Dream of a Nation **Re-Powering America**

Infographic

- 1. What are the material limitations of an energy generation system that produces and wastes energy in equal parts?
- 2. How is the United States' ecological footprint related positively and negatively to the country's ecological economy?

100 Percent Carbon-Free Electricity Within 10 Years

- 3. How is global warming an example of exploitative interaction and competitive exclusion?
- 4. Paul Taylor believes that, "The natural world is an interdependent system: The basic insight of the science of ecology is that everything is connected to everything else." How does Paul Taylor's realization about the interconnectedness of ecological systems support or refute ecocentrism?

Building a Conservation Nation

- 5. Aldo Leopold advocated for the idea of community to be extended to include non-human elements such as soils, waters, plants, and animals or collectively: the land. "That land is a community is the basic concept off ecology, but that land is to be loved and respected is an extension of ethics." In accordance with this line of thought, how many elements within our community are affected by coal energy?
- 6. How does energy extraction deplete ecosystem service?

A U-Turn on Transportation

- 7. How can car and bike sharing positively impact governmental efforts at cap-and-trade and emissions trading implementation?
- 8. Does the potential threat of the Asian Brown Cloud on America oblige the U.S. to increase our own aerosol pollution standards?

A Green Energy Future Without Expanding Nuclear

- 9. Amory Lovins, in his article, *Nuclear Socialism*, argues that, "Renewables, cogeneration, and efficiency can displace 2 to 20 times more carbon per dollar, 20 to 40 times faster, than new nuclear power—saving trillions of dollars over decades and avoiding vast financial risks." What is the basis for Lovins' and Slocum's argument opposing nuclear energy?
- 10. William Tucker, in response to Lovins' article, argues that society pays no price for the cost of nuclear energy in, *The Weekly Standard Goes Green*. He writes, "Private insurance provides \$300 million and individual reactors can be assessed \$100 million apiece for an accident at *another* reactor, for a total of \$12 billion. The industry insures itself. The only claims ever made were \$90 million at Three Mile Island and private insurers paid them. Although the program has lowered costs for utilities, it has never cost the government a dime." What is Tucker's basis for supporting nuclear energy and how does it differ from Lovins' and Slocum's?

A Blueprint for a Clean Energy Economy

Chapter 6 Questions

- 11. How would the energy economy be affected if it was consistent with Bryan Norton's population principal that, "...the level of population in any given generation should be determined by the requirements for the stability of resources flow"?
- 12. Describe how the carrying capacity of the earth affects population and energy ratios.

Post-Reading Questions

- 13. Does the concept of ecology require the belief that the earth exists in a dynamic equilibrium? If it does, how does an environmentalist account for past major extinction events? If it doesn't then why should ecologists worry about the disruption of the current processes of the system?
- 14. Watch <u>this debate</u> on nuclear energy, between the scientists Stewart Brand and Mark Jacobson, and then detail which side of the debate you fall on and why.