Green IT solution for GHG emissions, analytics, and reporting

The world is transitioning toward sustainable practices, and organizations are stepping up to reduce greenhouse gas (GHG) emissions. Green IT, which integrates technological innovation with responsible environmental practices, is essential to advancing this mission. From precise GHG emissions tracking to actionable analytics, discover how TCS Intelligent Urban Exchange™ for sustainability empowers businesses to align with sustainability goals.

Organizations are seeing an explosive growth in IT assets and infrastructures, IT outsourcing, and data processing capability as part of their IT operations. As IT systems have started exerting significant pressure on scarce resources, accompanied by a huge demand for energy, it is becoming an increasing concern for sustainability and climate change. Further, the electronic waste being generated and GHG emissions being churned out during the life cycle of the IT ecosystem threaten to disrupt the ecosystem of sustainable life. Not only is information technology fast becoming a cause of concern for sustainable life, but it also faces a mounting challenge of being disrupted due to the risk posed by climate change. Therefore, a holistic approach to put in place a robust sustainability and climate action using **TCS Intelligent Urban Exchange™ for sustainability** becomes a necessity.
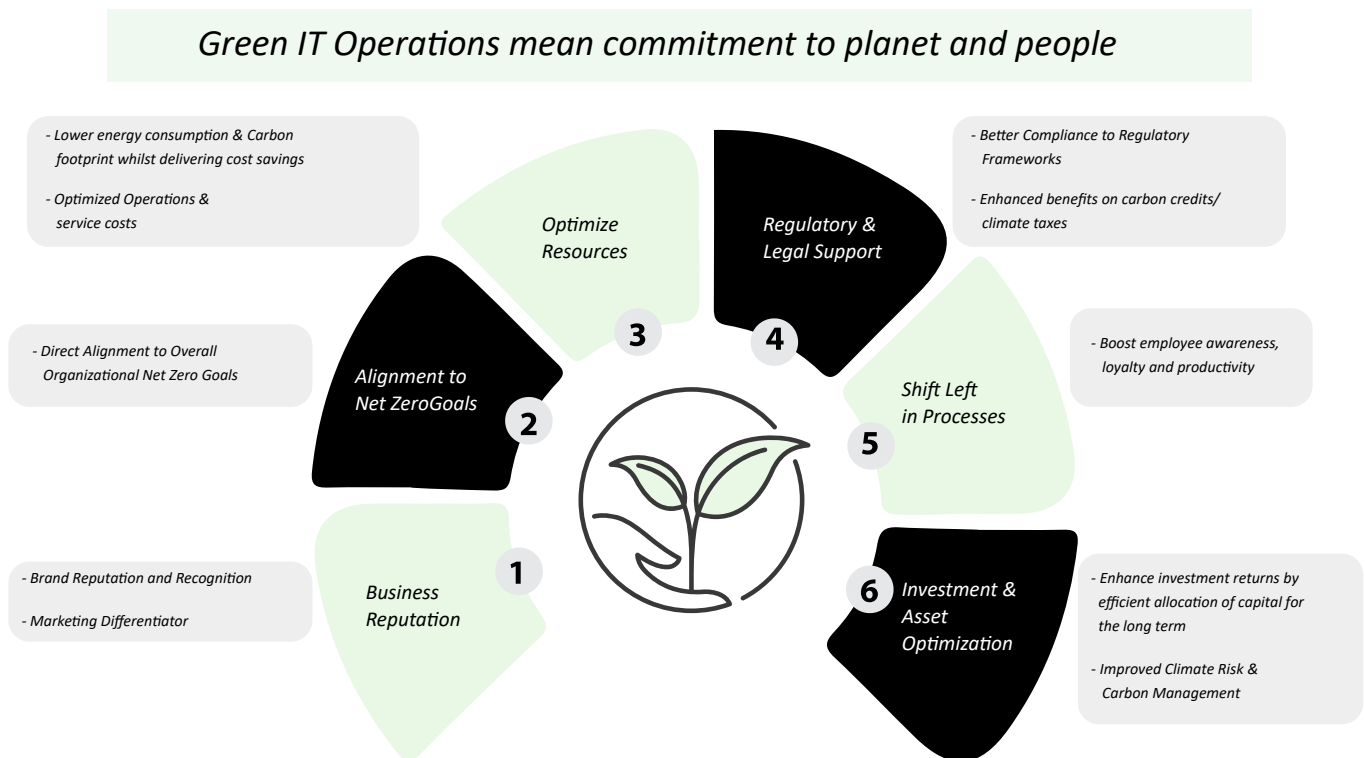
What is Green IT Monitoring?

