

NATIONAL BIODIESEL BOARD

“Biodiesel’s Potential Under Low Carbon Fuel Standards”

IBB/NBB Member Meeting

September 12, 2018

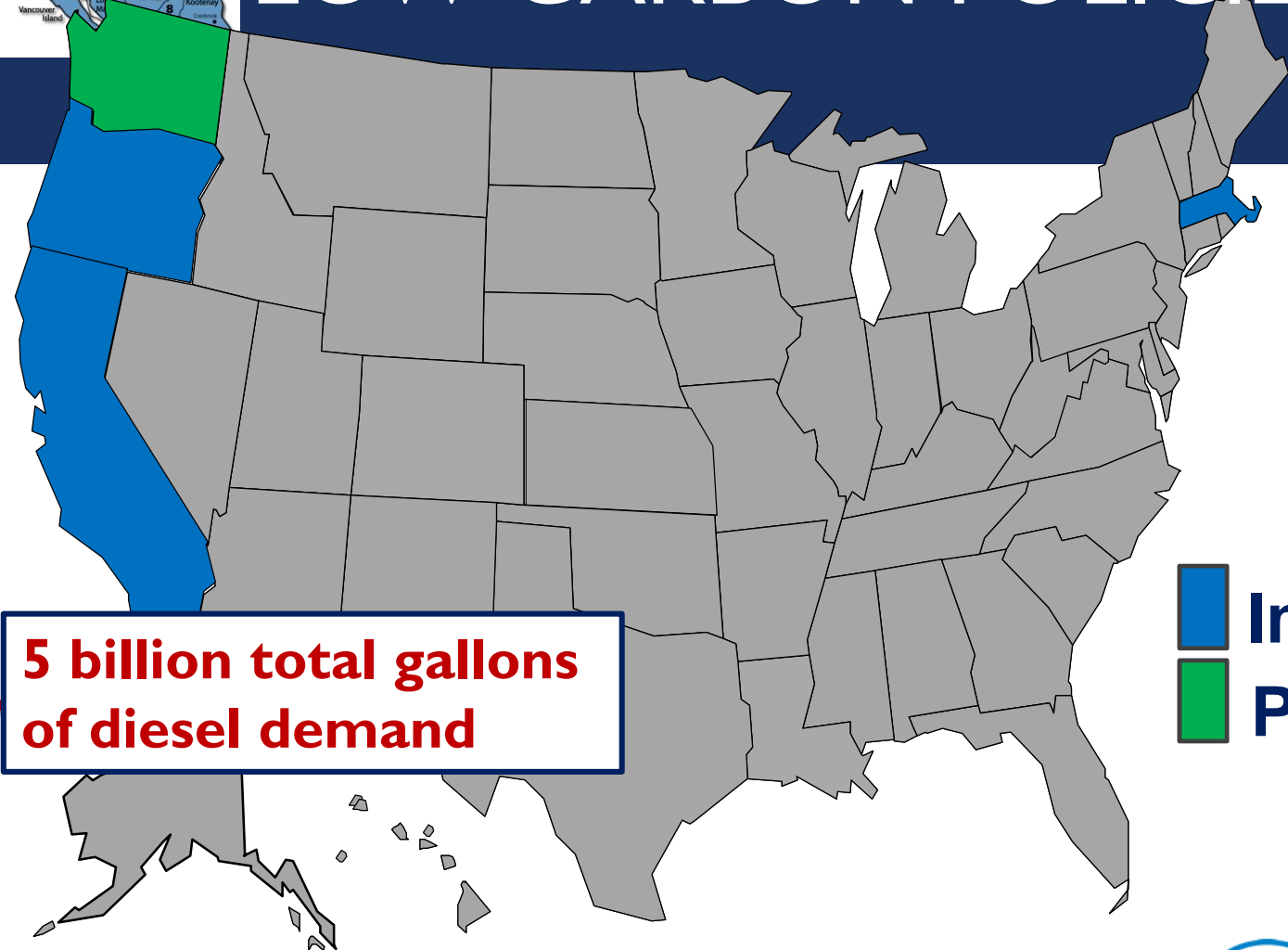
Shelby Neal

Director of State Governmental Affairs

National Biodiesel Board



