Contents

List of Illustrations	XV
List of Tables and Boxes	XiX
Copyright Information	XX
Illustration Credits	XXV
About the Editor	XXX
Acknowledgments	XXXI
Introduction to the Fourth Edition	1
PART 1 ORIGINS OF THE SUSTAINABILITY CONCEPT	3
Introduction to Part 1	4
"The Three Magnets" and "The Town-Country Magnet" from <i>Garden Cities of To-morrow</i> (1898) Ebenezer Howard	7
"The Land Ethic" from A Sand County Almanac (1949) Aldo Leopold	14
"Orthodox Planning and the North End" from <i>The Death and Life of Great American Cities</i> (1961) Jane Jacobs	21
"The Development of Underdevelopment" from Capitalism and Underdevelopment in Latin America (1967) Andre Gunder Frank	26
"Plight and Prospect" from <i>Design With Nature</i> (1969) Ian McHarg	30
"Perspectives, Problems, and Models" from <i>The Limits to Growth</i> (1972) Donella H. Meadows, Dennis L. Meadows, Jörgen Randers, and William W. Behrens III	34
"The Steady-State Economy" from <i>Toward a Steady-State Economy</i> (1973) Herman Daly	40

Robert Cervero, Erick Guerra, and Stefan Al

111

117

119

137

141

143

165

169

171

180

186

192

Vanesa Castán Broto

Promoting Social and Environmental Justice	197
"Just Sustainabilities" from <i>Introducing Just Sustainabilities: Policy, Planning,</i> and Practice (2013) Julian Agyeman	199
"Fighting Poverty and Environmental Injustice in Cities" (2007) from <i>State of the World 2007: Our Urban Future</i> Janice E. Perlman with Molly O'Meara Sheehan	202
"The Case for Reparations" from We Were Eight Years in Power (2017) Ta-Nehisi Coates	214
Rethinking Economic Development and Capitalism	219
"Sustainable Development Economics" from Project Syndicate (2014) Jeffrey D. Sachs	221
"Just Transition Description and Principles" (2018) Climate Justice Alliance	224
"The Value of a Degrowth Economy" from <i>Independent Australia</i> (2021) Erin Remblance	228
"Smart Cities Should Mean Sharing Cities" (2014) from <i>Zócalo Public Square</i> Julian Agyeman and Duncan Maclaren	231
"Strengthening Local Economies" (2007) from State of the World 2007: Our Urban Future Mark Roseland with Lena Soots	234
Building Green	245
"The Urgency of Embodied Carbon" (2018) from <i>BuildingGreen</i> Paula Melton	247
"Life Cycle Assessment of Buildings" (2019) Carbon Leadership Forum, University of Washington	254
LEED v4.1 Description and Scorecard for Building Design and Construction (2022) US Green Building Council	258
"Building New Social Infrastructures" from <i>Climate Urbanism</i> (2020) Jennie Pickerill	261
Creating Healthy Environments and Food Systems	265
"Human Health and a Sustainable Built Environment" from <i>Encyclopedia of</i> Sustainable Technologies (2017) Susan M. Thompson and Jennifer L. Kent	267

COI	NTENTS
"The Gendered Politics of Food" from Staying Alive: Women, Ecology, and Development (2010) Vandana Shiva	276
"Why the 'Slow' Movement is Gaining Momentum" from ThriveGlobal (2014) Cass Dunn	280
Envisioning Healthy Democracy	283
"Social Change is Coming" from <i>The Guardian</i> (2021) Rebecca Solnit	285
"Urban Healing: Recovering from Trauma" from Cities for Life: How Communities Can Recover from Trauma and Rebuild for Health (2021) Jason Corburn	288
"Love as the Practice of Freedom" from <i>Outlaw Culture: Resisting Representations</i> (1994) bell hooks	292
PART 3 TOOLS FOR SUSTAINABILITY PLANNING	297
Introduction to Part 3	298
"Indicators for Sustainability" from Indicators for Sustainability: How Cities Are Monitoring and Evaluating Their Success (2012) Sustainable Cities International	301
"What <i>Is</i> an Ecological Footprint?" from <i>Our Ecological Footprint</i> (1996) Mathis Wackernagel and William Rees	305
"Seeing Change" from <i>Looking at Cities</i> (1985) Allan Jacobs	314
"Citizen Participation for Sustainable Cities" from Stockholm Environment Institute (2021) Astrid Nilsson, Fedra Vanhuyse, Venni Arra, Alicia Requena, and Magnus Agerström	319
"The Use of Social Media" (2015) CIVITAS	323
"Tactical Urbanism: Disturbing the Order of Things" from <i>Tactical Urbanism</i> (2015) Mike Lydon and Anthony Garcia	327
"The Story of Change" from The Story of Stuff Project (2012) Annie Leonard	332
"Active Hope" from Active Hope: How to Face the Mess We're In Without Going Crazy (2012) Joanna Macy and Chris Johnstone	335

