



May 31, 2022

Ms. Liane Randolph
Chair
Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: Comments (BMW of North America) - Advanced Clean Cars II

Dear Chair Randolph and Members of the Board,

BMW of North America (BMW NA) is pleased to submit comments to California Air Resources Board's (CARB) Advanced Clean Cars Regulation (ACCII). BMW NA commends the work of CARB staff and the board on the proposed regulation and for working with industry to address our concerns.

BMW NA is committed to supporting California in reaching its climate goals and meeting State and federal air quality standards. We understand that the intent of ACCII is to drive the sales of zero emission vehicles to 100% ZEVs by 2035, as established by the Governor's Executive Order N-79-20 and further reducing smog-forming emissions from new internal combustion engines.

As one of four original signatories to the California Agreement, we understand our role as an automaker and are committed to reducing greenhouse gas emissions and to grow the ZEV market. By 2030, BMW's EV share will account for approximately 50% of projected sales globally.

At the end of 2021 the BMW Group had over one million electrified vehicles on the road globally. In 2022, the company will have 15 fully electric vehicles in production that will cover 90% of our segments (including pre-production vehicles). This will lead to a minimum of 2 million fully electric vehicles by 2025.

We are excited to highlight the launch of the all-new/all-electric BMW i4 and BMW iX both of which are on sale and target some of our most popular segments. The i4 boasts an EPA electric range of 301 miles, while the iX delivers 324 miles. Both the MINI and Rolls-Royce brands are committed to being fully electric from 2030.

Manufacturers are investing billions in the ZEV market while also investing in cleaner technologies for conventional internal combustion engines. According to Environmental Defense Fund's – [Electric Vehicle Market Update \(2022\)](#), it is projected that OEMs will invest an estimated \$515 billion globally into the ZEV market by 2030. It is important to note that while we are investing and bringing new ZEV models to the market, that alone will not deliver on the targets.

To achieve these ambitious targets, it will also be necessary to have sufficient infrastructure, more robust supply chains, increased consumer education and a fully trained and equipped workforce. These need to be coupled with broadly available incentives to ensure consumer confidence, engagement with the new technology and to facilitate long-term customer demand.

We continue to urge CARB staff to consider all these components as we move through this regulatory process.

The proposed regulations are the most transformative and challenging to date. However, as mentioned above, we remain committed to doing our part. The following are priority areas for BMW NA that merit comment.

Zero Emission Vehicles

I. Battery Durability

BMW NA is supportive of durability requirements to ensure performance over the lifetime of the vehicle. BMW NA also strongly supports Auto Innovator's position to align the Battery Durability requirements with the United Nations Global Technical Requirements (UN-GTR), or to initiate this requirement in 'data gathering' mode. This standard was developed over 2 years with input from a large consortium of stakeholders from both OEMs and government agencies.

II. Early Compliance Values

BMW NA requests clarification that when a state adopts this regulation, 13 CCR 1962.4, that early compliance values (ECV) described in 1962.4(e)(3)(A) are available for two model years prior to implementation of this regulation. Furthermore, these ECVs would be generated for all ZEVs and PHEVs exceeding 7% ZEVs and PHEVs on average from 2020-2022. For example, if a state adopted these regulations in 2024, with implementation to begin in 2027 model year, the ECVs would be generated for eligible vehicles in 2025 and 2026. This would ensure there is no confusion whether the years ECVs are eligible to be generated are based on the year this regulation is adopted versus implemented.

III. Converted Historical Credits

Under the proposed regulation, converted credits that were based on credits earned prior to 2026 are limited to usage to fulfill 15% of the OEM's ZEV requirement. In addition, these credits can only be used to shore up a credit shortfall. BMW NA recommends allowing use of these credits to fulfill 15% of an OEM's ZEV requirement and remove the limitation that it can only be used to fulfill a shortfall. These credits represent vehicles sold above and beyond the requirement and in an earlier year. Actions to exceed the requirement should be recognized as such rather than be penalized. This flexibility will help to mitigate short-term market fluctuations in consumer demand as we build market momentum.

IV. Credit Pooling

The current proposal for state pooling caps is too restrictive and can negatively affect the sales of electric vehicles across all states and impact cross-state consumer buying behavior. By increasing pooling flexibility, we see an opportunity to better match sales to customer demand to ensure maximum possible ZEV sales, also in California.

