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Denver, CO 80202

June 18, 2022

Rajinder Sahota  
California Air Resources Board (CARB)  
1001 I St.  
Sacramento, CA 95814

**Re: Expand California's Leading Climate Framework to Incorporate Upstream Emissions from Natural Gas Production**

Dear Ms. Sahota:

PureWest Energy appreciates the opportunity to comment on the draft 2022 Scoping Plan. This is an impressive and thorough plan to meet the state's ambitious climate change and related goals, and we recognize the significant, thoughtful and deliberate public process that informed it. As you move to finalize the plan, we hope you will:

1. Highlight the significant opportunity to further reduce potent short-lived climate pollutant (SLCP) emissions and other environmental impacts associated with natural gas supplying California
2. Commit to steps to capture that opportunity, by thoroughly accounting for out-of-state methane emissions associated with natural gas produced for California and incorporating incentives to reduce it through your policies

CARB already thoroughly accounts for differentiated greenhouse gas emissions associated with electricity and transportation fuel imported into the state, but does not do so for natural gas – even though 90% of it is imported. Aligning the State's approach towards natural gas with emissions accounting and policy incentives in place for other imported energy sources could deliver significant, near-term low or negative cost greenhouse gas emissions reductions and bolster the State's leading efforts to measure, monitor and reduce potent methane emissions.

**About PureWest Energy**

PureWest Energy is an independent natural gas company focused on development in the U.S. Rockies, with current operations in the Pinedale Anticline and Jonah Field in Southwest Wyoming. We are dedicated to advancing modern life by responsibly delivering essential energy with exceptional reliability and proven environmental stewardship. We strive to go beyond the expected to produce natural gas in the most responsible and efficient manner possible.

PureWest was recognized by Hart Energy as a Top ESG Performer and has been working with Project Canary to certify 100% of our production as TrustWell Responsibly Sourced Gas (RSG) by year end. We are the first Rocky Mountain producer to achieve TrustWell's Freshwater-Friendly Verified Attribute and have earned a platinum rating, representing the top decile of performers, from Project Canary on more than 85% of the production certified to date. All certified production has also achieved the Low-Methane Verified Attribute.

In addition, we are partnering with Colorado State University Energy Institute in their Advancing Development of Emissions Detection program to field-test multiple stationary methane detection technologies that will inform PureWest's multi-layer strategy for methane detection throughout our field. Last year, we delivered the first-of-its-kind scope one and two carbon neutral RSG to Pierce Transit to power transit buses on the northwest coast.

### **Significant Climate Opportunity Associated with Reducing Methane Emissions from Natural Gas Supplying California**

There is significant opportunity to reduce methane emissions from upstream gas production supplying California. For example, PureWest has completed an initial calculation of our average climate impact using the GREET model, which estimates the average carbon intensity of our operations to be 0.489 gCO<sub>2</sub>/MJ. This represents greater than a 90% reduction compared to the average for natural gas recovery (6.07 gCO<sub>2</sub>/MJ) in the GREET 3.0 model.<sup>1</sup>

While these results are preliminary, and we are working with third parties to complete the model with greater rigor and validate them, they suggest a significant potential for the state to further reduce greenhouse gas and potent methane emissions. California used 2,075 billion cubic feet of natural gas in 2021,<sup>2</sup> and imports 92% of its supply.<sup>3</sup> This suggests that about 1,900 billion cubic feet is produced out of state and not subject to the State's oil and gas methane rules.

Based on the estimated potential reduction in upstream methane emissions of 5.581 between PureWest operations and the current assumed industry average, California could reduce potent SLCP emissions by 11.7 MMTCO<sub>2</sub>e/year, simply by shifting its natural gas use to RSG.<sup>4,5</sup> *This is equivalent to total methane emissions from dairy manure management in California, according to CARB's greenhouse gas inventory.*<sup>6</sup>

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<sup>1</sup> <https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/ca-greet/lut-doc.pdf>

<sup>2</sup> <https://www.eia.gov/state/print.php?sid=CA>

<sup>3</sup> <https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california>

<sup>4</sup> Based on 10.37 therms per thousand cubic feet and 105.5 MJ/therm natural gas

<sup>5</sup> Note this value exceeds CARB's estimate for greenhouse gas emissions associated with natural gas imports, which it estimates were 9.6 MMTCO<sub>2</sub>e in 2019. (Note that the report acknowledges that numerous studies suggest the data behind these numbers may significantly underestimate actual emissions.) Still, CARB's estimates suggest a significant potential emissions benefit associated with switching to responsibly sourced gas, likely on the order of multi-millions of metric tonnes CO<sub>2</sub>e per year.

