INDEX

A
accounting, 4
  principles to value ecosystem services, 49
  professionals, 130
active packaging, 235
American Chemistry Council, 64
analytical tools, 140
Anderson, Ray, 9
anthropocentrism, 42
Aqueduct, 144
Article 3 of the United Nations’ Trafficking in
  Persons Protocol, 110
Article 5 of the United Nations’ Trafficking in
  Persons Protocol, 110
Articles of Incorporation, 76
Association of Chartered Certified
  Accountants, 129
AT&T Wireless, 104
automation, 277
avoiding risk, 178

B
balanced scorecard, 138
balancing needs principle, 4-5
Basel Convention, 101-102
B-Corporations, 82
bearing risk, 177
benchmarking of sustainability, 21
Ben & Jerry’s ice cream, 60
Berridge, Rob, 168
best practicable control technology, 108
best system of emissions reduction, 108
Bhopal gas tragedy, 160
big data analytics, 278
biocapacity deficit, 52
biocapacity remainder, 52
biocentrism, 42
biodiversity, 25
biomimicry, 52, 269-270
blue ocean strategy, 24
BMW, 189-190
bottom of the pyramid, 236
brand differentiation, 38
brand extension, 204
breach of warranty, 114
Brundtland Report, 4, 36
business area, legal frameworks, 104-117
  performance standards, 105-107
  pollution regulation, 107-108
  supply chain, marketing, and consumer
  protection, 109-114
“business as usual” approach, effect of, 8-9
business continuity planning, 181-182
Business for Innovative Climate and Energy
  Policy (BICEP), 96
Business for Social Responsibility (BSR), 65, 67
business strategies for change management,
  72-73

C
California human trafficking law, 111
Canada’s Hazardous Products Act, 112
carbon bubble hypothesis, 168
Carbon Disclosure Project, 145, 236
carbon-intensive lobbying strategy, 95
carbon leakage, 62
carbon negative, 202
carbon neutral, 202
Cargill and Dow Chemical, 236
cautious adopters, 3
Center for Strategic & International Studies
  (CSIS), 6
centralized storage facility, 276
CEO compensation per average employee
  wage, 83
CEO incentives, 83
CEO Water Mandate, 143
certification programs, 211-217
  categories of sustainable certification
  programs, 213
  challenges to sustainable certification,
  216-217
certification programs (continued)
consistency, criteria of, 215
efficacy, criteria of, 215–216
Fair Trade certification, 214
FTC’s Endorsement Guides, 212
functional equivalency, criteria of, 215
objectivity, criteria of, 214
relevancy, criteria of, 215
specificity, criteria of, 215
sufficiency, criteria of, 215
third-party, 212
UTZ program, 215–216
change management, 73–74
business strategies for, 72–73
entrepreneurialism and innovation, 70–72
hiring strategy and employee engagement, 75–76
changing process, 74
Chemical Manufacturer’s Association (CMA), 63
Chief Sustainability Officer (CSO), 84–86
child labor, 231
Citizens United v. Federal Election Commission, 119
Clean Air Act (CAA), 104, 108, 118
Clean Water Act, 104, 108
CLIF Bar, 71
climate change, 6, 25, 61, 95
related business risks, 171
risk assessment, 180
role of corporate leadership, 62
coca-cola, 159
coca-cola, commitments to water conservation, 20
collaborative reporting, 145
collective action problem, 61–63
Coloplast A/S, 22
command-and-control laws, 111
competitive advantages, 3
compliance with sustainability, 21, 162
challenges, 104
incentives for legal compliance, 102–104
mere compliance, 117
vs sustainable performance, 117–118
conflict minerals, 109
conservation, 49
easements and offsets, 50
Constitutional Charter for the Environment, 96
corporate activities, energy efficient, 280
cost leadership, 72
cradle-to-cradle design, 233–234
cradle-to-cradle metaphor, 53
cradle to grave paradigm, 53
credibility in marketing sustainability, 211
cross-country ethical dilemmas, 41
C-Suite, 60, 77, 84
Deception Policy Statement of FTC, 198
dangerous waste products, disposal of, 115–116
decentralized inventory, 276
deep ecology, 42
design, 105
defects, 113
for recycling, 272
differentiation, 72
Dodd-Frank Wall Street Reform and Consumer Protection Act, 109
dove beauty products, 60
Dow Jones Sustainability Indexes (DJSI), 103–104, 133
drifters, 192–193
Drucker, Peter, 73
eco-entrepreneurialism, 70
eco-innovation, 71–72
eco-labels, 216
ecological engineering, 51
ecological footprint metric, 9
Ecology Center, 234–235
economic perspectives of sustainable business, 35
  Environmental Kuznets Curve (EKC), 46–48
globalization, 43–45
natural capital accounting and sustainable land use, 48–50
sustainable engineering, 50–51
economies of scale, 44
ecosystem services, 33–34
Eli Lilly, 78, 143
Elkington, John, 5
embracers, 3
Emergency Planning and Community Right-to-Know Act, 104, 107
emissions, 145
employee engagement, 75–76
energy management, 280–281
energy productivity, 151
enlightened value maximization, 82
Enron collapse, 160
enterprise resource planning (ERP) systems, 277–278
enterprise risk management (ERM), 162–165.
  see also risk assessment; risk management and sustainable business; risk response control activities, 165
  information and communication, 165
  internal environment, 163–164
  monitoring, 165
  objective setting, 164
  risk assessment, 164
  risk identification, 164
risk response, 164
entrepreneurialism, 70
“environmental, social, and governance” (ESG) issues, 14
environmental catastrophes, 160
environmental conservation organization, 19
environmental ethics, 42
environmental footprinting, 143–145
environmental impact statement (EIS), 116–117
environmental injustice, 41–43
Environmental Kuznets Curve (EKC), 46–48
criticisms of, 47
economic development in low-income regions, 47
flawed assumption of, 47
proximate factors, 46
environmental law, 96
environmental management systems (EMS), 23–24, 63
environmental offsets, 50
environmental perspectives of sustainable business, 35
  biomimicry, 52
  cradle-to-cradle metaphor, 53
  human ecology, 53–54
  regenerative capacity, 51–52
Environmental Profit & Loss (EP&L) analysis, 127
Environmental Sustainability Program, 50
ergonomics, 276
Erickson, Gary, 71
Estes, Jonathan M., 192
ethical conflict
  of cultural tradition, 41
  of relative development, 41
ethics, 41–43
e-waste, 25
executive branch, 101
executive committees, 79–80
exposure to risk, 173
extended producer responsibility (EPR), 114
external data, 131
externality, 162
externalized costs
  of global primary production and processing, 14
  sustainable business, 12–14
Exxon Valdez spill, 160

