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California Air Resources Board
1001 I Street
Sacramento, CA 95814

ChargePoint Comments on the November 9, 2022 LCFS Public Workshop

ChargePoint would like to thank the California Air Resources Board (CARB) for hosting the public workshop on potential changes to the Low Carbon Fuel Standard (LCFS) on November 9 and the opportunity to provide comment. ChargePoint is one of the world's largest EV charging networks and solution providers with more than 200,000 Level 2 and direct current fast charging (DCFC) stations on its network. ChargePoint designs, manufactures, and sells networked charging solutions and works with major employers, municipalities, utilities, fleet operators, real estate developers, and investors to deploy and operate charging stations across North America and Europe to enable the electrification of transportation.

ChargePoint is a strong supporter of the LCFS and its ability to attract investment in clean energy and supporting infrastructure to bring about emissions reductions in the transportation sector. Below please find ChargePoint's perspective on several issues raised in the November 9 workshop.

(1) Balancing the credit market and providing market certainty to usher in sufficient investment for California's ZEV goals.

Over the past few years, the LCFS has begun to play a more prominent role in financing non-residential EV charging infrastructure in California. Over this period, the charging industry (from charging providers to investors to site hosts) has grown more comfortable with the LCFS program and confident in LCFS revenues to the point where LCFS can play a significant role in project economics and can be the difference between projects penciling or not. Whether through structured financing models or the expectation of cost recovery via credit revenue, the LCFS has brought down the total cost of ownership and increased private investment in EV charging (and EV fleets). However, this positive investment trend has waned since 2021 as credit prices have continuously declined from nearly 200/credit in early 2021 to roughly 67/credit today. Just as important (and detrimental) to investment is the expectation that credit prices will remain low for years to come under current market conditions. These investment conditions are of course not unique to EV charging projects but do affect charging infrastructure all the same.

Many alternative fuel/infrastructure investors are investing in a portfolio of projects across the technology spectrum (EV charging infrastructure, RNG projects, liquid biofuels, solar, etc.) and will allocate capital within this portfolio based on expected returns by project type. While the LCFS is one factor affecting expected returns, there are other programs and markets that can be just as, if not more, impactful to project economics. One such program is the federal Renewable Fuel Standard (RFS). The RFS indirectly impacts investment in EV charging infrastructure in California because the RFS credits liquid and gaseous biofuels but does not allow electricity to generate credits, thus directing capital towards RNG and liquid biofuel projects and away from EVs and EV charging infrastructure. In fact, since January 2021 when LCFS credit prices began their steady decline, RIN prices under the RFS have gradually run up to all-time highs¹. This means that the RFS is subsidizing liquid and biofuel consumption in California at the expense of investment in EVs and charging infrastructure, and likely devaluing existing investments in EVs and charging infrastructure via lower LCFS

¹ US EPA RIN Trades and Price Information, Accessed December 20, 2022



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credit prices. This is reflected in CARB's published LCFS market data, where credits from renewable diesel and RNG have grown exponentially over this time resulting in the largest bank of credits the LCFS has yet to see. Potential supply of renewable diesel could saturate the entire US west coast diesel fuel pool by 2025 if all of the announced investments in new capacity come online². This trend does not align with California's stated long-term goal of largescale transportation electrification via Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, and the Clean Miles Standard and realistically could conflict with these policies. Therefore, we ask CARB to consider in their evaluation of the LCFS the long-term detrimental impacts the rapid growth of RNG and renewable diesel may have on investments in EV fleets and charging infrastructure that leverage LCFS revenues. For these reasons we believe a scenario resembling scenario B presented in CARB's November 9 workshop may be most amenable to balancing the credit market and creating the stability necessary to draw in sufficient investment for California's future ZEV goals.

We also encourage CARB to incorporate a one-off "step down" in the carbon intensity (CI) curve in 2024 to eat into the existing bank of credits. If the bank remains as large as it is today large buyers will be incentivized to lean on banked credits to satisfy compliance in the near term which will continue to weigh on credit prices.

(2) Technology phaseouts – Proposed phaseout of electric forklifts.

