



# Electric Vehicle Charging Station Grants

# 2.8 Million Dollars to Award

- That's how much Idaho received from the VW Settlement to award in grants for Electric Vehicle Charging Stations

# Where did this money come from?

**Short answer:** Volkswagen Settlement

**Long answer:**

- VW admitted to manufacturing 11 million diesel vehicles that were designed to cheat to pass emission tests
- Vehicles were actually emitting up to 40 times over the limit for NO<sub>x</sub>
- NO<sub>x</sub>, Nitrogen Oxides are one of 5 criteria pollutants which form smog and acid rain and affect people's breathing

# VW Settlement

- VW settled the case; therefore “VW Settlement”
- Each state gets a portion of the settlement money based on how many affected VW vehicles are in their state.
- Money is to be used to offset the excess NOx emissions from the VW vehicles

# What is the VW settlement?

- The overall settlement consists of three major parts:
  - 1. Buyback, Lease Termination, Vehicle Modification, and Emissions Compliant Recall Program
  - 2. National Zero-Emission Vehicle (ZEV) Investment Plan
  - 3. Environmental Mitigation Trust

Volkswagen is required to fund an Environmental Mitigation Trust in the amount of \$2.925 billion (\$2.7 billion from the first 2.0-liter consent decree and \$225 million from the second 3.0-liter consent decree) to be used to offset the air pollution emitted by the vehicles that violated the Clean Air Act. The court appointed Wilmington Trust Bank as the trustee to administer the environmental mitigation trust funds.

# How does Idaho benefit?

- Idaho has the opportunity to receive a total of \$17.3 Million from the VW Settlement
- Idaho Beneficiary Mitigation Plan designates how the funds will be used.
  - 4.1 Light-Duty Zero-Emission Vehicle Supply Equipment
  - 4.2 Trucks and Buses
  - 4.3 Locomotives, Airport Equipment, and Forklifts
  - 4.4 DERA Option

# Idaho's Two Programs

- Electric Vehicle Fast Charging Stations
- Diesel Replacement Program

DEQ has been awarding grants for the replacement of older diesel vehicles.

# Overview of EVSE

. . . . The Electric Vehicle Supply Equipment (EVSE) Program, funded through a trust established by the Volkswagen Settlement with the United States. This program will have access to 15% of the Eligible Mitigation funding made available to the State of Idaho under the Trust. This equates to approximately \$2.8 million to be utilized across the state to assist in lowering NOx emissions through deployment of electric vehicle supply equipment.

OEMR Application Guide



# Idaho EV Corridor Map



Figure 7. Idaho alternative fuels corridors map.

# EV Highways by Region

- REGION I - Coeur d'Alene I-90, US 95
- REGION II - Lewiston US 95
- REGION III - Boise I-84, US 95, Idaho 55
- REGION IV - Twin Falls I-84, US 93, Idaho 75
- REGION V - Pocatello I-15, I-86, I-84
- REGION VI - Idaho Falls I-15, US 93, Idaho 75

# Idaho EV Fast Charger Map

- **Red:** Electrify America Chargers along interstates
- **Green:** Projects awarded grants through the Idaho program



# Idaho Grant Awards

- Bonners Ferry
- Lewiston: Clearwater Casino and Lodge
- Hailey



# There is still money available

- Applications opened in 2018
- Structured so money had to be spread out over the first three years
- Maximum 10 years to use money

