Opinion: State can be a leader on clean energy

The Tennessean
By Gov. Phil Bredesen
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Back in February, I spent a few days with the National Governors Association in Washington. Energy was the main topic of conversation.

At the time, our nation was reeling from news of $100-a-barrel oil. Now, less than four months later, that discussion seems like the good ol' days. Today, it's near $143 a barrel and $4 per gallon of gas. It's the kind of ground shift that exposes the ugly realities of rising energy demand. And it signals the need for a comprehensive energy plan, in Tennessee and across the U.S.

Obviously, state government can't on its own affect oil prices and the global energy market. But there's no shortage of common-sense strategies we can pursue to drive efficiency and ease overall demand here at home, whether it involves electricity, fuel or other sources.

First, we've got to acknowledge our shortcomings. Then we've got to roll up our sleeves and get to work.

It's no secret Tennessee has energy-consumption problems. For example, thanks to historically inexpensive power, we have the nation's highest per capita residential electricity usage. Meanwhile, the Southeast spends just one-fifth of the national average on energy efficiency.

To sort through the challenges and opportunities, I convened the Governor's Task Force on Energy Policy. I'm chairing the group's monthly meetings, and we'll offer a series of recommendations that will serve as the basis for new initiatives and laws in 2009.

State can lead by example

Most immediately, I want state government to do a better job leading by example. After all, it's hard to claim moral authority unless we're doing our part. Whether it's requiring efficient Energy Star appliances and equipment in our buildings or establishing vehicle-idling policies, we're moving toward significant cultural changes in state government.

Additionally, the task force is looking at ways Tennessee can be more of a leader in the development of clean-energy research, technology and products.

UT and Oak Ridge National Laboratory, with the state's support, already are pioneering cleaner biofuel initiatives. ORNL is making use of its supercomputing power to help study climate change. Partners like the Tennessee Valley Authority and scores of individual businesses and companies are committed to driving innovation.

Nuclear power and renewable energy sources like solar and wind need to be part of the master plan. But when it comes to renewables, we need to change the way we think about them.

Too often, government approaches big ideas in small ways. The result is, we end up tinkering around the edges. To be successful we've got to reach the kind of critical mass, or scale, that's necessary to make a big impact and help reduce our reliance on coal-fired power.

Ultimately, we'll get there. But as we work toward long-range aspirational goals, we need to look right now at the waterfront of potential policies that can drive efficiency and conservation in both the public and private sectors.

The best way for Tennessee to get a handle on energy, in the short term, is to find ways to consume less.

We should be aggressive in our search for energy efficiency

The Tennessean
By Sen. Rosalind Kurita
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Higher energy prices have put new emphasis on the work of Gov. Phil Bredesen's Task Force on Energy Policy, a group charged with helping Tennessee become a leader in energy efficiency and conservation.

The governor should be applauded for seeing an opportunity to make Tennessee a national leader in the fight to lower energy prices through efficiency and conservation as well as seeing the opportunity to create jobs in Tennessee.

While the long-term goals of the task force include finding ways to expand the use of alternative fuels and renewable energy sources, Gov. Bredesen has named an ad hoc group to develop and implement immediate actions for what state government is able to do to cut electricity use in state buildings and gas consumption in the state's fleet of vehicles.

I agree with Gov. Bredesen that efforts to reduce consumption should start with state government. We should lead by example if we really want to encourage all our citizens to utilize energy efficiently and reduce what we can, as well as maximize the energy we do consume.

Audit crucial to meeting goals

A key part of accomplishing this goal starts with actually measuring our energy usage and using that information to target areas for reduction or increased efficiency. In the legislative session, I sponsored a bill to require the comptroller of the treasury to undertake a performance audit of agencies and departments authorized to take action relative to the conservation of energy, the study and production of alternative sources of energy, and energy security within the state.

My intent was to assess the extent to which these entities have fulfilled their mandate and capitalized on their responsibility to assist the state with energy conservation, production and security. The comptroller always gives us usable information and his audits are valuable tools. We have received the results of the audit and it points out that we have to change and improve our organization, including the new reality that kilowatt usage is as important as purchase price.