V. Environmental Justice Provisions

BMW NA is supportive of Auto Innovators' recommendation to allow OEMs to add a new section in the regulation that will allow manufacturers to propose innovative programs that will increase adoption of electric vehicles in underrepresented communities. These proposals must include components that will have clear metrics for success (raising awareness of ZEV and adoption/purchasing of ZEVs), proven feasibility/impact and defined timeframes.

VI. Compliance Flexibilities

Compliance flexibilities such as Early Compliance Values and Converted Credits are capped to a certain percentage of the ZEV requirement for a model year. Currently, this cap is applied on a Model Year basis. However, due to the market volatility and external factors outside of manufacturer control, a manufacturer may exceed the cap or not fully utilize the cap over the lifespan of the flexibility. To mitigate these factors, BMW NA supports making flexibility caps cumulative over the life of the flexibility rather than a discrete cap each model year. This change would maintain the overall benefits of the program while mitigating planning uncertainties for the industry.

VII. Reporting by VIN and Audit of Records

BMW NA agrees with Auto Innovators' comments that this VIN reporting requirement is unnecessary and yields no value, especially in the later years. The elimination of this requirement by 2028 model year or 2030 model year will reduce the regulatory complexity for vehicles that have zero emission. BMW NA recommends eliminating this requirement from the regulation.

With respect to audit of records, the proposed audit or records will add additional administrative burden on manufacturers with little benefit. BMW NA is supportive of audits and investigations only when significant discrepancies are apparent – more than 10 percent.

Criteria Pollutants

I. Standalone SC03 Standards

Under the proposed regulations, LEV IV is eliminating composite standards (FTP, US06, SC03) Phase-in period provided for US06. However, a similar phase-in period for SC03 is not available; manufacturers must comply by MY2026. BMW NA recommends that staff consider adding a phase-in period for SC03 to align with the phase-in period of the US06 standalone standard.

II. Plug-in Hybrid Electric Vehicles

Plug-In Hybrid Electric Vehicles (PHEVs) that meet the ZEV Regulation's US06 requirement are exempt from the High-Powered Cold Start (HPCS) requirement. However, the current language defines PHEV as those vehicles able to generate ZEV credits. BMW NA recommends that the language in this section be amended such that vehicles that can meet the US06 test requirements in 1962.4 are exempted, without requiring them to meet other ZEV criteria (e.g., min. range, 150,000 mile warranty, etc.). The exemption to the HPCS is based on the engine not starting under load during the US06, and should be available to all PHEVs, not just those meeting 1962.4 ZEV requirements.

III. Evaporative Emissions – Minimum Canister size requirement

The current draft regulation includes a 1.2 factor for calculating the minimum canister size due to aging. BMW NA along with industry worked cooperatively with CARB to provide data showing the expected GWC (gasoline working capacity) reduction is much less than the 1.2 (20% reduction) in the current equation. An excessively large factor would necessitate much larger canisters than required to limit breakthrough, and lead to packaging and other concerns. BMW NA supports eliminating or significantly reducing this factor based on industry feedback.

Thank you for taking the time to review our comments and we look forward to engaging with CARB staff and board members. As always, please feel free to reach out to any of our colleagues if you have any questions or need additional background.

About BMW of North America

BMW of North America, LLC has been present in the United States since 1975. The BMW Group in the United States has grown to include marketing, sales, and financial service organizations for the BMW brand of motor vehicles, including motorcycles, the MINI brand, and Rolls-Royce Motor Cars; Designworks, a strategic design consultancy based in California; a technology office in Silicon Valley; iVentures, a corporate venture capital fund with approximately \$1bn assets invested in future innovations, and various other operations throughout the country. BMW Manufacturing Co., LLC in South Carolina is the BMW Group global center of competence for BMW X models and manufactures the X3, X4, X5, X6 and X7 Sports Activity Vehicles. The BMW Group sales organization is represented in the U.S. through networks of 351 BMW passenger car and BMW Sports Activity Vehicle centers, 144 BMW motorcycle retailers, 105 MINI passenger car dealers, and 38 Rolls-Royce Motor Car dealers. BMW (US) Holding Corp., the BMW Group's sales headquarters for North America, is located in Woodcliff Lake, New Jersey.

Sincerely,



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