



AT&T's Connected Climate Initiative includes a collection of climate leaders working to unleash the power of connectivity solutions, such as IoT, 5G and edge computing, to reduce emissions. The CCI aims to accelerate climate progress and highlight how companies can collaborate to reduce global emissions by one gigaton through connectivity-based solutions. Collaborators include:

Businesses:

Badger Meter: Badger Meter, a leading provider of smart water solutions including flow measurement and water quality devices, utilizes AT&T IoT connectivity to help its customers collect near real-time data to drive efficiency, reduce costs and enable conservation throughout their water distribution networks. Helping to identify leaks quickly, avoiding trips to read or turn meters on or off, and arming households with water usage data, collectively reduce wasted water and related emissions.

“For over 116 years, Badger Meter has been helping our customers manage water efficiently. Working with AT&T to integrate cellular connectivity into our endpoints has been a game-changer, enabling our customers to securely and reliably measure and manage water more efficiently, without the infrastructure-hassle or the need to roll trucks needlessly.” – **Kimberly Stoll, Vice President - Sales and Marketing, Badger Meter**

Duke Energy: Duke Energy, one of America's largest energy holding companies, intends to work with AT&T to explore how broadband technologies can accelerate the transition to renewable energy and help achieve Duke Energy's goal of net-zero carbon emissions by 2050.

“There are real challenges and opportunities to address as we tackle climate change, which require purposeful and unifying leadership from all sectors. As Duke Energy delivers on its clean energy transformation in a way that enables our communities to be stronger and more resilient, it's important to work with companies on shared priorities. AT&T is a great partner who shares in our vision of a clean and equitable energy future. An example of our action together includes our Frontier II wind project and our work together to provide wind technician scholarships to students of color. We look forward to our continued work as we



progress along this journey.” – **Katherine Neebe, Chief Sustainability Officer, Duke Energy**

Equinix: Equinix is a leading digital infrastructure company. Digital leaders harness our trusted platform to bring together and interconnect the foundational infrastructure that powers their success. We enable our customers to access all the right places, partners and possibilities they need to accelerate their advantage. With Equinix, they can scale with agility, speed the launch of digital services, deliver world-class experiences and multiply their value.

“As the world’s digital infrastructure company, Equinix has committed to becoming climate neutral globally by 2030 and reach its Science-Based Targets across Scope 1, 2 and 3 emissions. We are excited to collaborate with AT&T to provide highly secure access to energy-efficient digital infrastructure covered by our industry-leading purchases of renewable energy and long-term goal to reach 100% renewable energy worldwide. Our efforts are helping customers sustainably accelerate their digital transformations and reduce emissions.” – **Jennifer Ruch, Director of Sustainability, Equinix**

GCP: GCP, a leading global provider of construction products technologies, uses AT&T Internet of Things connectivity to make the cement and concrete industry more environmentally sustainable. Thanks to AT&T connectivity, GCP’s VERIFI® in-transit concrete management system monitors and automatically adjusts the consistency of concrete while it is on its way to the construction site. This ensures the concrete is delivered as specified, leading to fewer rejected loads, less waste and optimized use of cement and water.

“At GCP, we can make a difference by helping our customers in the construction business achieve their sustainability goals. Our products enable the cement and concrete industry to reduce its environmental footprint and save money in the process. AT&T connectivity allows us to bring innovative solutions, such as the VERIFI® system, to market and we’re excited to explore additional opportunities for collaboration as a member of the Connected Climate Initiative.” – **Jason Straka, Product Manager, GCP**

IndustLabs: IndustLabs builds and integrates Industrial Automation solutions for a range of industrial applications, using AT&T IoT connectivity to provide customers



with the data needed to optimize performance and create industrial solutions that reduce environmental impacts.

“We work with customers in many different industries, and we’ve found that reliable and highly secure connectivity is critical for developing efficient processes that reduce waste,” said **Uziel Salgado, Co-Founder, IndustLabs**. “AT&T connectivity gives us access to the information and insights needed to create game-changing solutions with our customers.”

Microsoft: Microsoft is working with AT&T in areas like 5G, AI, Internet of Things and the cloud to further enhance our development of products, such as the AT&T Guardian device with Azure Sphere: It enables businesses to securely collect and analyze data to identify efficiencies and reduce sources of carbon emissions. Use cases range from connected kitchens to fully digitalized spaces, transportation and supply chains. Azure Sphere is built on the Azure cloud which is 98% more carbon efficient than common on-premises solutions.

“As we work toward our own pledge to be carbon negative by 2030, Microsoft is committed to helping every organization on a path to net zero transform their business. Customers are using Azure Sphere to create and connect smart, secured IoT devices in pursuit of sustainability, efficiency, and reduced waste. The AT&T Guardian device with Azure Sphere is an early demonstration of how we can accelerate progress toward these objectives through the combined power of our technologies. We will continue to support AT&T's sustainability goals via Microsoft’s sustainable cloud infrastructure,” said **Halina McMaster, Partner Group Program Manager, Azure Sphere, Microsoft**.