By putting together individuals responsible for state purchasing with those who utilize state property, we can maximize efficiency and target areas for reduction. Anywhere we can cut kilowatts or cost should be aggressively identified.

There are other simple things we can do to conserve that do not require a state energy department of the hiring of any new personnel to direct our efforts.

For example, we can make sure the lights are off when a state building is not in use. It sounds elementary but could result in a great deal of savings. State government organization needs to be revamped to include energy cost and usage in the awareness of building managers. They should have a responsibility to budget energy use. Currently, they do not ever see an electric bill.

By utilizing the information we have, we can harvest the low hanging fruit in our efforts to eliminate waste and increase efficiency in state government. While we should not spend money to find out how to save money, we can organize government more efficiently with an eye toward energy savings.

It is said the 50 states are policy laboratories where the best ideas and methods take shape for the federal government and other states. Tennessee must lead by example. We can and should be the lead laboratory in helping break dependence on foreign oil through conservation and maximizing energy consumed through the most efficient usage possible.

Opinion: State well-positioned for economic shift

The Tennessean
By Commissioner Matt Kisber
Published: June 18, 2008

Over the course of the next six months, we'll probably hear a lot of discussion among political leaders about the creation of "green jobs." It's a discussion that's warranted, because these types of jobs, tied to a renewed emphasis on energy efficiency and cost reduction, hold lots of promise for the U.S. and for Tennessee.

Not everyone agrees on the definition of a green job, but as energy costs rise and companies try to reduce their energy costs, there is widespread belief that new technologies will emerge, creating a broad range of employment opportunities. In Tennessee, we're positioning to take advantage of that transition.

Only last month, *Site Selection* magazine named Tennessee the most competitive state in the nation for economic development. Tennessee also has remarkable assets in terms of research and development, including one of the country's largest federally funded national laboratories at Oak Ridge, the University of Tennessee and Board of Regents systems, Vanderbilt, TVA and many others. Our state has demonstrated an ability to leverage these assets to attract new industry and that model can work effectively with clean-energy companies, as well.

In fact, Gov. Phil Bredesen has made green jobs a priority for the Department of Economic and Community Development and positioned our state as a national leader in March by signing an order creating the Governor's Task Force on Energy Policy. The panel will look at Tennessee's strength in the energy sector and develop strategies for using environmental technologies developed in Tennessee to create new markets and jobs.

Innovators thrive in Tennessee

Some approaches in Tennessee are already garnering national attention. The governor has developed a partnership with Oak Ridge National Laboratory and UT to move development of ethanol away from food crops to switchgrass and wood chips. This effort will result in a new generation of ethanol-based fuels that can power vehicles and provide energy without driving up food costs.

We're already seeing the impact of our economy's transition away from its dependence on imported oil. Just this week, a Bristol company making stainless-steel pipelines used in ethanol production announced strong growth is prompting it to expand. ORNL research on "zero energy" housing and energy-efficient appliances is already having an impact on the design and construction of new homes. As Tennessee develops its expertise in this area, our state will become a draw for companies interested in taking advantage of our knowledge base.

We've developed tools designed to take advantage of this growing industry. Our newly created Green Energy Tax Credit provides incentives for some types of companies developing and building "green" products and all companies in Tennessee receive tax credits for investing in pollution-control equipment.

This new economic sector will continue emerging in the decades ahead. The challenge for our state will be to continue the progress we've made in education so that clean-energy companies in Tennessee will have the innovative, productive and skilled work force they'll need to compete in the global marketplace.

Opinion: Energy Policy Task Force will help Tennessee meet its energy needs

The Tennessean
By Mike Vandenbergh
Published: July 1, 2008

Cheap electricity and gasoline fueled Tennessee's prosperity over the last several decades. But Tennessee now ranks second in the nation in per-person residential electricity consumption, much of which is generated from coal, the most carbon-intensive fossil fuel, and Tennessee drivers rank among the highest in the number of vehicle miles traveled per person.

How can Tennessee succeed in a new energy era in which market pressures and carbon emissions limits will generate high energy prices for the foreseeable future? The first step is to recognize the challenge while there is still time to adapt. The industrial heart of the nation did not become the Rust Belt overnight. It simply continued with business-as-usual while major changes occurred in the global economy, only to find that its competitive advantage had eroded.

