A new study by Headwaters Economics compares how Colorado, Montana, New Mexico, Utah, and Wyoming—five states with vast traditional but also significant clean energy resources—are taking advantage of clean energy opportunities to create green jobs. The report also measures the likelihood that each state’s policies will promote future growth and investment.

All five of the states have opportunities to benefit from the green economy, increasing jobs, investments, and production. The states performing the best—Colorado and New Mexico—have made a strong, deliberate, and lasting commitment to growing their green economy.

The study, *Clean Energy Leadership in the Rockies*, found that employment in the green economy has grown significantly faster than overall employment. From 1995 to 2007, total jobs in New Mexico grew by 13 percent, while jobs in green sectors grew by 62 percent. For the five-state region, total job growth was 19 percent, while job growth in the core green economy was 30 percent.

The report also measures private and public investment in clean energy. In 2008, the study region attracted more than $500 million dollars in clean energy venture capital, a ten-fold increase from 2000 levels. Colorado captured 75 percent of all new venture capital in the region while Montana failed to secure any clean technology venture capital.

**Growth in Green Jobs v. Total Jobs, 1995–2007**

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Source: Green Establishments Database, Collaborative Economics

www.headwaterseconomics.org/greeneconomy
Research into the green economy is still evolving. Our report, for example, used a conservative estimate of “green” jobs by Collaborative Economics because no federal data today accurately captures the green economy. We welcome input and collaboration from the many experts on this issue.

Renewable energy production is growing in all five states, and there is every reason to expect continued rapid expansion. Montana and Wyoming stand out for wind and geothermal potential, Utah for solar and geothermal, and Colorado and New Mexico for strength in all three. Installed wind capacity among the five states increased by more than two-thirds in the past three years.

On a more cautionary note, the study found little enthusiasm in the five states to pursue energy efficiency—the most cost-effective part of any long-term green economic strategy. None of the states, for example, spend money from their own budgets on state transit, nor do they mandate coordinated land use and transportation planning.


![Graph](source: U.S. EIA, SEDS)

**Ongoing Clean Energy Research**

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**Five Key Steps to Future Clean Energy Economic Growth**

States can do a great deal to foster continued clean energy growth:

1) **Pair Incentives with Clear Policy Goals.** Progress depends on a smart mix of appropriate incentives and regulations, such as Renewable Portfolio Standards with meaningful targets and compliance strategies.

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.** Investment in education is essential. Innovative companies require skilled workers, research institutions, and trained workers.

4) **Demonstrate Leadership.** A clear commitment to the clean energy economy on the part of state leaders is a key element in attracting growth.

5) **Develop Infrastructure Capacity.** To fully cultivate their renewable energy resources, states must improve an inadequate transmission grid.
Headwaters Economics continues to analyze the impact of the recession on counties across the West and to work with communities and businesses to improve their economic competitiveness.

This summer, in partnership with Economic Development for Central Oregon (EDCO), we prepared a report on the economic challenges and opportunities in Deschutes County.

The study incorporates Central Oregon data and trends, interviews with local business leaders, and a comparison of the performance of Deschutes County to four peers: Ada County, Idaho; Boulder County, Colorado; Kootenai County, Idaho; and Washington County, Utah.

The report ends with recommendations for how Central Oregon can compete successfully with larger, more mature competitors.

We emphasize the need to provide a greater variety and cost range of housing; to invest in sustaining the mix of amenities that makes the region attractive; to improve access to markets, education opportunities, and business networks; and to explore developing a material sciences business cluster.

www.headwaterseconomics.org/deschutes

Ongoing Work
Reforming Federal Land Payments to Counties

More than half of the land in western counties, in some cases more than 90 percent, is managed by the federal government. Because county governments cannot collect property taxes on these lands, more than 100 years ago Congress began a compensation program—paid with commodity receipts such as timber sales.

The two largest county payment programs today (Secure Rural Schools and Payment in Lieu of Taxes) soon must be renewed. This provides a great opportunity to reform county payments while continuing to provide assistance to counties for schools and roads.

Future county payments could be tied to job creation and improved conditions on the land, through programs such as incentives for forest restoration (e.g., putting people to work removing roads, planting trees, improving wildlife habitat), community-supported stewardship projects (e.g., weed control, fencing to improve riparian areas), and efforts to protect watersheds or forests (e.g., production of fresh water, carbon sequestration).

Headwaters Economics is working with partners across the West to develop a white paper that analyzes the range of potential reforms, and the pros and cons of each.

Eric Strobel
The report has created awareness in our community of what it will take for Central Oregon to compete at the next level.

-Eric Stroebel, EDCO Business Development Manager

Federal Land Payments to Western Counties

Source: Headwaters Economics
Fossil Fuel Energy and the Recession

Headwaters Economics is measuring the economic and fiscal performance of the fossil fuel economy—oil, natural gas, and coal—during the recession for five Rocky Mountain States: Colorado, Montana, New Mexico, Utah, and Wyoming.

The forthcoming report will build on our earlier eight-part series, *Energy and the West*, and will address a number of issues, including:

- How the five states performed economically and fiscally through the recession.
- How the fossil fuel industry fared in these states during the recession (employment, production, and tax revenue trends, and share of the overall economy).
- How the communities that were highly dependent on oil, natural gas, and coal performed during the recession.

Production Value of Oil and Natural Gas in Five Rocky Mountain States

This chart maps the production value of oil and natural gas from 1999 to 2009.

MISSION STATEMENT

Headwaters Economics is an independent, non-profit research group. Our mission is to improve community development and land management decisions in the West.

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