

**AUGUST 2025** 

# Biodiesel use by Washington State Agencies

JANUARY — DECEMBER 2024

Contracts & Procurement Division

Report to the Legislature

# **Agency Overview**

The Department of Enterprise Services (DES) provides centralized services to state government agencies; to other public entities such as cities, counties, and tribes; and to Washington residents.

DES' mission is to strengthen the business of government.

We do this by creating overall operating efficiencies so our state's government entities can focus on their core missions. Our buying power, economies of scale and years of experience help government get the best value for the products and services they need to support their missions.

## **Key Services**

- Capitol Campus stewardship
- Construction & public works
- Contracts & procurement
- Employee Assistance Program
- Energy efficiency
- Engineering & architectural services
- Facilities management
- Fleet management & EVs

- Parking management
- Print & mail services
- Property management
- Real estate services
- Risk management
- Small agency support
- Surplus property
- Training & workforce development



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# **Contents**

Executive summary	1
Terminology	1
Key findings	1
Introduction	3
Statutory directive	3
Key terms	4
Background	4
Scope	4
Findings	5
State biodiesel purchases	5
State ferries biodiesel use	6
Land sector biodiesel use	8
WSDOT regional purchases: vehicle & equipment fleet	9
Fuel quality	12
State contracts	13
Recommendations	14
Statewide	14
Department of Enterprise Services	15
Washington State Ferries (WSF)	15
Department of Transportation (WSDOT)	15
Other agencies	15
Conclusions	17
Acknowledgements	17

# **Executive summary**

Since 2009, state law requires that agencies use biodiesel-blended fuels to operate diesel-powered vessels, vehicles, and construction equipment. This is part of the state's efforts to reduce greenhouse gas emissions, improve air quality, and alleviate public health impacts.

Each year, the Department of Enterprise Services (DES) updates this report to share information about the state's use of biodiesel-blended fuels. This report focuses on state agency purchases of bulk diesel fuel through statewide contracts and the open market to operate diesel-powered vessels, vehicles, and equipment from Jan. 1 through Dec. 31, 2024.

## **Terminology**

In this report, the term "biodiesel" means pure biodiesel unless clearly indicated otherwise. The term "fuel" is used to indicate a combination of all forms of diesel, including biodiesel.

This report also includes information about renewable diesel (R99), which is different than biodiesel, though both biomass-based fuels are being used as lower carbon replacement fuels.

## **Key findings**

Below are our key findings for the state's use of biodiesel fuel in 2024:

- During 2024, state agencies, including universities, bought just under 1.55 million gallons of biodiesel, representing 8.45% of all fuel purchased to power diesel vehicles, vessels, equipment, and fire boilers to heat and power facilities in Washington. This is a 1.04% decrease from 2023, when the biodiesel use was 9.49%.
- The Washington State Department of Transportation (WSDOT) buys the most biodiesel of all state agencies. WSDOT purchased 1.54 million gallons of biodiesel in 2024, representing 99.4% of state agencies' use.
  - WSDOT's Washington State Ferries (WSF) division accounts for 93% of all biodiesel purchases. WSF purchased 1.4 million gallons of biodiesel in 2024, a 0.1% increase from 2023. WSF averaged 9.4% biodiesel, down by 0.2% from 2023.
  - During 2024, all other WSDOT divisions purchased 102,552 gallons of biodiesel, representing 6.62% of the state's biodiesel purchases. WSDOT's average blend level was 4.5% biodiesel, which was 6.8% lower than its 2023 level due to expanding use of renewable diesel (R99).
- The state departments of Corrections, Natural Resources, and Fish and Wildlife bought a

- combined 9,741 gallons of biodiesel, representing only 0.63% of total biodiesel purchases.
- Agencies purchased a total of 283,385 gallons of heating fuel and 18 million gallons of vehicle fuel.
- WSDOT (excluding WSF) expanded its use of R99 statewide. However, challenges with deliveries limit the use of R99 in the Southwest Region. In 2024, WSDOT replaced 1.2 million gallons of petroleum diesel with R99. WSDOT's average 2024 renewable diesel blend level was 52.6% in 2024. When we combine biodiesel (B100) and R99, WSDOT's total diesel purchase of biomass-based blend increased to 57.1%.

