

Vermont's Beneficiary Mitigation Plan for the VW Environmental Mitigation Trust Public Comment Report

EXECUTIVE SUMMARY

On November 29, 2017, The Vermont Agency of Natural Resources (ANR) released a Draft Beneficiary Mitigation Plan for administration of Vermont's \$18.7 million allocation of the Volkswagen (VW) Environmental Mitigation Trust. The Environmental Mitigation Trust was created on October 2, 2017 following the finalization of an agreement between VW and the U.S. Environmental Protection Agency regarding VW's installation and subsequent cover-up of nitrogen oxide (NOx) emission defeat devices in over half-million diesel passenger vehicles in the United States. Vermont, as well as the remaining 49 states and the U.S. territories, is a beneficiary of the Environmental Mitigation Trust.

On November 1, 2017 Governor Phil Scott submitted a request to the Trustee administering the VW Trust for Vermont to be certified as a beneficiary of the Trust. In the certification documents the Governor named the Agency of Natural Resources as the lead-agency beneficiary for Vermont.

Within ANR, the Air Quality and Climate Division has been providing support to the Vermont Attorney General regarding VW violations and directly advising the Environmental Protection Agency on how the provisions of the (then proposed) Environmental Mitigation Trust would impact Vermont. As a result of this preliminary work, the Trust has been finalized in such a way that allows Vermont to take better advantage of the funding available to beneficiaries to help mitigate the excess NOx emissions caused by affected VW diesel vehicles.

The mission of the Air Quality and Climate Division is to achieve levels of air quality that will protect human health, prevent injury to plant and animal life, foster the comfort and convenience of the people, promote economic and social development in the state, and facilitate the enjoyment of the natural attractions of Vermont.

In keeping with this mission and in compliance with the requirements of the Mitigation Trust Agreement, ANR drafted and released the Draft Beneficiary Mitigation Plan (hereinafter called "Plan"). The public comment period on the Plan was held from November 29, 2017 – January 13, 2018. A public meeting was held on December 13, 2017, where verbal public comments were received.

ANR received 699 separate written comments, including responses to the online form. 594 of the written comments received were uniform comment letters from members of local and regional advocacy groups. ANR also provided an online public comment form with 23 questions that received 63 separate responses. The purpose of the comment form was to solicit ideas and suggestions for specific questions that were posed in the Plan, or proposed project priorities on which ANR needs additional feedback.

The Environmental Mitigation Trust Agreement is silent on how beneficiaries should carry out the public comment process and respond to comments. Although this is not a rulemaking, ANR has deferred to the normal public notice and comment procedures ANR follows for rulemaking and will finalize a summary of comments and responses to major comments similar to what EPA provides when adopting a final rule. This report provides a summary of the written and verbal comments received and the responses that ANR received to the questions in the online comment form. A document that includes responses to these comments is being draft by ANR and will be available in the future.

SUMMARY OF ONLINE PUBLIC COMMENT FORM RESPONSES

ANR provided an online public comment form with 23 questions to solicit specific feedback on proposed project priorities and other areas of consideration in finalizing the BMP. We received 64 separate comment form submittals via the online form. The responses ANR received are paraphrased below.

1. If you own or operate a vehicle/piece of equipment that would be eligible for replacement/repowering, what are your preferences, considerations, and constraints for choosing between a new electric, diesel, or alternatively fueled vehicle?

Two respondents stated that they would prefer to apply for electric or alternatively fueled vehicles. The majority of respondents did not think this question was applicable to them because they did not own or operate a piece of equipment that would be eligible for replacement, or the comments they provided were not applicable to the scope of the Mitigation Trust and the list of eligible mitigation actions.

2. If you own or operate a vehicle/piece of equipment that would be eligible for replacement/repowering, what type(s) of project(s) do you plan to apply for? See list of eligible projects here.

Unfortunately, most respondents did not own or operate a piece of equipment that would be eligible for replacement. Three respondents, all town Energy or City officials, commented that they plan to apply for replacement of current buses with electric school or shuttle buses, and possible medium duty electric trucks.

3. Should Vermont utilize the services of a third party to assist applicants with application development and feasibility issues, or to manage a portion of eligible project funding? What types of eligible projects should be managed by a third party?

Several respondents commented that a third party should be considered to manage projects that require expertise on the state of the technology available, and technical knowledge that will be necessary to complete an electric or alternative fuels project application, like electric school buses. One respondent commented that municipalities likely don't have the type of expertise that will be necessary to plan for and implement electric or alternative fuel projects, and a third party could be used to assist in those instances. One respondent commented that ANR should recuse itself from the management of the funds if it plans to apply for funding. One respondent commented that a third party could help in determining the best locations to site electric vehicle supply equipment (EVSE).

Several respondents commented that a third party should not be used to administer the Trust funds, and that ANR should instead work with existing state entities, like the Clean Energy Development Fund

(CEDF) and Agency of Commerce and Community Development (ACCD) to manage projects and keep costs to 7.5% of total project costs. Two respondents commented that ANR should hire limited service positions to help administer the Trust funds. Many respondents commented that third parties are too expensive and that the state could manage the funds more cost effectively.

4. How should Vermont calculate the emissions benefits/cost effectiveness of a project?

Several respondents proposed ideas in response to this question. Answers included are those that responded to the question asked.