F
facility design, 282–283
facility layout, 281–282
facility location, 242–244
factor rating, 243
Fair Trade certification, 214
farming practices, 59
Federal Trade Commission (FTC), 198
  Green Marketing Guidelines, 112
FIJI Water, 202
finance officers, 130
financial risks, 169
fisheries, 11–12
flood disasters, 25
focus, 72
food production, 12
food-related services, 281
Ford, Sustainability Committee at, 79–80
“ForEver Wild” Catskill Park Forest Preserve, 50
Fortune companies, 16
Freelancers Insurance Company, 82
freeriders, 61
Frisk, Patrik, 37
Fujitsu Global, 78
FUJITSU Way Internal Control Division, 79
furnishings, 281

green space, 281
greenwashing, 112, 197, 202–203
groundwater footprint, 144

H
halo effect, 197
hard law, 99
Hazardous Products Act, 112
hazard risks, 168
Hellman’s mayonnaise, 60
Herman Miller Perfect Vision campaign, 250
Hewlett-Packard, 272
hiring strategy, 75–76
Hollender, Jeffry, 11
Home Depot, 40
horizontal view of reporting, 145
hot-spot assessment, 177
HSBC, 208
human activity, impact of, 7
human capital value, 138–139
human ecology, 53–54
human rights, 40, 231
human trafficking, 109–111
initiatives to expose and eliminate, 110

