US SAF Policy & Targeted Opportunity Regions

Launch Webinar
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Opening Remarks

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SAF Policy: Refueling Aviation in the US

Alex Piper

RMI

RMI

Refueling Aviation in the United States

Evolution of US Sustainable Aviation Fuel Policy

Report / February 2024

Federal Policy

The Three Pillars of US Federal SAF Policy

US SAF Grand Challenge

3 Billion Gallons by 2030

35 Billion Gallons by 2050

Renewable Fuel Standard Program

Inflation Reduction Act

40B SAF Credit

45Z Clean Fuel Credit

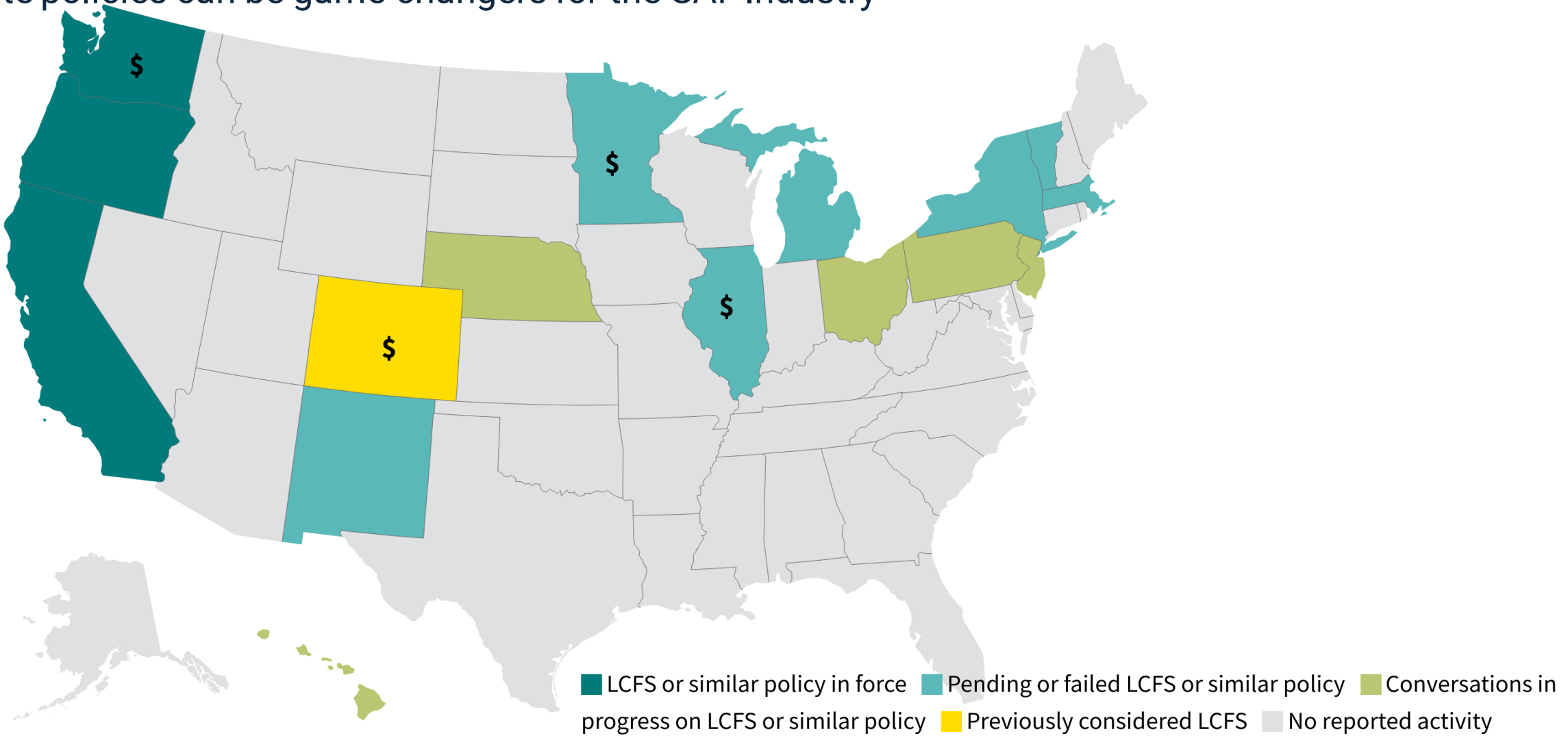
Can US achieve its goals?
Looking at current project pipeline, a gap will exist in 2030.

Can it handle advanced fuels like e-SAF?
Currently it can't handle e-SAF.

Is the credit duration too short?
40B SAF credit runs out in 10 months. 45Z ends by 2027.

