



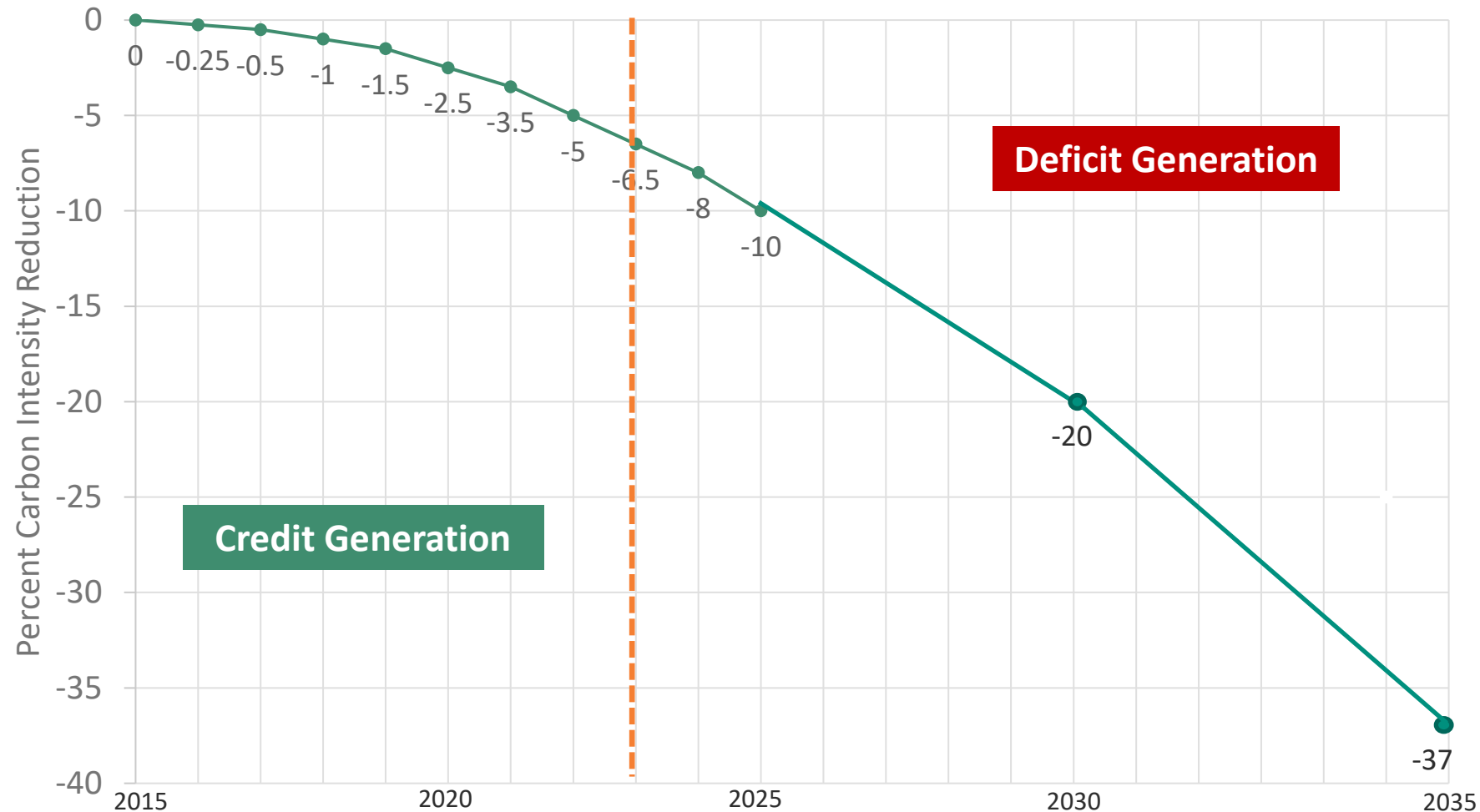
# Oregon Clean Fuels Program Overview

Vermont Senate Committee on Natural Resources and Energy

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# Clean Fuels Program in a Nutshell



