This version of the reporting tool is for reference only, and data submitted with it will not be accepted. Please use the full excel version for reporting purposes.

Start Here tab

Washington Department of Ecology Reporting Tool for Greenhouse Gas Emissions from Fuel Suppliers

Instructions
This reporting tool must be completed by suppliers of fuels, except natural gas, reporting under WAC 173-441-122(5). For assistance and questions, email ghgreporting@ecy.wa.gov.

Accessibility
To request an ADA accommodation, contact Ecology's ADA Coordinator by phone at 360-407-6831 or email Ecology's GHG Reporting and Verification Team at GHGReporting@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.

Color code
Light green cells require reporter input
Light blue cells are optional for a reporter to complete
Light gray cells calculate based on reporter input or are non-input

External links
WAC 173-441: Reporting of Emissions of Greenhouse Gases
40 C.F.R Part 98: EPA Mandatory Greenhouse Gas Reporting

Fill out the following table with general information about this supplier:	
Supplier name:	
GHGRPID:	
Reporting year:	
GHG report start date:	
GHG report end date:	
Primary NAICS code:	
Additional NAICS code(s):	
Comments (optional):	

Version
Version 2.0
Last updated: 1/31/2024
Publication No. 24-14-017

Correct before uploading
Enter a value for all green cells (B19-B24, B30, B38, B41, B43, B47-B49) on this tab. Enter NA if applicable.
Make sure ownership in F30-F35 adds to 100%.
Invalid NAICS code. Enter a valid NAICS code.

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Start Here tab (cont.)

Fill out the following table with information about this supplier's highest parent company(s):						
Parent company name	Street address	City	State	Zip code	Percent ownership	Description of direct or indirect affiliation with other reporters

Fill out the following table if any of the following situations are applicable to this supplier:	
Were any missing data procedures used this reporting year?	
List each data element for which a missing data procedure was used (40 CFR § 98.395):	
Total number of hours in the year that a missing data procedure was used for each data element:	
Were there any changes to **emission** data calculation methodologies since the last reporting year or during the reporting year?	
Emission data method change explanation:	
Did emissions increase or decrease more than 5% relative to the previous year?	
Description of cause of increase or decrease in emissions, if the increase or decrease is more than 5% in GHGs relative to the previous year:	

Please confirm the following:	
Per WAC 173-441-122(5), fuel products must be reported into their component/constituent parts. Please confirm that fuel products are reported in their component/constituent parts and not as finished fuel products in this reporting tool.	
Per WAC 173-441-122(5)(d)(vii), please confirm that oxygenate percentages have been reported for all imported fuel products.	
Per WAC 173-441-122(5)(a)(ii), no fuel product shall be reported as finished fuel. Please confirm that all unfinished products at the point of regulation are reported.	

Emissions Summary:	
Reported Emissions - in MT CO_2e	0
Covered Emissions - in MT CO_2e	0

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Aggregate products tab

Aggregate petroleum products: Report annual aggregate quantity of each individual product. For blended products, emissions must be reported for each individual product separately.

