NEW ANALYSIS: DESPITE POTENTIAL, WYOMING TRAILS ROCKY MOUNTAIN STATES IN DEVELOPING GREEN ECONOMY

A new report by Headwaters Economics shows that Wyoming has enormous potential to be competitive in clean energy production and energy efficiency, but the state trails the other Rocky Mountain states in growing these sectors. According to the report—Clean Energy Leadership in the Rockies: Competitive Positioning in the Emerging Green Economy—Wyoming lacks policies and incentives to grow its green economy that could create thousands of new jobs, earn hundreds of millions in annual revenue, and attract private and public funding.

Wyoming has reasons to consider the potential of the green economy. The state’s reliance on fossil fuels makes Wyoming vulnerable to federal decisions, the policies of other states for imported energy standards, and volatile fossil fuel prices. By comparison, clean energy generation is an opportunity to supplement state revenues with a diversified income stream. Furthermore, renewable generation has potential to be an important income source for many landowners and communities that do not participate in the fossil fuel economy.

“While Wyoming has seen growth in some sectors of the green economy such as wind energy production, it is more piecemeal, rather than the result of a deliberate strategy to create sustained, consistent growth,” said Julia Haggerty Ph.D., the report’s author.

“As a rural state with a small economy, Wyoming faces challenges when it comes to attracting and retaining private capital and supporting businesses,” she added. “To fully take advantage of its renewable resources, Wyoming will need to do more to distinguish itself with regard to stronger policies, incentives, and entrepreneurship.”

The Headwaters Economics study compares how Wyoming, Colorado, Montana, New Mexico, and Utah—five states with vast traditional and clean energy resources—are taking advantage of clean energy opportunities and concludes with five keys to success for the states to further benefit from the emerging green economy while measuring the likelihood that each state’s policies will promote future growth and investment.

The full study, digest, state fact sheets, and state-by-state comparisons can be found at www.headwaterseconomics.org/greeneconomy.
**Green Economy Jobs and Businesses**

Using a conservative measurement of green jobs, the report found that employment in the green economy has grown significantly faster than total employment across the five-state region. From 1995 to 2007, total job growth for the region was 19 percent, while job growth in the core green economy was 30 percent. Nationwide, overall jobs grew by 10 percent, compared to green job growth of 18 percent from 1995 to 2007. Looking at business establishments, in 2007 the five states supported 3,567 green enterprises with 50 percent based in Colorado, 16 percent in Utah and in New Mexico, 11 percent in Montana, and 6 percent in Wyoming.

“All of the states have opportunities to benefit from the green economy, but it does not happen by accident,” said Haggerty. “Wyoming must make a concerted effort to make itself more attractive for both private and public investment while improving its energy efficiency policies and investing in worker training and research facilities.”

**Investment Dollars**

The *Clean Energy* report also measures private and public investment for the five states. In 2008, the region attracted more than $500 million dollars in clean energy-oriented venture capital, a ten-fold increase compared to 2000 levels. Wyoming attracted $38 million in venture capital for the clean technology sector during this time. Colorado and New Mexico, by comparison, collected close to $800 million and $239 million respectively in the same time period.

When looking at public funding from competitively-awarded federal stimulus competitive grants by the Department of Energy, Wyoming ranked near last, 49th of states and territories. For the other states, Colorado ranked 15th, Utah and New Mexico fell toward the middle of the pack, ranked 30th and 37th, while Montana ranked 52nd.

**Energy Production**

Renewable energy production is growing in all five states, and there is every reason to expect continued rapid regional expansion. Among the five states, Wyoming and Montana stand out for their wind and geothermal potential, Utah for its solar and geothermal, and Colorado and New Mexico for strength in all three. Recent data from the wind industry, for example, shows that installed wind capacity among the five states increased by 3,000 megawatts since 1999, with more than two-thirds of that increase occurring in the past three years, 2006–2009.

Wyoming’s economy is partially built on its ability to sell electricity into the Western Interconnection. Yet, many states that buy their energy from the Interconnection now mandate that a portion of their energy supply derive from renewable sources. By increasing the renewable energy resources it has to offer, Wyoming could stay competitive, grow its economy, and create new jobs.

**Energy Efficiency**

On a more cautionary note, the study found an uneven record for how the five states are pursuing energy efficiency—a necessary, cost-effective part of any long-term economic strategy. Wyoming is among the highest per-capita consumers of energy in the nation, and the state stands alone in not having a mandatory energy code for buildings. In addition, incentivizing energy efficiency could benefit the state’s residents and businesses by reducing their energy bills, and could boost the building trades sector.
Five Key Steps to Future Growth
States can do a great deal to benefit their future position, and the Clean Energy report concludes with five keys to success needed for the region and Wyoming to foster future growth:

1) **Strategic Pairing of Incentives with Clear Policy Goals.** Progress depends on a smart mix of appropriate incentives and policies, such as Renewable Portfolio Standards with meaningful targets and compliance strategies. The renewable industry will thrive in states that provide the best incentives alongside the best access to established markets. Private ventures are deterred from investing in the Cowboy State because Wyoming, while having no corporate income tax, has chosen not to extend other types of incentives (e.g. business property tax exemptions) to renewable firms.

2) **Encourage and Capture Large-Scale Investment.** To attract growing private investment and billions of federal dollars, states must have a mix of policies, incentives, and proven development expertise.

3) **Cultivate a Well-Resourced Business Environment.** Companies on the cutting edge of technological development benefit from skilled workers and access to world class research institutions. In Wyoming, because there are few opportunities for workers with green job skills, Wyoming residents, including graduates of Laramie Community College’s nationally-recognized Wind Energy Technology program, are leaving the state to seek work elsewhere.

4) **Leadership.** Developers and manufacturers of clean energy and energy efficiency technologies operate in a highly competitive global environment, and they need to see consistent leadership in order to commit to a state. The governors of three states—Colorado, Montana, and New Mexico—all have made significant clean energy outreach efforts.

It is not too late for Wyoming to claim a piece of the emerging green economy by sending a strong signal that these sectors are welcomed, and will complement Wyoming’s strong conventional energy profile. Political leadership that reaches out to win new businesses, capital, and public funding, coupled with support for state agencies and universities are the kinds of actions that can help Wyoming claim a position in the clean energy economy.

5) **Overcome Limited Infrastructure Capacity.** To fully cultivate their renewable energy resources, the five states must overcome an inadequate infrastructure; which includes an outdated, overstressed electrical grid as well as federal, state, and local governments that currently lack the capacity and the necessary plans to respond to permits for new construction (for new facilities and transmission lines). In the development of transmission capacity, Wyoming is a leader through support for a well-funded state infrastructure authority.

**About Headwaters Economics**
*Headwaters Economics is an independent, nonprofit research group that assists the public and elected officials in making informed choices about energy development;*  
[www.headwaterseconomics.org](http://www.headwaterseconomics.org)