

# Washington State Clean Diesel Grants Announcement of Funds Available and Grant Guidelines for Replacing Diesel Transit Buses with All-Electric Transit Buses

## Prepared by

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## Washington State Clean Diesel Grants Announcement of Funds Available and Grant Guidelines for Replacing Diesel Transit Buses with All-Electric Transit Buses 2018 Funding October 1, 2018

**Apply to:** Ecology Air Quality Program

Title: VW State Penalty - Diesel Grants, 2018 Funding

**Action:** Request for Grant Funding

**Due Date:** Thursday, November 8, 2018

**Summary:** This notice announces funding available to help Washington transit authorities reduce toxic diesel and greenhouse gas emissions from publicly owned heavy-duty diesel transit buses in Washington by:

- Replacing diesel powered buses with all-electric buses, or
- Repowering diesel powered buses with all-electric engines

**Amount of Funding Available:** Approximately \$9,500,000 is available for eligible projects.

Application Deadline: Applicants must submit applications by 5 PM PST, November 8, 2018.

Note: Ecology has an electronic grant and loan application system called EAGL (Ecology Administration of Grants and Loans). See Application Process for more details.

Notice of Awards: Ecology will notify successful recipients of awards by November 29, 2018.

### **Award and Required Cost Share**: Ecology will provide:

- Up to \$500,000 per bus to help cover the cost difference between a new diesel powered bus and a new all-electric powered bus.
- Up to \$400,000 per repowered engine to cover the cost for a repowered all-electric engine.

**Application Process:** All applicants must submit applications through the electronic grant and loan application system called EAGL (Ecology Administration of Grants and Loans). To apply through EAGL, applicants must first register for a Secure Access Washington (SAW) account and an EAGL account. Detailed instructions for new and current EAGL users are at: <a href="https://ecology.wa.gov/About-us/How-we-operate/Grants-loans">https://ecology.wa.gov/About-us/How-we-operate/Grants-loans</a>.

For more information or help, call Cindy James at (360) 407-6568, or email at Cindy.James@ecy.wa.gov.

For all project proposals, applicants must submit:

- an application using EAGL (<a href="https://ecology.wa.gov/About-us/How-we-operate/Grants-loans">https://ecology.wa.gov/About-us/How-we-operate/Grants-loans</a>).
- a list of diesel transit buses, or diesel engines, to be scrapped and replaced (list form is available on the EAGL application), and
- the amount of funding requested to repower or purchase each new all-electric bus
- a cover letter describing:
  - 1. the number and model of all-electric buses, engines, and charging equipment currently in the fleet
  - 2. the number and model of all-electric buses or engines currently on order
  - 3. the level of interest or future commitment, including current and future budgets, to convert or replace buses within your fleet to all-electric
  - 4. the committed current and future budgets to purchase any needed charging equipment
  - 5. the estimated purchase costs for each all-electric bus or all-electric powered engine to be purchased with these grant funds.

### **Overview of Award Process**

Ecology is offering funds to Washington Transit Authorities to help accelerate the transformation to all-electric powered transit fleets. Investing in zero-emission technologies will help address current air pollution problems, avoid future air pollution problems, and improve both near and long-term public health in communities historically disproportionately impacted by diesel pollution.

### **Eligible Project Categories:**

- <u>Scrap and replace</u> of pre-2007, diesel powered transit buses with all-electric powered buses.
- <u>Scrap and repower</u> of pre-2007, diesel powered transit bus engines with all-electric powered engines.

Eligible Applicants: Transit Authorities operating in Washington

**Grant Requirements:** To qualify for grant funds, transit authorities must meet and document the ability to provide:

- 1. Charging infrastructure prior to receiving delivery of the new all-electric bus, and
- 2. All necessary funds needed to fully purchase each all-electric bus or all-electric engine. (Necessary funds include the cost difference between the Ecology grant and the full purchase price of the new all-electric bus or all-electric motor.)

**Background:** Diesel emissions contain a hazardous mixture of pollutants that have serious health effects. Diesel exhaust has been linked to the onset or worsening of most major, chronic and/or terminal diseases, including cancer, emphysema, auto-immune disorders, asthma, heart disease, stroke, and the underdevelopment of children's lungs. When inhaled, fine particles in diesel exhaust penetrate the lungs and remain there indefinitely to aggravate or create both lung and heart conditions. Research also indicates diesel emissions cause premature deaths of people regularly exposed to these toxins. For this reason, diesel exhaust is one of the most toxic forms of air pollution.

For violating the Washington Clean Air Act, Volkswagen (VW) agreed to provide Ecology \$28.4 million to fund diesel emission reduction projects. Ecology will use \$9,500,000 to help accelerate the transit diesel bus fleet turnover to all-electric buses, reduce toxic air pollution to sensitive populations, to benefit disproportionately impacted communities, and to reduce greenhouse gases.