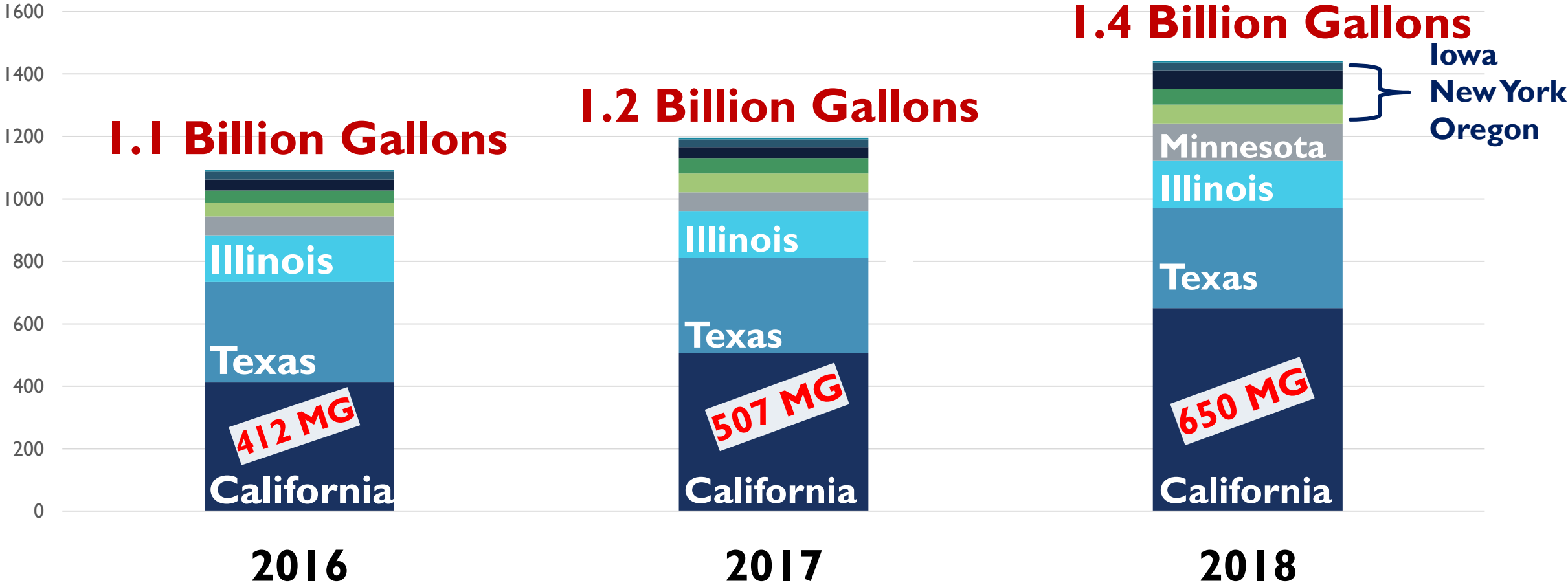
LOW CARBON POLICIES



**5 billion total gallons
of diesel demand**

Implemented
Potential

MINIMUM STATE VOLUMES



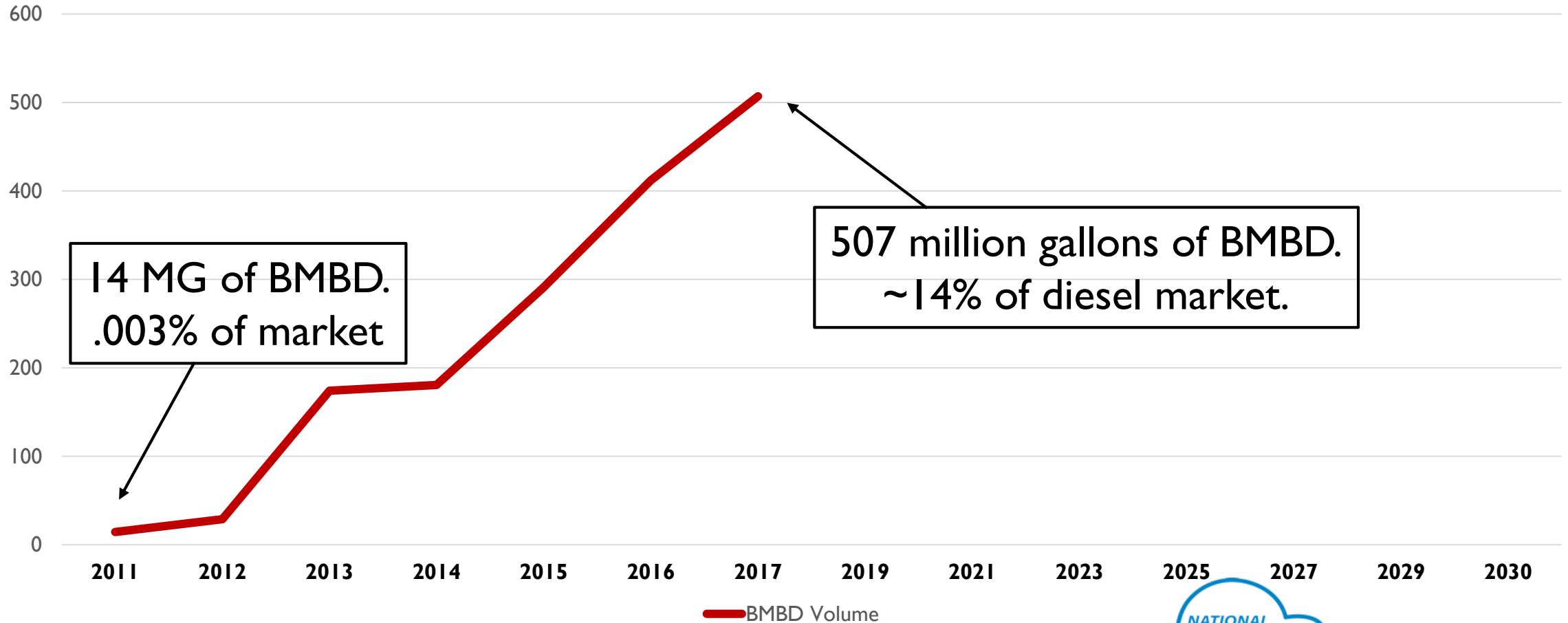
■ CA ■ TX ■ IL ■ MN ■ OR ■ NY ■ IA ■ PA ■ RI





