

October 28, 2019

Renewable Energy Group

Elizabeth Burns-Thompson, Manager, Corporate Affairs



RENEWABLE ENERGY GROUP

Providing Cleaner Fuel Solutions Since 1998



*Renewable low carbon
feedstock*



Leading Refining Technology



Biodiesel & Renewable Diesel

North America's largest Advanced Biofuel producer - serving a growing demand for cleaner diesel fuels

Source: 1. NBB. Energy balance defined as units of energy returned per unit of fossil used for production.

2. EPA Lifecycle Greenhouse Gas Emissions for Select Pathways, 2016

An International Company

➤ #1 in North America



649^{*}
Million gallons
of fuel sold¹



\$2.4^{*}
Billion in
revenue

Note: 1. Includes all bio-mass based diesel and petroleum gallons sold: domestic, international and third party gallons

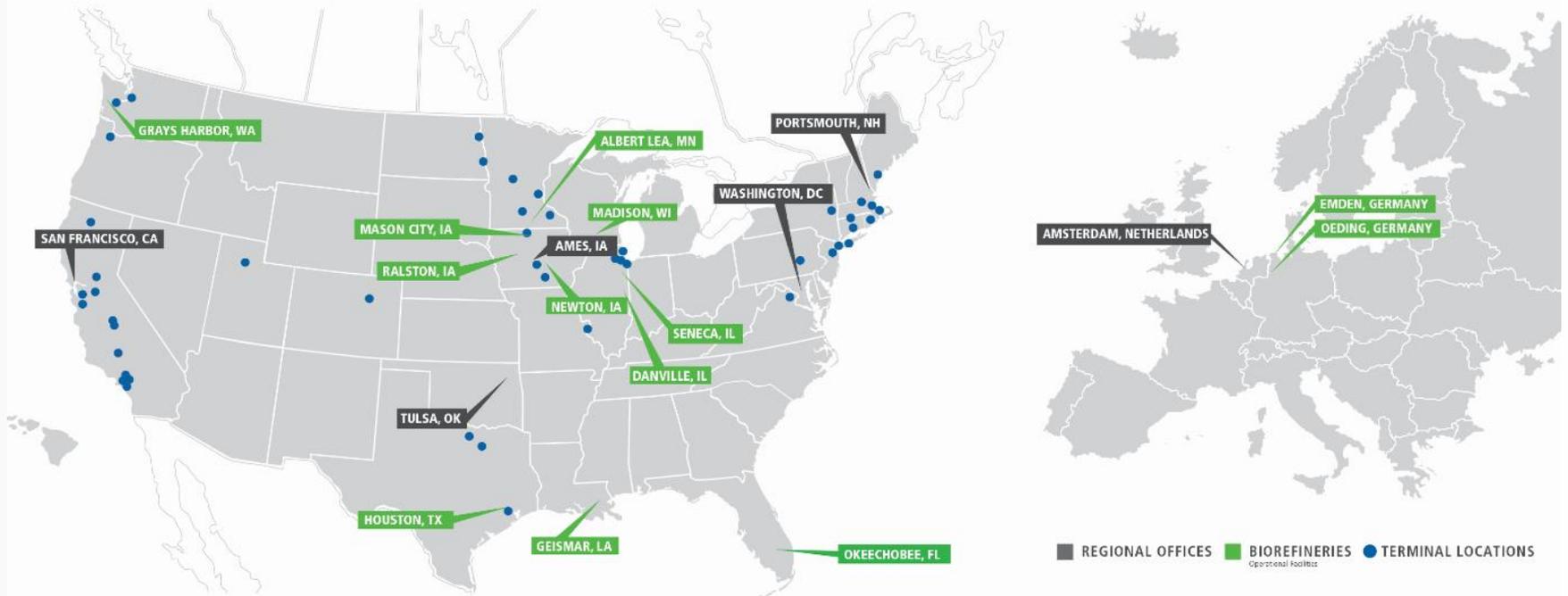
* Trailing 12 months ending December 2018

Source: REG Analysis



© 2019 Renewable Energy Group, Inc. All Rights Reserved.