Product	Description	% biogenic	Product delivered across a terminal or refinery rack in WA (Barrels)	Product imported from outside WA outside the bulk system/terminal system delivered in WA (Barrels)	For fuel product imports (reported in column E), designated percentage of oxygenate (%)	Product with a final destination outside of WA, product previously delivered by a position holder or refiner out of an upstream WA terminal or refinery rack prior to delivery out of a second terminal rack, or non-crude feedstocks used in WA refinery (Barrels)	Product with a final destination outside of WA (Barrels)	Product previously delivered by a position holder or refiner out of an upstream WA terminal or refinery rack prior to delivery out of a second terminal rack (Barrels)	Non-crude feedstocks used in WA refinery (Barrels)
Gasoline									
CBOB—Summer Regular	Conventional gasoline, typically used in WA	0%			0%	0			
CBOB—Summer Midgrade	Conventional gasoline, typically used in WA	0%			0%	0			
CBOB—Summer Premium	Conventional gasoline, typically used in WA	0%			0%	0			
CBOB—Winter Regular	Conventional gasoline, typically used in WA	0%			0%	0			
CBOB—Winter Midgrade	Conventional gasoline, typically used in WA	0%			0%	0			
CBOB—Winter Premium	Conventional gasoline, typically used in WA	0%			0%	0			
RBOB—Summer Regular (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
RBOB—Summer Midgrade (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
RBOB—Summer Premium (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
RBOB—Winter Regular (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
RBOB—Winter Midgrade (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
RBOB—Winter Premium (CA)	Reformulated gasoline, typically used in CA	0%			0%	0			
Blendstocks—Other		0%			0%	0			
Oxygenates									
Methanol		0%			100%	0			
GTBA		0%			100%	0			
MTBE		0%			100%	0			
ETBE		0%			100%	0			
TAME		0%			100%	0			
DIPE		0%			100%	0			
Diesel and Distillate Fuel Oil									
Distillate No. 1 Ultra Low Sulfur		0%			0%	0			
Distillate No. 1 Low Sulfur		0%			0%	0			
Distillate No. 1 High Sulfur		0%			0%	0			
Distillate No. 2 Ultra Low Sulfur		0%			0%	0			
Distillate No. 2 Low Sulfur		0%			0%	0			
Distillate No. 2 High Sulfur		0%			0%	0			
Distillate Fuel Oil No. 4		0%			0%	0			
Residual Fuel Oil No. 5 (Navy Special)		0%			0%	0			
Residual Fuel Oil No. 6 (a.k.a. Bunker C)		0%			0%	0			
Kerosene-Type Jet Fuel		0%			0%	0			
Kerosene		0%			0%	0			
Diesel—Other		0%			0%	0			
Petrochemical Feedstocks									
Naphthas (<401°F)		0%			0%	0			
Other Oils (>401°F)		0%			0%	0			
Unfinished Oils									
Heavy Gas Oils		0%			0%	0			
Residuum		0%			0%	0			
Other Petroleum Products and Natural Gas Liquids									
Aviation Gasoline		0%			0%	0			
Special Naphthas		0%			0%	0			
Lubricants		0%			0%	0			
Waxes		0%			0%	0			
Petroleum Coke		0%			0%	0			
Asphalt and Road Oil	Assumed not combusted when calculating CCA covered emissions.	0%			0%	0			
Still Gas		0%			0%	0			
Ethane	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Ethylene	The density and emission factor determined at 41°F and saturation pressure	0%			0%	0			
Propane	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Propylene	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Butane	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Butylene	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Isobutane	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Isobutylene	The density and emission factor determined at 60°F and saturation pressure	0%			0%	0			
Isobutylene		0%			0%	0			
Pentanes Plus		0%			0%	0			
Miscellaneous Products		0%			0%	0			
Biomass-Based Fuels									
Ethanol (100%)	Volume of denaturant is assumed to be zero and not required to be reported here.	100%			100%	0			
Biodiesel (100%, methyl ester)		100%			0%	0			
Rendered Animal Fat		100%			0%	0			
Vegetable Oil		100%			0%	0			
TOTAL									

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Aggregate products tab (cont)

Columns K-O: Must include these volumes in columns D-E (as applicable); may also report these volumes in columns K-O if documentation demonstrating product's end use can be pro *Notes optional*

Product for aviation use (Barrels)	Product for marine applications combusted outside WA state (Barrels)	Motor vehicle or special fuel exclusively used for agricultural purposes by a farm fuel user (Barrels)	Motor vehicle or special fuel exclusively used for the purpose of transporting agricultural products on public highways (Barrels)	Product demonstrated to Ecology's satisfaction that it is not combusted or oxidized (Barrels)	Notes

Liquefied petroleum gas (LPG)
LPG supplied in WA (Barrels)
Note: This reporting is required but additional to Rows 3-66 so it is not included in emissions totals. You must enter individual components in Rows 3-66 and enter total volume of LPG supplied in WA in this table.

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Aggregate products tab (cont)

Total product quantity used for emissions reporting (Barrels)	Biogenic product quantity used for emissions reporting (Barrels)	Fossil CO_2 Reported (MT)	Biogenic CO_2 Reported (MT)	CH_4 Reported (MT)	N_2O Reported (MT)	Total CO_2e Reported (MT)	Fossil product quantity used for CCA (Barrels)	Biogenic product quantity used for CCA (non-CO_2) (Barrels)	Fossil CO_2 CCA (MT)	CH_4 CCA (MT)	N_2O CCA (MT)	Total CO_2e CCA (MT)	Contact ECY if you need to report differing biogenic percentages for the same fuel that meets multiple points of regulation.	Check for negative values.
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0		
	-	-	-	-	-	-		-	-	-	-	-		

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Reference tab

Table MM-1 to Subpart MM of Part 98—Default Factors for Petroleum Products and Natural Gas Liquid Back to Aggregate products

