Management Approach: Innovation

Innovation is essential to providing value in an ever-changing world, and it is identified as one of our value creators in our most recent Strategic Plan. Our approach to innovation is broad, using digital-forward approaches to find new ways to meet client challenges, increase efficiency, and improve profitability. Innovation facilitates collaboration, is essential to employee engagement, and advances environmental and social thought leadership.

Commitments and Practices

Stantec is committed to promoting innovation to reimagine and redefine what's possible for our communities, and Stantec annually invests millions of dollars to fund grants and research.

In Our Operations

Stantec leaders promote creativity within all our business operating units and geographic locations. In our day-to-day, employees are encouraged to innovate and create the future. To accelerate the progress, Stantec has several formal innovation programs, including the Innovation Office (a department focused on encouraging, developing, and commercializing employee ideas); The Stantec Institute for Applied Science, Technology & Policy (a think tank to foster developments in technology and policy centered around climate change); and collaborative partnerships (working with industry and communities to develop and encourage new ideas).

Innovation Office

To develop leading-edge solutions, Stantec's Innovation Office nurtures ideas through ideation, capture, development, commercialization, and graduation phases.

Stantec's Innovation Office programs include

- **Micro-grants:** Every Stantec employee can easily submit their ideas through an Idea Machine app installed on the desktops of all employee computers. We support the ideation process and help employees develop their ideas.
- **Greenlight Grants:** Our Greenlight Grants Program takes innovative ideas a step further by funding early-stage prototypes and research proposed by employees. We try to focus these efforts on projects that address mega-trends like climate change and urbanization and favor the creation of interconnected, digital products to address the challenges faced by our communities. Grant recipients are assigned collaborative coaches for support in developing their ideas.
- **Innovation Fund:** Once we have generated a prototype for an idea, the innovation fund offers more significant funding to scale an idea into a minimum viable product. Our goal is to create a viable pathway for implementing innovative ideas in the market, while still providing significant support. Otherwise, many innovations remain "thought leadership" exercises, and don't get a chance to transform the industry.

Stantec Institute for Applied Science, Technology & Policy

The Stantec Institute for Applied Science, Technology & Policy supports ideation and innovation in our water business through market focused applied research. The Institute is currently focused on implementing applied research in four key areas:

- **Per- and polyfluoroalkylated substances (PFAS) removal and destruction:** PFAS, often referred to as forever chemicals, contaminate water supplies, soil and even the food-chain. Their persistence in the environment underscores the urgent need for effective removal and destruction. Our research contributes directly to sustainability goals for clean drinking water and enhanced ecosystem health.
- **Sustainable nitrogen management:** Existing biological nutrient removal processes for nitrogen removal at Water Resource Recovery Facilities are energy intensive and result in nitrous oxide (N_2O) emissions. Our research improve nitrogen removal, reducing scope 2 and scope 3 GHG emissions.
- **Real-time, online biosensors to enhance potable water reuse:** Potable reuse is an essential component to scaffold water sustainability, particularly in water scarce regions. Our research investigates the feasibility and efficacy of novel real-time pathogen detection technologies as part of the potable reuse treatment process. Such research is crucial to promote the use of potable water and enhance the circularity of our engineered water systems.
- **Machine leaning applications for water systems management:** Machine learning (ML) is emerging as a technology in the water industry because its ability to learn and predict patterns directly from data, rather than reliance on mechanistic models. Our ML-AI research team is focused on water-industry specific applications such as water demand, wastewater influent flow and process equipment performance prediction.

Collaborative Partnerships

Stantec makes regular investments to further industry adoption of innovative ideas.

We regularly partner with communities in need through our North America Funding Program, which helps progress community development and transformational climate action projects through mechanisms like low-interest loans and government grants. Our specialists help clients through research and strategy, application preparation, and grant administration. Stantec is one of the first architectural and engineering firms to offer such funding support.

Besides supporting Stantec-developed innovations through the Innovation Office, we also support development of new technologies with industry partners, both financially and with subject matter expertise.

To support our employees as they carry out research (when directly serving clients or when strengthening capacity in anticipation of client needs), we provide a Research and Development Resource eLibrary, pursue collaboration options with academic institutions, and partner with academic researchers to access federal funding for research.

Accountability

As part of our compensation key performance indicators, Stantec executives hold themselves accountable for innovation success through the number of commercialized initiatives funded by the Innovation Office.

Material Topic / Value Chain Node Covered:

Innovation / Operations

See all Stantec Management Approaches