Index

Figures and tables are shown in bold typeface.

60 Minutes (television show), 21–22
A Calorie Counter (website), 217
A123 Systems (battery company), 38, 117, 163
ABB Ltd. (technology company), 29
Abe, Shinzo, 168
Abound Solar, 73
Academy of Nutrition and Dietetics Foundation, 215
Accel Partners (venture capital), 22
Acer Inc., 58
advertising controversy, 218–23
Advertising Standards Authority (ASA), 219
Aemetis (biofuel company), 42
Aerodyn Energiesysteme, 187
After Greenwashing (book), 1
Agassi, Shai, 110, 124–35, 342
agricultural technology. See food biotechnology
agriculture. See also food biotechnology
and Monsanto, 298–99
and Walmart, 290
CVC investment in, 55
healthy food investment, 203–23
precision, 320–21
TCSB, 319–20
venture capital investors, 45–47
Ahearn, Mike, 90
Ahold (retailer), 291
Aikosolar, 74
Airbnb, 80
Aje Group (carbonated soft drinks company), 243–45, 245
Alcoa, 318
Alexander, Lex, 268
Alfalfa’s Market, 268
AlgaeCake Technologies (biofuel company), 44
Alpha Beta (food store), 269
Alstrom (manufacturing company), 193, 196
AltaRock Energy (geothermal), 68, 70–71, 339
Alternative Energy Systems Consulting (AESC), Inc., 38, 117
AltraBiofuels, 41
Amitil (Australian bottler), 253
Amazon, 15, 262
Amdocs (billing company), 22
Ametil (Australian bottler), 129, 133
American Association for the Advancement of Science, 326
American Electric Power, 181
American Energy Alliance, 178
American Heart Association, 205, 212, 226–27
American Medical Association, 326
American Recovery and Reinvestment Act, 178
Amonix (solar power company), 22, 32–33
Amyris (biofuel company), 42
Animal Compassion Foundation, 286
animal rights, 285–86
Apple Inc., 58, 79, 333
Applied Biosystems Group, 319
AQT Solar, 74
Aquion Energy, 38
Archer Daniels Midland (ADM) (food company), 320
Areva (solar company), 31
Argonne National Labs, 38
Index

ARM (microprocessor company), 58
Ascent Solar, 74
Asia Silicon, 97
AstraZeneca (pharmaceutical company), 313
AT&T, 30
Atlantic Wind Connection, 65
Attune Foods, 209
Australia
electric vehicles in, 131, 133, 140
solar energy, 99
wind energy, 179
Avancis (solar company), 74
bacterium bacillus thuringiensis (BT), 303, 304, 311
Ballard Fuels (fuel cell company), 128
Bank of America, 30
Barrett, Craig, 57
BASF, 318
batteries
cost of, 137–39
GM electric vehicle, 113
hybrid vehicles, 35, 37–40, 158–61, 168
swapping stations, 125, 130, 135–36, 139
Tesla, 110–13, 111, 116–18, 135–36
Bayer (pharmaceutical company), 302
Bechtolsheim, Andy, 16
Belkin (consumer electronics company), 61
Best Buy (retailer), 61, 291
Better Place (electric automobile company)
battery technology, 117
business model evolution, 5, 110, 111, 124–35, 341
financing, 115
Beyond Meat (plant protein company), 23
biofuels
assessing venture capital investments in, 24
CVC investment in, 55
demand for, 327
Dupont and, 318
venture capital investors, 40–44, 336
biomass energy cost, 175
Bloom Energy (energy efficiency company), 29–30
Bloomberg, Michael, 226
Bluebonnet Natural Foods Grocery, 267
BMW (automobile company), 128, 140
Borlaug, Norman, 300
bottled water consumption, 232–34, 233
Bowen, F., 1
Branson, Richard, 80
Braskem (oil company), 42
Bread & Circus (food store), 267
Bread of Life (food store), 267
British Petroleum (BP), 43, 318
Bronfman, Edgar Sr., 126
Buffet, Warren, 181
buildings (energy efficiency of), 26–31, 251
Burkle, Ron, 269
buses (electric), 37
Bush, George W., 19, 268
business model evolution and social responsibility, 259
Better Place, 111, 124–35
Coca-Cola company, 226–55
DuPont, 322–25
First Solar, 89–95, 94
Google Ventures, 59
Intel, 56–59
mission based, 263–75
Pepsi, 226–55
stages, 4–8, 338
SunTech, 95–99
sustainable ventures, 340–45
Tesla (electric automobile company), 110–42
venture capital investors, 336–40
Business Week (magazine), 297
