

# List of Changes





# **Environmental Economics**8th Edition

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available in



The eighth edition of *Field Environmental Economics*, eighth edition, contains new exhibits and updated figures and tables. It also contains new materials on:

- Paris Agreement Chapters 18 and 19
- Economics of Adaptation Chapter 18
- Developing Countries and the Paris Agreement Chapter 21
- Climate Change and Globalization Chapter 20
- Carbon Intensity of Trade Chapter 20
- Greenhouse Gas Emissions Chapter 20
- Recycling Markets Chapter 17
- Frank Lautenberg Chemical Safety for the 21st Century Act Chapter 16
- Emission Trading in Water Pollution Control Chapter 14
- Income Distribution of Emission Charges Chapter 12
- Community Resiliency Chapter 21
- Total Maximum Daily Load Chapter 14

# **Chapter by Chapter Changes**

# Chapter 1

- Replaced Exhibit 1.1 to Experience with PAYT Programs
- Updated Exhibit 1.2 Carbon Taxes Around the World
- Replaced Exhibit 1.5 to **Economic Growth and the Environment**
- Updated data in Table 1.1 CO2 Emissions per Capita, Selected Countries

# Chapter 2

- Added section Environmental Sustainability and Green GDP
- Added Exhibit 2.1 Green GDP
- Renumbered Exhibit 2.1 Managing Episodic Sources of Pollution to Exhibit
  2.2

Chapter 3 – Updated figures and tables

# Chapter 4

- Updated data in Exhibit 4.1 External Costs Associated with Driving Automobiles
- Added more examples and cases of external costs

Chapter 5 – Updated figures and tables

# Chapter 6

- Green GDP moved to Chapter 2
- Exhibit 6.3 changed to Exhibit 6.2 to **Benefits and Costs of New Regulations Requiring Coal-Fired Power Plants to Improve Their Handling of Coal Combustion Residues (CCR)**
- Exhibit 6.4 changed to Exhibit 6.3 to The Effects of Discounting

# Chapter 7

- Updated data in Table 7.1 Estimated Cost of Asthma in the United States
- Updated data in Table 7.2 Implied Value of a Statistical Life as Estimated in Labor Market Studies
- Deleted Table 7.3
- Some Contingent Valuation examples updated

# Chapter 8

- Updated data in Exhibit 8.1**The Environmental Industry**
- Updated data in Table 8.3 Pollution Abatement & Control Expenditures
   (PAC) as a Percentage of Gross Domestic Product (GDP), Selected
   Organization for Economic Cooperation and Development (OECD)
   Countries, Latest Available Year

## Chapter 9

• Expanded discussion of **Environmental Justice** 

## Chapter 10

- Added industry examples to Table 10.1Examples of Voluntary Pollution Reduction Programs (VPRPs) in the United States
- Updated discussion of **Green Power**

## Chapter 11

• Updated data in Exhibit 11.1 **Standards Applicable to Snowmobiles** 

# Chapter 12

- Updated content of Exhibit 12.1 **Environmental Taxes in Europe**
- Deleted Exhibit 12.2
- Reorganized discussion of emission charges, tax revenues and impact on income and wealth
- Added examples to Exhibit 12.2 (renumbered) Types of Environmentally Related Subsidies

# Chapter 13

• Added discussion of price-based vs quantity-based systems

## Chapter 14

- Added to Table 14.1 2014 Water Infrastructure Finance and Innovation Act
- Deleted Table 14.3
- Updated data in Table 14.4 **Progress in Public Wastewater Treatment**Facilities
- Replaced Exhibit 14.1 to **Water Contamination**
- Updated data in Figure 14.3 Volume and Number of Oil Spills for Incidents in Navigable U.S. Waters, 1973–2017
- Deleted Exhibit 14.2
- Deleted Exhibit 14.3
- Added Figure 14.4 TMDLs Approved by the EPA, 1996–2018
- Added discussion of stormwater run-off and the National Network on Water Quality Trading
- Deleted Table 14.6

# Chapter 15

- Updated data in Table 15.1 **National Emissions Estimates for Common Pollutants and their Precursors**
- Updated data in Table 15.2 National Primary and Secondary Ambient Air Quality Standards as of 2018
- Updated examples of Emissions Trading in Stationary-Source Control Cap-and-Trade programs for air pollution
- Updated data in Figure 15.1 SO2 Permit Prices, 1997 to 2017
- Updated data for **Total Miles Driven by year**
- Updated data in Table 15.6 **Automobile and Light Trucks Emission Standards, Past and Future**
- Updated data in Table 15.7 **Vehicle GHG Restrictions for Passenger Cars in Selected Countries**
- Updated data in Table 15.8 U.S. CAFE and GHG Standards for Automobiles, Selected Years, 1978–2025

# Chapter 16

- Updated examples and data in Table 16.1 **Federal Laws Dealing with Chemicals in Production and Consumer Products**
- Updated labeling in Figure 16.1 Cost—Benefit Balancing in Regulating Exposure to a Chemical
- Added discussion of 2016 amendments to TSCA and 2016 Lautenberg Act
- Deleted Figure 16.2
- Updated content in Exhibit 16.4 **Sparring over MACT for Mercury**
- Updated data in Table 16.3 Hazardous-Waste Quantities Managed in 2017, by Management Methods
- Updated discussion of Low-level radioactive wastes
- Replaced Exhibit 16.5 to Federal and State Trustees Reach \$4.5 Million
  Settlement with Three Companies for Natural Resource Damages
  Incurred at Sheboygan River & Harbor Superfund Site
- Updated list of CERCLA or Superfund site cases
- Updated discussion of section Cleaning Up the Nuclear Buildup

## Chapter 17

- Delete Table 17.1
- Updated data in Table 17.2 Municipal Solid Waste, Selected Data
- Updated data in Table 17.4 Municipal Solid Waste Generated and Recovered in the United States, 2015
- Updated discussion of single-stream recycling

## Chapter 18

- Increased focus on climate change
- Added new section on **Economics of Adaptation**
- Expanded discussion of The Paris Agreement/United Nations Framework
  Convention on Climate Change
- Updated data in Exhibit 18.2 The Quick Story
- Updated data in Table 18.1 Major Greenhouse Gases
- Updated data and discussion of current world production rate of CO2
- Updated discussion of Mitigation and Adaptation
- Updated content in Table 18.2 Cost-Effectiveness of Alternative Means of Reducing CO2, United States, 2030
- Deleted Table 18.3
- Deleted Exhibit 18.3
- Updated data in Table 18.4 Social Cost of CO2, 2015–2050

# Chapter 19

- Expanded discussion of The Paris Agreement/United Nations Framework Convention on Climate Change
- Updated content in Exhibit 19.1 Rehabilitating the Ozone Layer

# Chapter 20

- Expanded focus on globalization and climate change
- Expanded examples of regional trade agreements

# Chapter 21

- Reorganized discussion of **property rights**
- Added new section on The Paris Agreement and Developing Countries
- Deleted Exhibit 21.2