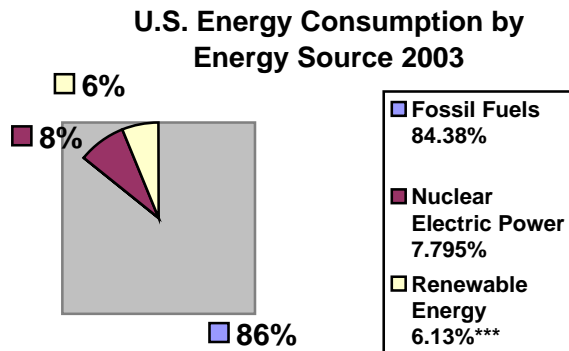


## Document Based Assessment

### The Use of Alternative Energy

For many scientists, politicians, and citizens, energy consumption is a troubling issue. Most people agree that the world is too dependent on fossil fuels, which are not renewable. However, intense debate surrounds the questions of which alternate energy sources we should focus on, and how quickly we need to have them developed.

#### Document A



\*\*\*Renewable Energy includes: Conventional Hydroelectric (2.7%), Geothermal Energy (.31%), Biomass (2.8%), Solar Energy (.06%), Wind Energy (.10%)

#### Document B

“As we approach the end of the twentieth century there is no single thing we can do that will have as large an impact on the people of the world during the new century than the development of solar power satellites. They will bring prosperity, an opportunity for the poor nations of the earth to achieve true freedom from want, healing of our environment, and open the vast new frontier of space to all of us.

...With the development of solar power satellites we will tap directly into the power of the sun and save the world from impending chaos. There will be hope for the future as we enter the twenty-first century.”

-From **Sun Power** by Ralph Nansen

#### Document C

“Renewables are not without their drawbacks. Solar and wind farms cannot generate much electricity on cloudy or still days. As intermittent energy sources, they require vast systems to store the energy they produce, or must rely on the rest of the electrical system for backup. And despite federal subsidies to spur technological innovation, renewable sources have not become economical enough to seriously challenge fossil fuels in an open market”

-from “CQ Researcher,” November 7, 1997

### Analyzing Documents

Use your knowledge of global issues and Documents A, B, and C to answer questions 1-4

- Which Statement best describes the viewpoint of the author of Document B
  - Biomass generators are a better alternative to fossil fuel than solar powered satellites.
  - Solar powered satellites are the most promising alternative to fossil fuels.
  - Solar powered satellites are not realistic or cost effective as an alternative to fossil fuel.
  - More research must be carried out to determine whether solar powered satellites are a realistic alternative to fossil fuel.
- According to Document C, all are drawbacks of renewable energy except which of the following?
  - They are intermittent energy sources.
  - They are not cost-efficient.
  - They rely on traditional electricity sources.
  - They are worse for the environment.
- Short Answer:** What generalization can you make regarding document A? Which renewable energy source do you think should be expanded? Why?
- Writing Task:** What does our energy future hold? Make some predictions for 50 years into the future. Use information from these documents along with information from research, the text and or lecture notes.