



# Energy Fact Sheet

## Oil Shale

### Energy to Fuel – Our Future

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#### What is Oil Shale?

Oil shale is a mineral resource that produces petroleum-based fuels we use in our automobiles, airplanes, and trucks. It is found in many places in the world, but the largest deposits are found in the United States. The oil shale resources in the United States are the most concentrated hydrocarbon accumulation on Earth.

#### Our Domestic Resources

The oil shale deposits in the United States are estimated to contain over 2 trillion barrels of oil, averaging over 25 gallons per ton. The three states, Colorado, Utah, and Wyoming, contain an amount of shale oil that is comparable with the conventional oil reserves in the Middle East. It is estimated that these three states contain approximately 1.2 trillion barrels of oil equivalent. Recovery of even a small fraction of this resource would represent a significant supplement to the Nation's oil supply for many decades.

#### Our Colorado Resources

In the Colorado Piceance Basin, there is five times the amount of oil per acre as there is in a rich oil field like Alaska's Prudhoe Bay. Certain locations in Colorado may yield as much as 1.5 million barrels of oil from a single acre. In comparison, more than 3,000 acres of land would need to be covered with solar panels for 25 years to produce as much energy (both resources calculated on an electricity basis) that equals the production of shale oil from that one acre.

#### Why Are We Not Producing Shale Oil Now?

Converting oil shale into usable products is currently more expensive than pumping petroleum from the ground. Attempts to build commercial oil shale plants in the last century were suspended when the price of petroleum plummeted. With prices rising and technology advancing, the prospects for success have improved. The energy industry is conducting research to try to develop projects that will be economic, environmentally acceptable, and socially sustainable. The U.S. Department of Energy has estimated that commercial projects could come on line in the next decade if research results are positive and the industry finds the investment risks acceptable.

#### Oil Shale and Our Communities

In the near term there will be little effect on communities because research work does not require large labor forces. When commercial projects are initiated there will be an increase in population and there will be both positive and negative influences for communities. Jobs, new businesses, and tax revenues will bring positive effect. The stresses of growing populations will bring adverse effects that the energy industry and governments will plan for in a cooperative manner. The net effect for our nation will be positive because of the pressing need to become less dependent on foreign oil supplies.