The formation of the Governor's Energy Policy Task Force suggests that Tennessee can act with foresight and avoid the Rust Belt's fate. The Task Force is examining how the state can prosper in this new energy era and how the state government can lead by example.

Meeting the challenge will require reducing demand through conservation and efficiency and increasing the supply of clean, secure energy.

Although it is tempting to look only at energy supply, if demand grows at historic rates, the game is up. We will not be able to avoid substantial risks to the economy and the environment. Dramatic advances in technology will occur, but they will take decades to

develop and adopt. In contrast, reducing demand now through efficiency and conservation can cut energy costs and carbon emissions while providing jobs and a window of time to develop clean energy sources.

Research and experience suggest that large energy savings can be achieved today at remarkably low cost. Price increases alone will stimulate changes, but in some cases infrastructure changes also will be necessary. Good information is also important.

A National Research Council report concludes that we suffer from "energy invisibility" — we cannot identify our largest energy uses, so we don't know where to save money and energy. The report notes that expecting households to reduce energy bills is like expecting shoppers to reduce grocery bills in a store where products have no price tags and shoppers only get a final bill at checkout.

Providing prompt, accurate information that attracts attention and sticks in the memory can have tremendous effects.

Studies show that simply providing real-time feedback about home electricity use can reduce electricity bills by 10 percent or more.

A program to train municipal employees to drive efficiently is saving one city roughly $300,000 per year. Our research at Vanderbilt has demonstrated that large savings can arise just from inducing drivers to reduce unnecessary idling to 30 seconds or less.

By identifying ways to reduce energy demand, the Task Force can lay the foundation for a prosperous future, generate new jobs, respond to carbon constraints, and demonstrate that the New South of today will not be the Rust Belt of 2020.

Opinion: Individuals should seek ways to conserve

The Tennessean
By John Noel
Published: June 7, 2008

The "shock monster" at the gas pumps is now stalking the light switch. Natural gas costs are up 93 percent since last August and coal prices are up, too. Since most of our electricity comes from these two natural resources, our home energy bills could double in the very near future.

The impact to our lives and wallets is, and will continue to be, costly. (Tennessee rivals Alabama for the highest residential per capita use of electricity in the country.) What can

we do about this now? We must take personal responsibility for the way we use energy and resources, a quest as intense as Kennedy's race to the moon.

The cheapest, cleanest and safest new energy available is the energy that is not used or wasted. Various government and scientific studies conclude that we can save 25-50 percent on energy costs today by adding insulation and sealing leaky air ducts, windows, doors, roofs and basements in our homes and offices.

Additionally, new models of old energy guzzlers such as lighting, refrigerators, water heaters, air conditioners, clothes washers and other appliances in some cases use up to 200 percent less energy.

A free energy audit

For a simple first step, TVA offers a free energy audit at TVA.gov; this will give you a report on the things you can do in your home to save energy. Changing from old incandescent bulbs to new, more efficient, compact fluorescent lights, or better yet, LED lights, is a no-brainer. If you want to do even more, call a professional energy auditor, upgrade your energy-gobbling appliances with Energy Star-rated ones and consider using geothermal and solar energy, both passive and panels. An investment in a CD or savings account currently returns less than 2-3 percent annually, and yet investments in re-energizing your living space can produce 15-100 percent savings on utility bills.

And imagine generating on-site clean energy from the solar and wind that can be sold back to TVA. This makes good business sense.

As we make personal changes, we must also invest in new policies that favor the development of clean, green energy. This is paramount if we are to extract ourselves and our country from our dependence on dirty sources of energy. Government investment in clean energy will stabilize our energy costs, improve our health, and create green jobs, further removing us from the slippery slope of oil.

An intense public pursuit with our vote and voice can — indeed, must — alter our nation's dependence on oil and coal. TVA is now rolling out new energy-efficiency and renewable-energy programs which, in large part, were driven by public persuasion and demand.

Gov. Phil Bredesen has engaged an active Energy Task Force, but our federal government is sorely in need of more public persuasion and demand to change the way we do business with energy. We must work it from both ends — your personal energy audit and personal persuasion to our governance.