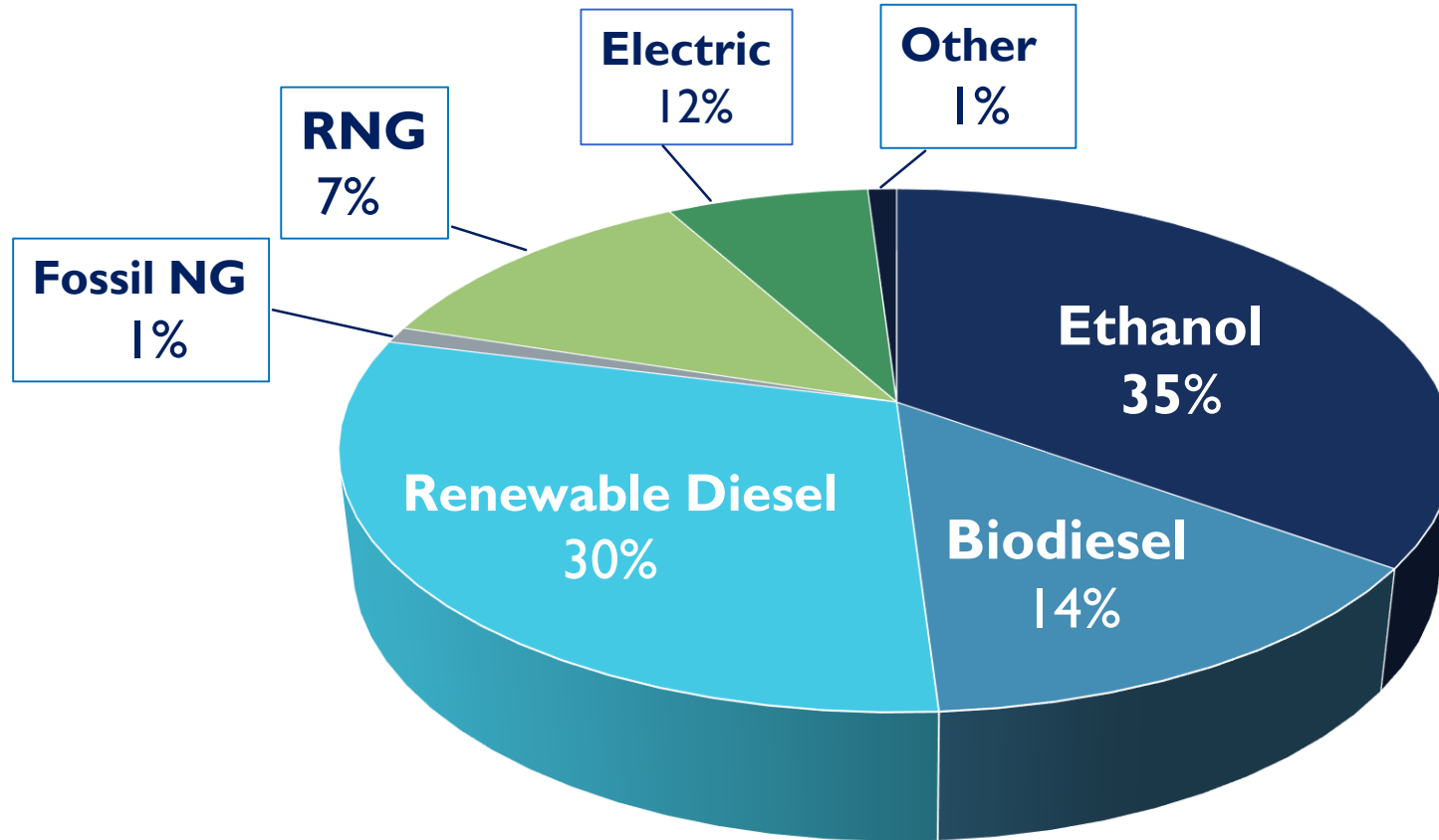
CALIFORNIA

BMBD GROWTH IN CALIFORNIA



Source: 2011-1017 CARB quarterly reports.