I
ifixit.com, 234
impact mitigation, 170
independent, third-party verification, 132
Independent Directors, 79
industrial ecology, 51
information
and communication, 165
driven sustainable business model, 130–132
sharing with consumers, 148
innovation, 24, 71, 236
entrepreneurialism and, 70–72
in product design, 234
types of, 71
input mix, 46
insurance, 179–181
Integrated Valuation of Environmental Services and Tradeoffs (InVEST), 49
integrating sustainability principles, 21
Interface Inc., 9, 234
intergenerational justice, 42
internal analysis, 131
internal environment, 163–164
internalization of externalities, 13, 15–16
internalize risk, 162
International Accounting Standards (IAS), 128
International Federation of Accountants, 129
International Financial Reporting Standards (IFRS), 128
International Labor Organization (ILO), 231
international marketing, 206–207
International Monetary Fund, 43
International Organization for Standardization (ISO)
ISO 14000 series, 149
ISO 26000 series, 148–149
Internet age, 195
inventory management, 178, 275–276
Investor Responsibility Research Center (IRRC), 137

J
Jensen, Michael, 82
judicial branch, 101

K
Kellogg Company, 157
key performance indicators (KPIs), 129, 151
Keystone XL, 117
Kim, Jim Yong, 159
Kotter, John, 73
Kruse, Kevin, 68
Kyoto Protocol on Climate Change, 1997, 101
Kysar, Doug, 201

L
landscaping, 281
land use planning, 116–117
law
by business area, 104–117
corporate sustainability, role of, 96–99
enforcement of good, 119–120
greenwashing, 202–203
guidelines for marketing environmental attributes, 199–200
hard, 99
incentives for legal compliance, 102–104
legal environment of business, 102
legal framework for sustainable business, 102
mandatory disclosure laws, 201
product/process information distinction, 200–201
soft, 99–100
truth-in-advertising rules, 198–199
leadership, 65
reporting and, 146
Leadership in Energy and Environmental Design (LEED) certification, 283
LEED Rating System, 283–284
legal environment of business, 102
legal framework for sustainable business, 102
legal hierarchy, 100
legislative branch, 100–101
life cycle assessment (LCA), 141–143, 233, 269
life cycle costs, 233
life-cycle impact assessment, 142
life-cycle inventory analysis (LCI), 142
lifestyle of health and sustainability (LOHAS), 192–193
line extension, 204
Lipton iced tea, 60
Living Building Challenge, 283
Living Planet Report, 7–8
LJ Building Maintenance, 68
logistics, 238–239
reverse, 239–241
L’Oréal, 237