## Introduction

As a part of the state's efforts to reduce greenhouse gas emissions, improve air quality and alleviate public health impacts, and stimulate local production and use of biodiesel, since 2009 state law has required that agencies use biodiesel-blended fuels to operate diesel-powered vessels, vehicles, and construction equipment.

## **Statutory directive**

#### RCW 43.19.642 - Biodiesel fuel blends—Use by agencies—Annual report.

- (1) Effective June 1, 2006, for agencies complying with the ultra-low sulfur diesel mandate of the United States environmental protection agency for on-highway diesel fuel, agencies shall use biodiesel as an additive to ultra-low sulfur diesel for lubricity, provided that the use of a lubricity additive is warranted and that the use of biodiesel is comparable in performance and cost with other available lubricity additives. The amount of biodiesel added to the ultra-low sulfur diesel fuel shall be not less than two percent.
- (2) Except as provided in subsection (5) of this section, effective June 1, 2009, state agencies are required to use a minimum of 20 percent biodiesel as compared to total volume of all diesel purchases made by the agencies for the operation of the agencies' diesel-powered vessels, vehicles, and construction equipment.
- (3) All state agencies using biodiesel fuel shall, beginning on July 1, 2016, file annual reports with the department of enterprise services documenting the use of the fuel and a description of how any problems encountered were resolved.
- (4) By December 1, 2009, the department of enterprise services shall:
  - (a) Report to the legislature on the average true price differential for biodiesel by blend and location; and
  - (b) Examine alternative fuel procurement methods that work to address potential market barriers for in-state biodiesel producers and report these findings to the legislature.
- (5) During the 2021-2023 and 2023-2025 fiscal biennia, the Washington state ferries is required to use a minimum of five percent biodiesel as compared to total volume of all diesel purchases made by the Washington state ferries for the operation of the Washington state ferries diesel-powered vessels, as long as the price of a B5 or B10 biodiesel blend does not exceed the price of conventional diesel fuel by five percent or more.

## **Key terms**

The term "biodiesel" means pure biodiesel unless clearly indicated otherwise. Biodiesel blends are specified by the capital letter "B" followed by the percentage of biodiesel. For example, B5 contains 5% biodiesel and 95% diesel.

In the tables and charts, we express biodiesel in B100 gallons. To avoid confusion, the term "fuel" is used to indicate a combination of all forms of diesel, including biodiesel and renewable diesel.

## **Background**

Under current law, Washington State Ferries (WSF) must use a minimum blend of B5 in all vessels if the price of B5 or B10 does not exceed the price of petroleum diesel by 5% or more. All other state agencies are to use a minimum blend of B20 (**RCW 43.19.642**).

This policy is reinforced by procurement rules written under <u>WAC 194-28</u>, which directs state agencies to use biofuels and electricity to the extent feasible for publicly owned vessels, vehicles, and construction equipment. These rules reinforce the criteria mentioned in <u>RCW 43.19.642</u> and highlight expectations for the 16 agencies and universities with the highest gasoline and diesel consumption.

In addition, <u>Executive Order 20-01</u> directs agencies to reduce emissions of greenhouse gases and other toxins by finding lower-emission options when "cost-effective and workable solutions are available."

State law requires that the Department of Enterprise Services (DES) collaborate with key state agency stakeholders to gather and analyze data about the use of biodiesel fuel by state agencies. They must report on these findings and recommendations to the Governor and Legislature in an electronic format. (RCW 43.19.646, RCW 43.19.642)

For nine years, these reports were required every six months. In 2016, the Legislature changed the frequency to an annual report.

## Scope

Earlier reports attempted to determine whether diesel and biodiesel procurement by agencies was intended for transportation purposes, facility energy needs, or both. Given the expanding policy framework around public sector use of fossil fuels, this report now includes all diesel-related fuel purchases. It also now includes information on renewable diesel procurement by agencies.

