

BENEFITS & CHALLENGES OIL SHALE DEVELOPMENT

The development of oil shale will benefit the Nation and local communities through the creation of jobs, tax and royalty revenues, and by providing a more secure future for our children and grandchildren.

An oil shale project cannot be built without receiving the required environmental permits from Federal, State and local authorities.

Despite reports to the contrary a wealth of factual information is available on water usage, environmental impacts, energy efficiency, socioeconomic impacts, and climate change implications.

Commercial plants outside the United States recover oil and gas and produce electricity from oil shale within permitting parameters. Experimental plants that successfully operated in our country in an earlier time produced extensive factual environmental data that is also available to regulators and the public.

A key challenge for an oil shale industry is to demonstrate and utilize technologies that can be economically sustainable and continue to operate through the ups and downs of energy pricing.

NATIONAL OIL SHALE ASSOCIATION

NOSA is an experience based information source for oil shale resource characteristics and the history and technology of oil shale mining, pyrolysis, product processing, environmental impacts, and site reclamation. NOSA advocates responsible oil shale resource development.

Sustaining Members: Dragon Shale, E.R.T.L., Red Leaf Resources, Shale Tech International Services, TerraCarta, and Wheeler Machinery.

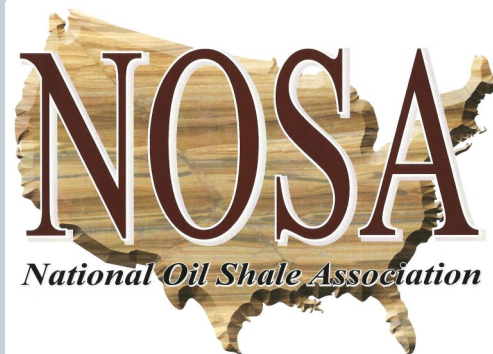
Service & Equipment Members: Agapito Associates, ATP Services, IGES, Millcreek Mining, Sage Geotech and Stantec Consulting.

Contact the Association at the address below if you have a question or an interest in membership

www.oilshaleassoc.org

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AMERICA'S OIL SHALE RESOURCE

Oil shale in the Western United States is a huge untapped domestic energy resource. The amount of oil contained in Green River formation oil shale deposits in Colorado, Utah and Wyoming is comparable to the proven worldwide reserves of conventional petroleum. The Federal Government controls 70% of the resource. It is the size and potential of this resource that makes it so important to the future energy security and national defense of the United States.



Western U.S. Oil Shale Basins in Green



Oil Shale Development What's Next?

The National Oil Shale Association recently distributed a White Paper that seeks national recognition of oil shale as an important strategic energy source. Action on the initiative is pending at the Federal Level.

KEROGEN AND OIL SHALE

The huge oil shale resource in Utah, Colorado, and Wyoming is often confused with conventional oil and gas produced by horizontal drilling and fracturing (fracking) in shale deposits in many places in the US. These resources are in-place naturally produced liquids and gases. The parent organic deposit that was the source of this oil and gas, and in fact all oil and gas, is kerogen, a solid organic material. This solid kerogen material is present in its original as deposited form in oil shale. If oil shale has been buried deeply enough (sufficiently hot) for a sufficiently long time, the kerogen in the shale transforms into oil, gas, and residual carbon. The deepest (hottest) deposits produce more gas, and shallower deposits produce more oil. In areas where the shale deposits are insufficiently deep to produce oil and gas (either in their entirety or sloping up towards the surface) the deposits remain as kerogen bearing shale.

REQUIRED ACTIONS

The members of NOSA are dedicated to making sure the strategic value of the oil shale resource is recognized by Federal, State and local officials. Some member companies have active research and development projects using unique technologies that are ready for testing at a size that will demonstrate their economic, environmental and socio-economic viability.

NOSA members believe the next step is to form an Oil Shale Advisory Board to recommend actions needed to move development forward as approved by Congress in 2005 but not carried out by subsequent Administrations.

NOSA offers its expertise to advance this important initiative.