Butamax (biofuel company), 43
Byrne, David, 312
cadmium, 100
cadmium telluride (CdTe), 99–101
Calgene (biotechnology company), 302
California Public Employees Retirement System (CALPERS), 14, 17, 249
California State Teacher’s Retirement System, 17
Cambridge Associates (investment company), 20, 25
Canada
oil reserves in, 151, 151
tea market, 230
Canadian Solar, 67, 95
capacitors, 39
CapGemini (French IT consulting), 61
Carbon Disclosure Project, 251, 284, 288
Carbon War Room, 125
carbonated soft drinks
Coca-Cola domination in, 234–36, 236
global competition, 242–47, 244, 245, 247
in Muslim countries, 226–27, 229, 344–45
cargill (biotechnology company), 302, 318
Carson, Rachel, 304
Cascadian Farm, 203
Center for Science in the Public Interest (CSPI), 226, 241
Centre for Science & Environment (India), 242–43
Champions for Healthy Kids grants, 215
Charles River Ventures, 23
Chesapeake Energy, 197
Chevron, 34
China
agriculture technology in, 46–47, 313
and Walmart, 288–90
approach to innovation, 341
bottled water consumption, 233
clean energy investment, 21
clean transportation investment, 114, 139–40
future energy demand, 150
hybrid vehicles, 157, 166
juice consumption, 235
solar energy investment in, 19, 33–34, 66, 72, 78, 95–99, 337
solar trade wars, 87–89, 88, 102–06
tea market, 230
wind energy, 179, 181–83, 182, 184, 185, 185–87
China Development Bank (CDB), 97, 104
Chobani (food company), 220
Cialdini, Robert, 28
Cilion (biofuel company), 42
Cisco Systems, 51
Citrix Systems, 15
Clarksville Natural Grocery, 266
clean energy
and trade wars, 105
CVC investment in, 52–56, 55, 56, 71–81
private venture capital investment, 24, 15–47, 48
public policy on, 19–20, 103
clean transportation
CVC investment in, 55, 80–81
electric cars, 110–42
fuel-cell vehicles, 166–69
hybrid vehicles, 153–66
macroenvironment assumptions, 342–43
private venture capital investors, 35–37
Cleantech Group, 68, 82
climate change
and clean transportation public policy, 114, 148–50
Coca-Cola and Pepsi, 250–52
DuPont, 297
Monsanto, 328
Walmart, 287
Whole Foods, 284–85
Climate Corporation (agriculture company), 45–46, 52, 321, 326–27, 338
Climate Savers Computing Initiative, 63
coal. See fossil fuels
Coalition for Affordable Solar Energy (CASE), 107
Coalition for American Solar Manufacturing (CASM), 106–07
Coca-Cola company
and carbonated soft drinks market, 344–45
and Walmart, 291
business model evolution, 226–55
clean energy investments, 30, 43
Cohen, Dan, 133–34
Comcast Cable, 76–77
Compaq (computer company), 15, 115, 141
Compass Technology Partners (venture capital), 114–15
competition between mission and non-mission based companies, 345–47
between Whole Foods employees, 281
carbonated soft drinks, 242–47
food retailer, 259–63, 264
solar energy, 88, 87–89
computer technology and Intel, 56–59
venture capital success in, 15
Conoco (petrochemical company), 305
conscious capitalism. See consensus capitalism
Conscious Capitalism (book), 278
consensus capitalism, 259, 336, 346
Consumer Reports (magazine), 120, 266, 274
Convey Computer, 60
Conway, Gordon, 312
Cook, Libby, 268
copper indium gallium selenide (CIGS), 32–35, 71–76, 74
Core Power (food company), 228
Coriolis Wind (power company), 45
Corning, 26
Corporate Social Responsibility ranking (CSR), 250
corporate venture capital (CVC). See also private venture capital investors, Intel Capital, Google Ventures
costs to companies, 54–58
principles of, 51–54
uncertainty in clean energy investment success, 336–40
Coskata (biofuel company), 41
Costco, 261, 270
costs
clean energy implementation, 19
generically modified (GM) foods, 309–10
hybrid vehicles, 156
levelized energy, 174–77
of CVCs to companies, 54–56
of solar in China, 99
organic foods, 274
solar power, 71–76, 87
Tesla battery, 110–12, 111, 137–39
