

Clean Fuels Forecast Review



August 19th, 2025

2025 Forecast Review



AGENDA

- Introductions
- Major Policy Changes/Proposals
- ODOT Fuel Forecast
- Reported Volumes Forecast
- Carbon Intensities for Biofuels
- Credit/Deficit Forecast
- Supply Forecast Discussion
- Next Steps
- Adjourn

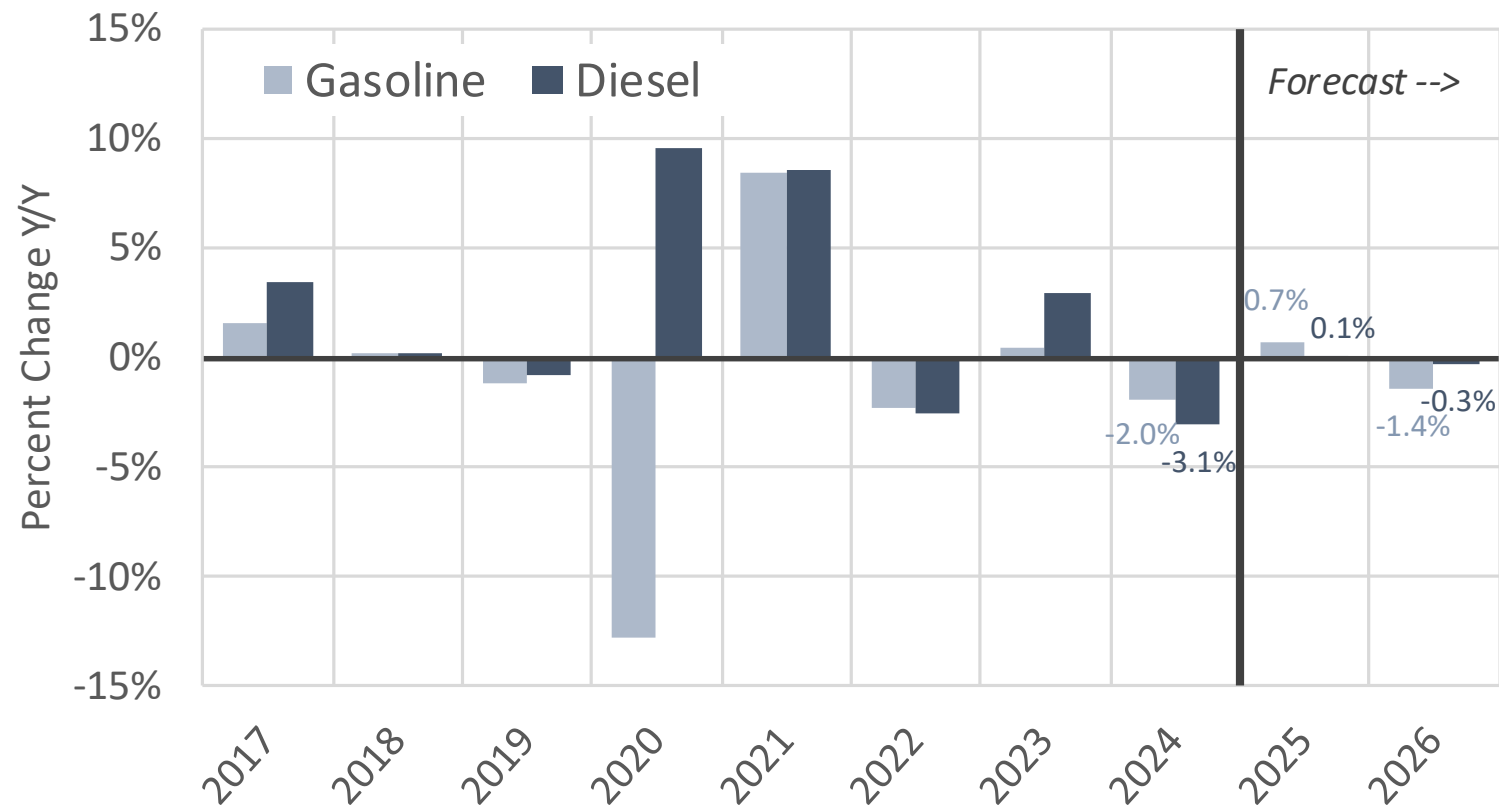
Major Policy Changes/Proposals



- Advanced Clean Cars I & II
- CA Low Carbon Fuel Standard Amendments
- Federal Policy
- Washington Clean Fuels Program – HB1409
- Portland Diesel Regulation



ODOT Fuel Consumption Forecast



Source: Oregon Department of Transportation (April 2025 Forecast)

Reported Volumes Forecast

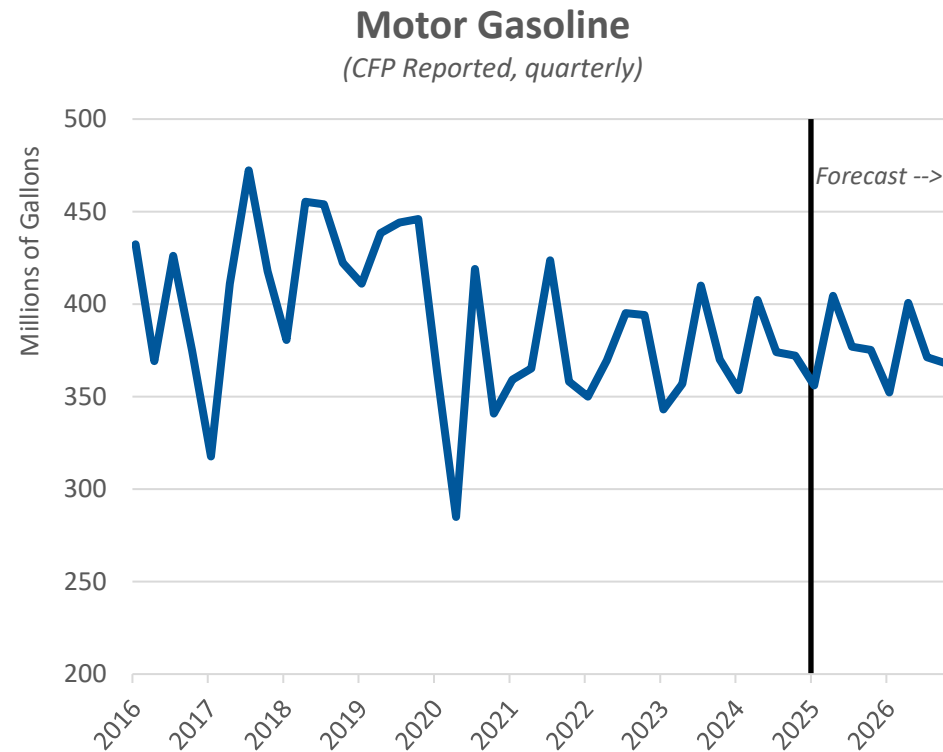


- Motor Gasoline
- Ethanol
- Diesel
- Biodiesel
- Renewable Diesel
- On-Road Electricity
- Off-Road Electricity
- Natural Gas
- Liquefied Petroleum Gas