Production and Distribution



45+

TERMINALS

13

BIOREFINERIES

DELIVERED
PRODUCT TO:

49

STATES

6

CANADIAN PROVINCES

10

COUNTRIES

Diversified Customer Base

REG 2018 Finished Product Sales by Segment ¹

| Travel Center/ Convenience Store | Petroleum Major | Distributor/ Jobber | Other ² |
|-------------------------------------|-----------------|------------------------|--------------------|
| 36% | 34% | 26% | 4% |



Notes: 1. Includes only North America Biomass-based diesel sales gallons; for full year 2018

2. Includes sales to traders, fleets, home heating, Co-ops and others

Source: REG Analysis



What We Do

Biomass-based diesel feedstocks



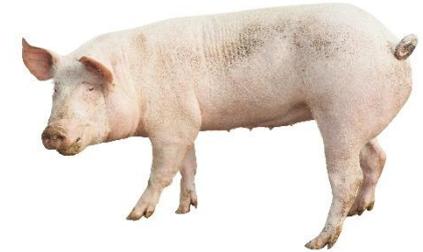
Soybean Oil



Distillers Corn Oil



Beef Tallow



Choice White Grease



Used Cooking Oil



Algae Oil



Canola Oil



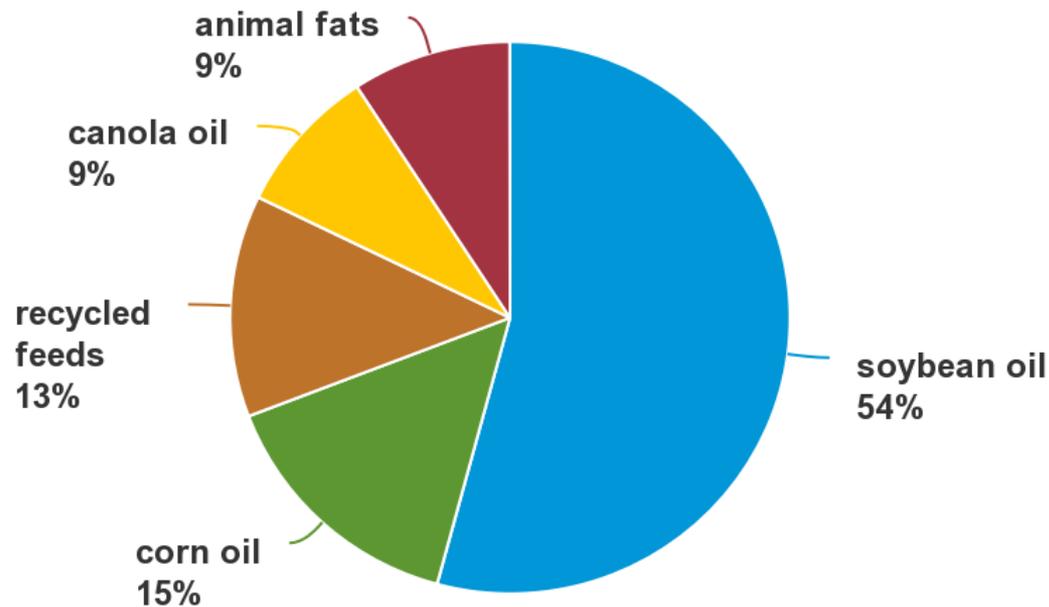
Carinata Oil



Biomass-based diesel feedstocks

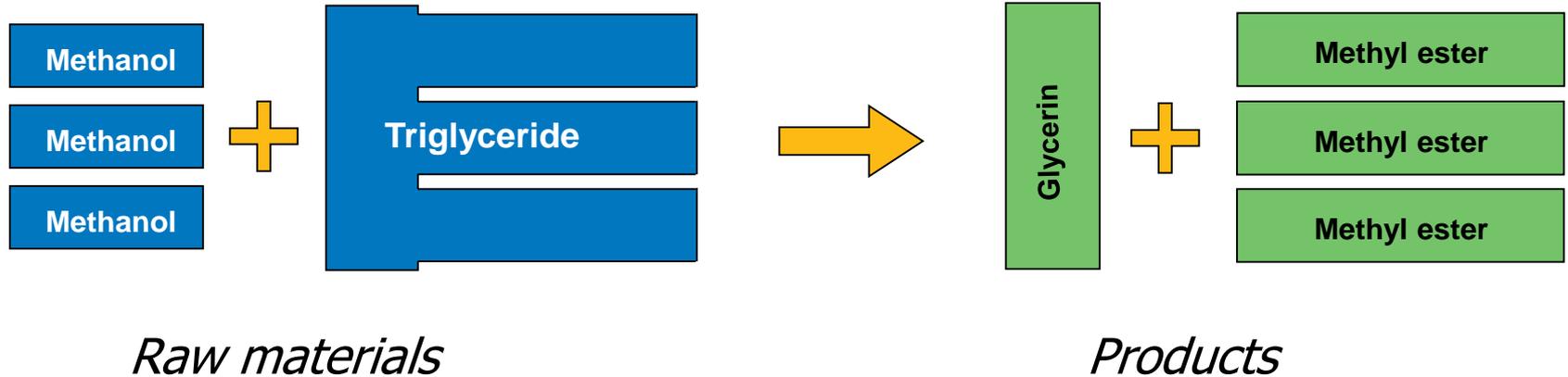
Feedstock inputs to U.S. biodiesel production, 2018

