

Energy Facts



Parachute, Colorado is one of the areas oil companies want to open up to destructive oil shale drilling

Oil Shale by the Numbers: Dirty Fuels Won't Solve America's Energy Crisis

With summer gas prices setting record highs, some are touting oil shale as the answer to our problems at the pump. Oil shale production involves heating rock to high temperatures and turning it to liquid. But this process requires massive amounts of electric resources, while sapping huge quantities of water from the arid West. Moreover, oil shale production could cause five times more global warming pollution than conventional gasoline.

Destructive oil shale is not the answer to America's energy crisis. Instead of trying to tap more dirty fuels, we should be focusing on clean energy solutions that can provide relief at the pump today without the risks to our air, water, and land.

For more information,
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www.nrdc.org/policy

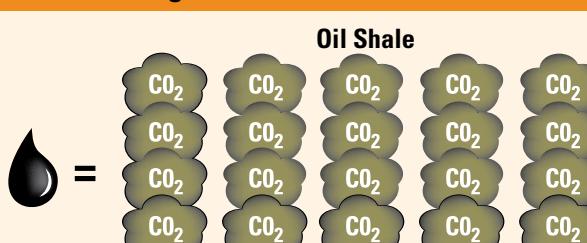
August 2008

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Oil Shale Production Will Dramatically Increase Global Warming Pollution

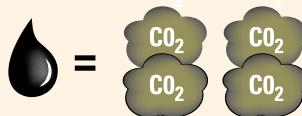
For every unit of oil shale produced, up to 20 units of CO₂ could be generated.¹ In comparison, conventional petroleum sources produce four units of CO₂ for every unit of fuel generated.

Global Warming



VS

Conventional Gasoline



Each unit of oil shale produced generates up to 20 units of CO₂

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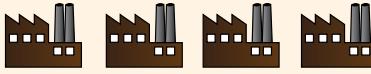
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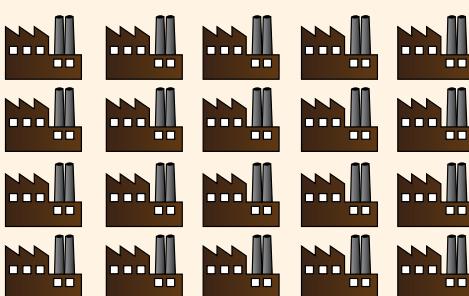
Oil Shale Production Will Sap Electrical Power

To produce oil shale on a scale that is economically viable, massive amounts of electrical power would be necessary—power that would most likely come from coal-fired plants that have been proven to cause health problems such as heart attacks and asthma and release dangerous global warming pollution into our air.²

To produce 200,000 barrels of oil a day, four typical coal generation plants would be needed.³ Boosters of oil shale often talk about extracting one million barrels of oil per day. At that rate, upwards of 20 coal-fired power plants would be required, burning more than 50 million tons of coal annually.⁴

Power Generation

200,000 Barrels/Day =  

1,000,000 Barrels/Day =  

1 million barrels of oil shale per day would require more than 20 coal-fired power plants

Oil Shale Production Will Dry Up Our Water Resources

Five units of water would be required for every unit of oil shale produced. The federal government predicts that a viable oil shale industry would consume upwards of 200 million gallons of water daily.⁵ Such quantities do not exist in the arid West where oil shale and consumer water needs would inevitably collide.

Water Consumption

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Five units of water would be required for every one unit of oil shale produced

¹ Brandt, Adam R. "Converting Green River Oil Shale to Liquid Fuels with the Alberta Taciuk Processor: Energy Inputs and Greenhouse Gas Emissions," Working Paper, Energy and Resources Group University of California, Berkeley, Berkeley, CA 94720-3050, p.26. (see <http://abrandt.berkeley.edu/>)

² "Dirty Coal is Hazardous to Your Health: Moving Beyond Coal-Based Energy," Natural Resources Defense Council, October 2007. Available online at <http://www.nrdc.org/health/effects/coal/coalhealth.pdf>

³ Schuster, Erik. "Tracking New Coal-Fired Power Plants," Department of Energy: National Energy Technology Laboratory, February 18, 2008, p. 14.

⁴ Bartis, James T., et al. "Oil Shale Development in the United States: Prospects and Policy Issues," Rand Corporation, 2005, p. 23.

⁵ Bureau of Land Management, "Draft Oil Shale and Tar Sands Resource Management Plan Amendments to Address Land Use Allocations in Colorado, Utah, and Wyoming and Programmatic Environmental Impact Statement," Vol. 2, Chapter 4.5, December 21, 2007.