As CARB considers the phaseout of alternative fuel technologies, such as the proposed phase out electric forklifts, we encourage CARB to consider broader ramifications beyond any one technology and contemplate the signal it sends to investors and how that could impact decarbonization. Investors and project developers require long-term visibility and relative financial certainty with regards to investments. Technology phaseouts, which we acknowledge may be merited at times to preserve balanced credit markets, should be signaled early and allow for a gradual phase out. We support transparent and gradual offramps to ensure investments are not stranded and new projects are not deferred due to a perception of potential ineligibility. CARB could look to the phaseout of the investment tax credit for solar at the federal level for a model to emulate.

(3) Medium and heavy-duty infrastructure credits.

We support CARB's proposal to add an infrastructure crediting carve out for medium and heavy-duty charging infrastructure to the LCFS. We expect such a provision would see similar success in building out medium and heavy-duty charging infrastructure as the light-duty infrastructure crediting provision has for the light-duty sector. Please see ChargePoint's comments to the July 7, 2022 LCFS workshop for more on specifics. As to whether the 10% total carve out for infrastructure crediting (for FCI and HRI and for LDV and M/HDV) should be blended or kept separate, we believe the carve outs should be kept separate for the two technologies (FCI and HRI) but CARB could blend the LDV and M/HDV carve outs. In other words, FCI is allocated a 5% carve out regardless of LDV v M/HDV credits, and HRI has the same.

(4) Implementing a ratcheting mechanism to auto-adjust the CI curve during periods of sustained oversupply.

Over the years, CARB has implemented several mechanisms to effectively cap credit prices and compliance costs and ensure enough liquidity to ease obligated parties' compliance under the program. Similar provisions have not been enacted on the other end to provide support to low-carbon fuel suppliers. We support a

² <https://www.eia.gov/todayinenergy/detail.php?id=48916>



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“ratcheting mechanism”, echoed by other stakeholders, that CARB could implement to automatically adjust down the CI curve if a sustained oversupply occurs in the market. A mechanism that targets demand is superior to one that targets prices, such as a price floor, because a price floor will likely have the effect of keeping buyers out of the market thus reducing the flow of financing to low-carbon fuel projects. However, we believe it makes the most sense to make the ratcheting mechanism price-based as opposed to volume-based because under a volume-based mechanism (i.e., the ratchet is triggered by an oversupply of credits) obligated parties could potentially game the system by refusing to purchase excess credits so as not to trigger the ratchet. That said, this topic warrants further conversation and thought and we encourage CARB to dedicate a public workshop to this topic.

(5) Re-evaluate the clean fuel rewards fund.

Residential base credits under the LCFS make up the majority of on-road electricity credits and are an important source of funding to expand electrification in California. The Clean Fuels Reward Program has provided helpful vehicle rebates to date; however, the longevity of the fund has recently been called into question as the fund has dipped below minimum reserve balance requirements. ChargePoint supports vehicle rebates but also believes that in order to ensure a sustainable funding source, the program may need to be tweaked. CARB could consider implementing an income threshold and shifting a portion of funds to an EV Home Charger Reward Program, which could include funds for single family and multifamily charging. Furthermore, a top hesitancy to purchasing an EV is the lack of charging infrastructure at home. CARB may consider funding options to decrease the cost of a networked charger as opposed to the vehicle; this will have the added effect of providing utilities with better quality data on EV charging to support LCFS credit calculations and other utility planning activity.

(6) Re-classify multifamily charging as non-residential under the LCFS.

Here we reiterate the case to re-classify multifamily charging as non-residential to increase investment in this segment. Deploying charging infrastructure in multifamily housing has traditionally been more difficult than other sectors (commercial, single family, etc.). Multifamily installations are more costly than single family, while the sector is typically more cost constrained. Installing sufficient charging at multifamily locations, however, will be critical to transitioning this driver base to electric and meeting the State’s ZEV goals. This design lends itself better to the electrification of transportation network companies (TNCs) as well by enabling TNC stakeholders to plan for and leverage multi-family credits in electrification plans. This design change would align California’s LCFS to the other west coast clean fuels markets as well³.

The LCFS has been critical for incentivizing investment in low-carbon transportation fuel in California and will be crucial for the state to achieve its long-term ZEV goals in this next chapter of the program’s life. Thank you for considering our comments. ChargePoint looks forward to continued participation in this rulemaking.

Sincerely,

Evan Neyland

³ The Oregon, Washington, and British Columbia programs all classify multifamily as non-residential.



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