Motor Gasoline



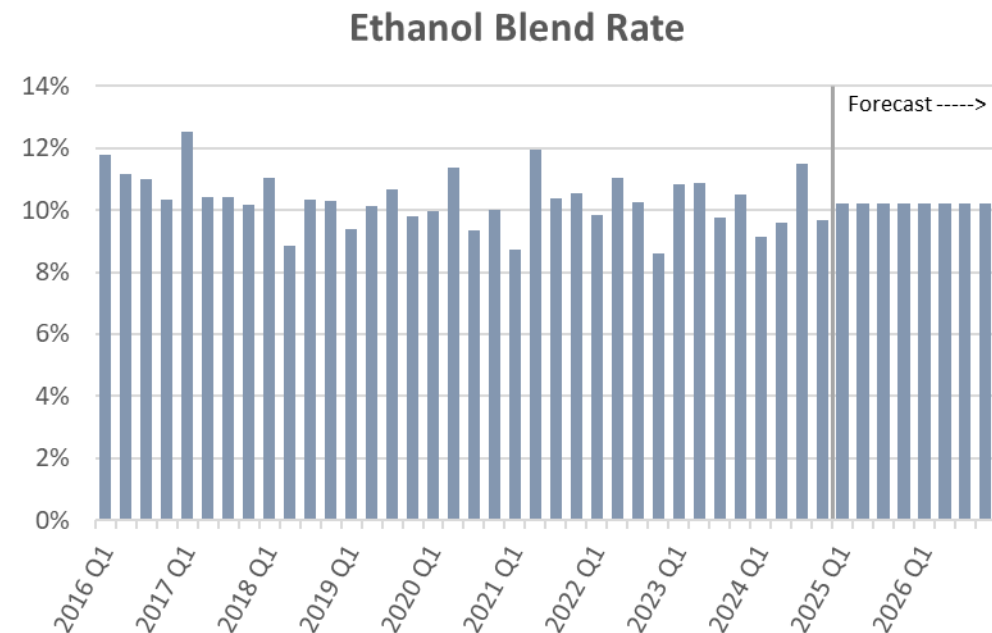
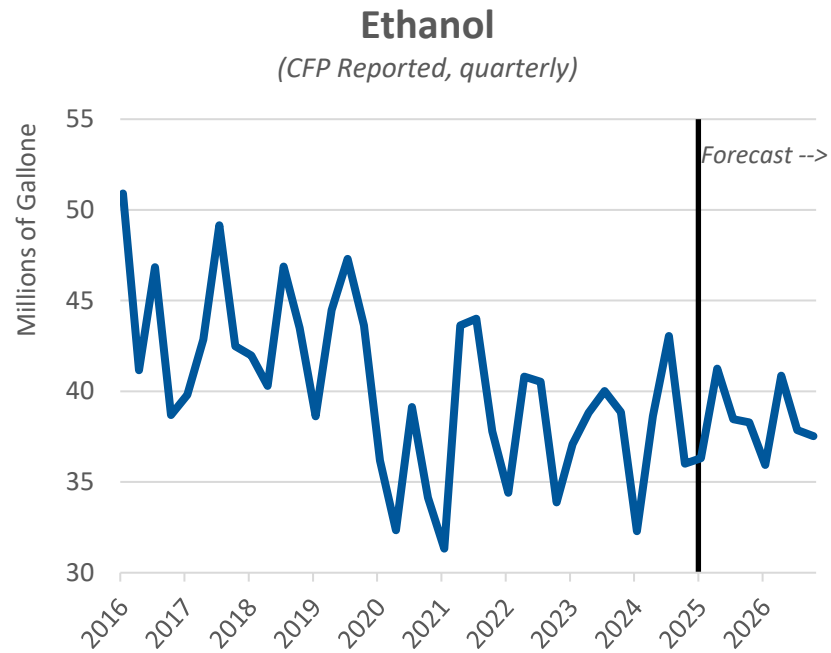
	2019	2020	2021	2022	2023	2024	2025F	2026F	2016-24 Ann. Growth
Motor Gasoline (Y/Y change)									
EIA Pacific Outlook	0.0%	-10.5%	3.7%	-5.1%	-0.8%	3.2%	0.1%	-2.7%	
ODOT Gasoline Forecast	-1.2%	-12.8%	8.5%	-2.2%	0.5%	-2.0%	0.7%	-1.4%	-1.1%
Clean Fuels Program	1.6%	-19.1%	7.0%	0.2%	-1.9%	1.5%	0.7%	-1.4%	-0.8%



Ethanol



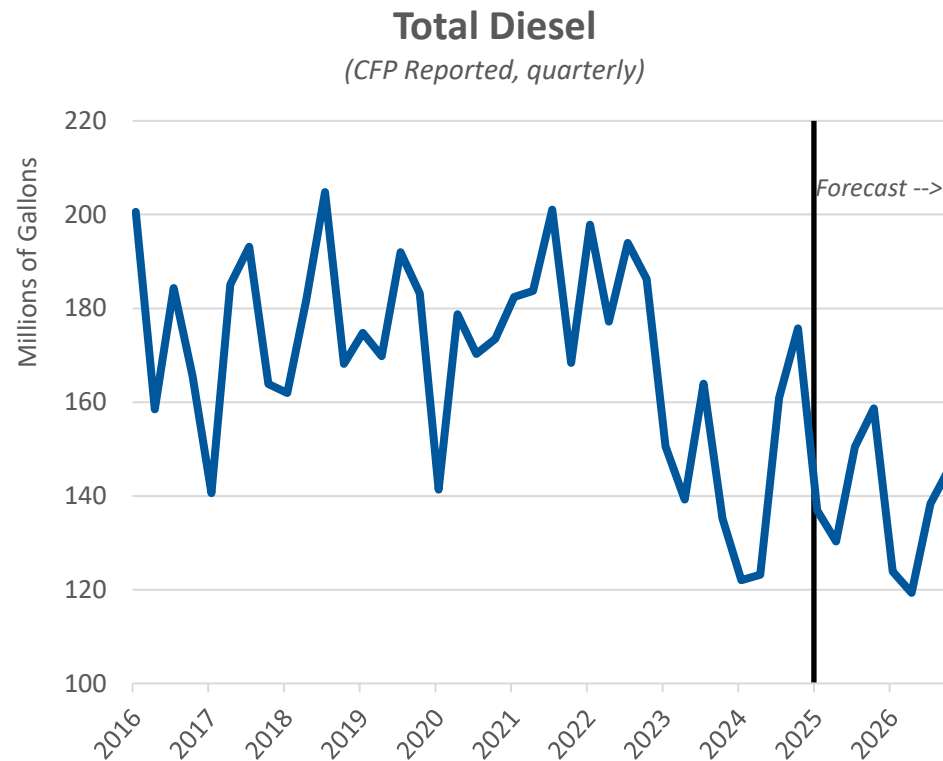
Ethanol (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA National Outlook	-0.6%	-12.3%	8.2%	2.4%	-0.2%	1.5%	0.5%	2.4%
ODOT Gasoline Forecast	-1.2%	-12.8%	8.5%	-2.2%	0.5%	-2.0%	0.7%	-1.4%
Clean Fuels Program	0.8%	-18.5%	10.5%	-4.5%	3.5%	-3.1%	2.9%	-1.4%
Blend Rate	10.0%	10.1%	10.4%	9.9%	10.5%	10.0%	10.2%	10.2%



