

# AI-powered sustainability for intelligent net zero journeys

TCS Intelligent Urban Exchange™ for  
sustainability data driven climate action



Organisations today are on a journey to become operationally interconnected, resilient, and sustainable as they step-up their climate action strategies.

While profitability and consistent returns continue to be the fundamental operating principles of businesses, governments and institutions, consumer sentiment for climate friendly practices, such as Environmental, Social and Governance (ESG) guidelines, is rapidly growing.

In addition, mandatory emissions and climate protocols are rapidly being developed by global consortiums such as the Conference of the Parties (COPS) and the Intergovernmental Panel on Climate Change (IPCC). Backed by world bodies such as the United Nations and the World Health Organization these regulations are compelling executive boards of organizations around the globe to prioritize and expedite their sustainability journeys. Forward thinking enterprises are quickly incorporating and adjusting business models, operations, and supply chains to align with these evolving standards and consumer expectations.

TCS Intelligent Urban Exchange™ for sustainability is an advanced AI and ML powered solution that delivers comprehensive insights, recommendations, and metrics for environmentally clean organizational and value chain operations. The aggregate system-wide impact of TCS Intelligent Urban Exchange™ for sustainability results in substantial emissions reduction, cost savings, and resource conservation while also advancing corporate environment stewardship, compliance, and social responsibility.

## Overview

Climate change acceleration is affecting the places we live, the food and water that we consume, and the businesses where we work. Organizations of all types play a critical role in helping to reduce the environmental, social, and economic impacts caused by climate change. Businesses and government entities need to rethink operating models to reduce their carbon footprint and accelerate sustainability efforts while remaining agile and resilient.

## Challenges

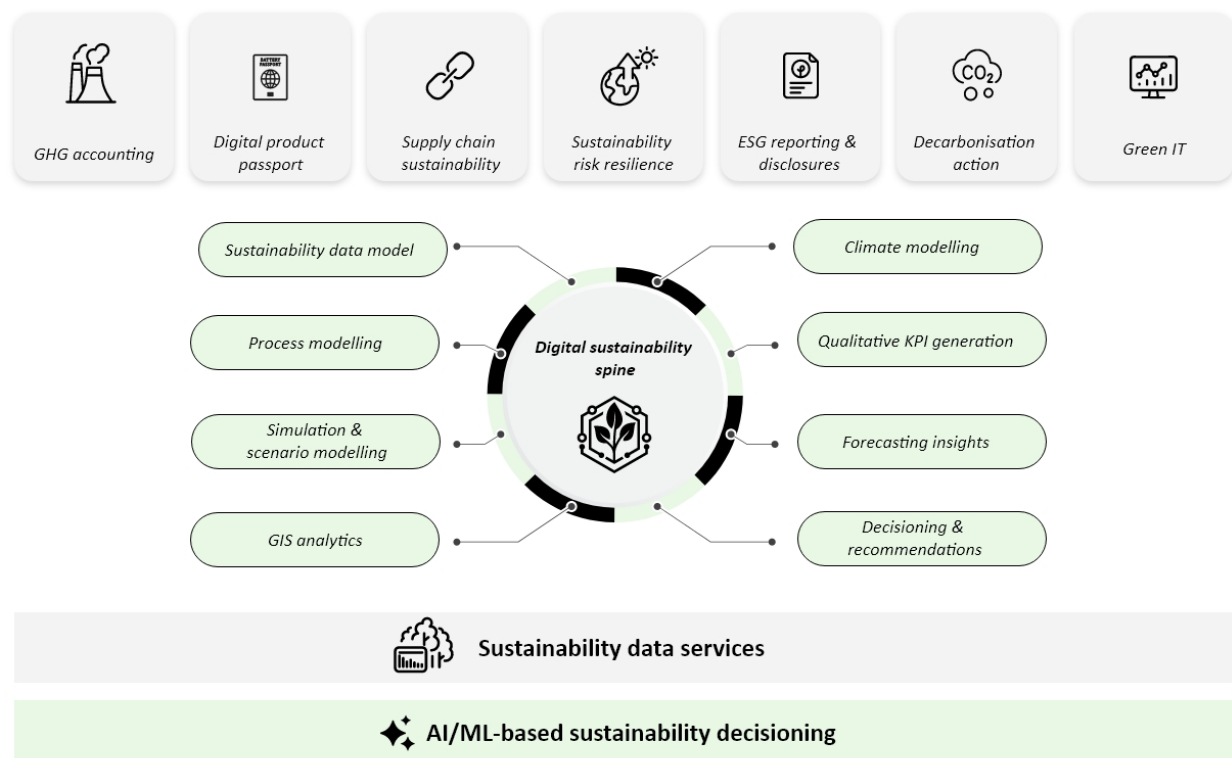
Current systems offer a limited view of an organization's emissions such as 'last mile' and facilities operations emissions. These disparate views leave gaps and do not provide a holistic integrated view across operations. Blind spots created by such gaps create the potential for untracked emissions and risk unintended regulation and target non-compliance.

