

## Lafarge and Hyperion Team Up to Capture Carbon Emissions

Lafarge Canada Inc. and Hyperion Global Energy Corp. announced the launch of Hyperion's Tandem Carbon Recycling System<sup>®</sup> pilot. This process captures and transforms carbon emissions into high-performance mineral components used to make sustainable building solutions, such as low-carbon concrete. The pilot project, currently in operation at Lafarge's cement plant in Bath, ON, Canada, involves testing Hyperion's net-zero mineral solutions for concrete, such as Lafarge's ECOPact<sup>®</sup>. The joint effort will further develop and scale Hyperion's proprietary Tandem Carbon Recycling technology, a drop-in system that captures and transforms waste carbon emissions into high-purity minerals that permanently store carbon. The pilot currently has the capacity to remove up to 1000 tons (907 tonnes) of carbon dioxide (CO<sub>2</sub>) per year from plant operations.



Lafarge's Bath cement plant

## OCP Announces Low-Carbon Concrete Trial Collaboration

The Open Compute Project (OCP) Foundation announced a collaboration to test the development and deployment of low-embodied-carbon concrete. OCP is facilitating a partnership among Amazon Web Services, Google, Meta, and Microsoft to drive the adoption of low-embodied-carbon concrete in data center construction. This endeavor is being conducted through research with Wiss, Janney, Elstner Associates, Inc., to test the application of low-embodied-carbon concrete for data center floors, targeting a significant reduction in greenhouse gas emissions to greater than 50% per cubic yard. The results of these tests will be used to better understand areas of risk, possible mitigation strategies, and ways to further optimize the mixtures to deliver concrete meeting data center structural performance requirements. These findings will be coalesced into a final white paper and made available to the public by OCP to inform other efforts to adopt new concrete technologies.

## Ingage and Renoworks Pro Announce Collaboration

Renoworks Pro has been directly integrated into Ingage. Ingage delivers interactive sales presentation technology to the home improvement industry. With its dynamic and interactive presentation features, sharing tools, and comprehensive analytics, Ingage's presentations give sales leaders the tools they need. This direct integration of Renoworks Pro adds artificial intelligence (AI) design capabilities directly into Ingage's interactive sales presentations platform, as well as the ability to access project designs within contractor presentations. This technical integration brings a seamless workflow experience from sales presentation to visualization and vice versa for contractors and remodelers.

## Sika Launches Fully Automated Distribution Center

Sika announced the opening of the Marion Regional Distribution Center, a fully automated warehouse in Marion, OH, USA. This 150,000 ft<sup>2</sup> (13,900 m<sup>2</sup>) facility will inventory finished goods for multiple strategic construction and industry markets. It will serve as Sika's Central/East Coast regional distribution hub with a direct-to-customer concept. The new warehouse is the first of its kind for Sika in the United States, using fully automated equipment, including guided vehicles, self-directing forklifts, inbound and picking conveyors, and automated cameras and contour stations for tracking handling units and verifying pallet transport safety throughout the warehouse. Sika has also recently broken ground for a 250,000 ft<sup>2</sup> (23,200 m<sup>2</sup>) mortar production plant in Upper Deerfield Township, NJ, USA. This site will produce a full range of mortars, including high-performance cementitious grouts, self-leveling mortars, and mixtures for shotcrete, which include products for residential and commercial construction applications.

## Winners of the CRSI HONORS Recognition Program

The Concrete Reinforcing Steel Institute (CRSI) announced the recipients of its biennial CRSI HONORS recognition program. Thirteen projects were selected to receive recognition. Project entries were evaluated based on the satisfaction of owner objectives, development of innovative solutions, maximizing project value, effective use of reinforced concrete, and overall aesthetics. Eight projects received a premier HONORS Award, and five received a Merit Certificate recognition. The following projects were awarded:

### Commercial and Mixed-Use:

- 222 Fifth Avenue North, Cary Kopczynski & Company, Inc. (CKC) – HONORS Award (Office);

- TSX Broadway and Palace Theater Redevelopment, Severud Associates Consulting Engineers, PC – HONORS Award; and
- Nissan/INFINITI of Downtown LA, Miyamoto International – Merit Certificate.

#### **Cultural, Religious, or Entertainment:**

- Seattle Aquarium Ocean Pavilion, Rebar Design & Detail, Inc. – HONORS Award;
- The Sphere, Severud Associates Consulting Engineers, PC – HONORS Award; and
- Little Island at Pier 55, Hudson River Park, KRB Machinery Co. – Merit Certificate.

#### **Educational:**

- William and Linda Frost Center for Research and Innovation, John A. Martin & Associates, Inc. – HONORS Award.

#### **Healthcare:**

- OU Medical Center Bed Tower Expansion, ZFI Engineering, Co. – HONORS Award; and
- SMC Surgery Center Addition & Canopy, ZFI Engineering Co. – Merit Certificate.

#### **Residential and Hotel:**

- The Ayer, Cary Kopczynski & Company, Inc. (CKC) – HONORS Award; and
- The Godfrey Hotel Detroit, Resurget Engineering PC – Merit Certificate.

#### **Bridge:**

- Nice-Middleton Bridge, Commercial Metals Company – HONORS Award; and
- Marion Street Pedestrian Bridge Replacement, HDR, Inc. – Merit Certificate.

## **Prezerv Awarded for AI 3-D Mapping Solution**

Prezerv Technologies received second place and a prize of 25,000 USD in the AI Infrastructure Challenge, held by the National Security Innovation Network (NSIN) in partnership with the Naval Facilities Engineering Systems Command (NAVFAC) and Program Executive Office Industrial Infrastructure (PEO II). The competition had participants develop solutions that have the potential to help the United States Navy leverage artificial intelligence (AI) to optimize building design, allowing the branch to rapidly generate and evaluate multiple design options, iterate throughout development, and ensure compliance with standards and regulations. Finalists shared their AI-driven solutions to optimize building design across disciplines, codes, and site conditions and competed for part of a 250,000 USD prize pool. Prezerv took second with its solution to automatically map subsurface conditions, helping construction teams avoid unanticipated encounters with underground utilities, which

can cause accidents, injuries, damages, and significant costs. Although existing three-dimensional (3-D) radar scanning helps address the issue of outdated and incomplete historical records of subsurface conditions, the data produced requires slow, costly interpretation by experts, meaning that the technique is not widely employed. By automating the interpretation process and generating 3-D maps, Prezerv's technology gives the U.S. Department of Defense and private industry better access to critical information.



Prezerv scans an electrical substation site with AI technology

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