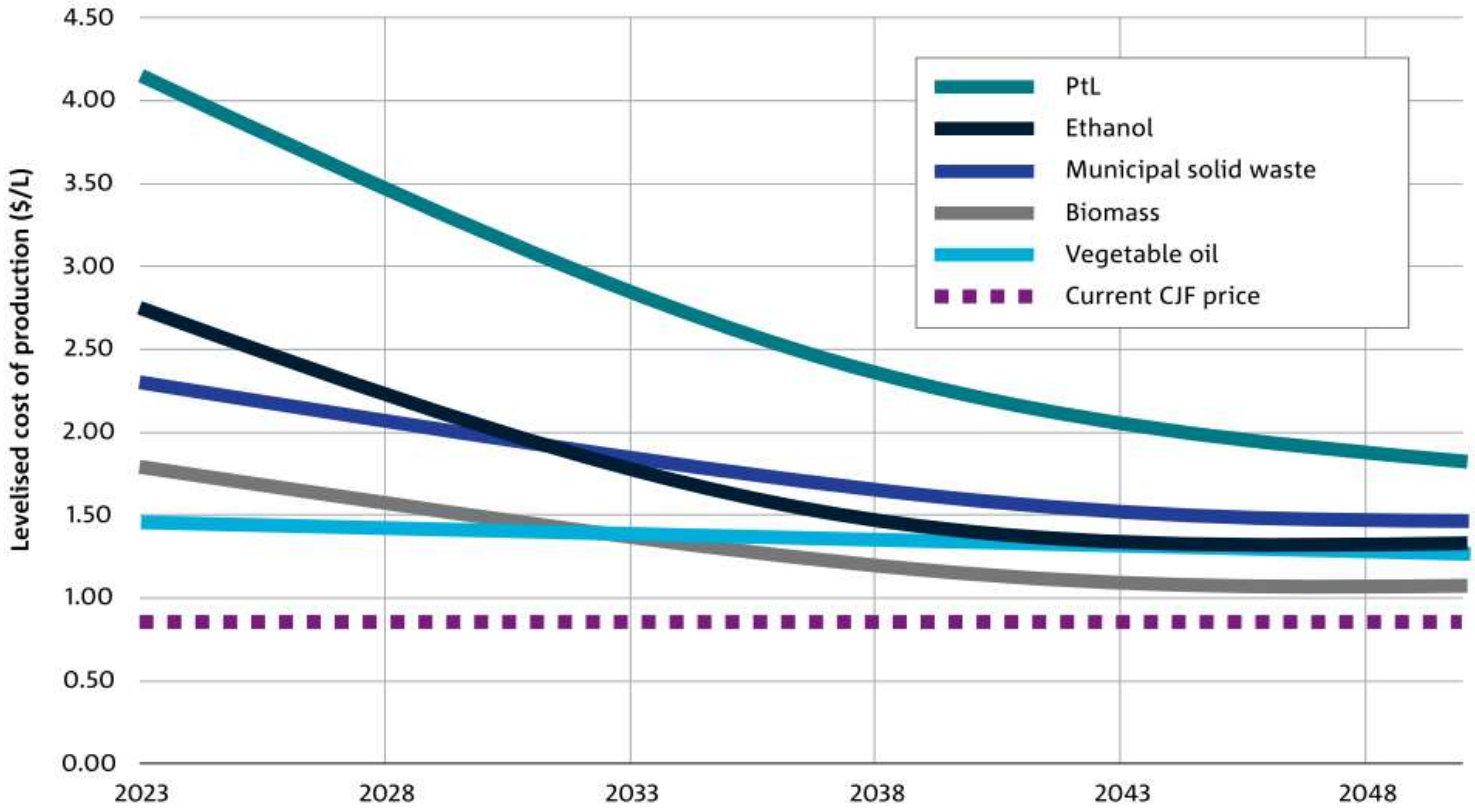

The Australian Context

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Benefits of Action

HIGH Ambition Scenario
Conventional Jet Fuel Market Share of 10%

13.8
billion L of SAF

- By 2050, Australian aviation emissions could be reduced by over 50% using SAF, which is projected to meet 85% of the jet fuel demand in the industry.
- Significant investment and economic opportunity: By utlising the feedstock modelling from this scenario, this opportunity equates to $19 billion worth of fuel by 2050.[3]
- Increased sovereign fuel security: Converting locally sourced biomass into SAF could significantly enhance Australia's energy security, reducing dependence on imported fossil fuels and ensuring a stable, renewable energy supply for the aviation sector.
- Jobs: The bioenergy sector in Australia has the potential to create 26,000 new jobs[5]

