TECH OFFER

Advanced Green Building Performance Assessment Platform

KEY INFORMATION

TECHNOLOGY CATEGORY:
Green Building - Sensor, Network, Building Control & Optimisation

TECHNOLOGY READINESS LEVEL (TRL): **TRL8**
COUNTRY: **SINGAPORE**
ID NUMBER: **TO175073**

OVERVIEW

The advanced green building performance assessment platform, developed by a Singapore-based technology enterprise, addresses the critical challenge of inefficiencies in green building projects due to limited data transparency and coordination among industry stakeholders.

While numerous tools offer building performance evaluations, this platform distinguishes itself through its AI-driven, comprehensive, and user-friendly approach. Standard energy assessment software takes a long time (typically 6-8 weeks) to complete similar assessment, requires special skillsets to use the software and is very costly. These are among the reasons that brings down the motivation of building owners.

The proposed platform empowers stakeholders to access instant assessments and solutions, significantly reducing transaction times, marketing costs, and investment risks. Its AI-powered cloud-based platform facilitates the assessment and analysis of building performance. It aggregates diverse building data sources, applies physics-based simulations and machine-learning

analytics, and creates digital twins. The platform serves as a catalyst for sustainable development through digitalization, catering to the urgent need for decarbonization strategies worldwide.

The technology owner is seeking co-development and test-bedding partnerships with real estate owners including commercial building and residential building owners, as well as smart city planners.

TECHNOLOGY FEATURES & SPECIFICATIONS

- An AI-driven platform that integrates diverse building data, employing physics-based simulations and machine-learning analytics to create digital twins for sustainable buildings.
- Allows stakeholders' access to instant assessments and solutions, reducing transaction times and costs significantly.
- GIS-based navigation, energy performance calculations, connections to technology providers and consultants, and a full admin portal for user management and data control.

POTENTIAL APPLICATIONS

This technology is applicable across various sectors within the built environment industry. It assists building owners and energy consultants in understanding baseline data and recommending energy-efficient solutions. It benefits green financiers by qualifying saving potentials, and product companies by facilitating efficient product sales to building owners. Additionally, it aids in virtual audits, improving energy efficiency in buildings. On top this, the platform can simulate and support smart cities projects to bring the entire city's building on the platform for driving the energy efficiency initiative

MARKET TRENDS & OPPORTUNITIES

The market size for green building technologies is on a steady rise, aligning with global initiatives for sustainable development. Platform offers a competitive edge by providing an AI-powered solution that streamlines building performance assessment and drives sustainable practices. Its ability to improve productivity, reduce costs, and accelerate decarbonization strategies positions it as a valuable asset in the evolving built environment market.

UNIQUE VALUE PROPOSITION

Platform excels in delivering accurate and instant green building assessments, eliminating the need for expensive intermediaries. It leverages advanced AI and simulation techniques, offering a neutral and validated evaluation, bridging the gap between data accessibility and building industry needs. Its capability to revolutionize energy efficiency assessments and its diverse applications set it apart from conventional solutions.