Rhetorical Analysis of IRENA's Emission Reduction Visualization

Khwaab Thareja

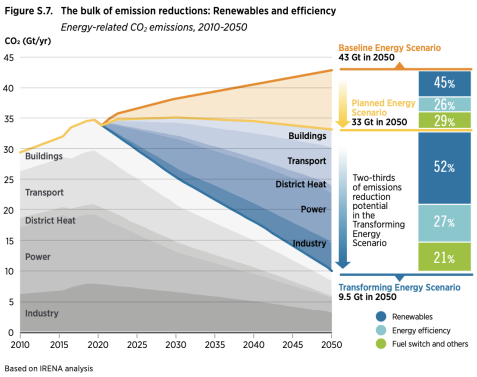
1. Introduction

This report analyzes a visualization from the IRENA Global Renewables Outlook 2020, titled *"The Bulk of Emission Reductions: Renewables and Efficiency."* The figure illustrates energy-related CO2 emissions from 2010 to 2050 across three scenarios: Baseline Energy (BES), Planned Energy (PES), and Transforming Energy (TES). The analysis explores its narrative structure, persuasive techniques, visual elements, call to action, and ethical considerations.

2. Narrative Structure and Persuasive Techniques

The visualization employs a cause-effect structure: fossil fuel usage (cause) versus CO2 reduction through renewables and efficiency (effect).

- **Logos:** Demonstrates clear, logical data showing emission reductions under TES compared to PES and BES.
- **Pathos:** Highlights the dramatic CO2 reductions in TES, inspiring optimism for a cleaner future and encouraging action.



figureEmission reductions by renewables, efficiency, and fuel switching. Source: IRENA, "Global Renewables Outlook 2020."

3. Visual Elements

- **Color Coding:** Blue (renewables), green (efficiency), and gray (fuel switch) differentiate reduction strategies over time.
- **Stacked Area Graph:** Shows sector-wise emission reductions (Buildings, Transport, Power, etc.) under each scenario, emphasizing TES's benefits.
- **Comparative Analysis:** Contrasts BES, PES, and TES to advocate for immediate renewable adoption.

4. Call to Action

The visualization's implicit message—*"Adopt renewables and improve efficiency to cut emissions"*—is clear. The stark contrast between TES and PES visually underscores the urgency of transitioning to clean energy.

5. Ethical Considerations

- **Oversimplification:** Simplifies challenges like financial, political, and social barriers to achieving global emission reductions.
- **Regional Disparities:** Ignores differences in access to renewable technologies and transition costs across regions.

6. Conclusion

The IRENA visualization effectively highlights the critical role of renewables and efficiency in reducing emissions. Combining logical data (*logos*) with emotional appeal (*pathos*), it motivates action. However, oversimplification and regional disparities remain ethical concerns. Overall, it is a compelling call for global climate action.