Renewable diesel is different from biodiesel, though both are biofuels made from non-petroleum renewable sources. Renewable diesel is typically made from materials including vegetable oils and animal fats, like biodiesel and biomass, but is processed to be chemically the same as conventional diesel. It can be used as a "drop-in" replacement in existing engines and infrastructure, either blended or in pure form (R99 renewable diesel).

# **Findings**

## **State biodiesel purchases**

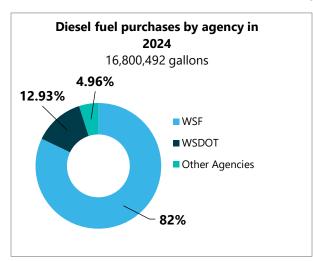
State agencies must purchase bulk fuel through statewide contracts that sell gasoline, heating oil, and diesel, including biodiesel. Many cities, counties, school districts, higher education institutions, and transit systems also use these contracts.

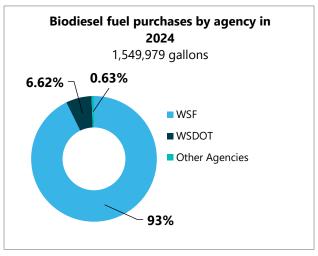
In 2024, state agencies and universities bought 16.8 million gallons of diesel fuel and 1.55 million gallons of biodiesel.

The Washington State Department of Transportation (WSDOT) is the largest consumer of diesel among state agencies.

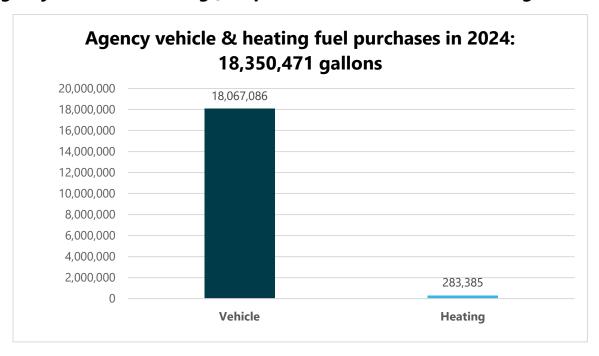
- WSDOT's Washington State Ferries (WSF) division accounted for 82% of diesel purchases and 93% of biodiesel purchases.
- WSDOT divisions, excluding WSF, accounted for 12.93% of diesel purchases and 6.62% of biodiesel purchases.
- Other agencies and universities accounted for the remaining 4.96% of diesel purchases and 0.63% of biodiesel purchases.

### Diesel & biodiesel fuel purchases by agency in 2024





### Agency vehicle & heating fuel purchases in 2024: 18,350,471 gallons



### State ferries biodiesel use

Washington State Ferries (WSF) has not fully restored service to four routes since the pandemic.

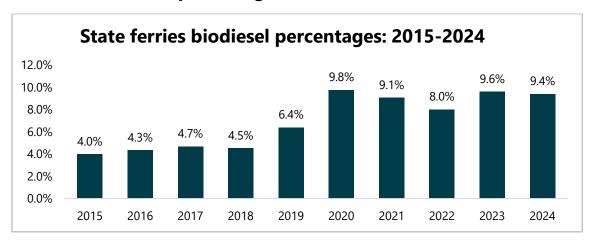
- In 2024, WSF, bought 1.4 million gallons of biodiesel, representing 9.4% of total fuel purchases.
- In 2023, it bought 1.4 million gallons of biodiesel, representing 9.6% of total fuel purchases.
- There was a 0.2% decrease in the percentage of biodiesel to total gallons bought in 2024 compared to the percentage in 2023.

