

Vis Solis Inc.



TREEDC – Tech University Tennessee
National and International Renewable
Energy Summit, Oct. 13, 2014

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About us – vis solis corporate

- “vis solis” is Latin and stands for:
“The Power of the Sun” www.vis-solis.us
- Development, Structuring, Engineering, Procurement, Construction, Financing, Operation of PV Solar Projects
- Corporate Office established in Neubrandenburg, Germany in April 2009
- Installed about 50 MW in Germany, Italy, USA
- Subsidiary Vis Solis, Inc. established Aug 2010 in Franklin, Metropolitan Area Nashville, TN
- Vis Solis is a Diamond Founding Member of TREEDC

Developers of world-class PV power plants



10/13/2014

About us – vis solis US story

- Foundation of subsidiary Vis Solis, Inc. in August 2010
- Installation of 3 MW ground mount in Fayetteville, TN
- Installation of 6.1 MW ground mount in Tucson, AZ
- Development of 800 kW Dual-Axis-Tracker in TN
- Installation of 200 kW rooftop in Lenoir City, TN
- Installation of 550 kW roof projects in TN & AL 1st. Q. 2013
- Dena Solar Roof Program Award for 50 kW Dual-Axis-Tracker in Oak Ridge National Lab Heritage Center
- Vis Solis is one of the largest owners of PV in TN 4 MW / 16 projects
- Focusing on co-development and consulting of about 750 MW in NV, NC, GA, Chile, and the Philippines
- Dena Renewable Energy Solar Solution Award for 78 kW in Puerto Princesa, Palawan Philippines

Powerhouse One – 3.0 MW



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vis solis – 3 MW Project Fayetteville, TN



3 MW (4 x 750 kW) in TN in 10/2011
Vis Solis Inc. became a “Market Leader”
2011 In the Tennessee Valley



The small county City of Fayetteville, TN
became 3rd largest Solar City in terms
kW PV per Capita in the USA (SEPA)

Powerhouse Two

200kW Tellico Plaza, Lenoir City, Tennessee



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vis solis – UA Tech Park Tucson, AZ

SEPA Conference visiting our site under construction in April 2012



6.1.MW Amorphous Si Thin-Film
Project in the designated Solar Zone
of the University of Arizona in Tucson

