Video Guide Questions→ NOVA: Saved by the Sun

1. What are some of the primary drawbacks of solar energy and photovoltaic cells?
2. How does a silicon based photovoltaic cell actually produce electricity?
3. What does an inverter do in a solar panel system?
4. About how many kilowatts of energy does the average household require? How much would this typical home-sized solar system cost?
5. Do you think government subsidies and tax credits have been effective in terms of increasing the number of photovoltaic home systems?
6. Phil Revis was able to cut his electric bill costs by half, but he was more worried about his "carbon footprint". What do you think he was talking about?
7. What are some of the potential weather and climatic effects of increased global temperature?
8. What causes power blackouts?
9. Describe a grid manager's job.
10. Kramer junction is an example of a solar thermal plant. Describe how it basically works.
11. Why don't we see numerous plants like Kramer junction across the country?
12. Describe some of the ways that Germany has implemented solar technology.
13. Heinrich Gartner's mixed use traditional livestock and solar farm was developed in part of "fixed pricing" for energy production. How has fixed pricing helped the development of solar renewable solar power?
14. What has been the effect of solar technology on the German economy?
15. How have Sun Edison and whole foods work together to support solar energy?
16. What is the typical efficiency of a photovoltaic array of panels?
17. How do multi-junction cells increase efficiency compared to traditional silicon photovoltaic cells?
18. What is a dye based solar cell?
19. What kind of energy saving design elements are integrated into Mr. Luvin's home?
20. By 2025, how much of our nation's energy do you think will be derived from solar energy? Why?