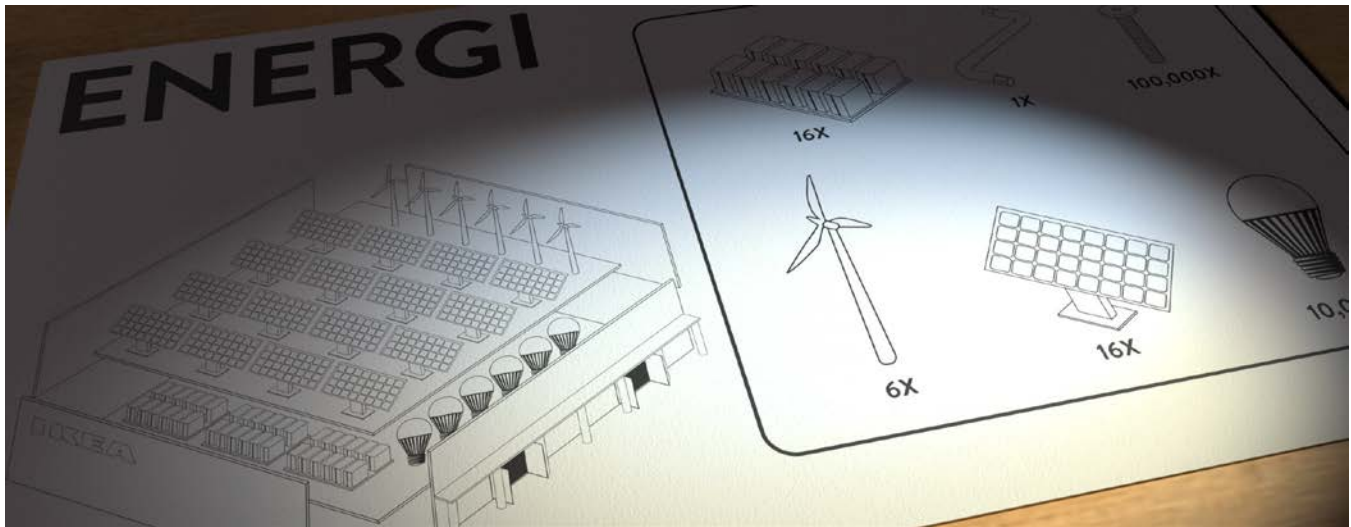


First Person—Energy at IKEA: For the Bottom Line



IKEA Pursues Solar, Fuel Cells, Geothermal, LEDs, and Much More

The Story in Brief

“We have a global goal of producing as much energy as we consume by 2020,” says Joseph Roth of IKEA’s U.S. Expansion/Property Public Affairs. Roth speaks with *EPRI Journal* about what drives IKEA’s renewable energy and efficiency initiatives and how it works with electric utilities to achieve its goals.

EJ: At a high level, what is your company’s energy vision—both as a consumer and producer of energy?

Roth: As an energy consumer, IKEA is a retailer with very large buildings that require electricity for air conditioning, display lights, refrigeration for our food operations, and much more. As an energy producer, we’re investing in renewable energy generation for our buildings. That said, we rely on the grid for a portion of our consumption and for backup power. The level of grid reliance varies from location to location. As renewable technologies advance, we expect to continue growing on-site generation but still anticipate that our buildings will rely on the grid for backup. We recognize the grid’s value as a safety net.

While we are an energy producer, our focus remains on our core retail business. Our energy generation activities are aimed at supporting our locations and our commitment to minimizing impacts on the environment. Our locations remain connected to the grid, and our on-site generation does not result in excess power.

EJ: What are IKEA’s goals with renewable energy and energy efficiency? How will IKEA reach them?

Roth: Reflecting our Swedish heritage, IKEA has a strong respect for the environment. We have a global goal of producing as much energy as we consume by 2020. Our strategy is focused on investing in renewable energy at our buildings wherever and whenever possible as well as off-site to enhance our energy generation. Currently, 90% of our U.S. stores, distribution centers, and offices have rooftop solar, for a total of approximately 42 megawatts of generation capacity. We have four stores with solar water heating, two stores with geothermal for heating/cooling, and we own two off-site wind farms in the U.S.

Globally, IKEA evaluates locations regularly for conservation opportunities. We integrate innovative materials into product design; take steps to conserve water, forests, and other natural resources; and flat-pack goods for efficient distribution. Sustainability efforts in the U.S. include recycling waste material; incorporating energy-efficient HVAC and lighting systems, recycled construction materials, skylights, and water-conserving restrooms into buildings; eliminating plastic bags from the check-out process; selling only LED bulbs in our lighting department; and using only LEDs for exterior and interior lighting. IKEA has installed electric vehicle charging stations at 30 stores, with more planned.

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EJ: What drives these initiatives?

Roth: The Swedish respect for the environment is ingrained in our culture and incorporated into day-to-day business. As a privately-held company, IKEA has flexibility to pursue innovative energy and sustainability initiatives. We evaluate potential initiatives from a return-on-investment perspective, assessing the economics of proposals and the potential impact on a location’s—or the company’s—bottom line.

EJ: How does your company work with electric utilities to achieve these goals?

Roth: IKEA partners with various utilities across the country where we have buildings, participating in large customer programs focused on renewable energy, demand management, and energy conservation. We work with utilities to ensure that our solar and geothermal projects serve our buildings’ needs while also meeting grid requirements. We recognize that our needs and operations are complex and may present opportunities to implement utility pilot programs. We welcome opportunities to be pioneers in testing new approaches for managing, tracking, or pricing energy use.

IKEA is also open to deploying and testing new generation technologies in collaboration with open-minded utilities. At seven stores, we recently installed fuel cells, all of which are operating smoothly.

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EJ: What will your relationships with utilities look like in 5 years? As a customer, what new services and products will you seek from utilities?

Roth: We strive to forge strong and productive relationship with the utilities that serve the areas where we operate. We continually look for opportunities to conserve energy, reduce operational costs, and minimize environmental impacts while also maintaining affordable, reliable utility service. Heating and cooling systems, escalators, and interior and exterior lighting are just a few of the energy efficiency opportunities on our radar.

Utilities can help us evaluate our energy use patterns and identify actions to reduce consumption and costs. As the technology for commercial energy management systems advances, utilities can help us deploy these systems and make optimal use of them.

Despite our commitment to renewable energy generation on-site, we recognize the value of staying connected to the grid and the importance of supporting investment in utility infrastructure to ensure continued grid reliability.