Total=13.9 billion pounds



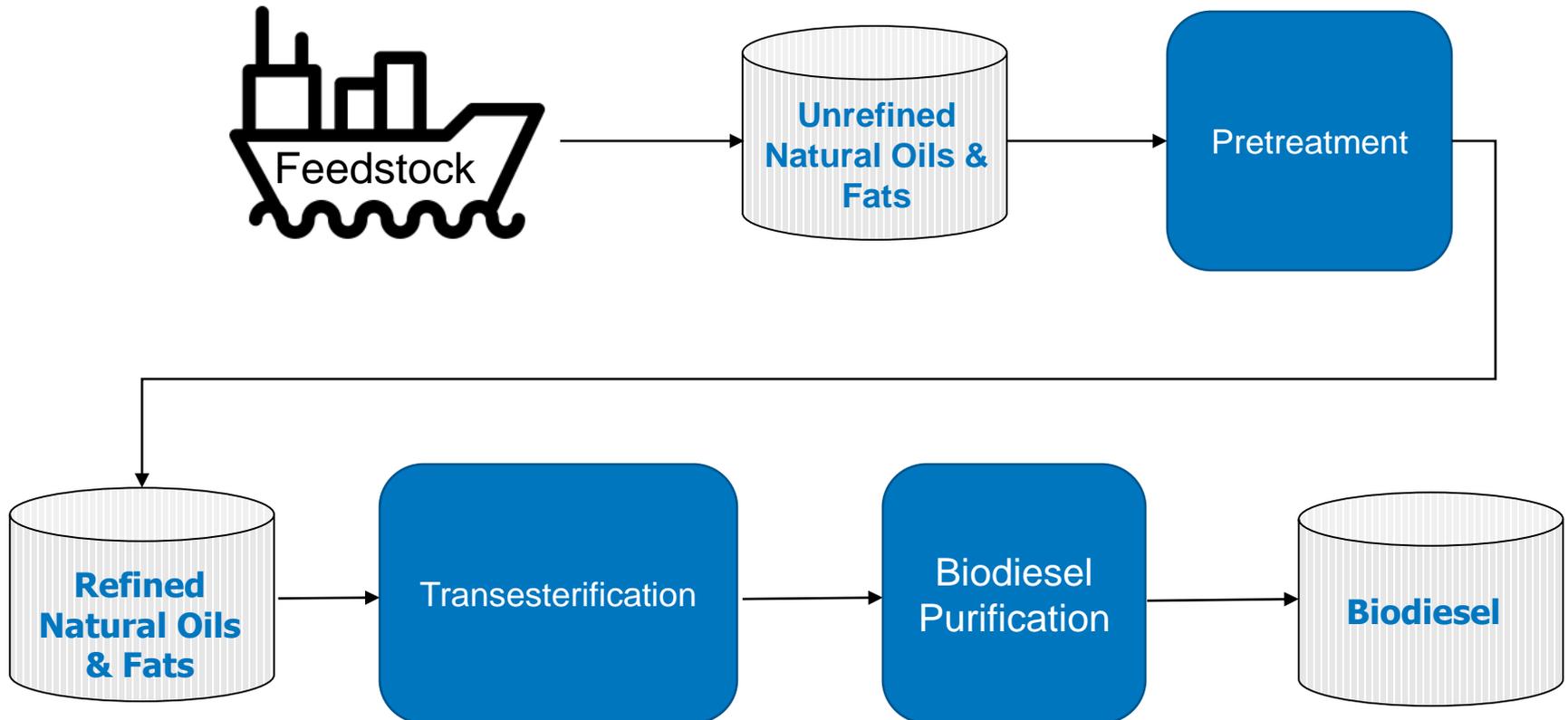
What is Biodiesel?