wind energy, 189–92
Coulomb Technologies (charging system company), 129
CPower (energy efficiency company), 60
Crick, Frances, 302
CSRHub (assessment group), 264
CVC. See corporate venture capital
Cypress Semiconductors, 15
Daimler, 120, 122, 128, 137
Danica (Danish biotech company), 323
Danish Oil & Natural Gas (DONG Energy), 130
Danone (food company), 234, 245, 345
De Gucht, Karel, 105
DeKalb Genetics (biotechnology company), 302
Dell (computers), 58, 141
Delta & Pine Company (food), 311–12, 316
Denmark (electric vehicles in), 127, 129–31
Deutsche Bank, 313
Diageo (food company), 207
Disney Corporation, 291
diversification. See also innovation
General Electric (GE), 174
Kleiner Perkins Caufield & Byers (KPCB), 338
Monsanto, 316–18, 346–47
solar energy, 93
Doerr, John, 22–23
dominance (business), 4–8, 54–55, 234–36, 236
Dominick’s (food store), 269
DotOrg (Google non-profit), 61–62
Dow, 74, 318
Dow Jones Sustainability Index, 252
Draper Fisher Jurvetson, 16, 115
Duke, Michael, 287
DuPont and Monsanto, 316, 325 and TCSB, 319
diversification, 316–18, 346–47
example of retention stage, 5
financials, 321
food biotechnology, 299, 305–09
precision agriculture, 321
promising future of, 335
sustainability, 296–98
dynamic random access memory (DRAM), 57

early-stage startups
Google Ventures, 68–71
Intel Capital, 66–68
eAsic (transistor efficiency company), 31
Eberhard, Martin, 115
Echelon Corporation (smart-grid company). See Spring Networks
Ecogen (biotechnology company), 303
EcoMotors, 36
economic performance. See financials
Edison, Thomas, 171
El Solutions (solar energy), 65, 96
electric vehicles
background of, 112–14
hybrid, 155–66
technology, 134–35
Electronic Arts, 15
Elektromotive (charging system company), 129
Enertech Capital, 16
enhanced geothermal systems (EGS), 70–71
Enron Corporation, 91, 171
environmental commitment
Coca-Cola and Pepsi, 247–52
food companies, 207
Google Ventures, 61–66
Intel Capital, 59–61
Monsanto, 310–12
Walmart, 286–92
Whole Foods, 284–86
Environmental Defense Fund, 288
Environmental Protection Agency, 173, 284, 296. See also public policy
Envision (Chinese wind power), 186
Ericsson (telecom company), 58
eSolar, 68–70, 339
Esty, D., 2
ETH Bioenergy (biofuel company), 42
ehanol. See biofuels
Ethisphere Institute, 279
Europe
and genetically modified (GM) crops, 312–14
carbonated soft drinks in, 236
clean transportation investment, 114, 140–41
hybrid vehicles, 157, 164
public environmental policy, 128
solar energy in, 33, 90, 95
tariff on China solar, 105–06
wind energy, 179, 182, 192, 194
European Commission, 326

Facebook (internet social network), 22, 64
Fadell, Tony, 23
Fairfield Semiconductor Company, 15
FedEx (shipping company), 30
Financial Recovery Act, 103
financials
agriculture chemical companies, 321
automaker, 123
Coca-Cola and Pepsi, 252–55
Monsanto, 314–16
ready-made cereal, 205–07
wind energy, 194–95
financing. See also funds
clean transportation, 115, 124–26
First Solar, 89–90, 94
startups, 336–40
Suntech, 94, 94–95
Tesla, 138
First Solar
and trade wars, 87–89, 88
business model evolution, 89–95, 94, 340
competition, 78, 95
efficiency of, 34
financials, 94
selection onset stage, 5
technology, 73–74, 99–102
Fisker (electric automobile company), 22, 36–37, 122
Fisker, Henrik, 36–37
fitness landscape, 4, 5
Flandesign Wind Turbine. See Ogin
Florida Power & Light, 28
Food and Drug Administration (FDA), 219, 221, 231, 313
food biotechnology. See also genetically modified (GM) foods, agriculture
DuPont, 299, 305–09
Monsanto, 301–03
obstacles to, 309–19
promising future of, 335
TCSB, 319–20
Forbes (journal), 21, 23, 56, 95
Ford Motor Company, 156, 159, 160, 161, 165
Forsythe, Tom, 213
Fortune (magazine), 279, 280, 284, 304
fossil fuels
and clean energy, 13, 147–48, 154–55
and climate change, 148–50
