

Gigaton Spotlight: Carbon X

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

About Carbon X

As a leader in permanent methane elimination, Carbon X identifies and eliminates methane leaks from oil and gas wells, converting verified emissions reductions into high-quality carbon credits. The company's field-to-credit approach integrates emissions science, oil and gas operations expertise, registry compliance and carbon finance to turn methane liabilities into scalable, measurable, real climate initiatives.

Gigaton Pathway: Methane Waste to Value

- Carbon X targets overlooked methane sources through screening, field assessments and methane testing to pinpoint high-impact, legacy wells.
- Verified carbon credits are generated based on methane detection and quantification before and after plugging, ensuring the registry-backed methodologies and inputs are conservative, reliable and third-party validated, establishing a repeatable system to fund additional oil and gas well mitigation and scale remediation efforts nationwide.
- Following a 2025 project in Breckenridge, Texas, where 23 leaking wells were plugged, generating ~321,000 MT CO₂e in carbon credits, Carbon X has expanded into larger portfolios, including a Western Oklahoma project targeting 150+ wells with ~4.5 million MT CO₂e, demonstrating scalability and impact potential.



Carbon X is contributing to AT&T's Gigaton Goal

- With methane ~82 times more impactful than CO₂ over a twenty-year period ^[1], Carbon X delivers measurable and meaningful reductions by identifying, quantifying and permanently eliminating emissions through engineered well plugging, resulting in transparent, auditable data.
- Millions of abandoned wells across the United States contribute to ongoing methane emissions, making scalable methane abatement a meaningful and diversified pathway toward AT&T's goal of enabling 1 billion metric tons of emissions reductions by 2035.
- By connecting remote well sites, field crews, methane sensors, monitoring systems and verification workflows, AT&T connectivity supports Carbon X's mission to accelerate the transition from isolated methane-abatement projects to a widespread, repeatable, data-rich national remediation platform.

Connectivity helps enable Carbon X's success

- AT&T connectivity transforms remote legacy wells into connected field assets by transmitting real-time methane measurements, GPS-tagged data points, photos, work orders, inspection records and post-plug monitoring data to secure cloud-based systems.
- IoT, 5G and fiber enable near-real-time data capture and secure transmission, supporting the auditable records required by registries, verifiers, regulators, landowners and credit buyers.
- AT&T connectivity helps Carbon X scale methane abatement project development by reducing manual data collection, improving field visibility, accelerating response times and creating a digital record from leak detection through credit issuance, enabling a repeatable, transparent and financeable process.
- Connectivity supports permanence and risk management through continuous monitoring to confirm wells remain sealed while allowing rapid detection and remediation of post-plug leaks, reducing risk and improving overall safety.

¹ Section 7.6, pg. 1017, <https://doi.org/10.1017/9781009157896.009>