



# 2021 Annual Cost of the Clean Fuels Program

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HB 2017 (2017) requires DEQ, by no later than April 15 of each year, to calculate the average cost or cost-savings of the Clean Fuels Program per gallon of gasoline (E10) and per gallon of diesel (B5) for the previous year. The approach and values used to calculate the cost of compliance below are conservative, meaning they result in a likely higher cost per gallon than the real effect on fuel prices in the prior year. It does not account for the value of CFP credits being used to lower the cost of the low-carbon biofuels being blended into gasoline and diesel for use in Oregon, nor does it capture the value of the credits making other low carbon fuels such as electricity, renewable natural gas or renewable propane cheaper and more affordable to consumers in Oregon. The State Department of Agriculture must provide the formula and results of these calculations to each gas station in Oregon to facilitate compliance by gas station owners or operators with ORS 646.932. DEQ is also required to calculate the total greenhouse gas emissions reductions attributable to the low carbon fuel standards for the preceding calendar year.

**Formula:**

The average cost of the Clean Fuels Program is associated with the difference in the carbon intensity of the fuel when compared to the clean fuel standard and the cost of credits in the program.

$$\text{Average Cost} = [(\text{Carbon Intensity} - \text{Standard}) \times (\text{Energy Density})] \times \left(\frac{1 \text{ tonne}}{1,000,000 \text{ g}}\right) \times (\text{Credit Price})$$

Where:

- Carbon Intensity is shown in Table 4 (OAR 340-253-8010)
- Standards are shown in Table 1 (OAR 340-253-8010) or Table 2 (-8010)
- Energy density is calculated from values in Table 6 (OAR 340-253-8010)
- Credit Price is shown in the Monthly Credit Transaction Report

Average Cost of the Clean Fuels Program per gallon of E10 for 2021:

$$\text{Average Cost of the Clean Fuels Program per gallon of E10} = \left[ \left( 98.06 \frac{\text{gCO}_2\text{e}}{\text{MJ}} - 94.63 \frac{\text{gCO}_2\text{e}}{\text{MJ}} \right) \times \left( 118.38 \frac{\text{MJ}}{\text{gallon}} \right) \right] \times \left( \frac{1 \text{ tonne}}{1,000,000 \text{ g}} \right) \times \left( \frac{\$125.30}{\text{tonne}} \right)$$

The Average Cost of the Clean Fuels Program was \$0.0509 or 5.09 cents per gallon of E10 for 2021.

Average Cost of the Clean Fuels Program per gallon of B5 for 2021:

$$\text{Average Cost of the Clean Fuels Program per gallon of B5} = \left[ \left( 98.74 \frac{\text{gCO}_2\text{e}}{\text{MJ}} - 95.29 \frac{\text{gCO}_2\text{e}}{\text{MJ}} \right) \times \left( 134.06 \frac{\text{MJ}}{\text{gallon}} \right) \right] \times \left( \frac{1 \text{ tonne}}{1,000,000 \text{ g}} \right) \times \left( \frac{\$125.30}{\text{tonne}} \right)$$

The Average Cost of the Clean Fuels Program was \$0.0580 or 5.80 cents per gallon of B5 for 2021.

Greenhouse Gases Reduced:

Nearly 1.5 million metric tons of greenhouse gases were reduced by the Clean Fuels Program in 2021. Approximately 6.7 million metric tons of greenhouse gases have been reduced by the Clean Fuels Program since 2016.

Historical Values:

Year	GHGs reduced	Avg E10 CFP cost	Avg B5 CFP cost
2017	926,000 tonnes	0.23 cent/gallon	0.31 cent/gallon
2018	976,000 tonnes	0.98 cent/gallon	1.13 cent/gallon
2019	1,275,000 tonnes	2.57 cents/gallon	2.94 cents/gallon
2020	1,318,000 tonnes	3.71 cents/gallon	4.24 cents/gallon
2021	1,472,000 tonnes	5.09 cents/gallon	5.80 cents/gallon