



WIND

SOLAR

GEO THERMAL

WATER

BIOMASS

10-Year Energy Vision

Western Governors' Association Energy Initiative

BY GOV. GARY R. HERBERT-UTAH
Chairman of the Western Governors' Association



The West plays an indispensable role in meeting our nation's energy needs. Awash in conventional and renewable resources, it is our country's energy breadbasket. Consider the facts:

- Western coal production accounts for more than half the national total.
- The region has provided nearly 70 percent of the nation's natural gas and petroleum output in recent years.
- The U.S. will become the world leader in petroleum production within the next five years, based on current Western regional growth (International Energy Agency, 2012).

The region's energy bounty extends well beyond fossil fuels. Renewable energy resources are distributed throughout the West in far greater abundance than in any other region in the country. Consider these facts:

- Roughly 66 percent of America's installed wind power capacity is in the West (American Wind Energy Association, 2013).
- Southwest states have some of the world's highest solar energy resource potential with national leader California's total output nearly triple that of the next largest state (Solar Energy Industries Association, 2013).
- Geothermal power is the near exclusive province of the West, with 99.5 percent of all national installed capacity in 2011 (Geothermal

Energy Association, 2012).

- The country's largest gross area of land with high biomass yield is in the Western states (National Renewable Energy Laboratory, 2012).

There's more. Clean energy sources and technology are found and utilized throughout the West. Hydropower is widespread, with the region accounting for 70 percent of national hydroelectric power generation (U.S. Energy Information Administration, 2011). The West delivered 10 percent of 2012 national nuclear power generation, much of that from Arizona's Palo Verde Nuclear Generation Station, the country's largest nuclear power facility in terms of output capacity (Mirza-Reid, 2011).

All that energy is good news for the West and its citizens. On the other hand, the broad array of resources presents a challenge. Can Western states create a comprehensive approach to energy development – taking into account the trade-offs inherent in the use of each resource and the marketplace – that delivers energy in a secure, affordable, and environmentally respectful way?

My colleagues and I at the Western Governors' Association (WGA) decided to accept that challenge by creating a "10-Year Energy Vision." The project provides an overview of the resources and technologies used in the West, the role of energy efficiency in energy planning, environmental impact associated with energy use, and the contribution and prospects for economic growth associated with energy industry activities.

The "10-Year Energy Vision" is premised on the idea that an "all-of-the-above approach" to planning our energy future is most advantageous for our region. Western Governors believe resources should

compete freely in the marketplace, based on the policies and needs of our member states.

The Vision lays out the overarching goals of Western energy policy: energy security, affordability and reliability, environmental protection, a robust energy delivery system, and educational and technological development. It emphasizes the critical importance of having an effective federal-state partnership in all aspects of energy development, lands management, and environmental protection.

Western Governors consider the "10-Year Energy Vision" a first step toward a blueprint for an encompassing national energy policy that promotes economic growth while protecting our valued natural and environmental resources. We have demonstrated that states with diverse geography, resources, and politics can identify and work together toward shared goals. We hope national leaders will follow our practical, bipartisan approach.

Every vision needs a thorough grounding in the facts. So we also created "State of Energy in the West," a companion document that provides detailed background on energy resources and consumption in the West, while illustrating the importance of the West in securing energy independence for our country.

The end result: These resources provide regional energy objectives the governors can adopt to ensure future energy development is done responsibly and in the best interest of the West's citizens.

Responsible energy development in the West can drive economic growth vital to the entire country. Whether it's the extraction of conventional resources in states such as North Dakota and Wyoming, or renewable energy sources in

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California and Texas, the region's vast energy wealth will remain critical to the economy.

Our WGA vision does not dictate policy for the member states. Each will choose its own course. As each state settles on an energy strategy best suited to its population, a well-diversified regional energy development portfolio will emerge. This will lead to the addition of numerous jobs utilizing varied skill sets and educational backgrounds. Employment growth of this kind will ensure the creation of everything from well-paying manufacturing jobs suited to the skills of workers displaced by globalization, to technical and professional careers for recent graduates struggling to find employment in a sluggish economy.

Responsible development of all resources at our disposal will go a long way toward achieving energy security for the U.S., meeting all our domestic energy needs with clean, affordable and reliable North American sources. Given the vastness of the West's resources, reaching energy security is achievable.

Western states have long assumed a stewardship role for the natural environment, adapting model regulations, developing innovative solutions, and working across state lines to protect air, land, wildlife, and water. Western Governors recognize it is critical to strike balance in all activities and are committed to ensuring that energy development is done in an environmentally responsible manner.

No energy policy can succeed without broad support, so it's in our best interests to educate the public about energy, employing impartial facts and scientific evidence.

The Western Governors recognize they are in a unique position to develop broad, regional energy policies, while not impeding the ability of individual states to develop energy portfolios that meet their respective needs. As the energy breadbasket of the nation, the western states have the resources to drive job creation and economic development through broad energy industry growth while also protecting our vast and beautiful environment. 🌻

WESTERN GOVERNORS' ASSOCIATION GOALS

1. Put the United States on a path to energy security
2. Ensure energy is clean, affordable, and reliable by providing a balanced portfolio of renewable, non-traditional and traditional resources
3. Increase energy productivity associated with electricity and natural gas
4. Establish an energy distribution infrastructure (electricity transmission and pipelines) planning, siting, and permitting system that facilitates the development of necessary infrastructure while maintaining wildlife, natural resource, and environmental protection
5. Protect Western wildlife, natural resources, and the environment
6. Make the West an international leader in energy education and the development of new energy technologies