1. How do I use the Environmental Protection Agency's (EPA) Environmental Justice (EJ) Screen Tool?

This tool gives us comparative information about potential environmental exposure of vulnerable and susceptible populations. It does not identify EJ communities.

- 1. Go to EJSCREEN: Environmental Justice Screening and Mapping Tool | US EPA
- 2. Scroll down to 'Launch the Tool'
  - a. Click on 'Launch the EJSCREEN Tool' link.
    - i. The + in the upper left corner will enlarge map to better view your location.
- 3. In the upper left toolbar, **Click** on **Select Location**, scroll down past second **Select Location** (don't click on this one) to choose **Report on Known Geography** 
  - a. **Select** from the toolbar: **Report on Known Geography** and choose **Block Group, County, City, or Tract** from the Dropdown.
- 4. **Click** on your impact area **on the map**. (You can select more than one county, but only one city. Be patient when adding. It's slow!)
- 5. When you see the County, etc. that you selected highlighted in green on the map, and listed under **Report on Known Geography** 
  - a. click "Submit."
- 6. **Chart or Report** Window will pop up.
  - a. Name your report, then
  - **b.** Click **Get Printable Standard Report**
- 7. **Print** Standard Report as a pdf. and **save** to your desktop.
- 8. Submit this pdf with your application.

The EJ screen report has additional value as it can be included in sustainability reports, as well as in other grant applications which require information on environmental and social justice impact areas.

If assistance is needed with the EJ screen tool contact Irene Queen at queeni1@michigan.gov.

- 2. If we're already in the process of purchasing a vehicle that qualifies, can we still apply for and qualify for the grant? We've already secured a loan and have a purchase agreement for equipment replacement.
  - a. No. And yes. Awardees may place an order for new vehicle(s) and/or charging station(s) prior to having a fully executed grant agreement. However, an awardee may not be invoiced, take delivery, or pay for the new vehicle(s) and/or charging station(s) prior to having a fully executed grant agreement and will not be eligible for reimbursement if they do so. The grant agreement is fully executed the day it is signed by both the Michigan Department or Environment, Great Lakes, and Energy (EGLE) and the grantee. Awardees may begin to install charging infrastructure (other than the charging station) prior to having a fully executed grant agreement.
  - 2. What are some of the requirements for on road vehicles?
    - a. The existing vehicle must be fully operational.
    - b. The participating fleet owner must have owned and operated the vehicle during the 2 years prior to upgrade. (See school bus variance in item d.)

- c. The existing vehicle must have at least 3 years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding.
- d. Highway Usage: Vehicle must have operated 7,000 miles/year during 2 years prior to upgrade with the following exceptions.
  - i. School Buses may use mileage from calendar year (Jan-Dec) 2019.
  - ii. <u>Two</u> buses may be decommissioned and replaced by <u>one</u> new bus to meet a combined mileage of 7,000 miles/year for two years.
- 3. What are some of the requirements for Nonroad, Locomotive, and Marine Usage?
  - i. Agricultural Pumps: 250 hours/year during 2 years prior to upgrade.
  - ii. All Other Nonroad Engines: 500 hours/year during 2 years prior to upgrade.
  - iii. Locomotive and Marine Usage: 1,000 hours/year during 2 years prior to upgrade.
- 4. Would this grant program consider a project to reduce emissions for an emergency backup generator?
  - a. Yes, in some cases. That would be considered a nonroad engine. Restrictions apply.
- 5. Does replacement of diesel generators qualify for grant funds. The generator provides back up power for a wastewater treatment plant.
  - a. Yes, in some cases. That would be considered a nonroad engine. Restrictions apply.
- 6. Who would be the contact person for assistance with the DEQ calculation tool?
  - a. Dan Zbozien, ZbozienD@michigan.gov
- 7. Would a School Bus be eligible for The Fuel Transformation Program?
  - a. Not at this time.
- 8. What is involved in "decommissioning" an old engine?
  - a. Cutting a three-inch by three-inch hole in the engine block (the part of the engine containing the cylinders). Disabling the chassis by cutting through the frame/frame rails on each side at a point located between the front and rear axles. See RFP for specific details regarding before/ after and labeling of pictures. See grant agreement for specific details.
- 9. Are there any programs for retrofitting a diesel motor for biofuels?
  - a. Biodiesel is considered an alternative fuel. Restrictions apply. Biodiesel information available at <u>LARA Biodiesel</u>
- 10. Can you discuss the Full Audit by Certified Public Accountant (CPA) requirement again?
  - a. PROOF OF SUCCESSFUL AUDIT needed. If selected, grantees are required to submit a copy of their full financial audit signed by a CPA. The audit must have been completed within 24 months prior to the RFP closure date. The audit must be of

the applicant organization – No fiduciary arrangements will be accepted.

