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Department of Ecology  
State of Washington  
P.O. Box 47600  
Olympia, WA 98504-7600

**Re: Comments Pertaining to Chapter 173-424 WAC, the Washington Clean Fuel Standard**

Dear Rachel Assink,

CleanFuture, Inc. (“CleanFuture) appreciates the opportunity to comment on the proposed Washington Clean Fuel Standard (Chapters 173-424 WAC). CleanFuture is a leading environmental company that has worked for over a decade to electrify and improve the efficiency of a wide range of vehicle fleets; CleanFuture works with fleets in some of the hardest sectors to decarbonize. CleanFuture has built a strong platform connecting clean vehicle fleet customers with low carbon fuels (electricity and other fuels), particularly zero and sub-zero CI fuels, serving both on the supply and demand side in multiple programs and jurisdictions. Our experience in Oregon and California provides us with unique insights into the mechanics of Clean Fuel Standard (CFS) programs, and also into the decision-making processes of fleet managers and corporate decision makers regarding fleet and equipment electrification strategies.

**Recommendations regarding Credit Generation**

Regarding responsibility to generate credits, we support the rules as written to designate the owner of the equipment as the responsible credit generator which may be designated to another entity by written contract.

CleanFuture provides the following specific comments on each section:

WAC 173-424-220 (3) Nonresidential electric vehicle charging.

CleanFuture agrees that the owner of the electric-charging equipment is the default fuel reporting entity and credit generator, or may designate an aggregator.

WAC 173-424-220 (5) Electric forklifts.

CleanFuture agrees that the owner of the forklifts is the default fuel reporting entity and credit generator, or may designate an aggregator under written contract.

For WAC 173-424-220(5)(a)(ii) we suggest the following modification (changes marked):

- (ii) The estimated or actual annual credits ~~revenue~~ the owner gets for the use of electricity in the forklift.

The reasoning for this recommended change is that given the unpredictable nature of credit revenues; the annual credits is a more reliable metric.

WAC 173-424-220 (6) Electric transport refrigeration units (eTRU).

CleanFuture agrees that the owner of the eTRU is the default fuel reporting entity and credit generator, or may designate an aggregator by written contract.

WAC 173-424-220 (7) Electric cargo handling equipment (eCHE).

CleanFuture agrees that the owner of the equipment is the default fuel reporting entity and credit generator, or may designate an aggregator by written agreement.

WAC 173-424-220(8) Electric power for ocean-going vessel (eOGV)

CleanFuture agrees that the owner of the electric power supplying equipment is the default fuel reporting entity and the credit generator, or that the credit generation may be designated to an aggregator.

WAC 173-424-210(d)(ii)

CleanFuture agrees that the forklift fleet owner is the first fuel reporting entity and credit generator, or that the credit generation may be designated to an aggregator.

### **Recommended Revisions to Requirements for Biogas-derived Electricity**

CleanFuture recommends that Ecology remove the efficiency adjustment factor for biogas to electricity pathways because there is no such efficiency adjustment for biomethane pathways, and no sound policy basis to distinguish between biogas-to-electricity and biogas-to-biomethane.

Biogas-to-biomethane and biogas-to-electricity both offer an important avoided methane emissions benefit; this benefit should be equally realized for both pathway types. Ecology's efficiency adjustment factor will result in lesser credit generation for biogas-to-electricity and could result in Low-CI Electricity projects ceasing to operate once their PPAs run out. This would establish a state policy of encouraging these projects to shift away from electricity generation to instead deliver RNG to combustion vehicles.

If Ecology's goal is to prioritize and favor biomethane pipeline injection projects over biogas-derived electricity projects, then the policy justifications for this goal should be more clearly articulated.

### **Recommendations on RECs**

CleanFuture recommends a change to WAC 173-424-630 (5) as follows (changes marked):

(5) RECs must be generated by an electric generator that was placed into service after ~~2023~~-2017;

The proposed post 2023 placed in service requirement excludes renewable electricity through book-and-claim accounting through at least 2024, given the timeline necessary to generate

RECs in WREGIS such that renewable electricity could not participate until 2025. CleanFuture suggests using the benchmark year of 2017 as identified in statute.