State-Level Policy

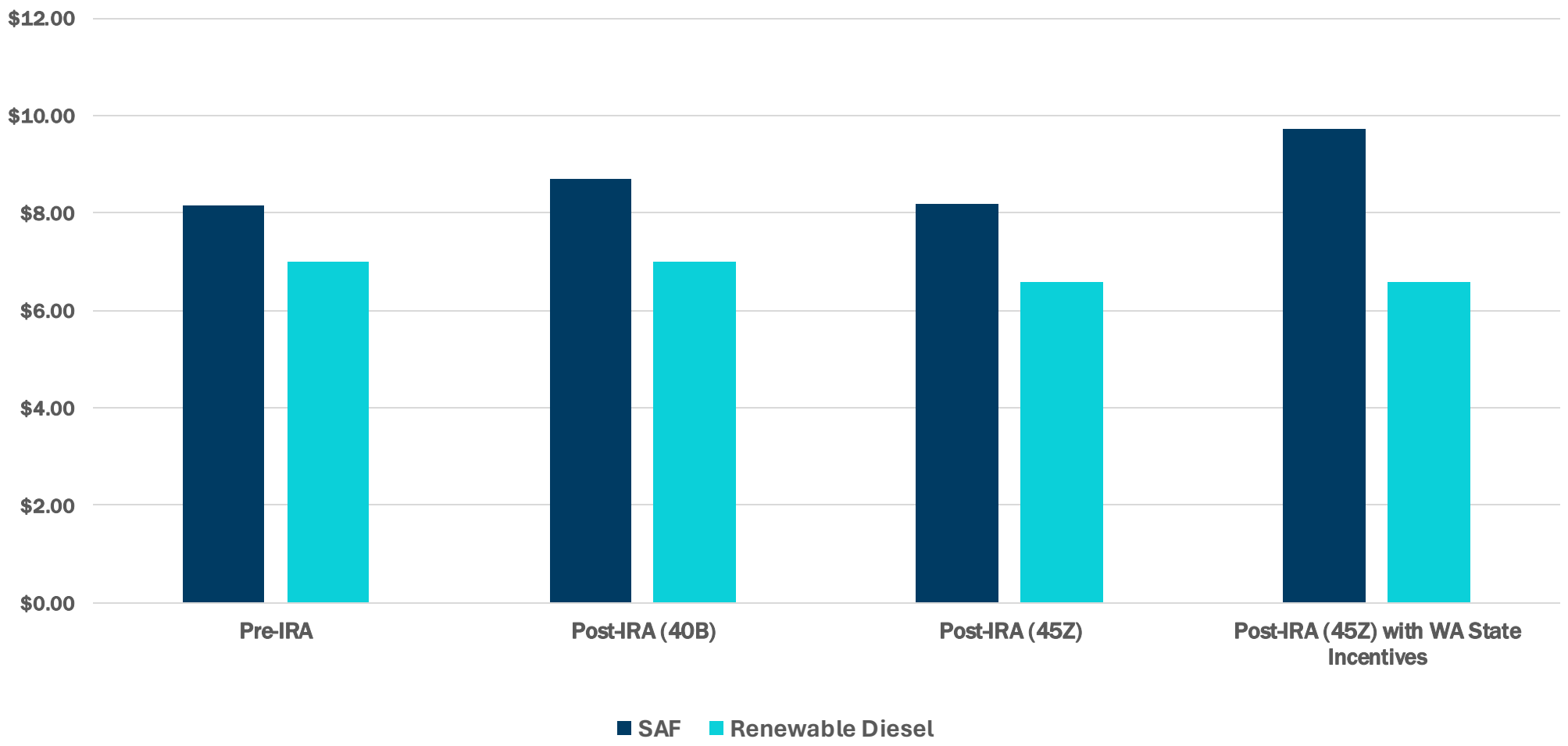
State policies can be game-changers for the SAF Industry



The "$" indicates direct incentives for SAF in the states of Washington, Colorado, Minnesota, and Illinois.

Stacking State & Federal Incentives

New analysis suggests SAF outcompetes Renewable Diesel when considering the combined incentive stack.



Policy Takeaways

Given the urgency of decarbonizing the aviation sector, creative and certain policy implementations will be critical for the industry to innovate, finance to invest, and for airlines to adopt SAF as a decarbonization solution.

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SAF - Targeted Opportunity Regions

Aamir Shams, Joey Cathcart & Corey Stewart

Sustainable Aviation Fuel Targeted Opportunity Region-Rocky Mountain Region

Sustainable Aviation Fuel Targeted Opportunity Region-Great Lakes Region

Defining a TOR

Targeted Opportunity Regions (TORs) are select regions in the US that have relevant industrial networks and significant SAF scaling opportunities. These regions can play a crucial role in helping the US aviation sector achieve its decarbonization targets. TORs are not limited to the US and this concept can be scaled globally.