demand and supply of, 150–53, 151, 342
dependence on foreign, 114
levelized energy costs, 175
subsidies, 177
Fox, Vicente, 244
Fraley, Robert, 326
Freeman, Sullivan & Company (FSC), 68
Fresh Fields Markets, 267
Friedberg, David, 46, 326
Friedman, Milton, 278
Frontline (TV show), 212
fuel cell
and batteries, 139
investment in, 197–98
vehicles, 166–69
Walmart, 287
funds. See also financing
clean transportation, 114–16, 120
pension, 17
venture capital in clean energy, 14, 52–56
wind energy, 172–74, 174
Fuze (food company), 228
gallium arsenide (GaAs), 102
gallium nitride (GaN), 30
Gamesa (wind energy company), 194
Gates, Bill, 39
Gateway Computer, 141
Gatorade (food company), 227–28, 231
Gemini Solar, 97
General Electric (GE)
energy investment options, 195–98
wind energy, 171–74, 174, 182, 189–93, 343
General Electric Ventures, 26, 69, 76
General Mills
advertising controversy, 218–23
cereal nutrition, 211–12, 216–18, 344
economic performance, 205–07
example of retention onset stage, 5
healthy food investment, 203, 212–15, 291
sales, 209–11
snack foods, 236
General Mills Foundation, 214–15
General Motors (GM)
clean technology investment, 61, 147–48
electric vehicle, 113–14, 128
fuel-cell technology, 139, 166–67
hybrid vehicles, 5, 34, 156, 159, 160, 162–66, 165
macroenvironment assumptions, 342
General Motors Ventures, 38
Index

HSBC (bank), 131
Hughes, James, 91
hybrid vehicles. See also internal combustion engine (ICE)
market for, 155–66
selection stage, 5
venture capital investors, 35–37
hydropower energy costs, 175
Hyundai (car company), 159, 160, 161
Iberdrola (wind energy), 181
IBM (computer company), 30, 67, 141
Icontrol (energy efficiency company), 60, 76–77, 338
IdeaLab (business incubator), 70
Immelt, Jeff, 171
imports (organic food), 275–77
income. See financials
independent power producers (IPPs), 181
India
carbonated soft drinks in, 242–43,
electric vehicles in, 140
solar energy, 92, 93, 99
solar trade wars, 89
water issues in, 253
wind energy, 184, 187
Influence: The Psychology of Persuasion (book), 28
initial public offering (IPO) and venture capital, 14, 47–48, 48
clean energy numbers of, 56
Tesla, 122
Innocent (food company), 228
innovation. See also sustainability, diversification
battery technology, 116–18, 137–39
Chinese approach to, 341
electric vehicle, 141–42
fuel cell, 167–68
hybrid vehicles, 155–56
petroleum exploration, 152
solar energy technology, 99–102
uncertainty in, 1–8
wind energy, 193, 196
Institute for Local Self-Reliance, 292
Intel Capital. See also startups, corporate venture capital
business strategy history, 56–59
CVC investments, 30, 34, 45, 55, 56, 54–56, 141, 338–40
eyear-stage startups, 66–68
environmental commitment, 59–61
late-stage investing, 71–77
variation stage, 5
internal combustion engine (ICE), 35–36, 113–14, 116–18, 139, 342–43. See also hybrid vehicles
International Energy Agency (IEA), 182
International Organization for Standardization (ISO), 128
Internet
bubble burst, 16
dominating CVC investing, 54–55
Intuit, 15
Isdell, E. Neville, 247
Israel, 126, 129–31, 342
Israel Cleantech Ventures, 126
Israel Corporation, 125, 133
Izze (food company), 228
JA (solar company), 95
Japan
and solar energy investment, 78–79
electric vehicles in, 131, 140
export market for Chinese solar, 98
solar energy in, 89–90
tea market, 230
wind energy, 179
Jiangxi Tianren Ecological Industrial (Chinese agriculture company), 46
Jinko (solar company), 95
Johnson & Johnson, 318
Johnson Controls, 29, 117
Joy, Bill, 16
JP Morgan Partners, 115
juice market, 235
Juniper Networks, 15
Kaiima (agriculture company), 47
Kashi, 203, 219–20
Kaufman Foundation, 20
Kellogg, John Harvey, 211
Kellogg’s advertising controversy, 218–23
and Bloom Energy, 30

© in this web service Cambridge University Press
www.cambridge.org
Kellogg's (cont.)
