



**MONTANA
RENEWABLES™**



Building a SAF Business From the Ground Up



ABOUT MONTANA RENEWABLES

- HEFA producer, 660MM liters per year in total renewable products
 - Renewable hydrogen (feed for hydrotreater)
 - Renewable diesel
 - Renewable naphtha (gasoline blendstock today, renewable plastics tomorrow)
 - **Synthetic Paraffinic Kerosene (SPK)**—about 20-25% of current production
 - This is the “sustainable” portion in a SAF blend
- 2022: MRL placed in service (completed conversion of existing reactor, other infrastructure)
- 2023: Experience and expansion (new SMR and PTU)
- 2024: Achieved **170MM lpy SPK runrate = 340MM lpy SAF** (at 50:50 blend per ASTM 7566)
- **Trailblazers**
 - World Energy—first domestic SAF producer
 - Montana Renewables—second and currently largest North American producer (2004)
 - Diamond Green (pending 2024)
 - P66 (pending 2024)



LOCAL GATHERING OF MRL FEEDSTOCK

Located within the temperate oil seed belt for immediate feedstock access and lower-cost logistics

- 125,000+ barrels per day of feedstock within advantaged logistics range—10X coverage
- Burlington Northern ag commodities heavy duty rail



Canola



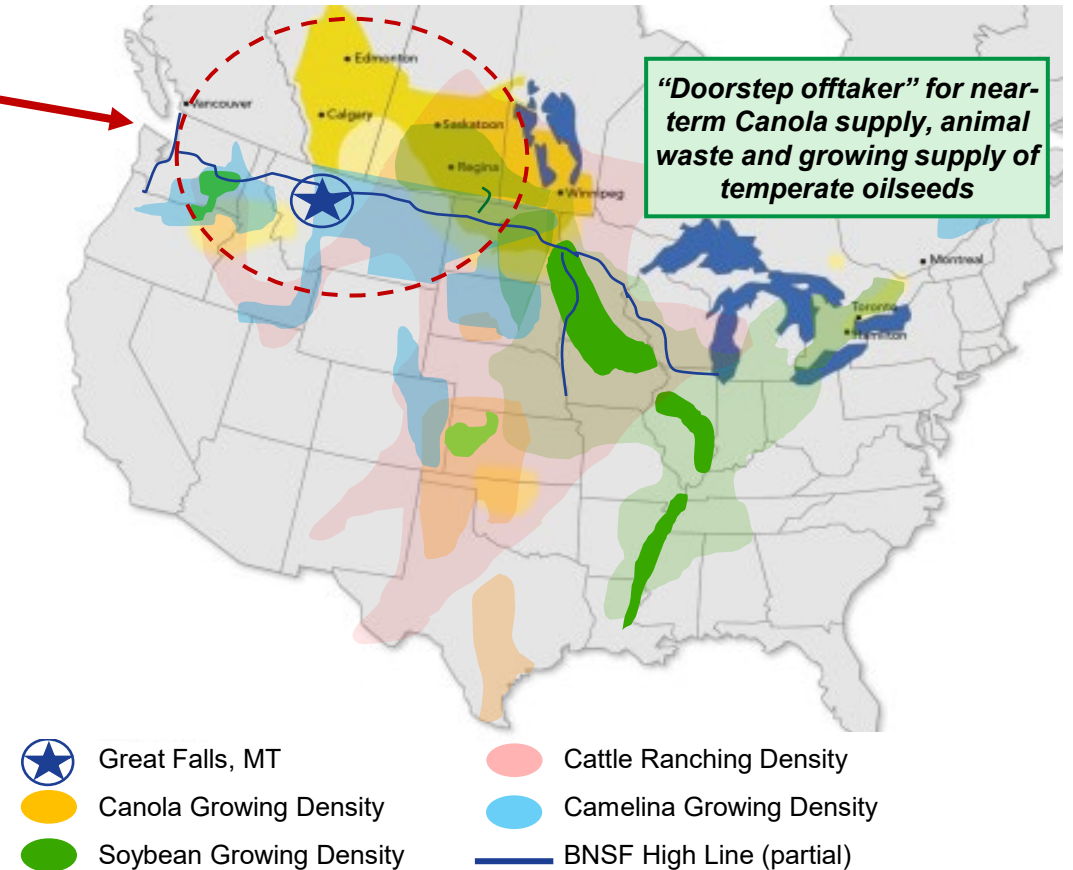
Distiller's
Corn Oil



