

Oregon Department of Environmental Quality

2018 Annual Cost of the Clean Fuels Program

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 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.

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

Where:

Carbon Intensity is shown in Table 3 (OAR 340-253-8030) or Table 4 (-8040) Standard is shown in Table 1 (OAR 340-253-8010) or Table 2 (-8020) Energy density is calculated from values in Table 6 (OAR 340-253-8060) Credit Price is shown in the Monthly Credit Transaction Report

Average Cost of the Clean Fuels Program per gallon of E10 for 2018:

Average Cost of the Clean Fuels Program per gallon of E10 = $\left[\left(98.64\ \frac{gCO2e}{MJ}-\ 97.66\frac{gCO2e}{MJ}\right)\times\left(118.38\ \frac{MJ}{gallon}\right)\right]\times\left(\frac{1\ tonne}{1,000,000\ g}\right)\times\left(\frac{\$84.06}{tonne}\right)$

The Average Cost of the Clean Fuels Program was \$0.0098 or 0.98 of a cent per gallon of E10 for 2018.

Average Cost of the Clean Fuels Program per gallon of B5 for 2018:

Average Cost of the Clean Fuels Program per gallon of B5 = $\left[\left(99.61\,\frac{gCO2e}{MJ} - \,98.61\frac{gCO2e}{MJ}\right) \times \left(134.06\,\frac{MJ}{gallon}\right)\right] \times \left(\frac{1\,tonne}{1,000,000\,g}\right) \times \left(\frac{\$84.06}{tonne}\right)$

The Average Cost of the Clean Fuels Program was \$0.0113 or 1.13 cents per gallon of B5 for 2018.

Greenhouse Gases Reduced in 2018:

948,696 tonnes of greenhouse gases were reduced by the Clean Fuels Program in 2018.

Historical Values:

Year	GHGs reduced	Avg E10 CFP cost	Avg B5 CFP cost
2017	925,269 tonnes	0.23 cent/gallon	0.31 cent/gallon
2018	948,696 tonnes	0.98 cent/gallon	1.13 cent/gallon