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The references to all selected articles in *Taking Sides: Clashing Views in Sustainability* can be found on the Web at www.mhhe.com/cls.

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UNIT 1 PRINCIPLES AND OVERVIEW 1

Issue 1. Is Sustainability a Realistic Objective for Society? 2

YES: Sharon Boyd-Peshkin, from “Built to Trash: Is ‘Heirloom Design’ the Cure for Consumption?” *In These Times* (November 2009) 6

NO: Sharon Begley, from “Green and Clueless,” *Newsweek* (August 2010) 12

Sharon Boyd-Peshkin, an associate professor of journalism and freelance writer, believes that sustainability is a realistic objective for society but is achievable only through sweeping changes in our economic system. Enticing producers to market products that have a longer life cycle and are repairable would address much of our overconsumption and help move toward a sustainable society. Sharon Begley, a journalist for the *Wall Street Journal* and *Newsweek*, believes that people have little idea about how to achieve energy efficiency and lead an eco-friendly lifestyle, and fail to understand how a move to sustainability requires major societal steps.

Issue 2. Is Sustainability More About Politics Than Science? 16

YES: Bill McKibben, from “Hot Mess: Why Are Conservatives So Radical About the Climate?” *The New Republic* (October 2010) 20

NO: Huub Spiertz, from “Food Production, Crops and Sustainability: Restoring Confidence in Science and Technology,” *Current Opinion in Environmental Sustainability* (November 2010) 25

Noted environmental writer Bill McKibben discusses how money and vested political interests undermine efforts toward sustainability and how this is reflected in politics. Huub Spiertz, a professor of crop ecology and past-president of the International Crop Science Congress, elaborates on how applicable agro-technologies and bio-technologies can address global food and population issues and offers an example of how science provides a more sustainable world.

Issue 3. Are Western Values, Ethics, and Dominant Paradigms Compatible with Sustainability? 34

YES: Jo Kwong, from “Globalization’s Effects on the Environment—Boon or Bane?,” *Lindenwood Economic Policy Lecture Series* (July 2004) 38

NO: Erik Assadourian, from “The Rise and Fall of Consumer Cultures,” *2010 State of the World—Transforming Cultures from Consumerism to Sustainability* (The Worldwatch Institute, 2010) 51

Jo Kwong, vice president of institute relations at the Atlas Economic Research Foundation in Fairfax, believes that globalization is a basic part of the solution of the global problems that plague the developing world. Greater movement of goods, services, people, and ideas can lead to economic prosperity, improved environmental protection, and a host of other social benefits. Erik Assadourian, a senior researcher at the Worldwatch Institute and the project director of *2010 State of the World*, believes that Western culture is the origin of consumer culture and the consumption trend and, therefore, leads to a global culture of excess and is emerging as the biggest threat to the planet. Higher levels of consumption can affect the environment and, in the long run, limit economic activity. As a matter of fact, higher levels of consumption require larger inputs of energy and material to produce and therefore generates a high volume of waste products. It also increases the extraction and exploitation of natural resources.

Issue 4. Does Sustainability Mean a Lower Standard of Living? 62

YES: Will Wilkinson, from “In Pursuit of Happiness Research: Is It Reliable? What Does It Imply for Policy?” *Policy Analysis* (April 11, 2007) 66

NO: Saamah Abdallah et al., from “Unhappy Planet Index 2.0: Why Good Lives Don’t Have to Cost the Earth” (2009), <http://happyplanetindex.org> 80

Will Wilkinson, a policy analyst at the Cato Institute, staunchly supports the economist’s perspective that happiness and standard of living are related to economic growth. British psychologists Saamah Abdallah and Sam Thompson, writing for the New Economics Foundation who developed the Happy Planet Index, argue that we need to get away from focusing on GDP and instead measure a successful society by supporting life satisfaction that doesn’t cost the earth.