Feedstock Availability

Legislative Incentives

Demand Centers

Existing Infrastructure

Fostering Quicker Action. Realizing SAF's benefits Faster.

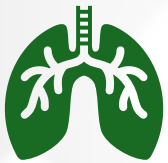
TORs can realize benefits of SAF quicker than a disaggregated process. Specialized Stakeholder Working Groups (SSWGs) will set the tone by building trust, paving the way for quicker action (permitting + offtakes + financing) and decarbonizing the sector in line with US & global targets.

Direct Job Creation

Indirect Job Creation

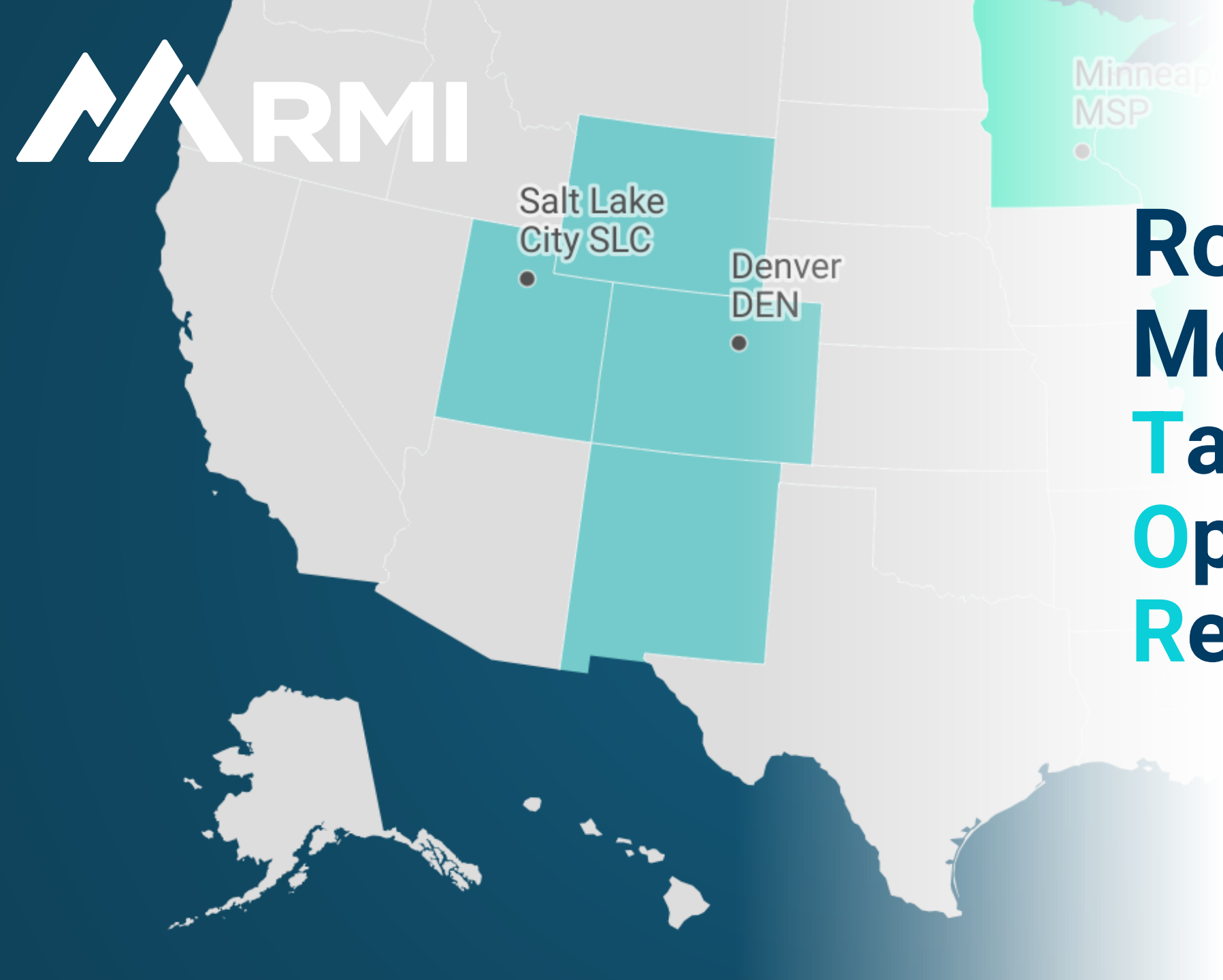
Extra Revenue to Ag-sector & Farmers

Macro-Environmental Benefits



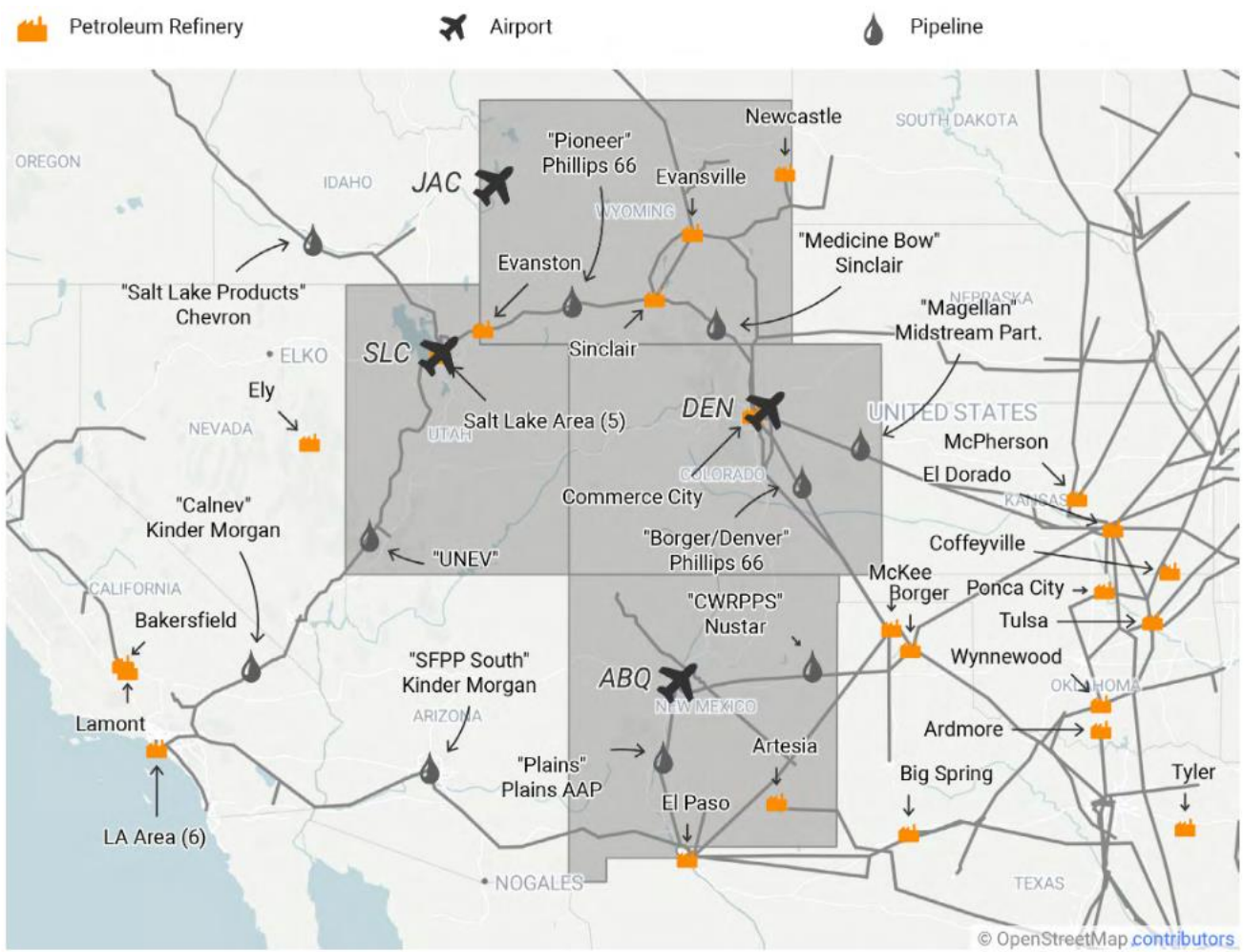
Local Air Quality Benefits

Better Aircraft Performance