PART 4 URBAN SUSTAINABILITY IN THE DEVELOPING WORLD	339
Introduction to Part 4	340
"Developing the Sustainable City: Curitiba, Brazil, as a Case Study" from How Cities Will Save the World: Urban Innovation in the Face of Population Flows, Climate Change and Economic Inequality (2016) Hanna-Ruth Gustafsson and Elizabeth A. Kelly	341
"Sustainable City: Crisis and Opportunity in Mexico" from Sustaining Cities: Urban Policies, Practices, and Perceptions (2013) Alfonso Iracheta	349
"Urban China: The Torturous Path Toward Sustainability" from <i>Planning Theory</i> and <i>Practice</i> (2020) Guilio Verdini and Li Zhang	355
"How Africa Can Build Inclusive, Safe and Sustainable Cities" from The Conversation (2015) Jacqueline M. Klopp and Jeffrey W. Paller	361
PART 5 VISIONS OF SUSTAINABLE COMMUNITY	365
Introduction to Part 5	366
"The Streets of Ecotopia's Capital" and "Car-Less Living in Ecotopia's New Towns" from Ecotopia (1975) Ernest Callenbach	369
"Description of Abbenay" from <i>The Dispossessed</i> (1974) Ursula K, LeGuin	375
"A Sustainable Society" from Climate Change and Social Ecology (2012) Stephen M. Wheeler	379
PART 6 SUSTAINABILITY PLANNING PEDAGOGY	385
Introduction to Part 6	386
"Sustainability Pedagogies" from Sustainability Education: Perspectives and Practice Across Higher Education (2010) Debbie Cotton and Jennie Winter	387
"On Competence in Sustainability Research and Problem Solving" from Environment Magazine (2011) Arnim Wiek, Lauren Withycombe, Charles Redman, and Sarah Banas Mills	395

Principles for Teaching Urban Sustainability" from <i>Habitat International</i> (2018) Nan Li, Deland Chan, Quan Mao, Kevin Hsu, and Zhiyong Fu	401
'Blooming in the Doom and Gloom: Bringing Regenerative Pedagogy to the Rebellion" from <i>Journal of Sustainability Education</i> (2020) Tema Milstein	407
PART 7 CLASS EXERCISES	411
ntroduction to Part 7	412
Cognitive Mapping Exercise	413
Future Visions Exercise	413
Definitions of Sustainable Development	414
Role Plays to Analyze Sustainability Perspectives and Decision-Making	415
Sustainability Indicators Exercise	418
Personal Ecological Footprints	418
First-Hand Analysis of Urban Environments	419
Regional Vision Exercise	420
Economic Development Exercise	421
Creek Mapping Exercise	423
Neighborhood Planning Exercise	424
An Ecological Site Plan	425 426
International Development Exercise Mapping Your Own Block	428
Using YouTube Videos on Sustainability	428
Class Debates on Urban Sustainability Themes	429
Studio or Service Learning Classes	430
PART 8 EXAMPLES OF URBAN SUSTAINABILITY	433
ntroduction to Part 8	434
Energy-Positive Buildings in Europe	435
Sky Gardens in Frankfurt	436
Sustainable Skyscraper in Guangzhou	437
Bio-Climatic Building in Kuala Lampur	438
A Living Building in Seattle	439
Passive Solar Design and Biomimicry in Harare	440
Bamboo Construction in Bali	441
Green Affordable Housing in the Bronx	442
Eco-Village Cohousing in Adelaide	444
Eco-Districts Worldwide	445
District Heating in Stockholm	461
Building Energy Retrofits in Europe	463 463
Sponge City Development in China	463

CONTENT

XiV	CONTENTS	
	Removing a Freeway and Restoring a River in Seoul	466
	Constructed Wetlands for Sewage Treatment in Arcata	467
	Rehabilitating Old Industrial Lands in Germany	468
	Sustainable Rural Development in Gaviotas	470
	Green and Blue Spaces in Oslo	472
	Green Density in Singapore	474
	Sustainability Planning in London	475
	Social Housing in Vienna	477
	Transportation Planning in Bogotá	478
	Reducing Motor Vehicles in Paris	480
	Bicycling in Copenhagen	481
	Local Food Systems in Kenya	482
	A Cooperative Economy in Mondragón	483
	Social Equity in Kerala	484
	Songdo as a Green Tech Hub	486
	A Culture of Progressive Planning in Portland	487
	Building Unity in Auroville	490
	Local Democracy in Burlington	493
	Citizen Budgeting in Melbourne	495
	Ecological Regionalism in Vancouver	495
		400
	Index	499