NATURAL GASES

BY: WALTER DEBOSE

Information of Natural Gases

- Natural Gas is a naturally occurring Hydrocarbon Gas mixture consisting primarily of Methane, but is commonly carrying more things such as higher alkanes (Ethane, Propane, Methane, and Butane) and sometimes includes a small mixture of carbon dioxide, nitrogen, and/or hydrogen sulfide.
- Natural Gas is an odd chemical that is composed of animal matter and dead plants, and when exposed to intense heat and pressure, they produce this compound.
- The energy that the plants, before death, originally gained from the sun is instead given off in the form of the gas.

What is the main goal of this energy?

- Natural Gas is a fossil fuel. And because of this, it can not be recollected to use over and over again.
- Natural Gas is used as a source of energy towards heating, cooking, and generating electricity. It is also used as a fuel for vehicles and as a chemical feedstock in the manufacture of plastics and other commercially important organic chemicals. It is completely a non-renewable resource. This source of energy is oddly enough, clean-burning, and is used in a wide variety of aspects and applications.
- In the 19th and 20th centuries, Natural Gas was used for Street Building and providing a streetlight known as "gas lighting" Today, with some improvement, they've developed ways too be able to implement Natural Gas into factories, homes, businesses, and power plants.

How does it work?

- Natural gas is a versatile fossil fuel that we use for heating, cooking, electricity production, transportation, and as an industrial feedstock. In 2012, it made up 30 percent of the U.S. energy mix, and it continues to be a readily available domestic resource as a result of recent discoveries and advances in extraction technology.

What might disrupt this process?

- What could possibly disrupt the process of obtaining the Natural Gas is not having the proper equipment. Fracking, to the people doing it, costs a large amount of money. If they don't check their equipment, or something goes wrong, they'd have to start other, which in turn, causes even more environmental issues.

What politically could affect it?

- Something that could affect it politically is the Clean Power Plan.
- On August 3, 2015, President Obama and EPA announced the Clean Power Plan – a historic and important step in reducing carbon pollution from power plants that takes real action on climate change. Shaped by years of unprecedented outreach and public engagement, the final Clean Power Plan is fair, flexible and designed to strengthen the fast-growing trend toward cleaner and lower-polluting American energy. With strong but achievable standards for power plants, and customized goals for states to cut the carbon pollution that is driving climate change, the Clean Power Plan provides national consistency, accountability and a level playing field while reflecting each state's energy mix. It also shows the world that the United States is committed to leading global efforts to address climate change.

Positive environmental impacts

- Widely used, contributes 21% of the world's energy production today
- Delivery infrastructure already exists
- End use appliances already widespread
- Used extensively for power generation as well as heat
- Cleanest of all the fossil fuels
- Burns quite efficiently
- Emits 45% less CO2 than coal
- Emits 30% less CO2 than oil
- Abundant supply in the US. DOE estimates 1.8 trillion barrels
- Low levels of criteria pollutants, (e.g. SOx, NOx) or soot when burned
- Can be used as an automotive fuel
- Burns cleaner than gasoline or diesel
- No waste (e.g. ash) or residue to deal with
- Lighter than air, safer than propane which is heavier than air
- Can be used to makes plastics, chemicals, fertilizers and hydrogen
- Natural gas industry employs 1.2 million people

Negative environmental impacts

- Non-renewable fuel, supply cannot be replaced for millennia
- Emits carbon dioxide when burned
- Contains 80-95% methane, a potent greenhouse gas (GHG)
- Explosive, potentially dangerous
- Concentrated sources require long distance transmission and transportation
- Energy penalties at every stage of production and distribution
- Requires extensive pipelines to transport over land
- Stored and distributed under high pressure
- Requires turbine-generators to produce electricity
- Liquefied form (LNG) used to transport over water, in tanker ships is potentially very dangerous
- Energy use competes with use for chemicals and fertilizers

Can the negative effects be dealt with?

- So far, No.

Sources.

- http://www.ucsusa.org/clean_energy/our-energy-choices/coal-and-other-fossil-fuels/uses-of-natural-gas.html#.VsYKhvmDFHw
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