Fossil Fuels: Negative Effects And Ways To Prevent Pollution

Are fossil fuels good or bad?

If you have ever drove by a factory or power station and saw smoke falling out of the place, you're seeing petroleum contamination first hand. Fossil fuels want to be burnt to release the chemicals stored in them which contribute to gas being released into the atmosphere. Unfortunately, burning fossil fuels releases toxic molecules and greenhouse gasses into the air resulting in harm for us and the world around us. For example, burning coal releases toxic atoms like sulfur dioxide and heavy metals like mercury into the atmosphere. These chemicals lead to more severe effects like acid rain, global warming, and cancer.

Natural gas

Natural gas is a flammable, nonrenewable gas consisting largely of methane and other hydrocarbons occurring naturally underground (often in association with petroleum) and used as fuel. There are multiple types of natural gas like; ethane, butane, propane, pentanes, hydrogen sulfide, carbon dioxide, and more. These natural gasses can be found underneath the earth's surface all over the world. It is mainly near the surface in pockets where there is low oxygen. It is usually below mutable layers of rock and other minerals like limestone and shale. Natural gas has many uses like in cooking for gas stoves and similar appliances. It is used as a fuel for vehicles like planes, trucks and boats. It's used in heaters and used to power big factories. It is obtained by drilling vertical wells and making use of traditional pumping techniques. In most cases it will be found floating atop of oil deposits due to buoyancy or mixed with the oil.

Coal

Coal is a combustible black or dark brown rock consisting mainly of carbonized plant matter. Coal is one of the main and widely known fossil fuels. In just West Virginia, almost ninety-three million tons where exported to foreign markets. Coal can be found under ground in formations called coal seams or coal beds. A single coal seam can be as thick as thirty meters (90 feet) and stretch 1,500 kilometers (920 miles) coal seams exist on every continent. The largest coal reserves are in the United States, Russia, Australia, and India. The main uses for coal are in power generation where the coal is burned and then the heat is converted into mechanical energy which then operates an electrical generator. Some other uses for coal are steel production where it is burned to melt iron to be mixed into steel, cement where it is used to make cement, and as liquid fuel. It is obtained in mutable ways the first one is surface mining. Surface mining is where the coal is near the surface but still with rock above it. To get to the coal the rock is destroyed by explosives and then removed by trucks. When the coal is exposed, it is drilled, fractured, and systematically mined in strips. Then the coal is loaded into a truck and then transported. Underground mining, underground mining is split into two categories' room and pillar, and long wall mining. Room and pillar mining are where a network of rooms is cut in the coal seam and where pillars of coal support the roof. These pillars can take up to 40% of the coal in the seam but it can be mined in later stages. Long wall mining, long wall mining is where

sections of the seam are fully extracted using mechanical shearers. The face can vary in length from 100-350m. hydraulic powered supports temporarily hold the roof while the coal is being extracted. Once the coal is fully extracted the supports are removed and the roof is allowed to collapse.

The Negative Effects

There are negative effects of these fossil fuels that are harmful to us and the environment here are some. Global warming, global warming is where there is a hole in the ozone layer in the atmosphere above Antarctica. This hole is allowing more UV light to reach the ice caps and cause them to melt. This is thought to be caused by greenhouse gasses being released into the air by burning coal and other fossil fuels. The melting of the ice caps is causing the sea level to rise at an alarming rate. This would cause water to rise above the coast and destroy habitats and homes for many plants, animals, and people all over the world. Toxic gasses and acid rain, burning fossil fuels gives out harmful compounds like nitrogen oxides and sulfur dioxide. These substances rise high into the atmosphere where they combine with water, oxygen, and other natural chemicals to form acid pollutions. The chemicals easily dissolve in water and are carried very far by wind and spread into rain and becomes acid rain. Oil spills, oil spills are when boats and other oil heavy machinery spill oil into the ocean. This oil can get on birds, fish and even people. When the oil gets on birds it prevents them from flying and destroys a bird’s natural water proofing. When the oil finally sinks it damages the under-water ecosystem by killing and making fish sick. Sometimes the oil will float ashore and plants will absorb it and will cause the ecosystem there to become unstable because the animals eat the defective plants and it could cause them to die or get sick. And the effects of oil spills are long term the horrible affects can last up to or more than ten years. When oil washes ashore it can get stuck in the sand and last there for years and kill the animals in the sand like crabs and kill the plants in and around the sand.

Ways pollution can be prevented

We can prevent pollution in a few ways a few of these ways are to use solar panels to help power our house. If we use solar panels to reduce the amount of coal used to power and heat our house we can stop some of the dangerous chemicals that are causing global warming. Wind turbines, wind turbines are big fans powered by the wind and generate electricity. If e were to use these more there would be less need for coal power generators because these would generate the same power but without the chemicals. The problem with wind turbines is that they cannot be put anywhere if we put them in a place with mountains they would not be able to produce power due to the lack of wind. The only place we can use these is in flat areas where the wind can reach them properly. Electric cars run on fuel and when they move the fuel is burnt and the smoke is released into the air. If we use electric cars this extra smoke is unnecessary. Dams we can use power from dams when water passes through the dam the power of the rushing water is used to create mechanical power which is converted into electricity.

Conclusion

There are many good and bad effects of fossil fuels and they do more bad than good. They cause horrible problems and if we don’t resolve them soon we might never be able to fix them. There are ways we can stop using these fuels and prevent some of our bigger problems like

global warming and pollution. So, in conclusion, fossil fuels help us but they cause more damage than they fix and need to be replaced by less harmful ways to live.

Sources

1. www.Worldcoal.org
2. www.sciencea-z.com
3. www.thoughtco.com