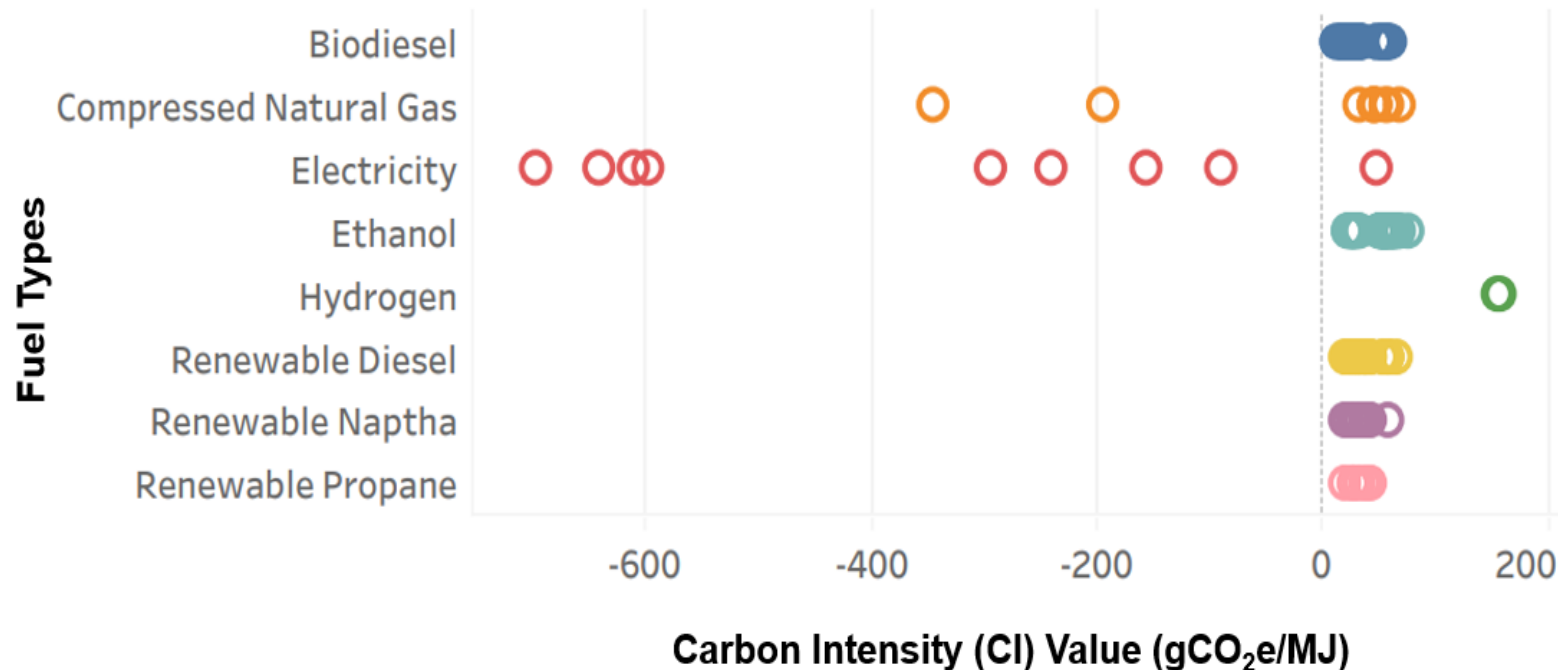
## Mandatory Fuels

- Gasoline
- Diesel
- Ethanol
- Biodiesel
- Renewable diesel

## Voluntary Fuels

- Fossil and bio-CNG
- Fossil and bio-LNG
- Fossil and bio-LPG
- Sustainable aviation fuel
- Electricity
- Hydrogen