### **Recommendation on RECs from biogas-electricity projects**

CleanFuture recommends no in-service date requirements for biogas electricity projects; such projects deliver valuable methane avoidance benefits and should be encouraged. Washington has numerous existing digesters that would be excluded from participation in the CFP if they produce electricity from biogas, these projects face economic challenges to continue operation on new power purchase agreements (PPAs) due to low wholesale electricity prices. However, if these same digesters upgraded the same biogas to biomethane, there is no restriction on facility date for Clean Fuel Program eligibility. As CleanFuture stated above, we recommend equivalent treatment for biogas electricity renewable fuel projects and biomethane renewable fuel projects. Biogas electricity projects are quite different from wind and solar generation and should be treated more like biomethane projects regarding the facility in-service date.

### **Recommendation on Electricity (Shore Power) in Ocean Going Vessels**

CleanFuture suggests that while Ecology's definition for eligibility of Ocean Going Vessels should not follow California's and Oregon's definition. The restrictive definition excludes numerous vessels using shore power electricity in place of diesel fuel and thereby misses the opportunity to reduce the emissions from these vessels. Given the important role of shipping in Washington and the impact of diesel emissions on local communities, Ecology should establish credit generation opportunities for switching vessels from diesel fuel to electricity while at berth. Many working vessels meet none of DEQ's new criteria for overall length, gross tonnage, or propulsion technology. It is also important to note that propulsion technology has no bearing for shore power as onboard electricity is typically generated from fuel-burning auxiliary engines rather than propulsion engines. The propulsion criterion is limiting and ignores other common types of marine propulsion technologies such as steam turbine and gas turbine engines that also burn oil or diesel but without cylinders. For example, cruise ships and naval ships typically use gas turbine propulsion systems, not internal combustion engines. In addition, most ships have multiple auxiliary generators to provide electrical power that may or may not be connected to the propulsion system. These fossil fuel generators become the power source when a ship is cold ironed and not on shore power.

A specific example of a vessel which would be non-conforming to the eOGV definition is the USNS Sea Fighter which would fail to meet Ecology's definition because of insufficient length (262 feet) and inadequate gross tonnage (1,600 tons), combined with a different propulsion technology (combined diesel or gas turbine).<sup>1</sup>

CleanFuture suggests that a pathway application for a Tier 2 EER-adjusted pathway under WAC 173-424-620 for other vessels using shore power electricity instead of diesel fuel is an appropriate treatment for vessels that do not meet the criteria of WAC 173-424-110 (100).

### **Recommendation on Tier 2 EER-adjusted Pathways**

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<sup>1</sup> [https://en.wikipedia.org/wiki/Sea\\_Fighter\\_\(FSF-1\)](https://en.wikipedia.org/wiki/Sea_Fighter_(FSF-1))

CleanFuture recommends the following modification to WAC 173-424-620(5) (changes marked):

Any application made under this rule must include at least three months of operating data that represents typical usage for each individual vehicle category included in the application, except that the application must cover at least 300 hours of operating data for each individual vehicle category included in the application; or an analytical approach using publicly available data sources; and (...)

### **Recommendation to align in-service vehicle dates with 2017 as in statute**

CleanFuture recommends aligning certain vehicle in-service dates to match the year 2017 as identified in statute. We recommend rewarding equipment placed into service in 2017 or later be eligible for full credit generation to reward fleets and entities for recent upgrades to their vehicles; this provides a better incentive for further fleet turnover to new equipment with recent equipment. To implement this change, we recommend the following marked changes:

WAC 173-424-420(3)(e)(ii) and WAC 173-424-420(3)(f)

(i) Separated by use for light rail, streetcars, aerial trams, or electric transit buses; and

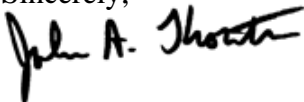
(ii) Separated by electricity used in portions of their fixed guideway system placed in service before and after January 1, ~~2023~~2017;

(f) For entities reporting forklift charging, the amount of electricity dispensed to or consumed by forklifts per FSE. The report must be separated by electricity used to charge forklifts built in or before model year ~~2016~~2022 and electricity used to charge forklifts built in model year ~~2017~~2023 and after. The reporting entity must provide the number of electric forklifts in the above model year groups (in and pre-~~2016~~2022 versus post-~~2017~~2023);

### Conclusion

Thank you for this opportunity to submit these comments. Please advise if any further input on these issues would be constructive.

Sincerely,



John A. Thornton, President  
CleanFuture, Inc.