- Metric tons of CO2 equivalent avoided over the lifetime of the equipment per dollar requested;
- Cost per ton of particulate matter and/or carbon;
- Consider emissions of vehicles versus rider miles for transit buses;
- Calculate the benefits/cost effectiveness of any given project by including the air quality and health benefits, not just the environmental and economic costs;
- Compare the total life-cycle cost, including capital, operating, and “environmental” costs of carbon emissions, of the vehicle to be replaced with the replacement vehicle over a specified period (maybe 20 years);
- Calculate benefits/ cost effectiveness of a project over the anticipated lifetime of the project;
- Consider NOx reductions, health impacts, and broader societal costs including benefits from reduction greenhouse gas (GHG) emissions;
- Consider costs and benefits on a lifecycle basis, including reductions in NOx and climate change-causing emissions, and upfront purchase and lifecycle costs of fuel and maintenance;
- Consider expected lifetime CO2 output;
- Estimate the changes in vehicle-miles, vehicle-hours and vehicle-trips for different classes of vehicles, and develop a model that quantifies how the project will affect the quantity and mix of air pollution emissions and then apply an appropriate dollar value per unit of emissions;
- Complete a literature review to determine best method;
- Focus solely on tailpipe emissions and choose “cleanest” vehicles possible;
- Deduct savings of the estimated remaining service life of the retired diesel from the lifetime emissions from the newer diesel replacement;
- Conduct tailpipe emissions testing;
- Reduction in diesel fuel should be valued far above any marginal increase in electrical usage that would result from an increase in electric vehicles;
- Consider fiscal responsibility and balance that with environmental impact; and
- Only fund projects that would require the use of no fossil fuels.

5. How, if at all, should Vermont prioritize the replacement or repower of eligible projects that, if funded, would occur earlier than they would have without funding?

Several respondents proposed ideas in response to this question. Answers included are those that responded to the question asked.

One respondent suggested that Vermont prioritize emissions reductions that would not have been achieved without the VW funds.

One respondent suggested that project be prioritized based on how many vulnerable people will benefit from the improved air quality.

Several respondents suggested that Vermont consider speed of implementation and highest emissions reductions.

Two respondents suggested that Vermont consider cost-effectiveness.

One respondent suggested that Vermont consider state energy goal attainment.

Two respondents suggested that Vermont prioritize school buses, then transit buses, then state owned vehicles.

One respondent suggested that Vermont prioritize projects that would yield the greatest air quality benefits.

6. How, if at all, should Vermont prioritize projects in eligible project categories that are limited to vehicles in certain model year ranges?

Many respondents declined to answer this question. Answers included here are those that responded to the question asked.

Several respondents suggested that Vermont prioritize the oldest/dirtiest vehicles for replacement first.

Two respondents suggested that funding priorities should align with the model year requirements to ensure that the window of eligible vehicles does not close during the life of the Trust.

One respondent suggested that Vermont should consider annual VMT and life cycle emissions.

One respondent suggested that frequency of use of the vehicle to be replaced should be considered.

One respondent suggested replacing the newer engine model years first, since the older vehicles would be retired soon anyway.

7. For eligible transit bus replacement or repower projects, how should Vermont prioritize these projects? For example, should Vermont prioritize projects that result in increased ridership, expanded routes, different schedules, and/or other factors?

Several respondents suggested that Vermont prioritize transit bus projects that increase ridership. In urban areas, priority should be given to projects that will increase ridership served by zero-emission technologies.

One respondent suggested that Vermont prioritize replacing older transit buses first.

One respondent suggested replacing fleets within routes that already exist to achieve emission reductions.

Several respondents suggested replacing buses that achieve long-term NOx and greenhouse gas reductions and allow for electrification of transit buses to realize the associated cost savings and expand routes and the transit fleet in general.

One respondent suggested that Vermont prioritize electric bus technology that is mature and readily available for larger buses (i.e. 35+ foot models) currently operated by three Vermont transit agencies: Green Mountain Transit, Advance Transit, and Marble Valley. These projects will have the added benefit of operating in more urban environments, which are more impacted by vehicle emissions or relatively poor air quality. The respondent also recommends that Vermont carve out a portion of funding to go towards electric cutaways (smaller buses) which operate in most of Vermont's rural transit service. This technology is not widely available now, but this is likely to change in the next few years. Setting aside money will allow time for the technology to develop and ensure that all Vermonters have the benefit of cleaner electric buses.

Two respondents suggested that priority be given to projects that would help rural/low-income communities have better access to public transit.

Several respondents suggested that transit bus replacements in urban areas should be prioritized because of the public health benefits that would be realized.

One respondent suggested considering the amount of emissions reductions that would be achieved per rider of the subject transit route.

8. In areas of Vermont where people are exposed to a disproportionate amount of air pollution, which of these areas should Vermont prioritize? For example, near-roads, school bus, etc.?

Several respondents suggested that Vermont consider the proximity of the public to areas with high concentrations of vehicle and stationary source emissions.

One respondent suggested that Vermont consider replacing vehicles that travel on roads with historically heavy truck traffic but that also serve an industry with environmental co-benefits (e.g. compost haulers).

Two respondents suggested that projects be prioritized in areas with high rates of disease caused or exacerbated by air pollution. Franklin and Grand Isle counties have high rates of COPD, heart disease and stroke and Rutland and Washington counties have high rates of asthma.

Several respondents suggested that areas where school bus loading, unloading and idling occurs should be prioritized.

One respondent suggested focusing on workplace areas where exposure to air emissions is high.

One respondent suggested that school bus should not be considered in this analysis because school buses are not available to the general public. Instead priority should be given to areas with high population density that are exposed to poor air quality.

One respondent suggested focusing on areas with low-income Vermonters.

One respondent suggested that Vermont should focus more on climate change that reducing pollution in areas with high population density.

9. What is the maximum amount of time that Vermont should consider acceptable for implementation of eligible projects? Should the timeframe be different for different types of eligible projects?

Many respondents declined to answer this question. Answers include:

- *Three years;*
- *Two years;*
- *One year;*
- *18 months for municipalities only;*
- *Longer time considerations for more complex and technical projects;*
- *“Good” projects should not have a time limit;*
- *The implementation timeframe should be left to the applicant, including project milestones that must be met for the project to be fully funded; and*
- *5-10 years.*

10. How should Vermont prioritize projects with verified or leveraged funding? Specifically, what types of leveraged funding should be acceptable and/or prioritized?

