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Denver Post Guest Commentary:

Oil shale development and climate change

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While the world discusses climate protection in Copenhagen, a climate disaster looms in the Rocky Mountain West: a resurgence of interest in oil shale development. We need only look at Canada to see that oil shale development in the West, like tar sands production in Alberta, would undermine our country's goal of reducing greenhouse gasses.

Eleven years ago when the international community met in Kyoto to establish goals to reduce greenhouse gas emissions, Canada pledged to reduce its levels 6 percent by 2012. Since that time its output has increased 26 percent, largely as a result of tar sands production. Canada is now one of the largest emitters of greenhouse gasses.

Oil shale, which is closely related to tar sands, is a sedimentary rock found in the Green River Formation under Colorado, Utah and Wyoming. When heated, the shale releases kerogen, a waxy substance that may be refined for use as transportation fuel.

Despite efforts over the last 100 years, producing oil from shale is not commercially viable. Nevertheless, oil shale continues to be touted as a golden key to energy independence. However, even if the technological and economic challenges are solved, the climate impacts could be devastating.

Tar sands production generates almost three times as much carbon as conventional oil production because of the amounts of energy needed to extract, upgrade, and refine the oil. Oil shale is also highly energy intensive. In a 2008 analysis, the Department of the Interior concluded that ten new coal plants that could generate up to 121 million tons of carbon dioxide per year would be needed to power oil shale development. That translates into a 90 percent increase in the carbon dioxide emitted by all existing electric utility generating units in 2005 in Colorado, Wyoming, and Utah combined.

Oil shale proponents argue that development could be powered through natural gas, eliminating the need for coal and reducing carbon impacts. 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?

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Every country has an Achilles Heel that could make climate goals unattainable. In Canada, it is tar sands production. In the United States, it could be oil shale.

President Obama's pledge to reduce our climate impacts is laudable - and necessary to protect human health and the environment. The President's efforts would likely be nullified should oil shale resources be developed.

As delegates from 200 countries meet in Copenhagen to discuss climate goals, the Obama Administration should send a clear message that it is serious about combating climate change by putting the brakes on oil shale development.

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