Total Diesel



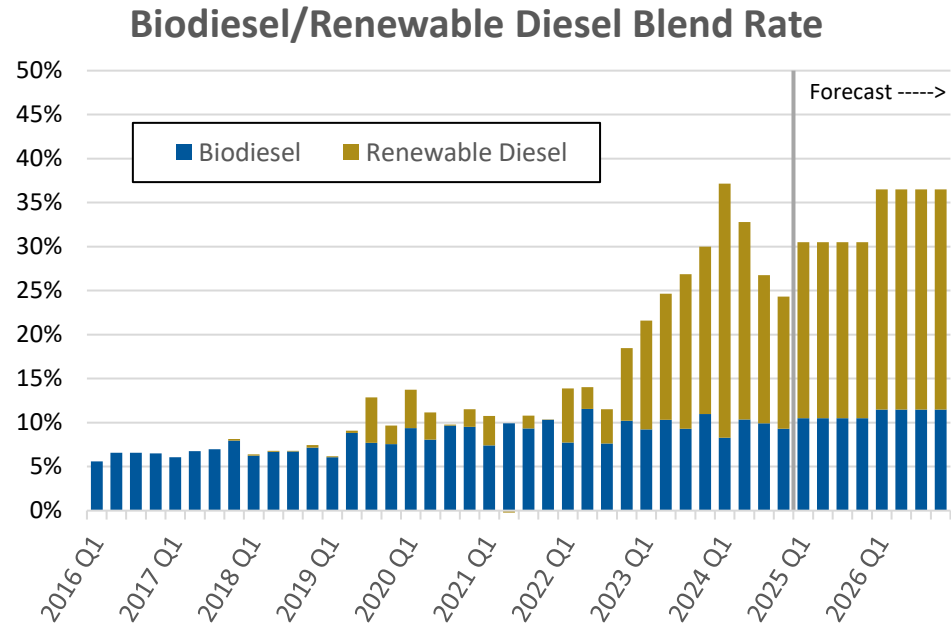
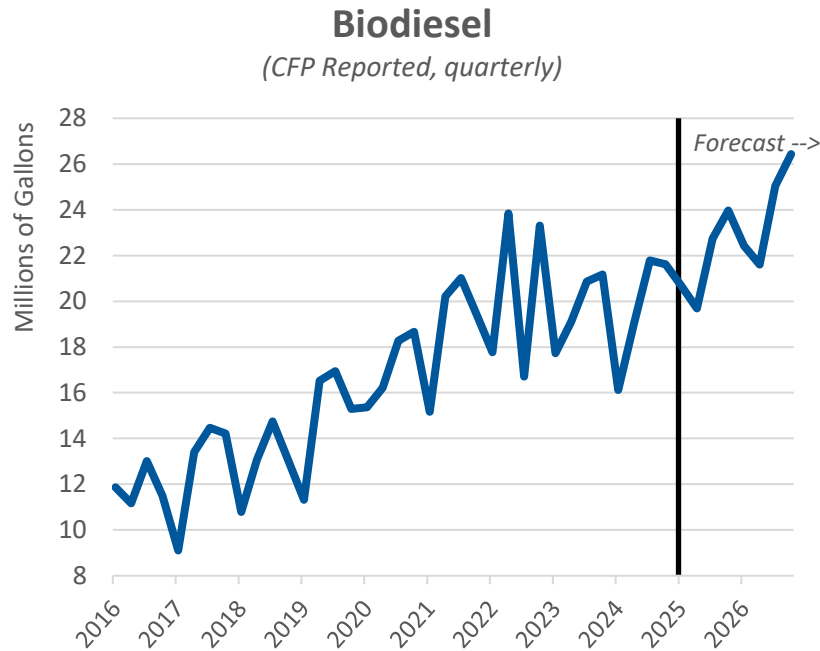
	2019	2020	2021	2022	2023	2024	2025F	2026F	2016-24 Ann. Growth
Total Diesel (Y/Y change)									
EIA Pacific Outlook	4.7%	-13.0%	4.1%	2.8%	3.3%	31.9%	0.9%	-0.4%	
ODOT Diesel Forecast	-0.8%	9.5%	8.6%	-2.5%	3.0%	-3.1%	0.1%	-0.3%	2.2%
Clean Fuels Program	3.5%	-5.8%	9.5%	7.6%	-10.1%	4.5%	0.0%	-0.3%	1.2%



Biodiesel



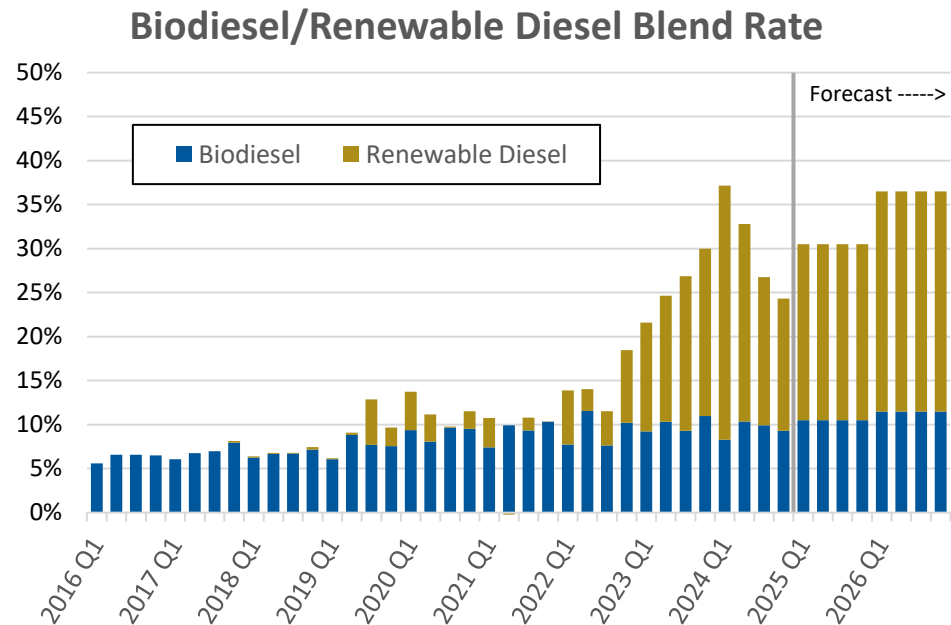
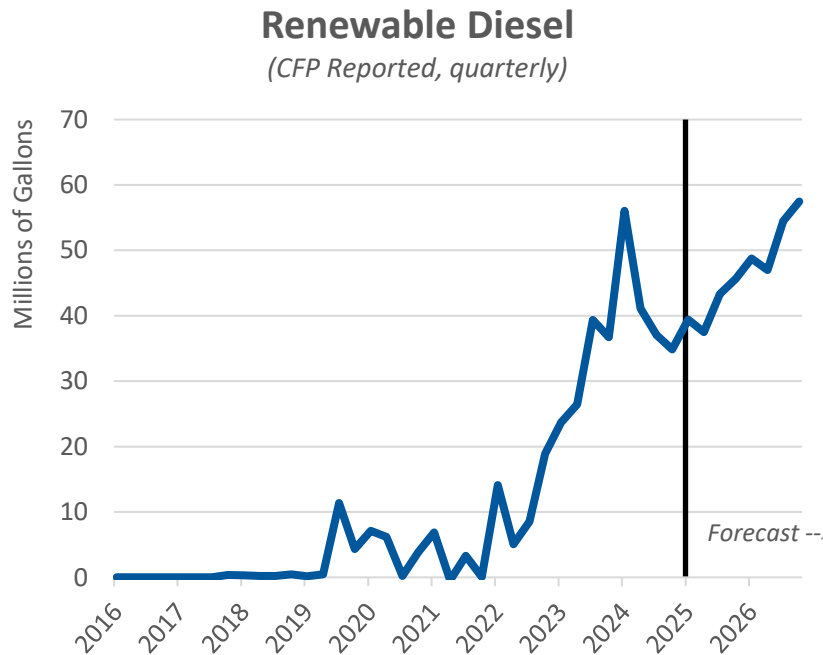
Biodiesel (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA National Outlook	-3.1%	-20.7%	-5.6%	-6.0%	-5.8%	25.1%	-16.7%	2.0%
ODOT Diesel Forecast	-0.8%	9.5%	8.6%	-2.5%	3.0%	-3.1%	0.1%	-0.3%
Clean Fuels Program	16.3%	14.0%	10.7%	7.7%	-3.4%	-0.4%	10.9%	9.1%
Blend Rate	7.5%	9.1%	9.2%	9.2%	9.9%	9.5%	10.5%	11.5%



Renewable Diesel



Renewable Diesel (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA National Outlook	-9.8%	13.1%	111.0%	100.9%	19.5%	7.2%	13.9%	3.6%
ODOT Diesel Forecast	-0.8%	9.5%	8.6%	-2.5%	3.0%	-3.1%	0.1%	-0.3%
Clean Fuels Program	1251.0%	6.9%	-43.9%	377.1%	170.8%	33.9%	-1.9%	24.6%
Blend Rate	2.0%	2.3%	1.2%	5.3%	15.9%	20.4%	20.0%	25.0%

