Faculti Summary

https://faculti.net/carbon-emissions-trading-and-environmental-protection/

This video discusses the impact of emissions trading systems (ETS) on global carbon emissions and renewable energy usage. It highlights that while numerous studies exist on specific regional ETS markets—like those in the EU, US, and China—there has been a lack of global perspective regarding their effectiveness in addressing climate change, which is a global issue.

The paper presents findings from the first comprehensive global study using data from the 100 largest countries by GDP to understand how ETS policies affect emissions. It reveals that adopting ETS leads to approximately a 12% reduction in greenhouse gas emissions and an 18% reduction in carbon dioxide emissions. Additionally, the findings indicate a significant shift from fossil fuels to renewable energy sources, with renewable energy usage rising by nearly 62%.

The ETS, also known as cap-and-trade, effectively caps emissions and allows firms to buy or sell carbon permits, influencing their emissions based on market dynamics. While ETS has shown local effectiveness in reducing emissions, concerns such as "carbon leakage"—where companies move to regions with laxer regulations—question the overall global effectiveness of ETS due to fragmented implementation.

The paper compares the effectiveness of ETS and carbon taxes, concluding that ETS tends to be more effective in reducing emissions and promoting a transition to renewable energy. The average carbon price in ETS markets is significantly higher than in carbon tax regimes, contributing to the latter's perceived lower effectiveness.

The authors suggest that rather than debating which instrument is better, future climate policies should focus on optimizing the design and scale of both ETS and carbon taxes, improving their impact on emissions reduction and facilitating the transition to cleaner energy sources.