



## Oil Shale News

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### *Oil Shale Climate Facts*

Oil shale development would undermine our nation's goal of reducing greenhouse gasses. Consider the following facts:

1. Without mitigation or technology improvements, full-fuel-cycle **carbon dioxide (CO<sub>2</sub>) emissions from oil shale derived liquid fuels are likely to be 25 to 75% higher than those from conventional liquid fuels**, depending on the process used.[\[1\]](#)
2. Replacing 10% of U.S. gasoline with shale-derived fuels produced using the Alberta Taciuk Processor (ATP) – **the leading retort process – would result in additional emissions commensurate with the total emissions from the state of Colorado.**[\[2\]](#) A large oil shale industry in western Colorado would be a major global

### From the President's Desk

Even if industry succeeds in solving the technical and economic facets of the oil shale Rubik's Cube, climate impacts will still need to be addressed. As Canadians are learning first-hand, large scale development of dirty fuels undermines climate change goals. In 1995, Canada pledged to reduce its greenhouse gas emission levels 6% by 2012, only to see its output increase 26% largely as a result of the production of tar sands, a dirty fuel similar to oil shale. Canada is now one of the world's largest emitters of greenhouse gasses.

Adam Brandt, a leading oil shale scientist, estimates oil shale fuels would produce 25 to 75% more greenhouse gasses over their life cycle than conventional liquid fuels. Oil shale proponents suggest energy required for production could instead be derived from natural gas, thus reducing or eliminating CO<sub>2</sub> impacts from coal. But it makes little sense to use natural gas to produce power from one of our dirtiest fuels. Why run busses, for instance, on fuel derived from oil shale when they are already burning natural gas?

President Obama's pledge to reduce our climate impacts is necessary to protect human health and the environment. Oil shale would undermine this commitment.

Sincerely,

**Karin P. Sheldon**  
WRA President

### On the Front Burner: RD&D Leasing

Last week, the nomination period for the 2<sup>nd</sup> round of oil

CO2 emitter. [\[3\]](#)

3. Without capture of the CO2 generated by electricity produced to support oil shale development, **well-to-pump GHG emissions for in situ will be 21%-47% larger than those from conventionally produced petroleum-based fuels.** [\[4\]](#)

4. Without mitigation, **fuels produced using the ATP would have emissions 1.5-1.75 times those of conventional oil production** on a full-fuel-cycle basis. [\[5\]](#)

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[\[1\]](#) Adam Brandt, Jeremy Boak, Alan Burnham, (2009). "Carbon Dioxide Emissions from Oil Shale Derived Liquid Fuels". American Chemical Society oil shale book.

[\[2\]](#) *Ibid.*

[\[3\]](#) Adam Brandt, "Converting Oil Shale to Liquid Fuels: Energy Inputs and Greenhouse Gas Emissions of the Shell in Situ Conversion Process", *Environ. Sci. Technol.* 42(19) 7489-7495

[\[4\]](#) Adam Brandt, "Converting Oil Shale to Liquid Fuels with the Alberta Taciuk Processor: Energy Inputs and Greenhouse Gas Emissions", *energy&fuels DOI: 10.1021/ef900678d*

[\[5\]](#) *Ibid.*

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## **Correcting the Record**

**Myth:** Petroleum use will rise so we need oil shale to help meet growing demand.

**Fact: False.** The federal Energy Information Administration (EIA) predicts U.S. petroleum demand will remain flat through to 2035, as biofuel production will provide the growth of total liquid fuel demand. ([Source: Dow Jones Newswire.](#))

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## **Quotable Quotes**

"Geophysical data on the carbon amounts in oil, gas and coal show that **the problem is solvable, if we phase out global coal emissions within 20 years and prohibit emissions from unconventional fossil fuels**

shale RD&D leases closed. While WRA supports additional research, WRA opposes the issuance of additional RD&D leases at this time:

1. **Research is important but additional RD&D leasing is premature** – current federal lessees have barely begun to develop their federal research leases.
2. **There are ample private lands on which to test technologies so federal lands are not needed** – Shell, OSEC, Red Leaf and General Synfuels International own or have leases on state, private and tribal lands – and they are using the lands to test their technologies.
3. **Oil shale research diverts funding and attention from 21<sup>st</sup> century solutions** – The Obama Administration has committed to moving towards cleaner energy sources such as the sun, wind, alternative fuels, and savings from efficiency. Instead of promoting dirty fuels, which would increase greenhouse gas emissions and put the region's lands, water, communities and wildlife at risk, Interior should focus on moving in this positive direction and not open up more of our special Western landscapes to promote dirty fuels.

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## **Looking Ahead - GAO Investigation**

At the request of Congress, the US Government Accountability Office (GAO) is currently reviewing oil shale development in the US. The GAO is examining water use, water quality impacts, and environmental and technical challenges of oil shale development. It is also researching steps the federal government is taking to address the challenges to commercial oil shale development. The report will likely be submitted to Congress in August 2010.

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## **Looking Ahead - Oil Shale Tracker**

**Lawsuits** – As has been reported in the press, the parties are discussing settlement of the two suits.

**2<sup>nd</sup> Round of RD&D** – Lease proposals were submitted to DOI on January 4, 2010. An interdisciplinary team will soon begin reviewing the proposals. The BLM will request the participation of a representative from each of the States of Colorado, Utah, and Wyoming, as appropriate, and the Departments of Defense and Energy.

**Shell Yampa Water Right Filing** – Litigation is ongoing.

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such as tar sands and oil shale.”

[James Hansen, NASA Goddard Institute for Space Studies, Nov. 29, 2009](#)



“I think the uncertainty that has been pervasive over the last several years on oil and gas leasing has been brought about because there's been a rush to lease.... **We are not just about the business of letting the oil and gas industry run the Department of Interior.**”

[Interior Secretary Ken Salazar, January 4, 2010](#)

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## Recent News

[Denver Post](#): Oil Shale and Climate Change (Op-ed by Karin Sheldon and Paul Komor)

[Denver Post](#): Draft State of Colorado study reports water use in oil shale country is increasing

[LA Times](#): Federal agencies may have to consider climate before they act

[iStock Analyst](#): Farmers welcome oil shale slowdown

[Morningstar](#): US Oil Use Flat To 2035 Without New Policies

[iStock Analyst](#): Shale oil versus oil shale: What is the difference?