



Sustainable Fuels Quarterly Business Analysis Illustrative Example, Volume 3: Aviation

Q1 2024





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Q1 2024

Graphics Are ILLUSTRATIVE ONLY



NOT SHOWN: Discussion Slides providing insights based upon analysis shown in tables and graphics; Additional Context and Overview Slides, etc.

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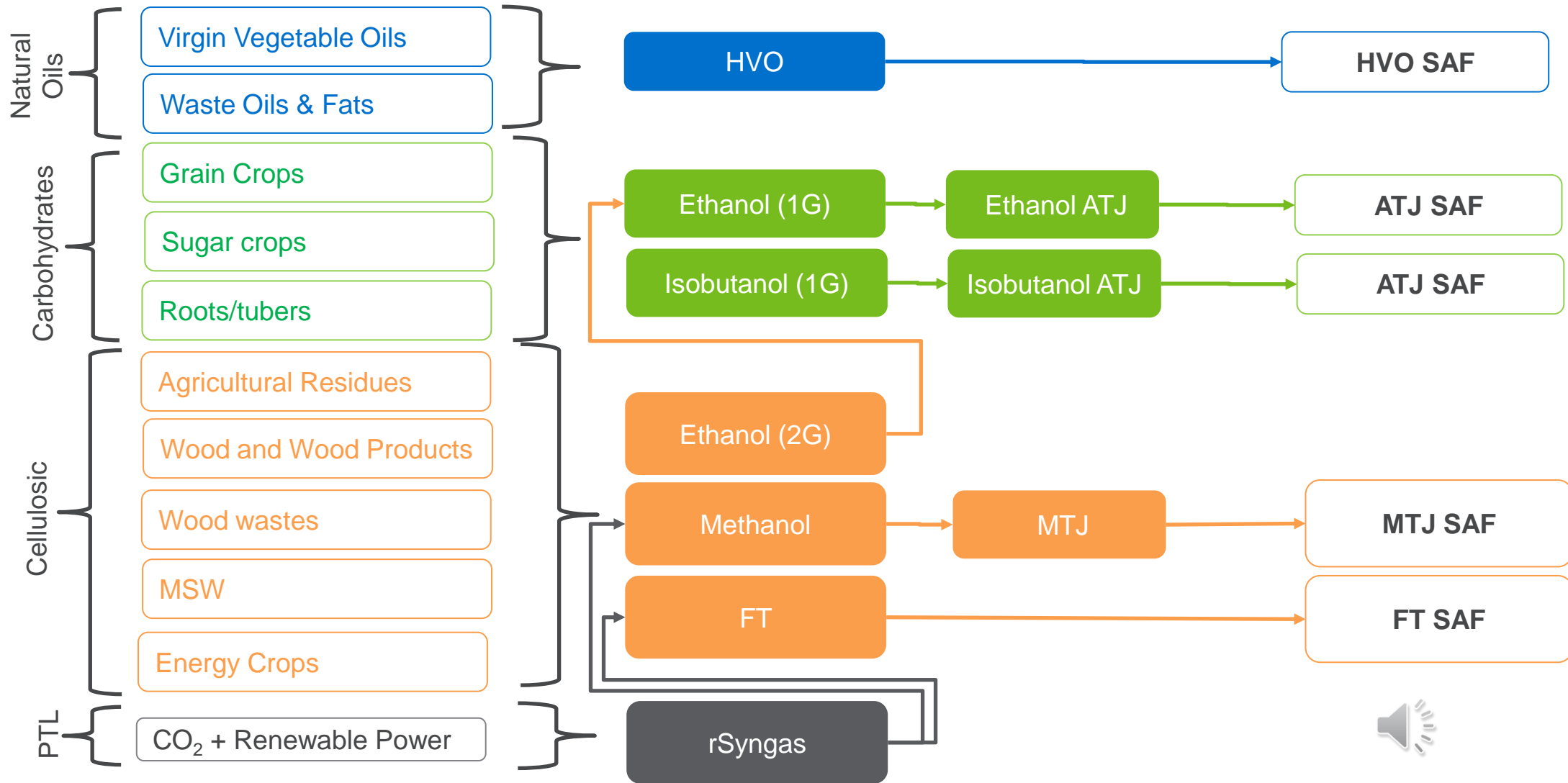
Section 7: PTL

6.1 eFT

6.2 eMTJ

Additional Routes and Technologies to be added as they become more commercially relevant/active in the SAF market (e.g., Gevo's Isobutanol-based SAF and Virent's Synthetic Aromatic Kerosene for Aviation Fuels (SAK))

Commercially Pursued Routes for SAF



Section 1: Executive Summary



Global Summary

Key Industry Developments in Q1:

- XXX
- XXX
- XXX

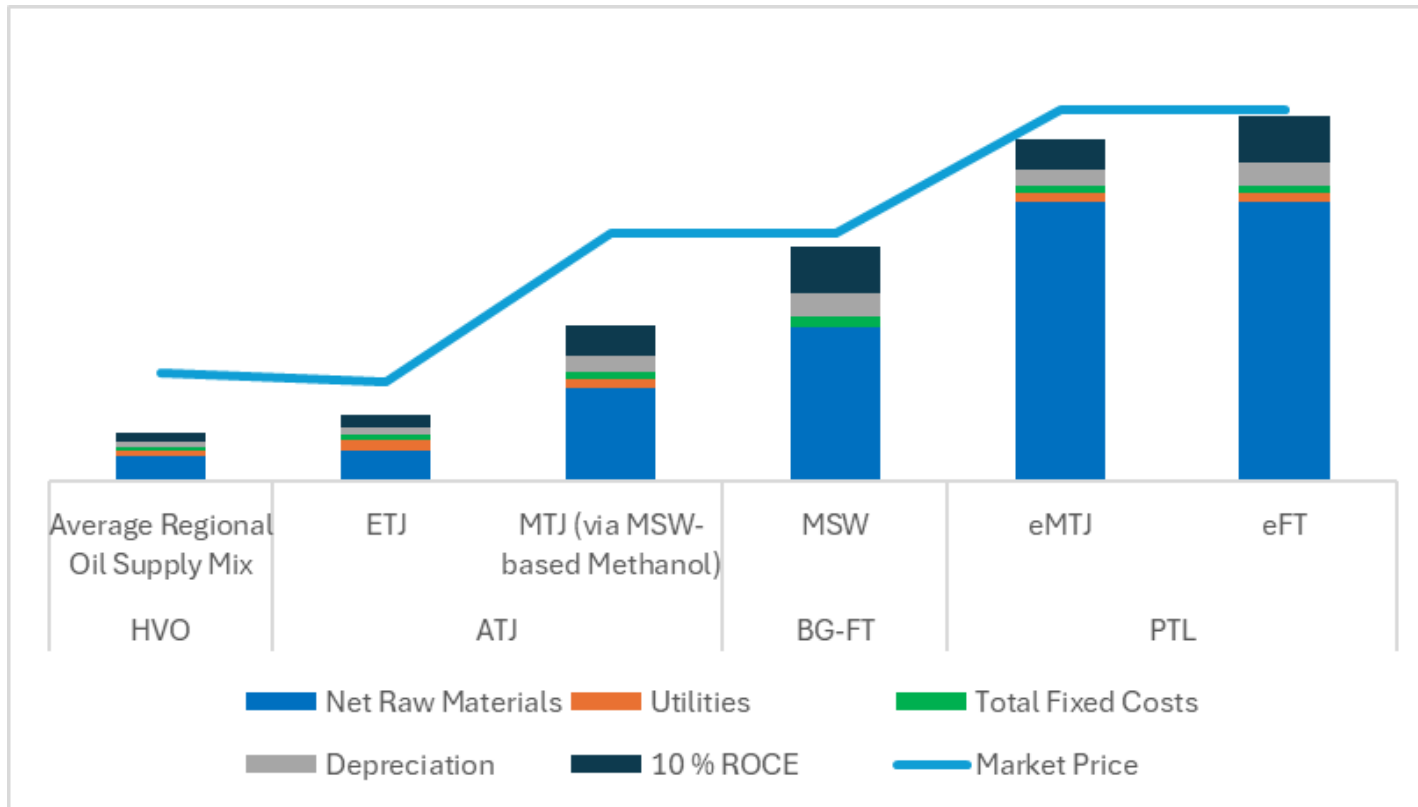


United States Cost of Production Comparison

EXAMPLE: United States Comparative Cost of Production
(Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



United States

Cost of Production

	HVO		ATJ		BG-FT		PTL	
	Average Regional Oil Supply Mix		ETJ	rMTJ	MSW	eMTJ	EFT	
Net Raw Materials	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Utilities	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Total Fixed Costs	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cash Costs	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Depreciation	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cost of Production (COP)	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
10 % ROCE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
COP+ 10% ROCE	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Credit Value	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
REGIONAL SAF PRICE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