- Biodiesel is **methyl esters** made from biological oils and fats (**triglycerides**) by **transesterification**



Transesterification reaction

REG Biodiesel Production Overview



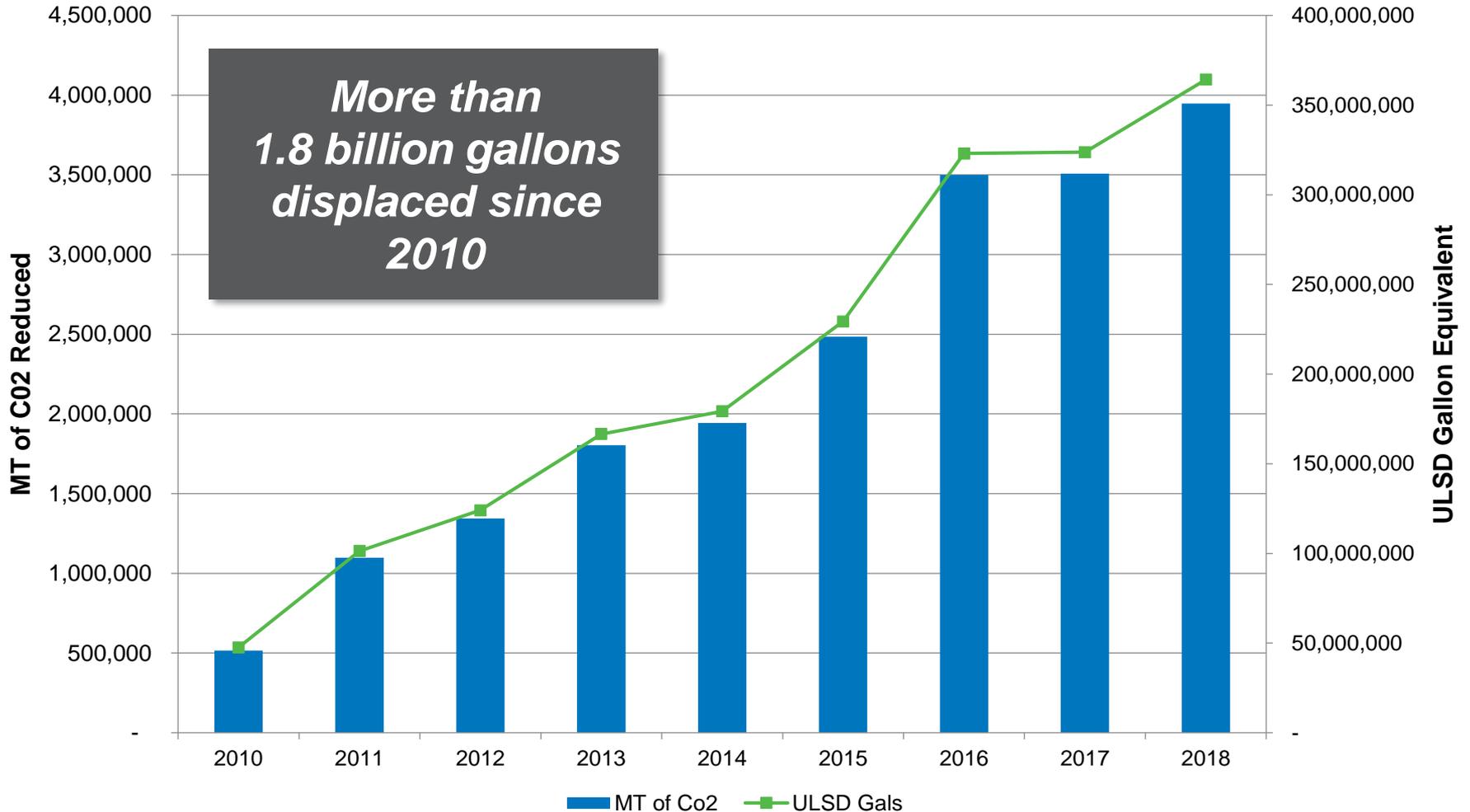
Benefits of Biodiesel

- Oxygenated fuel, which means:
 - Reduced tailpipe emissions
 - Sulfur, carbon monoxide, hydrocarbons and particulates
 - Burn fuel instead of losing it out the exhaust
 - Enhanced lubricity
 - No lubricity additives needed with B2 or higher blends
- Comparable to vegetable oil for transport & handling requirements
- Easily blended at any level with diesel and/or renewable diesel



Greenhouse Gas (GHG) Reduction

REG Total GHG Reduction



REG Driven Carbon Savings

BIOMASS-BASED DIESEL PRODUCED

502 million gallons

LOWER CARBON INTENSITY FUEL

*4.3 million metric tons
of
carbon reduction*



*10.5 billion miles driven by
an average passenger
vehicle*



OR



10 million barrels of oil



Biodiesel Adds Value to Marketplace

- Added \$.63/bushel of soybeans
- Added \$.35/bushel of corn
- Added \$16/head for market steer
- Added \$1.24/head for market hog
- Added \$.01/head for poultry
- Transformed used cooking oil from a cost to a revenue stream for restaurant industry