- 11. Will your staff assist with emissions calculations for niche-technologies? i.e., a new diesel-bucket truck that has a battery power takeoff (PTO) for the aerial unit.
  - a. Staff will assist with questions and calculations.
- 12. Does the diesel grant program include stationary diesel engines, for example, backup generators?
  - a. Yes. Hours of use apply.
- 13. Are fire trucks eligible?
  - a. Yes.
- 14. Are non-road diesel engines (for water pumps or emergency power generation) allowed to apply for the grant?
  - a. Yes
- 15. If a Public School System is financing new school buses through a bank loan, are they still eligible for the 35 percent grant amount?
  - a. Yes
- 16. Is this information going to be used for auditing future emissions of our entire fleet?
  - a. No
- 17. If you were part of a group that has already participated in the Volkswagon grant, can you still apply for this grant?
  - a. Yes, but not for the same vehicle.
- 18. Is the CPA audit for the company as a whole or for a specific project?
  - a. CPA audit for the company is required.
- 19. Will the audit become public information (via Freedom of Information Act (FOIA)?) or held confidential with EGLE?
  - a. Information on applications is subject to the FOIA.
- 20. What are eligible funding sources for the match? Are other federal sources eligible?
  - a. Match on the project cannot come from other <u>federal</u> sources or from <u>Fuel</u> <u>Transformation Program (Volkswagen Mitigation Funds).</u> There is no restriction on applying for those funds for other projects.
- 21. Is there an early retirement requirement this year?
  - a. The existing vehicle must have at least 3 years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding.

- 22. What types of vehicles, engines, and equipment are eligible?
  - a. Eligible heavy-duty diesel emission source types include school buses, Class 5-8 highway vehicles, marine engines, locomotives, and nonroad engines, equipment, or vehicles (used in construction, cargo handling, agriculture, mining, or energy production). Vehicles, engines, and equipment targeted for upgrades must meet all applicable eligibility criteria, as defined in the Request for Proposal (RFP)
- 23. When replacing an existing diesel vehicle with a zero-emissions vehicle (ZEV), we might not want to totally scrap the diesel vehicle during the first winter of the ZEV operation (i.e., December-April 2021). So, if we put the ZEV into service in mid-2020, can we keep the existing diesel vehicle just parked for back-up purposes through the winter without disabling it while using the ZEV, as long as we disable the diesel vehicle by August 31, 2022?
  - a. The vehicle, equipment, and/or engine being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced.
- 24. Are we eligible to apply if we have received Diesel Emissions Reduction Act (DERA), Michigan Clean Diesel, or Michigan Fuel Transformation Program funding through another opportunity?
  - a. Yes, you may apply for funding under this funding opportunity. Participation in one program does not preclude you from participating in others; however, an applicant may not accept funding from multiple programs for the same vehicle.
- 25. For engine replacements, do eligible costs include items required in addition to the new engine (such as gears, controls, and shipyard costs)?
  - a. Yes. Charges for equipment and parts on engine replacement projects are eligible for funding if they are included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology but are not part of typical vehicle or equipment maintenance or repair. The eligible cost of engine replacement includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional, including related labor expenses. Examples of ineligible engine replacement costs include, but are not limited to tires, cabs, axles, paint, brakes, and mufflers. Shipyard costs are also eligible and should be included in the "other" cost category in applications.

- 26. Will this grant cover 100 percent of the cost of an engine replacement in a truck?
  - a. No. Michigan will fund up to 50 percent of the cost of replacing diesel engine with an engine certified to meet the California Air Resource Board (CARB)'s Optional Low-NOx Standards and up to 60 percent of the cost (labor and equipment) of replacing a diesel engine with a zero tailpipe emissions power source (grid, i.e. battery, or fuel cell).
- 27. Is a Tier 2 marine engine eligible for replacement with a Tier 4 marine engine?
  - a. Yes. And Tier 3 engines are now allowed for nonroad engine replacements with EPA approved best achievable technology analysis
  - b. Tier 4 nonroad engines/equipment can now be replaced with zero emission engines/equipment
- 28. What types of replacement projects are eligible?
  - a. Replacement projects can include the replacement of diesel vehicles/equipment with new, hybrid, or alternative fuel vehicles/equipment such as compressed natural gas (CNG), liquified natural gas (LNG) or propane, or zero tailpipe emissions technologies such as battery or fuel cell where applicable.

- 29. Must a fleet replace its oldest eligible vehicles before its newer eligible vehicles?
  - a. No, any vehicle meeting the eligibility requirements outlined in the RFP is eligible for funding.
- 30. Are transit buses eligible for hydrogen fuel cell powered bus replacement?
  - a. Yes.
- 31. Are electric charging stations eligible for funding?
  - a. Electric vehicle charging infrastructure is not eligible as a standalone project but is eligible as part of an all-electric engine or vehicle replacement project which requires vehicle charging capability for the successful operation of the new equipment.
- 32. Other sustainable transportation resources in Michigan:
  - a. Michigan Mobility Funding Platform | Michigan Business
  - b. <u>EGLE Fuel Transformation Program</u>.
  - c. EGLE Charge Up Michigan program: <u>Climate and Energy Charge Up Michigan Program</u>
  - d. Michigan Office of Future Mobility and Electrification: Office of Future Mobility and Electrification | Michigan Business

33. What replacement percentages are available for engines and vehicles?

34.

