



## Advanced Renewable Energy and the Environment

### Benchmarks

- Expertise in energy and the environment has been recognized in national and international publications, like *The Economist*, *Newsweek*, and the *Wall Street Journal*
- Winner of two of only 11 Solar Energy America awards in 2007
- Winner of one of only six projects funded by the U.S. Department of Energy for biofuels research in September 2008
- A UT environmental researcher led an expert delegation to assess the Three Gorges Dam for impact on water, land, wildlife, economics and society (reported in *Science Magazine*)

### Goals

- Help Northwest Ohio become a national leader in alternative energy research, production, and use
- Increase industry employment in Northwest Ohio in advanced renewable energy and the environment at a 15% per year rate for the next 10 years
- Become an emerging national leader in environmental and ecosystems sciences, monitoring and remediation
- Identify a new dean for the newly created School of Solar and Advanced Renewable Energy by the 2010-2011 academic year
- Produce 10 post-incubation companies by 2011 through The Scott Park Campus of Energy and Innovation

### Metrics

*Over the past five-years*

#### Economic Contribution Measures:

- Invention Disclosures: **54**
- Technology Licenses: **32**
- Industry Research funding: **\$4 million**
- UT Spinoff Companies: **Five spinoff companies**
- Industrial Collaborators: **30 companies**

#### Faculty Expertise Measures include:

- Publications: **924 publications** by the 59 core faculty members
- Citations per faculty member: **91.4**
- Grants and contracts: **\$54 million** (past three years)

The Center of Excellence in Advanced Renewable Energy and the Environment addresses the need for new clean-energy technologies and a better understanding of complex environmental systems necessary for solving global challenges that will demand decades of focused attention and interdisciplinary contributions. Over the past ten years, **The University of Toledo** has invested in faculty talent and the research infrastructure that are helping Northwest Ohio emerge as a global center for advanced renewable energy.

### Driving Economic Advancement

The Center of Excellence in Advanced Renewable Energy and the Environment's core areas of research and technology development are focused around solar, biomass energy, wind, energy storage, conversion and management, and ecosystems. These efforts support local industrial growth in companies that are expanding their products to become competitive in the global markets.