Source: https://biodiesel.org/reports/20121201_GEN-430.pdf

Source: Study, BIODIESEL DEMAND FOR ANIMAL FATS AND TALLOW GENERATES AN ADDITIONAL REVENUE STREAM FOR THE LIVESTOCK INDUSTRY (Sept 2014)

Source: <https://www.farmprogress.com/biofuel/biodiesel-industry-turns-corn-oil>



Biofuel Role in Colorado GHG Reduction Goals



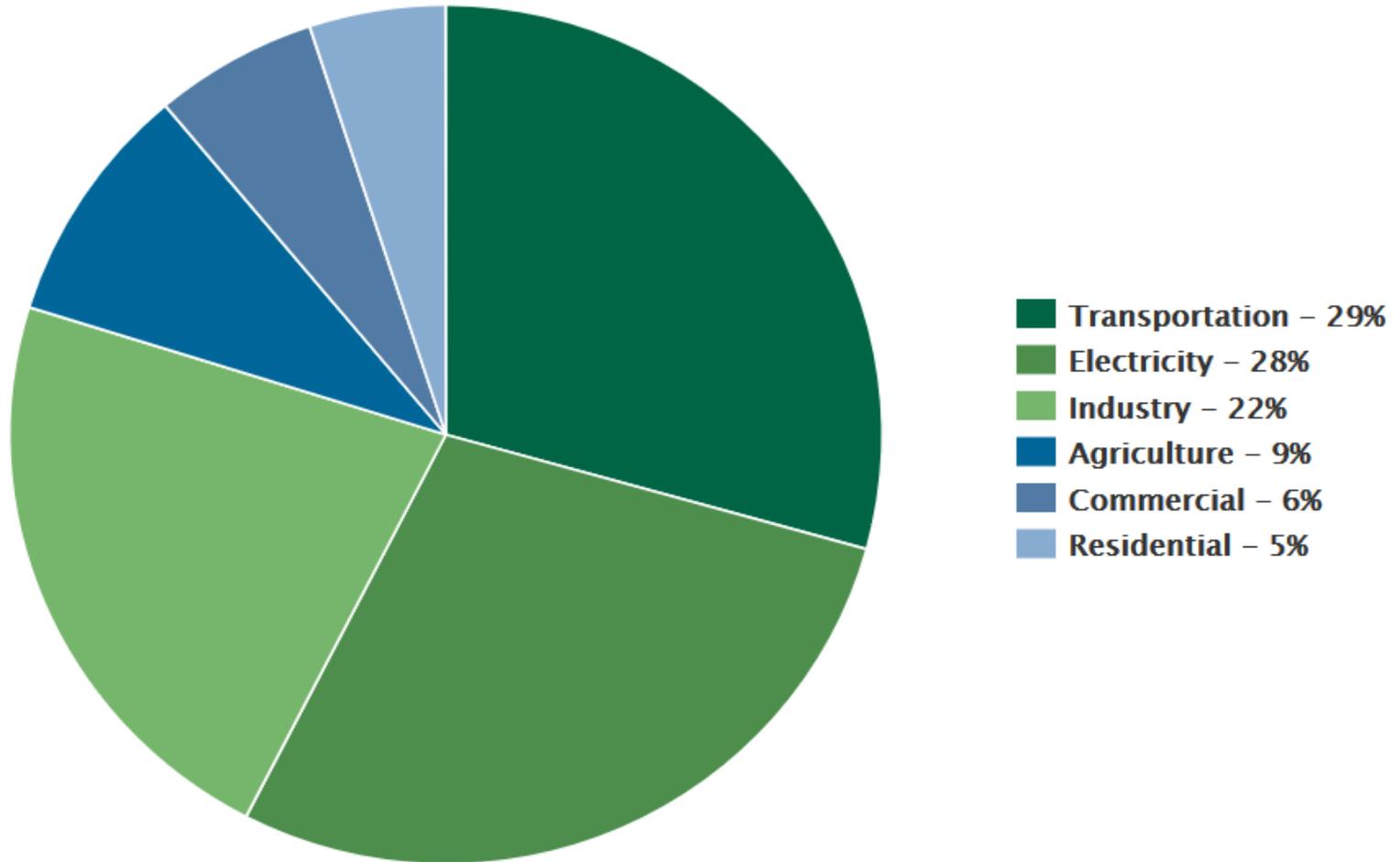
RENEWABLE ENERGY GROUP

Climate Action Plan (HB19-1261)