### State ferries biodiesel purchases: 2015-2024

Year	Diesel gallons	Biodiesel gallons	Total gallons	Biodiesel %	
2024	13,794,168	1,437,686	15,231,854	9.4%	
2023	13,530,480	1,436,209	14,966,689	9.6%	
2022	13,713,078	1,190,720	14,903,798	8.0%	
2021	14,097,488	1,402,959	15,500,447	9.1%	
2020	13,403,109	1,448,102	14,851,211	9.8%	

Year	Diesel gallons	Biodiesel gallons	Total gallons	Biodiesel %	
2019	17,633,816	1,200,837	18,834,653	6.4%	
2018	17,806,078	843,467	18,649,545	4.5%	
2017	17,976,949	882,214	18,859,163	4.7%	
2016	17,799,290	807,807	18,607,097	4.3%	
2015	16,687,482	691,580	17,379,062	4.0%	

### State ferries biodiesel percentages: 2015-2024



WSF's progress using biodiesel has occurred in stages. In 2009, WSF began using B5 for vessels fueled by truck from the Harbor Island truck facility in Seattle. In 2011, vessels fueled by truck from Anacortes began using B5. In 2013, installation of infrastructure for in-line biodiesel blending at the Seattle Harbor Island dock facility was completed.

DES Statewide Contract <u>05718</u> – Marine Refueling Services and Fuels was finalized at the end of 2018. The contract enabled WSF to purchase B10 at the lower B5 prices. This removed a financial hurdle for using B10 fleetwide.

After completing a pilot in 2018 that found no negative impacts of B10 on vessel equipment, performance, or maintenance, WSF implemented fleet-wide use of B10 in July 2019. WSF piloted the use of a self-propelled bunkering vessel to deliver B10 via vessel-to-vessel delivery in October 2019 at Pier 15 in Seattle. After successful testing, vessel-to-vessel fuel delivery started at the Kingston Terminal in November 2019 and expanded to terminals in Bremerton in January 2020, Bainbridge Island in June 2020, and Vashon Island in April 2021.

There are 11 WSF delivery locations and all received biodiesel in 2024; all locations except one averaged at least 9.0% biodiesel.

- Three terminals Fauntleroy, Friday Harbor, and Point Defiance received exclusively B10.
- Anacortes Terminal, which accounted for about 23% of all fuel delivered in 2024, averaged 9.7% biodiesel.
- Fuel at Pier 15 in Seattle, which accounted for 21% of all fuel delivered, averaged 9.6% biodiesel.
- The four northern locations Clinton, Port Townsend, Anacortes, and Friday Harbor averaged 9.8% biodiesel, up from 9.4% in 2023.
- Vashon Island terminal averaged 8.4% biodiesel, which is the lowest biodiesel percentage of any delivery location.

WSF reported no biodiesel-related quality or performance concerns in 2024.

## Land sector biodiesel use

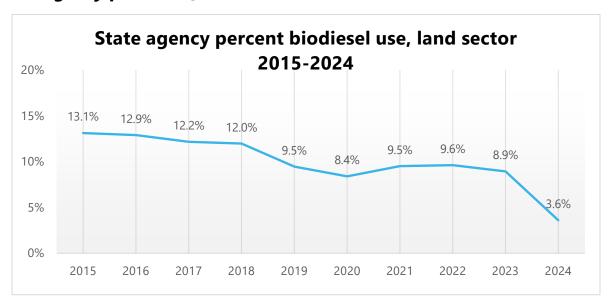
Excluding WSF, WSDOT purchases of biodiesel (B100) totaled 102,552 gallons in 2024. This is about 3.6% of total biodiesel purchases and an 8.9% decrease from 2023.

WSDOT's land sector division is the state's second-largest fuel user. It bought 2.17 million gallons of fuel in 2024. Biodiesel made up 4.5% of WSDOT's total diesel purchases, which is lower than in 2023 due to WSDOT's expansion of R99 use.

### Land sector biodiesel purchases in 2024

Agency	Diesel gallons	Biodiesel gallons	Total gallons	Biodiesel %
WSDOT	2,172,389	102,552	2,274,940	4.5%
Other Agencies	833,935	9,741	843,676	1.2%
TOTAL	3,006,324	112,293	3,118,617	3.6%

### State agency percent of biodiesel use, land sector: 2015-2024



# WSDOT regional purchases: vehicle & equipment fleet

### **WSDOT** fueling sites

WSDOT maintains a statewide network of 106 diesel fueling sites that serve most of the state's diesel-powered vehicles and equipment. Of those sites, 11 do not receive biodiesel due to cold winter temperatures and low fuel turnover. This means that these 11 fueling sites use little to no fuel for four to six months or longer. All remaining sites received some amount of biomass blend. Renewable diesel (R99) replaces diesel and biodiesel when available in all regions.