Tucson Electric Power (TEP) was
elected “Utility of the Year 2011” by SEPA



Arizona 6.1 MW DC



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10

Installed 11 Systems @ 50kW on Commercial Roofs in TN/AL in 1st Q. 2013



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11

Rooftop Solar – Knoxville, TN



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12

OAK RIDGE SOLAR PARK dena Solar Roofs Program

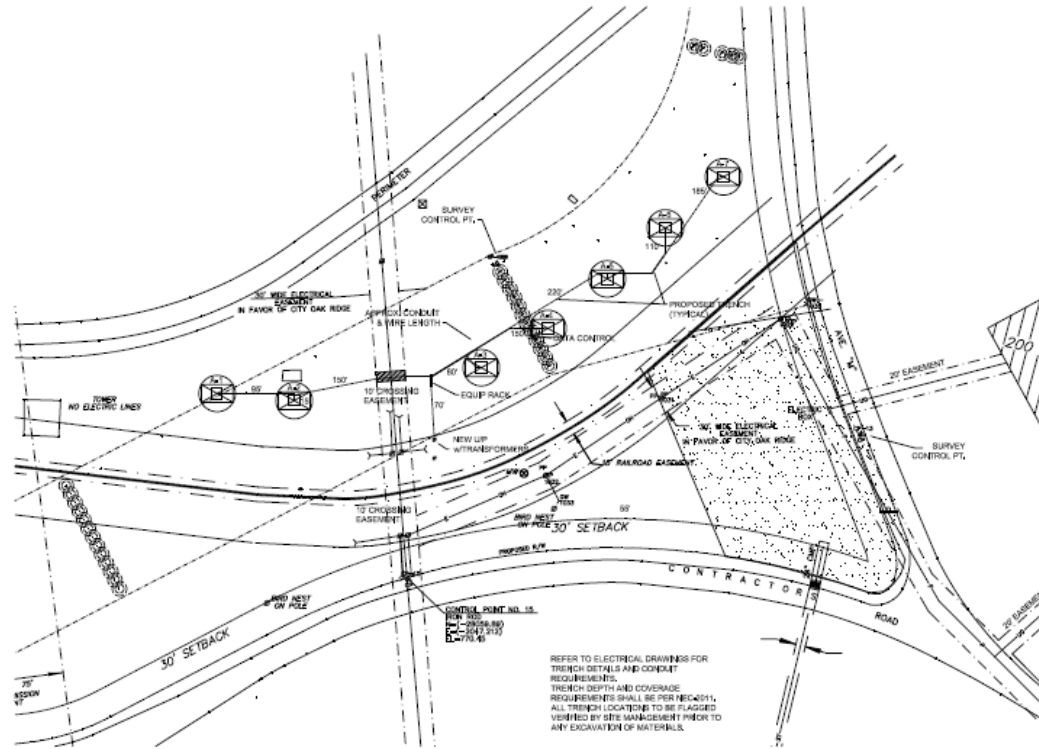


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Tracking Array – Oak Ridge, TN



OAK RIDGE SOLAR PARK Dual-Axis-Tracker



JAMES A. CLANCY
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PROPOSED PHOTOVOLTAIC ARRAY
