

SPOTLIGHT

ECOLOGICAL IMPACT

UW'S TESTBEDS FACILITY PROVIDES OPEN ACCESS FOR CLEANTECH RESEARCH.

By Julia Goldstein

THE WASHINGTON CLEAN ENERGY TESTBEDS

center is taking the concept of universityindustry collaboration to a new level. The University of Washington's Clean Energy Institute, which focuses on research in solar energy, energy storage and finding better ways to integrate alternative energy sources with the power grid, opened the 15,000-squarefoot Testbeds facility in February with \$8 million in state funding.

Housed in a former sheet-metal manufacturing plant near University Village with room to grow to 90,000 square feet, the Testbeds offer industry-scale manufacturing equipment for entrepreneurs to develop and test new products. It also has a scientific staff to provide training and guidance as well as an entrepreneur in residence to mentor fledgling companies.

The fabrication lab includes an impressive machine that can print solar cells onto flexible plastic films in roll-to-roll fashion. It is the only machine of its kind in the United States. Products that make use of such equipment offer the potential to develop a competitive domestic solar energy industry. Also available are advanced 3D printing facilities that use an array of thermal materials. One lab includes battery testers, electron microscopes, a solar tester to evaluate the efficiency of solar cells and an environmental room where users can set both temperature and relative humidity to test products under various conditions.

"We are not telling some people your idea is good enough for us and yours isn't," says Dan Schwartz, director of the Clean Energy Institute. "We are providing access to the tools so that people who can raise the money can come in and try their ideas."

While the facility opened with equipment purchased with state funds, the Testbeds center hopes to purchase additional equipment through user fees. Companies retain the intellectual property associated with their research. UW researchers have discounted the price of gaining access to the equipment. One goal is to encourage more UW spinouts to commercialize university research.

Entrepreneurs can apply for up to \$1 million in Small Business Innovation Research grants to pay for enough time at the Testbeds to bring an idea from concept to scalable product. Phase 1 money typically pays \$150,000 to \$225,000, enough to do an initial proof of concept. Phase 2 funding typically provides an additional \$500,000 to \$750,000, which could take a product from initial prototype to something that could be shown to a customer.

The Testbeds are open to researchers from around the world, but most of the 65 users so far are local entrepreneurs. **SB**



FOR A HEALTHIER PLANET.

A UW researcher works on a solar film at the Washington Clean Energy Testbeds.