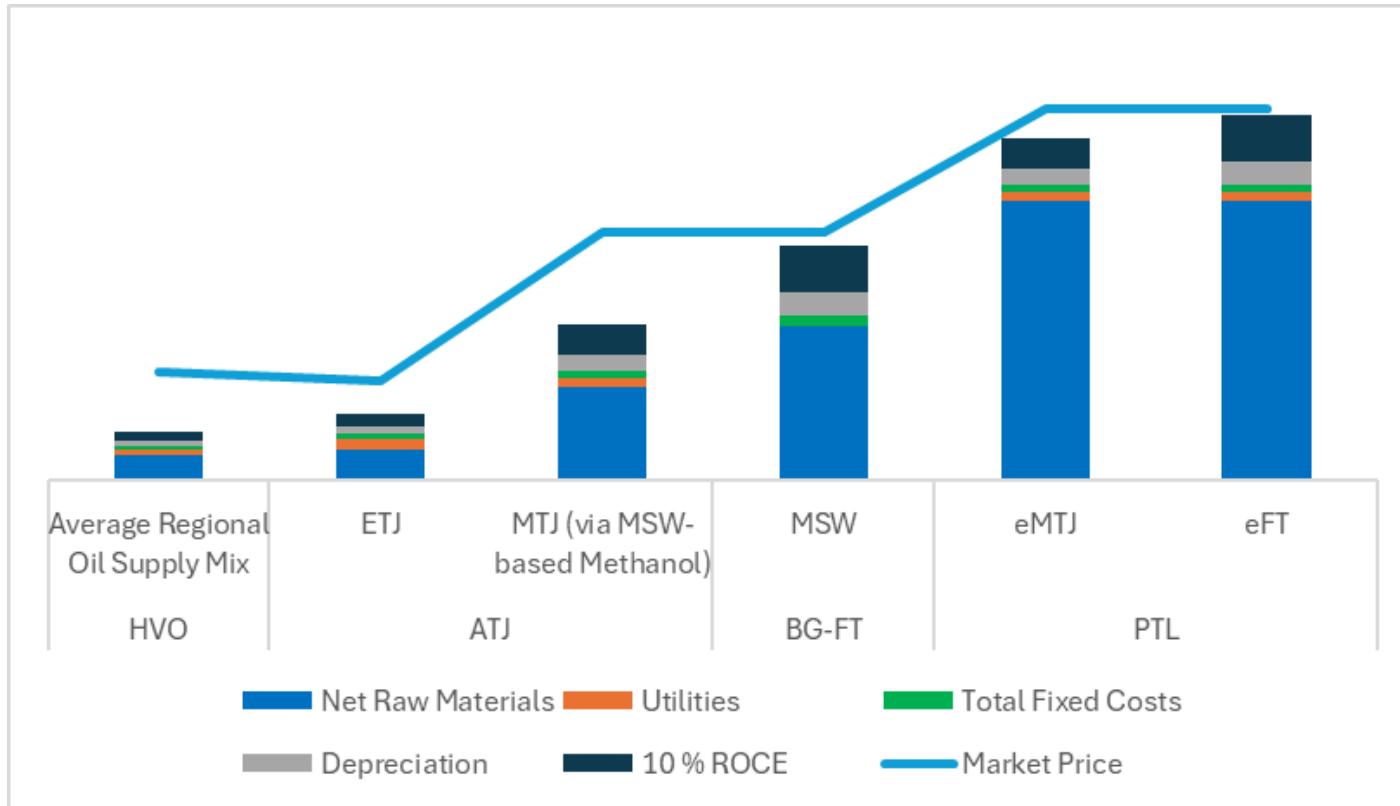
Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



Western Europe Cost of Production Comparison

EXAMPLE Western Europe Comparative Cost of Production
(Dollars per ton)



Quarter One Highlights:

- XXX
- XXX
- XXX



Western Europe Cost of Production

	HVO		ATJ		BG-FT		PTL	
	Average Regional Oil Supply Mix		ETJ	rMTJ	MSW	eMTJ	EFT	
Net Raw Materials	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Utilities	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Total Fixed Costs	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cash Costs	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Depreciation	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cost of Production (COP)	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
10 % ROCE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
COP+ 10% ROCE	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Credit Value	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
REGIONAL SAF PRICE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

Quarter One Highlights:

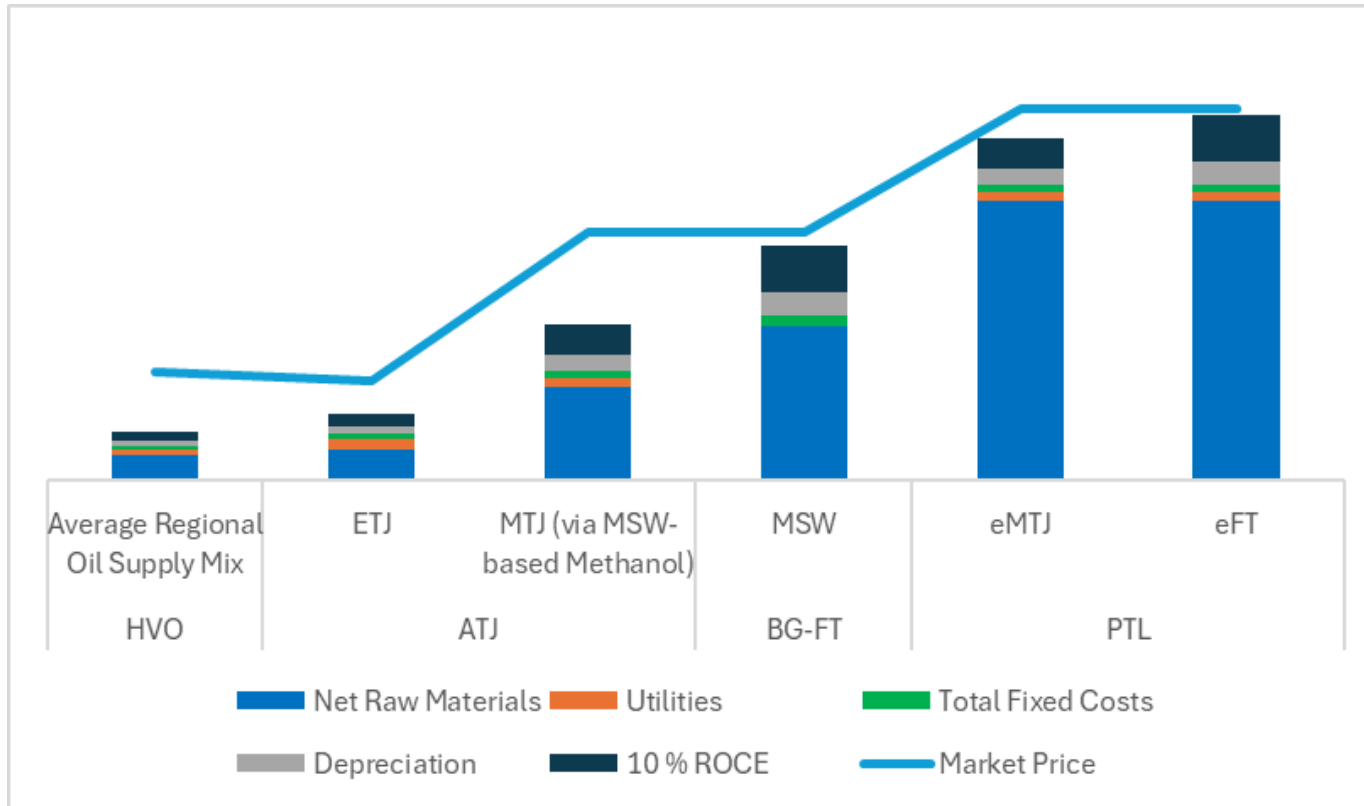
- **XXX**
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China

Cost of Production Comparison

EXAMPLE China Comparative Cost of Production
(Dollars per ton)



Quarter One Highlights:

- XXX
- XXX
- XXX



China

Cost of Production

	HVO		ATJ		BG-FT		PTL	
	Average Regional Oil Supply Mix		ETJ	rMTJ	MSW	eMTJ	EFT	
Net Raw Materials	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Utilities	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Total Fixed Costs	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cash Costs	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Depreciation	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cost of Production (COP)	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
10 % ROCE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
COP+ 10% ROCE	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Credit Value	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
REGIONAL SAF PRICE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

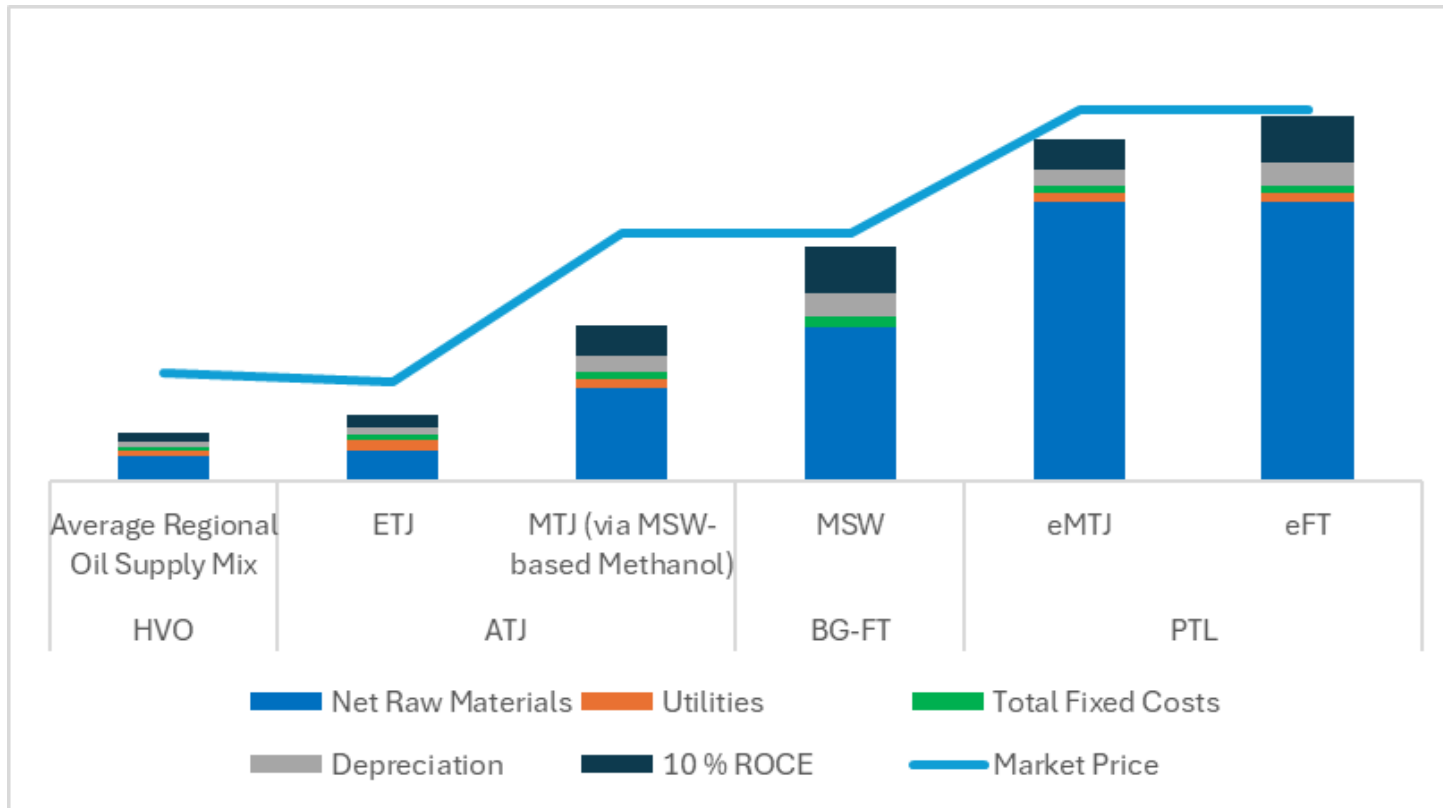
Quarter One Highlights:

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South-East Asia Cost of Production Comparison

EXAMPLE Southeast Asia Comparative Cost of Production
(Dollars per ton)



Quarter One Highlights:

- XXX
- XXX
- XXX



South-East Asia

Cost of Production

	HVO		ATJ		BG-FT		PTL	
	Average Regional Oil Supply Mix		ETJ	rMTJ	MSW	eMTJ	EFT	
Net Raw Materials	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Utilities	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Total Fixed Costs	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cash Costs	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Depreciation	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
Cost of Production (COP)	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
10 % ROCE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
COP+ 10% ROCE	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX</u>	
Credit Value	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
REGIONAL SAF PRICE	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

Quarter One Highlights:

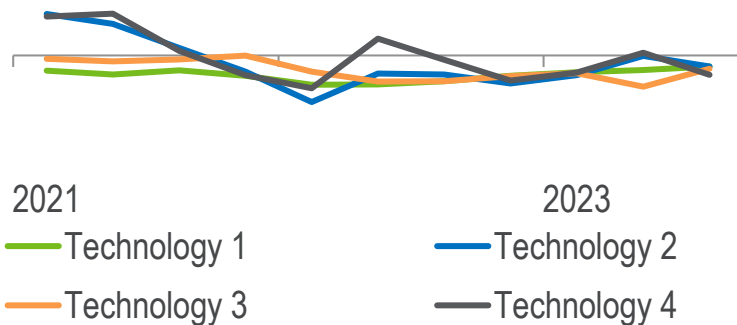
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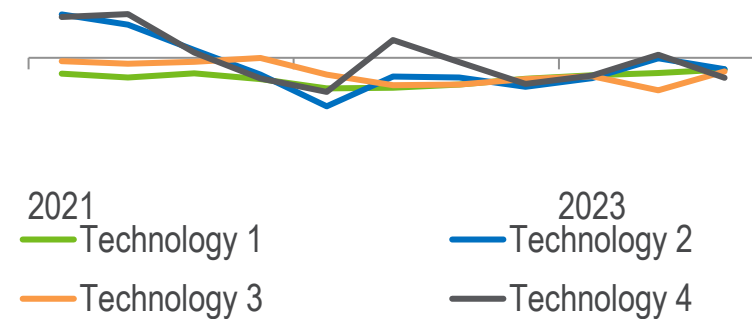
All Regions

Quarterly Cash margin evolution

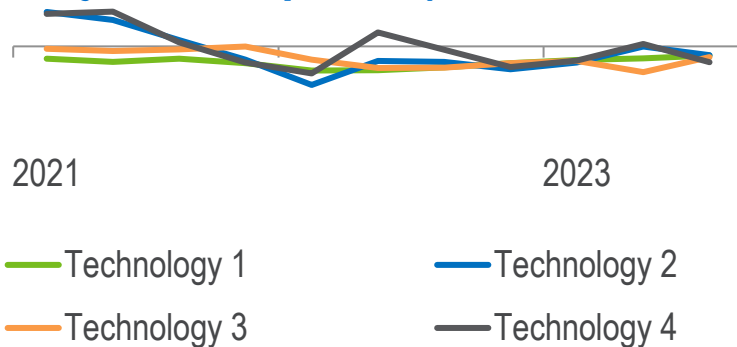
EXAMPLE US Comparative Cash Margins Over Time
(Quarterly, Dollars per ton)



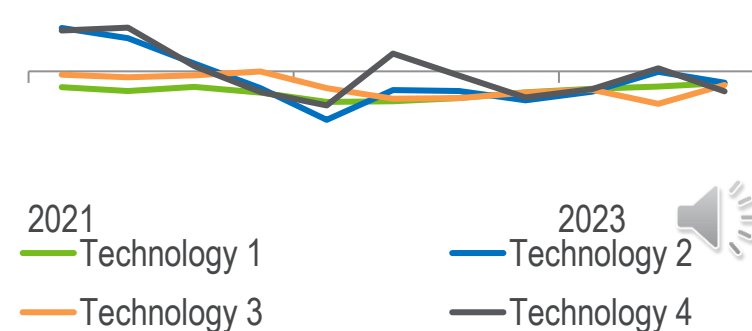
EXAMPLE WE Comparative Cash Margins Over Time
(Quarterly, Dollars per ton)



EXAMPLE China Comparative Cash Margins Over Time
(Quarterly, Dollars per ton)



EXAMPLE SEA Comparative Cash Margins Over Time
(Quarterly, Dollars per ton)



All Regions

HVO Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

HVO Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Methodology included in QBA Handbook

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

ETJ Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
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All Regions

ETJ Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Methodology included in QBA Handbook

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

MTJ Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

MTJ Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Methodology included in QBA Handbook

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

FT Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

FT Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Methodology included in QBA Handbook

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

eMTJ Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

eMTJ Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Methodology included in QBA Handbook

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

eFT Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



All Regions

eFT Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



Section 2: Industry Trends Spotlight



Industry and Regulatory Spotlight

Any additional industry and regulatory relevant news will be included here.



Airlines	Airports and Operations	Producers	OEMs
Corporate Buyers			

Source: Clean Skies for Tomorrow Coalition

Section 3: Key Industry Data

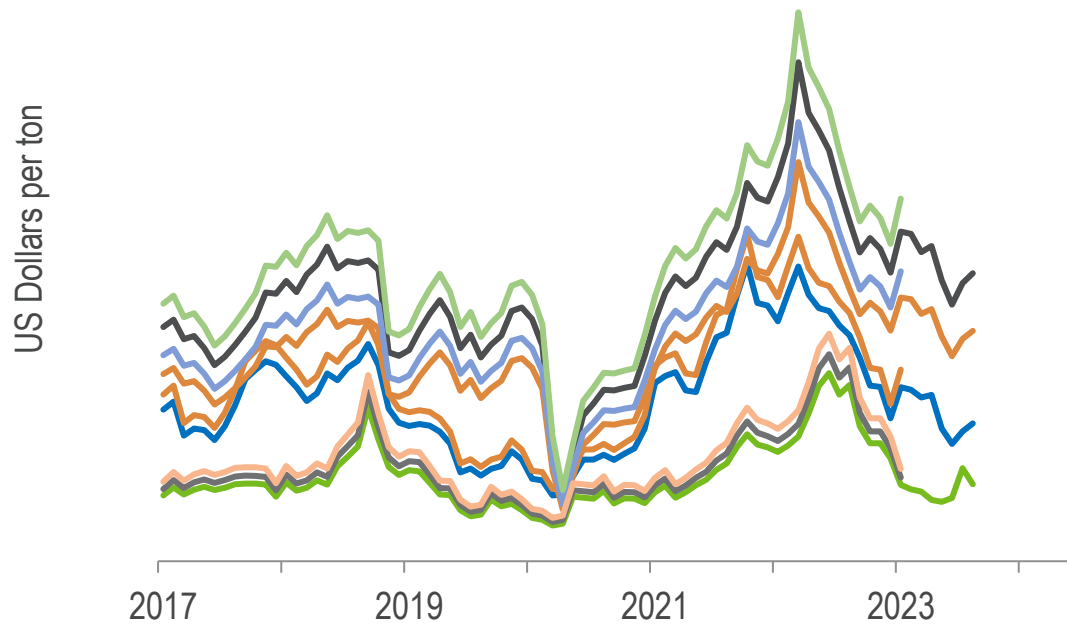


Regional Feedstock Pricing Trends

All Feedstock Prices
(Monthly Average FOB)