OAK RIDGE HERITAGE CENTER
SOLAR TECHNOLOGY PARK
OAK RIDGE, TENNESSEE

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NATIONAL PARK NEW JERSEY 08063
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DATE	DESCRIPTION

SP-2



OAK RIDGE SOLAR PARK

Dual-Axis-Tracker

Flagship Project - German Technology

- Market leader with high-tech sensor
- One of the most innovative enterprises 2010
- 55,000 DEGERenergie installations worldwide
- Tracks the solar resource instead of just the sun
- 45% higher yields and ROI
- Ideal for capacity limits



OAK RIDGE SOLAR PARK

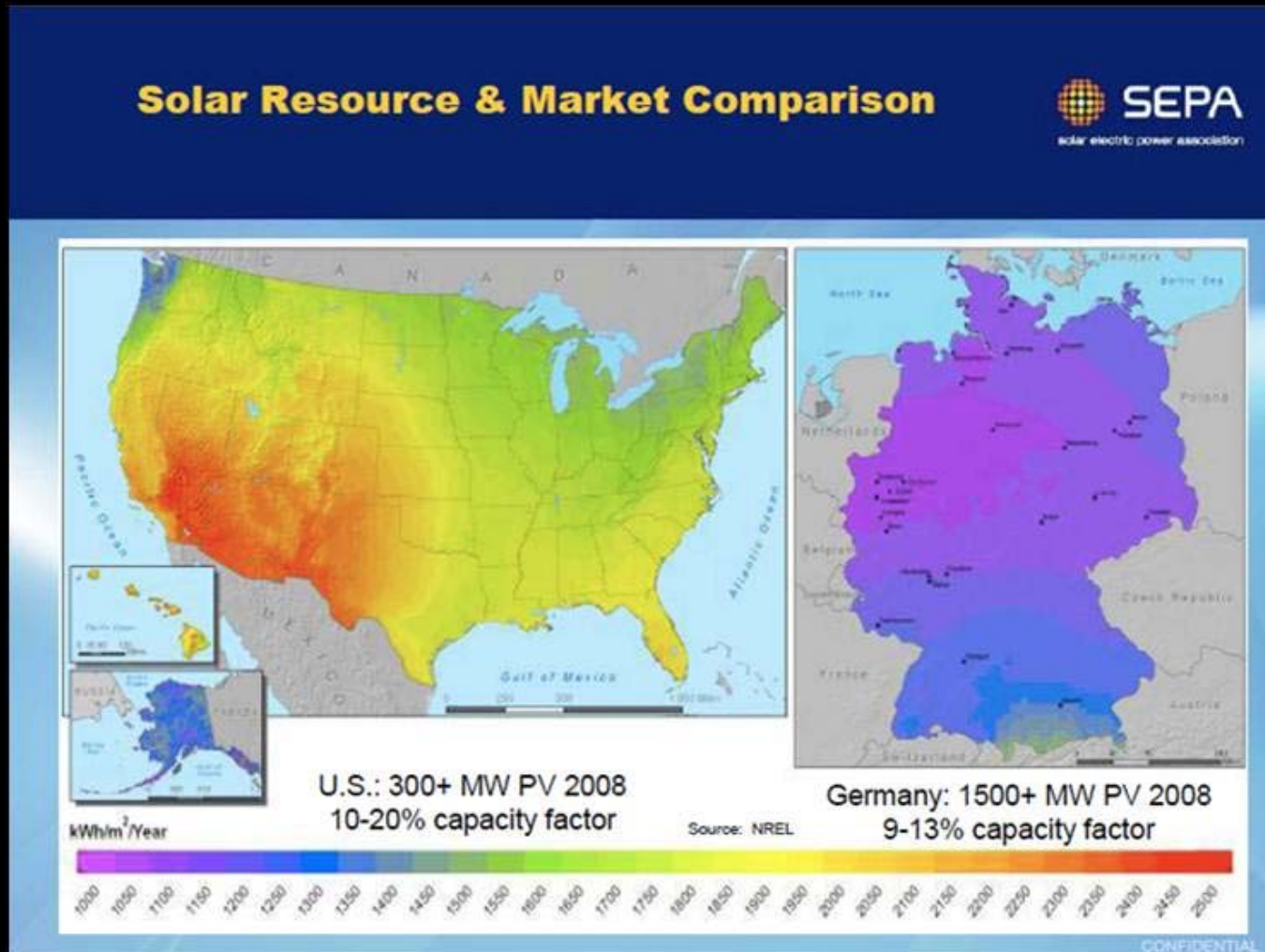
Why Oak Ridge Heritage Center?