cereal nutrition, 211–12, 216–18,
changes to fight obesity, 214–15
economic performance, 205–11
example of retention onset stage, 5
healthy food investment, 203
snack foods, 236
sustainability, 291
Kent, Muhtair, 252, 253
Kholsa, Vinod, 16
Khosla Ventures. See also startups,
corporate venture capital
agriculture, 45–47
and biofuels, 40–44
and clean energy, 20–22, 31–35, 44–45, 47–48, 48
assessing venture capital investments
in, 23–25, 24
clean transportation, 35–36
energy efficiency investment, 31, 38
energy storage, 37–40
example of variation stage, 5
founders of, 16
investors in, 14
private venture capital investors, 336–37
Kior (biofuel company), 40–41
KKR (investment firm), 78
Kleiner Perkins Caufield & Byers (KPCB). See also startups,
corporate venture capital
agriculture, 45–47
and biofuels, 43–44
and solar power, 31–35
assessing venture capital investments
in, 23–25, 24
criticism of clean energy investment, 22–23
energy efficiency investment, 31, 38, 76
energy investment future, 47–48, 48
energy storage, 37–40
founders of, 15
transportation, 35–37
variation stage, 5
venture capital funds, 14
venture capital investors, 336–37
wind energy, 44–45
Kleiner, Eugene, 15
Koch Industries, 316
Kola Real (carbonated soft drinks
company), 243–45
KPCB. See Kleiner Perkins Caufield & Byers
Kravis, Henry, 78
Kroger (food retailer), 261, 273, 291
Kullman, Ellen, 322–25
Kyocera, 90
Kyoto treaty, 149–50
labeling
genetically modified (GM) foods, 313
Monsanto and, 326
labor relations
Walmart, 282–83
Whole Foods, 280–82
Land O’Lake, 43
late-stage investing
Google Ventures, 77–81
Intel Capital, 71–77
Latin America
food industry, 210–11
solar energy, 92, 99
wind energy, 179, 182
Lauckner, Jon, 162
Lazard Asset Management, 131
LDK (solar company), 95
Leadership in Energy and Environmental Design (LEED), 251
Leonard Green & Partners (private equity firm), 270
levelized energy costs, 174–77
LG Chemical (Korean car parts company), 38, 117, 163
light emitting diode (LED), 25, 77, 337
Lilly, 318
lithium-ion batteries, 38, 116–17, 141, 161, 168
Luberski (food distributor), 269
Lucent Technologies, 58
Lufthansa (airline), 43
Lutz, Robert, 162
Lyft (transportation sharing company), 80
Lynch, Michael, 56
Mackey, John, 259, 266, 268–70, 278–79, 282, 284–85, 346
Index

Magen Power (wind power company), 45
Mahoney, Richard, 301
Makani Power (wind energy), 64
malnutrition, 204, 204–05, 240
Malt-O-Meal (food company), 209
Maniv Energy Capital, 125
Manz, 74
Marine Stewardship Council, 285
market carbonated soft drinks, 226–27
electric vehicles, 119, 139–41
sports drinks, 231–32
tea, 230
wind energy, 179–83
marketing. See sales, advertising controversy
Mars (food company), 291
Mascoma (biofuel company), 22, 43
Mathlouti, Tawfiq, 246
Mayer, Jean, 212
McNealy, Scott, 16
McNealy, Scott, 16
Mecca Cola (soft drinks company), 246
Mendel Biotechnology, 303
Mercedes-Benz, 140
Merchant of Vino (food store), 267
Merck Pharmaceuticals, 306, 318
Merrill Lynch, 30
Metropolitan Life (insurance company), 78
Mexico carbonated soft drinks, 243–45, 245
juice consumption, 235
MiaSolé (solar company), 34, 74, 74, 99
microprocessors. See computer technology
Microsoft Corporation, 51, 141
MidAmerican Energy (wind energy), 65, 181, 194
Mill Valley (food store), 267, 268
