



HERE COMES THE SUN



by **Matt Kisber**

In February 2008, Governor Phil Bredesen called me to his office to discuss an idea to attract new capital and create new jobs in our state. It isn't unusual for Governor Bredesen, a successful healthcare entrepreneur, to talk about new strategies for changing our state's economy, but the focus of his conversation and the level of his enthusiasm took me by surprise. No one at the time was suggesting Tennessee could take a leadership role in the creation of new jobs around sustainable energy, but clearly the Governor believed it could. And he wanted a strategic plan aimed at moving our state to the forefront.

Following his return from the National Governors Association conference in Washington, D.C., he was clearly fired up about clean energy. After hearing presentations on the topic by General Electric CEO Jeffrey Immelt and New York Times columnist Tom Friedman, Governor Bredesen understood there would be opportunities for those states that created the right environment for clean energy jobs. This was an industry poised for growth, and the states moving quickest would be in a position to reap the rewards of high-skill, good-paying jobs.

Cultivating a thriving clean-energy economy is not simply an issue of environmental stewardship, he said, or even of energy assurance and national security. Rather, developing an industry around understanding and deploying clean energy is a critical component of job creation. The states that can grasp this principle and get out in front of it strategically will be the leaders of the 21st century economy.

Sitting across from me that morning, the governor asked me to work with Commissioner of Revenue Reagan Farr to explore this emerging industry and craft a plan to put Tennessee at the leading edge of green innovation and deployment. The result is a series of incentives and programs we've called our Green Energy Tool Kit and a whole series of initiatives that have found broad-based support across Tennessee.

Our Strategy

With that solid foundation on which to build, our team began to craft a point-by-point strategy for growing Tennessee's clean energy econ-

omy. Our strategy is based, at the most fundamental level, on leveraging our business climate, existing partnerships, and collaborative approach to development. Additionally, we are committed to developing and utilizing smart, flexible, and innovative incentives for clean energy companies.

We have clearly defined our target sector and are working tirelessly to recruit what the governor and I call "transformational" companies. These are companies that not only will lead innovation in their fields but will attract complementary companies such as customers and suppliers to locate in close proximity. In this way, they have an exponential effect on the economies of the surrounding communities, and Tennessee is able to fulfill the final point of our strategy, which is to build success up and down the solar energy value chain.

Major Clean Energy Investments

Tennessee's aggressive strategy to build a clean energy sector is already producing results. In just three short months between December 2008 and February 2009, our state welcomed the location of the world's two largest manufacturers of polycrystalline silicon, a major component of photovoltaic cells. Hemlock Semiconductor announced they would build a \$1.2 billion plant and create 500-800 jobs in Clarksville, and German company Wacker Chemie AG announced a \$1 billion facility and 500 new jobs in Bradley County. As a result of these significant investments, Confluence Solar announced this January that they would invest \$200 million and create 250 new jobs at a solar production facility in Clinton.

Hemlock, Wacker, and Confluence are huge momentum-builders for Tennessee's solar industry, but they are only the most recent success stories. Solar-oriented companies have been flourishing in all three regions of the state for years. In Memphis, longtime Tennessee company Sharp shifted its manufacturing capacity from microwaves and other electronics to solar panels in response to rising demand. At the other end of the state, AGC Flat Glass in Kingsport is an innovative producer of photovoltaic glass. Shoals Technologies Group, a maker of solar energy panel components,

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the future of America's economy.**



located its headquarters and a manufacturing facility to Gallatin in May 2008.

As the industry takes root, Tennessee's focus continues to be the promotion of growth up and down the solar supply chain. Ideally, solar panel manufacturers will be able to buy their raw materials right here in Tennessee, and installers will mount solar displays with panels made and purchased here as well. Major leaps forward like the Hemlock and Wacker projects, combined with our foundation of companies specializing in solar energy, leave no doubt that Tennessee is well on its way to achieving that goal.

Volunteer State Solar Initiative

The American Recovery and Reinvestment Act in response to the challenges our economy is facing has offered our state an opportunity to advance our solar initiatives in accord with President Obama's ambition of increasing renewable energy use nationwide. In September 2009, the U.S. Department of Energy approved Governor Bredesen's Volunteer State Solar Initiative, a two-pronged strategic plan to spend \$62.5 million in ARRA funds to promote solar energy in Tennessee.

The first aspect of the Volunteer State Solar Initiative is the Tennessee Solar Institute at the University of Tennessee, to be managed jointly by the university and Oak Ridge National Laboratory. The Solar Institute will be a center for excellence bringing together scientists, engineers, and technical experts with business leaders, policymakers, and industry workers to help speed the improvement and deployment of solar photovoltaic technology. The institute will also create the Solar Opportunity Fund to underwrite a series of solar innovation and installation grants.

The second portion of the Volunteer State Solar Initiative is the West Tennessee Solar Farm, a 20-acre, five-megawatt power generation facility along Interstate 40 in Haywood County. As one of the largest installations in the Southeast, the farm will serve as a demonstration center for how solar power works. A welcome center will educate visitors about the technology and raise awareness of the role renewable energy plays in Tennessee's environment and economy.

The power generated at the facility will be sold to the Tennessee Valley Authority, and the revenue will be invested back into expansion of the solar array and technological innovation. Our investment will generate exponential returns, and that's why we're calling the facility a farm.

Planning is currently underway for both the Solar Institute and the Solar Demonstration Farm.

**Deliberate Strategy,
Long-Term Payoff**

Here in Tennessee, we're proving unequivocally that green jobs are the future of America's economy. This is not a trend, not an emotional hot-button issue that will fade from memory as power changes hands. Renewable energy is here to stay.

And as the economic impact on deck for Tennessee as a result of the Hemlock, Wacker, and Confluence projects shows, economic development and environmental sustainability absolutely can go together. Green jobs are the future of economic growth, and early adopters of that principle can and will come out ahead of the pack economically.

Thanks in large part to the success we've experienced early on, Tennessee is ideally positioned to succeed in this growing arena. We've got the human capital, the industrial base, and the mounting reputation to lead the clean energy sector not only regionally but nationally. In fact, the Pew Center for the States called Tennessee one of only three states with a "large, fast-growing" clean energy economy.

But our success — now and in the future — is no accident. We've taken pains to craft our strategy, refine our goals, and hone our approach. We've aggressively taken steps to cultivate a culture friendly to green business. And now, I believe we have not only achieved remarkable success but also set the stage for future progress. Today's accomplishments in Tennessee are only the beginning of what I expect to be long-term, sustainable growth in the solar industry for decades to come.

Here comes the sun, indeed.

Matt Kisber is the commissioner of the Tennessee Department of Economic and Community Development.