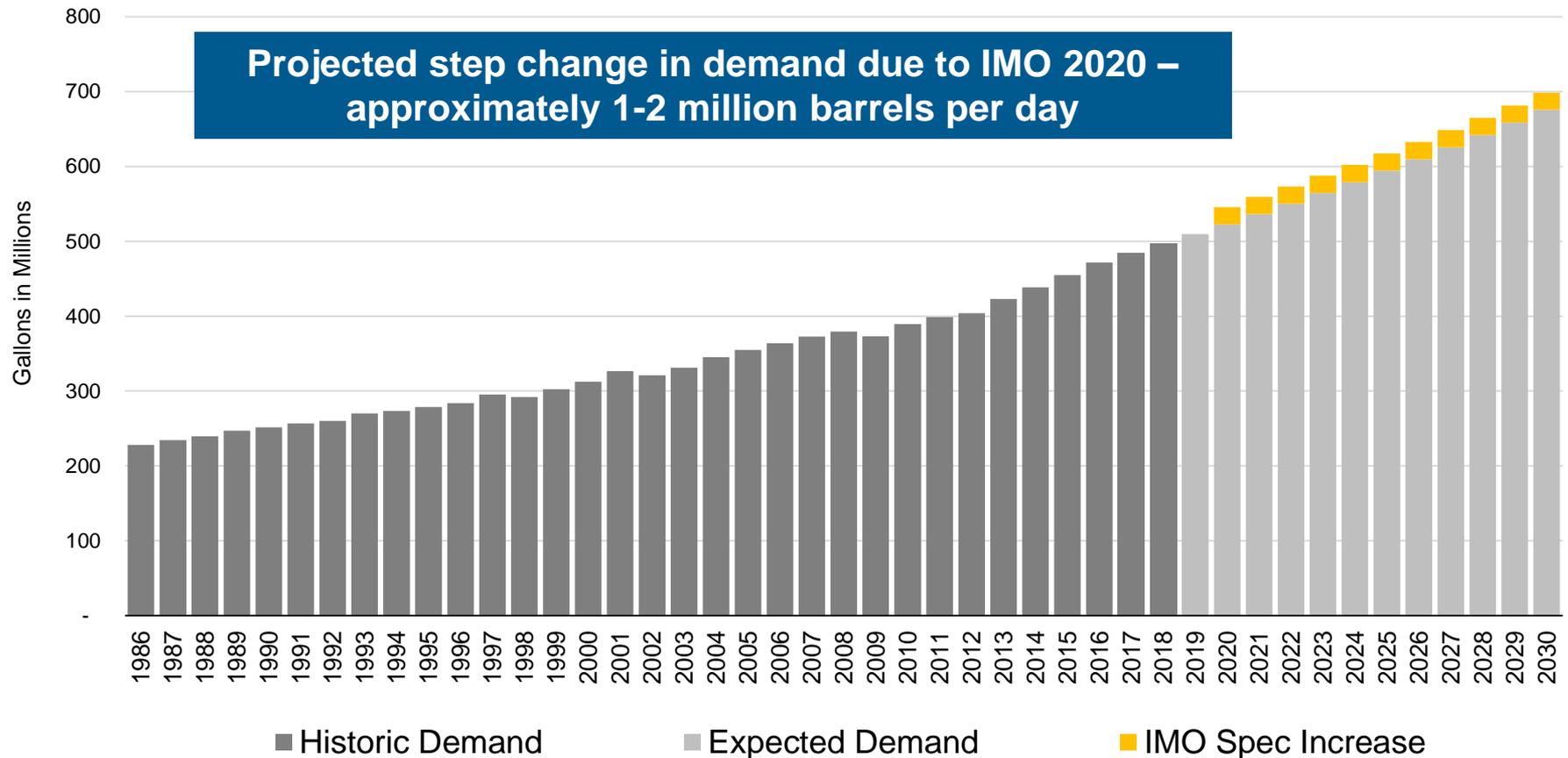
- Goal= reduce GHGs 26% by 2025, 50% by 2030, and 90% by 2050; with 2005 serving as baseline.
- Require the air quality control commission to consider: the benefits of compliance and the equitable distribution of those benefits, the costs of compliance, opportunities to incentivize clean energy in transitioning communities, and the potential to enhance the resilience of Colorado's communities and natural resources to climate impacts.