Many respondents declined to answer this question.

Two respondents suggested that projects with leveraged funding should be prioritized, and that both cash and in-kind contributions be accepted.

Two commenters suggested that project be required to provide some degree of cost share, with more points given to projects with higher cost share or leveraged funding.

One commenter suggested that an applicant’s inability to use leveraged funding should not be a barrier to project funding. Some applicants may not have access, or the expertise to access, additional funding.

Two commenters suggested that projects with leveraged funding should not outrank projects that do not provide as much of a pollution reduction as a project without leveraged funding.

One commenter suggested that projects that use leveraged funding that has been provided by a Vermont entity should be prioritized.

11. How should Vermont consider an eligible project applicant’s experience, existing administrative/programmatic structure, technical expertise, and/or existing infrastructure necessary to ensure successful deployment of a project?

Many respondents declined to answer this question.

Several respondents suggested that applicants demonstrate some level of capability to carry out a proposed project.

One respondent suggested that applicants should provide evidence of successfully executing projects of a similar nature in the past, the number of years they have been implementing such projects, and team credentials.

One respondent suggested that municipalities should be presumed to have the expertise necessary to deploy and maintain the equipment that replaces existing equipment.

One respondent suggested that applicants with a demonstrated ability to deploy capital projects and manage grant funds be given priority.

Three respondents suggested that applicants be able to meet the requirements of an RFP. No other qualifications should apply. Technical support should be provided to applicants, if needed.

12. For eligible electric heavy-duty replacement or repower projects or light-duty electric vehicle supply equipment, how should project applicants be required to demonstrate coordination with local electric utilities? Should these types of project be required to show that electric charging will be managed to promote affordability of electricity and not add to peak demand?

Almost all respondents suggested that some degree of coordination with the utilities would be beneficial, including ensuring that a project does not impact peak demand, evidence of an agreement between the utility and project applicant, a demonstration of coordination with the utility,

One respondent suggested that applicants should not need to provide a plan showing how charging will be managed.

One respondent suggested that charging from renewable sources be prioritized, while another suggested that applicants simply be required to state whether they plan to use on-site renewable generation.

One respondent suggested that no coordination with the utility be required.

13. For eligible electric heavy-duty replacement or repower projects or light-duty electric vehicle supply equipment, how should project applicants demonstrate that electric vehicles will be powered by the cleanest available energy sources?

Many respondents suggested that this should not be a consideration because Vermont already has a “low carbon” or “clean” or “renewable” or “lowest NOx” electricity supply.

One respondent suggested that applicants who propose diesel projects should be required to demonstrate that the lifecycle emissions of the project will be lower than a comparable electric vehicle.

One respondent suggested that projects should only be powered by wind, solar, or hydro every source.

One respondent suggested that applicants should present a detailed plan showing where electricity is sourced.

14. How should Vermont measure the life-cycle emissions from proposed eligible projects?

Many respondents agreed with the concept of using life-cycle emissions as a method for prioritizing projects but did not provide suggestions on how these emissions should be quantified.

Several respondents suggested that Vermont use existing, peer reviewed, life cycle emissions assessments to develop a measurement tool. This calculation should not be the responsibility of the applicant.

One respondent suggested that Vermont consider the emissions associated with the production of the replacement vehicle itself.

15. How should Vermont consider eligible project feasibility or a project's ability to actually result in the net emissions benefit if deployed as described in the project application?

One respondent suggested that applicants be required to provide a detailed plan and timeline of expected emissions reductions and also provide supporting evidence for implementation feasibility.

Several respondents suggested an applicant be required to anticipate and report annual VMT, and the expected period of use for the vehicle/equipment in years.

One respondent suggested that an applicant must assess emissions reductions by showing dollar per unit of emissions and emissions reduced.

Several respondents suggested that Vermont consider an applicant's history as to knowledge, commitment, and ability to follow through with, and meet project milestones, on a past project.

16. The intent of the Environmental Mitigation Trust is the reduction of diesel air contaminants, including NOx and particulate matter, however Vermont is also seeking to achieve greenhouse gas reductions in funding eligible projects. How should Vermont evaluate greenhouse gas emission reductions as a co-benefit of a project?

Many respondents agreed that reducing GHG emissions is an important co-benefit to consider but did not provide suggestions on how these reductions should be evaluated as a co-benefit.

One respondent suggested considering both CO₂ reductions and NOx reductions in the project evaluation process.

One respondent suggested prioritizing investment in agricultural and forestry vehicles tied to GHG sequestration and reduced fuel consumption from land management practices.

One respondent suggested that Vermont should prioritize projects that support state goals, maintain the National Ambient Air Quality Standards, and protect communities. Also, particulate matter (PM) reduction should be a priority given that NOx converts to PM in the environment.

One respondent suggested that electric vehicles have no associated criteria pollutants because emissions from electricity generating units, from which the electricity to charge the vehicle is sourced, is treated.

Three respondents suggested that Vermont only fund projects that achieve reductions in GHG emissions as well as reductions in NOx and PM.

One respondent reiterated that life-cycle GHG emissions should be considered to prioritize projects.

Several respondents suggested that reducing GHG emissions should be given top priority over other pollutants.

17. Should Vermont limit the amount of cost share for an eligible heavy-duty electric replacement project to the amount that the technology is expected to cost in 5 years (given the fact that electric technology costs are expected to be lower in the future)? 10 years? Why or why not?

Many respondents suggested that limiting the amount of cost share to expected future costs is not appropriate given the perspective that VW Trust funds are meant to transform the electric vehicle market.

Two respondents suggested that cost share be limited to what applicants would have paid for a traditional replacement vehicle in their normal course of business, in cases where an all-electric replacement option is being pursued by the applicant.

One respondents suggested that Vermont apply the highest contribution allowable to support alternative fuel, electric, and idle reduction projects. Conversely, diesel projects, if eligible at all, should be subject to the highest cost share possible, using the smallest amount of settlement funding.

