

NREL aims to improve building energy performance with new web-based tool

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The Energy Department's National Renewable Energy Laboratory (NREL) has developed a web-based tool to help consumers better understand the energy performance of building-related products. The Technology Performance Exchange (TPEX) is a portal that helps manufacturers and other organizations that measure and test products easily share performance data with product consumers.

"Many organizations refrain from moving forward with the procurement of energy efficient and [renewable energy](#) solutions because they don't have access to the performance data needed to evaluate and compare high impact technologies against organizational and energy performance criteria," said Engineer Daniel Studer, TPEX project manager for NREL's Commercial Buildings Research Group. "TPEX provides a way for manufacturers and consumers to come together to exchange the information necessary to move these projects to the implementation stage."

The TPEX helps to reduce analysis uncertainty through the use of data entry forms (DEFs), standardized documents that identify the minimum product-specific performance parameters needed to evaluate a product's energy performance. Information provided through the TPEX can be used in conjunction with any number of evaluation tools and methods.

By asking manufacturers to provide performance data using DEF-defined parameters, TPEX users are able to perform apples-to-apples comparisons of [products](#). Consumers can browse the TPEX to find the

most appropriate product for their particular use, helping to ensure that high-impact technologies and products are deployed in the market.

The benefits of the TPEX are not restricted to consumers. Utilities, industry analysts and others interested in the energy performance of building products and materials will also find data provided by the TPEX to be of interest.

"Electric and gas utilities can use the TPEX to help streamline their product evaluation, incentive, and rebate program workflows," Studer said. "Anyone who wants to investigate the energy performance of a particular product or technology class will benefit from the information provided by the TPEX."

Currently, the TPEX accepts data for 17 distinct product categories, ranging from solar photovoltaic modules to variable refrigerant flow units. For more information and a complete list, go to the TPEX website. Manufacturers with products in these categories can share their data, either manually through the TPEX user interface, or automatically, using the site's application programming interface.

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Provided by National Renewable Energy Laboratory

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