

QUARTZ



Quartz for ESG Compliance



Challenge

Moving from the sidelines to the spotlight, Environmental and Social responsibilities now go beyond strictly regulatory compliance, as this showcases a company's commitment towards preserving the environment, social responsibility and ethical practice of business. The ESG framework helps stakeholders understand how an organization is managing risks and opportunities related to ever-changing environmental, social and governance factors.

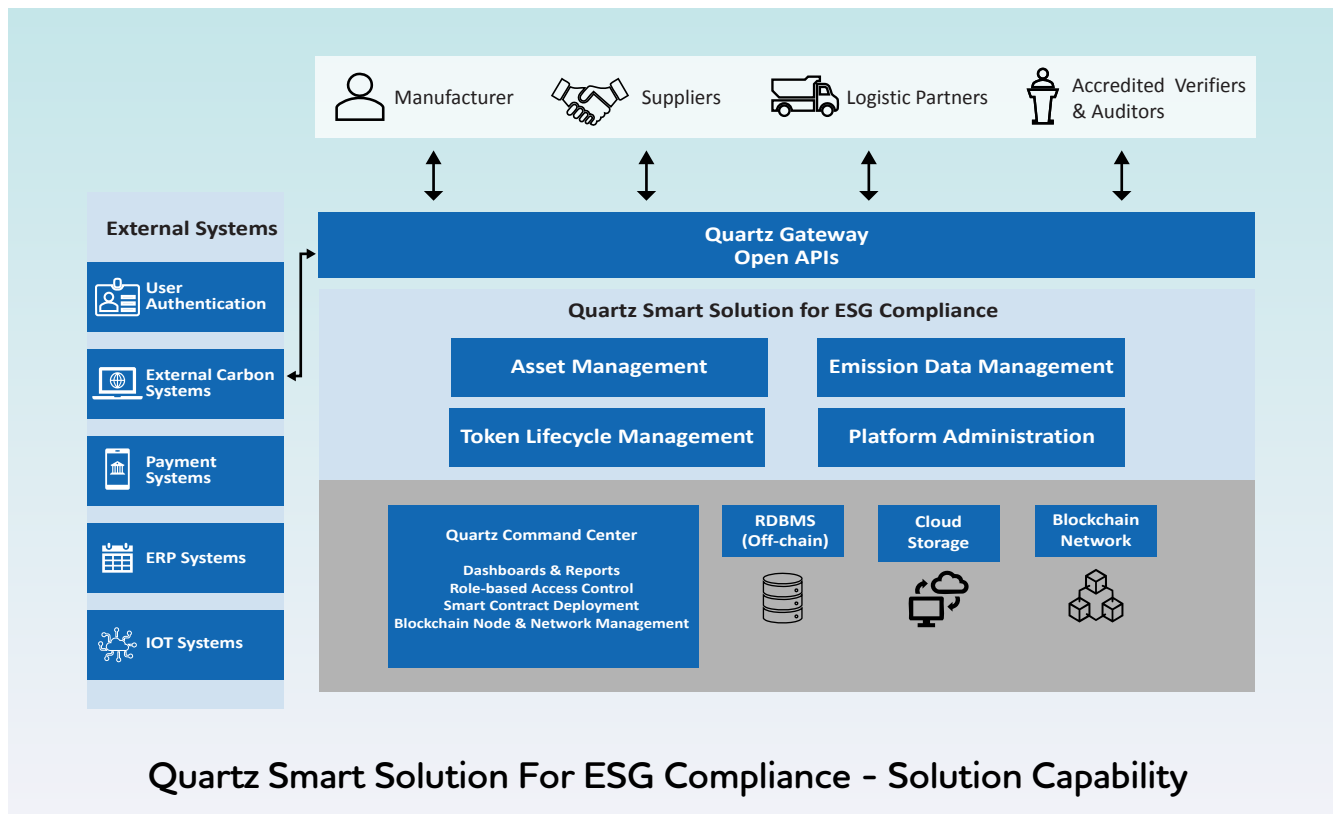
A major reason for the growth of ESG programs has been a greater focus on the environmental component of ESG and corporate responses to climate change. Due to fragmented data sources and evolving regulatory standards, organizations usually struggle with effective tracking, verifying, and reporting of ESG data. Given these needs, an intelligent, comprehensive ESG compliance solution that facilitates effortless data collection, processing, and reporting across regions is crucial. Organizations need to guarantee auditability and accountability while meeting global standards, which can be achieved through a reliable, immutable, and automated system.

