

**Report Digest: *Impacts of Energy Development in Montana,  
With a Case Study of the Powder River Basin***



HEADWATERS  
ECONOMICS

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**Overview:** This report focuses on the economic and fiscal contributions of the oil and natural gas industries in Montana, including a case study of potential coal bed methane natural gas (CBM) extraction in the Powder River Basin.

The report is divided into four sections:

- (1) The significance of oil and natural gas development for Montana's economy;
- (2) How fossil fuel development contributes to state and local government fiscal health;
- (3) The economic and fiscal impacts of CBM on the Powder River Basin;
- (4) Conclusion and public policy options.

The report will assist the public and elected officials in making informed choices about energy development to benefit the region over the long-term. The *Montana* report is the sixth in Headwaters Economics' *Energy and the West* series which can be found at [www.headwaterseconomics.org/energy](http://www.headwaterseconomics.org/energy).

**Current Economic and Energy Situation:** The return of volatility to energy prices and production, especially in the context of recent worldwide economic turmoil, raises important issues for decision-makers concerning how Montana and local communities will benefit from future energy development while maintaining the state and region's diverse economy.

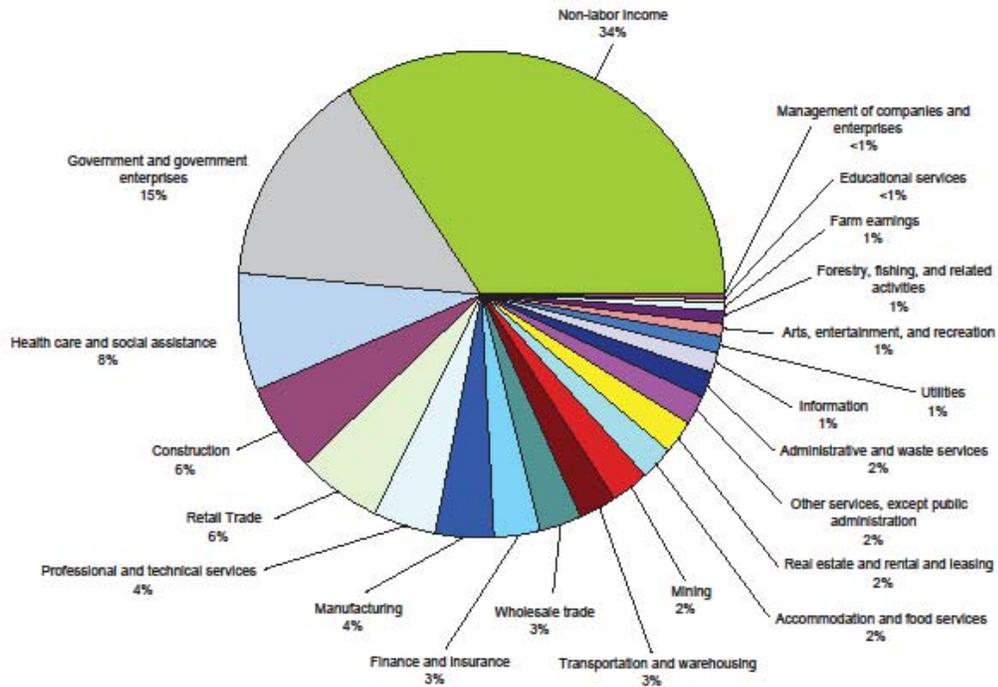
**Significance of Fossil Fuels for Montana's Economy:** In the 1990s and 2000s, Montana's economy grew and diversified significantly in industries associated with the West's services and professional economy, and in non-labor income (e.g., retirement and investment income). High-wage service-providing jobs in Montana now account for about 7 percent of all employment in the state. (See Figure 1, next page.)

Montana's mining industries, including oil and natural gas, accounted for just 1.4 percent of all state employment in 2006 (down from 3.2 percent in 1970). Although mining jobs account for only a small portion of all jobs, the wages are among the highest in the state.

These findings for Montana are consistent with two important West-wide trends: the economy of the West has grown and diversified in recent decades, and states are less reliant on resource extraction for jobs and income than in the past. The principal sources of prosperity in the region are now related to a modern service, or knowledge-based, economy, along with retirement and investment dollars.

Resource extraction industries are still important in some rural and isolated counties in Montana. Relying on oil and natural gas as an economic development strategy creates challenges. Specialization in these sectors and impacts from extraction activities can leave local economies vulnerable to volatility and lead to slower than average long-term growth.

**Figure 1: Sources of Personal Income in Montana, 2006 (NAICS)**



Source: BEA REIS 2006 Table CA05N

**Fossil Fuels and Montana’s Fiscal Health:** Oil and natural gas contributed \$288 million in revenue to state and local governments in 2006, making up 4.3 percent of all government revenue in Montana. This is important revenue to the state. It is also inherently volatile because tax and royalty revenue are linked directly to the price of oil and natural gas.

