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19-10-4

20 November 2019

Clerk of the Board
California Air Resources Board

Re: Agenda Item #19-10-04: Public Hearing to Consider Proposed Amendments to the Low Carbon Fuel Standard

Dear Members of the Air Resources Board:

Neste writes to express our disappointment in the proposed amendments's cost containment features. The amendments attempting to control the cost of the LCFS program disrupt the otherwise proper-functioning, market-based program that has effectively helped California meet its greenhouse gas reduction goals in the transportation sector.

CARB's desire to institute a long-term cost containment mechanism is laudable - provided there is adequate alignment among all market participants and regulators. But, Neste agrees with CARB's assessment that there will be sufficient credits available for future compliance. Therefore, the need to amend the LCFS to include new cost containment provisions is unnecessary and unduly burdensome.

Neste was drawn to the California market based on the promise that the LCFS program would reward risk and innovation by low-carbon fuel producers who entered this market early and in volume. As you are aware, Neste is the world's largest producer of renewable diesel fuel produced from a variety of renewable materials. Over the past several years, Neste has contributed to the success of the LCFS by supplying a total volume approaching a billion gallons of renewable diesel, making Neste one of the largest single suppliers of carbon intensity (CI) credits to California's LCFS program. In addition to being the world's largest renewable diesel producer, Neste also manufactures renewable jet fuel and has plans to introduce it in commercial volumes to California.

Were it not for this volume of CI credits from renewable diesel in recent years, the program's current success very well could have been in question. As such, Neste participates in the LCFS marketplace and is keenly interested in potential modifications to the cost containment provision that could negatively impact liquidity, reduce market signals to continue to attract low-carbon fuels like renewable diesel to California, and have other unintended consequences. These proposed amendments would not just diminish incentives for innovative, large-volume, low-carbon fuel suppliers, but reward incumbent, petroleum-based fuel producers and their efforts to delay complying with the LCFS.

Current CCM Price Cap Provisions are Adequate to Control Costs

A credit price cap does not accomplish the goal of increasing incentives to invest in low-CI fuels. The opposite is true. Under a price cap, an investor knows that they will have only a fixed return that is not tied to performance or other market conditions. This would serve as a destabilizing effect on the investment return calculations and will make new investments limited or non-existent.

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California is a leading market and pioneer in setting targets for decarbonizing transportation fuels. But, the current proposed price cap of $200 was established several years ago, before the current program's carbon reduction targets were extended and increased. Since that time, more jurisdictions have added carbon reduction targets for fuel and others have extended program aspirations. But, the supply of low-carbon fuel has not yet increased at the same rate as the demand. As a result, the value of carbon reductions have increased along with competition for those fuels. In order to continue to attract sufficient supply of low-carbon fuels and to incentivise new production, the LCFS program must set a clear price signal that is adequate to support California's ambitious CI reduction targets. A price cap that is too low will disincentive good behavior and will actually serve to harm the LCFS market and prevent the overall reduction of high-carbon fuel consumption. It is important to align any price cap to fuel performance, market conditions, and the true cost of carbon emission reductions.

We suggest that $200 is not a leading price point when compared to other, more aggressive low-carbon markets. In addition to several Eurpoean markets, British Columbia is engaging in program updates that might increase compliance penalties above California's proposed price cap level. Caifornia's increased commitment to this proposed price cap will place it at a disadvantage in the coming years as the incremental cost of carbon emission reductions exceeds the price cap and California regulations are not flexible enough to continue to incentivise low-carbon fuels into this market.

Neste supports the current regulations that place a cap on the credit price within the Credit Clearance Market (CCM). But, ARB should abandon any efforts to extend the cap to open market transactions between willing participants. If an obligated party wants to take advantage of the CCM then they can adequately be protected from excessive compliance costs. However, if an obligated party chooses to continue to participate in a credit market that exceeds the price cap for its own individual considerations, it should not be prohibited from doing so. The price cap should be a safety valve as an available option and not as an overly regulated and prescribed way of working. The only changes to regulations should be those that are necessary and otherwise ARB should let the market function efficiently without undue or overly burdensome restrictions.

Changes to Increase Cap Stringency Undermine the Investments and Progress of Low Carbon Supporters and Provide Undue Deference to Program Laggards

These proposed changes are, simply, an affront to low-carbon fuel producers looking to supply long term to California. Low-carbon fuel producers have responded to the regulatory signals from the LCFS program. In making business decisions, they have conducted in-depth analyses into feedstock availability, technology assessments, consumer behavior, other investments, production capacity, traditional fuel demand, and consumer preferences and trends. Based on these and many other factors, low-carbon fuel producers have made decisions to produce and supply low carbon fuels to California and are making investment decisions to grow that supply capacity. Changing the rules of the game at this stage damages the validity of the analysis and jeopardizes current and future investments and business plans.