Products	Column A: density (metric tons/bbl)	Column B: carbon share (% of mass)	Column C: emission factor (metric tons CO_2/bbl)
Finished Motor Gasoline			
Conventional—Summer			
Regular	0.1181	86.66	0.3753
Midgrade	0.1183	86.63	0.3758
Premium	0.1185	86.61	0.3763
Conventional—Winter			
Regular	0.1155	86.5	0.3663
Midgrade	0.1161	86.55	0.3684
Premium	0.1167	86.59	0.3705
Reformulated—Summer			
Regular	0.1167	86.13	0.3686
Midgrade	0.1165	86.07	0.3677
Premium	0.1164	86	0.367
Reformulated—Winter			
Regular	0.1165	86.05	0.3676
Midgrade	0.1165	86.06	0.3676
Premium	0.1166	86.06	0.3679
Gasoline—Other	0.1185	86.61	0.3763
Blendstocks			
CBOB—Summer			
Regular	0.1181	86.66	0.3753
Midgrade	0.1183	86.63	0.3758
Premium	0.1185	86.61	0.3763
CBOB—Winter			
Regular	0.1155	86.5	0.3663
Midgrade	0.1161	86.55	0.3684
Premium	0.1167	86.59	0.3705
RBOB—Summer			
Regular	0.1167	86.13	0.3686
Midgrade	0.1165	86.07	0.3677
Premium	0.1164	86	0.367
RBOB—Winter			
Regular	0.1165	86.05	0.3676
Midgrade	0.1165	86.06	0.3676
Premium	0.1166	86.06	0.3679
Blendstocks—Other	0.1185	86.61	0.3763
Oxygenates			
Methanol	0.1268	37.48	0.1743
GTBA	0.1257	64.82	0.2988
MTBE	0.1181	68.13	0.295
ETBE	0.1182	70.53	0.3057
TAME	0.1229	70.53	0.3178
DIPE	0.1156	70.53	0.299
Distillate Fuel Oil			
Distillate No. 1			
Ultra Low Sulfur	0.1346	86.4	0.4264
Low Sulfur	0.1346	86.4	0.4264
High Sulfur	0.1346	86.4	0.4264
Distillate No. 2			
Ultra Low Sulfur	0.1342	87.3	0.4296
Low Sulfur	0.1342	87.3	0.4296
High Sulfur	0.1342	87.3	0.4296
Distillate Fuel Oil No. 4	0.1452	86.47	0.4604
Residual Fuel Oil No. 5 (Navy Special)	0.1365	85.67	0.4288
Residual Fuel Oil No. 6 (a.k.a. Bunker C)	0.1528	84.67	0.4744
Kerosene-Type Jet Fuel	0.1294	86.3	0.4095
Kerosene	0.1346	86.4	0.4264
Diesel—Other	0.1452	86.47	0.4604
Petrochemical Feedstocks			
Naphthas (<401°F)	0.1158	84.11	0.3571
Other Oils (>401°F)	0.139	87.3	0.445
Unfinished Oils			
Heavy Gas Oils	0.1476	85.8	0.4643
Residuum	0.1622	85.7	0.5097
Other Petroleum Products and Natural Gas Liquids			
Aviation Gasoline	0.112	85	0.349
Special Naphthas	0.1222	84.76	0.3798
Lubricants	0.1428	85.8	0.4492
Waxes	0.1285	85.3	0.4019
Petroleum Coke	0.1818	92.28	0.6151
Asphalt and Road Oil	0.1634	83.47	0.5001
Still Gas	0.1405	77.7	0.4003
Ethane[3]	0.0579	79.89	0.17
Ethylene[4]	0.0492	85.63	0.154
Propane[3]	0.0806	81.71	0.241
Propylene[3]	0.0827	85.63	0.26
Butane[3]	0.0928	82.66	0.281
Butylene[3]	0.0972	85.63	0.305
Isobutane[3]	0.0892	82.66	0.27
Isobutylene[3]	0.0949	85.63	0.298
Isobutylene	0.0936	85.63	0.2939
Pentanes Plus	0.1055	83.63	0.3235
Miscellaneous Products	0.138	85.49	0.4326

[1] In the case of products blended with some portion of biomass-based fuel, the carbon share in Table MM-1 of this subpart represents only the petroleum-based components.

[3] The density and emission factors for components of LPG determined at 60 degrees Fahrenheit and saturation pressure (LPG other than ethylene).

[4] The density and emission factor for ethylene determined at 41 degrees Fahrenheit and saturation pressure.

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Reference tab (cont.)