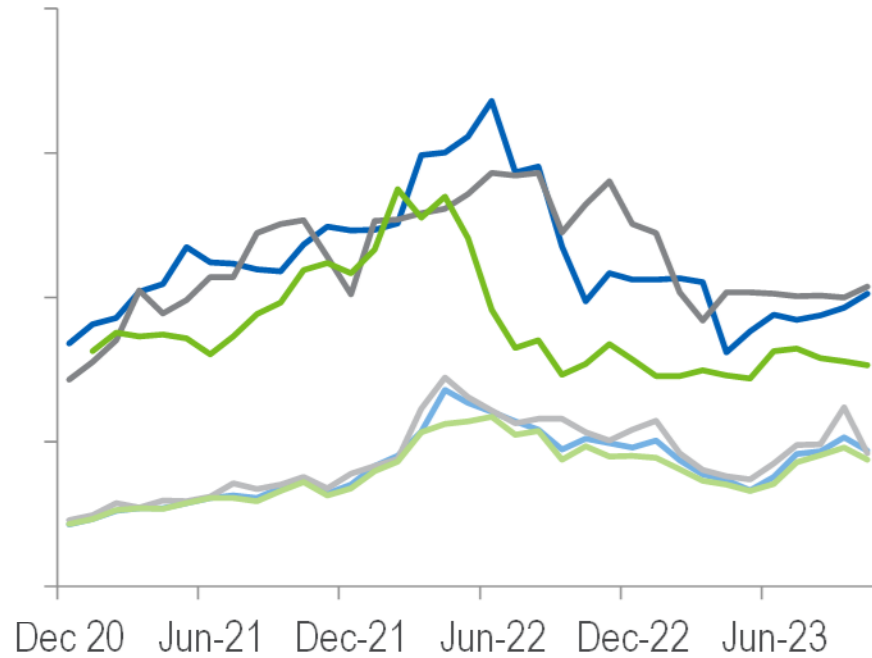
Quarter One Highlights:

- XXX
- XXX
- XXX



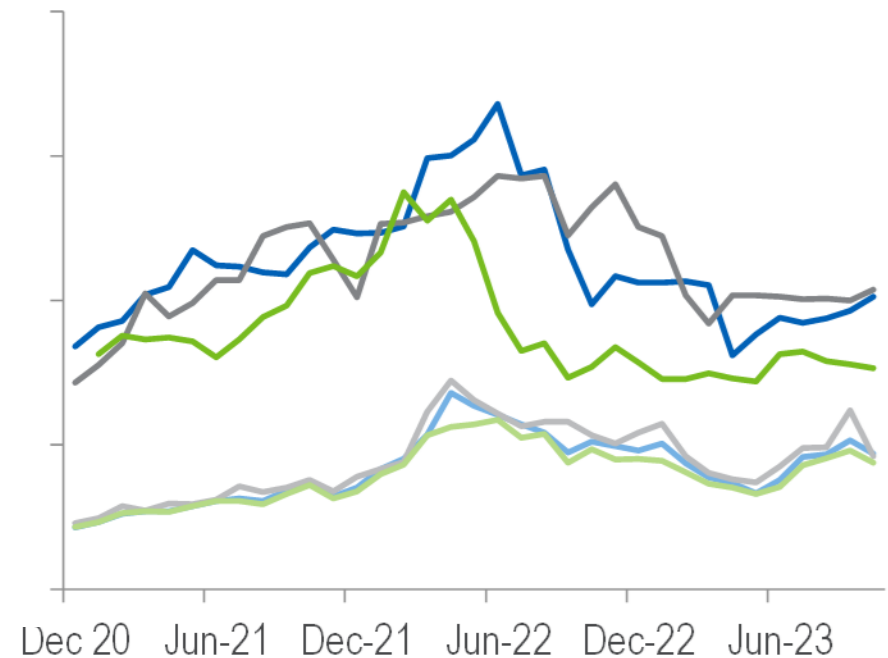
Quarterly Pricing by Product

SAF Price (HVO, ATJ and BG-FT)



— NWE SAF — USWC SAF
— SEA SAF — NWE Jet

SAF Price (PTL)



— NWE SAF — USWC SAF
— SEA SAF — NWE Jet

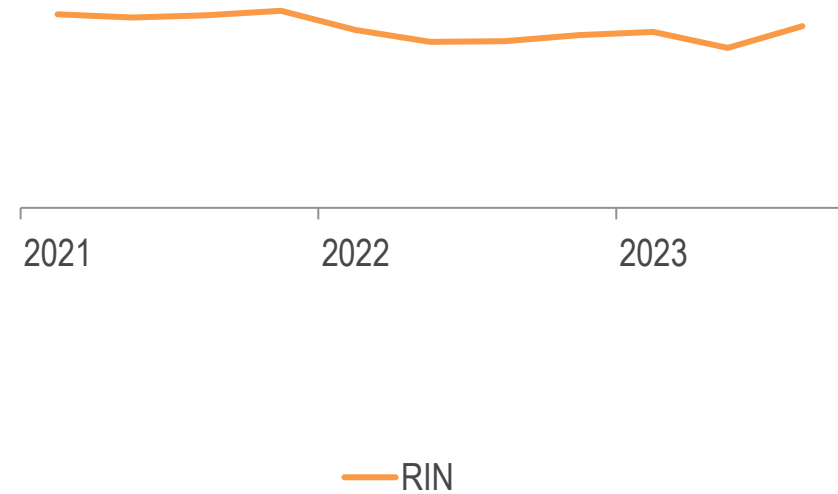
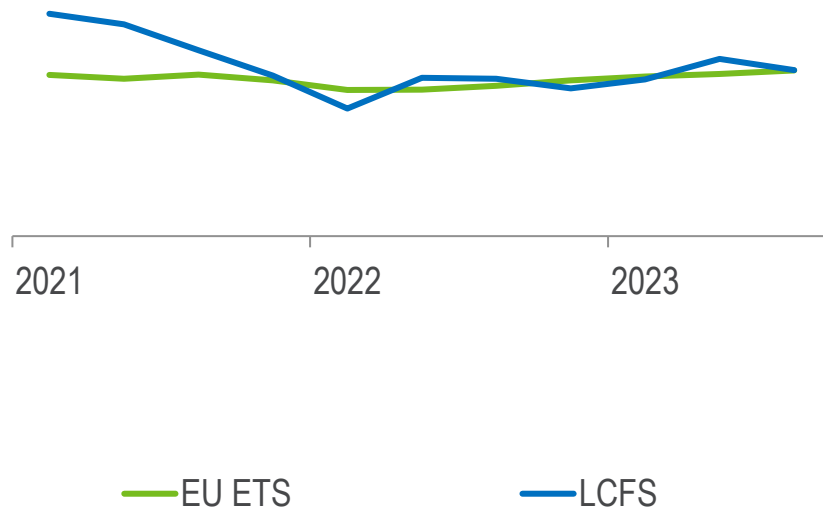
Quarter One Highlights:

- XXX
- XXX
- XXX



Quarterly Credit Values

EXAMPLE Key Credit Values
(Quarterly, Dollars per ton)

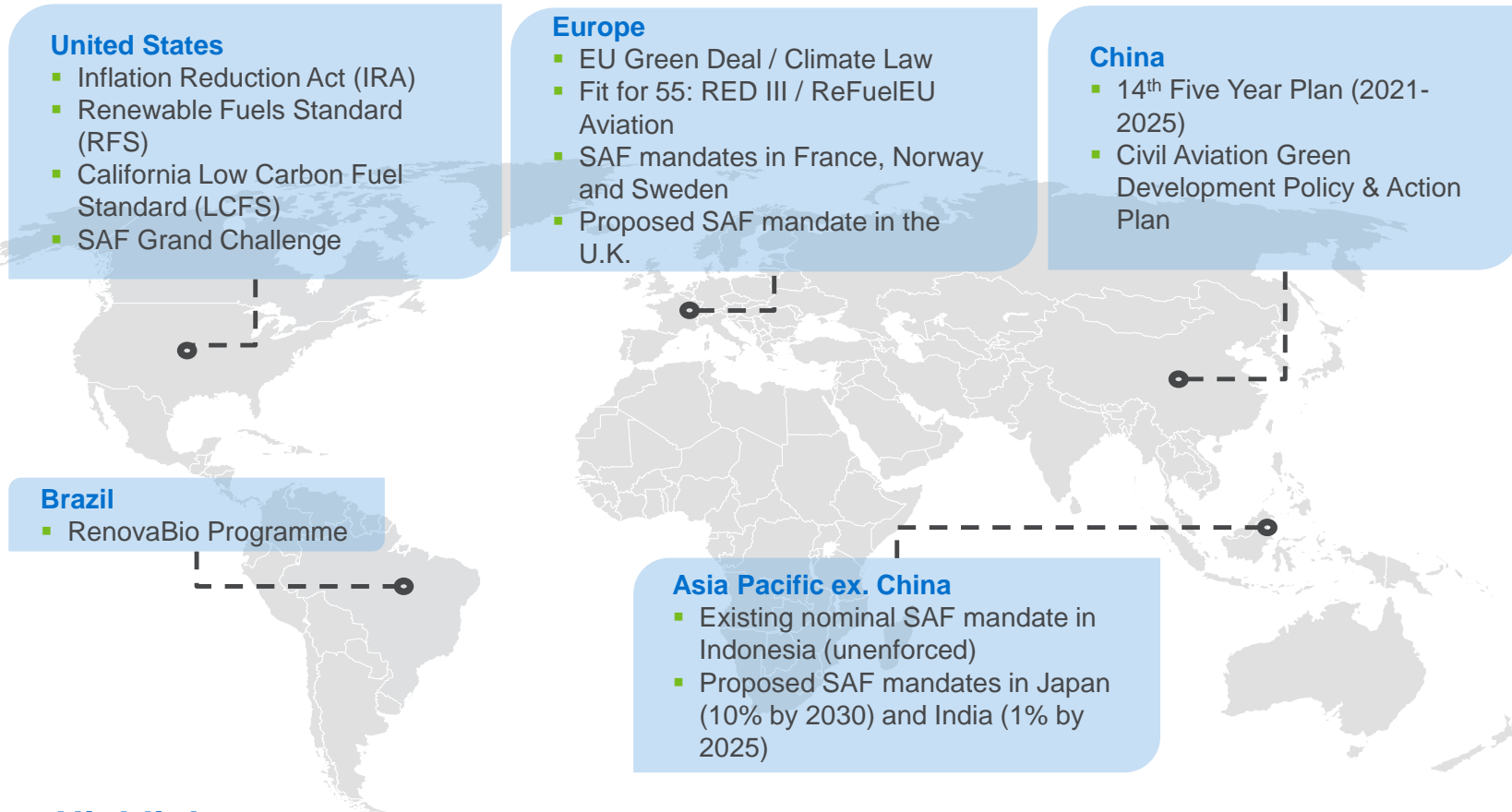


Quarter One Highlights:

- XXX
- XXX
- XXX



Global Policy Development (Q1)




Quarter One Highlights:

- XXX
- XXX
- XXX




Global Policy Development (Q1)

Type of Policy	Discussion
Blending mandates	XXX
Emission intensity mandates	XXX
Tax reliefs and exemptions	XXX
Innovation grants	XXX
Capital support and loan guarantees	XXX
Domestic carbon pricing or cap-and-trade	XXX

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Section 4: HVO

A small grey speaker icon with sound waves, indicating an audio recording.