- Representative location at the former DOE complex
- Historically used for enriching uranium for 1st nuclear bomb
- ORNL is the largest science and energy laboratory in the Department of Energy
- ORNL partners with the State of TN, Universities, and Industries
- ORNL is home of several of the world's top computers and is a leading neutron and nuclear energy research
- High science and research reputation and recognition worldwide
- Former Duct Bank was of no better use than solar

Development of 800 kW in TN

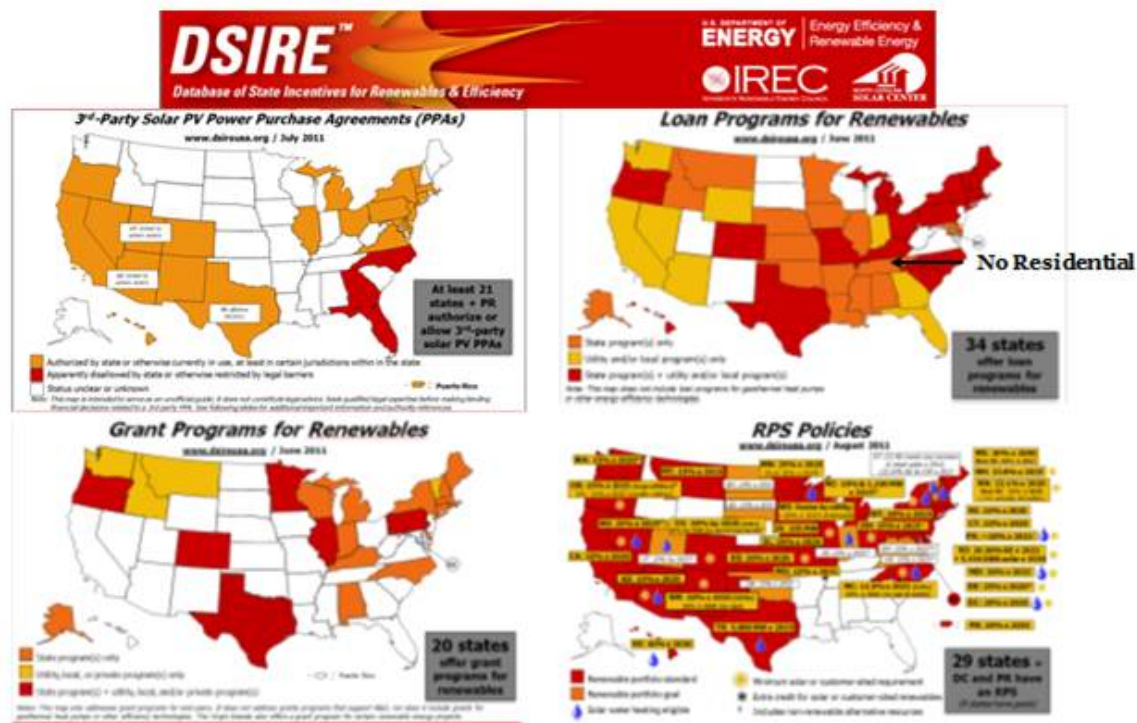


Solar Resource in USA vs. Germany



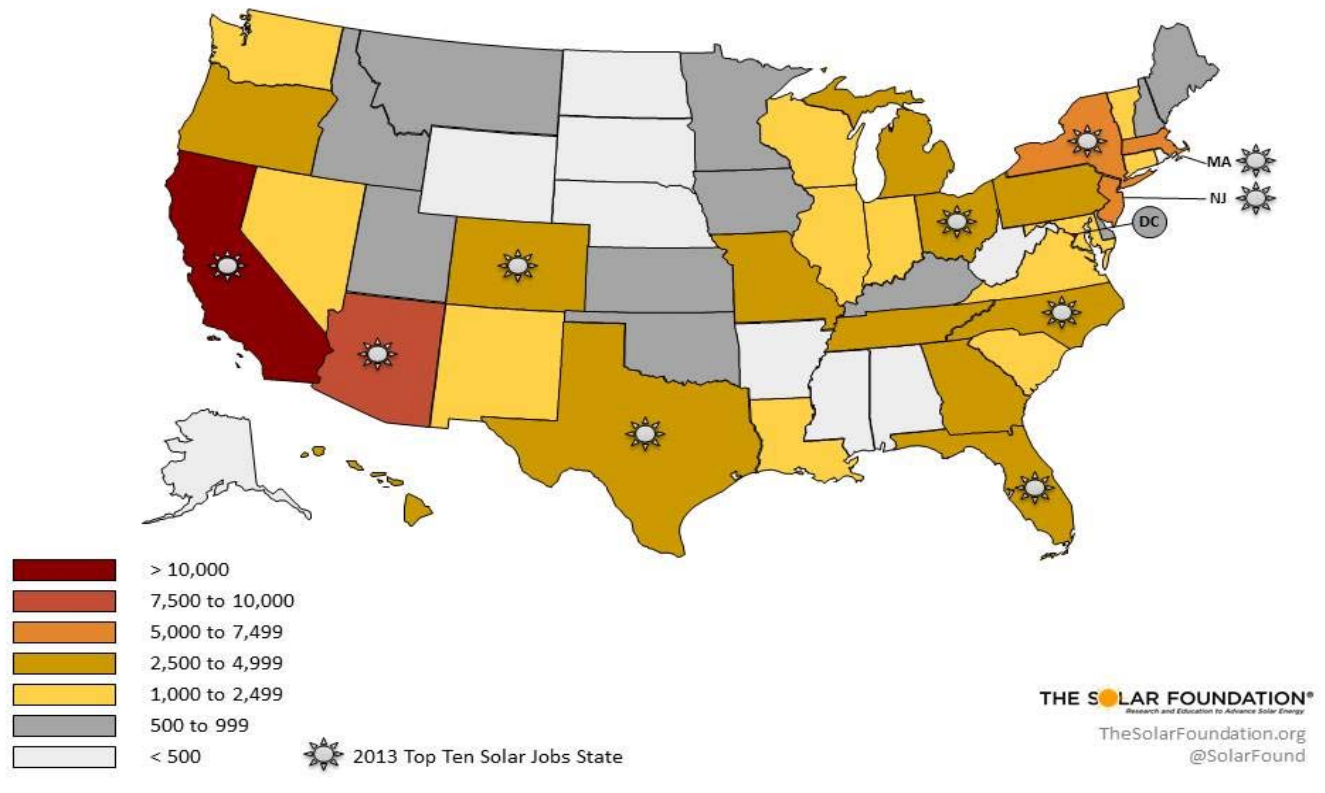
No RPS and no Net-Metering in TN

Tennessee Lacking



Solar means jobs

Solar Jobs by State - 2013



Tennessee Solar Jobs

Tennessee | The Solar Foundation

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TENNESSEE 2,800 SOLAR JOBS



TOP 3 SOLAR
SECTORS BY
EMPLOYMENT

MANUFACTURING
INSTALLATION
SALES & DISTRIBUTION

SOLAR JOBS RANK (CHANGE SINCE 2012): **12 (+2)**

CHANGE IN SOLAR JOBS SINCE 2012: **+500**

SOLAR JOBS PER CAPITA RANK (CHANGE SINCE 2012): **18 (-4)**

TOTAL SOLAR COMPANIES: **133**

MAXIMUM SOLAR RESOURCE RANK: **26 (5.06 kWh/m²/day)**

NUMBER OF HOMES POWERED BY SOLAR RANK: **17 (~5766 HOMES)**

ELECTRICITY PRICE RANK (MOST EXPENSIVE): **25**

LEGAL STATUS OF THIRD-PARTY OWNERSHIP: **UNCLEAR**