# A Variety of Clean Fuels



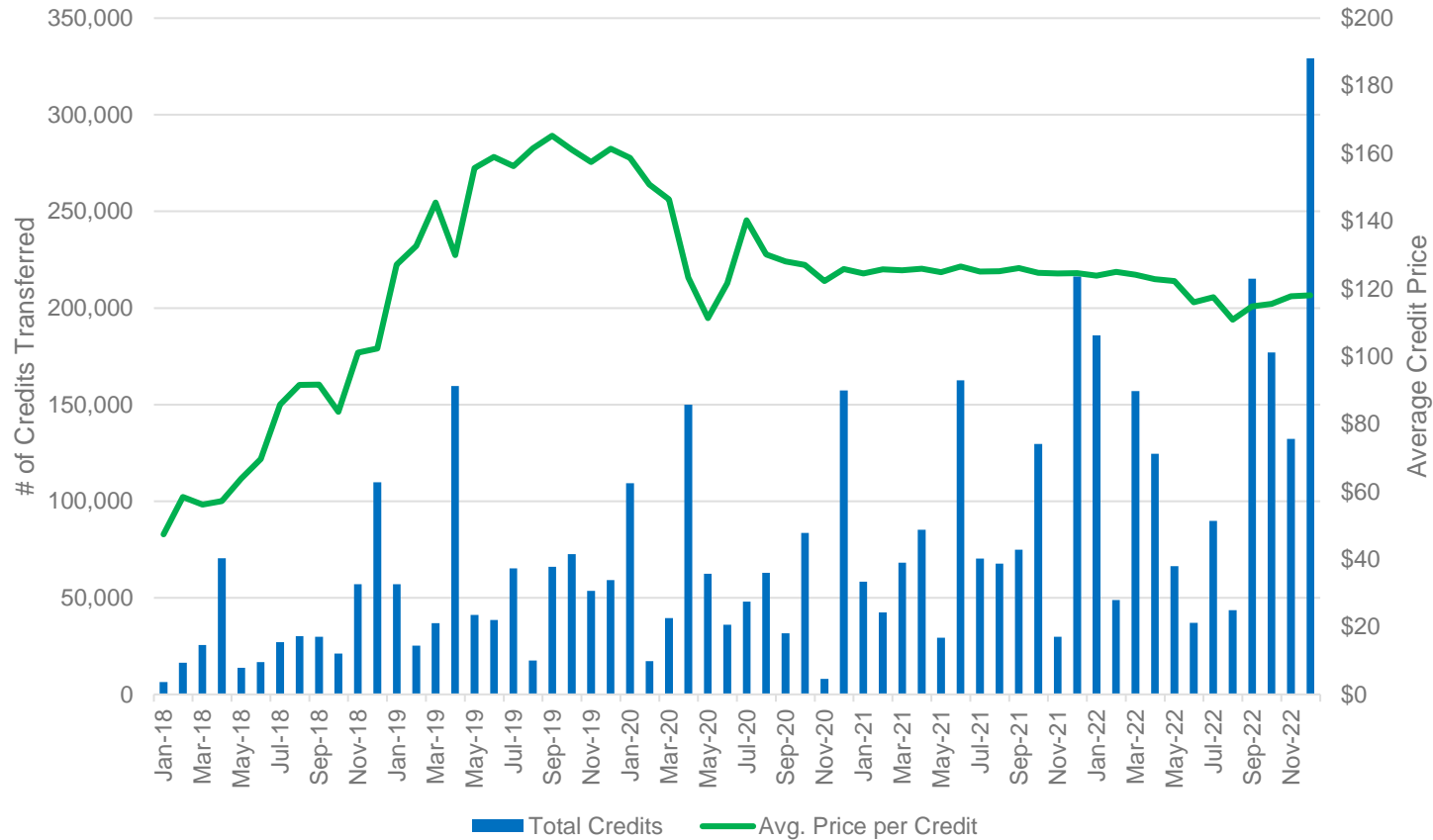
- Fuel producers submit fuel pathway applications to DEQ that include the GREET model and all supporting material.
- DEQ confirms the modeling and approves the carbon intensity values for use in CFP.
- Pathway holders submit an annual fuel pathway report to confirm that operational data remain within the parameters of the pathway.
- Pathways that generate over 6,000 credits are subject to third-party verification.

# Since 2016, the Clean Fuels Program has...

- Reduced almost 8 million tons of GHGs on a lifecycle basis
- Supported the displacement of almost 2 billion gallons of fossil fuels
- Lowered the carbon intensity of ethanol and biodiesel by about 20%
- Increased the blend rate of biodiesel & renewable diesel to about 15%
- Enabled the state's utilities to invest almost \$50 million in EV projects