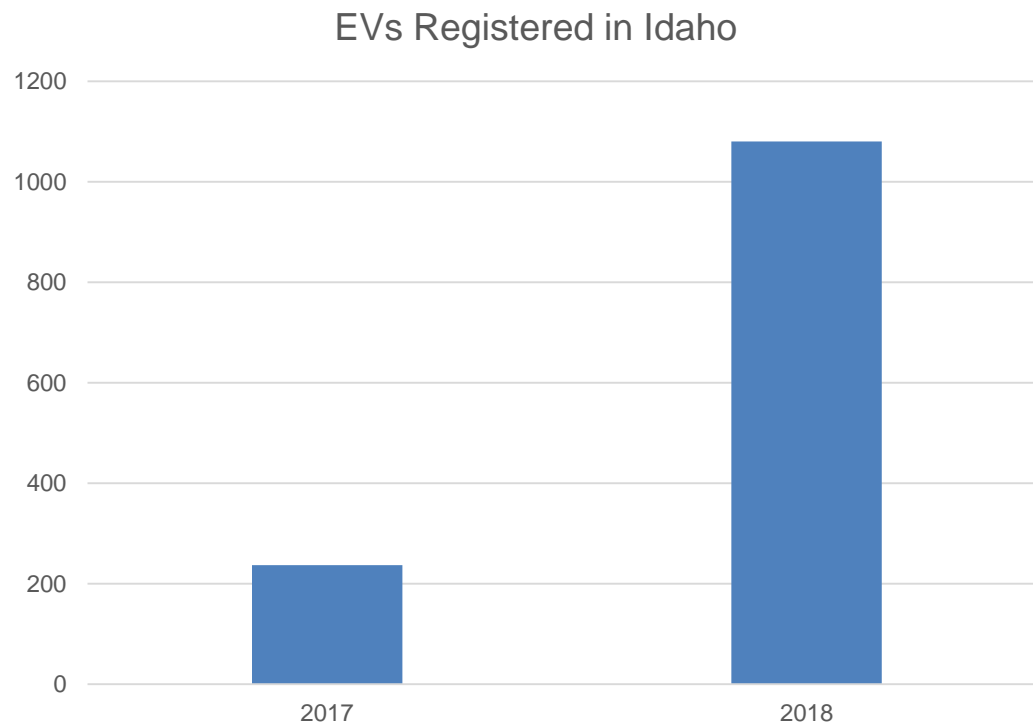
# Types of Electric Vehicles

- **Hybrid - electric motor and gas engine** (Toyota Prius)  
Regenerative braking captures energy and dramatically increases fuel mileage  
Can't plug in
- **PHEV - plug in hybrid electric vehicle** (Toyota Highlander, Chrysler Pacifica minivan, Ford Escape)  
Electric motor and gas engine  
Plug in to charge, secondary gas for back-up or range extender
- **BEV - battery electric vehicle** (Tesla, Chevy Bolt, Nissan Leaf, Hyundai Kona SUV)  
Only electric, so batteries must be charged

# Are we really going electric?

- Tesla has delivered over 350,000 vehicles in 2019
- Ford, GM, BMW, Nissan, and Toyota are selling tens of thousands EVs a year
- Pick up trucks, minivans, and sports cars are available or coming soon
- In the long run electric vehicles are much less expensive to operate and maintain
- Currently less than 2% of US sales
- Growing charging network

# Idaho EV Sales





# EV Charging Basics

- Different vehicles different plugs - **no standard**
- Only Tesla can charge at a Tesla pump
- Tesla has been developing their own charging network along highways
- Asian makes use CHAdeMO, also Tesla with adapter, no US or EU cars
- US and EU vehicle use SAE Combo CCS, no Asian ,no Tesla
- Combination chargers on the market (CHAdeMO + SAE Combo CCS)

# Types of EV chargers



# Cost of EVSE equipment

- Level 2 Charging: 4kW to 20kW charging station price estimated between \$1,500 and \$6,500
- DC Fast Charge: 150 kW charging station price was estimated between \$75,000 to \$112,000 in 2018. 2020 estimates are 40,000 to 70,000.



# Should my business host an EV charger?

- It's forward thinking new technology
- Bring in EV customers. The number of EV customers will grow over time
- Attract non EV but “green” minded customers
- Charging customers will stay at for at least 20 minutes and up to 1 hour
- Can put your business literally on the EV map

# What should my business consider?

- **Idaho EV corridor?**

Why? The BMP specifies charge stations must be within  $\frac{1}{2}$  mile, preferably within  $\frac{1}{4}$  mile, and easily accessible from all directions

- **Good cellular signal?**

Why? Most charging equipment needs cellular signal to process payment

- **Well lit, accessible 24 hours a day**

- **Amenities like shopping and restaurants?**

Why? Is the area somewhere you would want to hang out for up to an hour while charging?

# Power Considerations

- Contact your power company
- What is your site's existing electrical service?
- Are electrical upgrades needed?
- How much will any infrastructure changes cost?
- How will fast charging affect my business's power bill?
- What is your rate structure?
- Are there peak demand charges?

# What Project Cost Can be included?

The grant can include the cost to:

- Purchase,
- Install and
- Maintain

the eligible light duty electric vehicle supply equipment

How many chargers?