M
Magna Carta, 11
magnitude of harm, 173–174
maintenance, 281
Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A), 147
manner of conducting sustainability, 18
manufacturing defects, 113
marketing, 190
conventional, 191–192
innovation, 71
sustainable performance, 20
marketing sustainability, 111–112, 190
brand developments, 204–205
challenges to, 207–211
conventional marketing vs, 191–192
cost challenges, 210
credibility in, 211
indirect benefits of, 208–209
lifestyle-based marketing, 210
principles, 203–204
rewards for, 196–197
salience in, 210
stages of, 205–206
target audience, 210
marketing sustainability (continued)
  tradeoffs in, 209
trends, 194–196
using social networking, 195
market segmentation, 191
  for sustainable products, 192–193
  U.S. consumer segmentation, 193
materiality assessment, 147–148
materiality of a risk, 173–174
McDonald’s, 157–158
measuring sustainability performance
  accountability and, 128
  finance and accounting, role of, 128–130
  information-driven sustainable business model, 130–132
  monitoring and reporting, 132–134
  transparency and disclosure of, 132
medium for sustainability, 18
mega-multinationals, 44
mere compliance, 117
method for sustainability, 18
metrics, 146
  balanced scorecard, 138
  business operations and, 136
  definition, 136–137
  greenhouse gas emissions, 138
  human capital value, 138–139
  percent of nature mimicked, 139
  performance indicators as, 139–140
  process performance, 273–274
  real-estate efficiency ratio, 138
  return on investment (ROI) for sustainability initiatives, 138
  revenue share from sustainable products, 138
  sustainability, 136
  sustainability performance, 138–139
  water intensity per product unit, 139
Millennium Ecosystem Assessment, 33–34
minimizer strategy, 73
misrepresentation, 114
Mission Zero, 9
mitigating risk, 178–179
Mitsubishi International Corporation, 85
moderate biocentrism, 42
monitoring and reporting of sustainability, 132–134, 165. see also metrics; tools
  benefits of, 135
  drivers of, 134–136
Global Reporting Initiative (GRI), 149–151
  horizontal view, 145
ISO standards, 148–149
  leadership and, 146
  sharing sustainability information with end consumers, 148
  threshold for, 147–148
  vertical view, 145
Montreal Protocol, 101–102
moral psychology decisions, 161–162
motive for sustainability, 18
Mountain Equipment Co-op (MEC), 73, 274
  Materiality Analysis, 147
multi-brand, 204
  multinational corporations, 44–45
  multi-stakeholder partnerships, 250
N
National Ambient Air Quality Standards (NAAQS), 108
National Association for Environmental Management (NAEM), 133
National Environmental Policy Act (NEPA), 117
National Resource Defense Council (NRDC), 284
natural capital, 7, 48–50
  natural capital accounting, 140–141
Natural Capital Project, 48–49
naturalites, 192–193
Natural Resources Defense Council, 118–119, 278
Nature Conservancy, 119
negative externalities, 12
  internalization of, 13
negligence, 114
Net Zero Energy Building Certification, 283
  new brand, 205
New Cingular Wireless, 104
  new source selection process, 236
Nike, 234
  labor practices of, 39
  “Reuse-A-Shoe” program, 36
nonattainment regions, 108
normative guidance, 4
North American Human Development Index, 47
objective setting, 164
occupational health and safety, 231
Occupational Safety and Health Act (OSHA), 107, 279
Occupy Wall Street Movement, 83
Office Depot, 191
offsets, 50, 108
Oil Pollution Act, 116
Open Space Institute, 50
operational risks, 167–168
operations design
four R’s, 270–272
process design, 272
process performance metrics, 273–274
product design, 268–272
operations management (OM), 106
balancing act between traditional concerns and expanded concerns, 267
facility management, 280–283
functions, 260–261
impact on sustainability, 262–263
planning and control, 275–280
quality management, 267–268
stakeholder view of, 267
sustainable OM strategy, 264–266
water-related risks, 263–264
organizational development, 74
organizational innovation, 71
output mix, 46
outsourcing, 179
Overlook Mountain Wild Forest, 50

P
packaging materials, 115
packaging waste directives, 115
partnering with sustainability, 21
Paulson, Jr., Henry M., 159
Pearl Academy of Fashion in Jaipur, Rajasthan, 259
per-capita consumption of packaging, 114
percent of nature mimicked, 139
Petal Certification, 283–284
Petal Recognition, 283
Pete & Gerry’s Organic Eggs, 200
PGA Tour’s non-profit golf tournaments, 19
philanthropic projects, 19
philanthropic sustainability, 19–20
planned obsolescence, 115
plantation production problems, 45
point sources of pollution, 108
pollution controls, 19
Pollution Prevention Act, 107
Polman, Paul, 77, 84
post-sale liability, 113–114
pre-sale product restrictions, 112–113
preservation, 49–50
preventable risks, 169
Prevention of Significant Deterioration regions, 108
principle of balance, 4–5
principle of stewardship, 4–5
priority rules, 278
private sector, 34
proactive, 203
probabilistic risk analysis, 173
process design, 237–238, 272
process innovation, 71
process performance metrics, 273–274
process-related information, 200–201
process velocity, 273–274
Proctor & Gamble, 59, 161, 235–236
producer responsibility, 115
product defects, 113
product innovation, 71
production efficiency, 46
productivity, 273–274
product life cycle, 232–238
product-related information, 200–201
product take-back, 115
public disclosure, 131
public goods, 62–63
public-interest advocacy groups, 10
PUMA, 127