Role of Transportation in GHG Emissions



Growing Global Distillate Demand



For the World, 3% per year annual growth equals new sales opportunities for diesel of >12 billion gallons per year¹

Notes:
 1. As measured against 2017 projections moving forward
 2. IMO spec change from sulfur specification of marine bunker fuel from 3.5% to 0.5% in 2020, with predictions of 0.8 to 2.0 million bbl/day increase in distillate demand

Source: LMC International, Stillwater Associates



Policy Options to Increase Biofuel

- Clean Fuel Program

- Tax-Based Incentives
 - Tax Credit for Sales/Blending/Usage
 - Production Tax Credit
 - Fuel Tax Differential for Higher Blends

- Infrastructure Development Programs

- Statewide Blending Level Requirement

- State Fleet Usage Standard (*Colorado has B20 standard in place, CO Rev Statutes 24-30-1104 (2)(c)(IV)*)



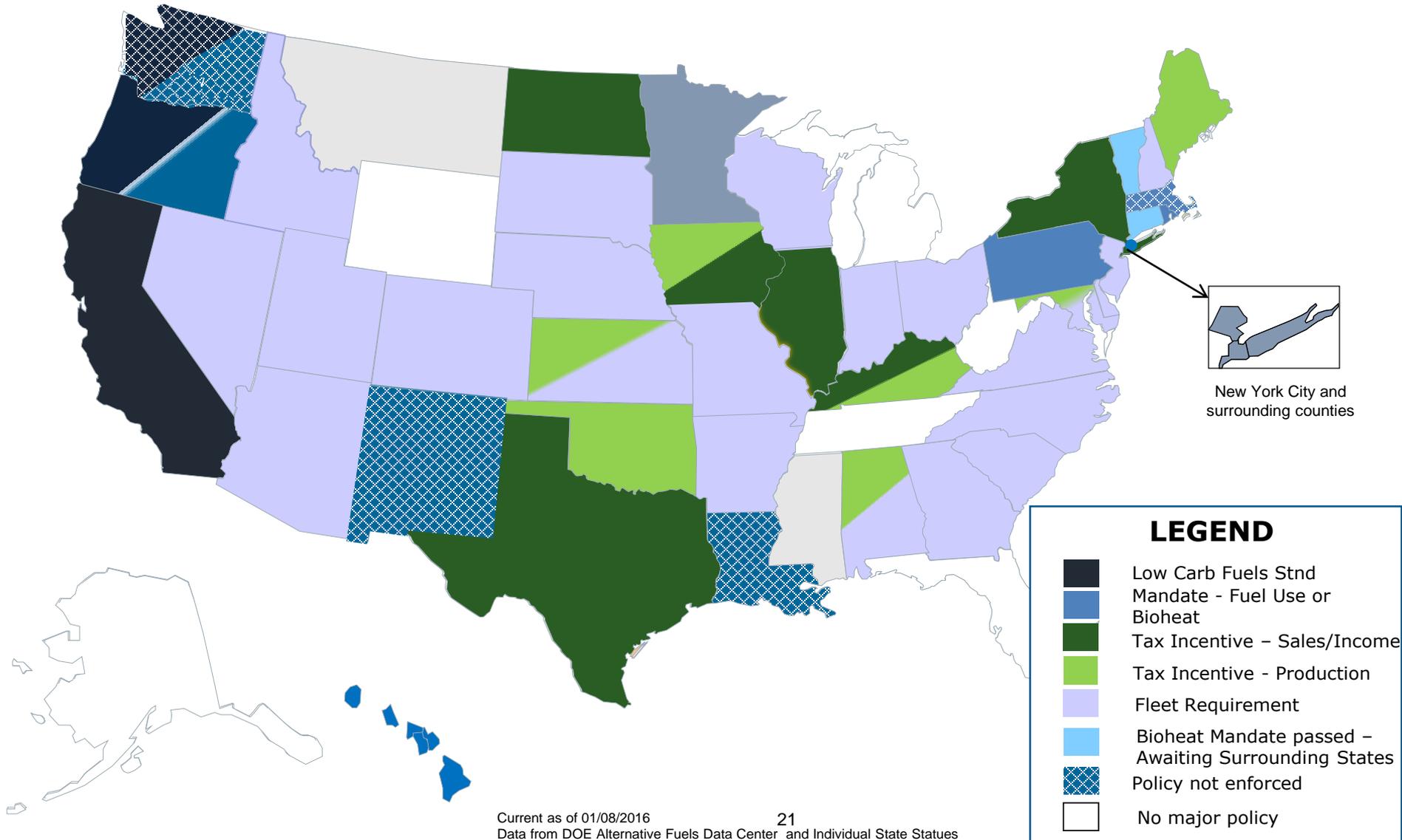
Thank you.