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Most of the investments and market reactions supporting the LCFS have been done by low-carbon fuel suppliers. The success to date of the LCFS has been driven by an increase in the supply and a lowering of the average carbon intensity of liquid low carbon fuels. There has not been a similar reduction in the carbon intensity or demand of traditional fuels. There has not been investment in new low-carbon fueling infrastructure or new low-carbon fuel production technologies or supply by the obligated parties.

It is contrary to a strong and stable implementation of a regulation to penalize the supporters - those who are making positive steps to lower the carbon intensity and investing in growth of low carbon fuels - in favor of other market participants who are not adapting their business and operating models and then complaining that the program is not working fast enough for them. The fear exhibited by such unstable policy belies California's oft-stated goal to be a global leader and example for other markets to decarbonize transportation.

Borrowing credits does not adequately support carbon reductions

While "borrowing" credits from future years might fix a short term credit shortfall, it has two fundamental flaws: 1) it fails to account for the harm arising from delayed carbon reductions on the environment, and 2) it merely hopes for - not guarantees against - future carbon reductions and future program solvency.

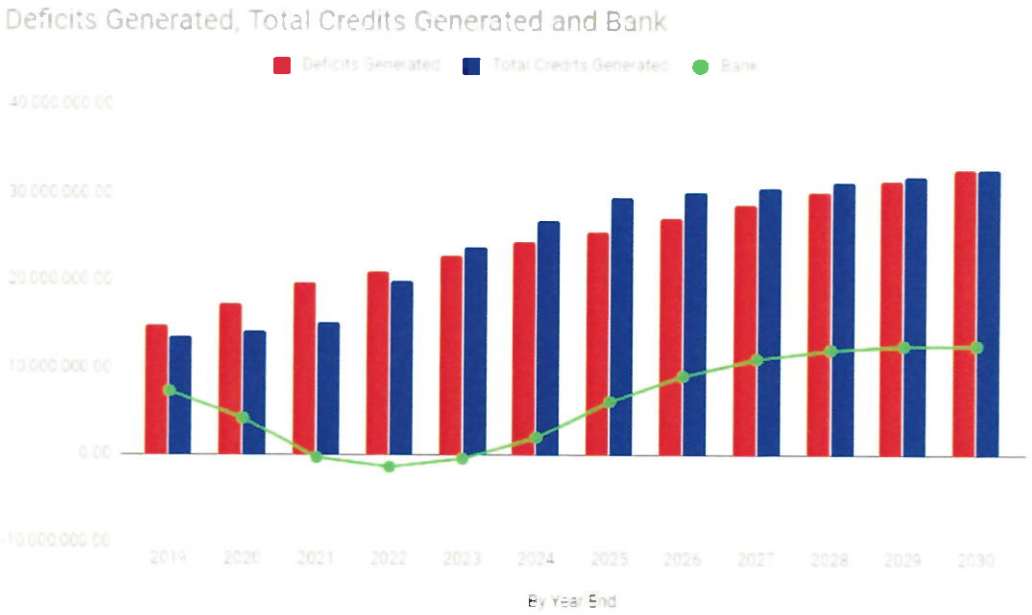
Because emissions are cumulative and because we have a limited amount of time to reduce them, carbon reductions today have more value than carbon reductions in future years. "Borrowed" emission reductions do not reduce current greenhouse gas inventory increases and further exacerbates the negative cumulative effects. This can be further seen in the beneficial concept of the credit banking system. Emissions reduced in early years are recognized as they limit the negative cumulative effects in years that follow. Notably, These current amendments do not adequately address the impact of cumulative emissions and tacitly encourages delays.

Secondly, while the expectation that electric vehicles will continue to become a growing part of the California light duty fleet, several policies - including numerous local and federal policies - are detached from the LCFS program and leave open the potential for misalignment. Shifting compliance obligations by borrowing credits might aid fleet electrification efforts, but does not provide adequate assurances that other policies will not unplug those efforts.