Since 2012, WSDOT's efforts to achieve a B20 blend level have been hampered by older tanks that fail to meet the U.S. Environmental Protection Agency (EPA) guidance (**EPA 510-K-20-001**) about materials compatibility.

As many of the fuel sites are beyond their 30-year life cycle and at the point of critical failure, aged tanks must be replaced to meet environmental standards. Since 2015, WSDOT has replaced tanks at 19 sites with B100-rated tanks. In 2025, 73% of WSDOT's fuel tanks are due for replacement, which would cost approximately \$87 million.

During the 2023-2025 biennium, WSDOT is working on replacing tanks at eight fuel sites, focusing on single-walled underground tanks as the highest priority. Single-walled underground tanks have the highest risk of leakage causing damage to the environment, fines, and resulting in high clean-up costs. Single-walled underground tanks are replaced with double-walled above ground tanks.

Due to funding, only tanks at four fuel sites can be replaced each year. While aged fuel tank replacement is critical, WSDOT has increased the biomass blend percentage with R99, which meets alternative fuel requirements and is compatible with the current tanks.

### WSDOT fueling site purchases by region in 2024

Diesel-only tanks are omitted from this data as of 2016.

WSDOT region	Diesel gallons	Biodiesel gallons	Renewable diesel gallons	Total gallons	Biodiesel %	Renewable Diesel %	Total Biofuel %
Westside	429,635	99,702	451,435	980,772	10.2%	46.0%	56.2%
Olympic	54,635	12,554	262,271	329,460	3.8%	79.6%	83.4%
Southwest	207,782	45,658	0	253,440	18.0%	0.0%	18.0%
Northwest	167,218	41,489	189,164	397,871	10.4%	47.5%	58.0%
Eastside	422,833	2,850	745,779	1,171,462	0.2%	63.7%	63.9%
North Central	179,451	0	101,512	280,963	0.0%	36.1%	36.1%
Eastern	105,046	2,850	271,108	379,004	0.8%	71.5%	72.3%
South Central	138,337	0	373,158	511,495	0.0%	73.0%	73.0%
TOTAL	852,468	102,552	1,197,214	2,152,234	4.8%	55.6%	60.4%

### **WSDOT** fuel purchases

WSDOT expanded its use of renewable diesel to Western Washington and prioritizes buying renewable diesel depending on availability. Renewable diesel can be used interchangeably with conventional diesel and does not have issues found with biodiesel, such as gelling in cold weather and microbial growth. Renewable diesel is a fuel made from fats and oils, such as soybean oil or canola oil, and is processed to be chemically the same as conventional diesel. Renewable diesel is at least 99% biofuel.

During 2024, in Western Washington, a diesel tank was installed at WSDOT's Newhalem fuel site bringing the total to 49 sites in three regions. Six of these sites did not receive biodiesel due to cold winter temperatures and low fuel turnover. However, these sites started to receive renewable diesel beginning in August 2024. Of the 740 diesel fuel deliveries to Western Washington sites:

- Nine deliveries did not have biodiesel or renewable diesel due to vendor delivery issues.
- 361 had biodiesel.
- 321 deliveries were renewable diesel.