One respondent suggested that limiting cost share until technologies “mature” is appropriate.

One respondent suggested that a cost share incentive could be graduated over time, decreasing over a 5-year period.

18. Considering that Vermont’s allocation of the Trust will be \$18.7 million, and that Vermont is eligible to spend up to 15% of its allocation of light-duty EVSE, and another 15% on administration of the funds, what percentage of funds should Vermont spend on (project categories listed).

Many respondents commented again on project prioritization but did not provide the requested feedback in the terms of percentage of allocation. Also, many respondents suggested that funds be allocated to categories of projects that are not eligible under the Trust, or at percentages that exceed the maximum allowed by the Trust.

One respondent suggested that the funds be allocated as follows: School Buses 55%, Heavy duty diesel replacement/repower 20%, Electric forklifts 5%, Light Duty EVSE 10%, Administration 10%.

Three respondents suggested that the funds be allocated as follows: Light duty EVSE - 15%, Administration - 7.5%, Heavy duty electric - 77.5%.

One respondent suggested that some of funds be used to fund DERA idle-reduction projects.

One respondent suggested that 85% of the mitigation funds should be spent to create an electric school bus pilot program, especially for schools who acquire the majority of their electricity from clean sources, and schools who manage their own bussing (thus saving taxpayers money).

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One respondent suggested that 20% of the funds be spent towards heavy-duty electric trucks (replacement/repower), 40% towards EVSE¹, 15% towards administration costs, 5% towards electric forklifts, 10% towards electric ground-support equipment, and 10% towards other DERA eligible projects.

One respondent suggested that 100% of the funds go towards the purchase of electric transit and school buses.

One respondent suggested that 60% of the funds go towards replacing older school buses.

One respondent suggested that 15% of the funds go towards light-duty EVSE, 15% towards administrative costs, and that the remaining 70% go towards school bus replacements.

One respondent suggested that 60% of the funds be spent on the replacement of existing heavy-duty vehicles with electric models, 10% on new diesel or alternative fuel powered heavy-duty replacements, 15% on light duty EVSE, and 15% on administrative costs.

Two respondents suggested that 100% of the funds go towards purchasing new electric school buses.

One respondent suggested that 70% of the funds go towards the purchase of electric school and transit buses, 15% towards light duty EVSE, 5% towards administrative costs, and 10% towards idle reduction projects under DERA.

One respondent suggested that 70% of the funds go towards the purchase of heavy duty electric vehicles, 15% towards electric forklifts, and 15% towards electric airport ground support equipment.

One respondent suggested that 85% of the funds go towards the purchase of heavy duty electric vehicles, and 15% towards administrative costs.

One respondent suggested that 56% of the funds go towards the purchase of heavy duty electric vehicles, 5% towards ferry/tug projects, 15% towards light-duty EVSE, 12% toward administrative costs, 5% towards freight switchers, 3% towards electric forklifts, and 4% towards electric airport ground support equipment.

One respondent suggested that 40% of the funds go towards the purchase of heavy duty electric vehicles, 20% towards ferry/tugboat projects, and 10% towards electric airport ground support equipment.

One respondent suggested that 85% of the funds go towards the purchase of heavy duty electric vehicles, and 15% go towards light duty EVSE, with administrative costs coming out of the heavy-duty projects to maximize funding for EVSE projects.

One respondent suggested that 30% of the funds go towards the purchase of heavy duty electric vehicle, 20% towards new heavy duty diesel or alternative fuel vehicles, 10% towards ferry/tugboat projects, 10% towards light duty EVSE projects, 10% towards administrative costs, 5% towards freight switcher projects, 5% towards electric forklifts, 5% towards electric ground support equipment, and 5% towards eligible DERA projects.

¹ The Trust Agreement only allows 15% to be allocated to light-duty EVSE projects.

19. Once Vermont is certified as a beneficiary (expected early 2018), it will have access to 1/3 of its funding allocation in the first year of the Trust (\$6.23 million), 2/3 available in the second year, and then the full allocation in the third year. How should Vermont prioritize projects funded in the first year of the Trust given the availability of funding?

One respondent suggested that Vermont prioritize projects in the agricultural and solid waste management sectors, and also state and municipal trucks and buses.

One respondent suggested that Vermont prioritize the purchase of electric school buses, but only if the technology is ready to be deployed in Vermont.

One respondent suggested that Vermont prioritize projects that are ready to be implemented in the first year.

Three respondents suggested that Vermont prioritize funding light-duty EVSE and an electric transit and school bus pilot project.

One respondent suggested that Vermont prioritize funding light duty EVSE projects and a variety of vehicle projects including new alternative fueled vehicles, electric vehicles, and idle reduction projects.

One respondent suggested that Vermont prioritize funding light duty EVSE.

Several respondents suggested that Vermont prioritize the replacement of school transit buses.

One respondent suggested that projects using proven technology with well-established benefits should be funded first, as well as light duty EVSE projects.

One respondent suggested that projects that will yield the greatest reductions of CO₂ and air pollutants should be funded first.

Two respondents suggested that bus replacements and electric vehicle projects be funded first.

One respondent suggested that projects should be funded on a first come first served basis.

Several respondents suggested that projects that will yield the greatest emission reductions should be funded first.

20. Should Vermont require government entities to provide some percentage of project cost share? If so, how much?

Several respondents suggested that government entities should provide some percentage of project cost share, but in many cases did not indicate how much cost share is appropriate and said it depends on the emissions reductions that will be achieved and what a government entity can afford. Some respondents suggested a cost share range from 1% to 50%, a cost share equal to the cost of a traditional replacement three years ago for electric projects, and a cost share that will remove barriers to deploying new technology.

Many respondents suggested that a cost share helps project applicants take ownership of a project and therefore the project is likely to be more successful.