# Clean Fuels Program Credit Market

Monthly Credit Transfer Data

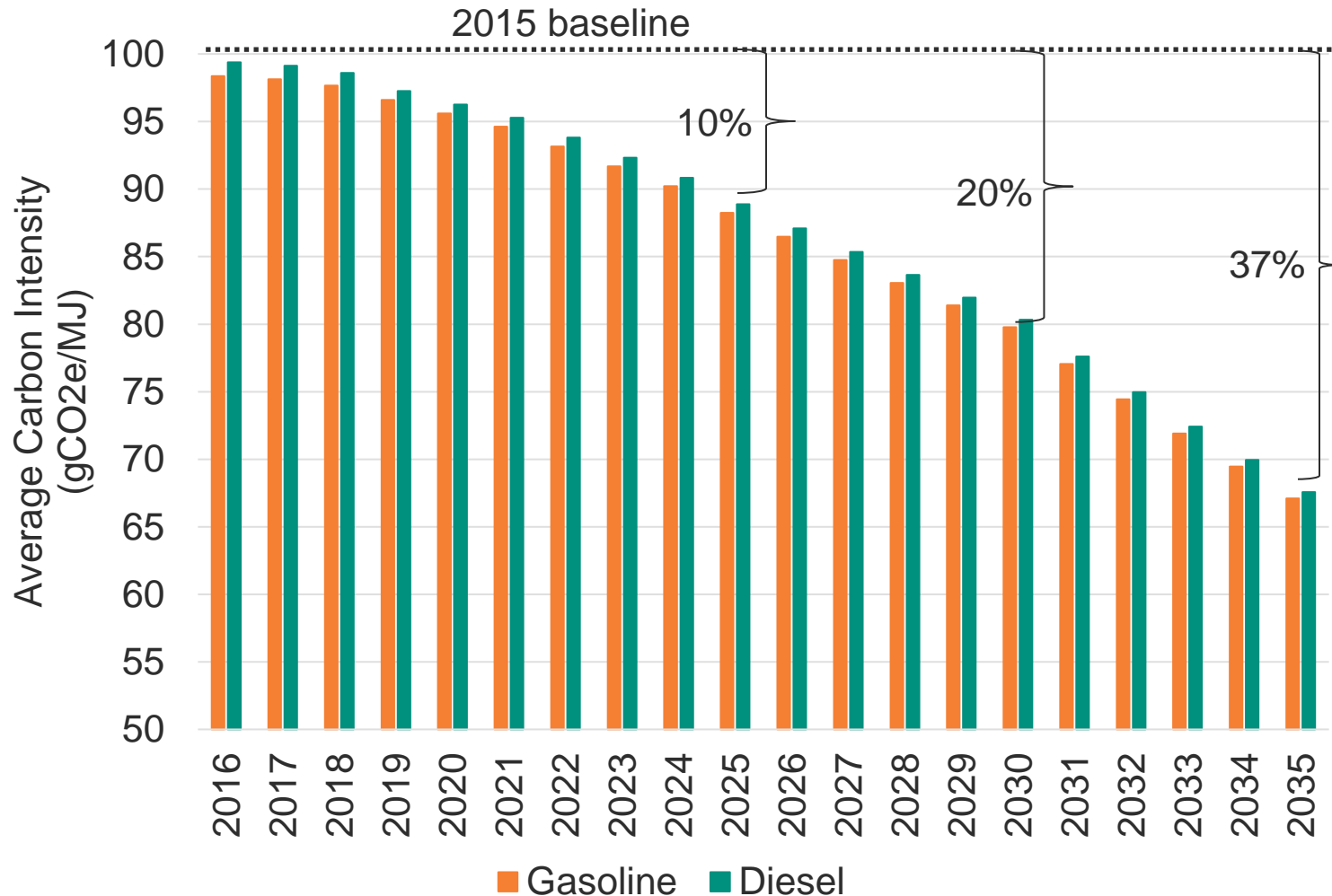


- Credit prices are published monthly to provide transparency to the market
- The average price of credits in 2022 was \$119.
- In 2022, approximately \$185 million in credits were traded.

# Impacting the Price of Fuels

Fuel	Avg CI (gCO <sub>2</sub> e/MJ)	Impact of CFP Credits @ \$119 in 2022
E10 (90% gasoline 10% ethanol)	98.06	+ 6.9 cents per gallon
B5 (95% diesel 5% biodiesel)	98.74	+ 7.9 cents per gallon
B20 (80% diesel 20% biodiesel)	92.68	- 1.8 cents per gallon
100% canola biodiesel	57.84	- 54 cents per gallon
100% used cooking oil biodiesel	18.12	- 114 cents per gallon
100% tallow renewable diesel	29.96	- 98.5 cents per gallon
Electricity in a light-duty vehicle	39	- 7.6 cents per kWh
Electricity in a heavy-duty vehicle	39	- 14.1 cents per kWh

# Key Outcomes of an Expanded CFP



## Expanded targets:

- 37% lifecycle GHG reductions = 48% tailpipe GHG reductions
- 50% reduction in gasoline and diesel consumption
- More than \$90 million annually in avoided health costs
- Supports ACT & ACC2 and brings down the cost to comply with ZEV regulations
- Supports increased blending of ethanol, biodiesel, and renewable diesel & reduces the carbon intensity and cost of liquid biofuels

# Questions?

Clean Fuels Program web page:

<https://www.oregon.gov/deq/ghgp/cfp/Pages/default.aspx>

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