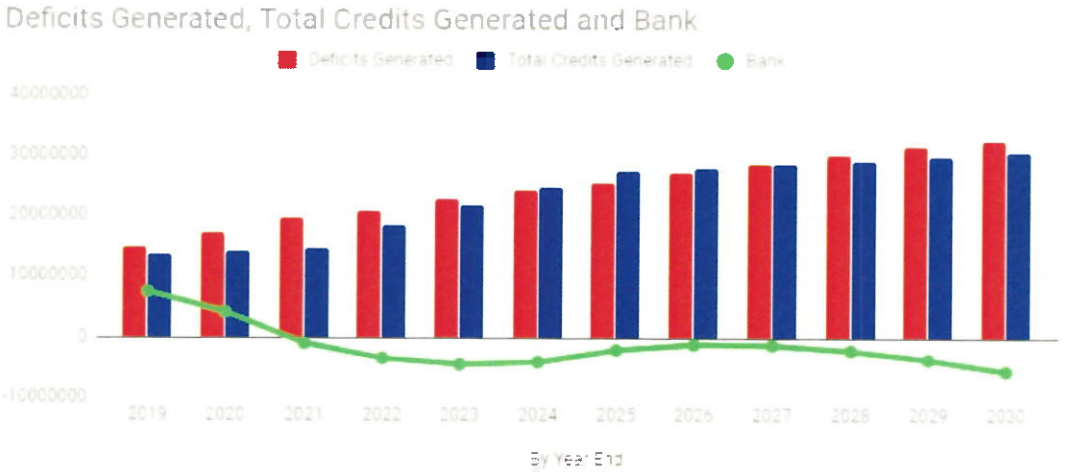
Regulations should include a Cost Cap Adjustment Based on Credit Shortfalls

In the unlikely event that CARB continues to assert a maximum price cap outside of the Credit Clearance Market, it should not be immovably fixed. Such a cap must be able to react to current market conditions to properly function. Otherwise, reasonable, but unforeseen, future market conditions might cause the credit price to increase but for the price cap and would serve as a significant negative factor in the credit market economics.

It appears that one of the main aims of a price cap is to control credit price exposure to fossil oil refiners as the primary obligated parties under the LCFS. Staff projections supporting the amendments assume growing amounts of credits as a result of refinery expenditures in low-complexity/low-energy infrastructure. Incorporating these and other assumptions, Neste projections agree with ARB staff and anticipates that in future years credits will be sufficient to keep the LCFS program solvent.



However, when keeping all other assumptions the same <u>but excluding projected refinery upgrades</u>, the outlook has a significantly different trajectory.[1]



[1] But for minimal low complexity/low energy use refinery credits generated in 2016 and 2017, no such credits have made significant impact in the credit bank. This scenario projects credit balance based on the refining industry implementing low carbon refining projects without making significant changes from the historical trendline.

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In the second scenario, there would be a building of deficits and an insufficient bank suitable for compliance. Correcting this will require a stronger market signal in the form of higher credit prices to actually encourage refinery investments or to attract adequate amounts of other credit-generating low-carbon fuels to make up the shortfall. In exchange for giving some upper bound to compliance costs, a reasonable expectation is that all sectors - including the primary fuel suppliers - implement all carbon reduction solutions available.

In order to hedge against laggard refinery improvements and other shortfalls - whether they be less than anticipated volumes of renewable diesel or fewer electric cars - ARB should explore and implement a formula that adjusts and increases the credit price cap as a function of the overall credit balance. This can be done using prior year's data and would give obligated parties and market participants a fixed and predictable measure to project a credit price while still allowing for control of the maximum value.

Conclusion

In a free market - one that reacts to regular and changing supply and demand dynamics - credit prices will not remain static. Sometimes the prices will go up and sometimes they will go down. But, the simple application of supply and demand principles will correct temporary imbalances. If a credit price rises, market participants will take actions to capture additional credits into their business operations - either by reducing the amount of high carbon fuels, or by increasing the supplying of more low-carbon fuels. A market that is allowed to function properly will correct short-term price swings. Attempts to mitigate such blips by over-regulation are contrary to the program's stated purpose - to send clear and stable market signals to promote the decarbonization of transportation fuels.

The existing cost-containment provisions in place are adequate for California. The price cap in the CCM provides adequate flexibility for obligated parties to remain in compliance by limiting their costs and buying in the clearance market, or for them to complete compliance obligations by obtaining adequate credits at a free market price. CARB should abandon attempts to extend a price cap to all transactions outside of the clearance market.

Additionally, staff should refrain from attempts to install artificial regulatory solutions to increase credit supply by borrowing credits from future electricity generations. This does not consider the negative climate impacts from delayed carbon reductions, does not accurately account for the true cost of credits when considering other State investments into electrification, and inappropriately picks winners and losers - again, contrary to one of the foundational tenets of a low-carbon program.

Finally, in the unlikely event that ARB proceeds with the cost containment, the regulations should include a predictable price cap adjustment formula to provide flexibility to adjust the price cap up as needed to continue to attract adequate amounts of carbon credits while still controlling the upper bounds of the credit compliance costs with predictability.

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We are happy to continue this conversation with you and your staff. Neste is committed to the long-term success of the LCFS and interested in helping to protect it from attacks by naysayers. However, we believe that these cost-containment amendments are unworkable in a well-functioning, free-market regulatory design. Please let me know if you would be interested in following up on any of these or other points.

Respectfully submitted,

Dayne Delahoussaye