Green Key Village selects Ekotrope for cost and energy efficiency planning

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Ekotrope, a leading developer of software for analyzing and designing energy-efficient buildings, has been selected by Green Key Village, the developer of a fully-sustainable new Florida subdivision for the construction of 145 net-zero homes, each selected and customized to fit the specifications of the individual home buyer.

The Green Key Village venture is creating a sustainable community in Lady Lake, comprising 145 eco-friendly homes available in ten customizable floor plans. Each home and design will be fully sustainable as defined and certified by the Florida Green Building Coalition (FGBC) and the Home Energy Rating System (HERS). Buildings will be unique to each homeowner, who will be able to choose all aspects of their home from the geometry and build upwards. All the homes will include the most energy efficient design and technology, considering the individual home's build, geometry and design as well as specific location. Features include solar panels, sustainable materials and net-zero energy build.

Green Key Village's biggest challenge was to find a means to understand and analyze every individual aspect of its 145 home community to ensure that each development could be customized, and result in a net-zero energy status at a cost-effective price.

Ekotrope's software suite is based on an advanced algorithm, developed at Mass. Institute of Technology (MIT) that allows developers, builders and design-build firms to analyze energy-efficient and cost-effective configurations of different building envelopes, heating and cooling systems. By analyzing entire systems and comparing different configurations, the developers of Green Key Village can find the sweet spots that save maximum energy, lower operating costs, and provide the greatest returns on investment.

Greg Thomas, managing member for Green Key Village, LLC, said, "When embarking on this new development it was crucial for us to fully understand all of the cost, energy and sustainability build options available to us in detail. For each individual design plan, this meant considering more than 10,000 unique variables. We also want our buyers to be able to choose from ten different, fully-sustainable designs. That's why we chose Ekotrope - the software is amazingly sophisticated but easy-to-use, enabling us to intuitively review and compare a wide array of build and material options."

CEO and founder of Ekotrope, Ziv Rozenblum, said "We're delighted to be working with Green Key Village on this unique building development, and know that our technology is the best fit for its exact need. We enable developers such as Green Key Village to design the best buildings in the most cost-efficient way. With Ekotrope, thousands of cost and energy-efficient design options can be evaluated in seconds, enabling developers to work within budget and to easily visualize and calculate the best sets of building components to meet their goals."