# What % of Project can the grant cover?

## Business

- Up to 80%

If available to the public at a Non-Government Owned Property.

## Municipality or Government

- Up to 100%

If available to the public at a Government Owned Property.

How many chargers?



# Also Available

- Up to 60% available at a workplace but not to the general public.
- Up to 60% that is available at a multi-unit dwelling but not to the general public.
- Up to 33% hydrogen fuel cell vehicle supply equipment capable of dispensing at least 250 kg/day that will be available to the public.
- Up to 25% of the cost to purchase, install and maintain eligible light duty hydrogen fuel cell vehicle supply equipment capable of dispensing at least 100 kg/day that will be available to the public.

# Yes, I'm going for it. What's next?

- Apply!
- Application does not guarantee funding
- OEMR review panel will evaluate applications
- No closing date at this time
- OERM will select applications to submit to the trust fund

# The application website

<http://www.deq.idaho.gov/air-quality/vw-diesel-settlement/>



**State of Idaho**  
**Electric Vehicle Supply Equipment Program**



**IDAHO**  
Governor's Office of  
Energy and Mineral Resources

**Participant Information**

Participant business name (As shown on income tax return):		TIN #:	
<input type="text"/>		<input type="text"/>	
Mailing address:	City:	State:	Zip:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Contact name:	Contact title:		
<input type="text"/>	<input type="text"/>		
Contact telephone number:	Cell number:	Contact email address:	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Project Title	<input type="text"/>		

## A. Site Description

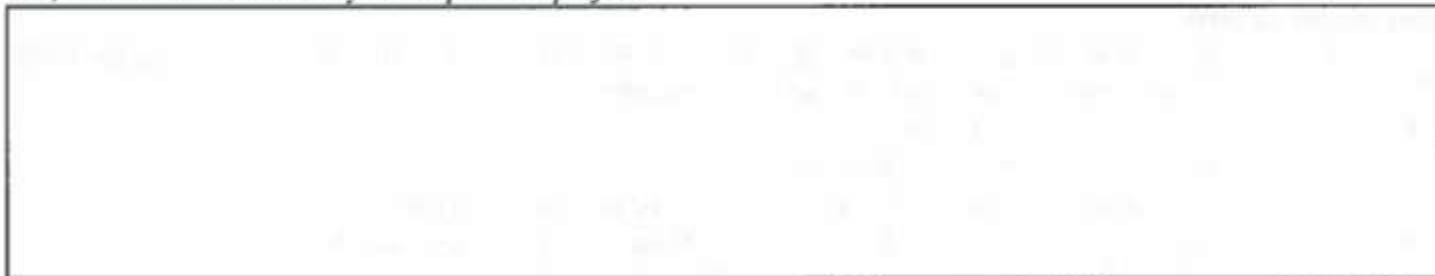
### Project Feasibility

1. Address for specific charging site

2. Is this address located on government-owned property?  Yes  No

3. Please provide a site plan for the proposed project including:

*Describe why the specific location is suitable for the proposed project; number of chargers applicant is proposing for the site; estimated time necessary to complete the project.*



Click in the space above to insert an image, or attach any additional files electronically to your email or by hard copy with your mailed application.

4. Please provide a map of the proposed site with all major roadways included.

*Attach to this application a visual depiction/map of the proposed location of the site on your property; how it can be accessed; and indicate any space available for future expansion; location and description of existing electricity service to the site.*



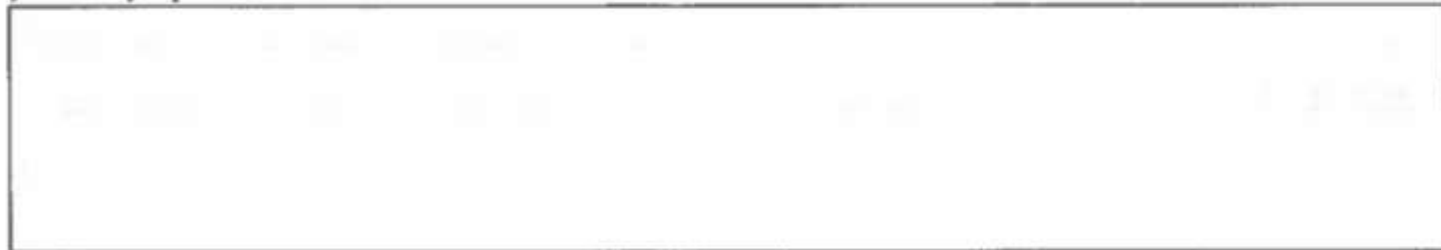
Click in the space above to insert an image, or attach any additional files electronically to your email or by hard copy with your mailed application.