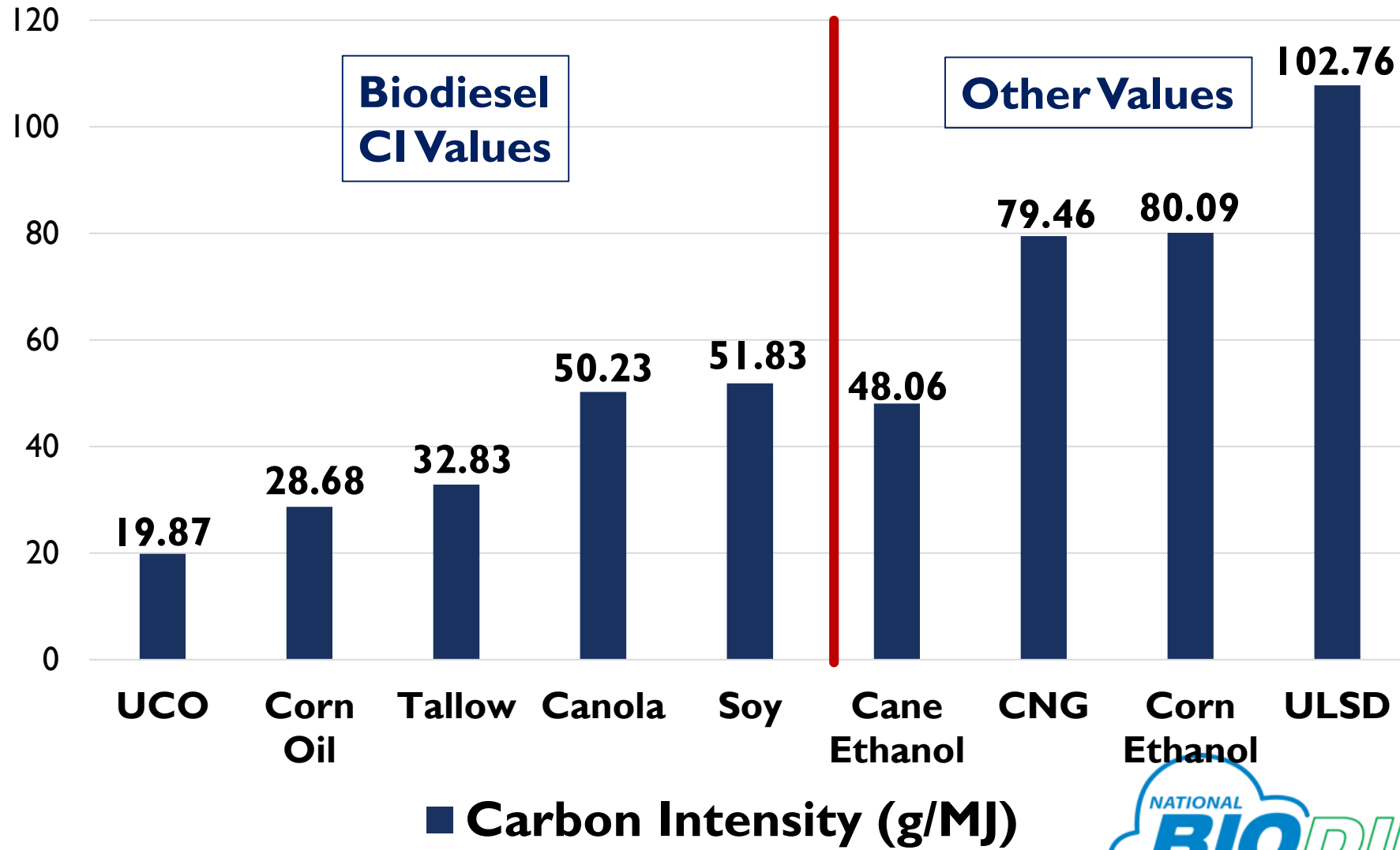
2017 LCFS CREDIT GENERATION



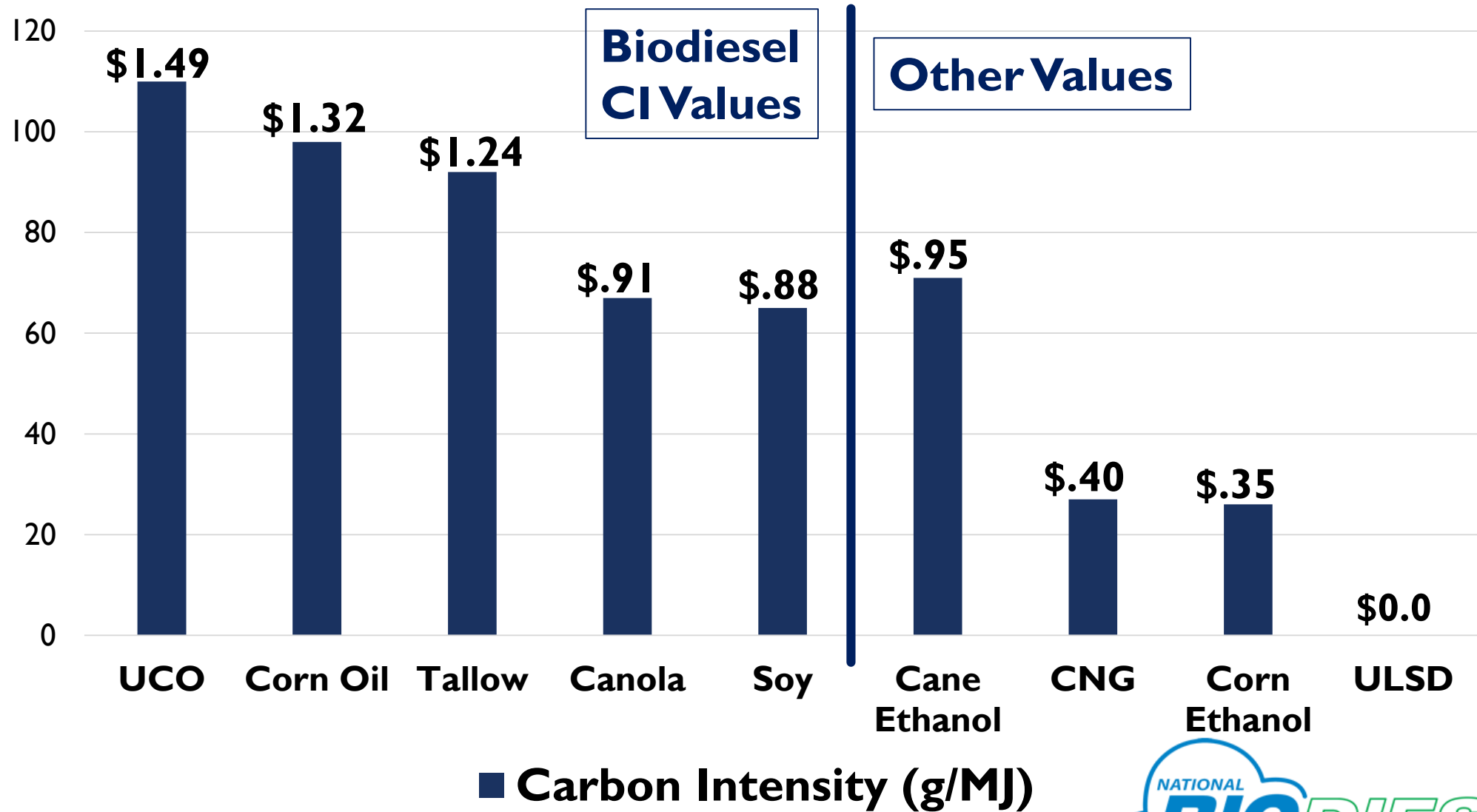
■ Ethanol ■ Biodiesel ■ RD ■ CNG ■ Electric ■ RNG ■ Other



LCFS Carbon Intensity Values



LCFS Carbon Intensity Values – in \$/gallon



Example values calculated for \$150/MT.



2018 REGULATORY PACKAGE

- Extends policy through 2030 w/new carbon intensity benchmarks.
- Includes provisions to address Poet v. CARB lawsuit.
- New carbon intensity calculators.
- NBB signed letter regarding electric vehicle infrastructure provisions.

