



The Honorable Mary Nichols and Members of the Governing Board  
California Air Resources Board  
Post Office Box 2815  
Sacramento, CA 95812

October 15, 2018

## **RE: FISCAL YEAR 2018-19 FUNDING PLAN FOR CLEAN TRANSPORTATION INCENTIVES**

Dear Chair Nichols and Members of the Governing Board:

Clean Energy would like to thank the California Air Resources Board (ARB) for the opportunity to comment on the proposed Fiscal Year 2018-19 Funding Plan for Clean Transportation Incentives from the Greenhouse Gas Reduction Fund (GGRF). Clean Energy believes this source of funding is critical to the transformation of the transportation sector toward cleaner, low carbon alternatives to diesel.

### **Introduction**

Clean Energy is generally supportive of most provisions of the proposed Plan but would appreciate the Board's consideration of key structural changes to the Clean Truck and Bus Vouchers Program. Looming federal attainment deadlines for ozone are in serious jeopardy and transforming the transportation sector immediately will be fundamental to demonstrating an attempt to solve the state's shortcomings. Of course, the strategy moving forward must look to have immediate, mid- and long-term strategies to address emissions generated by the mobile source sector. While we think ARB staff have adequately addressed and incentivized zero emission strategies, we think the program for low NOx engines that use renewable fuels needs to be further amended to ensure full subscription of the program.

### **Low NOx Engines are Key to SIP Strategy**

The low NOx engine has been certified at the optional .02 emission standard, providing greater than 90% reduction in NOx emissions. Based on research by UC Riverside CE-CERT, the 8.9L and 11.9L natural gas engines emitted lower NOx emissions than its ARB certification standard, as low as a 99% reduction at .002g NOx. Additionally, emissions decreased as the duty cycles decreased (i.e., slower speeds, idling, stop-and-go traffic) unlike diesel that increased 5-9 times above the 2010 certification. Furthermore, when you pair this technology with the biofuel, renewable natural gas, you also achieve substantial GHG emissions as well. This newly developed and commercially ready strategy deployed several years before any official standard is considered and adopted was identified in the 2016 SIP as the core strategy to achieve deep NOx emissions reductions in the heavy-duty sector. In fact, the SIP calls for as many as 900,000 low NOx engines to be on California's roads by 2030.

### **Policy Recommendations for the Clean Truck and Bus Voucher Program**

Clean Energy strongly urges the Board to consider the following policy considerations for incorporation in the final adoption of the proposed Plan:

1. The HVIP voucher incentive for the 8.9L low NOx engine should remain available for new purchases and repowers for all vocations. Staff is recommending a change to the current voucher program focused only on repowers to encourage new low NOx bus and truck purchases in vocations outside of the refuse and transit sectors. While we appreciate and encourage strategies that would expand low NOx engine adoption in new truck and bus vocations, we do not believe disallowing the refuse and transit sector to apply for new purchases is the right approach. As the staff report indicates, approximately 61% of the funds subscribed to for the 2017-18 voucher program as of June 30, 2018 came from the refuse sector. At the same time, staff is recommending that roughly \$3 million of the funds dedicated to low NOx engines be transferred to a waiting list of applications in other categories on a first-come, first-served basis. A similar transfer of funds was also made in the prior year and we believe these transfers are the result of inadequate incentive levels for 8.9L and 11.9L low NOx engine purchases.

Thankfully ARB staff is recommending increased levels of incentives for low NOx engines in the proposed plan but we would ask that rather than eliminate refuse and transit new purchases for the 8.9L low NOx engine, that the program rather prioritize other vocations for buses and trucks over the refuse and transit applications. In that way, other vocations may be more willing to submit an application and if those applications do not fully subscribe the amount allocated for the program, the refuse and transit sectors have an opportunity to backfill the remaining dollar allocations before ARB staff decides to transfer the funds outside of the program next year. We would also remind the Board that such restrictions are not placed on other categories and therefore should not be placed on the low NOx engine category.

2. Clean Energy is pleased that ARB staff has recognized the need to increase the maximum voucher amount for both the 8.9L and 11.9L low NOx engine to \$45,000. We are also very appreciative of staff's publicly expressed comments that no one has ever been turned down seeking to use a voucher for a low NOx engine, and funding will be found if voucher applications exceed allocated funding.

However, applications for the 11.9L engine will continue to suffer if the voucher amount is anything less than \$60,000. Much like the incentives being offered for zero emission vehicle categories, the voucher amount must cover the incremental costs of the technology to motivate meaningful market adoption. This higher amount would help cover the:

- Low NOx engine;
- Fuel system;
- Warranty to match a diesel engine, which is more expensive and should be included in the incentive;
- Potential maximization of on-board fuel capacity in regional haul applications; and
- General transition costs from a diesel to low NOx engine.

And we believe this cost would eventually come down as higher production volumes occur over time. Of course, we also need to factor in the significant national uptick in heavy-duty truck purchases to keep up with shipping demand as it may impact the ability to purchase a truck next year.

We have confirmed that for the 2017-2018 fiscal year, only 69 vouchers were used for the 11.9L engine, mostly from government, refuse and transit. Theoretically, if all of the \$18 million had been claimed that was allocated for this low NOx engine with a \$40,000 voucher, then 450 vehicles should have been funded. 69 vouchers for the 11.9L engine is a substantial shortfall from what could be funded through HVIP and is evidence that the current program's low voucher amount needs to be modified especially if we hope to attract other vocations.

Short of modifying the \$45,000 voucher for the 11.9L engine upwards, we recommend the allowance of stacking other grant programs to achieve a \$60,000 voucher. We recommend that this be done especially when a local air quality agency or port authority allocates funds to incentivize a faster transition to cleaner fleets.

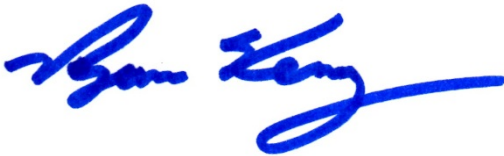
In addition, staff has expressed that the \$45,000 figure is based on a 120 diesel gallon equivalent (DGE) fuel system despite that no one size fits all of the industry's needs. If some fleet owners desire to purchase larger fuel systems to meet their logistical needs, we recommend that the voucher amount be raised accordingly to capture the greater costs associated with more fueling tanks.

In the end, ARB's Mobile Source Strategy document calls for the deployment of 900,000 low NOx heavy duty trucks by 2031. Additionally, the San Joaquin Valley Supplement to the Revised 2016 State Strategy for the SIP calls for a goal of 33,000 low NOx trucks by 2024. We don't believe these goals will be met unless adequate voucher amounts are provided to heavy-duty fleet owners. **Now is the time to establish an incentive that will increase demand.**

3. We are pleased to see ARB recommend that repowers be added to the voucher program as this was not allowed in the past. We think this is a positive move by ARB staff and we would like to thank them for being open to this change.
4. We are pleased the definition of "small fleet" for requiring renewable natural gas fuel with a low NOx engine has been increased from 3 to 10 vehicles.

Clean Energy would like to thank ARB staff and you for your careful consideration of our views. We believe our policy recommendations will result in a fully subscribed Bus and Truck Voucher Program for 2018-2019. We hope that you will consider making the above suggested changes so that our industry can help ARB and the state meet its vision of replacing dirty diesel vehicles off California's roads today.

Sincerely,



Ryan Kenny  
Senior Public Policy & Regulatory Affairs Advisor – Western U.S.  
Clean Energy