

TOPIC: Do the economic benefits in terms of jobs and energy outweigh the environmental risks of hydraulic fracturing (fracking) used in the production of natural gas? Justify your conclusion, using at least four resources, and cite references in approved MLA format.

American Technology Prevails

The economic benefits outweigh the environmental risks of hydraulic fracturing. The primary environmental concern of hydraulic fracturing is drinking water contamination by the fracturing fluid. This can occur if the fracturing opens a path between the target rock and groundwater, a drill pipe leaks, or a surface spill occurs.

Target shale formations are usually at least 1,600 meters below the surface, while drinking water is rarely deeper than 300 meters. A fracture through 1,300 meters of rock is improbable. Well casing leaks are rare because there are at least five separate, concentric steel or concrete pipes in the groundwater zone that must simultaneously fail. The most probable source of water contamination is a surface spill. However, if water contamination does occur, the remediation technology exists. Currently, the Department of Energy successfully treats over 6.5 trillion liters of contaminated water from various types of facilities and sites.

The production of natural gas by hydraulic fracturing directly or indirectly employs 350,000 American workers, results in \$20 billion annually in taxes, and supplies 25 percent of domestic consumption. Shale reserves can supply gas for over 80 years at current extraction rates. The production of natural gas from hydraulic fracturing cut the price of natural gas in half between 2008 and 2011.

Risks associated with failure to develop natural gas with hydraulic fracturing merit evaluation. The natural gas industry built eleven terminals to import liquefied natural gas from countries including Egypt, Qatar, Russia, and Yemen. In 2012, these terminals imported less than one percent of the domestic consumption of natural gas while operating at less than three percent of their design capacity. Safe production of natural gas by hydraulic fracturing relies on the skills of American engineers and scientists while importing natural gas depends upon the whim of foreign countries.

Therefore, the risks of hydraulic fracturing are mitigated by the skill of American workers and outweighed by the creation of jobs, tax revenue, security of supply, and lower prices.

ADDITIONAL PAGES OR SPACE NOT PERMITTED

RESOURCE PAGE : List all resources used in MLA format. When Internet resources are cited, they should also utilize the MLA format. Simply listing a search engine is not an acceptable citation.

Works Cited

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