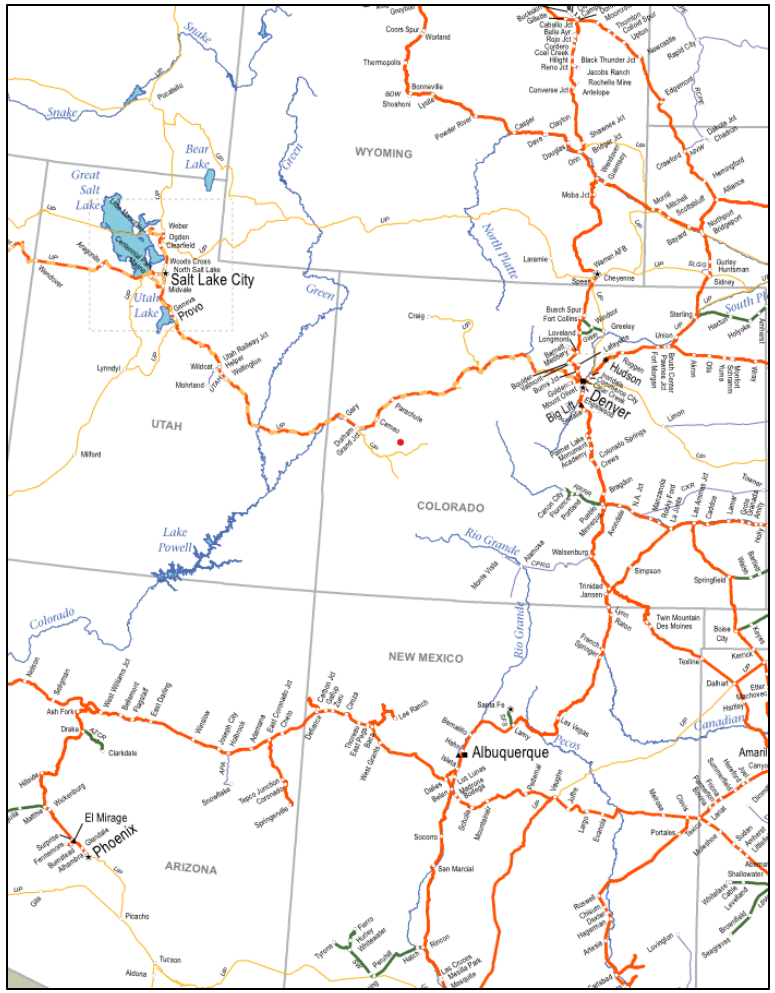


Rocky Mountain - Targeted Opportunity Region

Key Rocky Mountain Attributes for SAF Deployment



RMI Graphic. Source: Energy Information Administration; RMI analysis



Source: BNSF Railway Network Map

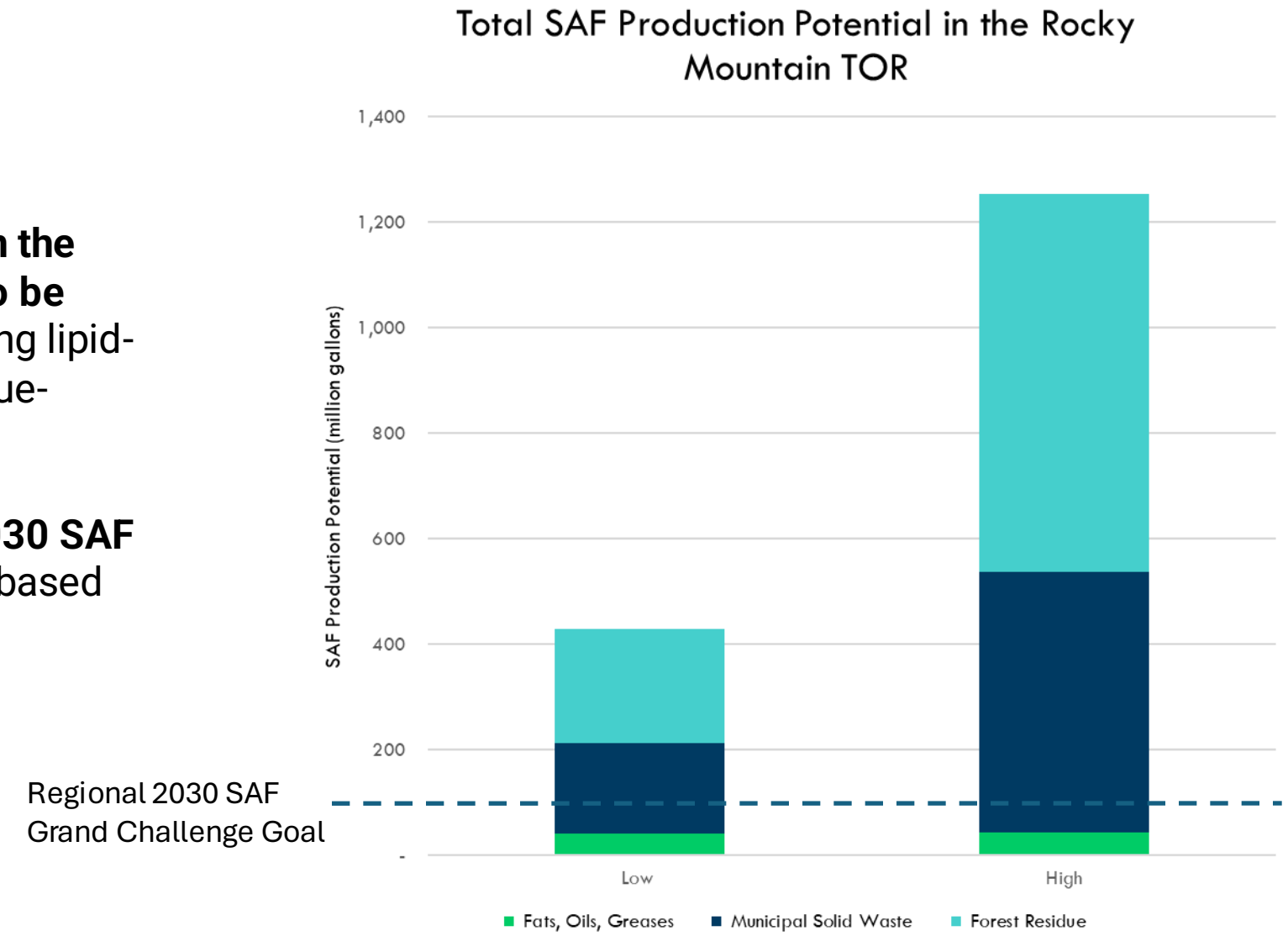
Rocky Mountain TOR will demand 100M+ gallons of SAF in 2030 and ~1.5B gallons by 2050

