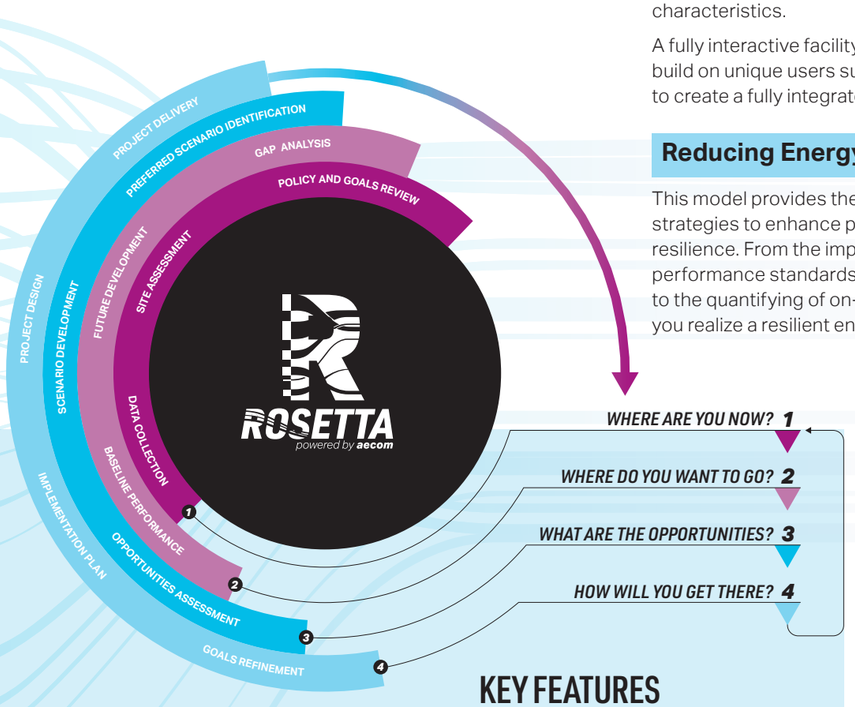
CAMPUS AND COMMUNITY ENERGY ASSESSMENT

Our Rosetta platform integrates campus modeling with opportunity analysis and strategic visioning to enhance the speed and quality of energy master planning and inform the design of high performance communities of the future.



◂ **Figure 1:** Our holistic energy planning process considers the site constraints and development goals to develop a clear vision for the community energy systems and infrastructure.

KEY FEATURES

- Internationally recognized experts in computational modeling and building simulation
- National and international capability
- Highlights key infrastructure considerations early in design process
- Assesses wide range of technologies to formulate energy strategy
- Allows both cost and time savings

As our new communities are embracing the need to consider the rapidly changing environmental and technological landscape in master planning, AECOM has developed an energy planning approach which empowers our clients to visualize a **carbon positive and resilient future**.

Through our Rosetta approach, our planners rapidly quantify and assess the energy performance of your campus or community and identify portfolio-wide energy strategies.

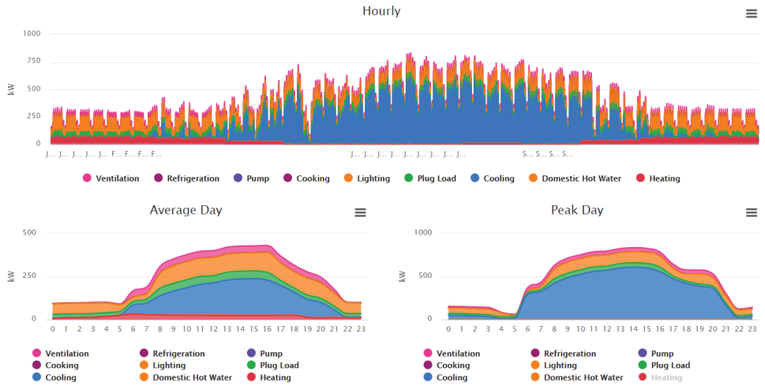
Community Energy Profiling

Leveraging our comprehensive global database of building and vehicle charging energy profile information, we develop a phased model of the development to map out future demand characteristics.

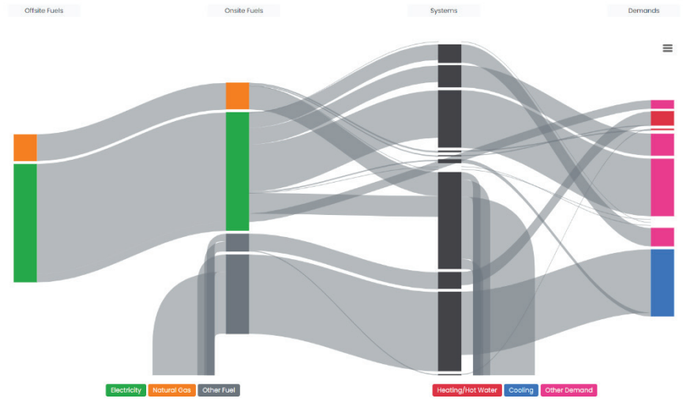
A fully interactive facility calibration process allows us to build on unique users such as data centers or manufacturing to create a fully integrated campus digital twin.

Reducing Energy Use

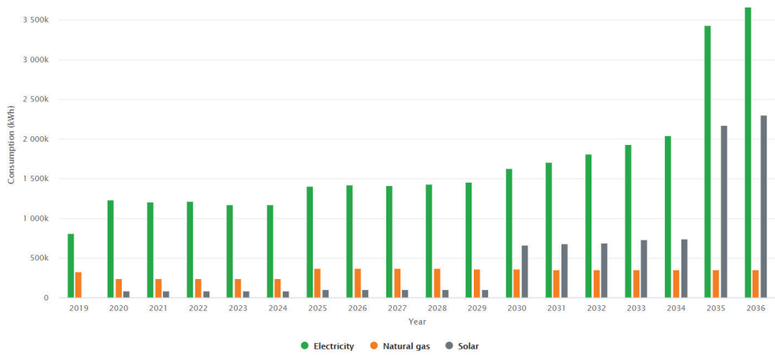
This model provides the basis for the assessment of strategies to enhance performance and improve campus resilience. From the impact of embracing best-in-class performance standards on required infrastructure capacity, to the quantifying of on-site generation potential, we can help you realize a resilient energy supply.



▲ **Figure 2:** Rapid modeling allows unparalleled insight into the nature of the development demand characteristics.



▲ **Figure 3:** Rosetta provides our engineers, planners, and clients a portal to understand energy flows and the implications of potential strategies.



◂ **Figure 4:** Our energy planning process considers development phasing against costs and GHG emissions to optimize the energy strategy.

District Thermal Energy Systems

The energy demand profile of the proposed community is assessed for opportunities for district thermal energy systems to improve performance.

From ambient energy loops to seasonal thermal storage, Rosetta evaluates the merits of various district strategies against development cost, performance, and emissions targets.

Renewable Strategies

The long-term viability of a community successfully achieving net-zero status will inevitably involve the large-scale deployment of renewable energy generation and the supporting infrastructure and controls to manage it.

Rosetta optimizes the nexus of demand, renewable supply, and energy storage to quantify the potential of supply strategies and the practicality of incorporating them into the development.

Optimized Phasing Plan

Rosetta informs the phasing of proposed energy systems through multi-variable optimization of the strategy selection against development goals. This process considers the interaction between strategies to ensure the resultant community energy goals are realistic, cost effective, and implementable.

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