Millennium Pharmaceuticals, 303
Mingyang Wind Power (Chinese), 186, 187
MinuteMaid (food company), 228
mission-based business model, 263–66
Mississippi Development Authority, 33
Mitsubishi Industries, 193
MMA Renewable Ventures, 96
mobile device technology, 58–59
Monsanto and Climate Corporation, 45–46
and TCSB, 320
diversification, 316, 318, 346–47
ending hunger commitment, 298–99
environmentalist opposition, 310–12
example of retention stage, 5
financials, 321
food biotechnology, 301–05, 313
genetically modified (GM) foods, 309–10, 327–28
partnering with DuPont, 325
precision agriculture, 320–21
reputation, 312, 325–27
restructuring of, 314–16
Monster (food company), 254–55, 345
Moore, Gordon, 57–58
Moore, Patrick, 314
Morgan Stanley (financial planning), 126, 131
Moss, Michael, 212–14
Motorola, 58, 59
Mrs. Gooch’s Natural Foods Markets, 268
Musea Ventures, 126
Musk, Elon, 93, 110, 114–16, 119
Muslim countries carbonated soft drinks, 245–47, 247
oil production in, 150–53, 151
Muslim Up (soft drinks company), 254
Naked Juice (food company), 228
Nanosolar (solar company), 74, 99
Narain, Sunita, 242
Nation Highway Traffic Safety Administration (NHTSA), 164
National Academy of Sciences, 326
National Labor Relations Board, 281
natural gas levelized energy costs, 174–77, 343
technology in, 197
Nature Conservancy, 249
Nature’s Heartland (food store), 267
Nature’s Northwest (food store), 268
Navetas (energy efficiency company), 61
NEC (technology company), 117
Nest (energy efficiency company), 23, 26, 51, 52, 77, 339
Index

Nestlé
  bottled water, 234
  carbonated soft drinks, 247, 345
  economic performance, 205–06
  tea, 228
Netscape (web portal), 15
New York Times (newspaper), 63
Newsweek (magazine), 299
Nexant (energy efficiency company), 68, 338
Next Autoworks, 36, 52
NextEra Energy (wind energy), 181
NGEN Partners, 16
Nokia, 58
Nooyi, Indra, 237–40, 243, 252–53
Nordic Windpower, 44
Norway, 121–22
Novartis (pharmaceutical company), 313, 318
Noyce, Robert, 57–58
Nth Power, 16
NUMMI (car manufacturing plant), 120
nutrition. See also organic foods and obesity, 204, 204–05
  and snack food consumption, 237
cereal, 211–18
  Pepsi investment in, 237–40
NuvoSun (solar company), 74
Oak Street Market, 267
Obama, Barack, 19, 107, 278
Obama, Michelle, 226
obesity
  and exercise, 240
  and nutrition, 204, 204–05
  and sugar intake, 212
  food companies changes to fight, 214–15
  from carbonated soft drinks, 226–27
  tea for, 230
Odak, Perry, 268
Odobrecht Agroindustrial (Brazilian conglomerate), 42
Odersun (solar company), 74
Odwalla (food company), 228
Ofer, Idan, 125, 132
Ogin (wind energy company), 44–45
Ogiso, Satoshi, 167
oil. See fossil fuels
Olmert, Ehud, 125
Opower (energy software company), 23, 28
OptiSolar, 91
organic foods. See also nutrition
  Walmart, 271–77, 274
  Whole Foods, 271–75
Organic Foods Protection Act, 271
Organization for Economic Cooperation and Development (OECD), 150
Organization of Petroleum Exporting Countries (OPEC), 150–53, 151
OSoft Electric, 29
Otellini, Paul, 58
Pacific Gas and Electric Company, 28, 181
Panasonic, 38, 116–18, 120, 138, 163
Parle Bisleri (Indian water company), 244
Partnership for a New Generation of Vehicles (PNGV), 156
Pathmark (food store), 270