NET METERING POLICY GRADE: **N/A**

INTERCONNECTION POLICY GRADE: **N/A**

RENEWABLE PORTFOLIO STANDARD (RPS) TARGET: **N/A**

RPS SOLAR CARVE-OUT TARGET: **N/A**

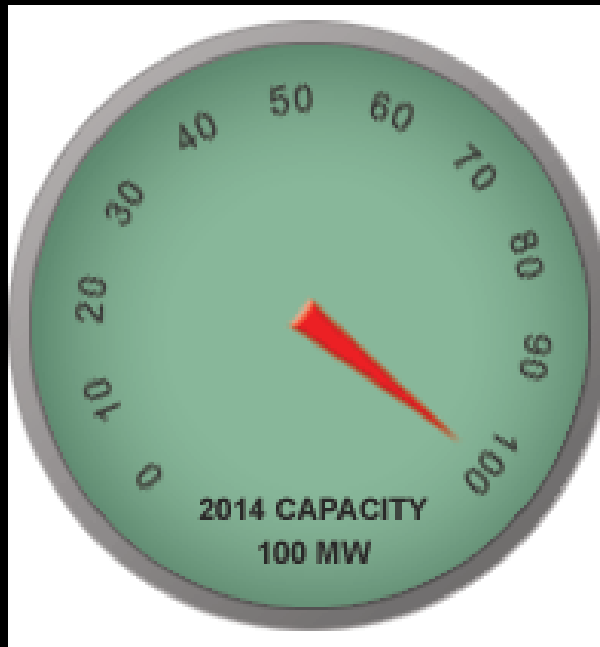
Solar employment data as of: November 2013

[VISIT THE DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY FOR MORE STATE SOLAR POLICY INFORMATION \(http://www.dsireusa.org/polar/\)](http://www.dsireusa.org/polar/)


[FOR MORE SOLAR INDUSTRY MARKET DATA SEE THE SFA/GTM RESEARCH SOLAR MARKET INSIGHT REPORT \(http://www.nrel.gov/research/resources/solar-market-insight/\)](http://www.nrel.gov/research/resources/solar-market-insight/)


TVA Dashboards 2014

100 MW RSO / 16 MW SSI









Does TVA have the right vision?



Our VISION 

ONE OF THE NATION'S LEADING PROVIDERS OF LOW-COST AND CLEANER ENERGY BY 2020

Acting to meet the region's needs for the future, while improving our core business today.

-  Low Rates
-  High Reliability
-  Responsibility
-  Cleaner Air
-  More Nuclear Generation
-  Greater Energy Efficiency

Carlos H. Mayer
President & CEO

Timothy E. Hayes
COO

R. Keith Gordon
General Counsel



*Developers of world-class solar electric generating systems –
financing, engineering, procurement, construction and operation.*

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Thank you for your attention!

