$\begin{tabular}{ll} Table 3 --- Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes \\ \end{tabular}$

Oregon Department of Environmental Quality

Table 3 – 340-253-8030

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Fuel	Pathway Identifier	Pathway Description	Carbon Intensity Values (gCO2e/MJ)		
			Direct Lifecycle Emissions	Land Use or Other Indirect Effect	Total Emission s
Gasoline	ORGAS001	Clear gasoline - based on a weighted average of gasoline supplied to Oregon	100.77	-	100.77
	ORGAS002	Blended gasoline (E10) - 90% clear gasoline & 10% corn ethanol based on Midwest average	98.54	-	98.54
Ethanol from Corn	ETHCOR001	Midwest average - MW corn; Dry Mill; NG; MW production	62.29	7.60	69.89
	ETHCOR002	Oregon average - MW corn; Dry Mill; NG; Oregon production	57.08	7.60	64.68

Oregon Department of Environmental Quality Table 3 – 340-253-8030 Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes Ethanol from Brazilian sugarcane ETHSOR001 39.24 11.80 51.04 Sugarcane base case Ethanol from ETHGOR001 Sorghum; average 66.96 19.40 86.36 Sorghum Ethanol from ETHMOR001 41.03 11.80 Molasses; average 52.83 Molasses North American NG delivered via ORCNG001 79.93 79.93 pipeline; compressed in OR Compressed Landfill gas **Natural Gas** (biomethane) ORCNG002 cleaned up to 50.26 50.26 pipeline quality NG; compressed in OR North American NG delivered via pipeline; liquefied in ORLNG001 94.46 94.46 OR using liquefaction with Liquefied 80% efficiency Natural Gas Landfill Gas (biomethane) to ORLNG002 LNG liquefied in OR 65.81 65.81 using liquefaction with 80% efficiency Liquefied Liquefied petroleum Petroleum ORLPG001 83.05 83.05 gas Gas Oregon average Electricity ORELC001 31.85 31.85

NOTE: DEQ recognizes that indirect effects, including indirect land use change, are real. However the methodologies to quantify these effects are still in development. DEQ intends to monitor the science of indirect effect and will adjust carbon intensity values through future rulemaking as methodologies improve.

electricity mix