



December 15, 2022

Rajinder Sahota  
Deputy Executive Officer - Climate Change & Research  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

Re: Comments on the Final 2022 Scoping Plan Update

Dear Ms. Sahota,

California Resources Corporation (NYSE: CRC) is an independent oil and natural gas company committed to energy transition in the sector. CRC has some of the lowest carbon intensity production in the US and we are focused on maximizing the value of our land, mineral and technical resources for decarbonization by developing carbon capture and storage (CCS) and other emissions reducing projects. CRC has a large portfolio of lower-risk conventional opportunities in the following major California oil and gas basins: San Joaquin, Los Angeles and Sacramento.

As a company exclusively invested in California, CRC is committed to the success of California's climate goals, including transitioning the economy to meet net zero greenhouse gas emissions by 2045. CRC announced a Full-Scope Net-Zero Goal in November 2021, which includes eliminating our Scope 1 and 2 emissions and permanently storing captured greenhouse gas emissions in a volume equal to our Scope 3 emissions by 2045. CRC is actively designing innovative technologies for deployment at our fields and facilities to decrease the CI of our oil, natural gas and electricity production, and we aim to develop California's first commercial-scale CCS project.

#### **CRC Supports Adoption of the Scoping Plan**

CRC applauds the efforts to map out a pathway to carbon neutrality for the state, an effort complicated by the sheer complexity of the economic interactions between sectors and the vast numbers of people living in widely different locals and climates. The overall plan represents a measured balance of competing interests to provide the state with a lower carbon economy, as modeled. However, CRC strongly disagrees with the modeled reduction of California crude production in line with reductions in California petroleum use. CRC believes that any reduction in California petroleum supply should be from reduced imports from foreign countries (e.g., Ecuadorian crude produced in the Amazon Rainforest, half of which goes to California<sup>1</sup>), not reduced California production. By producing oil locally, under the strict supervision and standards of the myriad California agencies regulating production practices and labor conditions, California can better protect disadvantaged communities here and abroad and ensure the overall effectiveness of the plan to address the risks of global climate change. CRC discussed these risks

---

<sup>1</sup> <https://www.reuters.com/markets/commodities/california-should-eliminate-oil-extracted-amazon-rainforest-ngos-2021-12-02/>

to plan effectiveness and disadvantaged communities in our letter dated October 24, 2022 in reference to the recirculated draft Environmental Analysis for the scoping plan. In it, we discussed the ability of California oil and gas producers to provide lower carbon petroleum fuels than those of imports due to California's world leading environmental standards. We noted that CRC's California production has a measured carbon intensity that is 30% less than that which is modeled for imported, water-borne crude.

The approach as modeled is counter to the objectives of this plan to move California as quickly as possible to a low carbon economy by enabling high-carbon intensity producers to gain at the expense of low-carbon intensity producers who have invested to mitigate emissions – creating a counterproductive disincentive to reduce emissions for these carbon “free-riders.” Further, the majority of high-carbon intensity oil and gas is produced outside of California by foreign countries and states that do not share California's high environmental, social, and governance standards and values – creating a de facto incentive for irresponsible producers to continue high-carbon production which is paid for every day by Californians at the pump.

During the upcoming Scoping Plan rulemaking process, we request CARB to consider real, verifiable reductions that can be provided by all California energy providers (including the California oil and gas industry) compared to other energy sources (e.g., solar, wind, foreign crude, battery storage) with poorly quantified lifecycle carbon intensities and with often-ignored ecological effects and externalities (e.g., human rights in the precious metals supply chain).

#### **CRC agrees that Carbon Capture and Sequestration is necessary to achieve the reductions**

We agree that dispatchable power generation will be required to stabilize the California electrical grid far into the future. As noted in the scoping plan, approximately 10% of the power generation in 2045 will be gas-fired plants fitted with carbon capture and sequestration (CCS), a proven technology, to provide firm baseload and dispatchable power to fill in the power generation gaps left by wind, solar and batteries. The same technology is also able to reduce greenhouse gas emissions from cement, biofuels and other hard to decarbonize industries that are not amenable to electrification or hydrogen use.

#### **CRC encourages CARB to incorporate CCS into Cap and Trade as an early action measure**

CARB has already invested significant time and effort in developing a comprehensive and protective regulation for CCS, incorporating methodologies for both permanence and quantification. The lifecycle-focused protocol, which was incorporated into the Low Carbon Fuel Standard (LCFS) effective January 1, 2019, goes to great length to ensure that only the most suitable sites are chosen for permanent geologic storage, that they are operated and decommissioned diligently, and that they are monitored thoroughly during their operational life and well past site closure. It is widely considered as the most comprehensive regulation for permanent geologic carbon dioxide storage.

However, the emission-based cap and trade program doesn't recognize emission reductions through CCS. The exclusion of CCS under Cap and Trade represents a disconnect between the major implementing regulations of AB32 (LCFS, Cap and Trade) and California's carbon neutrality goals. Currently under Cap and Trade, there is no mechanism to allow an entity to subtract

captured and geologically sequestered carbon dioxide from its compliance obligation, even when the entity satisfies the requirements of CARB's CCS Protocol to generate LCFS credits. This disconnect means that a CCS project would be treated under Cap and Trade as an uncontrolled source and have to account and acquire allowances or offsets for all captured CO<sub>2</sub> as though it were emitted into the atmosphere. Inclusion of CCS under Cap and Trade will facilitate development of a broad spectrum of CCS projects within California's borders, especially for natural gas fired power plants.

Incorporation of such a protocol into the Cap-and-Trade Program was foreseen by CARB as far back as 2010, when the Cap-and-Trade regulation was adopted, under [Board Resolution 10-42<sup>2</sup>](#), in which the Board directs the Executive Officer to establish such a protocol in the Cap-and-Trade regulation:

*"BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process to establish a protocol for accounting for sequestration of CO<sub>2</sub> through geologic means and recommendations for how such sequestration should be addressed in the cap-and-trade program [...]"*

CARB is gathering almost 12 years later to pass the 2022 iteration of the AB32 Scoping Plan with a goal to achieve carbon neutrality and which relies on the sequestration of carbon dioxide, but there is no regulatory mechanism to account for carbon dioxide that is not emitted and no economic relief from Cap-and-Trade obligations. CRC requests that CARB set an early action to incorporate a CCS protocol into Cap and Trade to facilitate the reductions contemplated by the plan.

California's Oil and gas industry has an important role in lowering carbon emissions, advancing social equity, and upholding fair governance principles in accordance with the goals of the Scoping Plan. By better balancing these reductions across the economy and using California's existing assets, California can achieve carbon neutrality by 2045 in a significantly more cost-effective manner to the benefit of Californians and without the detrimental leakage effects.

Thank you for the opportunity to provide comments on the 2022 Scoping Plan. We look forward to working with CARB on the future rulemaking that is spurred by the scoping plan.

Regards,

A handwritten signature in black ink that reads "Chris Gould". The signature is written in a cursive, flowing style.

Chris Gould  
Chief Sustainability Officer  
California Resources Corporation

---

<sup>2</sup> December 16, 2010.