



## PozGlass™ 100G Fact Sheet

**PozGlass™ 100G (“PozGlass”)** is a groundbreaking low-carbon supplementary cementitious material (SCM) designed to transform the global cement industry. Developed by Progressive Planet, this technology offers a scalable, sustainable alternative to traditional cement production, reducing emissions and reusing post-consumer glass.

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### Key Features

- **High Performance:** PozGlass blended with Portland cement makes concrete stronger than Portland Cement alone.
  - **Low-carbon impact:** Reduces reliance on clinker, the carbon-intensive ingredient in cement, and permanently sequesters CO<sub>2</sub> during production.
  - **Circular economy innovation:** Diverts post-consumer glass from landfills, turning underutilized resources into high-performance construction materials.
  - **Scalable solution:** Integrates seamlessly into existing cement production facilities with a bolt-on model for rapid deployment.
  - **Utilizes Onsite CO<sub>2</sub>:** Turns CO<sub>2</sub> emissions from cement production into limestone directly onsite, eliminating the need for CO<sub>2</sub> transportation.
  - **Global adaptability:** Relies on soda-lime glass, which has a consistent chemical composition worldwide, enabling rapid international scalability.
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### How It Works

PozGlass enhances the performance of post-consumer glass as an SCM through a patent-pending process:

1. **Sodium removal:** Sodium is extracted from soda-lime glass to improve its strength in cement.
  2. **Carbon sequestration:** Extracted sodium reacts with CO<sub>2</sub> to form sodium carbonate, permanently locking away carbon.
  3. **PozGlass production:** The sodium carbonate is removed, leaving PozGlass.
  4. **Secondary benefits:** Sodium carbonate is converted into precipitated calcium carbonate (PCC, also known as limestone), which can be added to cement or used to meet \$11 billion annual demand for PCC, further supporting the circular economy.
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### Environmental Impact



- **Tackling CO<sub>2</sub> emissions:** The cement industry contributes [26% of global industrial CO<sub>2</sub> emissions](#), and PozGlass offers a sustainable alternative.
  - **Landfill diversion:** Over [60% of post-consumer glass](#) in North America ends up in landfills. PozGlass repurposes this underutilized resource.
  - **Carbon sequestration:** PozGlass actively sequesters CO<sub>2</sub> during production, helping mitigate climate change.
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## Market Potential

- **Global cement industry:** Cement is the backbone of the [\\$400+ billion construction industry](#), with increasing demand for low-carbon solutions.
  - **Fly ash decline:** As coal plants phase out, traditional SCMs like fly ash are becoming less available, creating a critical gap for alternatives like PozGlass.
  - **Scalability:** Designed to integrate with the world's 2,600+ cement plants (excluding China), PozGlass is positioned for rapid global adoption.
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## Growth Strategy

- **Pilot plant:** Construction of a pilot plant in Kamloops, BC, will begin in 2025, marking the final step to validate PozGlass technology.
  - **Strategic partnerships:** Lafarge Canada Inc. has agreed to purchase PozGlass from the pilot plant and provide technical support throughout its development.
  - **Revenue model:** A licensing and royalty-based system ensures scalability and long-term profitability.
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## Why PozGlass?

- Addresses critical environmental challenges in the cement industry.
  - Supports circular economy principles by repurposing misallocated materials.
  - Combines innovation, scalability, and sustainability for a transformative solution.
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## Learn More

For additional details on PozGlass and its potential to transform the construction industry, contact us at:

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