

Chapter 20: Sustainability, Economics and Equity

Reading Guide

Vocabulary

Learn the definition of each term. The **bold** words require you to know more than just the definition. For example, GPI: you should know what it stands for, what it measures and how it is different from the HDI, the HPI and the GDP.

- **command-and-control approach**
- Demand
- DOE - Department of Energy
- ecological economics
- environmental economics
- EPA - Environmental Protection Agency
- **Externalities**
- **GDP - Gross Domestic Product**
- **GPI- genuine progress indicator**
- **green tax**
- **HDI - Human Development Index**
- **HPI - Human Poverty Index**
- human capital
- **incentive-based approach**
- leapfrogging
- manufactured capital
- market failure
- MEP - Market Equilibrium Price
- **microlending**
- natural capital
- OSHA - Occupational Safety and Health Administration
- **Precautionary principle**
- Supply
- Technology transfer
- triple bottom line
- UN - United Nations
- UNDP - United Nations Development Programme
- UNEP - United Nations Environment Programme
- valuation
- WHO- World Health Organization
- World Bank

Reading Outline

Assembly Plants, Free Trade and Sustainable Systems

1. List the benefits of the *maquiladora* system.
2. List the costs of the *maquiladora* system.
3. Describe one way to improve the *maquiladora* system by reducing a cost.

20.1 Sustainability is the ultimate goal of sound environmental science and policy

4. Define sustainability in terms of environmental science.

20.2 Economics studies how scarce resources are allocated

5. Look at Figure 20.1,
 - a. what happens to the number of units SUPPLIED as price increases?
 - b. what happens to the number of units DEMANDED as price increases?
 - c. Does that make sense? Why or why not.
6. What is the Market Equilibrium Price?
7. How is solar energy an example of leapfrogging?
8. How does microlending help poor populations?

20.3 Economic health depends on the availability of natural capital and basic human welfare

9. Give three examples of market failures from an environmental perspective.
10. List multiple ways to value natural capital.
11. What is a cradle to grave system? What happens to the outputs of this kind of system?

20.4 Agencies, laws, and regulations are designed to protect our natural and human capital

12. You need to memorize the laws in Table 20.1. Figure out how you are going to do that.

13. Differentiate between a command-and-control approach and an incentive-based approach. Give an example of each.

20.5 There are several approaches to measuring and achieving sustainability

14. Vocabulary only

20.6 Two major challenges of our time are reducing poverty and stewarding the environment

15. Why is poverty an environmental problem?
16. What are the goals of the UN Millennium Development Resolution?
17. Who is most likely to bear the brunt of environmental hazards?
18. Give 2 examples of environmental justice situations.
19. Briefly describe Nike's Cradle to Grave program. Do you think this program is environmentally sound? Why or why not.

Additional Work:

Answer the MC questions and the Measuring Your Impact question at the end of Ch 20.