



One Michael Owens Way  
Perrysburg, Ohio 43551-2999  
+1 567 336 5000 tel  
+1 567 336 8262 fax  
www.o-i.com

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Clerk of the Board, Air Resources Board  
1001 I Street  
Sacramento, California 95814

RE: Comments on CARB's Cap-and-Trade 15-Day Rulemaking Package

Owens-Illinois, Inc. (O-I) is the world's largest glass container manufacturer, with more than 22,000 employees and operations in 21 countries. This \$7.1 billion company is headquartered in Perrysburg, Ohio, U.S.A., and holds market leadership positions in each of the four regions in which it operates - Asia Pacific, Europe, Latin America and North America.

By the Numbers:

- \$325 million in California sales
- 78 plants worldwide
- 3 plants in California, 19 in North America
- Operating in 21 countries
- 1,000+ employees in California
- 22,000+ employees worldwide
- 1,900+ worldwide patents
- 800+ tonnes daily, 275,000+ tonnes annually of recycled content used in California
- 5.6+ million tonnes of recycled content used across the globe each year

O-I glass containers protect the purity, quality and flavor of thousands of well-known food and beverage products, including beer, wine, spirits and non-alcoholic drinks. O-I is the market leader in sustainability issues related to the glass container industry.

O-I respectfully submits the following comments on ARB's determination of an intensity baseline for the glass container manufacturing industry. The comments relate to the establishment by ARB of the GHG intensity baseline without a full understanding of glass manufacturing processes and secondly, ARB's incorrect assertion that sufficient data was collected to establish the baseline.

### **Establishment of the intensity baseline**

ARB's public record for the development of the GHG intensity baseline for the container glass manufacturing industry indicates a preference towards oxy-fuel furnace technology and their associated greater GHG emissions, in comparison to regenerative furnaces. The issue stems from ARB's limited understanding of the different glass melting furnace designs and the total energy requirements associated with each.

ARB stated during discussions with O-I regarding the establishment of the intensity baseline, that their analysis of the total energy requirements for the different furnace technologies had been fully considered and was based on the data that was collected from the container glass manufacturing facilities. The data

that ARB collected did not contain the specificity which would allow that level of analysis. The data request asked only for total facility electrical consumption.

O-I is concerned that the lack of understanding regarding the total GHG footprint of the different furnace technologies, rewards oxy-fuel designs, penalizes regenerative furnaces, results in an increase in total California GHG emissions and acts as a detriment to the environment. Although oxy-fueled furnaces will demonstrate a slightly lesser GHG emission footprint in direct emissions due to a lower fossil fuel combustion rate, once the indirect GHG emissions associated with the electricity requirements for the production of oxygen is included, the GHG emission gap is at a minimum, eliminated.

To alleviate this inconsistency with the intent of AB32, ARB needs to include the indirect GHG emissions associated with electrical consumption required to generate oxygen for an oxy-fuel furnace when establishing the intensity baseline, or alternatively bifurcation of the oxy-fuel and regenerative glass furnace types.

Owens-Illinois appreciates the opportunity to comment on this important regulation. If you would like to discuss these issues further or if you require additional information feel free to contact me at 567-336-8682.

Sincerely,

Mark Tussing

Manager, Environmental Affairs