Table MM-2 to Subpart MM of Part 98—Default Factors for Biomass-Based Fuels and Biomass			Back to Aggregate product
Biomass-based fuel and biomass	**Column A: Density (metric tons/bbl)**	**olumn B: Carbon shai (% of mass)**	**Column C: Emission factor (metric tons CO_2/bbl)**
Ethanol (100%)	0.1267	52.14	0.2422
Biodiesel (100%, methyl ester)	0.1396	77.3	**0.4296**
Rendered Animal Fat	0.1333	76.19	0.3724
Vegetable Oil	0.146	76.77	0.411

Fuel types from Table C-1 to Subpart C of Part 98	Back to Aggregate products
Fuel type	**Default high heat value**
Coal and coke	**mmBtu/short ton**
Anthracite	25.09
Bituminous	24.93
Subbituminous	17.25
Lignite	14.21
Coal Coke	24.8
Mixed (Commercial sector)	21.39
Mixed (Industrial coking)	26.28
Mixed (Industrial sector)	22.35
Mixed (Electric Power sector)	19.73
Natural gas	**mmBtu/scf**
Natural gas weighted U.S. average	0.001026
Petroleum products—liquid	**mmBtu/gallon**
Distillate Fuel Oil No. 1	0.139
Distillate Fuel Oil No. 2	0.138
Distillate Fuel Oil No. 4	0.146
Residual Fuel Oil No. 5	0.14
Residual Fuel Oil No. 6	0.15
Used Oil	0.138
Kerosene	0.135
Liquefied petroleum gases (LPG)	0.092
Propane	0.091
Propylene	0.091
Ethane	0.068
Ethanol	0.084
Ethylene	0.058
Isobutane	0.099
Isobutylene	0.103
Butane	0.103
Butylene	0.105
Naphtha (<401 deg F)	0.125
Natural Gasoline	0.11
Other Oil (>401 deg F)	0.139
Pentanes Plus	0.11
Petrochemical Feedstocks	0.125
Special Naphtha	0.125
Unfinished Oils	0.139
Heavy Gas Oils	0.148
Lubricants	0.144
Motor Gasoline	0.125
Aviation Gasoline	0.12
Kerosene-Type Jet Fuel	0.135
Asphalt and Road Oil	0.158
Crude Oil	0.0138
Petroleum products—solid	**mmBtu/short ton**
Petroleum Coke	30
Petroleum products—gaseous	**mmBtu/scf**
Propane Gas	0.002516
Other fuels—solid	**mmBtu/short ton**
Municipal Solid Waste	9.95
Tires	28
Plastics	38
Other fuels—gaseous	**mmBtu/scf**
Blast Furnace Gas	0.000092
Coke Oven Gas	0.000599
Fuel Gas	0.001388
Biomass fuels—solid	**mmBtu/short ton**
Wood and Wood Residuals (dry basis)	17.48
Agricultural Byproducts	8.25
Peat	8
Solid Byproducts	10.39
Biomass fuels—gaseous	**mmBtu/scf**
Landfill Gas	0.000485
Other Biomass Gases	0.000655
Biomass Fuels—Liquid	**mmBtu/gallon**
Ethanol	0.084
Biodiesel (100%)	0.128
Rendered Animal Fat	0.125
Vegetable Oil	0.12

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Reference tab (cont.)

Table C-2 to Subpart C of Part 98—Default CH_4 and N_2O Emission Factors for Various Types of Fuel		Back to Aggregate products
Fuel type	**Default CH_4 emission factor (kg CH_4/mmBtu)**	**factor (kg N_2O/mmBtu)**
Coal and Coke (All fuel types in Table C-1)	1.1E-02	1.6E-03
Natural Gas	1.0E-03	1.0E-04
Petroleum Products (All fuel types in Table C-1)	3.0E-03	6.0E-04
Fuel Gas	3.0E-03	6.0E-04
Other Fuels—Solid	3.2E-02	4.2E-03
Blast Furnace Gas	2.2E-05	1.0E-04
Coke Oven Gas	4.8E-04	1.0E-04
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residual	3.2E-02	4.2E-03
Wood and wood residuals	7.2E-03	3.6E-03
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2E-03	6.3E-04
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1E-03	1.1E-04

Table 122-1 of WAC 173-441		Back to Aggregate products
Fuel	**CH_4 (g/bbl)**	**N_2O (g/bbl)**
Blendstocks of finished gasoline	20	20
Distillate and diesel-other	2	1
Ethanol	37	27
Biodiesel and renewable diesel	2	1
Oxygenates	13	3
Residuum	18	4
Waxes	17	3
Still gas	19	4
Miscellaneous products	17	3

Conversion factors from Table A-2 of WAC 173-441	Back to Aggregate products
Conversion factors	**Unit**
1000	g/kg
0.001	MT/kg
0.90718	MT/short ton
42	gal/bbl
0.15891	m^3/bbl
35.31467	ft^3/m^3

Global warming potentials	Back to Aggregate products
Gas	**GWP**
CO_2	1
CH_4	25
N_2O	298