Two respondents suggested that government entities not be required to provide a cost share.

21. How should Vermont prioritize projects that align with state energy, environmental, and economic development goals?

Most respondents agreed that prioritizing projects that meet all three of these goals is important. Some respondents did not agree that meeting economic goals is as important, however some pointed out that protecting public health can achieve both environmental and economic goals because when public health improves as a result of a cleaner environment, health care costs go down.

22. Should Vermont require projects to meet a minimum size to be eligible for funding? If so, what should the minimum project size be and why?

Many respondents suggested that some minimum project threshold should be established to ensure that administrative costs can be kept low, but that different minimum thresholds could apply to different types of projects or applicants. Some respondents did not think there should be a minimum size to ensure that as many applicants as possible will have access to the funds.

Two respondents specifically suggested that projects that are leveraging other funding or taking advantage of bulk pricing opportunities should be given priority.

One respondent suggested that instead of setting a minimum funding threshold, a minimum “environmental benefit” should be applied to determine if a project is eligible.

23. Any other comments that you’d like to submit on the draft Beneficiary Mitigation Plan?

Additional comments received on the online form have been included in the responses to the other comments categories below.

SUMMARY OF WRITTEN AND VERBAL COMMENTS RECEIVED

Written and verbal comments received are categorized below into 18 bins that represent the subject area of the comment received. Given that ANR received several identical or similar comments or ideas in a particular category, comments have been summarized and paraphrased in the categories below.

CATEGORY 1: ELECTRIC GRID CONSIDERATIONS/ COORDINATION WITH UTILITIES

Several commenters suggested that ANR and applicants engage utilities in a process for statewide strategy and information sharing between utilities and applicants, focusing on EVSE locations that are beneficial for consumers and cost effective.

Several commenters suggested that coordination with utilities will minimize strain on the electrical system and electrical vehicle integration into the grid (benefits to off peak resources).

CATEGORY 2: COST BENEFIT CONSIDERATIONS

One commenter suggested that ANR consider and allow use of available emissions calculation tools, including AFLEET, which is better for alternative fuel emissions estimates.

Multiple commenters suggested the use of life-cycle emissions estimates in project emissions reduction calculations, instead of just upfront costs.

Two commenters suggested the use of a holistic approach for emissions benefits calculations, including co-benefits and consideration of additional state environmental goals, instead of a narrow cost per pound NOx reduction value.

One commenter suggested that all vehicles that meet CARB low NOx standards or have zero tailpipe emissions should be given equal funding percentages.

One commenter suggested the use of the DERA option to begin a school bus retrofit program, with a state database to identify older vehicles in need of a retrofit, for wider ranging benefits from fund dollars.

CATEGORY 3: POPULATIONS DISPROPORTIONATELY IMPACTED BY AIR POLLUTION

One commenter recommended that ANR prioritize investments that would expand the access of low-income communities to clean transportation, such as electric transit buses and electric school buses. Opportunities should be evaluated to leverage VW Settlement funds to improve public transit in transit-dependent communities through the acquisition of electric buses. Low-income communities are also more likely to live in areas with higher NOx emissions, so targeting those areas will have broad environmental, public health, and justice effects.

One commenter recommended prioritization of investments that benefit those most impacted and identified the need to identify other areas with concentrated air quality issues that could also benefit. For example, to help address health disparities in Vermont, funds could be targeted to communities where rates of disease caused and/or exacerbated by air pollution are highest (Franklin/ Grand Isle - high rates of chronic obstructive pulmonary disease (COPD), Rutland/Washington - asthma, and Franklin - heart disease and stroke).

One comment received recommended that priority be given for projects at freight facilities located in disproportionately impacted communities. Funding projects in these locations will result in dramatically reduced emissions in disadvantaged communities, potentially much larger than current calculations estimate.

One commenter recommended eliminating all proposals for the replacement of off-road diesel vehicles, which includes forklifts and airport ground support equipment, because supporting off-road upgrades or replacements would be exclusively targeted to a specific location and would have no broad effect or visibility statewide.

CATEGORY 4: IDEAS ABOUT PROJECT PRIORITIZATION

Several commenters made suggestions about how ANR should prioritize projects for funding, including the following:

- Use funds to enhance planned and current investments, enabling cost-effective investment in more zero-emission vehicle technologies;*
- Target older, higher emitting, diesel vehicles for retirement or repower;*
- Leverage other public funding to combine with VW funds to amplify investment impacts of projects;*

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- *Pursue opportunities that enhance EV purchasing power through coordination with other states or entities on purchases or bidding process, or through bulk or grouped projects;*
- *Prioritize projects that help meet existing state energy and climate goals;*
- *Prioritize projects that will benefit those disproportionately impacted by poor air quality, such as communities located near congested areas, school bus unloading and loading areas, communities with high rates of asthma, and the populations more susceptible to health problems from transportation such as elderly persons, low-income communities, and children;*
- *Prioritize project in areas where rates of disease caused and/or exacerbated by air pollution are highest;*
- *Prioritize projects that build on Vermont's air-quality successes;*
- *Prioritize projects that support no or reduced idling of motor vehicles;*
- *Prioritize projects that eliminate market barriers (ease of research and information for those looking to purchase clean vehicles and take advantage of incentives);*
- *Prioritize on-road over non-road vehicle and equipment projects;*
- *Allow functionally similar-to-similar replacement projects;*
- *Don't prioritize entities with experience in implementing diesel reduction projects;*
- *Prioritize projects that can be implemented within 18 months, but don't make this a requirement for funding;*
- *Prioritize projects from one sector to achieve significant and noticeable results;*
- *Prioritize alternative fuel vehicle projects that focus on maximizing NOx reduction for the funds spent.;*
- *Provide more funds from the Trust (larger cost share) for medium and heavy duty engines that deliver a greater NOx reduction than currently required for new vehicles and engines (meet a more stringent standard);*
- *Prioritize funding technologies that have demonstrated the ability to deliver actual lower in-use emissions when operated in real-world conditions;*
- *Prioritize funding for commercially available products that are ready to use;*
- *Prioritize funding for clean vehicles rather than fueling infrastructure;*
- *Balance funds distribution between public and private fleets;*
- *Funds more projects in the early years of the Trust to maximize the NOx reduction benefits; and*
- *Prioritize projects that spread funds throughout the state in urban and rural communities to make projects visible throughout the state.*

