



TENNESSEE



**Department of Economic &
Community Development
Energy Policy**

Clean Energy Technologies

Toll Free 1 800 342-1340



Governor Bredesen's *Energy Edge*

- Energy and environmental issues have been a focus of our state and nation's agenda for several years.
- On October 20, Governor Phil Bredesen announced Tennessee's alternative fuels initiative to increase production and use of cleaner renewable energy resources.
- How can Tennessee leverage business investments and US DOE Energy Efficiency and Renewable Energy grant opportunities ?



Clean Energy Technologies

“Clean-tech” venture capital investments for 2007 are projected to add more than \$2 billion in North America.

Clean Edge Newsletter



Investment Projections

2005 - 2015 in Billions Dollars

<i>Clean Energy Technology</i>	<i>2005</i>	<i>2015</i>
Biofuels	\$15.7	\$53.5
Wind Power	\$11.8	\$48.5
Solar Power	\$11.2	\$51.1
Fuel Cells	\$ 1.2	\$15.1
Total	\$39.9	\$167.2

Source: Clean Edge - Clean Edge Trends 2006



Grow Clean Technology Business

- Tennessee Business Investment in Clean Energy
- Network of partnerships & shared commitments deliver results
- Oak Ridge National Laboratory (ORNL) in January 2005 reported that each \$1 investment in State Energy Program Funding Yields \$7.23 in Annual Energy Cost Savings.
- The study represents the most in-depth metrics to date on benefits of the State Energy Programs.



Expand Clean Technology Programs

- Currently have small business loans.
- Grants to assist Tennessee businesses in the identification, purchase and installation of renewable and other clean energy technologies.
- Solar technologies: photovoltaic (PV) and solar thermal, wind electric generating systems, hydrogen fuel cell and solar hybrid lighting systems are eligible.



Investments - Jobs

an analysis completed for the Solar Energy Industries Association (SEIA), estimated “...Tennessee would reap 553 new solar industry jobs and \$307 million in new business investments by 2015...” due to increased solar support activity.



Existing Cornerstones

Fuel Cell Installations, Manufacturing and Research



HyPower &
MTSU,
Murfreesboro



Dana Incorporated,
Paris, TN



Nashville



TTU CMR
Fuel Cell
Components

UT Chattanooga



NTRC – Knoxville





Existing Cornerstones



**Buffalo Mountain,
Oliver Springs**



**ZEH Lenoir City,
Loudon County**



**Wind Towers
Chattanooga**



**Formerly AFG
Kingsport**



**Alternative Energy
Components**



Clean Energy Technology Education Sites

- | | |
|---------------------------|-----------|
| Alvin C. York Institute | Jamestown |
| Campbell Co. High School | Jacksboro |
| Morgan County Voc. Center | Wartburg |
| Centennial High School | Franklin |
| Scott Co. High School | Oneida |



**Hybrid Solar Lighting
Oak Ridge**



Sharp Solar Memphis

TENNESSEE



Dept of Economic & Community Development
Energy Policy



University of Tennessee

“the state is our campus”





WHY?

- New Product Manufacturing with GLOBAL Demand
- High Paying - Technical Employment
- Small Business Development Opportunities
- Advance Technically Skilled Workforce
- Bootstrap existing Construction and Technical Licenses:
Solar – Electrician, HVAC, Plumber, etc
- Create clean, renewable energy use, impact pollution reduction, environmental quality
- Life Cycle Costs - Photovoltaic cells in test fields show continuing service for more than 25 years



Tennessee Clean Energy Technology Grant

\$ 4,000,000 designated for grant program



Purpose

**Supplant the use of fossil fuels
using renewable and other
clean energy technologies**



Eligible Recipients

- **All existing Tennessee retail, commercial and industrial companies**
- **Any size company**
- **Non-profits, governmental and non-profit entities are not eligible**



Eligible Systems

- **Solar Electric Generating (PV)**
- **Solar Thermal Water Heating**
- **Wind Energy**
- **Hydrogen Fuel Cells**
- **Hybrid Solar Lighting**



Grant Amounts

- **40% of installed system cost up to a maximum of \$75,000**
- **Paid after completion and commissioning of project**



Application Requirements

- **An application is required**
- **A project design proposal is required**
- **Design/ Economic feasibility analysis is required**
- **Do not start work until application is approved**



Application Process

- **After economic feasibility review, package presented to department loan and grant committee**
- **If approved, applicant is notified and given permission to proceed**
- **Project is completed and applicant notifies ECD**
- **Grant document is completed, signed by applicant and processed for payment**



Energy Policy

**Tennessee Department of Economic &
Community Development**

**Wm. R. Snodgrass TN Tower, 10th Floor
312 Eighth Avenue North
Nashville TN 37243-0405**

1-800-342-1340 or 615-741-2994

<http://www.state.tn.us/ecd/energy.htm>