VS

Cost of Inaction

LOW Ambition Scenario
Conventional Jet Fuel Market Share of 92%

1.22
billion L of SAF

- Australia loses valuable feedstock offshore: Of the 4.5 million tonnes of canola grown annually, only 30% is processed locally while 70% (around 3.1 million tonnes) is exported, with 75% of that being processed into biofuels abroad.[6]
- Heavy reliance on imports: Australia imports 90% of its liquid fuels, including jet fuel, through long supply chains vulnerable to geopolitical and climate risks, making the nation dependent on foreign-produced SAF.[3]
- Missed opportunities: Australia is missing out on job creation and significant economic benefits by not fully capitalising on its bioenergy potential.

Cost of Inaction – Aotearoa

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Producing and adopting SAF can bring NZD2.3 billion in net benefits to the New Zealand economy between now and 2050

Benefits and costs of producing and adopting SAF in New Zealand (Pathway 2)[1]
NZD billions (NPV terms)

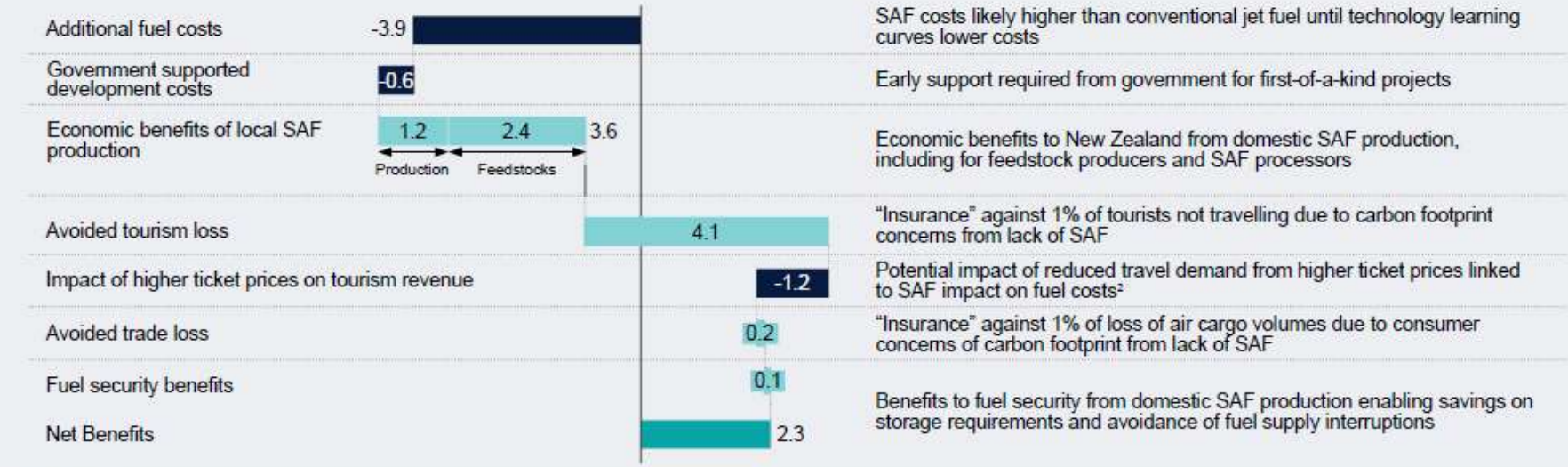

Exhibit E2

Source: Cyan Ventures analysis

[1] Assumes Pathway 2 (i.e., 30% SAF by 2050, all domestically produced). All values are NPV with an 8% discount rate over the period to 2050.

[2] Demand elasticity was assessed in line with the MBIE study- i.e., SAF cost impacts as a share of total trip cost rather just ticket cost.

