

January 20, 2017

Richard Corey  
Executive Officer  
California Air Resources Board  
1001 "T" Street  
Sacramento, CA 95814

*RE: Praxair Comments on the December 20, 2016 Amendments to the Cap-and-Trade Regulation*

Dear Mr. Corey,

Praxair, Inc. ("Praxair")<sup>1</sup> provides the following comments on the December 20, 2016 *Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation* ("Proposed Amendments"). We believe that a properly designed Cap-and-Trade program can be a cost effective means of achieving emissions reductions, and we generally support the extension of a Cap-and-Trade program post-2020 as opposed to new command and control regulatory schemes. We also generally support the approach for the post-2020 industrial assistance factors, but we believe product-specific analysis and coordination with individual industrial sectors is still needed before the ARB releases a final 15-day rulemaking package. Praxair looks forward to working with the ARB to evaluate and refine a post-2020 Cap-and-Trade program.

**DISCUSSION**

**I. The Domestic Leakage Risk Analysis Should Account for Leakage Risks Across the United States and Different Products Within a Single NAICS Code.**

The allowance allocation scheme is one of the most important aspects of the Cap-and-Trade program that must be carefully developed in order to reflect the diversity of products, processes and services in California's economy. Praxair supports the ARB's efforts to address domestic leakage risks faced by Emissions Intensive Trade Exposed ("EITE") industries, and we commend the ARB and its economists for taking an important first step in developing a domestic leakage methodology in Appendix E to the Proposed Amendments. In order to develop an accurate emissions leakage risk analysis, we believe two refinements or clarifications are needed.

First, as we have noted in our previous comments, the analysis should cast a sufficiently large net to account for the fact that some products are exposed to leakage risks in the mid-west and eastern United States. After the May 18<sup>th</sup> leakage risk workshop, we expressed concern with

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<sup>1</sup> Praxair was founded in 1907 and became an independent publicly traded company in 1992. Praxair is a supplier of atmospheric gases and coating services business, and is globally recognized for its sustainability efforts (Dow Jones Sustainability World Index in each of the last 13 years, and World CDP Leadership Index for eight consecutive years). In California, Praxair has 1,000 employees at 80 locations and five production facilities: two for atmospheric gases, two for carbon dioxide and one for hydrogen production.

the proposed 500 mile radius assumption.<sup>2</sup> Industries like the liquefied hydrogen sector, which are highly electricity intensive, have a relatively small group of competitors, and whose products can easily be shipped across the country, face trade risks from production throughout the United States. The ARB should update the analysis or make clear that domestic trade risk was evaluated throughout the United States, and not just from neighboring states.

Second, the ARB should evaluate potential updates to the EITE assistance factor tables to reflect the various products that may be reported under a single NAICS code. It is not clear from the categorization of certain products within a six digit NAICS code were distinguished from one another (i.e., those industries with more than one product benchmark in Table 9-1). The liquefied hydrogen sector can face a greater different domestic leakage risk than other types of industrial gas production, and it is not clear from Appendix E how the ARB distinguished liquefied hydrogen from other types of industrial gas production. Praxair is concerned that the new assistance factors for liquefied hydrogen may not fully account for the unique aspects of liquefied hydrogen.

## **II. Reallocation of Allowances From the Electricity Sector to EITE Entities Should Be Done on a 1:1 Basis.**

The ARB has proposed to update the EITE benchmarks to reallocate allowances from the electricity sector to the industrial sector. We believe this also requires further analysis. As a general matter, Praxair supports a direct allocation to EITE entities to account for GHG costs imbedded in electricity rates. However, we are concerned that utilities may develop new rate structures to account for the loss of Cap-and-Trade allowances attributable to a small subset of their ratepayers. Since the EITE assistance factors decline at a faster rate than the electricity sector allocations, GHG costs passed onto EITE entities in electricity rates may exceed the value of allowances EITE entities receive directly from the ARB post-2020. In order to avoid this unintended consequence, the ARB should ensure that allowances reallocated from the utility to the EITE entity are done on a one-for-one basis, and decline at a rate equivalent to the electricity sector's cap-decline-factor. To account for this unintended consequence, the portion of allowances reallocated to the EITE entities should be a separate allocation from the existing EITE allocations. In addition, the reallocation should be based on the emissions factor for the utility that actually serves the EITE customers, and not a system-wide emissions factor.

## **III. The ARB Should Evaluate EITE Designations for Industries that are Trade Exposed Solely Due to Their Electricity Consumption.**

The current regulation only includes EITE designations for industries that exceeded the Cap-and-Trade threshold (25,000 MTCO<sub>2</sub>(e)/year). The ARB should broaden its analysis to account for sectors that may not have significant direct, on-site GHG emissions, but are high users of electricity. As utilities pass through GHG costs in electricity rates, this will create risks of trade exposure for these "electricity-intensive industries." Consistent with the ARB's statutory requirements to "minimize leakage" in the design of its regulations (Cal. Health and Safety Code

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<sup>2</sup> See Praxair June 10, 2016 comments on May 18, 2016 ARB Staff Workshop (p. 2), available at: <https://www.arb.ca.gov/lists/com-attach/15-ctleakagestudies-ws-BTRcbFRIVzJXYFJi.pdf>

Sec. 38562(b)(8)), the ARB should endeavor to evaluate new EITE designations for these electricity-intensive industries.

In conclusion, Praxair generally supports the extension of the Cap-and-Trade program and the ARB's efforts to improve the post-2020 program, but we believe additional analysis of individual industrial sectors and products and additional public input is needed before the ARB releases another 15-day rulemaking package. We appreciate the ARB staff's attentiveness to these issues and thank the ARB staff for their diligent efforts to address the myriad issues facing California diverse economy in an open and transparent manner.

Sincerely,

/s/

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Armando Botello  
Vice President, West Region  
Praxair, Inc.