Q
quality management, 267–268

R
race to the bottom, 45
Rainforest Alliance, 214, 237
Ramanna, Karthik, 129
Rana Plaza disaster, 224, 232
real-estate efficiency ratio, 138
recovery, 182–183
fees, 115
recycling, 195, 271–272
redundancy, 182–183
refreezing process, 74
regenerative capacity, 51–52
Registration, Evaluation, Authorization, and Restriction of Chemical Substances (REACH) program, 107
regulatory arbitrage, 45
regulatory risk, 166–167
remanufacturing, 271
reputational risk, 166
resilience, 173, 182–183
Resource Conservation and Recovery Act, 115
resourcefulness, 182–183
Resource Hunt program, 237
resource utilization, 274
Responsible Care Management System (RCMS), 63–64
Restriction of Hazardous Substances (RoHS), 249
return on investment (ROI) for sustainability initiatives, 138
reuse, 271
revenue share from sustainable products, 138
reverse logistics, 239–241
revolving door, 118–119
rewards for sustainable products, 196–197
Rio+20 Earth Summit, 2012, 142
Rio+20 Summit on Sustainability, 16
risk, 159
risk appetite, 160
risk assessment, 164
materiality of a risk, 173–174
risk level formula of an event, 176
scenario planning, 172–173
vulnerabilities, 174–176
risk aversion, 160
risk identification, 164, 166–171
risk management and sustainable business, 158–165. see also risk assessment; risk response
business continuity planning, 181–182
treasurer risk management (ERM), 162–165
frameworks, 160
moral psychology decisions, 161–162
resilience, 182–183
risky environment of business, 161
role of, 159–161
risk response, 164, 176–181
avoiding risk, 178
bearing risk, 177
economic conditions, 179
environmental conditions, 179
inventory management, 178
mitigating risk, 178–179
outsourcing, 179
sharing risk, 179–181
social conditions, 179
transportation, 178–179
robustness, 182–183
Roden Group, 273
Roundtable on Sustainable Palm Oil (RSPO), 216
rules-based risk management, 165
S
Safety and Health Achievement Recognition Program (SHARP), 279
safety performance, 151
Safeway, 111
salience in marketing sustainability, 210
Sarbanes-Oxley Act of 2002, 147
SB 657: California Transparency in Supply Chains Act, 110
scale of production, 46
scarcity, 7
scenario planning, 172–173
scheduling techniques, 278–280
Scope 1, 2 and 3 emissions, 145
Seabright, Jeffrey, 159
Securities and Exchange Commission (SEC), 147
Commission Guidance Regarding Disclosure Related to Climate Change, 147, 171
Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A), 147
self-regulation, 63–64
Seventh Generation, 39
shareholders
resolutions on sustainability, 80–81
view of corporate responsibility, 81
sharing risk, 179–181
sick building syndrome, 276
Sierra Club, 119
slavery, 109–111
small and medium sized enterprises (SMEs), 5, 11, 15, 45, 72, 160
human resources management at, 277
marketing sustainability trends for, 194–196
OSHA consultation for, 279
supply chain management (SCM) for, 228
sustainability opportunities by sector, 196
social license to operate, 38
social perspectives of sustainable business, 35
corporate social responsibility (CSR), 36–39
ethics and environmental justice, 41–43
human rights, 40
laws and regulations, 40–41
stakeholder engagement, 35–36
soft law, 99–100
sourcing, 236–237
sovereign nation, 44
S&P500 Index® companies, 132
stages of marketing sustainability, 205–206
stakeholder engagement
costs of neglecting stakeholders, 36
stakeholder feedback, 131
stakeholders of SCM
communities, 250–251
competitors, 249–250
consumers, 246–247
governmental agencies and regulation, 248–249
non-governmental organizations (NGOs) and non-profits, 248
supplier relationships, 245–246
stakeholder theory, 35, 81
stakeholder view of corporate responsibility, 81
standards
production processes, 106–107
sustainable product design, 105–106
Starbucks, 223–224
Statoil ASA, 17
Steps to Responsible Growth program, 237
stepwell design (baoli concept), 259
stewarding resources principle, 4–5
stewardship, 23–24
of natural resources, 33
Stony-Field Farms, 236
strategic alignment for sustainable performance, 76–77
strategic risks, 168
strictly liability, 114
supply chain management (SCM)
business benefits of sustainable, 229–230
human rights, child labor, and occupational safety in, 230–232
infrastructure management, 238–244
product life cycle management, 232–238
risk management, 227
role in sustainability, 225–227
for SMEs, 228
stakeholders, management of, 244–251
transparency measures, 228–229
water-related risks, 230
supply chain protection, 109–111
supply chain risks, 167
sustainability, 3
benefits of, 22
as a defensive strategy, 19
defined, 4–6
drivers of, 15–17
evolution of attitudes toward, 21
four M’s of, 18
“gearing up” metaphor for organizational transformation, 21
hurdles before, 17–18
incremental improvements of, 18
indices, 16
environmental changes and business implications, 24
leadership gap, 64–65
megatrend, 10–11
metrics, 136
and profitability, 6
shareholder resolutions on, 80–81
at small and mid-sized enterprises (SMEs), 5, 11, 15
through self-regulation, 63–64
tools, 140
UN Human Development’s minimum criteria for, 47–48
Sustainability Framework 2.0, 129
sustainable building design, 259, 282
sustainable business, 3–4, 10–12, 18
balance and stewardship, 23
drivers of, 15
causes and consensus around, 12–17
externalized costs, 12–14
risk management and, 158–165
shareholder pressure as a driving factor, 14–15
stages of, 18–20
sustainable business leadership, 65–67
competencies of sustainable business leaders, 67–68
decision-making procedures, 70
five-fold path to, 69
virtues and vices, 69
sustainable corporate governance, 77–79
sustainable development, defined, 4
sustainable economic development, 4
sustainable engineering, 50–51
sustainable growth, 80
sustainable innovation, 24, 60
sustainable inventory management, 276
sustainable land use
conservation, 49
preservation, 49–50
sustainable leadership, 60–61
strategy, 68–70
sustainable market segments, growth of, 23
sustainable packaging, 234–236
sustainable performance, 20
measuring, 128
sustainable process design, 272
sustainable product design, 105, 268–269
sustainable production, 107
sustainable reverse logistics, 240
sustainable scheduling, 279
sustainable solutions, 59–60
sustainable water use, 20
sustainable work system design, 277
systems view, 42