Montana is the only state in the West not to invest some production revenue into a permanent fund, exposing essential government services to annual volatility in oil and natural gas prices.

In addition, Montana’s production tax incentives (such as the first-year exemption and a reduced tax rate adopted in 1999) have not achieved the intended goal of stimulating additional exploration, drilling, and production in the state. The Montana Department of Revenue estimates the tax incentives have lowered revenue collections by \$500 million between 2003 and 2007.

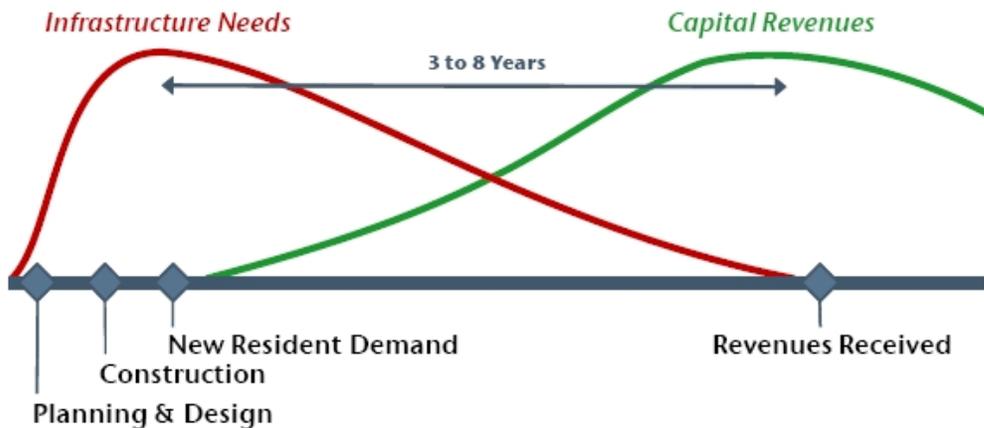
**The Potential Economic and Fiscal Impacts of Coal Bed Methane (CBM) in Montana’s Powder River Basin:** Planned CBM extraction in the Powder River Basin will create few new jobs for Montanans. The Bureau of Land Management (BLM) estimates only 770 new jobs during peak production (after 15 years of drilling) and that most of these jobs will go to the Wyoming communities of Sheridan and Gillette which are closer to Montana’s CBM than are Hardin or Miles City, and have established industry and labor markets.

Production taxes and royalties, unlike jobs, will accrue to Montana, generating an estimated \$1.8 billion to \$5.4 billion over 22 years (based on the BLM’s low and high reasonably foreseeable development scenarios).

The state’s tax policies described above reduce Montana’s revenue potential. Had the state maintained the tax structure that existed in 1999, revenue from the Powder River Basin would be higher by \$750 million to \$2 billion (the first year exemption alone reduces tax collections by \$237 to \$604 million). There is no evidence to suggest, and plenty that shows otherwise, that these tax breaks have created jobs or produced new revenue in Montana in the past.

In addition, the first-year exemption from production taxes makes it difficult for counties to facilitate and manage extraction. County governments must provide infrastructure and services concurrent with extraction and drilling activities, but will not see significant revenue from oil and natural gas development until 12 to 18 months after production begins. (See Figure 2.)

**Figure 2: Timing of Infrastructure Needs vs. Availability of Revenue**



Source: BBC Research and Consulting, *Northwest Colorado Socioeconomic Analysis and Forecasts*, prepared for the Associated Governments of Northwest Colorado, 2008.

### **Conclusion and Public Policy Options for State and Local Governments:**

Montana has an opportunity to expand oil and natural gas production in the state. However, Montana is currently not positioned to take full advantage of the employment and revenue benefits of new drilling. Montana's production tax incentives have not generated new employment or drilling in the state while Montana's neighbors that have targeted incentives to exploration (Alaska) and maintained higher production taxes (Wyoming) have generated more exploration, drilling, and production while retaining more revenue.

Several reforms can ensure maximum benefits:

1. Secure sufficient and timely revenue for local governments so that they can facilitate and mitigate the impacts of industry activities without harming economic development opportunities in other sectors.
2. Manage volatility in the state's budget, and secure a long-term revenue stream for Montana. Wyoming, New Mexico, and Alaska have amassed significant "rainy day" funds with oil and natural gas revenue while Montana continues to watch its revenue estimates decline in the current recession.
3. Raise taxes to be equivalent with the state's neighbors and move incentives from production to exploration where they have a more direct influence on industry activities.
4. Invest revenue generated from the one-time depletion of Montana's natural resources in ways that contribute to Montana's long-term economic success.