Green IT operation involves embedding sustainability and a climate action plan throughout the entire value chain. This is achieved through efficient and sustainable use of scarce resources and reduction in GHG emission footprint and wastages throughout the IT system value chain. Compliance with ESG regulations in procurement, production, operation, and end-of-life stages, accounting for GHG emissions, and enabling a robust decarbonization action plan are some of the well-defined measures tracked using green IT monitoring.

What if you could?

- **Enhance Sustainability Reporting -** Green IT monitoring enables precise measurement of scope 1, 2, and 3 GHG emissions, ensuring compliance with global frameworks such as the GHG Protocol, ISO 14064, and upcoming regulatory mandates like the EU's Corporate Sustainability Reporting Directive (CSRD). Accurate data builds trust with stakeholders and demonstrates a commitment to sustainability.

- **Increase energy efficiency and cost savings -** By monitoring and analyzing energy consumption, enterprises can identify underutilized servers, optimize cooling systems, and adopt energy-efficient practices. Reducing energy use not only cuts emissions but also drives significant cost savings in operations.

- **Meet regulatory and market demands -** Governments and customers increasingly demand greener IT practices. Green IT monitoring helps enterprises comply with stringent regulations, such as carbon taxation and mandatory emissions reporting, while meeting customer expectations for environmentally responsible practices.

- **Gain a competitive advantage and innovate -** Adopting green IT solutions positions enterprises as leaders in sustainability, enhancing their reputation and attracting eco-conscious customers and investors. Additionally, the insights gained through monitoring can foster innovation within IT infrastructure, enabling the integration of renewable energy solutions and the implementation of cutting-edge cooling technologies.

- **Enable renewable integration -** Green IT monitoring empowers organizations to more efficiently incorporate renewable energy sources, such as solar and wind, into their operational workflows. Real-time data helps balance loads, predict energy needs, and minimize reliance on non-renewable sources.

How does Green IT benefit your organization?

Summarized Benefits

Green IT Operations mean commitment to planet and people

- Lower energy consumption & Carbon footprint whilst delivering cost savings
- Optimized Operations & service costs

- Better Compliance to Regulatory Frameworks
- Enhanced benefits on carbon credits/ climate taxes

- Direct Alignment to Overall Organizational Net Zero Goals

- Boost employee awareness, loyalty and productivity

3 Optimize Resources

4 Regulatory & Legal Support

2 Alignment to Net Zero Goals

5 Shift Left in Processes

1 Business Reputation

6 Investment & Asset Optimization

- Brand Reputation and Recognition
- Marketing Differentiator

- Enhance investment returns by efficient allocation of capital for the long term
- Improved Climate Risk & Carbon Management

About TCS Intelligent Urban Exchange™ for sustainability

TCS Intelligent Urban Exchange™ for sustainability offers robust frameworks to manage and mitigate emissions. It provides a one-stop solution for all the emissions related to IT infrastructure and services. The solution focuses on reducing the environmental impact of IT operations. It encompasses strategies to lower emissions from data centers, which vary based on the region. It also includes workplace emissions, which are categorized based on departments, regions, and personas, and involves the measurement of the carbon footprint generated by hardware, software, and the infrastructure supporting software applications and data transmission. Furthermore, it includes the monitoring and reporting of emissions associated with cloud-based operations.

TCS Intelligent Urban Exchange™ for sustainability also features solutions for:

- GHG accounting: Scope 1/ 2 / 3, life cycle assessment, decarbonization management

- Supply chain sustainability: Green procurement, compliance, risk management

- Climate risk management: Physical risk, transition risk, reputational risk

- Circular economy enablement: Product eco design, Digital product/battery passport

- Sustainability data aggregation and disclosure management- GRI, CSRD (ESRS), BRSR

Awards and accolades

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

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