Western Washington regions bought 109,078 fewer gallons of fuel in 2024 compared to 2023. With the influx of renewable diesel, WSDOT Northwest region's average biomass percentage

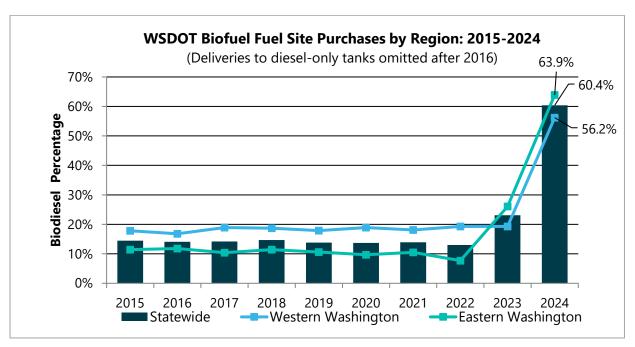
jumped to 58% and the Olympic region's increased to 83.4%. The Olympic region began receiving renewable diesel in March 2024 while the Northwest region began receiving renewable diesel in August 2024. The Southwest region biodiesel percentage was 1% lower in 2024 than in 2023. The overall biomass percentage in the three Western Washington regions was 56.2%, which was an increase from 37% in 2023. As mentioned previously, the Southwest region has fuel delivery issues that need to be resolved to receive renewable diesel.

During 2024, in Eastern Washington, WSDOT had 57 sites in three regions. Five of these sites did not receive biodiesel due to cold winter temperatures and low fuel turnover. Seven of 25 deliveries to these sites received renewable diesel. Of the Eastern Washington sites capable of supplying biodiesel, the overall biodiesel use decreased to 0.2% as sites shifted to R99.

The Eastern Washington region's total volume of fuel bought was 49,397 gallons more in 2024 than in 2023. Due to increased renewable diesel use, the percentage of overall biomass blend increased from 26.1% in 2023 to 63.9% in 2024. Of the 581 deliveries in Eastern Washington, 71% were renewable diesel and less than 1% had biodiesel.

### WSDOT biofuel fuel site purchases by region: 2015-2024

Deliveries to diesel-only tanks are omitted after 2016. Renewable diesel is included as of July 2023.



## **Fuel quality**

The Washington State Department of Agriculture (WSDA) monitors the quality of diesel and biodiesel fuels as part of the state's Motor Fuel Quality Program. During 2024, WSDA submitted monthly diesel and biodiesel blend fuel samples to a contracted laboratory to test if they met the American Society for Testing and Materials (ASTM) quality standards. WSDA collected samples from fuel terminals, retail outlets, and state and local government fueling sites.

### **Flashpoint failures**

While there are still occasional flashpoint failures, the frequency of these failures continues to decline.

A flashpoint failure is the lowest temperature at which a liquid or substance can produce enough vapors to ignite in the presence of air; it's the lowest temperature that a substance can catch fire if exposed to an open flame or spark. For diesel, the flashpoint minimum is 52 degrees Celsius (125.6 degrees Fahrenheit), and biodiesel can ignite at 93 degrees Celsius (200 degrees Fahrenheit). Flashpoint failures can happen from cross-contamination if distributors don't clean delivery trucks properly between loads or if fuel production and purification is poor.

WSDA checks the flashpoint levels of fuel samples in their ASTM quality standard testing.

There were two flashpoint failures in 2024. The flashpoint failures taken care of by fuel station owners or distributers did not require any WSDA enforcement action.

### **Regular testing**

WSDA continued to test WSDOT sites for biofuel. In November and December 2024, WSDA tested 37 WSDOT locations. WSDA conducted fuel testing for winter performance of WSDOT's fuel (such as "cold plug"). This is to ensure WSDOT's equipment can operate in extreme cold temperatures. WSDA found that most Western Washington sites had available biodiesel while most Eastern Washington sites had available R99.

No issues were found in either biodiesel or R99.

### **Overall quality**

Overall, WSDA did not find any significant quality issues with biodiesel in 2024. Other than WSDOT sites, no commercial biodiesel above 5% was found in any retail locations that would be open to the general public.

### **State contracts**

DES has two active statewide contracts that provide multiple types of fuel products that many purchasers across the state use. A third contract for Over the Water Marine Refueling (#07613) for Keller Ferry expired on January 13, 2024. Keller Ferry will be soliciting its own contract going forward.