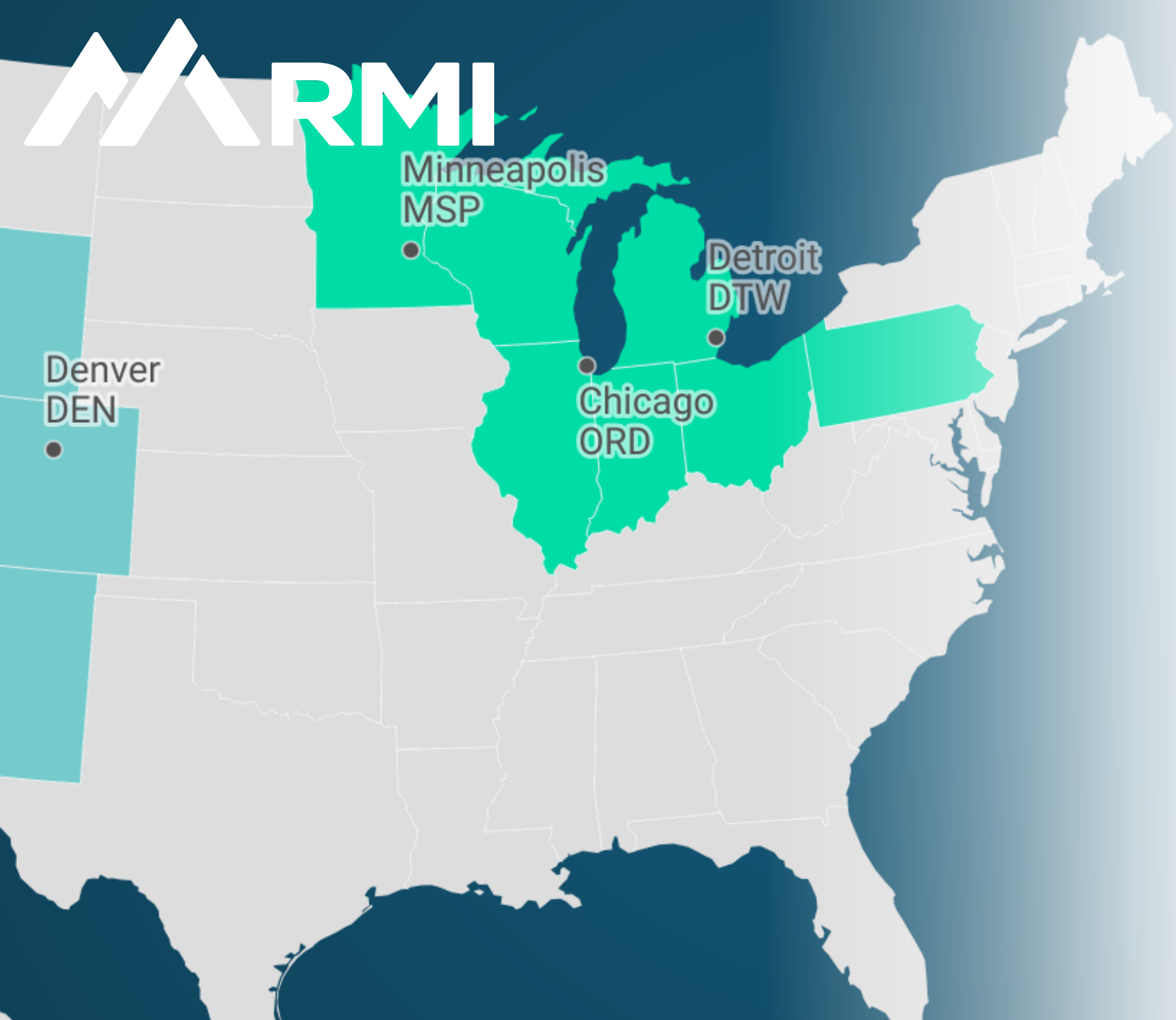
State	Jet Fuel Demand, 2030 (gallons, millions)	Jet Fuel Demand, 2050 (gallons, millions)	RM TOR SAF Grand Challenge Target 2030* (gallons, millions)	RM TOR SAF Grand Challenge Target 2050* (gallons, millions)
CO	640	1,088	79	1,047
NM	34	46	4	44
UT	237	410	29	395
WY	10	13	1	13
Total	**921**	**1,557**	**113**	**1,498**