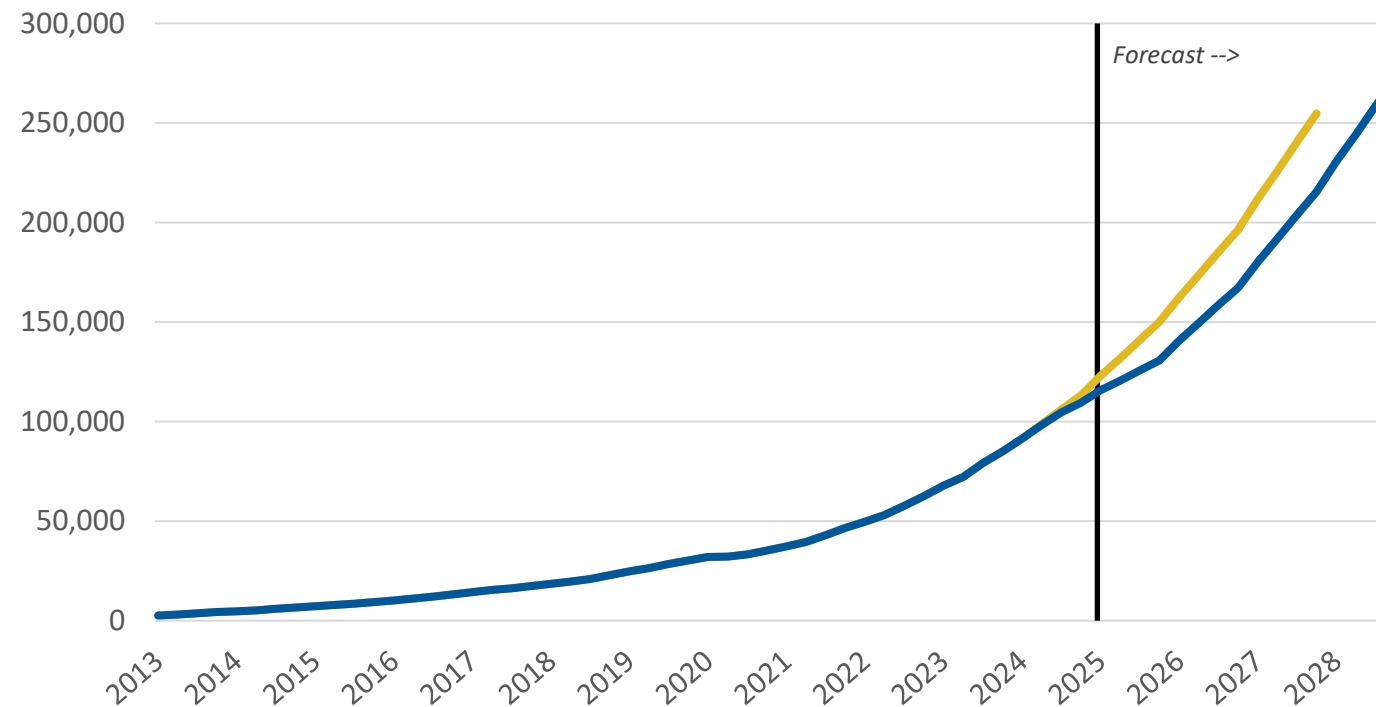


Electric Vehicles



Total Oregon Electric Vehicles

Current Forecast | Prior Forecast

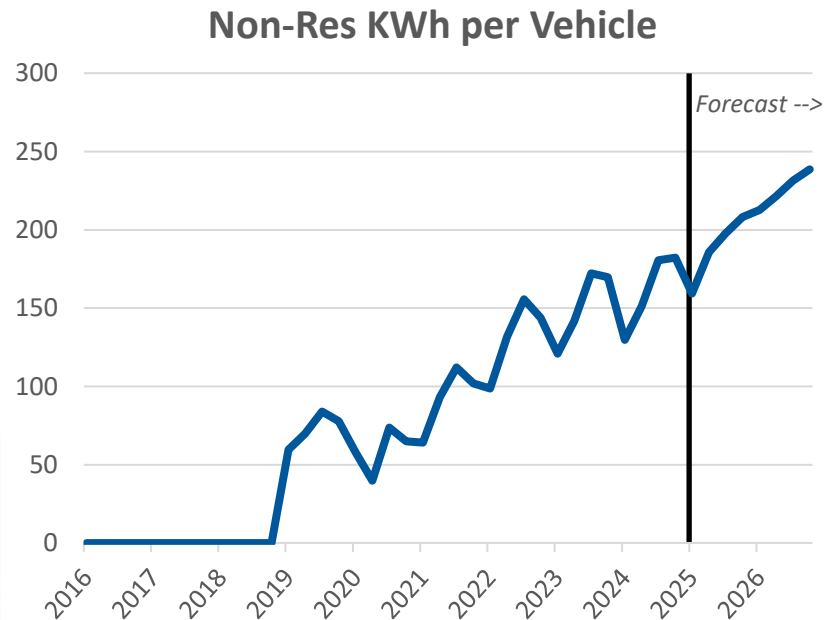
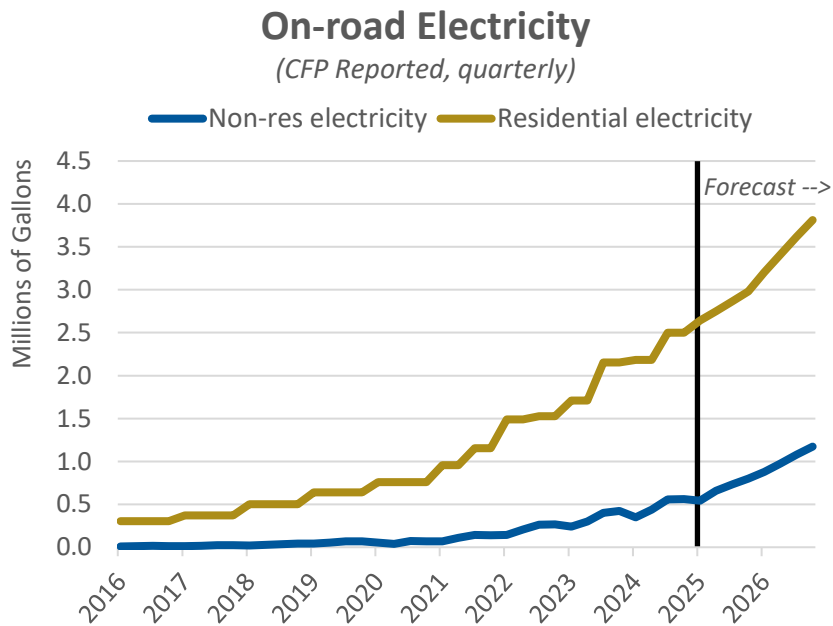


Source: Oregon Dept of Transportation

On-road Electricity



On-road Electricity (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA Pacific Outlook	7.2%	-6.5%	35.7%	34.1%	26.3%	24.8%	35.3%	34.8%
ODOT Electric Vehicle	34.8%	20.8%	25.7%	33.9%	36.3%	32.8%	22.0%	25.0%
Clean Fuels Program	31.2%	16.8%	43.6%	56.9%	23.8%	23.9%	27.9%	32.3%

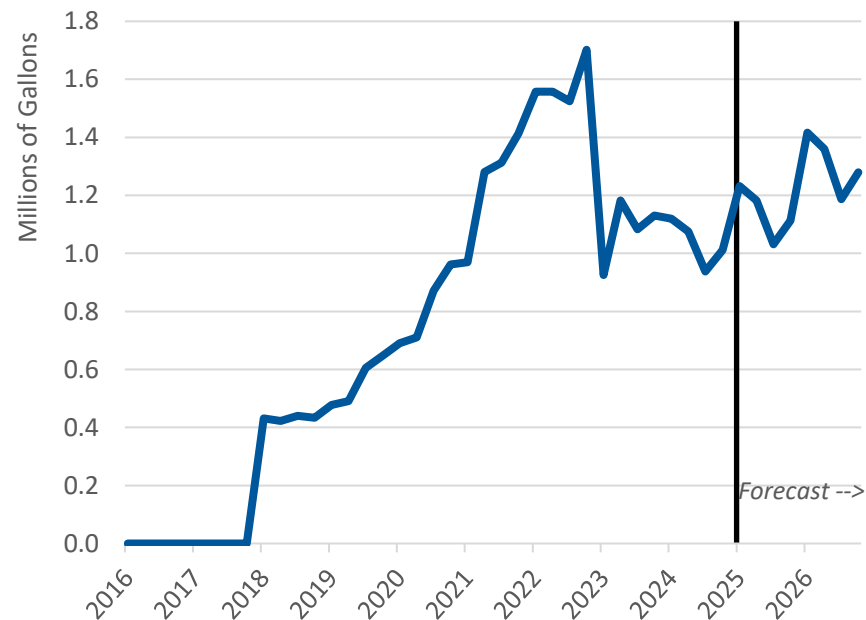


Off-Road Electricity



Off-road Electricity (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA Pacific Outlook	7.2%	-6.5%	35.7%	34.1%	26.3%	24.8%	35.3%	34.8%
Clean Fuels Program	28.5%	45.6%	53.9%	27.4%	-31.8%	-4.1%	10.0%	15.0%