### Fuels: gasoline, diesel & renewables

The <u>Fuel: Gasoline</u>, <u>Diesel</u>, <u>and Renewables</u> (#08721) contract provides bulk fuel and will-call fuel deliveries for gasoline, diesel, biodiesel, renewable gasoline, and renewable diesel. DES developed this contract based on recommendations in earlier editions of this report. Fuel prices are based on Oil Price Information System (OPIS) rates listed from the day before delivery.

The state's vendors for this contract are Christensen, Coleman Oil, KTB (small business), and PetroCard. These four vendors serve seven regions across the state in four categories:

- Will call.
- Bulk fuel.
- Renewable gasoline.
- Renewable diesel.

The Washington State Department of Commerce's State Efficiency and Environment Performance (SEEP) Office and the Washington State Department of Ecology (Ecology) work together to support the use of alternative fuels with lower greenhouse gas emissions, such as R99, to achieve emission limits within state government.

As a result, DES expects to see increased R99 use in state government operations where feasible. DES plans to rebid contract 08721 before it expires in 2026.

### Marine refueling services

The <u>Marine Refueling Services (#05718)</u> contract provides diesel and biodiesel blends to WSF via pier-to-vessel, truck-to-vessel, and vessel-to-vessel transfers at multiple locations. This contract only includes mobile marine refueling services and meets enacted environmental rules designed to reduce the risk of spills in marine environments (<u>WAC 173-180</u>, <u>WAC 173-184</u>, and <u>WAC 317-40</u>).

The sole vendor is Rainier Petroleum Corp. The contract ends Dec. 15, 2025, with automatic one-year extensions available through 2028.

## Recommendations

### **Statewide**

In 2021, the Washington State Legislature passed the Clean Fuel Standard (**E3SHB 1091**) to curb carbon pollution from the transportation sector. According to the **Washington State Greenhouse Gas Emissions Inventory for 1990-2021**, the transportation sector accounted for 39.7% of total statewide emissions in 2021.

The Department of Ecology completed the Clean Fuels Program Rule (**WAC 173-424**) on Nov. 28, 2022. The program became effective in December 2022 and launched in January 2023.

The <u>Clean Fuel Standard</u> requires fuel suppliers to reduce the carbon intensity of transportation fuels. It will provide an increasing range of low-carbon and renewable alternatives that are more affordable and will reduce dependency on petroleum and improve air quality. The program will have many impacts on biodiesel production and use in the state, including an expectation that biodiesel availability will increase, and prices will decrease.

Under the Clean Fuel Standard, participants may generate credits for the low-carbon fuels they supply for transportation uses. For liquid fuels, such as biodiesel and renewable diesel, the party generating the credits is typically the producer or importer. However, for gaseous and electric fuels — for example, electric vehicle chargers owned by agencies — the owner of the fueling equipment is often the party that generates the credits. Agencies may benefit from the program by working with a biodiesel producer or supplier that is participating in the Clean Fuel Standard to negotiate a purchase agreement that reflects the value of Clean Fuel Standard credits.

The Clean Fuel Standard statute (**RCW 70A.535.025(6)**) also contains several provisions to support development of an in-state biofuel industry. One provision requires that 60 million gallons per year of in-state biofuel facilities be permitted, with at least one new 10 million gallon per-year facility. A second provision requires an overall 15% increase in biofuel production using Washington feedstocks.

The purpose of this provision is to help connect the program to in-state clean fuels. However, carbon intensity thresholds in the program cannot increase beyond 10% until it meets the thresholds. This can have consequences of slowing investment in biofuels, including in-state biofuels. This is in part because there may be less incentive to invest in biofuel production until the carbon intensity reductions increase, which will drive up credit prices for low-carbon fuels. The biofuels industry has been significantly involved during rulemaking and implementation.

Revenue generated by agencies taking part in the Clean Fuel Standard is subject to appropriation under the Clean Fuels Transportation Investment Account or the Clean Fuels Credit Account.

Agencies should track and evaluate opportunities under the Clean Fuel Standard for the law to support increased use of biodiesel, renewable diesel, other sustainable fuels, cost savings, and other potential benefits for the state of Washington. Future work should also include evaluation of in-state feedstock availability for biofuel and alternative fuel production.