UNIT 2 GLOBAL ISSUES 97

Issue 5. Can India and China Reduce Their Dependence on Coal? 98

YES: M. Asif and T. Muneer, from “Energy Supply, Its Demand and Security Issues for Developed and Emerging Economies,” *Renewable and Sustainable Energy Reviews* (2007) 102

NO: Yun Zhou, from “Why Is China Going Nuclear?” *Energy Policy* (March 2010) 117

Professors M. Asif and T. Muneer of the School of Engineering, Napier University, Edinburgh, UK, indicate that emerging economies like China

and India are moving toward renewable energies and will need to continue to do so if they want to stem the environmental degradation due to global warming and climate change. Yun Zhou, a Nuclear Security fellow at the Belfer Center's Project on Managing the Atom and International Security Program at John F. Kennedy School of Government, Harvard University, sees a continuation of the use of coal in China with its environmental consequences due to its increased demand for cheap energy. He sees nuclear as the only alternative to coal.

Issue 6. Is Poverty Responsible for Global Environmental Degradation? 132

YES: J.B. (Hans) Opschoor, from "Environment and Poverty: Perspectives, Propositions, Policies," *ISS Working Paper* 437 (Institute of Social Studies, Netherlands, 2007) 136

NO: John Ambler, from *Attacking Poverty While Improving the Environment: Towards Win-Win Policy Options* (East Asia Program Development, Social Science Research Council, New York, 2004) 143

Professor J.B. (Hans) Opschoor of the Dutch Institute of Social Studies views the relationship between environmental quality and poverty within the wider context of the environmental-development system. He sees poverty as both an agent of environmental degradation and a cause of deepened poverty. Researcher John Ambler, Director of East Asia Program Development, Social Science Research Council, dispels various myths on poverty and environmental degradation and points to how specific policies can produce a "win-win" situation.

Issue 7. Is Limiting Consumption Rather Than Limiting Population the Key to Sustainability? 159

YES: Robert W. Kates, from "Population and Consumption: What We Know, What We Need to Know," *Environment* (April 2000) 163

NO: J. Anthony Cassils, from "Overpopulation, Sustainable Development, and Security: Developing an Integrated Strategy," *Population and Environment* (January 2004) 174

Robert W. Kates is an American geographer and independent scholar in Trenton, Maine, and university professor (emeritus) at Brown University. He believes that consumption is more challenging to sustainability than population but more difficult to study because of its varied meanings. J. Anthony Cassils, a writer and an activist on population issues for the Population Institute of Canada, states that "nothing threatens the future of our species as much as overpopulation," and advocates a comprehensive strategy to address overpopulation.

Issue 8. Can Technology Deliver Global Sustainability? 186

YES: Joanna I. Lewis, from "Technology Acquisition and Innovation in the Developing World: Wind Turbine Development in China and India," *Studies in Comparative International Development* (November/December 2007) 190

NO: Alan Colin Brent and David E. Rogers, from “Renewable Rural Electrification: Sustainability Assessment of Mini-hybrid Off-grid Technological Systems in the African Context,” *Renewable Energy* (2010) 198

Joanna Lewis, a professor of Science, Technology and International Affairs at Georgetown University’s Edmund A. Walsh School of Foreign Service, discusses how technological “leapfrogging” in emerging economies can “address concerns about rising greenhouse gases.” She explores the role that technology transfer holds in accelerating wind power in India and China. Alan Colin Brent and David E. Rogers, engineers from South Africa’s University of Pretoria and leaders in sustainable energy futures, conclude that alternative energy technology cannot always be easily implemented and that policy must consider social and cultural factors and involve multiple stakeholders.