Projects funded by these grants will:

- Reduce toxic air pollution among disproportionately impacted communities in Air Quality Priority counties
- Reduce greenhouse gases that help Washington meet its greenhouse gas reduction goals
- Help accelerate the adoption of zero emission transit buses

These grant awards align with the state's objectives under the:

- Washington Clean Air Act
- Diesel Particulate Emission Reduction Strategy for Washington State
- Washington GHG emission reduction limits (70.235 RCW)
- Results Washington Clean Transportation outcomes and indicators
- Washington State Clean Energy Fund

**Washington Air Quality (AQ) Priority Counties:** In AQ Priority Counties, transportation generates significant amounts of air pollution. These thirteen Washington AQ Priority Counties (see table 1) contain about 85% of the state's population and the highest twentieth percentile of the state population disproportionately impacted by diesel air pollution.\*

Ecology compiled the list of thirteen Air Quality Priority Counties from the following lists:

- EPA 2018 Priority County List for the National Air Toxics Assessment (NATA)
   https://www.epa.gov/sites/production/files/2018-04/documents/fy18-priority-counties-national.pdf
- Washington non-attainment/maintenance areas for National Ambient Air Quality Standards (NAAQS)
  - https://www3.epa.gov/airquality/greenbook/anayo\_wa.html
    Washington Tracking Network's (WTN) "Diesel and Disproportionate
- Washington Tracking Network's (WTN) "Diesel and Disproportionately Impacted Communities" Index\* https://fortress.wa.gov/doh/wtn/wtnibl/

**Table 1: Washington Air Quality Priority Counties** 

Priority County	EPA NATA	EPA NAAQS	Disproportionately Impacted Area*
Benton			X
Clark	Χ	X	X
Cowlitz			X
King	Х	Х	X
Lewis			X
Pierce	Χ	Х	X
Skagit	Х		Х
Snohomish	Х	Х	X
Spokane		Х	X
Thurston		Х	X
Walla Walla		Х	
Whatcom	Х		
Yakima		Х	X
<b>Total Counties</b>	6	8	11

<sup>\* &</sup>quot;Disproportionately Impacted Communities" include those census tracts in the top 20<sup>th</sup> percentile for exposure to diesel emissions and for a specific list of socioeconomic factors. These communities have traditionally borne the greatest health impact for exposure to diesel air pollution.

For the list of Washington Air Quality Priority Counties, Ecology calculated the percent of violating VW vehicles and the percent of disproportionately impacted population. At a county level, Table 2 reports the relative pollution contribution from the violating VW vehicles and the relative pollution impact on the disproportionately impacted population. These thirteen AQ priority counties have 83% of the state's violating VW vehicles and 100% of the disproportionately impacted population.

**Table 2: Air Quality Priority Counties** 

Priority County	% of Violating VW Vehicles	% of Disproportionately Impacted Population
Walla Walla	1%	0%
Cowlitz	1%	1%
Lewis	1%	1%
Skagit	2%	1%
Whatcom	4%	0%
Yakima	2%	2%
Benton	2%	2%
Thurston	4%	1%
Spokane	3%	7%
Clark	7%	9%
Pierce	9%	14%
Snohomish	9%	15%
King	56%	47%
Total	83%	100%

**Award of Funds:** Ecology will give priority to funding projects in the identified "Air Quality Priority Counties". Ecology will consider the percent of "Disproportionately Impacted Population" in Washington counties to help scale the size of potential awards. See Table 3.

**Table 3: Potential Award Amount** 

Percent of Disproportionately		
Impacted Population	Counties	Potential Award
	Statewide, other than "AQ Priority	
0%	Counties"	≤ \$500,000
	Benton, Cowlitz, Lewis, Skagit,	
Less than 5%	Thurston, Walla Walla, Whatcom,	≤ \$1,000,000
	& Yakima	
5% to 10%	Spokane & Clark	≤ \$1,500,000
11% to 25%	Pierce & Snohomish	≤ \$2,000,000
Greater than 25%	King	≤ \$5,000,000

### Amount of Award per Bus and Required Cost Share: Ecology will provide:

- Up to \$500,000 per bus to help cover the cost difference between a new diesel powered bus and a new all-electric powered bus
- Up to \$400,000 per repowered engine to cover the cost for a repowered all-electric engine.

The grant awardee must provide the remaining cost difference for the new all-electric bus or the repowered all-electric motor. The grant awardee must also provide the charging infrastructure or the new all-electric bus or motor.

### **Scrap and Replacement Conditions:**

The to-be-scrapped transit buses must currently be:

- Part of the applicant's fleet.
- Licensed, registered, and insured for on-road operation in Washington at least one (1) previous year from date of award.

The grant recipient must provide to Ecology documentation of the permanent destruction of the pre-2007 transit bus or engine. The documentation must include:

- Completing and signing a certificate of destruction provided by Ecology.
- Using acceptable methods of permanent destruction as approved by Ecology, such as cutting a 3 inch by 3 inch hole in the engine block and cutting the chassis rail in half.
- Digital photographs and other materials documenting the destruction.

Ecology will provide complete instructions on acceptable destruction methods and documentation prior to executing the award agreement.