

August 15, 2019

John Dawson, Deputy Director  
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Florida Department of Environmental Protection  
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Re: Draft Beneficiary Mitigation Plan for the Volkswagen Settlement

Dear Deputy Director Dawson,

On behalf of the Southern Alliance for Clean Energy (SACE), please consider these comments regarding the Draft Beneficiary Mitigation Plan for the Volkswagen settlement funding. The State of Florida must maximize the benefits of the \$166 million funding opportunity from the Volkswagen Environmental Mitigation Trust program, which offers a significant opportunity for Florida to increase its energy independence, grow the economy with clean energy jobs, reduce air emissions, protect public health, and provide cleaner and more efficient transportation options for Florida.

Air pollution is both a public health and a climate change concern. Children, the elderly, and those with respiratory illnesses are particularly vulnerable to air pollution that results from vehicle emissions. Air pollution is also fueling climate change and worsening its impacts. Florida is experiencing once-in-a-thousand-year downpours and historic floods. South Florida had an abnormally warm winter for the 8th year in a row and global average temperature that drive sea level rise are already impacting Floridians.

We appreciate that the Florida Department of Environmental Protection (DEP) recognizes the opportunity electrification brings to mitigate air pollution and that the draft plan has prioritized the maximum funding for electric vehicle charging infrastructure. However, the draft plan is sparse in details as to the type and location of that infrastructure. Likewise, the draft plan needs additional details on how the 70% allotment for transit, school and shuttle buses will be prioritized.

SACE recommends that DEP modify the draft plan to include specifics on how the funding will be allocated for the 70% allotment for transit, school and shuttle buses, as well as the 15% allotment for electric vehicle charging infrastructure.

Specifically, we recommend that DEP:

**Clarify language in the plan to prioritize investments in electrification.** DEP must clarify the plan's language and explicitly prioritize investments in electrification over fossil-fuel powered buses, or set the plan up to fund electric replacement projects first.

The electrification of transportation offers the best opportunity for reducing emissions – compared to fossil fueled vehicles, electric vehicles are cleaner, cheaper to fuel, operate and maintain, and eliminate fuel price volatility, thus offering significant economic benefits to the state. Given the strong advantages of electric, the plan should state that no funds will go towards the purchase of diesel buses.

The draft plan states the priority of “Identifying mitigation projects that achieve the lowest cost per ton of pollutants reduced,” and to this end, DEP must first accurately understand and evaluate both the upfront purchase price and the lifetime cost of ownership.

To accurately reflect the upfront purchase price, DEP should provide an updated correction to the purchase price of electric buses in the plan. While the cost of electric transit buses is listed at \$900K in the plan (Figure 13, pg. 26), several publicly available sources of information indicate that the purchase price is actually lower. For instance, Proterra sold electric buses in the \$777K range to the Greensboro Transit Authority (North Carolina),<sup>1</sup> \$750K to the Clemson Area Transit (South Carolina), and \$802K to the Berkeley-Charleston-Dorchester Council of Governments (South Carolina).<sup>2</sup> A lower range may be available from other manufacturers, and the cost of electric buses is declining year-by-year as lithium-ion battery technology matures.

Further, new financing models, including battery leasing, can help levelize the upfront cost of electric buses over the lifetime of the vehicle, allowing local governments to obtain electric buses at prices comparable to diesel buses.<sup>3</sup> DEP should research an accurate cost range for electric transit buses, including lease options, before finalizing the plan.

It is imperative that the lifetime cost to own be factored into the unit cost of the buses. Electric buses are proven to offer lower lifetime costs than diesel or natural gas buses because of much lower fuel and maintenance costs. For example, Greensboro, North Carolina has begun to fully transition its transit bus fleet to electric buses and expects to save \$300K-\$350K per bus over its lifetime, even factoring in the higher initial purchase price. Raleigh-Durham International Airport has bought four fully-electric buses and also expects 12-year-lifetime savings of about \$350K per bus.<sup>4</sup> Florida State University, in partnership with StarMetro, Tallahassee’s public transportation system, has contracted for a total of 18 electric buses, with an expected savings of millions of dollars.<sup>5</sup>

It would appear that DEP examined only the procurement cost--rather than lifetime cost--of electric buses which skews the emissions benefit/cost ratio (see Figure 13, pg. 26) to a ‘diesel’ or CNG preference as they appear to be a ‘cheaper option’ without considering the total cost to own. This is particularly problematic since, in fact, electric buses offer greater emissions reductions than fossil fueled counterparts.

<sup>1</sup> Personal correspondence with Greensboro Transit Authority

<sup>2</sup> South Carolina Department of Insurance. “State of South Carolina Volkswagen Environmental Mitigation Trust Round 1 Funding Awards Overview.”

<sup>3</sup> Proterra. “Financing Your Electric Bus.” <https://www.proterra.com/vehicles/catalyst-electric-bus/financing/>

<sup>4</sup> Raleigh-Durham International Airport. “RDU to Deploy the Triangle’s First Electric Buses.” <https://www.rdu.com/rdu-to-deploy-the-triangles-first-electric-buses/>

<sup>5</sup> Florida State University News. Dave Heller. “Florida State becoming a driving force in electric-vehicle technology.” February 14, 2019. <https://news.fsu.edu/news/2019/02/14/fsu-electric-buses/>

The plan should also include language to ensure electric bus charging infrastructure is eligible for funding in the bus category as opposed to the 15% for charging infrastructure.

**Prioritize funding in areas with high levels of air pollution and for communities disproportionately affected by air pollution.** Frontline communities, including minority communities and low income areas, are particularly vulnerable to the effects of climate change and air pollution. We recommend DEP prioritize funding for projects that address energy justice via reducing pollution burdens in the most vulnerable communities and recommend using more granular geographic data for both electric vehicle charging infrastructure and fleet replacement to prioritize projects targeted to disproportionately affected communities.

**Maximize the 15% allotment for electric charging infrastructure.** Adequate charging infrastructure is critical to ensuring that the benefits of electrification are realized. Therefore, we applaud DEP's decision to pursue the maximum allowable 15% allocation to go toward electric charging infrastructure. The plan should clarify how the 15% will be spent and prioritize the DC fast-charging network and Level 2 charging as well as prioritizing areas for communities disproportionately affected by air pollution.

**Support emerging cleaner technologies.** Clean vehicle technology is constantly evolving. Florida should evaluate new, clean technology for construction equipment and other heavy duty equipment. Aging transit fleets should be replaced with electric buses, rather than other alternative fuels, to ensure maximum emissions reduction in the long-term.

Thank you for your consideration. We believe that all of these modifications to the draft plan are essential to ensuring transportation improvements and improving air quality as Florida continues to face rapid growth, transportation and climate change challenges. If you have any questions or require any other information, please do not hesitate to contact us 727-410-4804 [dory@cleanenergy.org](mailto:dory@cleanenergy.org).

Sincerely,



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Florida Director  
Southern Alliance for Clean Energy



Dory Larsen  
Electric Vehicle Program Coordinator  
Southern Alliance for Clean Energy

cc:

Governor Ron DeSantis  
Chief Resilience Officer Julia Nesheiwat  
Chief Science Officer Tom Frazer  
Secretary Noah Valenstein, Florida Department of Environmental Protection  
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