

# Fossil fuels

[Environment](#), [Nature](#)



Fossil Fuels, which include coal, oil, and natural gas, are a non-renewable energy source that were formed from the decomposition of plants and animals that were deposited in the Earth around 300 million years ago. These fossil fuels, after being removed from the Earth, are converted into energy and this energy is essential to modern society (Chughtai & Shannon, 1998). Over 85 percent of America's energy demands are met by the combustion of fossil fuels, which means that America requires large amounts of oil, coal, and natural gas in order to generate the power that is needed to keep the country in operation.

Fossil fuels are used to power homes, heat homes, provide transportation, and to power exploration (Chughtai & Shannon, 1998). Without fuel there would be no energy and without energy the world would come to a virtual standstill. While fossil fuels have proven essential to the industrial revolution and the creation of society as we now know, fossil fuels pose a danger to the world, to the ecosystem, to animals, to plants, and to humans.

The exploration and extraction of fossil fuels cause destruction to the natural environment and upsets ecosystems which can not only harm the natural beauty of the world, but can interrupt the food chain which is essential to life. The Impact of Exploration and Extraction The destructive power of fossil fuel exploration and extraction is a major concern for environmentalists and starts with how each fossil fuel is discovered and removed from the Earth.

Because of the destructive nature of fossil fuel exploration and extraction environmental groups around the world are trying to show the negative

impact of fossil fuels on the environment. Environmental groups are trying to block oil exploration in the Georges Bank, a vast underwater plateau that stretches from Cape Cod to Nova Scotia and has been among the world's most fertile fishing grounds, because they show evidence that oil exploration could, “ could disrupt the fragile ecological environment at Georges Bank at a time that authorities are trying to restock declining fish populations” (Klein, 2005).

Exploration and extraction of fossil fuels from marine environments can cause untold damage to ecosystems and marine life that can completely change not only the underwater environment, but can also profoundly impact the lives of those who rely on the marine ecosystem to survive; including humans. According to different scientific studies, seismic blasting can damage reproductive organs, burst air bladders, and cause physiological stress in marine organisms. It can also cause behavioral modifications and reduce or eliminate available habitat, alter fish distribution by tens of kilometers, and damage planktonic eggs and larvae (Quijano, 2008).

Klein reports, “ some recent studies have indicated seismic testing impairs the hearing mechanisms of fish can kill fish eggs and larvae, and drive marine mammals -- including rare whale species -- from their feeding grounds (2005). The destruction of natural fish habitats has been shown to lower local fish populations and to interrupt the breeding and migration habitats of fish populations. Not only do local communities often rely on fish that are disrupted by underwater exploration and extraction of fossil fuels,

but other marine animals and ecosystems can be affected by sudden and irreversible changes.

Coal mining, often in heavily wooded and mountainous regions throughout the world, destroys habitat that is home to many animal species. In Canada, open-pit mining in the region of Jasper National Park has interfered with and destroyed the habitat for up to 5, 000 song birds and the breeding grounds of the largest breeding population of Harlequin Ducks in Alberta (Barber ; Gelfand, 2005). In addition to the birds, the mine is thought to further threaten the already endangered grizzly bear population in the region.

Additionally, coal mining, as well as other factors, is reported as a major threat to the critically endangered Sumantran Tiger in the Kerinci Seblat National Park in Sumatra. Mining operations in the area are destroying the remainder of the tiger's natural habitat and is not only reducing where the tiger can live, but is also reducing food populations for the tiger and forcing more human interactions (Linkie, et al. , 2003). Oil exploration not only harms the natural environment, but it can be destructive to natural cultures and to indigenous people.

Indigenous people are more in tune with nature and live with the land, and are less likely to exploit or destroy nature to suit their lifestyles; however, when they are displaced by oil companies, large portions of the natural environment fall to exploration and drilling. A report from Doctors Without Borders in 2002, showed, “ oil development in the western Upper Nile region of Sudan has caused mass displacements of civilians, bombings and burning

of civilian homes” (Babych, 2002). Hundreds of thousands of people were displaced or killed and their land was stripped in order to erect oil facilities.

Oil exploration is also reported to be a major cause of displacement of the indigenous people of Columbia. A reported 28, 000 or 10 percent of the population has been forced from their ancestral lands in order to allow outside nations, led by the United States, to explore for oil and coal in the regions (Lari ; Kurtzer, 2008). Oil exploration around the globe often occurs in regions where tribes of people have lived for hundreds of years and these people are now being unnaturally forced from the land.

Clearly the exploration and extraction of fossil fuels is having a major environmental impact around the globe and is harming the natural environment, natural ecosystems, animal populations, and even human lives. The impact of fossil fuels goes beyond the concerns of global warming and the extraction of fossil fuels further threatens the Earth and the natural environment. What is Being Done Unfortunately, little is being done by government agencies in order to protect the natural environment or the indigenous people when it comes to exploration and extraction of fossil fuels.

The government of the United States, and the governments of other industrialized nations, must continue to explore for new sources of fossil fuels in order to secure quantities for the future and often this means ignoring the global impact that fossil fuel exploration and extraction has on the environment. While the Government, led by the EPA, passes legislation to clean up the environmental impacts of consuming fossil fuels, little attention is paid to ending the harmful exploration and extraction issues.

The majority of America's fossil fuels are obtained from other nations and the U. S. government relies on these nations to study and lessen the impact of fossil fuel exploration and extraction. In order to correct the harm that is being done, more attention and more resources must be put into lessening or eliminating the environmental impact of extracting fossil fuels from the Earth. The Sierra Club states, " Extraction of these fuels, such as drilling for oil or mining coal, often destroys forests, mountains, coastlines, and other natural areas. When crude oil is transported by sea to refineries, leaks and spills can destroy marine life for huge areas" (2008).

Many environmental groups and human rights organizations are working to protect the environment from fossil fuel exploration and extraction, but an international policy must be enacted in order to address the issue on a global scale. An international policy must be written and adhered to by all nations if the world is to be protected from these harms. While global warming, oil spills, mine disasters, and other issues receive worldwide media attention, the impact of fossil fuel exploration and extraction receives little, if any, media coverage.

The media covers only the stories that involve the impact of burning fossil fuels and ignore any stories that show the impact on the environment of extraction. More advocacy is needed and governmental controls are required to reduce the global environmental impact from the exploration and extraction of fossil fuels. Environmental groups and human rights organizations must continue the fight in order to gain an international policy and gain the required public support and media attention. While the impact

of the use of fossil fuels is well-know, the public must be informed on the impact of finding and removing the fuel from the Earth.

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