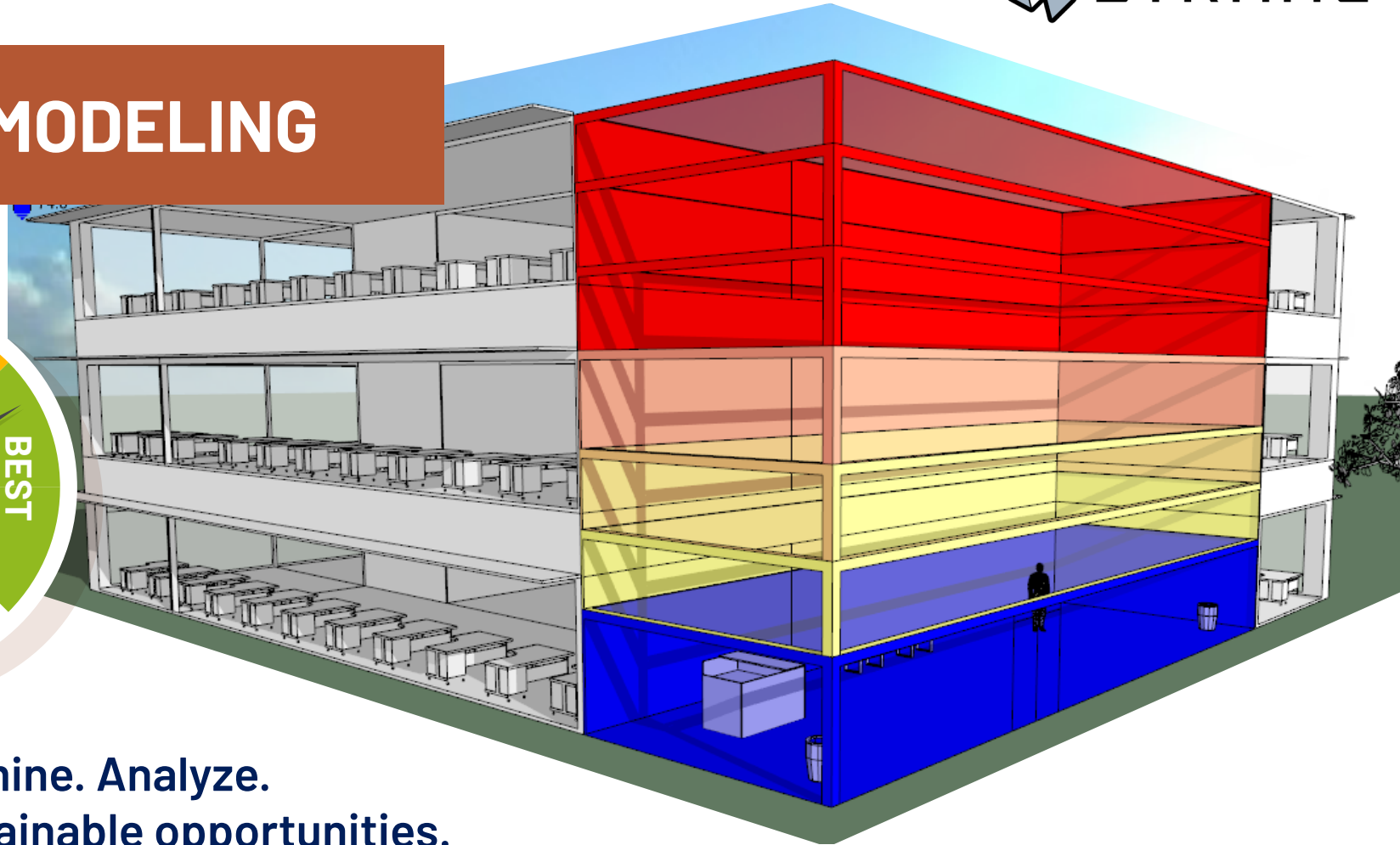


ENERGY MODELING



Identify. Examine. Analyze. Discover sustainable opportunities.

Energy modeling is a modern design process that allows our team to identify, analyze, and then select the most sustainable building forms, site orientations, materials, construction practices, and engineered systems for a specific facility. Given the complex nature of our client's projects, each opportunity is specifically catered to achieve your energy objectives.