Example Section:
To be repeated for other
technology sections

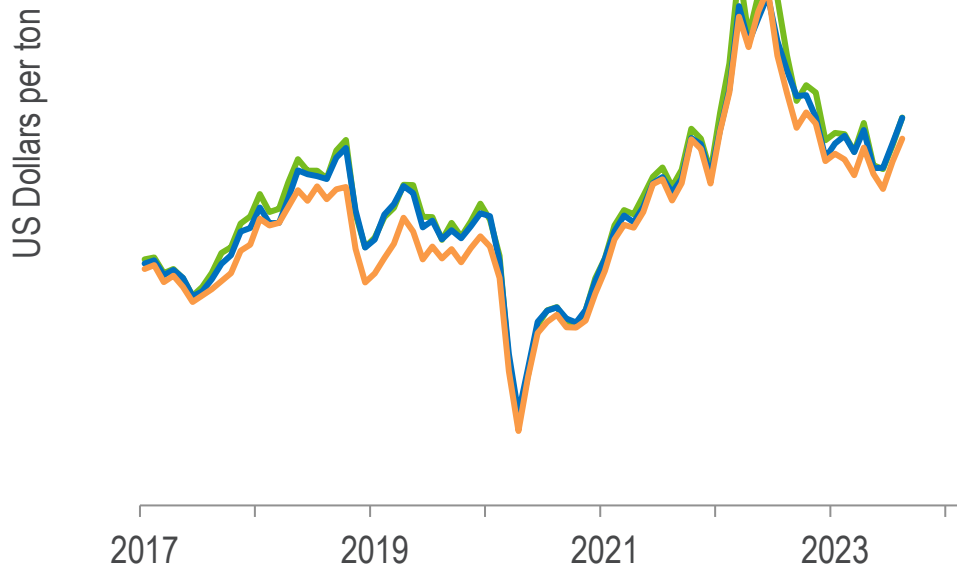
HVO
Global



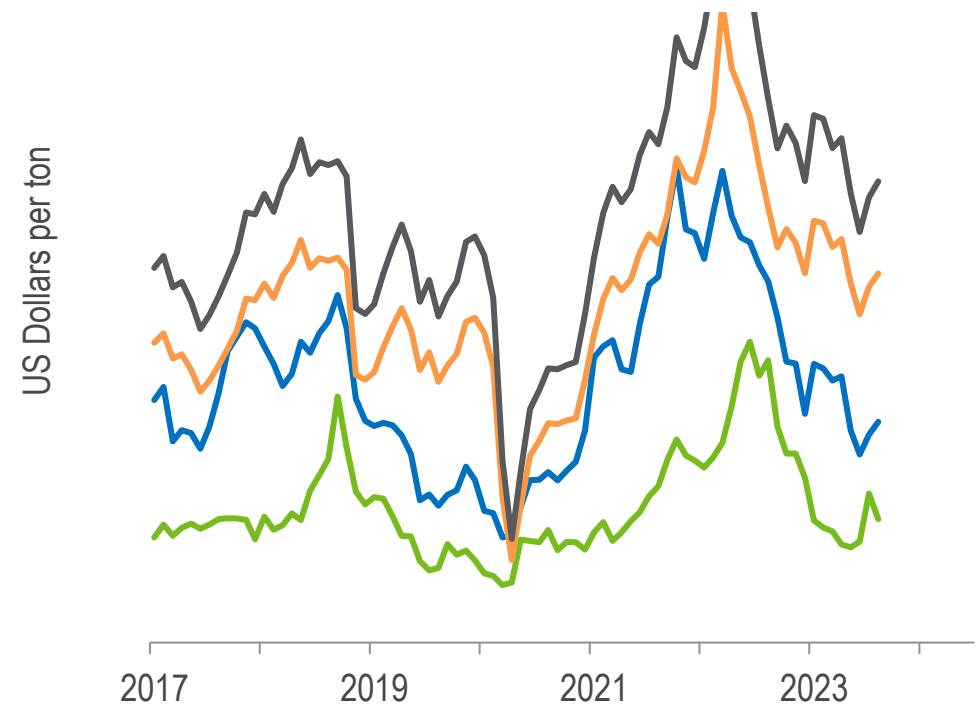
Example Section:
To be repeated for other
technology sections

Global Feedstock and Product Pricing

Regional Product HVO SAF Prices
(Monthly Average FOB)



HVO Feedstock Prices
(Monthly Average FOB)



Quarter One Highlights:

- XXX
- XXX
- XXX



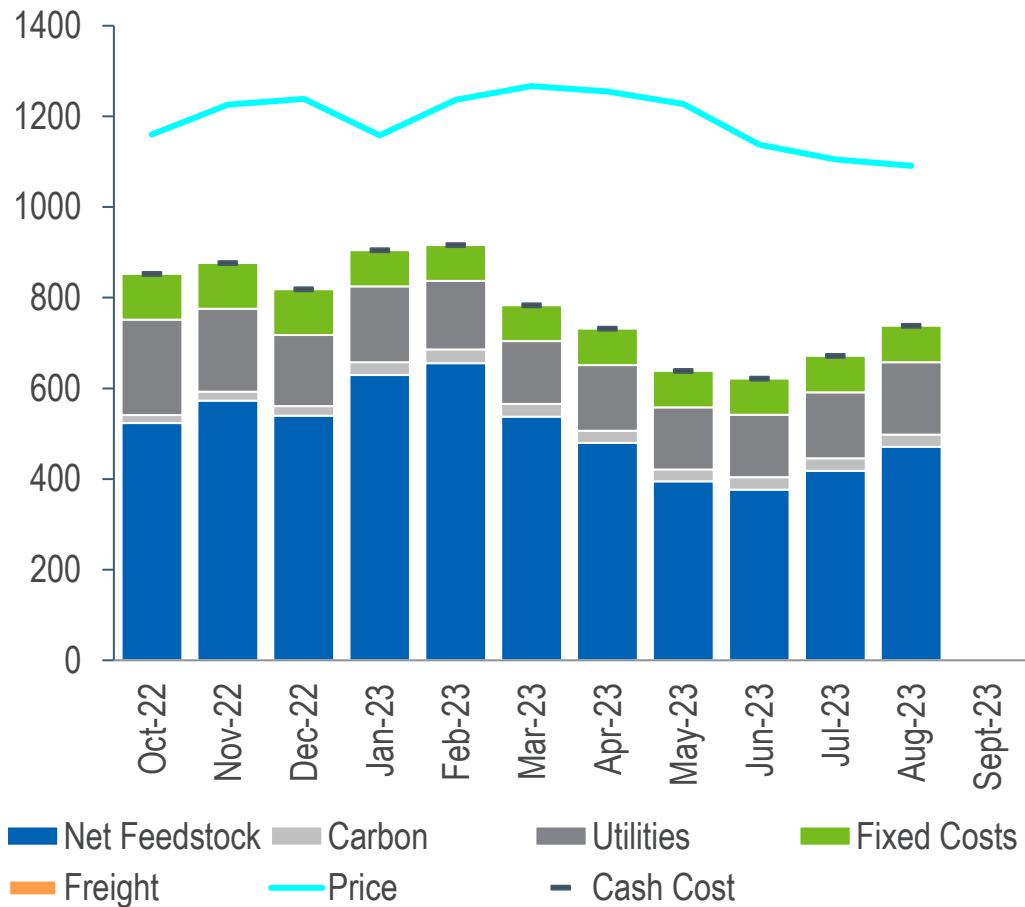
United States

Cost Summary – Rolling 12 Months

US Competitive Economics (Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



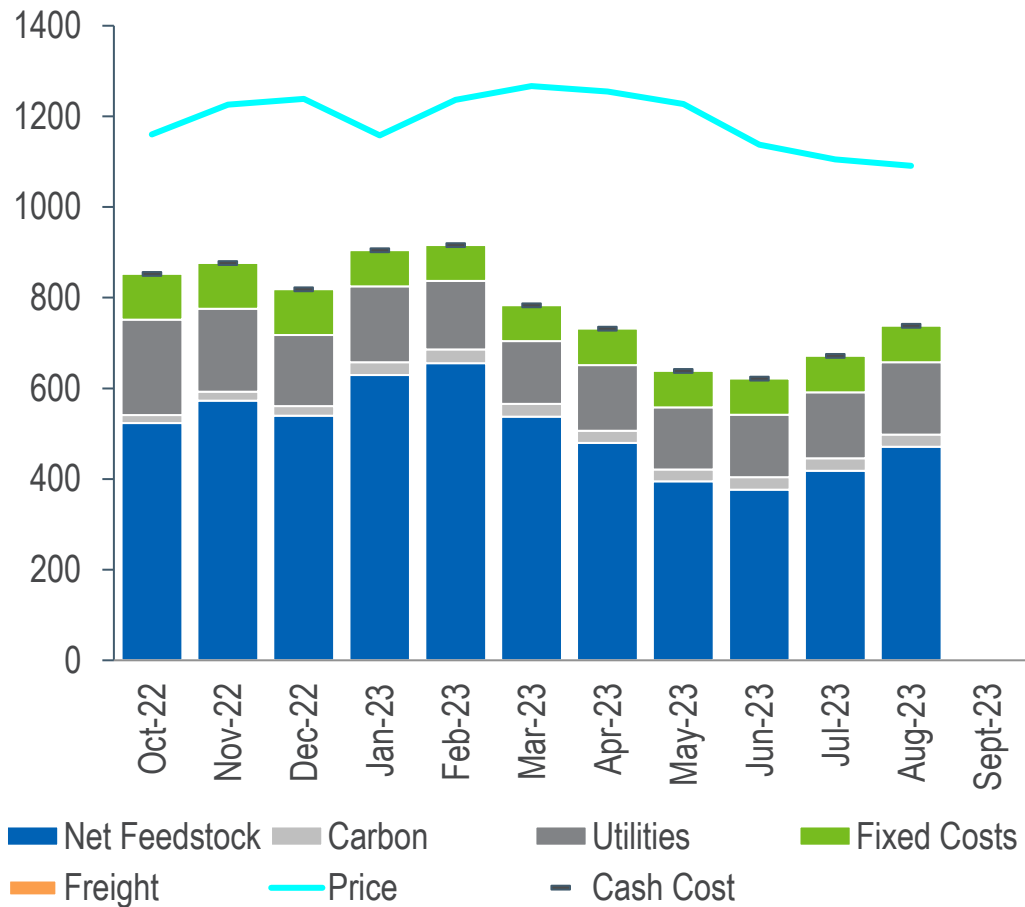
Western Europe

Cost Summary – Rolling 12 Months

Western Europe Competitive Economics (Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



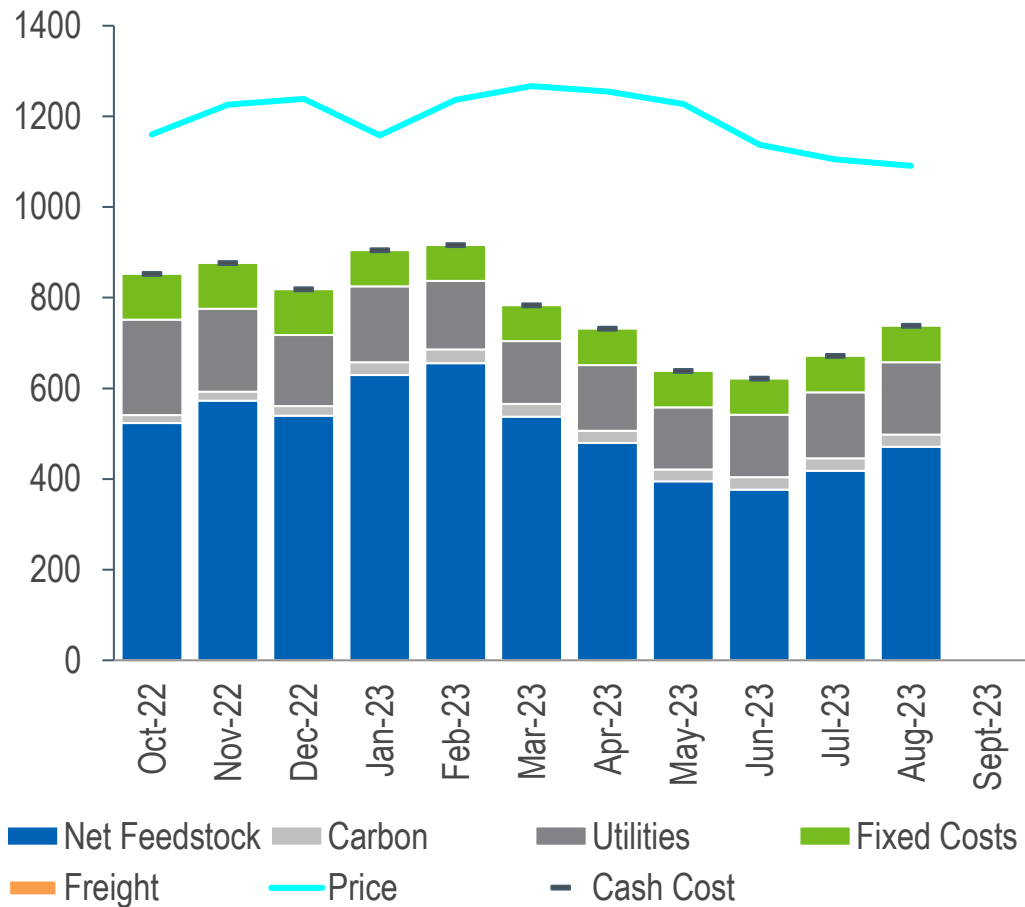
China

Cost Summary – Rolling 12 Months

China Competitive Economics (Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



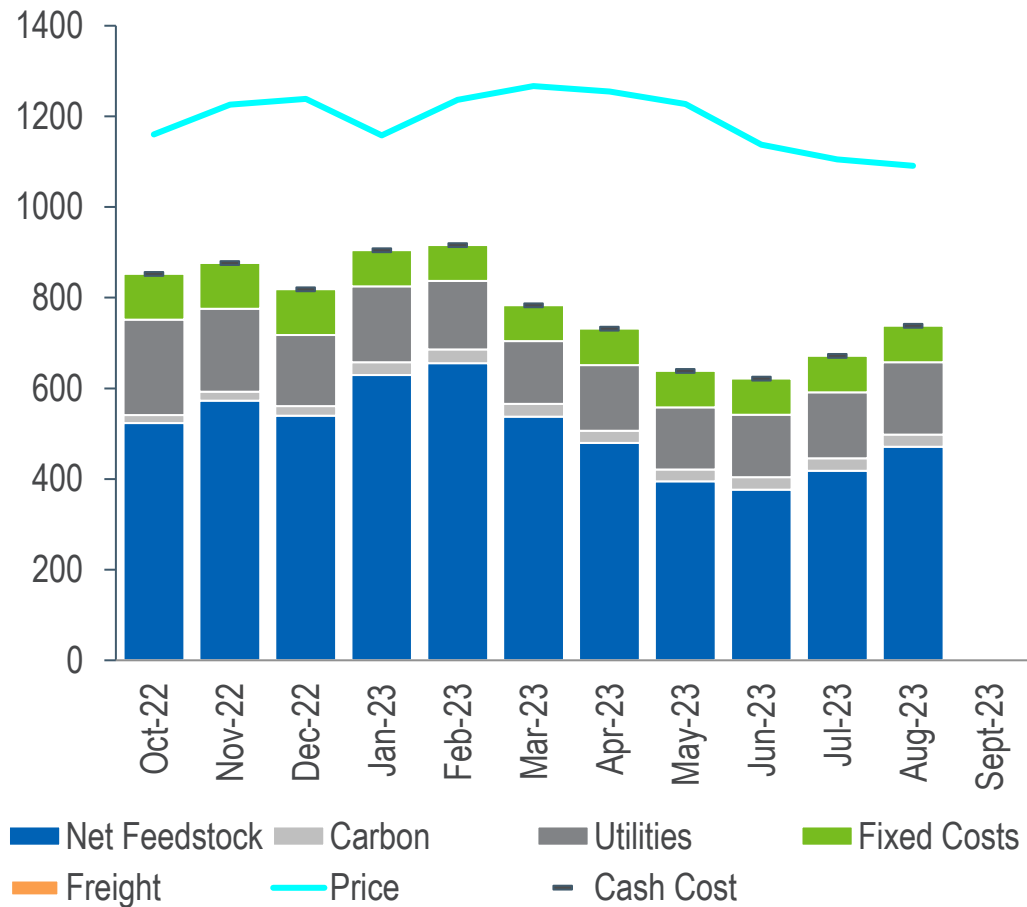
South-East Asia

Cost Summary – Rolling 12 Months

South-East Asia Competitive Economics (Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



Regional Delivered Cost Competitiveness

Delivered Cost Comparisons (Dollars per ton)

From	Delivered Cost to US			Delivered Cost to Western Europe			Delivered Cost to China			Delivered Cost to Southeast Asia		
	Regional Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost	Cost	Regional Credits	Delivered Cost
US	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Western Europe	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
China	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
Southeast Asia	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>	XXX	XXX	<u>XXX</u>
REGIONAL SAF PRICE			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>			<u>XXX</u>

Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



Regional Delivered CI Competitiveness

Delivered CI Comparisons – based upon average regional CI
(Tons CO2e per ton)

From	Delivered CI to US			Delivered CI to Western Europe			Delivered CI to China			Delivered CI to Southeast Asia		
	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI	Production CI	Freight CI	Delivered CI
US	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Western Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Southeast Asia	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

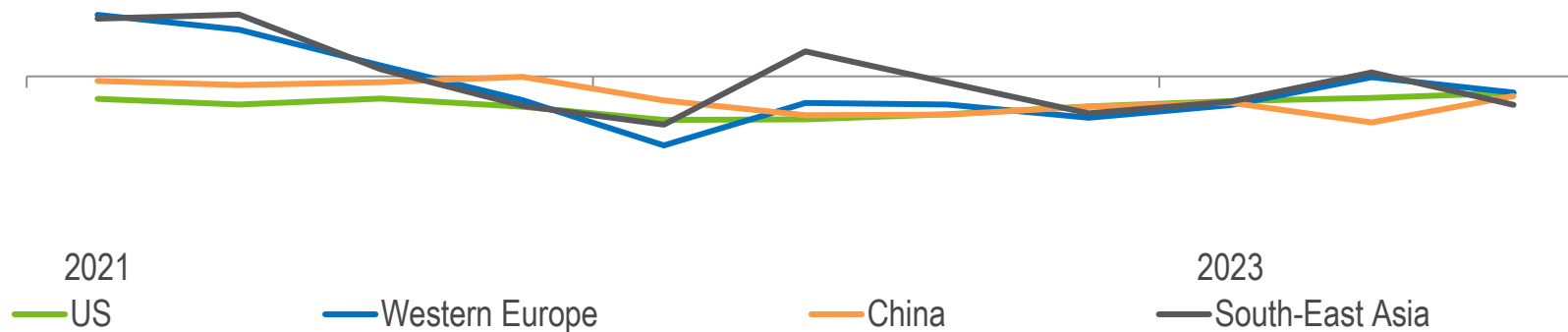
Quarter One Highlights:

