
Towards decarbonized specialty glass

Allison Yake*¹

¹Corning Incorporated – United States

Abstract

The technology brands around the world are now looking for specialty flat glass with optimum performance that also includes sustainable attributes. In addition, glass manufacturers are making validated science-based short- and long-term commitments to reduce their corporate greenhouse gas (GHG) emissions. Using industry recognized methods, estimates and assumptions, we can understand the key contributors of the GHG footprint of these products, which are predominantly energy sources and raw materials. Eliminating embodied carbon requires addressing a number of challenges, including production processes, material composition, transportation, and material sourcing. The input materials, in particular, create further challenges related to composition, material preparation and circularity. All these challenges must be addressed across the value chain with a collaborative mindset and demand transformation in the way we invent, manufacture, and use goods. By providing estimates of the relative magnitude of GHG sources and practical examples, this talk will provide a view of the opportunities and requirements that must be addressed in the journey towards zero-embodied carbon specialty glass.

Keywords: GHG, decarbonize, embodied carbon, specialty glass

*Speaker