

OIL SHALE FACTS AND FICTION

FACT SHEET

The following is presented to correct some common misconceptions about oil shale.

FICTION: We do not need kerogen oil shale. We can use renewables and non-fossil fuel alternatives to meet our future energy needs.

FACT: During the next 50 to 100+ years the United States will need a secure domestic supply of hydrocarbon fuels especially for airline travel and ground transportation. The demand for gasoline, diesel and jet fuels will continue into the foreseeable future. It is not certain that domestic supplies of conventional petroleum will be available to meet public demand for gasoline, diesel and jet fuel. Even with increased conservation and fuel substitution, the need for petroleum products will likely be needed for decades to come. Oil shale is one of the domestic bridge fuel supplies that can see the nation through to a society less dependent upon fossil fuels.

FICTION: Oil shale processing uses more energy than it produces.

FACT: Net energy is created though the retorting of oil shale. Depending upon the technology employed and the richness of the resource, estimates range from a ratio of 3:1 to 6:1. The size, concentration and quality of the oil shale resource in the Western U.S. make it an ideal domestic source of gasoline, diesel and jet fuels.

FICTION: Oil shale development has too many health, wildlife and environmental unknowns, and it is too risky and dangerous, so commercial development must await completion of all research, development and demonstration.

FACT: The basic methods of producing oil and gas from oil shale are well known. Commercial oil shale projects have been in operation in Brazil, China, Estonia, and other parts of the world for decades. Large-scale semi-commercial plants were operated in the United States in the 1960-80's. There is a wealth of knowledge that can be drawn upon by engineers and scientists. The ranges of technical, socioeconomic and environmental factors can also be established so the public and government officials can judge the impacts and benefits of development, prior to issuing permits to proceed.

FICTION: There is not enough water available to support oil shale development in Colorado, Utah and Wyoming, and the industry will pollute waterways.

FACT: Water is needed for oil shale processing. The amount varies with technology but is in the range of 1 to 3 barrels of water per barrel of upgraded shale oil produced. Water is currently available within the upper Colorado River Basin to support a commercial industry. A commercial oil shale industry would use only a small percentage of the water in the Basin. It would not dry up rivers or endanger fisheries as water use is strictly regulated by appropriate agencies. Water will be stored in reservoirs during the spring runoff for use during dry periods of the year. Contaminated water will not be discharged from plants.

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FICTION: Oil shale is an inferior hydrocarbon fuel.

FACT: Kerogen oil shale deposits in the Western United States are the most concentrated hydrocarbon resource in the world. One ton of oil shale will produce 25 gallons or more of shale oil that can be refined into excellent gasoline, jet fuel, diesel and other petroleum and petrochemical products. The shale oil content in a ton of oil shale is greater than the oil contained in a ton of rock from a conventional oil reservoir.

FICTION: All the impacts of oil shale development are negative and so significant that it should not be allowed to develop.

FACT: An oil shale industry will provide numerous benefits to local communities, states, the Federal government and the general public. These benefits are realized through public sector revenue distribution in the form of taxes and royalties paid by the producers; increased opportunities for local small businesses; long-term high paying jobs; education and skill development; and fiscal support for schools, hospitals, transportation and public services.

FICTION: There is no need to lease Federal oil shale lands since there are plenty of private oil shale lands.

FACT: Much of the highest quality and thickest oil shale resource in the world is under U.S. Federal ownership and not leased commercially by the BLM because of restrictions placed upon it by Congress. It is in the interest of the nation to make this resource available to industry to provide the public with royalties and a future secure domestic supply of energy. The oil shale lands in private hands are geologically less attractive for processing using insitu technologies.

FICTION: There is no solution to dealing with greenhouse gases (GHG) produced from oil shale processing.

FACT: Greenhouse gases produced from oil shale processing can be captured, put to beneficial use, or sequestered. Techniques are under development by industrial firms to do so and meet regulations when they are enacted. Measures are being taken to design plants that reduce emissions.

FICTION: Spent shale is a hazardous material that blows-up like popcorn when produced.

FACT: Spent oil shale, the residue from removing oil from oil shale, is not a hazardous material. A finding by the U.S. Environmental Protection Agency confirms that conclusion. Spent shale embankments resulting from semi-commercial oil shale operations in the western United States in the 1960-80's are stable landfills, support vegetation and have not contaminated surface or ground waters. Spent oil shale does not expand like popcorn but does have a slightly larger volume than the original rock primarily because of voids introduced by crushing.

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