Solution

Quartz Smart Solution for ESG Compliance provides an end-to-end digital solution for organizations striving for a sustainable future. It provides a unified platform that seamlessly manages ESG assets, greenhouse gas (GHG) accounting and data management, carbon footprint tracking, tokenization of ESG assets such as carbon credits, ensures regulatory compliance, and promotes collaboration among stakeholders.

The tokenization process creates an efficient, transparent system for trading ESG assets on a blockchain while preserving the credibility of the underlying environmental benefits. The common token standard ERC-20 is used for fungible tokens. With Quartz Smart Solution for ESG Compliance, tokens represent the ESG assets on-chain. When tokens are minted, they carry metadata that links them back to the original credits on the platform. This metadata typically contains information such as the project type, vintage year, expiry date and unique identifier from the platform. This creates an immutable, transparent record of ESG credit ownership and transactions, reducing the risk of fraud and double counting. It also ensures the integrity of the carbon credit market.

This solution also supports emission scope classification (Scope 1, 2, 3 emissions), GHG accounting, and ESG reporting in detail. The platform is geared towards providing automated support to regulators, making compliance easier. This allows organizations to achieve sustainability targets and regulatory compliance, as well as track and trade ESG assets in a simple and effective manner.



Benefits

- Faster time to market using pre-built functionalities and quick setup of the Carbon Accounting System, which monitors and reports emissions and token issuance
- Transparent, traceable records of carbon emissions and offsetting efforts, fostering trust among stakeholders
- Full transparency into the issuance, ownership, and retirement of ESG Assets
- Seamless integration with External platforms such as carbon market platforms, including carbon exchanges, MRV (Measurement, Reporting, and Verification) systems, and regulatory compliance frameworks

Quartz Advantage

- Use of Smart contracts to streamline processes such as emissions verification and carbon credit issuance
- Ease of Interoperability through Quartz Gateway supporting Integration with other systems and platforms
- Quartz Command Center enables smooth governance ensuring transparent oversight and automated compliance
- Easy portability between leading blockchain platforms including Ethereum, Quorum and Besu

About Quartz

Quartz offers innovation-led solutions that combine the benefits of DLT and AI. Built on the premise of 'trusted intelligence', the solution addresses business challenges across the entire value chain including development, integration, and governance of ecosystems for various industries including Financial Services, Banking, Supply Chain, Energy & Utilities and eGovernance. Backed by awards from Financial Technology Forum (Best Fraud Prevention Solution), Asia Pacific Stevie Awards (Best Machine First Sanctions Screening), Juniper Research (Gold Winner for Digital Identity Innovation), the Asian Banker (Best Fraud Prevention Technology Implementation), Financial Technology Forum (Best New Post Trade Solution of the Year), Asset Servicing Times (Outstanding Innovation Award) and recognition from Analysts (ranked #1 Best Performing Fraud Management Solution by IBS Intelligence) Quartz can help organizations operate at the forefront of technology innovation.

To know more about Quartz, please write to us at tcs.quartz@tcs.com, or visit our website <https://www.tcs.com/what-we-do/products-platforms/quartz>

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 607,979 consultants in 55 countries and 180 service delivery centers 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 over US \$30 billion in the fiscal year ended March 31, 2025. For more information, visit www.tcs.com

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