# Article information:

Material stocks in global electricity infrastructures – An empirical analysis of the power sector's stock-flow-service nexus - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0921344921003323?via%3Dihub>

# Article summary:

1. This article investigates the current state and historical development of the global power sector from a “stock-flow-service nexus” (SFS-nexus) perspective.

2. It quantifies the main bulk materials (iron/steel, concrete, copper and aluminium) in power plants, grids and transformers, and fuel use of thermal power plants from 1980 to 2017.

3. The article explores the relations between material stocks and qualitative indicators for service quality and societal well-being.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article is generally reliable in its reporting of facts about the global electricity infrastructure, such as material stocks, flows, emissions, etc., as it provides evidence for its claims in the form of data from various sources. However, there are some potential biases that should be noted. For example, the article does not explore any counterarguments or alternative perspectives on the issue; instead it presents a one-sided view that may be seen as promotional content by some readers. Additionally, while it does mention possible risks associated with electricity infrastructures such as greenhouse gas emissions, it does not provide any detailed analysis or discussion of these risks. Furthermore, while it does present both sides of the argument equally in terms of material stocks and flows versus service quality and societal well-being indicators, it does not provide any evidence to support its claims about their correlation. Finally, there is no discussion of other factors that could influence service quality or societal well-being such as economic development or political stability which could potentially have an impact on electricity infrastructure investments.

# Topics for further research:

* Greenhouse gas emissions and electricity infrastructure
* Impact of economic development on electricity infrastructure
* Political stability and electricity infrastructure investments
* Correlation between material stocks and flows and service quality
* Counterarguments to global electricity infrastructure investments
* Societal well-being indicators and electricity infrastructure

# Report location:

<https://www.fullpicture.app/item/e732d949ba5c928eb4bd61b748db667f>