Opinion: TVA will do its part, promote conservation

The Tennessean
By Joe Hoagland
Published: June 7, 2008

In the next five years, TVA will strive to reduce the growth in the region's power demand by 1,400 megawatts — about the amount of power it currently takes to serve all the homes in a city the size of Nashville.

To achieve this goal, we will need the help of the public, businesses and industries working with us to use electricity more efficiently. We are committed to investing the necessary financial resources to encourage our customers and consumers in the Tennessee Valley to make energy-efficiency improvements. We designed our program in line with guidelines established by the National Action Plan for Energy Efficiency, a public-private framework for creating a sustainable, aggressive national commitment to energy efficiency.

The renewed emphasis on energy efficiency reflects the growing reality of higher energy costs affecting every aspect of our economy and addresses the need to offset those costs through energy efficiency. As public awareness increases about electricity use, consumers can save money on their power bills, and TVA may be able to reduce the amount it invests in new plants.

Demand across the valley rises

Last year, the TVA power system was called upon to meet a 3.6 percent increase in electricity demand across the valley, which is nearly twice the national average. While an aggressive energy-efficiency program will help reduce some of the demand growth, it will not be enough to completely offset the need to add new generation to meet TVA's responsibility to provide the region with an adequate, reliable electricity supply.

The key to our energy-efficiency program is educating the 8.8 million people who use TVA electricity to become more aware of the energy they are using, when they are using it, and how their actions can contribute to reducing overall energy demand in the Tennessee Valley.

Even the simple things all of us can do, such as raising thermostats 3 degrees in the summer or changing our lightbulbs to more efficient lighting, can make a difference. We hope consumers will take those simple steps which, combined with other actions to reduce energy use, can produce real results and real savings. It is TVA's job to raise awareness of how everyone can use energy more efficiently.

TVA launched its campaign to promote energy efficiency earlier this year by offering free energy-conservation kits to valley residents who complete a do-it-yourself home energy audit. We encourage you to fill out a survey, available on the Web at

www.energyright.com. You'll receive a kit with two compact fluorescent lightbulbs, low-flow devices for faucets and shower heads and other items that will help homeowners begin reducing energy usage. The kit offers a first-step introduction to incorporating energy efficiency into our homes.

In the coming months, TVA will be evaluating and developing incentives to make energy efficiency an effective way to help meet the region's energy demand. We invite you, and all the consumers who use TVA electricity, to join us in that effort and become more energy-aware.

Editorial: Governor's task force must hit the gas on sustainability

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A comprehensive energy policy for the state of Tennessee is much needed and long overdue, but at least the wheels (probably gasoline-powered) have begun to turn.

Gov. Phil Bredesen in March signed an executive order establishing the Governor's Task Force on Energy Policy. The panel, composed of four state commissioners and a dozen others, including legislators and business and environmental figures, has held two meetings so far on their four stated goals:

1. Energy efficiency in state government, especially in building construction and vehicle fleets.

2. Legislation, regulations or incentives to encourage efficiency and conservation in the public and private sectors.

3. Public-private partnerships to encourage research and development of clean-energy technology.

4. Expanding use of alternative fuels and renewable energy sources to sustain a clean environment.

That agenda reaches high and low. Certainly, the first goal is the most easily achievable, and Tennesseans must be scratching their heads at the fact that the state's vehicle fleets weren't overhauled for efficiency years ago. Such shortcomings are the reason that Tennessee is ranked 43rd in energy efficiency by the American Council for an Energy-Efficient Economy.

The other three goals, however, are pretty ambitious, and cannot be accomplished quickly. Perhaps, the task force can look to the work already done by other states in the region, including Georgia, Kentucky, Florida and North Carolina, which have had energy plans in place since 2006.

In Florida, for example, Gov. Charlie Crist is backing "cap-and-trade" legislation that would direct the state to limit carbon dioxide emissions by power plants and require companies to pay whenever they exceed the restrictions on greenhouse gases.

A national cap-and-trade plan is facing an uphill battle in Congress, but regional initiatives are progressing in the Northeast, West and Midwest. Florida's proposal, if approved, would be the first such program in the South. But given the recent poor air-quality reports for Tennessee's largest cities, it's certainly a prospect Bredesen's panel should consider.

