

TruCerts: A BLOCKCHAIN-BASED PLATFORM FOR FIRE SAFETY PRODUCTS

by

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The Singapore Civil Defence Force, in partnership with Element Testing Services (S) Pte Ltd, Setsco Services Pte Ltd & TÜV SÜD PSB Pte Ltd, introduced TruCerts, a blockchain-enabled platform that simplifies the verification process for Regulated Fire Safety Products. This initiative, which won the Public Sector Transformation Regulatory Transformation Award in 2025, addresses challenges with paper-based certification processes, such as manual verifications, documentation errors, and complex record-keeping.

The platform provides a secure digital solution for instant verification of fire safety certifications. By leveraging blockchain technology, it ensures data integrity and simplifies compliance processes. During its pilot phase, the platform demonstrated significant time and cost savings by reducing administrative burdens, including total savings of \$277,000 in rectification costs, \$12,400 in man-hours through streamlined verification, and 14-day reduction in re-inspections for 5 piloted projects. Building professionals can now verify certifications instantly through a user-friendly interface, enhancing productivity and strengthening fire safety compliance with real-time visibility of certification status.

The success of this initiative is evident with 20% voluntary digital CoC adoption by Certification Bodies in the first year, even before it became mandatory.

Looking ahead, TruCerts showcases Singapore's commitment to digital transformation in the built environment sector. The platform offers businesses opportunities to integrate digital solutions into their workflows while maintaining high safety standards. Through stakeholder engagement and phased implementation, TruCerts is set to benefit the built environment, demonstrating how technological innovation enhances regulatory effectiveness and business efficiency in Singapore's construction industry.