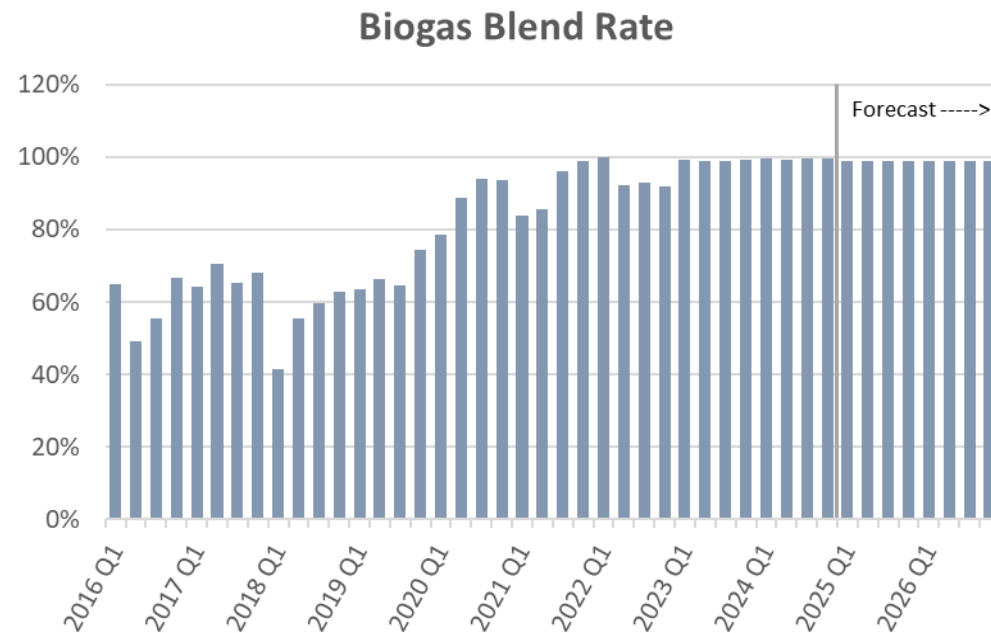
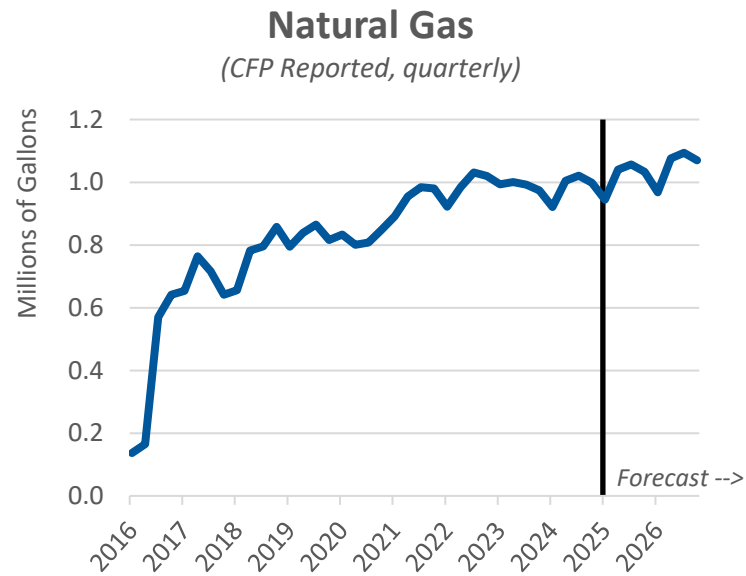
Total Off-Road Electricity
(CFP Reported, quarterly)



Natural Gas



Natural Gas (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA Pacific Outlook	19.0%	-20.2%	71.1%	-17.1%	9.5%	-37.9%	5.9%	2.0%
Clean Fuels Program	7.2%	-0.7%	15.8%	3.9%	0.0%	-0.4%	3.3%	3.3%
Biogas Blend Rate	67.1%	88.7%	91.4%	94.0%	99.1%	99.6%	99.0%	99.0%



Liquid Petroleum Gas



Liq. Petroleum Gas (Y/Y change)	2019	2020	2021	2022	2023	2024	2025F	2026F
EIA Pacific Outlook	-2.0%	-47.3%	17.3%	12.8%	4.2%	-11.9%	-0.5%	-1.4%
Clean Fuels Program	177.6%	-28.2%	65.7%	32.4%	1.3%	-20.0%	25.6%	21.1%
LPG Blend Rate			28.5%	20.7%	22.6%	0.0%	20.0%	25.0%

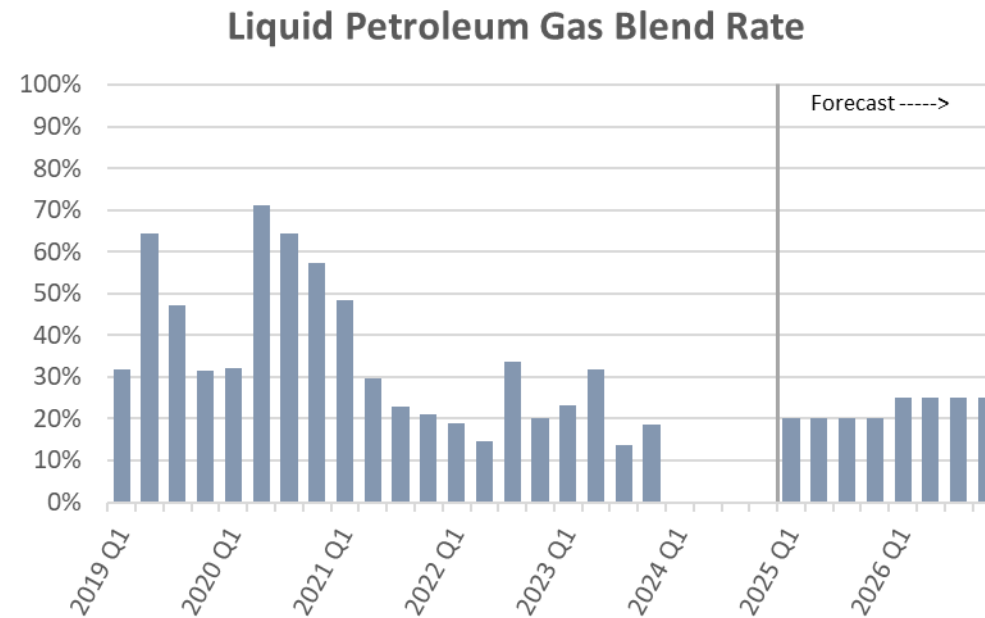
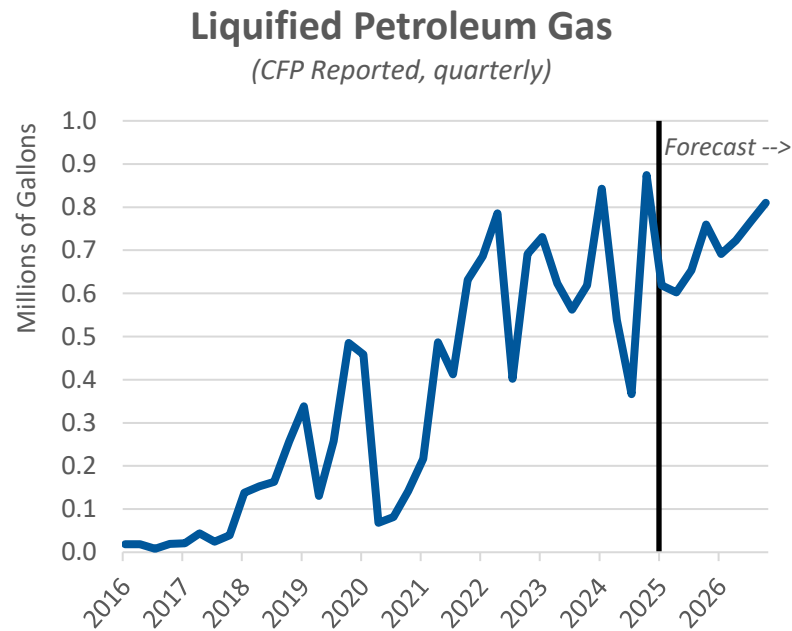