Granted, our state has its work cut out. Where leadership on energy use should have been obvious, it has been lacking. The Knoxville-based Tennessee Valley Authority, after being a pioneer in conservation in the 1970s under the guidance of S. David Freeman, reversed course and focused all its attention on growth and power production.

For more than a generation, the federally licensed utility has encouraged consumption, and only this year has begun to search cold storage for its environmental conscience. Tennesseans are beginning to see electricity price increases, and face the dilemma of having TVA power continue to be generated by carbon-emitting coal-fired plants or ramping up an unpopular nuclear-power program.

All of this sets the task force's bar that much higher. Establishing public-private partnerships is an area in which the governor has demonstrated skill over the years, but the panel must convince private companies that the state will do its part in developing clean-energy technology and alternative fuels. That will mean a funding commitment in a tight economic period.

Yet, commit, we must. Bredesen has signed legislation to spend $100 million of the nearly $460 million in lottery reserve funds to make Tennessee's K-12 schools more energy-efficient. Some legislators had other ideas for that money, but this is well-spent, because it will be paid back many times over in annual energy savings.

It is not too late for the task force to act, but they should feel a sense of urgency as they look for ways for Tennesseans to lighten their impact on the ever-more-fragile environment.

Editorial: Economic sector's potential fueled by environmental need

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If someone suggested a groundswell of "green jobs" would emerge magically out of thin air in a new environmentally conscious economy, it might sound like fantasy.

But a recent study on how the push for environmental concerns could translate into a strong new look economically has a lot of potential, because it's based on a whole lot of common sense. The study, developed by the Political Economy Research Institute, does not pretend that completely new lines of profession would develop. Instead, it points out how professions that already exist could be put to new uses as demand for environmental technology and products takes shape.

That can be a measure of reassurance in a job market and an overall economy where many people are wondering if there will be a demand for their work. The green-jobs picture might not be a whole new ballgame to add to the economy, but it does indicate that the desire for green markets will create a demand for skilled workers to do jobs in those markets.

For example, the report says in the realm of mass transit, which should grow in the future, the work will require the efforts of civil engineers, workers who lay tracks, electricians, welders, transportation supervisors and dispatchers. There is nothing new about having such jobs. What would be new is the sort of work those workers would be in demand to do.

Likewise, one of the movements in an environmentally aware economy is retrofitting buildings to be more environmentally friendly. That work would require electricians, carpenters, roofers, insulation workers and construction managers — all jobs that currently exist. Establishing wind farms would require work by sheet-metal workers and machinists. The study looked at work-force conditions in 12 different states, Tennessee among them. The conclusion is that there is a sufficient number of workers in the types of jobs that would be needed to meet the demands that are coming in a green economy. The only thing that appears to be lacking is the details in the ideas needed to create those shifts in work.

It remains important to remind everyone that the concept of turning to projects like wind power and solar power does not mean that the energy from them will be virtually free just because the wind and sun are free. Like anything else, when the market sees a way to create a business, whether it is related to energy or anything else, it will be subject to the demands of any other free market. And that might mean some of the seemingly cheap sources of energy will carry new costs. When the push for ethanol accelerated, it should surprise no one that as the demand for corn grew, the costs of corn grew. Similarly, the

devastating floods in the Midwest in recent days have affected the market for ethanol. Ideally, as techniques and technology improve in a green economy, the prices will come down in many ways. But the forces of supply and demand should be expected.

The PERI study looked at six different strategies in the energy field: building retrofits; mass transit; energy-efficient automobiles; wind power; solar power and cellulose biofuels. It found several kinds of jobs that would be needed for each of them. Where certain jobs are needed but don't currently exist, then the demand does create new jobs for a community. That becomes an economic generator.

So when skeptics say all this talk about a green economy is hocus-pocus, unrelated to the real world, all they need to see is the demand for fuel efficiency and the fact that people will be willing to pay for what they want and can afford. That's a viable economic market, and it's a sign that environmental consciousness has a very real, economically viable future. All that's left is ingenuity, willpower and a willingness to get to work.