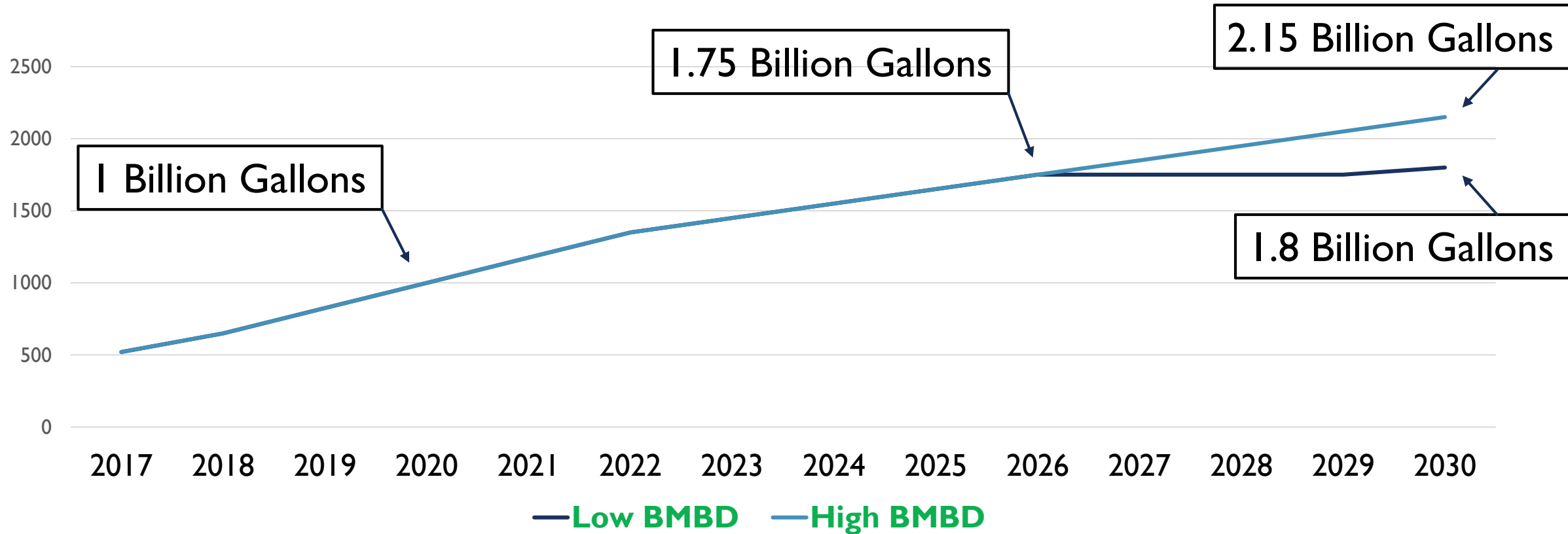
LCFS IMPLEMENTATION SCHEDULE

Year	Implementation Schedule	Year	Implementation Schedule	Year	Implementation Schedule
2015	1.0%	2021	10% 8.75%	2026	14% 15%
2016	2.0%	2022	10%	2027	15% 16.25%
2017	3.5%	2023	11% 11.25%	2028	16% 17.5%
2018	*5.0%	2024	12% 12.5%	2029	17% 18.75%
2019	7.5% 6.25%	2025	13% 13.75%	2030	18% <u>20%</u>
2020	10% 7.5%				

Note: Diesel reduction remains at 3.5% until CARB complies with Poet I court case.
 Source: https://www.arb.ca.gov/fuels/lcfs/lcfs_meetings/092217workshop_presentation.pdf.
 Slide courtesy of Joe Gershen, Encore BioRenewables, LLC.



PROJECTED BMBD VOLUMES UNDER LCFS



Source: CARB Illustrative Supply Scenario Calculator (<https://www.arb.ca.gov/fuels/lcfs/rulemakingdocs.htm>)