UNIT 3 POLICY 219

Issue 9. Is Monetizing Ecosystem Services Essential for Sustainability? 220

YES: Stephen Polasky, from “What’s Nature Done for You Lately: Measuring the Value of Ecosystem Services,” *Choices* (2nd Quarter, 2008) 224

NO: Clive L. Spash, from “How Much Is That Ecosystem in the Window? The One with the Bio-Diverse Trail,” *Environmental Values* (May 2008) 231

Writer Stephen Polasky presents the argument why putting a monetary value on ecosystem services will improve decision making by clearly illustrating the consequences of alternative choices. European professor and economist Clive L. Spash questions the model of human motivation and behavior underlying orthodox economics and its use in ecosystem valuation and states that ecologists and conservation biologists who use it fail in their awareness of the political and ideological system within which it is embedded.

Issue 10. Does the Market Work Better Than Government at Transitioning to Sustainability? 238

YES: Paul Krugman, from “Green Economics: How We Can Afford to Tackle Climate Change,” *The New York Times Magazine* (April 11, 2010, p. 34) 242

NO: Leigh K. Fletcher, from “Green Construction Costs and Benefits: Is National Regulation Warranted?” *Natural Resources & Environmental* (vol. 24, Summer 2009, p. 18) 257

Noted national economist Paul Krugman provides a history of both market-based and command-and-control (regulatory) approaches in environmental economics and recommends cap-and-trade, carbon taxes, and a carbon tariff as the best market-based approaches to reduce carbon. Leigh K. Fletcher, who is LEED certified and a lawyer in Tampa, Florida, believes that building codes as a regulatory policy can reduce electricity which would significantly limit carbon since buildings are the largest contributor to electricity consumption.

Issue 11. Does Sustainable Urban Development Require More Policy Innovation and Planning? 271

YES: **Bruce Katz**, from *Smart Growth: The Future of the American Metropolis*, (Center for Analysis of Social Exclusion and Brookings Institution, 2002) 275

NO: **David B. Resnik**, from “Urban Sprawl, Smart Growth, and Deliberative Democracy,” *American Journal of Public Health* (October 2010) 280

Bruce Katz, of the ESRC Research Center for Analysis of Social Exclusion within the Suntory and Toyota International Centers for Economics and Related Disciplines at the London School of Economics and Political Science, describes how current public policies facilitate the “excessive decentralization” of people and jobs and how smart growth reforms are being enacted, particularly at the state level, to shape new, more urban-friendly growth patterns. David B. Resnik, a bioethicist and vice-chair of the Institutional Review Board for Human Subjects Research at the National Institute of Environmental Health Sciences, National Institutes of Health, explains why urban sprawl, a model of unsustainable development around the periphery of a city, has a negative effect on human health and the environment. He believes that smart growth is an alternative to the problem of urban sprawl; nevertheless, he argues that smart growth has many disadvantages including a decrease in property values, decrease in the availability of affordable housing, restriction of property owners’ use of their land, disruption of existing communities, and a likely increase in sprawl.

Issue 12. Should Water Be Privatized? 289

YES: **Roy Whitehead Jr. and Walter Block**, from Excerpts from “Environmental Takings of Private Water Rights—The Case for Water Privatization,” *Environmental Law Reporter* (October 2002), reprinted in www.eli.org 293

NO: **David Hall and Emanuele Lobina**, from *The Private Sector in Water in 2009* (Public Services International Research Unit, Business School, University of Greenwich, March 2009) 306

Professor Roy Whitehead from the University of Central Arkansas and Professor Walter Block from Loyola University, New Orleans, make a case for the sanctity of private property rights and how privatization of water resources leads to economic development and a more habitable earth for people to live. David Hall is Director of Public Service International Research Unit (PSIRU) at the Business School of the University of Greenwich, London and Emanuele Lobina specializes in water research as PSIRU. Both writers boldly state that the “experiment with water privatization has failed.”

