

Fracking: The New Global Water Crisis

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New drilling and fracking techniques have been a boon for the oil and gas industry in the United States, making it possible for companies to extract large quantities of oil and gas from shales and other “tight” rock formations.¹ However, shale development^a has been a nightmare for those exposed to the resulting pollution.

Taken together, spills of toxic fracking fluid and fracking wastewater,² groundwater contamination from methane³ and fracking fluid,⁴ local and regional air pollution problems,⁵ explosions and fires,⁶ and climate-threatening levels of methane emissions⁷ demonstrate the shortsightedness of relying on the dirty energy from shale development.

Yet the oil and gas industry is poised to take the modern drilling and fracking nightmare global. International private and state-owned oil and gas companies from around the world are partnering with U.S. companies to gain drilling and fracking expertise, and new international shale “plays” are being targeted.⁸

Citizens of countries with shale development potential need to know the inherent risks and costs. They need to also know that the promise of broad-based economic growth from drilling and fracking is false.

Energy companies based elsewhere typically do not buy drilling and fracking supplies from local businesses, and shale development jobs typically go to transient workers who bring shale industry experience.⁹ In addition to a number of other characteristic flaws, projections touting the potential job creation from shale development do not include the negative impacts on employment in other parts of the economy, such as agriculture and tourism.¹⁰

Countries not yet exposed to the risks and costs of drilling and fracking have an opportunity to choose a different, environmentally sustainable path than that taken in the United States. Enacting a national ban on fracking and investing in the deployment of energy efficiency and renewable energy technologies will set a sustainable course.

a For simplicity, the term “shale development” is used in reference to the combination of horizontal drilling and hydraulic fracturing, or fracking, of shale and other impermeable rock formations, including coalbeds, “tight” sandstones and siltstones, to extract oil and/or natural gas.

Europe

In June 2011, France became the first country to ratify a nationwide ban on fracking.¹¹ In January 2012, Bulgaria also enacted a nationwide ban on the practice, and in the process revoked an agreement with Chevron that would have allowed shale gas exploration.¹² Poland has the highest estimated reserves of shale gas in Europe,¹³ but the government’s effort to commercialize this resource has been complicated by charges of corruption involving government officials and the shale gas industry.¹⁴

South Africa

In 2009, the Petroleum Agency South Africa granted permission to Shell to conduct an assessment of shale gas resources in the Karoo Basin.¹⁵ However, farmers and environmentalists, who do not own mineral rights on their lands, have resisted fracking in the Karoo.¹⁶ In April 2011, South Africa’s cabinet acknowledged concerns and established a moratorium to allow time for a government study of the impacts of fracking.¹⁷



SHALE GAS PROTEST IN BULGARIA. IMAGE BY IVAN DEMITROV / COMMONS.WIKIMEDIA.ORG

China

The U.S. Energy Information Administration (EIA) estimates that China has a potentially enormous amount of recoverable shale gas.¹⁸ The U.S.-China Shale Gas Initiative was launched to facilitate Chinese efforts to gain technical expertise in shale gas development.¹⁹ Shell has teamed up with PetroChina to drill and frack China's first exploratory horizontal shale gas well.²⁰

Argentina

According to the U.S. EIA, Argentina has the third-highest amount of technically recoverable shale gas in the world, primarily in the Neuquén Basin.²¹ In December 2010, Apache Corporation conducted the first multistage fracking of a horizontal shale gas well in Latin America.²² In addition to its gas resources, the Neuquén Basin is expected to hold significant quantities of tight oil.²³ Total, ExxonMobil and EOG Resources have each begun to invest in developing these resources.²⁴

Endnotes

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