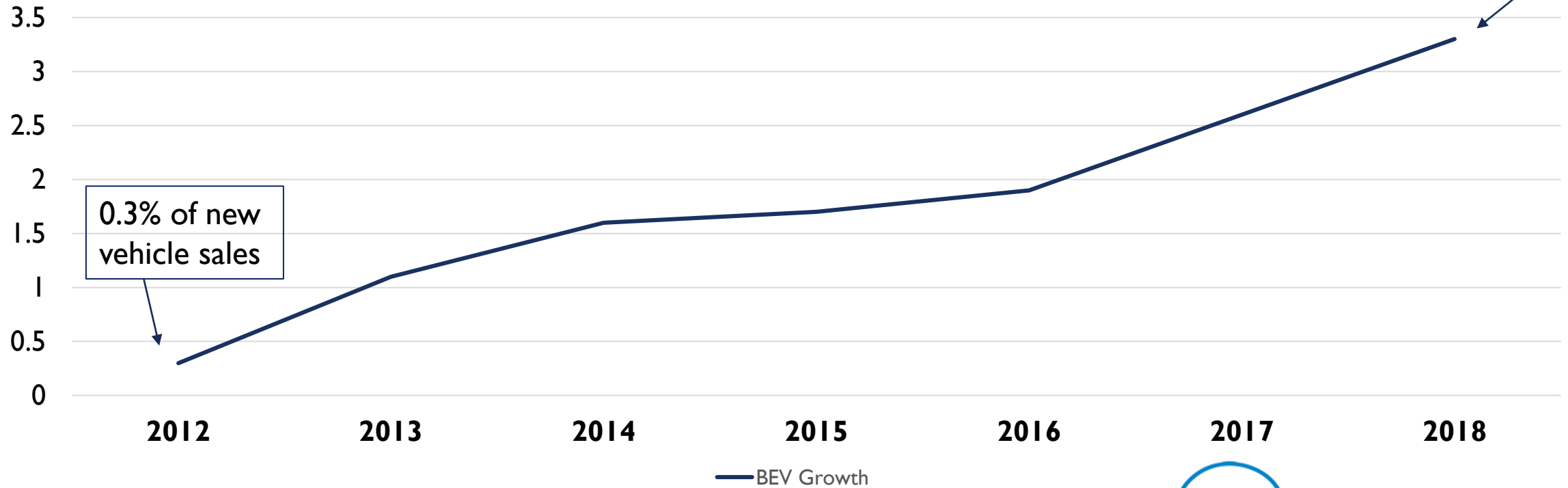


LONG-TERM LCFS COMPLIANCE

- Compliance may be easier than it seems due to:
 - E15
 - Co-Processed Renewable Diesel
 - Electric Vehicle Rules
 - Indirect Land Use Change (iLUC)

ELECTRIC VEHICLE GROWTH IN CALIFORNIA

BEV Growth



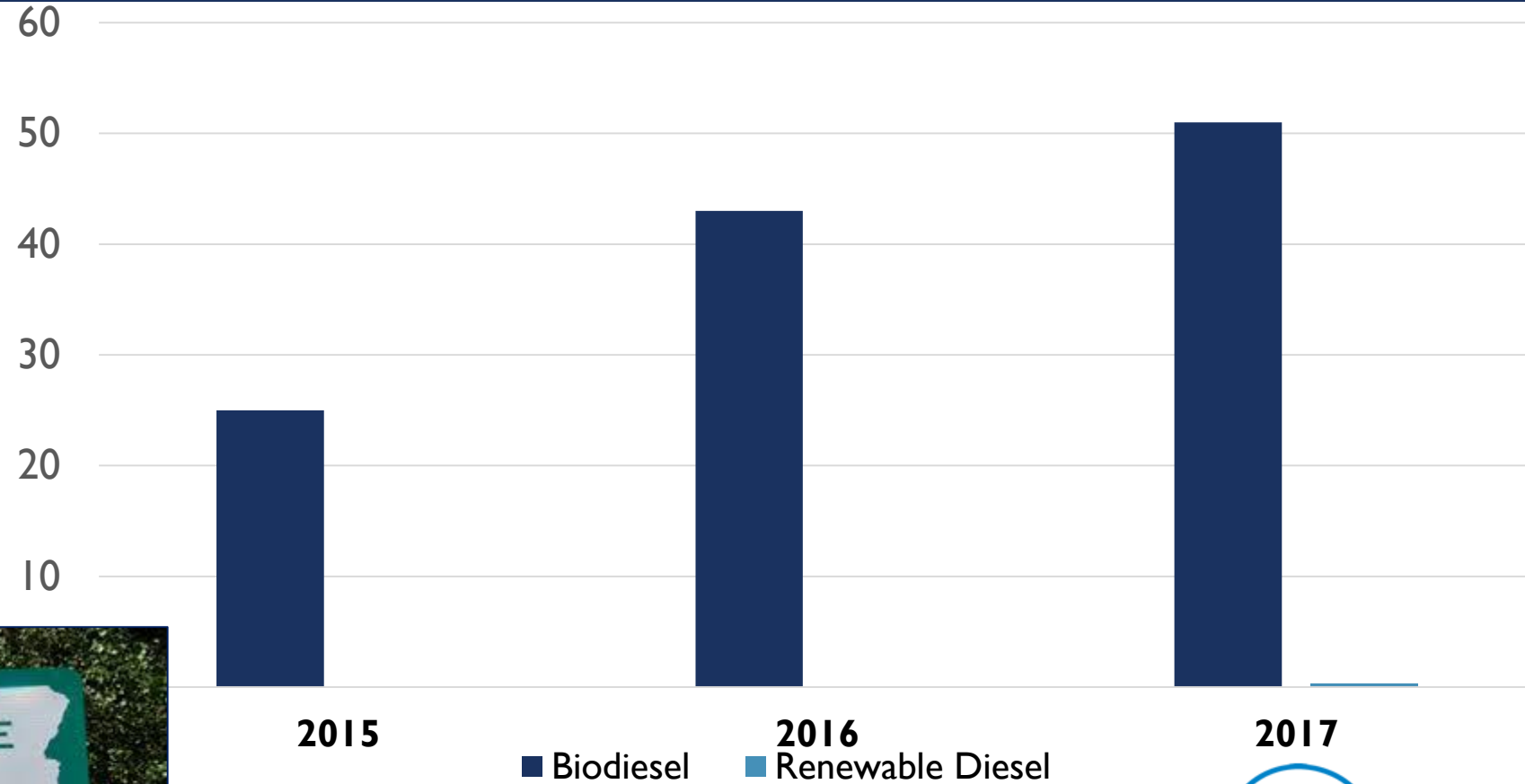
Source: Bloomberg.