Table 1: Clean Fuels Forecast - Reported Volumes

(Mil. gallons, percent)	2022	2023	2024	2025F	2026F	annual %ch vs. 2024
Conventional Gasoline	1,359.2	1,325.4	1,351.8	1,358.5	1,339.9	-0.4%
Ethanol	149.6	154.8	150.0	154.3	152.2	0.7%
<i>Ethanol Blend Rate</i>	<i>9.9%</i>	<i>10.5%</i>	<i>10.0%</i>	<i>10.2%</i>	<i>10.2%</i>	
Blendstock	1,508.8	1,480.2	1,501.8	1,512.8	1,492.1	-0.3%
Fossil Diesel	755.2	588.9	581.9	576.3	524.8	-5.0%
Biodiesel	81.6	78.9	78.5	87.1	95.0	10.0%
<i>Biodiesel Blend Rate</i>	<i>9.2%</i>	<i>9.9%</i>	<i>9.5%</i>	<i>10.5%</i>	<i>11.5%</i>	
Renewable Diesel	46.6	126.2	169.0	165.9	206.6	10.6%
<i>Renew diesel Blend Rate</i>	<i>5.3%</i>	<i>15.9%</i>	<i>20.4%</i>	<i>20.0%</i>	<i>25.0%</i>	
Total Diesel	883.5	794.0	829.4	829.3	826.4	-0.2%
Electricity (on-road)	7.3	9.1	11.3	14.4	19.1	30.1%
Electricity (off-road)	6.3	4.3	4.1	4.6	5.2	12.5%
Fossil Natural Gas	0.2	0.0	0.0	0.0	0.0	56.7%
Biogas	3.7	3.9	3.9	4.0	4.2	3.0%
<i>Biogas Blend Rate</i>	<i>94.0%</i>	<i>99.1%</i>	<i>99.6%</i>	<i>99.0%</i>	<i>99.0%</i>	
Total Natural Gas	4.0	4.0	3.9	4.1	4.2	3.3%
Fossil LPG	2.6	2.5	2.6	2.6	3.0	6.8%
Bio LPG	0.7	0.7	0.0	0.7	1.0	
<i>LPG Blend Rate</i>	<i>20.7%</i>	<i>22.6%</i>	<i>0.0%</i>	<i>20.0%</i>	<i>25.0%</i>	
Liquified Petroleum Gas	3.2	3.3	2.6	3.3	4.0	23.3%

Notes:

Electricity and Natural Gas denoted in gasoline gallon equivalents.

On-road electricity includes a calculation for residential charging.