	Replacement percent up to:
Alternative Fuel	40 percent
Engine Replacement – Low NOx	50 percent
Engine Replacement – Zero Emission	60 percent
Vehicle/Equipment Replacement – Low NOx	35 percent
Vehicle/Equipment Replacement  – Zero Emission	45 percent
Vehicle Replacement -Drayage	50 percent

35. How do I calculate emissions reduction and cost effectiveness of the following? Lifetime NOx reduced

Lifetime particulate matter (PM) 2.5 reduced

Lifetime total project cost effectiveness for PM2.5 and NOx

Lifetime capital cost effectiveness for PM2.5 and NOx

Follow these steps and the answer to all of these will be in your printout. See below. Use the same vehicle/engine data you provided for the applicant fleet description.

Emissions reduction – NOx & PM 2.5

To estimate the anticipated emissions reductions from your project, use the Diesel Emissions Quantifier (DEQ) found at

Cfpub.epa.gov/quantifier/index.cfm?action=main.home

You can group similar entries together to minimize the number of DEQ runs required (model year, vehicle miles traveled, idling hours, usage rate, and horsepower).

"Register a New Account" and log in to use the DEQ so that you will have the ability to save scenario information and retrieve it in the future.

To calculate carbon dioxide (CO2) emissions reductions, input an amount for annual diesel gallons reduced (per engine), annual idling hours reduced (per vehicle), or annual hoteling hours reduced (per vehicle) when inputting technology information for the vehicle group.

Cost Effectiveness for Most Project Types

To estimate total cost effectiveness for the project, enter estimated total costs in the total project costs field on the create new project page.

Total project costs reflect all costs related to this project, including the Michigan Department of Environment, Great Lakes, and Energy (EGLE)'s share, and any voluntary and mandatory cost shares. Total project costs entered into the DEQ should match the total project costs reflected in the budget.

To estimate capital cost effectiveness for the project, enter the estimated upgrade cost per unit on the add an upgrade page in the DEQ. Be sure to enter costs for every upgrade/vehicle in your project or else the results will be skewed.

Enter the lifetime capital cost effectiveness for NOx and PM2.5, and the total project cost effectiveness for NOx and PM2.5 in "Outputs and Outcomes," of your work plan.

For further instruction on using the DEQ, please refer to

cfpub.epa.gov/quantifier/index.cfm?action=main.home. Additional assistance is available by calling the Clean Diesel Helpline at

877-NCDC-FACTS (877-623-2322) or emailing DEQhelp@epa.gov.

36. After running the DEQ, results may be downloaded as a spreadsheet showing DEQ results and inputs. Applicants should include a printout of their DEQ results spreadsheet showing DEQ results and inputs as an attachment to their application.

## Emission Results and Health Benefits for Project: Sample Project

**Emission Results** Health Benefits Emission Results 1 Here are the combined results for all groups and upgrades entered for your project.1 Annual Results (short tons)2 PM2.5 HC Fuel<sup>3</sup> Baseline for Upgraded Vehicles 3.885 115,600 7.978 0.636 1.053 1,300.5 Amount Reduced After Upgrades 2.841 0.469 2.667 76.5 6,800 Percent Reduced After Upgrades 35.6% 73.7% 76.7% 68.6% 5.9% 5.9% Lifetime Results (short tons)2 Baseline for Upgraded Vehicles 46.414 3,660 6.085 7,650.0 680,000 22,447 (Amount Reduced After Upgrades 15.795 2.660 4.637 15.223 612.0 54,400 Percent Reduced After Upgrades 34.0% 72.7% 76.2% 67.8% 8.0% 8.0% <u>Lifetime Cost Effectiveness (\$/short ton reduced)</u> Capital Cost Effectiveness4 \$272,237 \$1,616,781 \$927,230 \$7,026 \$282,468 (unit & labor costs only) Total Cost Effectiveness<sup>4</sup> \$200,572 \$1,191,174 \$683,142 \$208,110 \$5,177 (includes all project costs)

<sup>&</sup>lt;sup>4</sup> Cost effectiveness estimates include only the costs which you have entered.

Remaining Life	doc+ccv: School Bus   School Buses dpfs: School Bus   School Buses vehicles: School Bus   School Buses SB subgrant: School Bus   School Buses	6 years 6 years 6 years 6 years
	rebates: School Bus   School Buses	4 years
	electric: School Bus   School Buses	8 years

## **Downloading Spreadsheets**

Results may be downloaded as a:

<u>Spreadsheet</u> showing DEQ results and your inputs (click on 'yes' if you get an error message).

Emissions from the electrical grid are not included in the results.

<sup>&</sup>lt;sup>2</sup> 1 short ton = 2000 lbs.

<sup>&</sup>lt;sup>a</sup> In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.