

Gigaton Spotlight: Polygon

How AT&T connectivity expertise enables emissions reduction and business value

About Polygon

Polygon specializes in engineered temporary climate solutions for construction, industrial, and commercial buildings. The company's innovative approach improves operational efficiency of construction drying processes and climate management, thereby reducing energy consumption and lowering greenhouse gas emissions during project execution. For more, visit www.polygongroup.us.

Gigaton Pathway: Buildings

- By some [estimates](#), the construction and operation of buildings accounts for 34% of global CO₂ emissions, making it the largest contributor.
- Promoting best practices and access to energy-saving solutions throughout the lifecycle is essential to driving down carbon emissions.
- Polygon boosts the efficiency of its climate control equipment by using environmental monitoring and automated controls to run machines only when needed. The 24/7 visibility delivers critical building diagnostic information, which helps users manage risk, accelerate schedules and reduce energy consumption.



Polygon is contributing to AT&T's Gigaton Goal

- Polygon's wireless sensors measure real-time conditions such as temperature, humidity, moisture content, indoor air quality and particulate matter.
- The system's core intelligence uses sensor data and a Smart Controller to modulate desiccant dehumidifiers, heating and cooling systems and other assets according to user-specified thresholds. This prevents unnecessary operation, ensuring the equipment only runs when conditions require it.
- **Polygon clients have experienced 50% to 70% energy savings and carbon emissions reductions when modulating equipment compared to running it full time.*** Results depend on multiple factors, including equipment selection, user settings and environmental conditions.

Connectivity helps enable Polygon's success

- Developed with support from AT&T experts and running on AT&T's network, the Polygon system can reliably communicate data between assets and user platform, even in remote areas.
- The collaboration with Polygon reflects AT&T's commitment to supporting innovative solutions to address environmental issues.

*Project data was analyzed and validated by Carbon Trust, a third-party, UK-based climate consultancy firm.