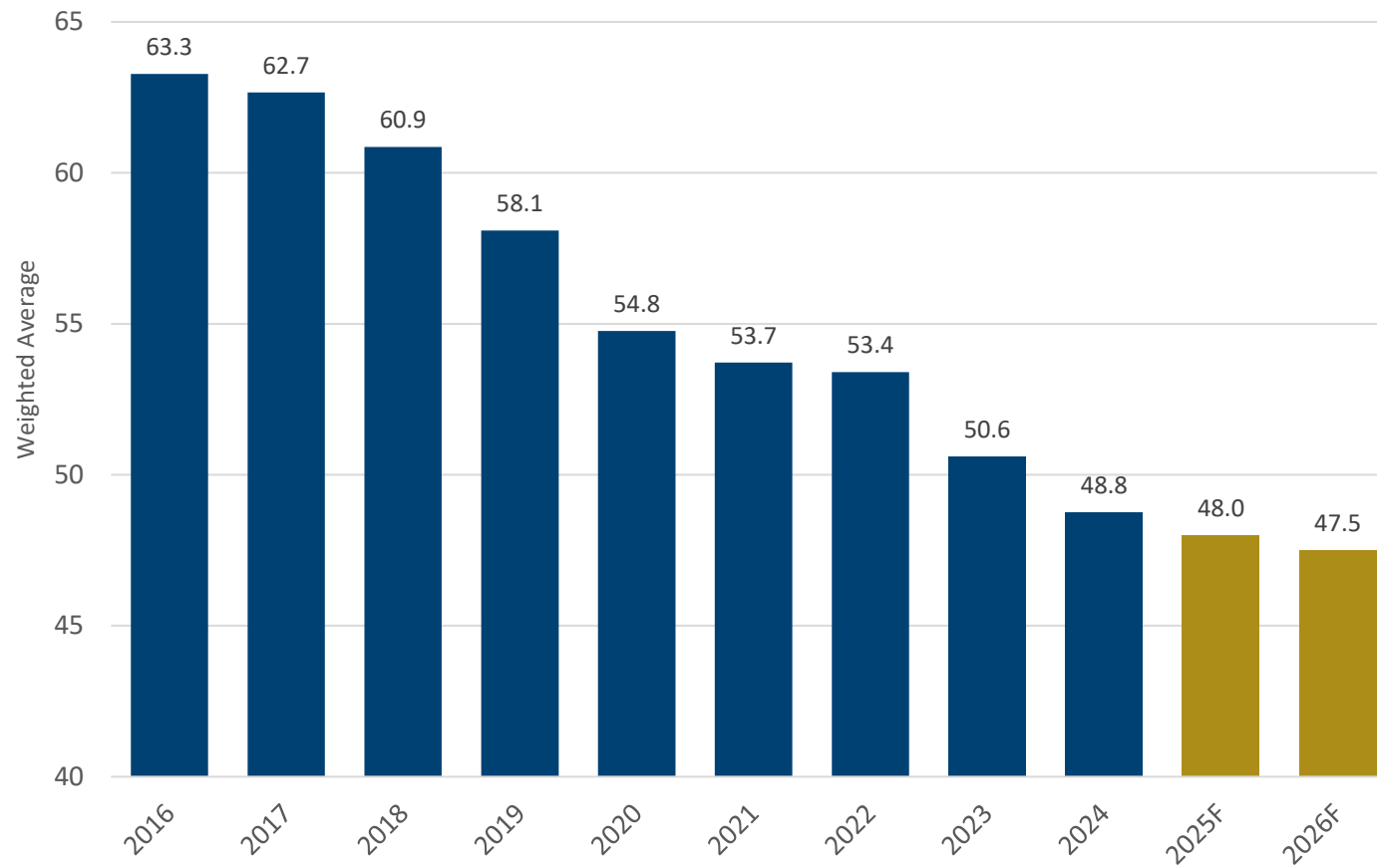
Carbon Intensities for Biofuels



- Ethanol
- Biodiesel
- Renewable Diesel



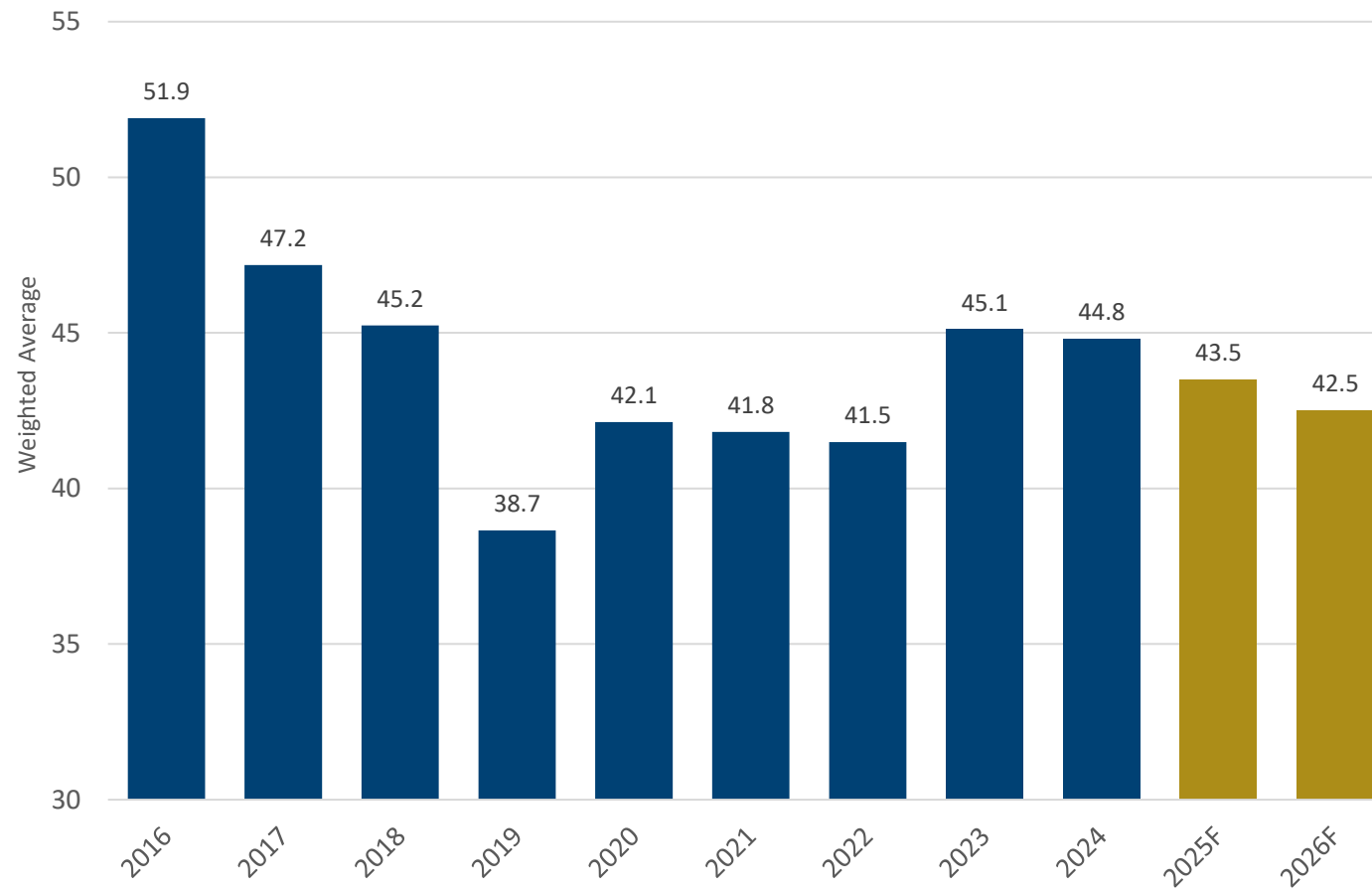
Ethanol Carbon Intensity



Lower bound scenario: 36.0



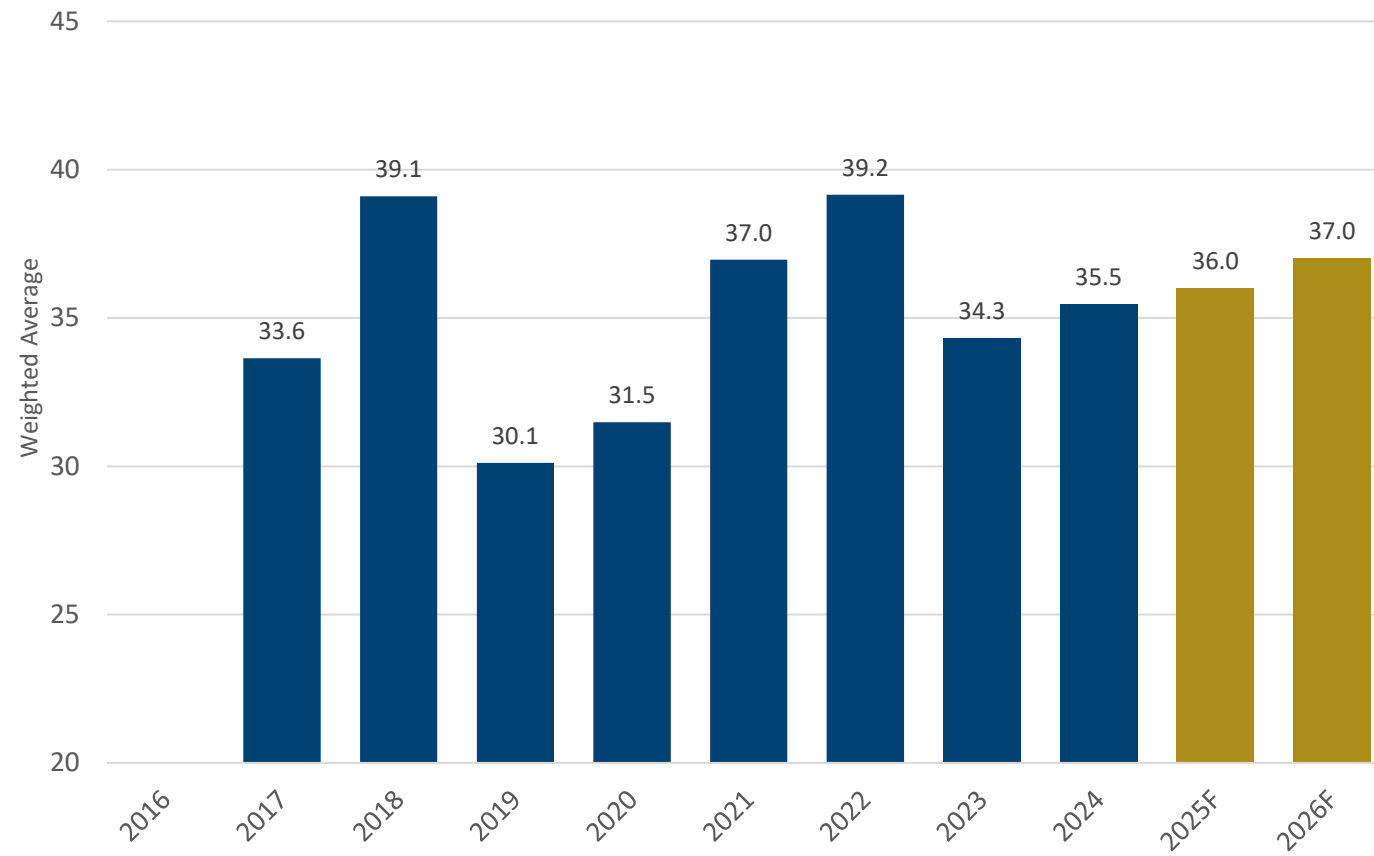
Biodiesel Carbon Intensity



Lower bound scenario: 21.6



Renewable Diesel Carbon Intensity



Lower bound scenario: 32.5



Parameters for 2025:

Table 2: Parameters for Clean Fuels Forecast

	Energy Density	Carbon Intensity Target	Carbon Intensity Assumption		
			2024*	2025	2026
Gasoline	122.48	84.92	100.14	100.14	98.12
Ethanol	81.51	84.92	50.50	48.00	47.50
Diesel	134.48	90.4	100.74	100.74	104.92
Biodiesel	126.13	90.4	44.00	43.50	42.50
Renewable Diesel	129.65	90.4	39.00	36.00	37.00
Electricity	3.60	84.92	0.00	0.00	0.00
KWh/vehicle (res)	3103				
EERelect	3.40				
EER_NG	0.90				
Natural Gas	134.48	90.4	79.98	79.98	81.89
Biogas	134.48	90.4	2.50	0.00	0.00
Liq. Petroleum Gas	89.63	84.92	48.00	45.00	45.00

* represents the assumption for the 2025 Clean Fuels forecast.