Tallow

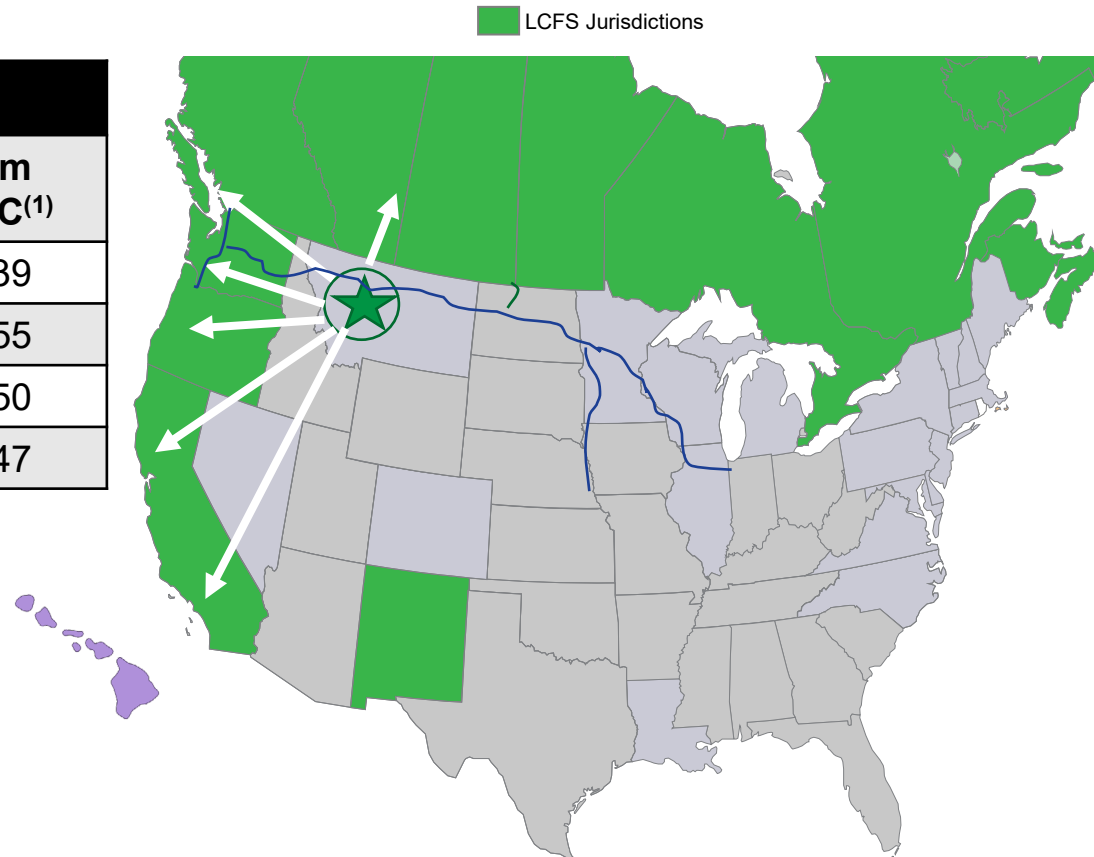


Camelina
Oil



LOCAL PLACEMENT INTO LCFS PRODUCT MARKETS

Product Rail Costs to LCFS Markets		
\$/gallon	From Great Falls	From USGC ⁽¹⁾
To Vancouver, BC	\$0.27	\$0.39
To Calgary, AB	\$0.26	\$0.55
To Seattle	\$0.25	\$0.50
To Los Angeles	\$0.37	\$0.47



Rail is expensive vs product pipelines e.g. ~\$0.07/gallon USGC to NY on Colonial PL⁽²⁾

(1) Average of two renewable diesel plant sites

(2) Beaumont TX to Linden NJ <https://colpipe.s3-us-west-1.amazonaws.com/media/Colonial-FERC-99.88.0-Index-Increase-4861-1278-4579.1.pdf?mtime=20240531054825&focal=none>







GETTING SAF OFF THE GROUND—SIMPLE TRUTHS

1. There will not be any SAF recovery from existing capacity
 - ***Unless SAF is priced above Renewable Diesel***
 - Because the same kerosene molecules can simply stay in the diesel pool
2. There will not be any new capacity constructed
 - ***Unless lenders and investors believe they will recover their money***
3. Scalable industry requires pipeline economics
 - ***Existing distribution infrastructure is advantaged on capex, opex, capacity***
4. Key investor concerns:
 - Technology risk
 - Operating company competencies
 - Stability of regulatory policy