Questions?

Elizabeth Burns-Thompson, *Manager, Corporate Affairs*

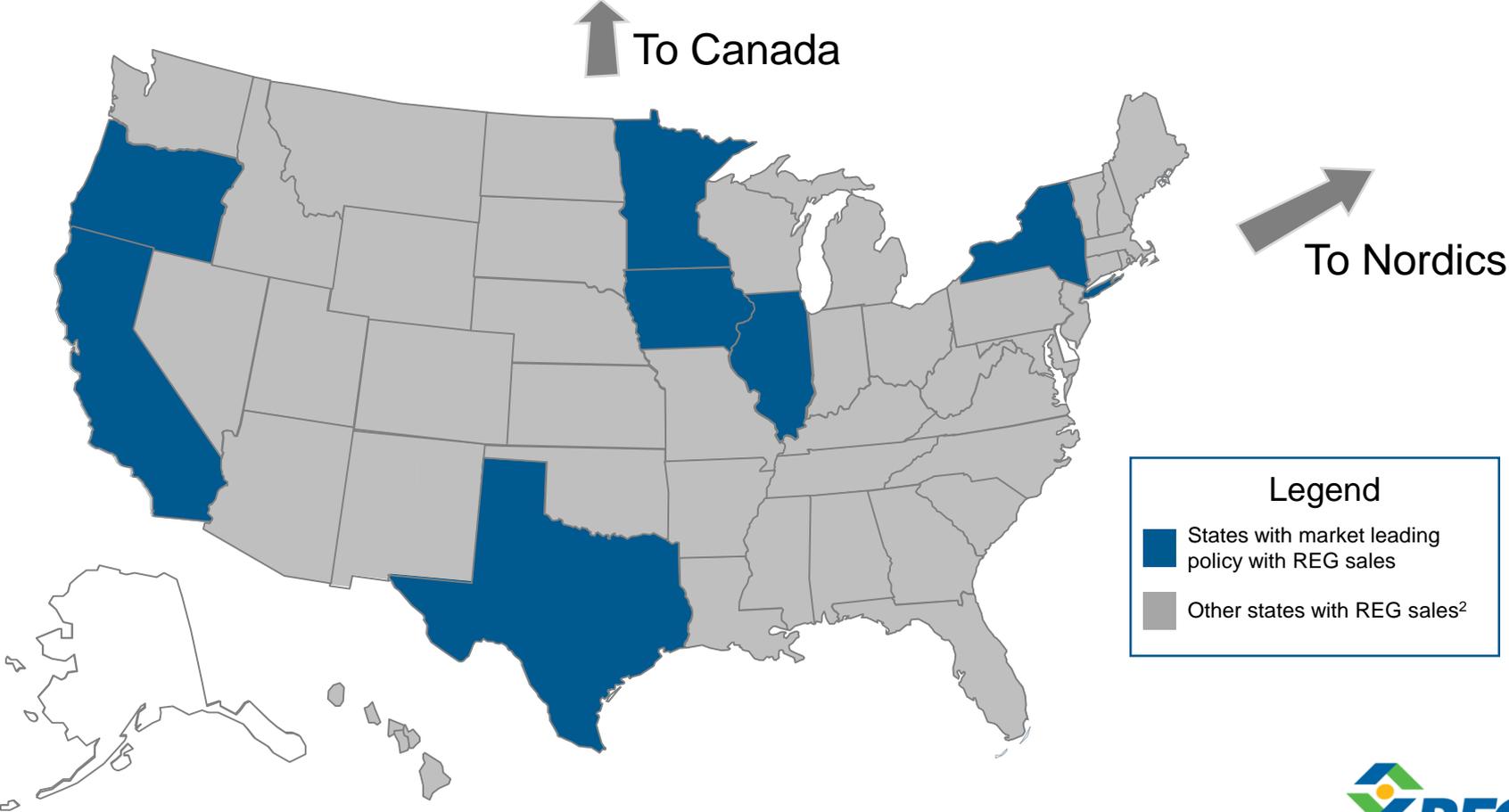
Elizabeth.Burns-Thompson@regi.com ; 319.899.4750 cell

States with Notable Biodiesel Policies 2018



Sales Optimization to Incentivized Markets

In 2018, 83% of sales were to regions where government incentives create higher value markets¹



Note: 1. Based on sales gallons shipped - US produced biodiesel and renewable diesel.

2. Delivered biodiesel, renewable diesel and coproducts to 48 states.

Source: REG Analysis