## **Department of Enterprise Services**

The Department of Enterprise Services will continue to partner with WSDOT and Ecology to build on the progress made on contract 08721 in providing competitively priced alternative fuel products. This includes addressing the following improvements in the next procurement:

- Aiming for multiple contract awards in each region that can provide competitively priced alternative fuel products.
- Clarifying standardized nomenclature to reduce confusion and errors in reporting, including types and uses of fuels (e.g., vehicles, facilities), and delivery locations.
- Addressing delivery fee methodology to minimize delivery costs for the purchasers.

## **Washington State Ferries (WSF)**

WSF should continue to address any gaps in delivery of biodiesel blends by ensuring fuel contractors fulfill the terms of their contracts.

## **Department of Transportation (WSDOT)**

#### WSDOT should:

- Continue to prioritize buying renewable diesel and biodiesel.
- Seek legislative appropriations to replace older WSDOT fuel tanks that are beyond their 30-year life cycle and at the point of critical failure. Replacing aged tanks is needed to meet environmental standards.
- Use biodiesel blends to meet facility heating needs at locations with consistent fuel turnover, including Port Angeles and Issaquah. Blends up to B40 are safe for use in diesel-fueled boilers.

## Other agencies

Other agencies can work through the Alternative Fuels & Vehicles Technical Advisory Group jointly administered by Commerce and Washington State University's (WSU) Energy Program to

substantially increase the use of biodiesel, renewable diesel, and other sustainable fuels by universities and agencies other than WSDOT and WSF. This should include increasing awareness of the Clean Fuel Standard program and opportunities to generate credits related to biodiesel and renewable diesel use, developed in coordination with Ecology.

### Specific opportunities include:

- Washington State Department of Commerce should continue to find ways to advance
  the use of biofuels and other sustainable fuels. Commerce teams that contribute to
  these efforts include the Office of Renewable Fuels which promotes production and
  deployment of green electrolytic hydrogen, alternative jet fuel and other renewable
  fuels under <a href="RCW 43.330.570">RCW 43.330.570</a>. Additionally, the SEEP office works to improve the
  environmental performance of state operations, including through promoting the use
  of renewable diesel and other low-carbon fuels, and the Clean Transportation unit
  which supports decarbonization programs across the transportation sector in
  Washington.
- The University of Washington and Washington State University bought substantial amounts of diesel for campus power plant operations in Seattle and Pullman. There might be opportunities to replace stored diesel for backup power with renewable diesel or other sustainable fuels.
- Corrections bought diesel for 10 facilities but purchased biodiesel blends at only two: Cedar Creek (25%) and the Washington Corrections Center in Shelton (5%). The department could substantially increase the biodiesel blend level at Shelton and add biodiesel blends to its facilities in Larch, Airway Heights, Monroe, and the Washington State Penitentiary in Walla Walla.
- Fish & Wildlife's diesel purchases were primarily for its Lacey headquarters. The agency could consider biodiesel for its Aberdeen facility.
- The Department of Natural Resources (DNR) procured biodiesel blends for its sites in Forks (16%) and Loomis (11%). DNR purchased diesel for two other sites, but the only one well-suited for biodiesel based on consistent fuel use and volumes is Yacolt.
- Social & Health Services bought diesel for seven facilities, but no biodiesel. The best opportunities to increase agency biodiesel use based on consistent fuel consumption and volumes are the Fircrest Residential Habilitation Center in Shoreline and the Consolidated Support Services building in Medical Lake.
- Parks & Recreation bought diesel for 13 facilities, but no biodiesel. Most locations use very modest levels of fuel, but three locations qualify as candidates for biodiesel use based on consistent fuel consumption and volumes: Fort Flagler, Deception Pass, and Spanaway Lake.

Prior biodiesel reports attempted to quantify diesel use by the Pierce County ferry that services the McNeil Island Corrections Center. Given that this ferry also stops at other locations, and it consumes a low volume of fuel to meet Corrections' needs, an estimate is no longer included in this report.

# **Conclusions**

DES has shared these recommendations with each agency for consideration and implementation.

## **Acknowledgements**

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