Australia and New Zealand Competitiveness

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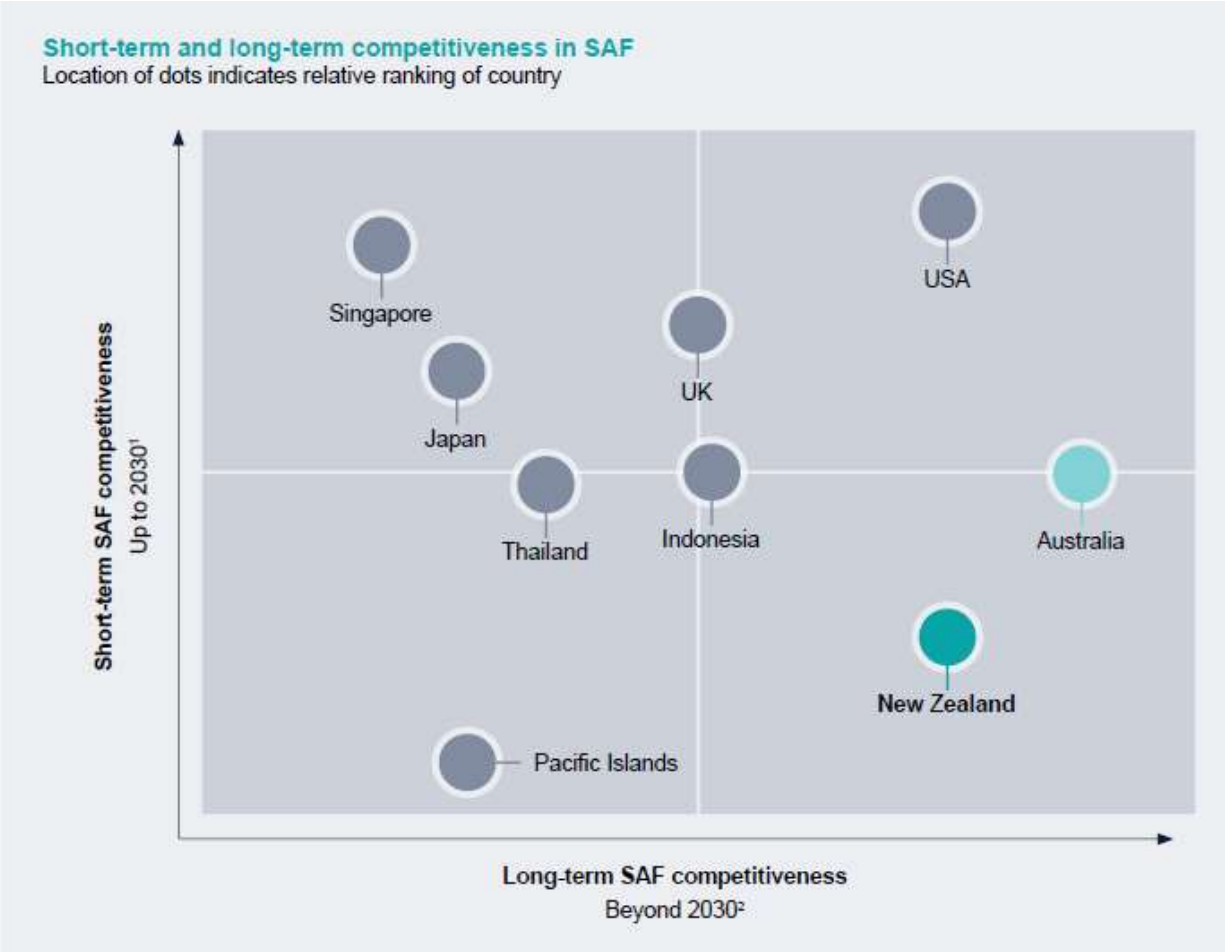

Policy is required to provide financial certainty and support long-term investment .

Fuel Security

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90% of liquid fuels are imported (Boeing & CSIRO, 2023)

Potential futures shocks

- Geopolitical
- Climate risks

Renewable diesel production can decarbonise other HTA sectors

Domestic SAF production diversifies supply chains


SAF
Powered with
Sustainable Aviation Fuel
BOEING


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Thank you

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