OREGON CLEAN FUELS PROGRAM

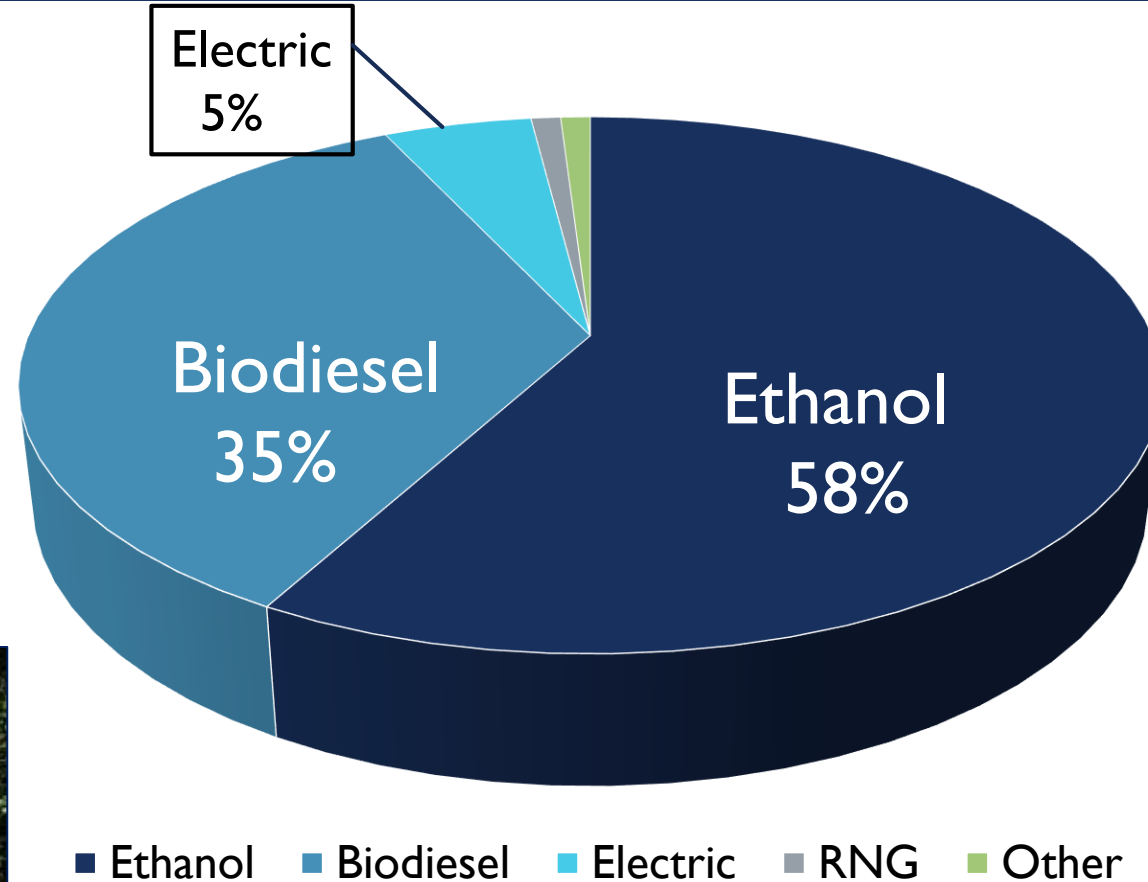
Year	Implementation Schedule
2016	.25%
2017	.5%
2018	1.0%
2019	1.5%
2020	2.5%
2021	3.5%
2022	5.0%
2023	6.5%
2024	8.0%
2025	10.0%



OREGON CLEAN FUELS PROGRAM



OREGON CLEAN FUELS PROGRAM



Other: Diesel, gasoline, LPG, fossil CNG.

WASHINGTON STATE

- **Composition of Legislature:**

- **Senate:** 26 Democrats; 23 Republicans. **House:** 50 Democrats; 48 Republicans. **Governor:** Democrat.

- **2018 Legislative Session:**

- SB6203, Carbon Tax bill sponsored by Sen. Carlyle.
 - Imposes tax of \$12-\$30/MT.
 - Passed Environment, Ways & Means, & Rules Committees.
- HB 2338, LCFS bill sponsored by Rep. Fitzgibbon.
 - Patterned after California & Oregon.
 - Passed Environment & Transportation Committees.

- **\$15/MT Carbon Tax on November Ballot:**

- Protect Washington Act Filed March 2nd by Alliance for Clean Jobs & Energy.



QUESTIONS?

Thanks!

Shelby Neal

Director of State Gov. Affairs

sneal@biodiesel.org

@ShelbyBiodiesel 