# When charging an electric vehicle owners want ...

- Covering for shade in hot months and to avoid shoveling snow in winter
- Not located in “prime parking”
- Accessibility of restaurants and clean bathrooms

**5. Please attach documentation from your local utility that includes the following:**

*Description of the existing electrical service to the site, what upgrades may be needed, and preliminary cost estimates for those upgrades. Documentation must be coordinated with your local utility and needs to include the name of your utility representative.*



Click in the space above to insert an image, or attach any additional files electronically to your email or by hard copy with your mailed application.

6. Please identify the status of all necessary permits or other approvals required for the project:

Permit/Agreement Description	Not Required	Required, Application Not Yet Submitted	Application Submitted	Permit/Approval Received	Unsure If Required
Air/land use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structural	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural/historical impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City council/board approvals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain, if necessary:



7. Please provide an estimated project schedule/timeline for project milestones:

Milestone	Proposed Completion Date	Notes

Milestone	Proposed Completion Date	Notes

Please explain, if necessary:

--

## Technical Requirements

**8. Please provide details of the type of equipment you plan to install for EV chargers:**

Electric Vehicle Supply Equipment	Charger Power Output (kW)	Type of Charging Technology	Quantity of Each Type of Charger	Can Charging Equipment Expand for Increased Power?
Single Port DC Fast Charger		<input type="radio"/> CHAdeMo <input type="radio"/> SAE Combo		<input type="radio"/> Yes <input type="radio"/> No
Multi-Port DC Fast Charger		<input type="radio"/> CHAdeMo <input type="radio"/> SAE Combo		<input type="radio"/> Yes <input type="radio"/> No
Other		<input type="radio"/> CHAdeMo <input type="radio"/> SAE Combo		<input type="radio"/> Yes <input type="radio"/> No

Please explain, if necessary:

**9. Describe the point of sale equipment to be installed at/near the EV charging station:**

# How many chargers?

- Consider installing 2 or more
- customers feel confident that even if someone else is charging they should be able to charge as well.
- Multiple chargers are more visible

## Community Impact

### 10. Site specific attributes?

*Key factors have been identified for consideration in choosing host sites (see BMP, Section 4.1). Please provide information on specific attributes currently available at the site, or planned in conjunction with your project, including, but not limited to the following: food service, cellular service, shopping, accessibility, hours of operation, site lighting, etc.*

### 11. What is the proposed fee/ rate structure to use the EV chargers?

*Provide information of the proposed fee/ rate structure.*



## Project Budget

**13. Please provide an estimated budget for equipment, installation and other cost categories listed below.** *This does not indicate that funding will be provided for all costs listed; funding must be consistent with the terms of the trust. Cost sharing will be required by the applicant. Please see the Application Guide for more details on what can be funded through the Electric Vehicle Supply Equipment Program.*

Eligible Project Costs		
Electronic Vehicle Charging Equipment Project Component	Cost	Line Item Description
Engineering and design costs (not yet incurred)		

Electronic Vehicle Charging Equipment Project Component	Cost	Line Item Description
Equipment costs		
Charger(s)		
Electrical system upgrades		
Other components (please list)		
Labor installation costs		
Permitting fees, if applicable (please itemize)		
Other cost (please itemize)		
<b>Total Estimated Project Costs</b>		
<b>Match Funding by Applicant</b>		
<b>Total Funding Request to Trust</b>		

## Application Acknowledgement

### Certification of Truth, Accuracy, and Completeness (By Responsible Official)

I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123 and 124.

\_\_\_\_\_  
Participant Name & Title (please print)

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

**Application must include all required documentation.**

Email completed application to [katie.pegan@oer.idaho.gov](mailto:katie.pegan@oer.idaho.gov) or mail to P.O. Box 83720, Boise, ID 83720



# Questions?

Belinda Breidenbach

Environmental Assistance Coordinator  
Idaho Small Business Development Center  
2360 W. University Drive, MBEB 2<sup>nd</sup> floor  
Boise, ID 83725  
(208) 426-1873  
IdahoSBDC.org