*One commenter recommended modification of proposed funding priorities for selecting and funding eligible mitigation actions to include both projects **and programs**. Projects and programs both constitute eligible mitigation actions that should be subjected to the same selection criteria and prioritization as described in the BMP.*

CATEGORY 5: ALTERNATIVE FUEL REPLACEMENT PROJECT IDEAS

One commenter recommended that alternative fuels should not be limited because different fuels serve different markets, and no single alternative fuel (including electricity) covers all applications.

Multiple commenters strongly encouraged the prioritization of investments in natural gas near-zero emission vehicles since the technology is proven and widely available, these vehicles are now commercially available in all the desired vehicle categories stated in the Plan, and can begin improving Vermont's air quality immediately at a much lower cost than other clean technologies.

One commenter supported investment in natural gas vehicles because they emit less CO₂ than diesel vehicles and they produce almost no nitrogen oxides. Today's NGV engines are 90% cleaner than the EPA's current exhaust standards, 90% below the cleanest diesel engine and 50% more cost effective at reducing NO_x as compared to diesel or electric vehicles.

Multiple comments were received supporting natural gas vehicles powered by Renewable Natural Gas (RNG) produced at farms and landfills. On farms, manure management is critical to reducing methane emissions and improve water quality. By "digesting" manure to create RNG, farms can produce renewable energy, reduce GHG emissions and advance efforts for cleaner water. Vehicles which use RNG create the double benefit of reducing transportation emissions through use of cleaner-running RNG, plus supporting a growing farm-sourced RNG supply which offers its own emissions reductions. This virtuous cycle of collaboration in transportation and agriculture promises to create and grow a robust market for RNG, a powerful strategy to advance Vermont's 90% renewable by 2050 energy goals.

One commenter encouraged the adoption and utilization of propane-powered Class 4-8 vehicles in Vermont's Volkswagen Environmental Mitigation Plan. Propane has a proven track record as a domestically produced transportation fuel in fleets across the country with benefits including lower total-cost-of-ownership, comparable performance to conventional fuels, onsite fueling, reduced maintenance, lower emissions, and decreased reliance on foreign-sourced fuel. Additionally, there are several companies that offer both OEM and aftermarket conversions for propane vehicles allowing for a variety so fleets can select the option that best fits their need. When factoring in all of the benefits, there is no doubt that investing Volkswagen Settlement funds into propane powered school buses would be one of the most cost effective ways of reducing the excess NO_x caused by Volkswagen. Propane infrastructure is already in place to facilitate Vermont's Environmental Mitigation Plan, as there are already 13 public and private stations within the state.

Another commenter supported propane powered buses and vehicles. Propane powered buses are a proven, popular alternative to electric school buses for the following reasons:

- 1. Propane school buses are roughly \$15,000 more than a diesel model and less than a third of the cost of an electric school bus. They are cheaper to operate and maintain, requiring less oil and fewer filters than conventional vehicles.*

2. *Due to its low carbon content, propane is fundamentally one of the cleanest burning fossil fuels. When used as a transportation fuel, it offers a 10% reduction in lifecycle emissions of greenhouse gases over petroleum based fuels, depending on vehicle type and load conditions.*
3. *The propane fueling infrastructure is very similar to gasoline and diesel refueling equipment.*

One commenter discussed the importance of looking at what the marketplace already offers for NOx reduction. For instance, the Volkswagen funds are available for electric forklifts. They discourage ANR from focusing on these. The forklift market already has a NOx reducing option—propane. By supporting electric forklifts, it would take money away from applications that can better reduce harmful diesel emissions. Unfortunately, propane-powered forklifts are not eligible for these funds. This exclusion may be shortsighted, but you can avoid expounding this problem by continuing to focus Vermont’s mitigation plan on where the best “bang for the buck” exists.

One commenter supporting alternative fuel technologies urged that the use of these funds should maintain the focus of offsetting the excess Volkswagen NOx emissions.

CATEGORY 6: COST SHARE RECOMMENDATIONS

One commenter stated that government entities should not have to provide any cost-share towards eligible projects because of the constrained budgets of towns and school districts. One commenter stated that all electric projects, including EVSE, should be funded with Trust funds paying the maximum allowable cost-share (75% for non-government entities, and 100% for government entities) to accelerate deployments of heavy-duty electric vehicles. Also, maximum funding levels should be set using percentages rather than fixed dollar amounts due to the variability in expense in deploying electric vehicles and EVSE.

Two commenters stated that Vermont should consider funding alternative fuel projects at lower cost-shares than the maximum allowed in Appendix D-2 of the Mitigation Trust Agreement. This would result in more vehicles replaced and greater NOx reduction. Also, this would encourage project applicants to leverage other public and private investment.

One commenter stated that the cost-shares decided upon should be based on the cost of the vehicles today, and not what they are anticipated to cost in the future.

CATEGORY 7: OPPOSITION TO FOSSIL FUEL BURNING TECHNOLOGIES

Multiple commenters recommended prioritizing electric vehicles/engine replacements and EV charging infrastructure over new diesel replacements.

Several commenters suggested the removal of new diesel from consideration for this funding. Since existing diesel engines are already on track to be replaced with newer, cleaner diesel, using the limited VW Settlement funds to hasten the purchase of an existing technology would mean putting the money toward a shift that would have happened on its own – it doesn’t spur transformation.

ANR received multiple comments opposing spending the VW settlement money on fossil fuel technologies.

