

Counterpoint: Solar Power Transition Comes with High Costs

Thesis

Solar energy is an important renewable energy source, but it has drawbacks, including unreliable service and potential environmental damage from the solar panels themselves.

Talking Points

- Solar power is intermittent and unreliable because it is weather-dependent.
- Large-scale solar farms raise concerns about competing land use, particularly for agriculture and food production.
- Solar technology can be environmentally damaging if not manufactured, maintained, and disposed of properly.
- The rapid adoption of residential solar panels has led to a rise in consumer complaints, many of which are difficult to receive assistance with due to outdated rules and regulations.

Summary

Solar power is a valuable renewable energy source that plays an important role in environmental preservation. However, opponents of expanding solar energy argue that its generation is weather-dependent, which makes it intermittent and potentially unreliable. To power homes at night and on cloudy days, homeowners must store energy in large batteries or draw from the commercial grid. Opponents state that these technical limitations mean that methods for power generation besides solar must remain readily available.

Additionally, the increase in large-scale solar farms has raised concerns with critics about competing land uses. Lobbying groups such as the Riverina Sustainable Food Alliance (RSFA) have pushed back against the development of solar farms out of concern that prime agricultural land is being sacrificed for energy production at the expense of food security. Farmers with land located near proposed large-scale solar projects are also concerned about drainage, potential heavy metal contamination of the soil, and localised temperature increases due to heat generated by the plant or panels.

Furthermore, some experts worry about the environmental impact of the panels themselves. Newer solar panels are made using inert or recyclable materials such as silicon wafers, tin, and copper, but mining operations for the metals, as well as energy use and

emissions from the manufacturing process, can negatively impact the environment. In 2021, Australia sent about forty thousand old solar panels to developing countries annually; Achim Steiner of the United Nations Development Program worried that these panels would eventually end up in other nations' landfills. Critics argue that this is especially problematic because some older panels were made with cadmium or nitrogen trifluoride, both of which are toxic and can cause serious health problems if they leech into the soil or water supply.

Finally, the Australian Competition and Consumer Commission (ACCC) reported that it fields more than one thousand complaints related to residential solar power each year, including misleading representations about the equipment and improper installations. While government agencies exist to help consumers with energy-related issues such as supply and service quality, Cynthia Gebert, the Energy and Water Ombudsman of Victoria, explained that her office's jurisdiction is limited to traditional energy suppliers who participate in the scheme. Since many newer technologies such as solar panels and batteries fall outside of this jurisdiction, the only recourse consumers have is to work directly with their energy provider or the company that sold them the system to find a solution.

Solar power plays an important role in emissions reduction, but because of its potential drawbacks, Australia must remain open to a variety of solutions for renewable energy.

Ponder This

- The author has presented the fundamental positions for this perspective in the debate. Outline the strengths and weaknesses of each perspective.
- If asked to begin forming an argument for this position, what sources would you need to build your case? What fundamental information do you need? What opinion leaders in this debate would you look to in solidifying your argument?
- What are the weakest aspects of the position outlined by the author? How might those weaker arguments help you prepare a counter argument?
- What additional Talking Points could you add to support this position?

Bibliography

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