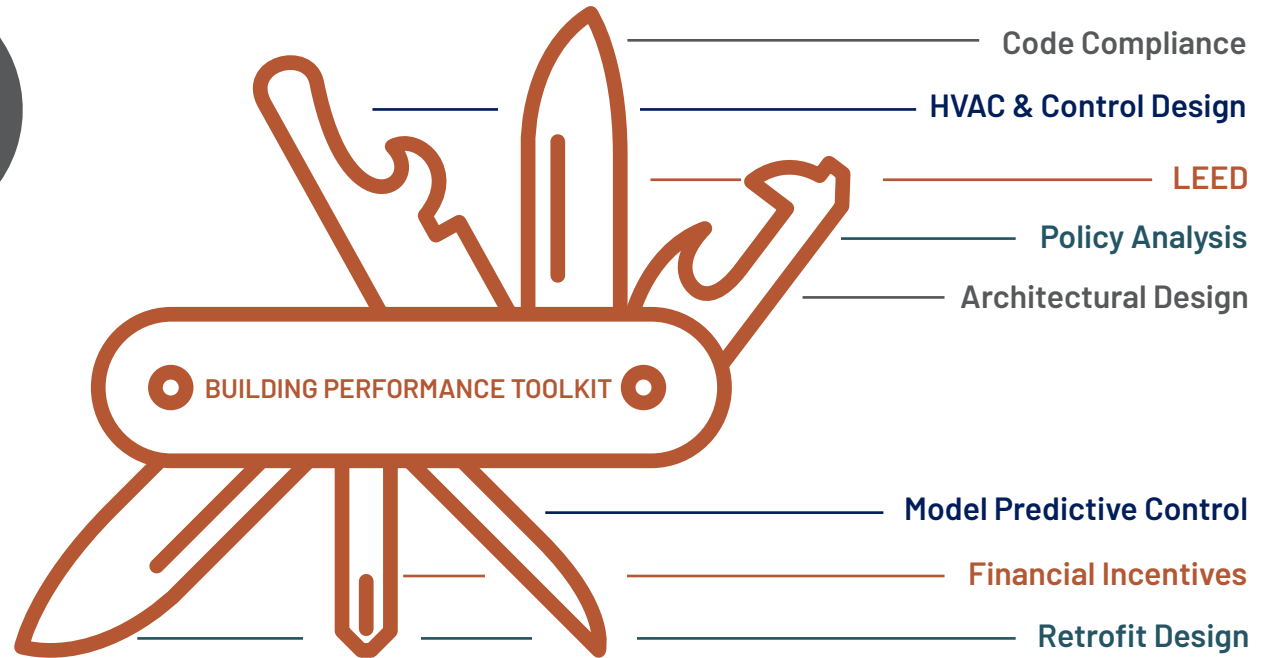
Our sustainability experts present the building performance data utilizing an integrated load calculation/energy model process. This integrated process allows the building owner and the builder to make meaningful decisions to improve the long-term operations of the facility; quickly identifying the probable facility energy utility costs, and savings opportunities. Owners are then able to choose **Good-Better-Best** system alternatives, supporting code compliance, and attain Focus on Energy incentives best suited for their spaces.

Strang is a pre-approved service provider of the Focus on Energy Design Assistance and Retro-commissioning programs.



DID YOU KNOW?

The initial cost of a building renovation is a small fraction of the cumulative cost of operating and maintenance of that facility. In fact, over 30 years of a building's life, the present value of maintenance, operations, and utility costs is nearly as great as the initial project costs. That's why at Strang, energy modeling is a design tool engaged at the earliest possible stage of every project. Energy modeling empowers our clients to make **sustainable design decisions** that deliver **substantial value**.



Strang engineering professionals working on-site.

DYNAMIC MODELING



'Energy modeling' typically refers to 'steady state' simulations and the calculation of a single point in time. However, we utilize dynamic energy modeling. **Dynamic modeling** simulates the building across a full year period, down to one minute intervals. We understand how the building environment and its systems change and respond over their useful life. Building form, massing, construction, and systems can now all be considered holistically and optimized throughout the year, not just on the single hottest or coldest day.



This performance knowledge across time empowers our designers to make informed decisions that deliver **quality**, **sustainable**, and **high performance** buildings. Key performance indicators estimate payback period and energy usage, enabling decisions to be accurately aligned with your long term goals.

VALUE-BASED DECISIONS



Energy modeling never makes decisions for you. It does, however, deliver quantifiable analytics to our experts who understand the intricacies, issues, and opportunities within your project. In other words, energy modeling empowers **intelligent**, **fact-based**, **sustainable** design decisions that deliver **real**, **tangible value**.