- **XXX**
- **XXX**
- **XXX**



Regional Cash Margin Evolution

EXAMPLE Regional Comparative Cash Margins Over Time
(Quarterly, Dollars per ton)



Quarter One Highlights:

- XXX
- XXX
- XXX



Regional Quarter One Capacity Round-Up

North America

- XXX
- XXX
- XXX

South America

- XXX
- XXX
- XXX

Western Europe

- XXX
- XXX
- XXX

South-East Asia

- XXX
- XXX
- XXX

Rest of the World

- XXX
- XXX
- XXX



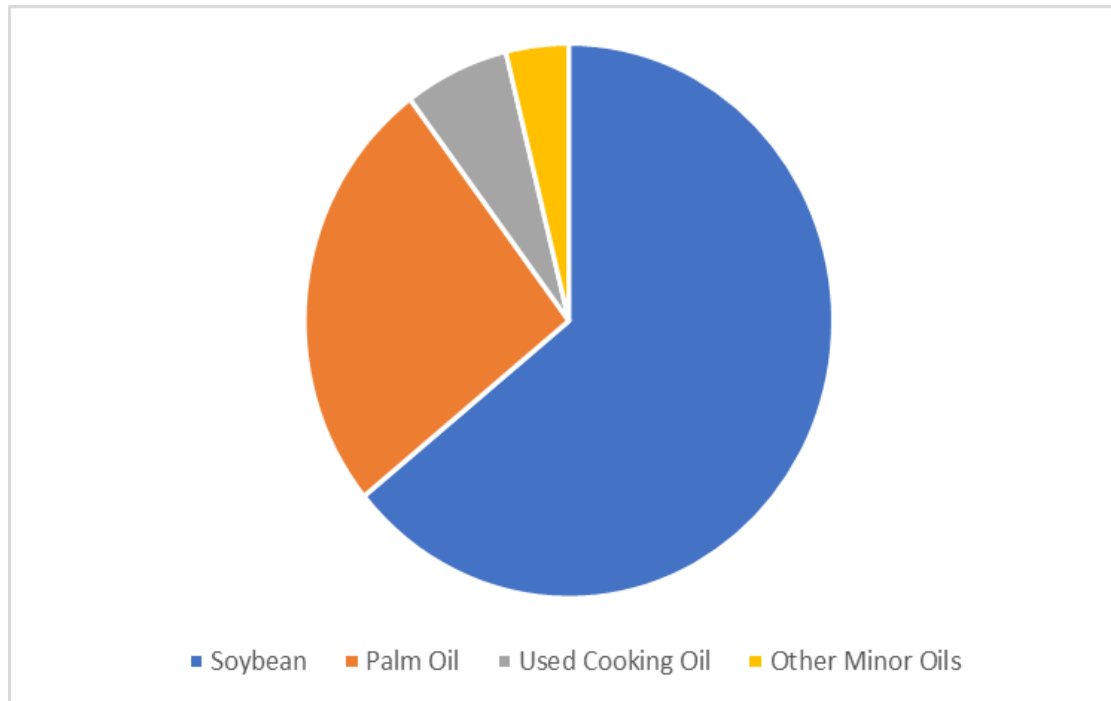
HVO
United States



Example Section:
To be repeated for other
technology sections

United States Regional Feedstocks and CI

U.S. HVO Feedstocks (Volumes)



Oil	Regional Market Share	Average CI (g CO2 eq/MJ)
Soybean	64%	55
Palm	26%	60
UCO	6%	15
Other Minor Oils	4%	25
Weighted Average CI		53

Quarter One Highlights:

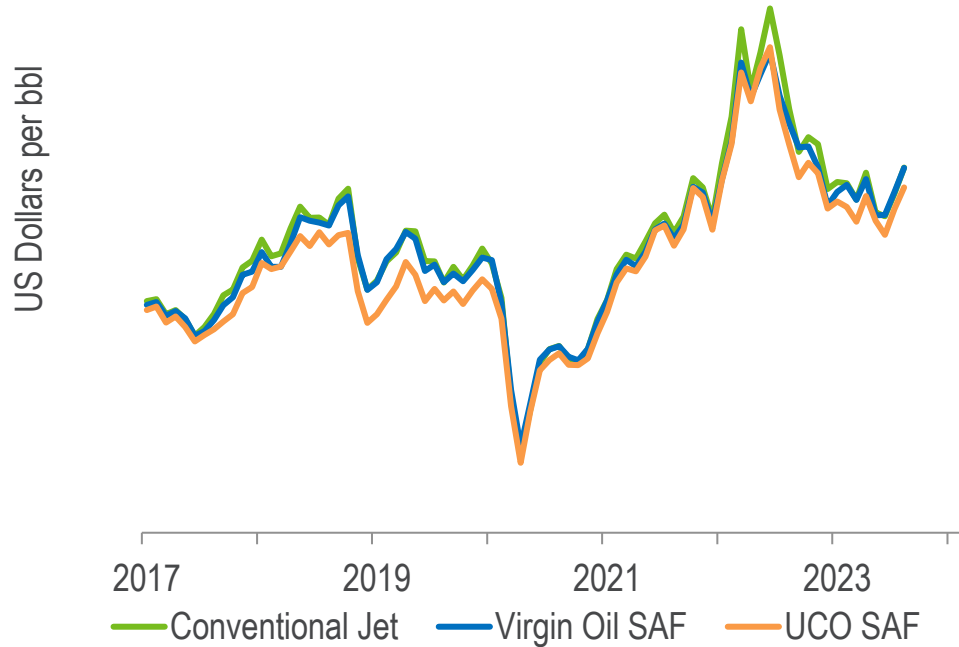
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- XXX



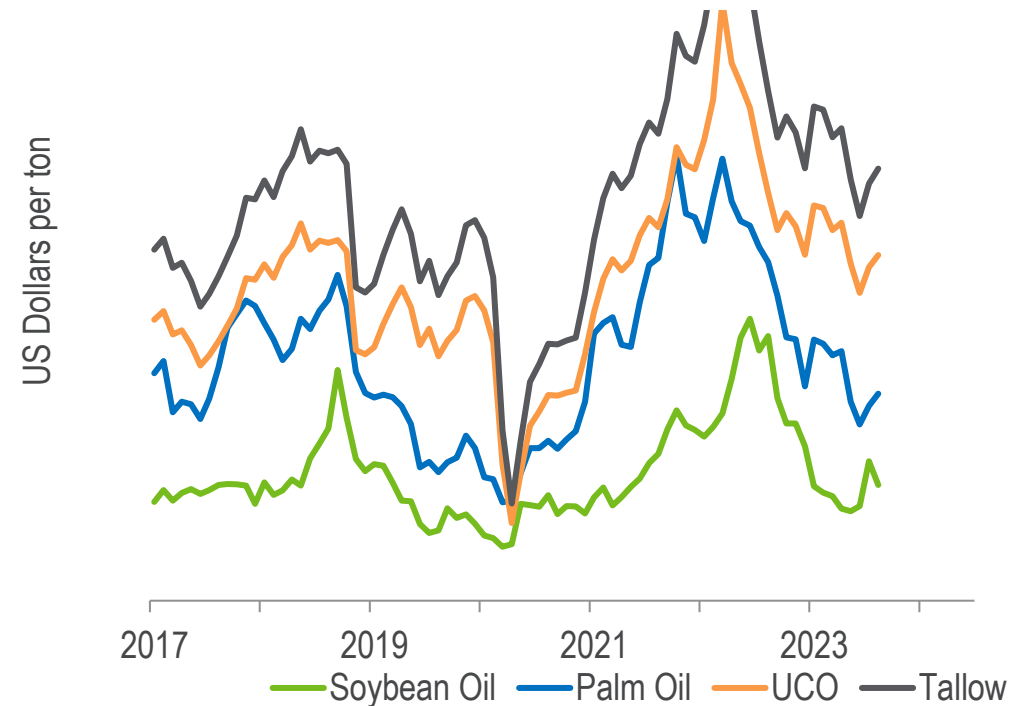
United States

Feedstock and Product Pricing

U.S. Product Prices
(Monthly Average FOB)



U.S. Feedstock Prices
(Monthly Average FOB USGC)



Quarter One Highlights:

- XXX
- XXX
- XXX



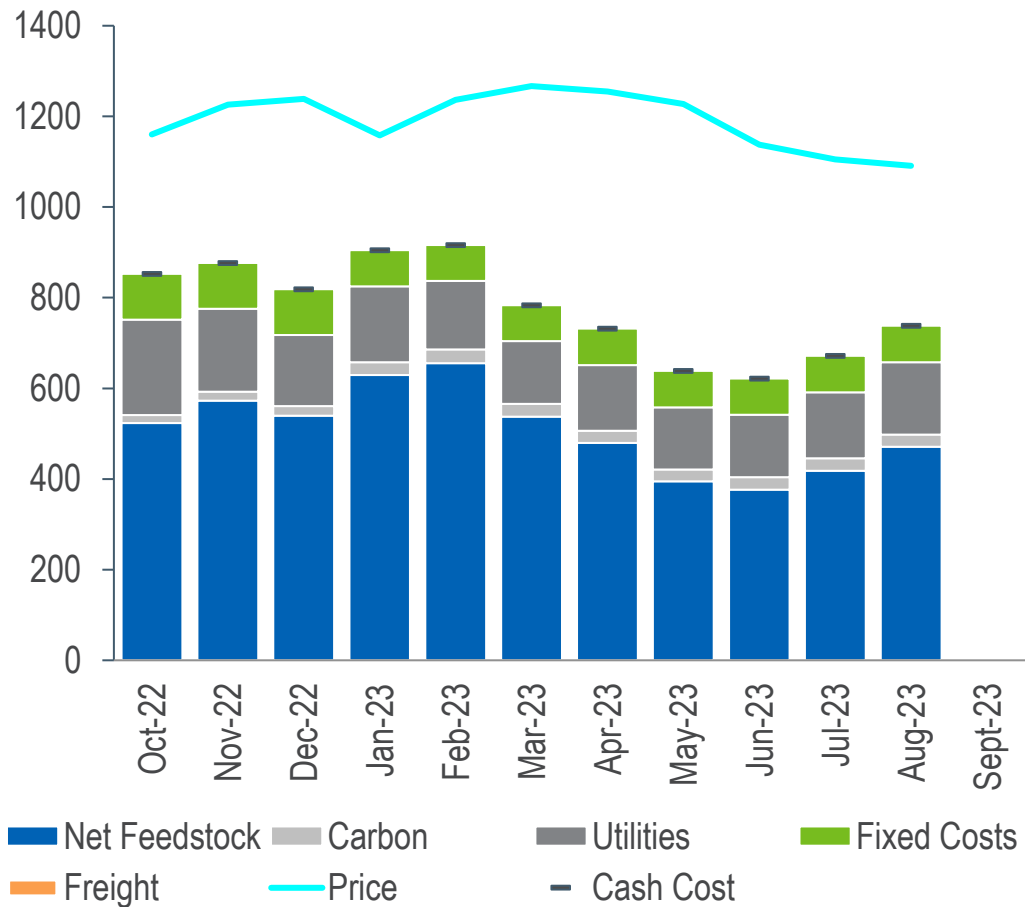
United States

Cost Summary – Rolling 12 Months

U.S. Competitive Economics (Dollars per ton)

Quarter One Highlights:

- XXX
- XXX
- XXX



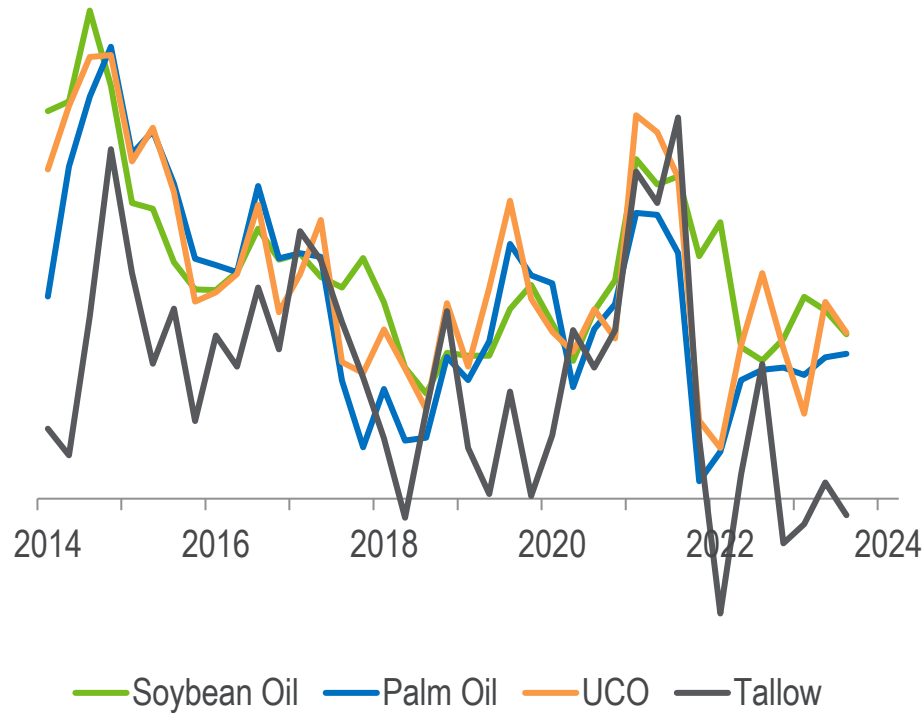
United States

Margins by Feedstock

U.S. Cash Margin By Feedstock
(Dollars per ton ethylene)

Quarter One Highlights:

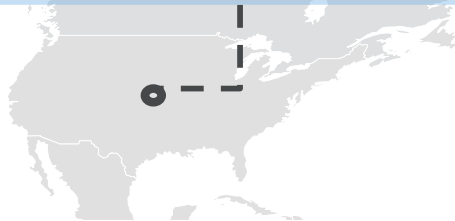
- XXX
- XXX
- XXX



HVO Policy Development

United States

- Inflation Reduction Act (IRA)
- Renewable Fuels Standard (RFS)
- California Low Carbon Fuel Standard (LCFS)
- SAF Grand Challenge



Type of Policy	Discussion
Blending mandates	XXX
Emission intensity mandates	XXX
Tax reliefs and exemptions	XXX
Innovation grants	XXX
Capital support and loan guarantees	XXX
Domestic carbon pricing or cap-and-trade	XXX

Quarter One Highlights:

- XXX
- XXX
- XXX



Section 5: ATJ



Refer to HVO Section

ATJ
ETJ



Refer to HVO Section

ATJ
MTJ



Refer to HVO Section

Section 6: Biomass Gasification Fischer-Tropsch



Refer to HVO Section

Section 7: Power-to-Liquids



Refer to HVO Section

Power-to-Liquids eMTJ



Refer to HVO Section

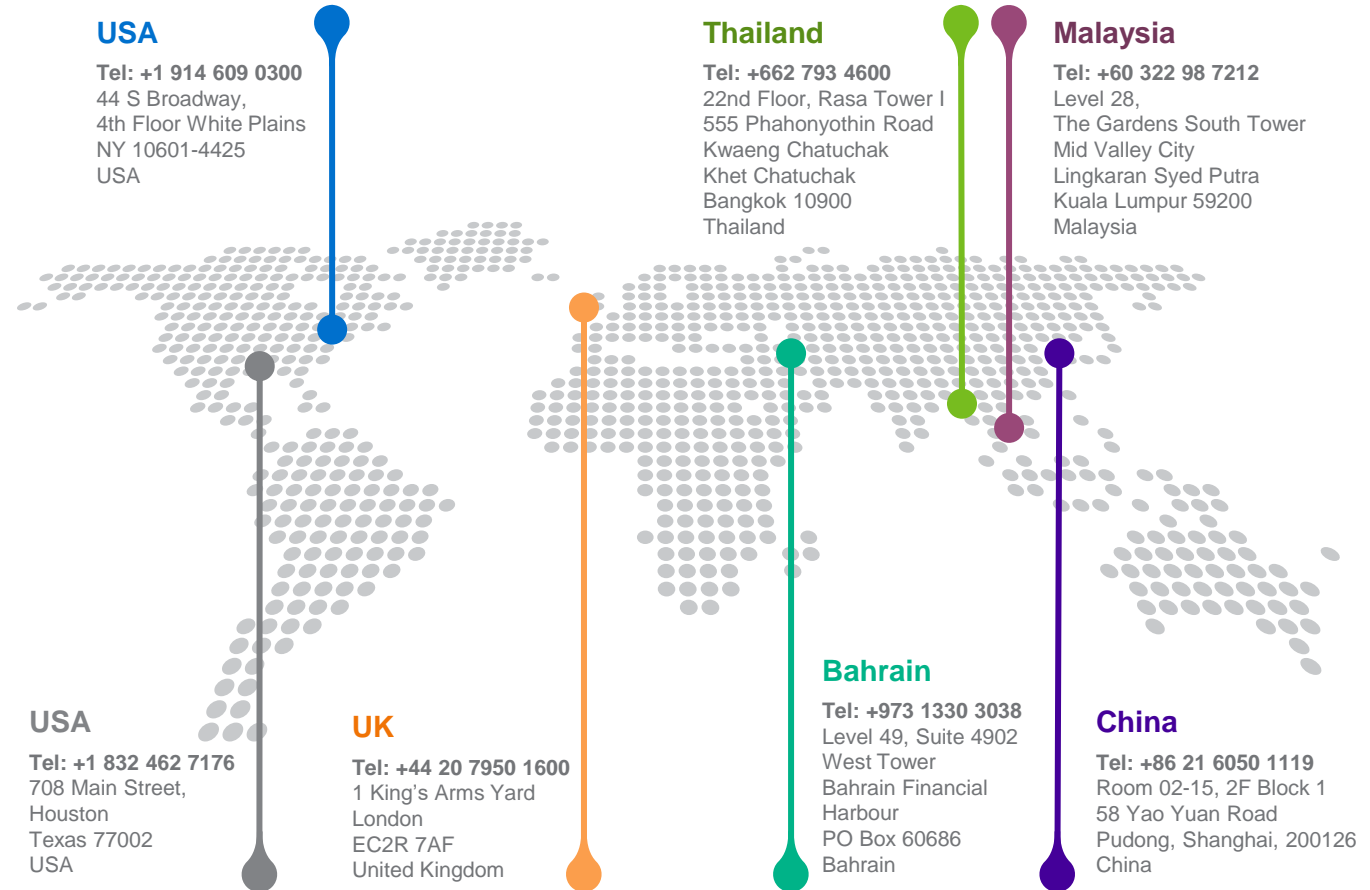
Power-to-Liquids eFT



Refer to HVO Section



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