Soiltech Wireless: Soiltech Wireless is an ag-tech startup working to make sustainable farming practices easy to access and implement. With an industry-first soil-to-storage sensor and robust analytics platform, Soiltech provides the agriculture industry with a much-needed rugged and easy-to-use solution for real-life farming challenges. Soiltech is helping to solve global problems by starting at the grassroots level – by providing farmers with tools to manage water consumption, avoid food waste and reduce fuel consumption. AT&T’s IoT network plays a critical role in facilitating seamless deployment to farmers no matter where they are.



“Farmers have long struggled with access to reliable connectivity and, therefore, reliable data which can help them make critical decisions that can have a global impact on water, emissions and food security. So, having access to a network that is present not only in rural American communities, but also globally as part of roaming agreements, Soiltech is able to deliver sustainability solutions on a wide scale where they are needed most – on the farm.” – **Ehsan Soltan, Founder & CEO, Soiltech Wireless**

SunPower: SunPower, a leading U.S.-based solar technology and energy services provider using AT&T IoT to optimize the production of renewable energy and enhance efficiencies, works with AT&T to monitor solar panels and battery storage, giving customers more visibility into system performance and more control over how and when they use stored energy.

“As customers look to take greater control of their energy needs, we need to make renewable energy easy and engaging with industry-leading offerings. To do this, we recognize that a connected energy infrastructure is vital,” said **Rich Kapusta, Vice President of Product Management, SunPower**. “To provide more reliable, affordable, and cleaner energy for homes and businesses across the country, our work with AT&T integrates IoT connectivity and expands our solar and storage solutions to create a complete energy experience powered by the sun.”

Traxen: Traxen uses AT&T IoT to deliver an AI-informed adaptive cruise control solution that delivers an average 10% increase in fuel efficiency with improved safety & driver satisfaction. Using AT&T IoT, Traxen collects and uses topography, traffic, and end-of-route congestion data to help drivers operate the vehicle engine and transmission at a highly efficient rate.

“Collaborating with AT&T to provide the reliable connectivity and bandwidth to process our cloud connected iQ-Cruise™, enables us to help ensure the system performs at peak efficiency with seamless over-the-air updates,” said **Traxen CEO Ali Maleki**.

Leading NGOs and climate experts:

BSR: BSR, a leader in sustainable business practices, will work with AT&T business customers to identify and prioritize how broadband-enabled solutions can help



reduce emissions, helping to maximize the financial and emissions-reducing ROI of their technology investments.

“We work with sustainability leaders around the world and we recognize the role that connectivity can play to help drive efficiency and reduce emissions. We’re pleased to be working with AT&T and its customers to help connect the dots between connectivity and emissions reduction.” – **David Wei, Managing Director, Climate, BSR**

the Carbon Trust: the Carbon Trust is an independent, expert partner of leading organizations around the world. It advises businesses on their opportunities in a sustainable, low carbon world and measures and certifies the environmental footprint of organizations, supply chains and products. The Carbon Trust will work with AT&T to calculate the annual emissions reduction impact enabled by AT&T as part of the company’s ESG reporting and will provide insights into leading trends and emissions reduction opportunities.

“We have been working with AT&T since 2015, from the beginning of their sustainability journey to calculate how connectivity solutions can play a role in reducing emissions. Together, we’ve used established standards and best practices to develop a methodology for measuring emissions reduction, with the aim of tailoring solutions to achieve further emissions savings in the future.” – **Andie Stephens, Associate Director, the Carbon Trust**

Third Derivative: Founded by RMI and New Energy Nexus, Third Derivative is an inclusive climate technology start-up accelerator that rapidly finds, funds and scales climate tech innovation — including CCI participants’ cutting-edge emissions-reducing technologies — globally.

“Closing the digital divide is important for reducing emissions, especially in agriculture, transportation, and energy,” said **Bryan Guido Hassin, co-founder and CEO, Third Derivative**. “Third Derivative’s partnership with AT&T has supported many of our innovators and helped integrate connectivity into potential game-changing solutions that need a push to commercialize at the speed and scale that’s needed.”



Universities:

The Texas A&M University System's RELLIS Campus: TAMU's RELLIS campus will research how AT&T 5G could help speed emissions reduction in industries with high emissions such as transportation.

"Autonomous Vehicles can reduce traffic congestion, improve safety and reduce the net emissions. 5G reduces latency, increases bandwidth and allows vehicles to communicate at farther distances. This enables vehicles to "talk" with other vehicles, traffic signals as well as other sensors on the road reducing emissions as well as increasing safety and efficiency."

– **Srikanth Saripalli, Professor, J. Mike Walker '66 Department of Mechanical Engineering, Director, Center for Autonomous Vehicles and Sensor Systems (CANVASS)**

The University of Missouri: Mizzou will explore how AT&T 5G may help reduce energy consumption and emissions from buildings.

"We are excited about the collaborations that take advantage of 5G connectivity for research and education at the university. We anticipate that 5G will decrease the barriers to achieve net-zero and eventually accelerate sustainability in many ways.

The new 5G testbed will explore 5G environments coupled with digital twins and sensors to improve data handling and communication among engineers in sustainable building design, construction, and operations. What's more, with this new testbed, students will broaden their perspectives on how emerging technologies rapidly shift the sustainable industry towards the net-zero built environment." – **Jong Bum Kim, assistant professor of Architectural Studies in the College of Arts and Sciences and PI of the research collaboration**