CATEGORY 8: DIESEL EMISSION REDUCTION ACT PROJECTS

Multiple comments were received supporting the allocation of funding to the DERA Option to allow for the funding of idle reduction technology projects for all fleets including ambulances and emergency vehicles.

One commenter recommended that if replacement/repower projects remain eligible for replacement with new diesel-powered engines or vehicles, then require these projects to be funded solely under the DERA Option as this would require the replacement to occur off-cycle (earlier than planned), ensuring diesel investment would be used to catalyze a project that wouldn't happen otherwise, thereby maximizing NOX reductions.

CATEGORY 9: DIESEL REPLACEMENT PROJECTS

One commenter supported reducing NOx Emissions in the most cost-effective way possible. The commenter suggests that there is an obvious and needed health benefit to students and Vermont's environment, but the VW fund is limited and must be invested fairly and thoughtfully and in a way that benefits the most people.

One commenter suggested that a cost-effective approach to meeting the BMP NOx reduction goal should focus on the entire Vermont school bus fleet and provide funding for all buses being retrofitted with state-of-the-art emission control technologies as a State-initiated program.

One commenter supported allocating funds to new diesel vehicles, stating that while the future will be electric vehicles in part, the industry and heavy duty commercial trucking market is not there yet. The commenter encourages working with the private sector and manufacturers who are on the ground and who can make an immediate impact by deploying new diesel vehicles. Considerations should be made regarding vocation and idling hours. The commenter suggests that those upgrades from old diesel to new diesel vehicles are changes that can be made within a 6-9-month period and most likely to benefit smaller communities.

CATEGORY 10: OFF-ROAD ELECTRIC TECHNOLOGIES

One commenter suggested replacing diesels with 100% electric will eliminate yard truck emissions and improve air quality, given that yard trucks typically operate 10-15 mph, diesels may emit far more NOx than currently estimated, along with other criteria pollutants.

CATEGORY 11: THIRD-PARTY MANAGEMENT OF TRUST FUNDS

One commenter stated that the VW Trust funds allocated to Vermont should not be managed by a third-party for-profit entity due to the limited nature of the funds. Instead, the commenter recommends that ANR consider project proposals and allocate the Trust funds directly.

CATEGORY 12: SUPPORT FOR EVSE AND PRIORITIZATION OF EVSE FUNDING

Multiple commenters supported using the maximum funding available on EVSE (15%) to build a more robust EVSE infrastructure around the state, to help drive EV market transformation, for emissions reductions and health benefits, and to increase the visibility of EVs in the state.

Multiple commenters supported installation of EVSE in strategically sited, highly visible, and high-volume locations (e.g. hospitals, airports, beaches, resorts, town center, parks, court houses, workplace charging, multi-unit-dwellings, and highway corridors and exits).

One commenter supported EVSE to spur integration of EVs into electric grid, for off-peak charging benefits.

One commenter requested the removal of hydrogen as a funding option.

One commenter voiced concerns with the price associated with charging at new charging stations.

One commenter suggested the use of a program methodology for review of EVSE projects, rather than a one-off method, for ease of scaling and potential cost share.

One commenter suggested future-proofing EVSE installations and creating a networked system to help manage grid load and data collection.

One commenter asked that the funding percentage difference for EVSE on government versus non-government properties be removed to enable a greater focus on priority locations.²

CATEGORY 13: CO-BENEFITS OF NOX REDUCTION

One commenter suggested that emissions of GHGs should be prioritized equally with diesel air contaminants, as reducing GHG emissions will reduce other contaminants, but this is not true for reducing diesel contaminants and GHG reductions.

One commenter asked that reducing fossil fuel use be of equal priority with air quality improvement.

One commenter asked that priority be given to projects that help meet existing state renewable energy, ZEV Action Plan, and GHG goals.

CATEGORY 14: ELECTRIC SCHOOL BUSES

Multiple commenters supported the use of 85% of the funds for electrification of the transportation sector, with an emphasis on electric school and transit buses.

Multiple commenters supported funding electric school buses because of the health benefits to children, air quality and emissions benefits, to help drive a market transition, to catalyze additional projects, especially for school districts where it would not happen naturally, to illustrate a visible commitment to electric technologies, to help educate and inspire children, to introduce children to new electric vehicle technologies, to help municipalities gain experience with the benefits and limitations of the new technologies, to move toward meeting state renewable energy goals, and to benefit the electric grid.

One commenters suggested that focusing the available funds only on electric school buses would be inequitable and would limit the amount of buses that could be replaced or retrofitted, therefore limiting

² Cost share amounts are dictated by the Mitigation Trust Agreement and the “up to” cost share amounts for government and non-government entities cannot be modified by the beneficiary (Vermont).

the air quality benefits and immediate health benefits to children that could be otherwise achieved through the more cost-effective purchase of newer diesel technology.

Multiple commenters requested the funds not be used to promote “clean diesel” technologies.

Multiple commenters requested the funding of electric school buses with the funds to help mitigate carbon emissions and climate change.

Multiple commenters supported the funding of electric school buses because of the tax benefits to Vermonters, driven by the reduced fuel and maintenance costs of buses.

One commenter requested the use of funds for electric school bus pilot programs, to be prioritized for districts that manage their own fleet and are in areas with an electricity portfolio consisting of at least 90% renewable energy.

One commenter suggested the use of funds to purchase electric school buses that could be used for transit buses during off hours.

One commenter suggested a slower rate of purchase for electric buses, and to wait for the bus price to go down as the technology emerges and becomes more widely adopted.

CATEGORY 15: ELECTRIC TRANSIT BUSES

Multiple commenters supported the use of all available funds (after EVSE) for electrification of the transportation system, specifically electric transit and school buses.