[https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ab\\_2195\\_out\\_of\\_state\\_natural\\_gas\\_emissions.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ab_2195_out_of_state_natural_gas_emissions.pdf)

<sup>6</sup> [https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_scopingplan\\_sum\\_2000-19.pdf](https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_sum_2000-19.pdf)

PureWest achieves these emissions benefits as a matter of its normal business operations with plans for further reductions. Overall, an estimated 20% of U.S. gas production is already certified as low methane, however much of this is in the southeast United States, where it may not reach the California market.<sup>7</sup> According to the Environmental Defense Fund (EDF), 50% of methane emissions in the oil and gas sector can be reduced at no net cost, and cutting methane pollution from these sources is the fastest way to slow climate change.<sup>8</sup>

### **Align Approach to Imported Natural Gas with Other Imported Energy Sources**

CARB's SLCP Strategy rightfully touts the State's leading approach to reducing methane emissions from oil and gas systems, but that approach only covers 10% of the state's gas use. The Strategy admits as much, noting "There may be steps that California agencies or utilities can take to ensure that infrastructure supplying gas to the state has minimal leakage, and to ensure that natural gas is providing environmental benefits compared to use of other fossil fuels in the State."<sup>9</sup> Yet fugitive methane emissions from natural gas supplies are not a focus in the draft 2022 Scoping Plan.

Now is the time to take those steps, and we hope that CARB will commit in the final Scoping Plan to supporting efforts to track and reduce methane emissions associated with all gas supplies to the State. California's climate framework already accounts for and incentivizes emissions reductions associated with the State's electricity and transportation fuel supplying the state, even if those resources come from out-of-state. However, it does not treat natural gas supplies the same way, even though natural gas is the State's largest energy import and a large source of potent SLCP emissions, and even though reducing fugitive emissions methane from natural gas production represents some of the lowest hanging fruit in the fight against climate change.

In the final 2022 Scoping Plan, CARB should set a goal to reduce methane emissions from natural gas supplying the state at least as much as its goal for instate methane emissions from the oil and gas sector (that is, 40-45% by 2025). It should further commit to taking steps to achieve and exceed this goal and:

- Require or otherwise encourage utilities and other natural gas end users to report the source of their natural gas supplies, including differentiated emissions associated with production, through the Mandatory Reporting Regulation and pursuant to AB 2195 (Chau, Statutes of 2018).
- Allow utilities and other natural gas end users to account for emissions reductions associated with RSG to reduce their obligations under the Cap-and-Trade program and other climate change programs.

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<sup>7</sup> <https://www.houstonchronicle.com/business/energy/article/How-green-is-my-gas-Questions-linger-as-17244835.php>

<sup>8</sup> <https://www.edf.org/issue/climate-pollution/methane-oil-and-gas>

<sup>9</sup> See pg. 79 of the SLCP Strategy at [https://ww2.arb.ca.gov/sites/default/files/2020-07/final\\_SLCP\\_strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf)

- Actively track and verify out-of-state methane emissions associated with natural gas production to serve California with the State’s methane satellite and other methane monitoring efforts.
- Work with the CEC and CPUC through gas planning proceedings, including the gas decarbonization track under the CEC’s Integrated Energy Policy Report and CPUC’s long-term gas planning process, to incorporate RSG into the State’s ongoing gas system planning.
- Work with the CPUC to incentivize, and eventually require, utilities to procure RSG to serve California customers.

We appreciate that CARB’s accounting protocols follow international norms and aim to avoid double counting, as described in the draft 2022 Scoping Plan.<sup>10</sup> Still, CARB has managed to account for and encourage greenhouse gas reductions for imported energy in the power and transportation sectors, and should do the same for natural gas use more broadly.

### **Don’t Overlook Near-Term Opportunities to Reduce Emissions**

PureWest Energy appreciates the State is focused transitioning away from fossil fuels, including natural gas, but we also agree with statement in the draft 2022 Scoping Plan that “a complete phaseout of oil and gas extraction and refining is not possible by 2045.”<sup>11</sup> Regardless, the focus on a long-term transition away from fossil fuels should not distract from opportunities to capture additional emissions reductions in the near-term – especially from SLCPs, which provide the greatest near-term climate benefits, and from conventional energy sources like natural gas. We hope you will commit to capturing this opportunity in the final version of the Scoping Plan.

Thank you again for the opportunity to participate in this important forum and comment on the draft 2022 Scoping Plan. We look forward to working with you as you finalize and implement the 2022 Scoping Plan. Please do not hesitate to reach out if you have any questions about PureWest Energy, the differentiated gas market, or these comments.

Thank you,



Kelly Bott  
Senior Vice President, ESG, Land and Regulatory  
PureWest Energy

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<sup>10</sup> See pg. 38 of the draft 2022 Scoping Plan. <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>

<sup>11</sup> See pg. 78 of the draft 2022 Scoping Plan. <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>