UNIT 4 NATURAL RESOURCES 319

Issue 13. Can Our Marine Resources Be Sustainably Managed? 320

YES: **Benjamin S. Halpern**, from “The Impact of Marine Reserves: Do Reserves Work and Does Reserve Size Matter?,” *Ecological Applications* (February 2003) 324

NO: **Andrew A. Rosenberg, Jill H. Swasey, and Margaret Bowman**, from “Rebuilding U.S. Fisheries: Progress and

Problems," *Frontiers in Ecology and the Environment* (August 2006) 333

Benjamin S. Halpern, marine biologist and project coordinator of Ecosystem-Based Management of Coastal Marine Systems for the National Center for Ecological Analysis and Synthesis (NCEAS) demonstrates how marine protected areas (MPAs) and marine reserves, tools for sustainably managing marine resources, are producing positive results based on four biological measures: density, biomass, size of organisms, and diversity. Andrew A. Rosenberg, biologist and oceanographer and presently dean of the College of Life Sciences at the University of New Hampshire, states that the Magnuson–Stevens Fishery Conservation and Management Act has not significantly altered overfishing and the rebuilding of fish stocks in the United States due mainly to pressures from the commercial and recreational fishing communities.

Issue 14. Is Natural Gas Hydraulic Fracturing Safe? 343

YES: **Seamus McGraw**, from "Is Fracking Safe? The Top 10 Controversial Claims about Natural Gas Drilling," *Popular Mechanics*, www.popularmechanics.com retrieved September 18, 2012 350

NO: **Russell McLendon**, from *Big Frack Attack: Is Hydraulic Fracturing Safe?* (December 2010), www.mnn.com 356

Writer Seamus McGraw in *Popular Mechanics* discusses 10 controversial claims about natural gas drilling in the hope of setting the record straight on this heavily debated issue. He notes the abundance of natural gas which will fuel America's future providing both inexpensive energy and a potential resurgence in manufacturing. He also points out that hydraulic fracturing does not use as much water as other activities; that deep-injected fluids will not migrate into groundwater; and that groundwater contamination, while possible, is not probable. Journalist Russell McLendon writing in the *Mother Nature Network* points out that hydraulic fracturing poses many concerns and is skeptical about whether it is "safe." The problem, he believes, is that hydraulic fracturing has not been studied enough and that the public just does not have the answers to important issues relating to public health and environmental risk. For instance, he states that there is no study that proves conclusively that "fracking" fluids cannot end up in groundwater and even migrate into aquifers. He is also concerned over the extent of methane migration in hydraulic fracturing; its ability to cause earthquakes; and the overuse of water resources.

Issue 15. Can Species Preservation Be Successfully Managed? 366

YES: **Dale D. Goble et al.**, from "Conservation-Reliant Species," *BioScience* (vol. 62, pp. 869–873, October 2012), www/mc.manuscriptcentral.com/ucpress-bio 371

NO: **Craig Hilton-Taylor et al.**, from *State of the World's Species* (IUCN, Gland, Switzerland, 2009) 377

University of Idaho law professor Dale D. Coble with John A. Wiens, PRBO Conservation Science; Michael Scott, University of Idaho, College of Natural Resources; Timothy D. Male, Defenders of Wildlife; and John A. Hall, Department of Defense, Strategic Environmental Research and Development Program/Environmental Security have developed the concept of "conservation-reliant species" to show how species extinctions can be

reduced through successful management planning. Researcher Craig Hilton-Taylor, manager of the International Union for Conservation of Nature “Red List of Threatened Species,” leads a team that shows the rapid decline in biodiversity as a result of unsustainable human–wildlife confrontation.

Issue 16. Can Sustainable Agriculture Feed the World? 394

YES: International Fund for Agricultural Development, from “Sustainable Smallholder Agriculture: Feeding the World, Protecting the Planet” (2012), www.ifad.org 399

NO: Craig Meisner, from “Why Organic Food Can’t Feed the World,” *Cosmos Magazine* online, www.cosmosmagazine.com, retrieved October 10, 2012 412

The International Fund for Agricultural Development, a global NGO, argues in its position paper that the future for world food security rests with a sustainable agriculture that protects local ecosystems and relies on smallholder farmers. They believe that smallholder farmers, when guided by coherent policies and fair incentives, can feed the world through the use of organic production methods and various green technologies and innovations. Cornell University professor Craig Meisner, while supporting many of the goals of sustainable agriculture, sees some limitations in the reliance of organic production methods for the poor in developing countries. Through his personal experience in Bangladesh he notes that the poor farmer’s ability to implement organic approaches are increasingly challenged by daily survival and economic factors. For example, he notes that a key component of organic farming is the use of green manure, nitrogen fixing crops, which he sees as competing with food crops and decreasing the overall income potential of poor farmers.

