# Advantages and Disadvantages of Nuclear and Coal Generated Energy

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### **Nuclear Vs. Coal**

As the demand for electricity grows every year, especially in developing countries, the source of energy is a growing concern. There is always a debate between getting energy from nuclear power plants and coal power plants. Most of the world's electricity is generated from coal powered power plants, but nuclear power plants are on the rise. I wanted to see for myself, if one method was better than the other.

### **Advantages of Coal Power Plants**

- Coal is easy to burn, and an easier method than nuclear energy.
- Coal is a cheap energy source with stable prices.
- Coal produces high energy when burned.
- Coal is abundant and a reliable energy source.

### **Disadvantages of Coal Power Plants**

- Burning coal releases large amounts of pollutants and greenhouse gases into the air, which contribute to global warming.
- Large amount of coal are needed to power one power plant every day. One
  1,000 Megawatts electric coal plant uses 9000 tonnes of coal per day.
- Coal is non renewable and is quickly diminishing.
- Coal mining ruins the environment and puts coal miners at danger.

## **Advantages of Nuclear Power Plants**

- Nuclear energy creates less carbon dioxide, so it will help reduce global warming.
- Nuclear energy can produce a larger amount of electricity than other power generation methods, so it meets the growing demand for electricity.
- The efficiency of nuclear energy can still be improved with technology.

## Disadvantages of Nuclear Power Plants

- Nuclear energy increases the risk of having a nuclear accident.
- The uranium supply used for fuel in nuclear power is only expected to last for the next 30-60 years.
- The radioactive materials involved with a nuclear power plant are dangerous to all organic life. In the Chernobyl accident, there was an estimated 4,000 deaths from cancer caused by radiation.
- Nuclear waste has to be stored for thousands of years.
- Nuclear power plants can be a target for terrorism.
- Nuclear waste can be used weapons.

# **Key Findings & Conclusion**

Even though coal power plants release large amounts of carbon dioxide, they don't risk having a nuclear accident. However, if we take extra measurements to ensure nuclear accidents don't happen, it can be better for the environment. Either way, uranium and coal are non renewable resources, so both methods are unsustainable.

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