2024 SAF PRODUCERS IN WESTERN HEMISPHERE

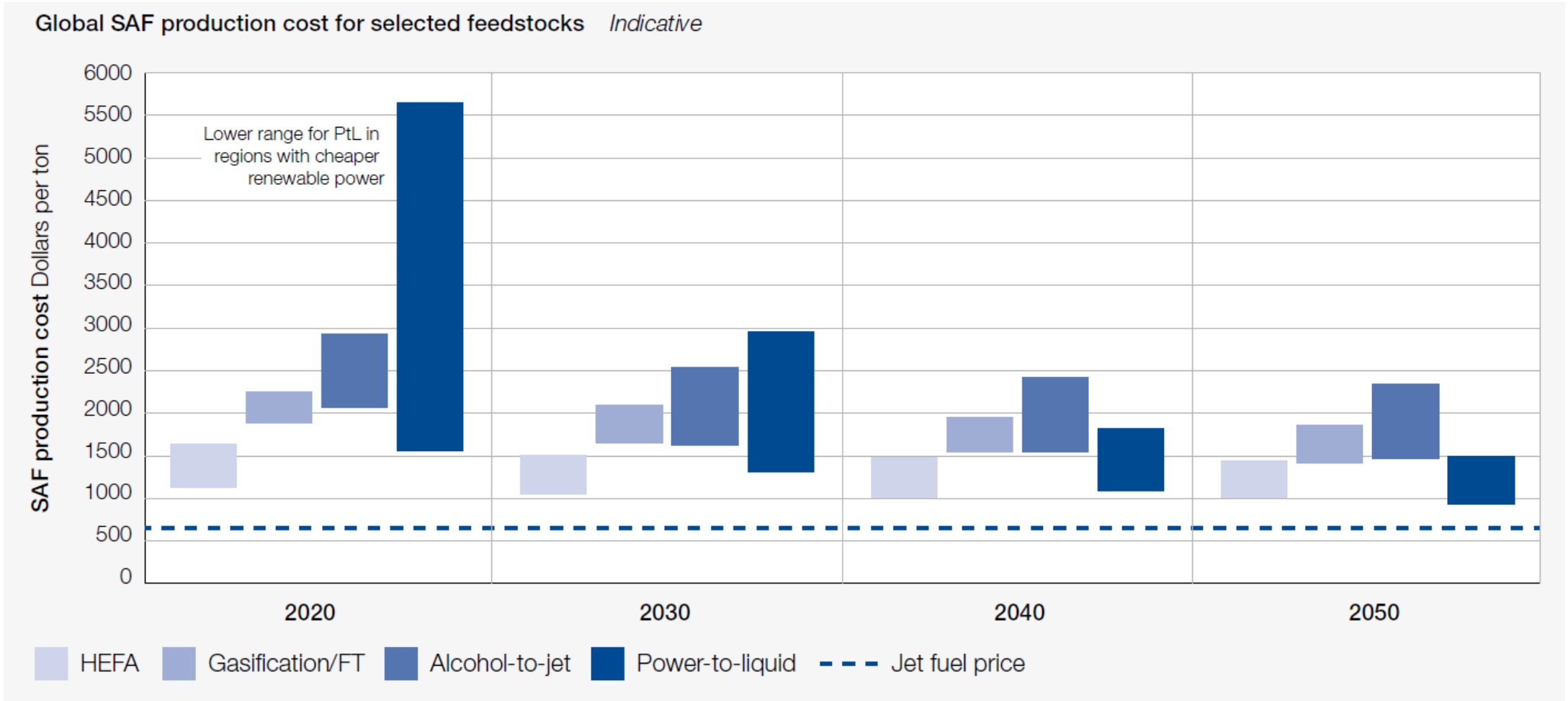
Legacy Operating Company?	Pending Completion	Running
YES	 	 
NO	<p>~ 3 dozen startup proposals (mostly HEFA or ATJ) <i>not yet under construction</i></p>	