* US SAF Grand Challenge: 2030 - 3 billion gallons, 2050 - 35 billion gallons

Rocky Mountain TOR production potential exceeds the 2030 Targets

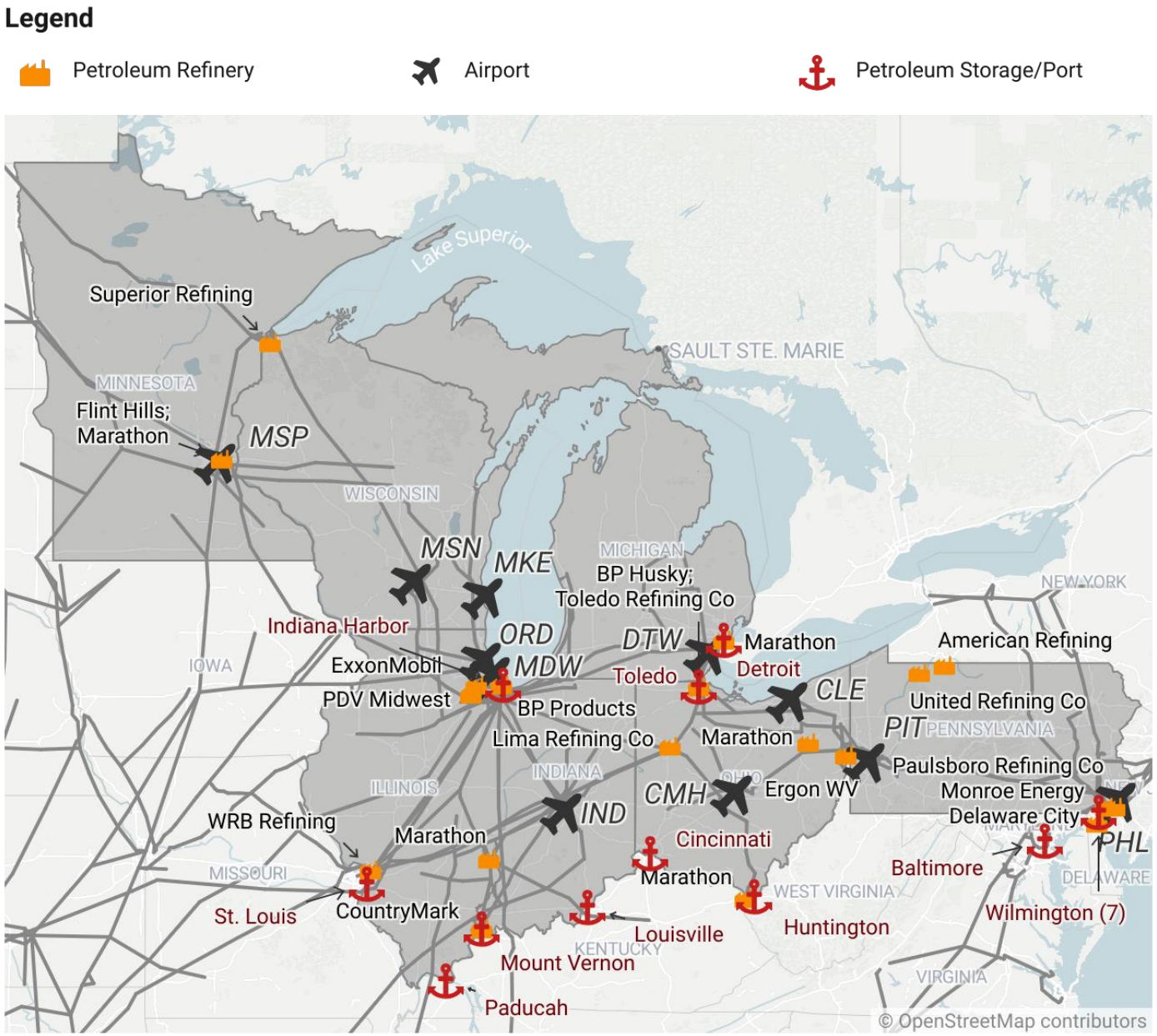
- The total **SAF production potential in the Rocky Mountain TOR is estimated to be 430-1,250 million gallons**, considering lipid-based, waste-based and forest residue-based feedstocks.
- **Production potential exceeds the 2030 SAF Grand Challenge goal** for the region based on projected jet fuel demand