UNIT 5 ENERGY, BUSINESS, AND SOCIETY 421

Issue 17. Can Nuclear Energy Be Green? 422

YES: A. Adamantiades and I. Kessides, from “Nuclear Power for Sustainable Development: Current Status and Future Prospects,” *Energy Policy* (December 2009) 426

NO: Milton H. Saier and Jack T. Trevors, from “Is Nuclear Energy the Solution?” *Water, Air, & Soil Pollution* (May 2010) 444

Engineer and energy consultant Achilles Adamantiades and economist and writer I. Kessides discuss how burgeoning population, growing demands for energy, dependence on foreign fossil fuels, and rising concern about global climate are major reasons for the growing interest in nuclear power. Biologist Milton H. Saier and environmental scientist Jack T. Trevors argue that nuclear power is not cost-competitive compared with other green energy sources such as solar and wind, which can be installed much faster. They also discuss its inability to deal with the issue of energy security since oil is mostly used for transportation and nuclear energy is not used for this key activity.

Issue 18. Is Corporate Sustainability More Public Relations Than Real? 450

YES: Richard Dahl, from “Greenwashing: Do You Know What You’re Buying?,” *Environmental Health Perspectives* (June 2010) 454

NO: Cristiano Busco et al., from “Cleaning Up,” *Strategic Finance* (July 2010) 463

Boston freelance environmental health issues writer Richard Dahl argues that there is increasing competition between companies to portray themselves as “green” and warns that if false green claims are not controlled, then people’s skepticism will grow and an important tool for sustainability will be lost. Busco et al. describe how General Electric and Procter & Gamble have operationalized corporate sustainability initiatives using management control and management accounting systems.

Issue 19. Are Social Concerns Taken Seriously in the “Triple Bottom Line” of Sustainability? 477

YES: Michael Laff, from “Triple Bottom Line: Creating Corporate Social Responsibility That Makes Sense,” *T + D* (February 2004) 481

NO: Frank Vanclay, from “Impact Assessment and the Triple Bottom Line: Competing Pathways to Sustainability?” *Sustainability and Social Science: Round Table Proceedings* (July 2004) 487

Internet training and development blogger Michael Laff details how corporations are utilizing triple bottom line (TBL) to develop innovative approaches to improve their relationship with the local community and reduce their impact on the environment. Frank Vanclay, a professor of cultural geography at the University of Groningen in the Netherlands, discusses the inability of triple bottom line (TBL) to provide an adequate framework for organizations to assess their progress toward social equity or justice in their management functions.

Issue 20. Can Cities Be Made Sustainable? 501

YES: Stephen M. Wheeler, from “Planning for Sustainability,” in Gary Hack et al., eds., *Local Planning: Contemporary Principles and Practice* (International City-County Management Association, 2009) 505

NO: Giok Ling Ooi, from “Challenges of Sustainability for Asian Urbanisation,” *Current Opinion in Environmental Sustainability* (December 2009) 513

Community planner Stephen M. Wheeler delineates how cities can move to sustainability by emphasizing compact urban designs, preservation of open space, adopting transport alternatives, and implementing building codes that emphasize energy conservation and efficiency. Urban geographer Giok Ling Ooi of Nanyang Technological University shows how the challenges of rapid urbanization in emerging Asian economies are making it difficult for these cities to meet the basics of sanitation, water supply, housing, and so on not to mention the most lofty goals of sustainability.

Contributors 521