Also, emission reporting systems are manual in nature with limited capability to address Scope 1 and Scope 2 emissions. In addition, Scope 3 emission monitoring is proving to be a significant challenge, delaying the ability of organizations to manage, track and report on them, again risking non-compliance.

# Our Solution

TCS Intelligent Urban Exchange™ for sustainability is an AI/ML powered sustainability decisioning solution for enterprises, featuring prebuilt tools that simplify climate action and net-zero journeys. The solution is designed as an enterprise platform to address the sustainability goals and their realization. It is a holistic sustainability solution for strategic planning, risk management, forecasting, monitoring and reporting, asset emission optimization, and product passport capabilities. Key features Include:

- **Automated Scope 1, 2 and 3 Reporting:** Available out of the box with easy configuration.
- **Green IT:** Minimize emissions from your IT, operations, and data-center assets.
- **Digital Product Passport:** Visibility and traceability across the value chain and secondary use.
- **Carbon transition risk assessment:** Drives energy transition and climate action.
- **AI-based ESG sentiment analyzer:** Delivers insights on public perception of ESG initiatives and monitors reputation index.
- **Sustainability twin carbon value chain simulation:** Supports enterprise decarbonization strategy planning from Scopes 1, 2, and 3.
- **Optimal sustainability initiatives:** Enables organizations to achieve more effective and cost-effective carbon reduction.
- **Leading climate models:** Minimize climate risk and projected loss.



# Benefits

TCS Intelligent Urban Exchange™ for sustainability delivers the following benefits:

**Sustainability insights:** Our solution provides accurate and comprehensive insights for optimizing Scope 1, 2, and 3 emissions

**Achieve net zero goals:** Carbon emission capabilities simulate complete emission behavior of the value chain, enabling organizations to identify and attain optimal emissions levels

**Robust emission reduction:** AI/ML powered decarbonization optimization that exposes the key drivers of emissions, and provides unique insights into the most effective solutions for reducing them

**Continuous reporting:** Automated emission management provides continuous Scope 1, 2, and 3 emission reporting across the entire value chain that facilitates expedited corrective actions

**Integrated risk assessment:** Climate risk assessments that empower organizations to see the impact of climate change on operations

## The TCS advantage

- **Award-winning expertise:** Our software is developed by industry experts who actively and continuously scan the global business horizon. Our industry-specific development approach complements the latest innovations from TCS' award-winning R&D efforts.
- **Lower cost of ownership:** We create modular and integrated solutions for solving the real-world problems our customers face. Our flexible platform architecture allows you to adopt what you need today and scale as your needs evolve, all with minimal downtime.
- **Simplified business and engagement models:** We offer flexible business models that adapt to how you want to engage. We build our solution to enable rapid implementation, accelerating the time to value.
- **World-class innovation:** Unencumbered by legacy code and requirements, we bring state-of-the-art open-source technology to our solutions that fits today's and tomorrow's requirements – such as artificial intelligence (AI), machine learning (ML), and intelligent workflows.

# Awards and accolades



## Contact

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### About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services (TCS) (BSE: 532540, NSE: TCS) is a digital transformation and technology partner of choice for industry-leading organizations worldwide. Since its inception in 1968, TCS has upheld the highest standards of innovation, engineering excellence and customer service.

Rooted in the heritage of the Tata Group, TCS is focused on creating long term value for its clients, its investors, its employees, and the community at large. With a highly skilled workforce of over 607,000 consultants in 55 countries and 180 service delivery centres across the world, the company has been recognized as a top employer in six continents. With the ability to rapidly apply and scale new technologies, the company has built long term partnerships with its clients – helping them emerge as perpetually adaptive enterprises. Many of these relationships have endured into decades and navigated every technology cycle, from mainframes in the 1970s to Artificial Intelligence today.

TCS sponsors 14 of the world's most prestigious marathons and endurance events, including the TCS New York City Marathon, TCS London Marathon and TCS Sydney Marathon with a focus on promoting health, sustainability, and community empowerment. TCS generated consolidated revenues of US \$30 billion in the fiscal year ended March 31, 2025. For more information, visit [www.tcs.com](https://www.tcs.com)

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