Volkswagen Settlement

Idaho funds to host electric vehicle charging stations

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What did VW do?

• 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 NOx

• NOx, Nitrogen Oxides are one of 5 criteria pollutants which form smog and acid rain and affect people’s breathing
What happened next?

• 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

• Idaho has the opportunity to receive a total of $17.3 Million
The overall settlement consists of three major parts:

1. Buyback, Lease Termination, Vehicle Modification, and Emissions Compliant Recall Program
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 is Idaho affected?

- Each state submits a Beneficiary Mitigation Plan (BMP)
- Idaho drafted and finalized a BMP
- The BMP directs how Idaho will use the designated funds
- Idaho has the opportunity to receive a total of $17.3 Million
- Money is to be used to offset the excess NOx emissions from the VW vehicles
4 parts to Idaho Beneficiary Mitigation Plan

• 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
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.
$ 2.8 Million for Electric Vehicle Charging Stations

• No more than \( \frac{1}{3} \) of the money can be spent in the first year.

• And no more than \( \frac{2}{3} \) of the money can be spent by the second year.

• That means money will be available for at least 3 years.

• Maximum 10 years to use money.
Western governors, including Idaho’s, agree to build charging station network for electric cars

October 4, 2017

Here’s a news item from the Associated Press: BOISE, Idaho (AP) — Western governors say electric vehicles will be able to travel easier across 5,000 miles of highway under a new agreement promising to build a network of charging stations in seven states. The governors of Utah, Colorado, Idaho, Montana, Nevada, New Mexico and Wyoming announced Wednesday they had signed a memorandum of understanding to create a regional electric vehicle plan. According to the agreement, governors will coordinate charging station locations and create voluntary minimum standards for station operations and management. Idaho Gov. C. L. "Butch" Otter says the initiative will allow locals and visitors to explore the West using the vehicle they prefer. The agreement was signed at the Energy Innovation Summit hosted by the National Governors Association. Currently, more than 20,000 electric vehicles and plug-in hybrids are used on roads in western states.

By Betsy Z. Russell
Are we really going electric?

• Currently less than 2% of US sales
• Sales are rising dramatically
• More EV models are planned by car manufacturers
• Electric vehicle prices dropping
• Electric vehicles are much cheaper to operate and maintain
• Growing charging network
Vehicle Sales in Idaho

New ZEV sales in 2017 were up by 87% compared to 2016. So far this year, 87 new ZEVs have been sold.

0.6% of all new vehicles sold in Idaho YTD 2018 were ZEV versus 5.6% in California, and 1.3% nationwide.
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 (Chevy Volt, Chrysler Pacifica minivan)
  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)
  Only electric, so batteries must be charged
EV Charging Basics

- Different vehicles different plugs - no standard
- Only Tesla can charge at a Tesla pump
- 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
- Tesla has been developing their own charging network along highways
- Combination chargers are on the market (CHAdeMO + SAE Combo CCS)
Types of EV chargers

- **Your garage at home**
- **Workplace Shopping areas**
- **Fast “fill ups” for long distance travel**

Eldar Sakebaev and Jessica Carolina, Boise State MBA Capstone Project with Idaho Power. Case for Electric Vehicle Fast Charging in Idaho
Lewiston

Plugshare.com
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 is estimated between $75,000 and $112,000. For 2 charging stations estimate is approximately $200,000.
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?

• Is your business on the Idaho EV corridor?
  Why? The BMP specifies charge stations must be within ½ mile, preferably within ¼ mile, and easily accessible from all directions.

• Does your location have good cellular signal?
  Why? Most charging equipment needs cellular signal to process payment.

• Is the area well lit, accessible 24 hours a day, and have amenities like shopping and restaurants?
  Why? Is this somewhere you would want to hang out for up to an hour while charging?
Ok, my location is good. Next question?

- Do I need permits?
- What is my estimated project timeline?
- What type of EV charging equipment is best for my business?
- What will my fee structure be?
- What financial structure works for my business?
- What’s the budget for this project?
- How much money am I able to put in and how much should I ask from “the settlement?”
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?
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
- Total first year funding can’t exceed ~ $930,000
The application website

http://www.deq.idaho.gov/air-quality/vw-diesel-settlement/
## Participant Information

<table>
<thead>
<tr>
<th>Participant business name (As shown on income tax return):</th>
<th>TIN #:</th>
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<table>
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<tr>
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<thead>
<tr>
<th>Project Title</th>
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</table>
A. Site Description

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.*

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.*
When charging an electric vehicle owner:

- 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:

<table>
<thead>
<tr>
<th>Permit/Agreement Description</th>
<th>Not Required</th>
<th>Required, Application Not Yet Submitted</th>
<th>Application Submitted</th>
<th>Permit/Approval Received</th>
<th>Unsure If Required</th>
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<td>Environmental impact</td>
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<td>Cultural/historical impact</td>
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<td>City council/board approvals</td>
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<td>Other:</td>
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Please explain, if necessary:
7. Please provide an estimated project schedule/timeline for project milestones:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Proposed Completion Date</th>
<th>Notes</th>
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</table>

Please explain, if necessary:
8. Please provide details of the type of equipment you plan to install for EV chargers:

<table>
<thead>
<tr>
<th>Electric Vehicle Supply Equipment</th>
<th>Charger Power Output (kW)</th>
<th>Type of Charging Technology</th>
<th>Quantity of Each Type of Charger</th>
<th>Can Charging Equipment Expand for Increased Power?</th>
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</thead>
<tbody>
<tr>
<td>Single Port DC Fast Charger</td>
<td></td>
<td>CHAdeMo</td>
<td>Yes</td>
<td>Yes</td>
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<td></td>
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<td>SAE Combo</td>
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<tr>
<td>Multi-Port DC Fast Charger</td>
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<td>CHAdeMo</td>
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<td>SAE Combo</td>
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<tr>
<td>Other</td>
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<td>CHAdeMo</td>
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<td>Yes</td>
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<tr>
<td></td>
<td></td>
<td>SAE Combo</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>

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
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.
### Financial Structure

12. Describe the financial structure of the project. *Include who will fund and assume ownership of the project; receive any financial benefits; pay for maintenance and repair; and what the duration of the commitment to fund maintenance and repairs will be.*
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.

<table>
<thead>
<tr>
<th>Electronic Vehicle Charging Equipment Project Component</th>
<th>Cost</th>
<th>Line Item Description</th>
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<tbody>
<tr>
<td>Engineering and design costs (not yet incurred)</td>
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<tr>
<th>Electronic Vehicle Charging Equipment Project Component</th>
<th>Cost</th>
<th>Line Item Description</th>
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<tr>
<td>Equipment costs</td>
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<td>Charger(s)</td>
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<td>Electrical system upgrades</td>
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<td>Other components (please list)</td>
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<tr>
<td>Labor installation costs</td>
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<td>Permitting fees, if applicable (please itemize)</td>
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<td>Other cost (please itemize)</td>
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<td>Total Estimated Project Costs</td>
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<tr>
<td>Match Funding by Applicant</td>
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<tr>
<td>Total Funding Request to Trust</td>
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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@oei.idaho.gov or mail to P.O. Box 83720, Boise, ID 83720
VW Repower and Replace

• Application just came out
  http://www.deq.idaho.gov/air-quality/vw-diesel-settlement/
• January 31 deadline
• December webinar with details
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Questions?
Idaho Falls

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