Credit / Deficit Summary

		2024	2025F	2026F
Deficits	Gasoline	-1,676,341	-1,978,295	-2,166,242
	Diesel	-805,303	-920,013	-1,029,941
Deficit Total		-2,481,644	-2,898,308	-3,196,183
Credits	Ethanol	523,184	506,226	464,201
	Biodiesel	462,099	498,284	577,120
	Renewable Diesel	1,227,892	1,136,875	1,437,700
	Electricity, on-road	304,628	470,377	571,747
	Electricity, off-road	70,947	105,563	121,398
	Natural Gas	38,790	43,392	45,578
	Liquified Petroleum Gas	1,121	12,763	14,267
Credit Total		2,628,661	2,773,481	3,232,011
Net Credits/Deficits		147,017	-124,827	35,828
Beginning Banked Credits		1,123,740	1,270,757	1,145,930
Total Net Credits/Deficits		1,270,757	1,145,930	1,181,758

Bio-Fuel Supply



Statutory directive regarding supply:

The fuel supply forecast shall include, but need not be limited to, the following with reference to the next compliance period of the clean fuels program:

- a) An estimate of the **potential** volumes of gasoline, gasoline substitutes and gasoline alternatives and diesel, diesel fuel substitutes and diesel alternatives available to Oregon;

In developing the estimate required under subsection (1)(a) of this section, the division shall consider, but need not be limited to considering:

- a) Constraints that may be preventing access to available and cost-effective low carbon fuels by Oregon, such as geographic and logistical factors, and alleviating factors to the constraints; and
- b) The existing and future vehicle fleet in Oregon.



EPA Renewable Fuel Standard Program - Reported Production

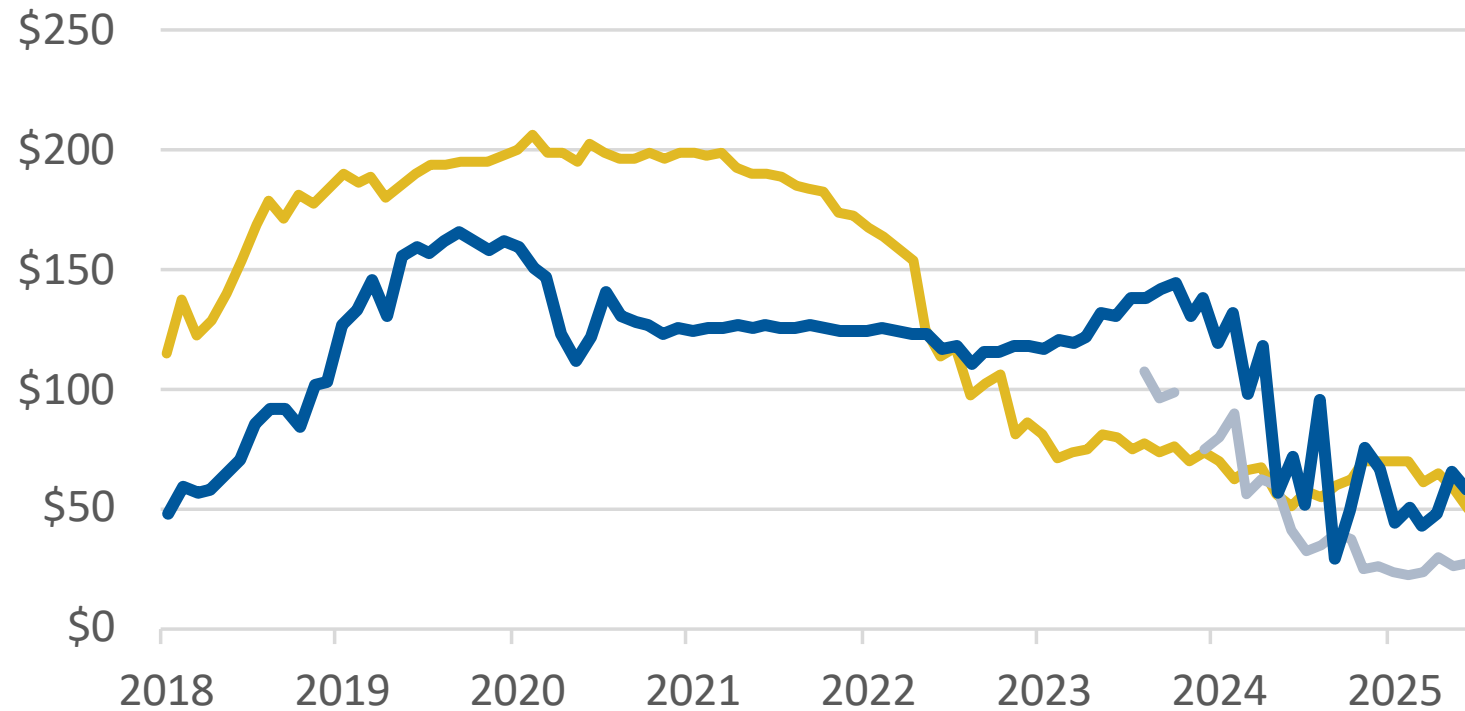
(millions of gallons)		2018	2019	2020	2021	2022	2023	2024	2025 Est.
Ethanol	Domestic	14,985.8	14,746.4	12,870.7	14,138.5	14,439.8	14,700.6	14,935.0	14,924.2
	Importer	92.0	213.4	197.2	72.9	94.6	35.8	14.5	13.6
Total Ethanol		15,077.8	14,959.7	13,067.9	14,211.4	14,534.5	14,736.4	14,949.5	14,937.7
Y/Y change		0.7%	-0.8%	-12.6%	8.8%	2.3%	1.4%	1.4%	-0.1%
Biodiesel	Domestic	1,855.5	1,713.8	1,824.9	1,704.6	1,620.2	1,675.6	1,671.9	1,107.9
	Importer	175.1	184.7	209.5	208.5	240.4	511.4	407.7	26.1
Total Biodiesel		2,030.6	1,898.5	2,034.4	1,913.1	1,860.6	2,187.0	2,079.6	1,134.0
Y/Y change		-1.0%	-6.5%	7.2%	-6.0%	-2.7%	17.5%	-4.9%	-45.5%
Renewable Diesel	Domestic	305.5	492.1	533.5	845.4	1,455.3	2,427.9	3,138.4	2,967.5
	Foreign	309.8	420.4	435.5	471.0	446.4	480.8	430.1	56.3
Total Renewable Diesel		615.3	912.5	969.0	1,316.4	1,901.8	2,908.6	3,568.5	3,023.7
Y/Y change		2.1%	48.3%	6.2%	35.9%	44.5%	52.9%	22.7%	-15.3%
Renewable CNG	Domestic	214.4	317.0	388.1	452.4	547.2	683.4	874.0	4.9
	Importer	8.3	11.1	24.3	33.0	30.6	6.1	8.0	0.0
Renewable LNG	Domestic	55.2	51.8	80.9	81.0	84.1	48.3	44.4	0.0
	Importer	27.5	24.4	10.6	3.1	6.4	37.2	38.2	0.0
Total Natural Gas		305.4	404.4	503.9	569.5	668.3	775.0	964.7	4.9
Y/Y change		25.9%	32.4%	24.6%	13.0%	17.3%	16.0%	24.5%	-99.5%
Propane	Domestic	0.7	4.2	4.3	4.6	4.5	4.7	0.9	0.3
Y/Y change			537.7%	2.3%	6.6%	-2.3%	5.2%	-80.3%	-63.3%

Note: 2025 estimates based on year-over-year growth through first six months.



Carbon Credit Price Comparison

Oregon | California | Washington



Latest Data: June 2025 | Source: CA Air Resources Board, OR Dept of Environmental Quality, WA Dept of Ecology

Next Steps



- Supply? Keep existing methodology?
- Distribute draft forecast document by September 5th.
- Comments due back by 5:00 September 19th.

Questions or comments:



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