Recognition of Special Achievement for Project Excellence Award



Climate Pledge Arena

The National Academy of Construction is honored to present the 2026 Recognition of Special Achievement Award for Project Excellence to the Climate Pledge Arena. The award recognizes projects for innovation, safety, sustainability, excellence in project delivery, and meaningful impact on its community and region.

The redevelopment of Climate Pledge Arena transformed Seattle's 1962 World's Fair pavilion and former KeyArena into a modern, below-grade multipurpose venue while preserving its landmark roof and façade. The project's complexity and tight timeline demanded an integrated project team. Working with Oak View Group, Populous, Mortenson, CAA ICON, ME Engineers, and other key project partners, Thornton Tomasetti provided structural and construction engineering to help deliver an almost entirely new arena beneath the historic roof in a high-seismic region. Associate Principal Brian MacRae of Thornton Tomasetti described Climate Pledge Arena as "an award-winning retrofit and rehabilitation project unlike any other," adding that "the complexities and challenges involved with temporarily supporting a 44-million-pound roof in the air while building a completely new arena below was a monumental feat of engineering, design, and construction."

"We're not going to solve climate change, but Climate Pledge Arena will inspire fans to make positive behavior changes. And, by going net zero carbon from Day One, we will inspire others who build arenas after us to follow suit!" Tim Leiweke, CEO of project developer Oak View Group said to Green Sports Blog on the eve of opening the $1.15 billion facility in October 2021.

For Seattle and the Pacific Northwest, the arena reactivates Seattle Center as a year-round civic hub. It provides a permanent home for the NHL's Seattle Kraken and the WNBA's Seattle Storm, while accommodating concerts, community events and cultural programming that draw diverse audiences and sustained foot traffic to the district. The enlarged, below-grade bowl allows events to scale up without overwhelming surrounding streetscapes, reinforcing the urban campus rather than displacing it.

A defining feature of the project was the effort to keep the existing roof in place while the structure below was demolished, and the arena was excavated as much as 60 feet below grade. Engineers transferred the roof loads to a 3,700-ton temporary steel shoring system, then built new foundations and framing around the active shoring.

"We do a lot of load transfer in our business, but never on this order of magnitude," said Shawn Leary, principal at Thornton Tomasetti.

Protecting the public, workers and the historic structure guided every major decision. The temporary shoring system was designed to carry the full roof load and anticipated construction and seismic demands while foundations were demolished, and the new bowl and permanent supports were built below. Engineers used detailed 3D analyses and staged-construction models to study roof behavior under gravity, wind and earthquake loads during each phase, confirming stable load paths under both normal and contingency conditions.
"The seismic codes have changed significantly since 1962," said Matt Farber, senior principal at Thornton Tomasetti. "We were designing for seismic forces on the roof and structure that were double of what were required over 50 years ago."

The arena also had to open in time for the Seattle Kraken's inaugural NHL season, with construction proceeding on a tight urban site Thornton Tomasetti's Advanced Project Delivery™ approach helped improve cost certainty, accelerate steel procurement and detailing, and shave approximately four months off the schedule. The time between ground breaking and a Foo Fighters concert was less than 30 months.

The project also delivered a strong safety performance, logging 2.7 million worker hours with an OSHA Recordable Incident Rate of 1.5 and a Lost Time Accident Rate of 0.148. That record was supported by a comprehensive safety plan covering more than 46,000 activities, a hazard-recognition program that generated 5,500 reported hazards, and a COVID-19 response plan later used by Washington Labor and Industries as a statewide template.
The project also stands out for its sustainability achievements. By retaining the existing roof and major façade elements, the team reduced embodied carbon while preserving a familiar part of Seattle's civic identity. Climate Pledge Arena later achieved International Living Future Institute Zero Carbon Certification and has become a prominent example of how adaptive reuse can support both performance and decarbonization.

"The Climate Pledge Arena project is an exemplary example of what our industry can achieve when innovation, collaboration, and respect for heritage and the environment are envisioned and delivered," said Edd Gibson, NAC president and CEO. "This project not only built an outstanding arena supporting the citizens in the Seattle region, but also did it with innovation, professionalism and outstanding execution. The National Academy of Construction is proud to recognize this noteworthy achievement."

This prestigious award recognizes outstanding innovation, exemplary safety performance, creativity, superb planning, a strong commitment to sustainability, excellence in project delivery, and meaningful contributions to the community and region. Past Recognition of Special Achievement Award for Project Excellence winners include La Guardia Airport's Terminal B, the Fargo-Moorhead Metropolitan Area Flood Risk Management Project, the Isabella Dam Safety Modification Project, and the Wyoming State Capitol Restoration Project.