



## Oregon Department of Environmental Quality 2017 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.

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

Where:

Carbon Intensity is shown in Table 3 (OAR 340-253-8030) or Table 4 (OAR 340-253-8040)

Standard is shown in Table 1 (OAR 340-253-8010) or Table 2 (OAR 340-253-8020)

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 2017:

$$\begin{aligned} \text{Average Cost of the Clean Fuels Program per gallon of E10} = \\ \left[ \left( 98.54 \frac{\text{gCO}_2\text{e}}{\text{MJ}} - 98.13 \frac{\text{gCO}_2\text{e}}{\text{MJ}} \right) \times \left( 118.38 \frac{\text{MJ}}{\text{gallon}} \right) \right] \times \left( \frac{1 \text{ tonne}}{1,000,000 \text{ g}} \right) \times \left( \frac{\$48.09}{\text{tonne}} \right) \end{aligned}$$

The Average Cost of the Clean Fuels Program was \$0.0023 or 0.23 of a cent per gallon of E10 for 2017.

### Average Cost of the Clean Fuels Program per gallon of B5 for 2017:

$$\begin{aligned} \text{Average Cost of the Clean Fuels Program per gallon of B5} = \\ \left[ \left( 99.64 \frac{\text{gCO}_2\text{e}}{\text{MJ}} - 99.14 \frac{\text{gCO}_2\text{e}}{\text{MJ}} \right) \times \left( 134.06 \frac{\text{MJ}}{\text{gallon}} \right) \right] \times \left( \frac{1 \text{ tonne}}{1,000,000 \text{ g}} \right) \times \left( \frac{\$48.09}{\text{tonne}} \right) \end{aligned}$$

The Average Cost of the Clean Fuels Program was \$0.0032 or 0.32 of a cent per gallon of B5 for 2017.

### Greenhouse Gases Reduced in 2017:

925,269 tonnes of greenhouse gases were reduced by the Clean Fuels Program in 2017.

**Note:** This document was updated on May 15, 2018 to correct the B5 and E10 energy densities above. The cost figures were not significantly affected by this correction. This document was also updated on April 12, 2019 to add the greenhouse gases reduced.