Difficult for startup proposals to attract risk capital for construction



TECHNOLOGY RISK

Non-HEFA technologies are higher cost, which risks recovery of investment

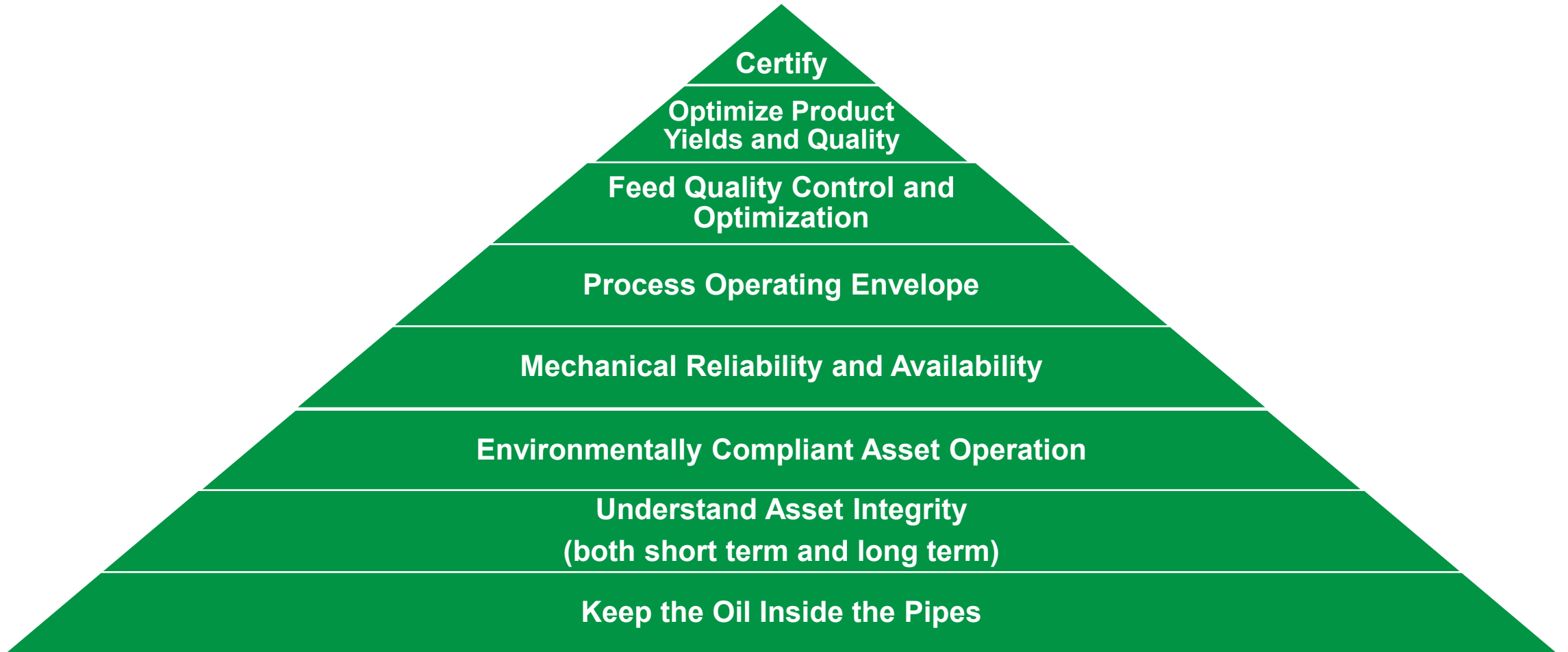


In Collaboration with McKinsey & Company: Clean Skies for Tomorrow, Sustainable Aviation Fuels as a Pathway to Net-Zero Aviation, Insight Report Nov 2020 World Economic Forum



OPERATIONAL COMPETENCIES RISK

Petroleum refiners have been doing this for 100+ years and *still* had renewable teething problems



REGULATORY POLICY RISK

The biggest challenge and the biggest opportunity?

- MRL assumes a continuing energy transition
 - In which “stroke-of-pen risk” is reduced by the tapestry of different policies & regulations in multiple States and Provinces, Federal Canada and Federal US (EPA, Ag, DOE, FAA)
- Although regulatory policy is collectively supportive, important details can still be materially at odds
 - Vegetable oil feedstock yes/no under different State/Federal legislation
 - Volume mandates (EU, Singapore, UK, etc) vs North America complex incentive structures
 - US incentives unstable over a capital investment planning horizon—i.e. specific disincentives introduced by erroneous 2023-25 RVO; BTC/PTC “donut hole”; broken permitting process; etc.
 - Canadian incentives in the cross-hairs for political rhetoric (“ax the tax”)
- Jet fuel uniquely requires international alignment for compliance and certification mechanics
 - Key “experimentation” underway but not yet aligned
 - Chain of custody accounting and book & claim mechanics will be a key enabler e.g. Shell Avelia⁽¹⁾

(1) <https://aviation.shell.com/avelia-panel-interactive>



COMMERCIAL VALUE CHAIN AND THE “LAST MILE”

- Value chain is lengthy
- Crosses unrelated industry boundaries

FARM & RANCH FEEDSTOCK:



SPK and SAF:



Industry will evolve over time to minimize total cost to serve customers, but chain length and complexity introduce significant price volatility





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