

# CO2 EMISSIONS FROM REFINING GASOLINE

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In the following calculation, I will prove how much CO2 will be released from the refining process of one gallon of gasoline

<b>85.50%</b> %	Refining efficiency of one gallon of Gasoline (average).	1
<b>0.145</b> gal Oil	Units of energy burned per unit energy refined	
<b>138095</b> BTU/gal	Crude Oil	2
<b>18676</b> BTU/lbs * <b>6.25</b> lbs/gal = <b>116725</b>	BTU/gal Gasoline	3
<b>0.145</b> gal Oil * <b>116725</b> BTU/gal = <b>16925</b>	BTU Oil to produce 1 gal Gasoline	
<b>16925</b> BTU / <b>138095</b> BTU/gal = <b>0.1226</b>	gal Oil to produce 1 gal Gasoline	
	*	
	<b>20.0559</b> lbs CO2/gal of oil burned	4
	=	
	<b>2.4581</b> lbs CO2 to produce 1 gal gasoline	

**That's 2.4589 lbs CO2 emitted from refining one gallon of gasoline.**

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<sup>1</sup> [www.transportation.anl.gov/modeling\\_simulation/GREET/pdfs/energy\\_eff\\_petroleum\\_refineries-03-08.pdf](http://www.transportation.anl.gov/modeling_simulation/GREET/pdfs/energy_eff_petroleum_refineries-03-08.pdf)

<sup>2</sup> [www.eia.doe.gov/kids/energyfacts/science/energy\\_calculator.html](http://www.eia.doe.gov/kids/energyfacts/science/energy_calculator.html)

<sup>3</sup> [www.eere.energy.gov/afdc/pdfs/fueltable.pdf](http://www.eere.energy.gov/afdc/pdfs/fueltable.pdf)

<sup>4</sup> [www.afteroilEV.com/Pub/CO2\\_Emissions\\_from\\_Fuel\\_Combustion.pdf](http://www.afteroilEV.com/Pub/CO2_Emissions_from_Fuel_Combustion.pdf)