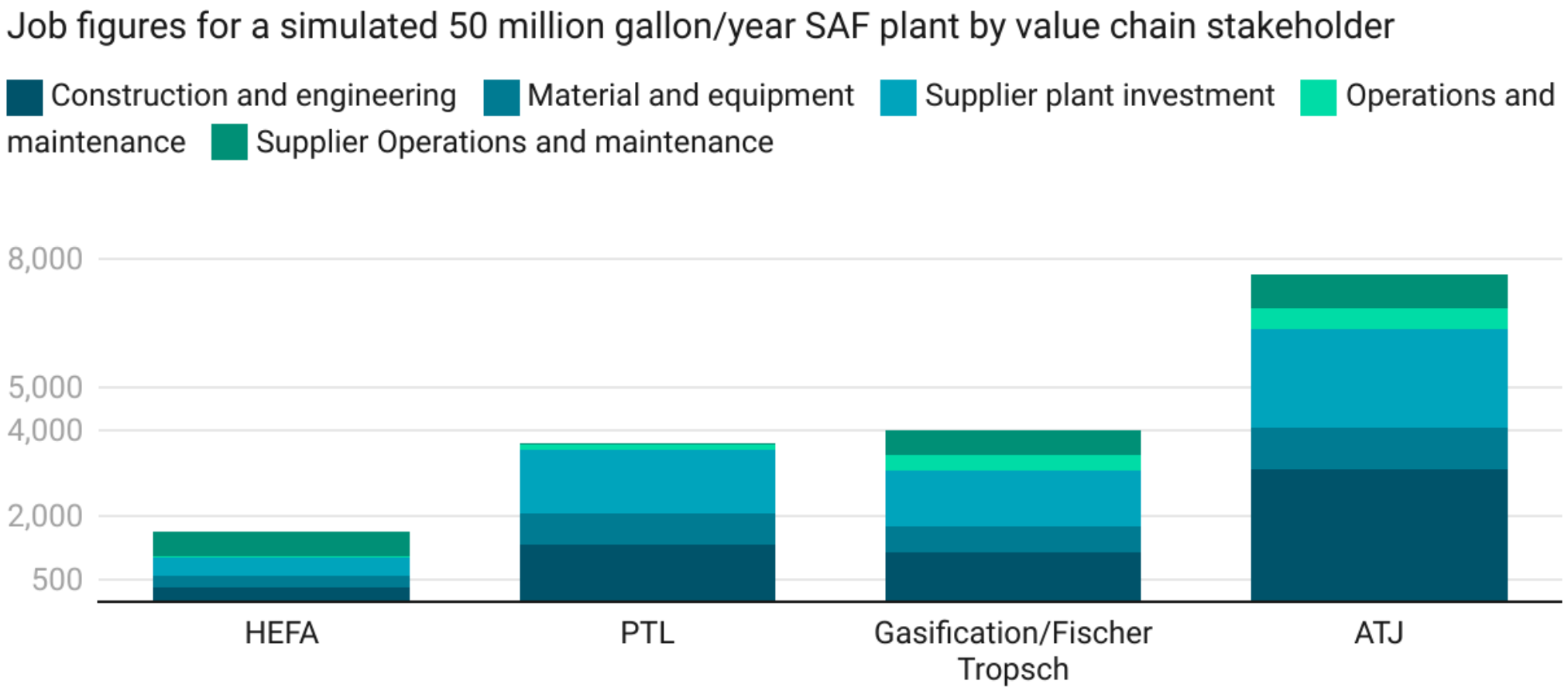


Great Lakes - Targeted Opportunity Region

Key Great Lakes Attributes for SAF Deployment



SAF Refining Creates Skilled Jobs



Source: Rhodium Group analysis with Tao et al. 2016.

Closing Remarks

Andrew Chen
Principal, Climate Aligned Industries
RMI

RMI's Work in the Aviation Sector


Q&A