Coal is an **incredibly** important resource for **humanity**, while also being extremely harmful to the Earth. The professor **discusses why the three proposed solutions for reducing emissions from burning coal are problematic**.
To begin with, converting coal into gas is inefficient. **Although syngas—the name for converted coal—produces almost no emissions when burned, there is a major drawback.** The process of **producing syngas requires fossil fuels to heat the coal and a large amount of water**. **As a result, this method both pollutes the air and wastes water.**
Moreover, using static electricity **has limited effectiveness**. **While it does remove some pollutants such as soot and dust, it does not eliminate carbon.** Since carbon is **the most harmful pollutant to the environment**, this method is **not very helpful in preserving nature unless it can also remove carbon**.
Lastly, there are fabric filters. **These involve tightly woven fabric bags that collect both liquid and solid waste.** While the filters themselves are effective, **they are too expensive for regular use**. **Each filter lasts only about three years and replacing them is costly.** In addition, fans are required to **direct emissions into the filters**, **adding further operational costs**.
In conclusion, **although converting coal to gas, using static electricity, and installing fabric filters might appear to be promising solutions, each method has significant drawbacks that limit its practical use.**