Multiple commenters supported using funds to purchase electric transit buses for the associated air pollutant reductions and health benefits, for the associated greenhouse gas and climate benefits, to transition away from fossil fuels, to drive the market transition for these vehicles, lower yearly fuel and maintenance costs, which would provide a tax benefit for Vermonters, to benefit and stabilize the electric grid, to help make progress toward state emission goals, because they are more energy efficient than diesel buses and they serve as an inspiring example to children.

One commenter suggested Vermont adopt an incentive program for EV buses, and a competitive funding program like the federal or California program.

One commenter suggested funding electric transit bus projects to assess the feasibility of electric buses in the public transportation fleet, with pilots in Montpelier, Burlington, Rutland, and several smaller municipalities.

One commenter supported the purchase of electric buses with funds to help lower vehicle miles traveled (VMT).

One commenter suggested a slower rate of purchase for electric buses, or to wait for the bus price to go down.

CATEGORY 16: FLEET ELECTRIFICATION IN GENERAL

Multiple commenters suggested the use of funds for electrification to help increase the visibility of EVs and electric buses, and to help model change to drive future transformation.

One commenter suggested strategically siting infrastructure (with cross functional capacity for heavy-duty technologies) and increasing the EVSE network to make it easier for drivers to go electric.

One commenter suggested using at least the 43% currently apportioned for on-road vehicles for electrification projects, and potentially expanding that, but also prioritizing electric options in the DERA, marine, and locomotive categories.

Two commenters suggested the use of funds for electrification of municipal fleets, including DPW, police, fire department, and parks and recreation.

One commenter suggested the use of funding for electrification of non-road equipment.

One commenter suggested that new EVSE installations be powered by renewable energy.

One commenter requested that the funds be used to prioritize vehicle electrification projects and so to help bolster the clean energy economy and provide new jobs in Vermont.

One commenter supported the use of funds for electrification of municipal HD trucks to gain municipal experience with electric vehicles.

One commenter illustrated the definition of “Port” in the Consent Decree and suggested the potential inclusion/expansion of electric Terminal Trucks.

CATEGORY 17: NOT ELIGIBLE

ANR received several comments that contained recommendations for projects, actions, or prioritization that are not eligible under the terms of the Mitigation Trust Agreement and therefore may not be implemented using VW Trust Funds. These projects include:

- *Allowing a fleet to acquire an older vehicle from another fleet or allowing a fleet to exchange one of its newer vehicles for another fleet’s older vehicle that is then scrapped;*
- *Funding incentives for weatherization projects or solar projects for town buildings, schools, and low-income Vermonters;*
- *Making funding available to provide public housing assistance;*
- *Funding a monitor for gas and particulate emissions;*
- *Development of a liquified natural gas fueling station on Interstate-89;*
- *Development of a hydrogen generation plant and fueling station in Vermont;*
- *Creating a revolving, no-interest loan program for local government with limited resources;*
- *Paving roads in Vermont; and*
- *Lowering the property tax burden.*

CATEGORY 18: MISCELLANEOUS COMMENTS

One commenter stated their opposition to spending the VW funds on any off-road motor vehicle replacement projects because these projects are more likely to be limited geographically to discrete urban areas within Vermont and would not be as visible as other all-electric replacement projects eligible under the Trust.

One commenter stated that the eligible administrative costs allowed under the Mitigation Trust Agreement should be used to create a program for the funding of electric and alternative fueled vehicles to ensure a streamlined approach to a complex process.

Two commenters stated that the BMP should align itself with other state goals and programs, for example the State Comprehensive Energy Plan or the Zero-Emission Vehicle Action Plan.

One commenter stated that the legislature be given time to take testimony and provide recommendations on the use of the funds.

One commenter stated that the BMP focus specifically on one sector to achieve the greatest results and make a noticeable impact.

One commenter stated that all components of an eligible project, acquisition, charging and infrastructure, should be for funding by the Trust and to also develop a funding structure that allows for multiple contracts to be included under one project umbrella.

One commenter stated that technical assistance should be provided to applicants and fund recipients to make sure that those that do not have the capacity to advance technical projects do not lose the opportunity to participate. State staff should be dedicated solely to the administration of funding projects under the Trust and that new staff be hired if necessary.

Two commenters stated that ANR should collaborate with other state agencies that have experience in awarding grants for EVSE projects and other projects, such as ACCD and the Clean Energy Development Fund.

One commenter stated that ANR should define “port” as used in Appendix D-2 as terminals which move cargo or are clustered at inland transportation hubs in disadvantaged communities.

One commenter recommended that ANR consider the merits of supporting their (the electric utility’s) Tier III program to install up to 20 EVSE annually over the next three years.

NEXT STEPS

This Public Comment Report includes a summary of the written and verbal comments and comment form responses that ANR received during its approximately 45-day comment period for the Draft Beneficiary Mitigation Plan. These comments will be taken into consideration as ANR works to finalize the Beneficiary Mitigation Plan for submittal to the VW Environmental Mitigation Trust Trustee, as required by the Mitigation Trust Agreement. At the time of the release of the final Beneficiary Mitigation Plan ANR will release a complete responsiveness summary that includes a summary of comments received, ANR’s responses to those comments, and how the comments were incorporated into the final Beneficiary Mitigation Plan, if applicable.

Once the Beneficiary Mitigation Plan is filed with the Trustee, ANR will have access to its allocation of the Trust within 30 days in accordance with the Mitigation Trust Agreement. The ANR Interagency VW Mitigation Working Group will continue its work to develop Requests for Proposals to fund individual projects and programs that align with the Beneficiary Mitigation Plan.

It is important to note that the Beneficiary Mitigation Plan is a living document and will continue to be updated over the life of the Trust. Funding priorities are subject to change based on public input, air quality or other data, interest from project proponents, and other applicable factors. Funding priorities are not necessarily project selection criteria but will be used to shape the project prioritization and selection criteria that will be used to decide which projects to fund from Vermont's allocation of the VW Environmental Mitigation Trust.

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