T
“take-make-waste” paradigm, 53
target audience, 210
technology, 46
tesco, 251
third-party logistics provider (3PL), 239
third-party logistics suppliers (3PLs), 244, 249
throughput time, 273–274
Timberland, LLC., 38
Tobin’s Q ratio, 14
TOMS Shoes, 190
tools
analytical, 140
Aqueduct, 144
CEO Water Mandate, 143
environmental footprinting, 143–145
Global Water Tool, 143–144
Greenhouse Gas Protocol, 143
groundwater footprint, 144
life cycle assessment, 141–143
natural capital accounting, 140–141
sustainability, 140
water footprint, 143
water sustainability, 144
WFN Water Footprint, 143
total quality management (TQM), 74
trade-offs in marketing sustainability, 209
tragedy of the commons, 62–63
transformer strategy, 73
transparency, 24, 145
laws, 111
trawlers, 11–12
triple-bottom-line approach, 5, 137–138
Trucost, PLC, 127
truth-in-advertising rules, 198–199

U
unconcerneds, 192–193
uncontrollable risks, 169
under-enforcement of protective laws, 119–120
Unfairness Policy Statement of FTC, 198
unfreezing process, 74
Unilever, 59, 77, 237
Pureit, 60
Sustainable Living Plan, 59
United Nations Environment Program/
Society of Environmental Toxicology
and Chemistry (UNEP/SETAC), 141
United Nations Global Compact, 100, 231
United States Environmental Protection
Agency, 208
U.S. Environmental Protection Agency
(EPA), 104
U.S. Federal Trade Commission’s Green
Marketing Guidelines, 111
U.S. Food and Drug Administration, 112
utilization, 273–274
value analysis, 270
value-creation, 3
Verizon, 86
vertical view of reporting, 145
virtue of sustainable products, 197
vulnerabilities, 173

W
Wall Street, 2008 collapse of, 118
Walmart, 237
warning defects, 113
Waste Electrical and Electronic Equipment
(WEEE) directive, 115
waste productivity, 151
Water Footprint Network, 143
water footprint tools, 143
water intensity per product unit, 139
water productivity, 151
water quality, 25
water-related business risks, 170–171
water sustainability tools, 144
wealth-creating effect of sustainable product design, 197
wealth inequality, 83
Wegner, Wayne, 235
WFN Water Footprint, 143
wildlife hunting, 11
Williams, Lonnie, 68
workplace safety, 107
work system design, 276–277
World Economic Forum, 249
World Wildlife Fund, 119
Z
Zeitz, Jochen, 128
Zicam, 166