PayPal, 114, 115
Peltz, Nelson, 236
Pentadyne Power, 40
People for the Ethical Treatment of Animals (PETA), 285
Pepsi, 206, 226–55, 291, 344–45
Peres, Shimon, 125, 126
  performance. See financials
  Perkins, Thomas, 15
Pfizer (pharmaceutical company), 318
Pharmacia (drug company), 314, 318
  photovoltaics (PVs), 31, 34, 68–69,
  77–79, 93, 96, 99, 298
Pickens, T. Boone, 36
Pillsbury, 207
Pioneer Hi-Bred (seed company), 305–08, 311, 316, 317
Planar Energy Devices, 40
Post, 209, 211–12, 217, 291
PowerLight, 96
PowerMap (energy efficiency company), 61
PowerThru (energy storage company), 40
Powervation (energy efficiency company), 60
precision agriculture, 320–21
Precision Planting (biotech company), 321
Premier Nutrition, 209
PrimeStar, 73
Primus Power Flow, 38
private venture capital investors. See also corporate venture capital
and clean energy, 52–56
and global economy transformation, 15
and late-stage investing, 50–51
and startups, 13–15
in clean energy, 15–48
in clean energy startups, 23–25, 24
uncertainty in clean energy
investment success, 14–15, 336–40
Procedia Food Science (journal), 216
Proctor and Gamble, 207
protein, 221–23
Protein Technologies International (biotechnology company), 308
Proterra (electric bus company), 37
public policy. See also Environmental Protection Agency
and battery vehicles, 36, 163, 165
and building efficiency, 26–27
and clean energy, 50–51
and climate change, 148–50
and electric vehicles, 112–14
and solar power, 90–91, 96
Chinese solar, 98
European, 128
oil subsidies, 177–78
on carbonated soft drinks, 226
sustainability, 4
wind energy, 179, 185–86, 191
WTO, 104
Public Utility Regulatory Policies Act (PURPA), 178
Putin, Vladimir, 152
Q-Cells (solar energy company), 17
Ralphs Grocery, 269
Rand, Ayn, 278
Range Fuels (biofuel), 41
Reagan, Ronald, 278
Recurrent Energy (solar power), 77–79, 339
Reinemund, Steven, 238
Reliance Group (Indian company), 187
Renault (car company), 127
Renessen (biotechnology company), 303
renewable energy certificates (RECs), 251, 284
renewable portfolio standards (RPS), 179
renewable power
investment return on, 20
Walmart, 287
Whole Foods, 284
retention stage, 5
Reuters (news service), 22
REVA (electric car company), 129
risk. See uncertainty
Robb, Walter, 268
Roberts, George, 78
Rockefeller Foundation, 312
Rocketdyne (engine company). See United Technologies Corporation
Rockport Capital Partners, 16
Rogers Cable, 77
Rohm and Haas (chemical company), 318
Royal Society, 326
Russian oil production, 151, 151
Safer Way (food store), 266, 278
Saft (battery company), 38, 117
Sainsbury (food retailer), 313
Sakti3 (battery company), 38
sales
Better Place, 127, 130, 135
bottled water, 232–34, 233
carbonated soft drinks, 228, 229
food retailers, 261
General Mills, 209–11
hybrid vehicles, 165
juice, 235
Kellogg’s, 209–11
retail food industry, 271
snack food, 236–37, 237, 238
tea, 230, 230, 230–31
Tesla, 118–24, 122, 136–37, 139–40
wind power, 172
Salt, Sugar, and Fat (book), 212–14
Salzman, Alan, 132
Samsung, 58, 138
Sandia National Laboratories, 31
Sanger, Stephen, 213–14
SAP (software company), 124, 125
SBAE Industries (biofuel company), 44
Scheuten Solar (solar company), 74
Schneider (electric), 29
Scott, Lee, 286, 288
Secret Tesla Motors Master Plan (blog), 110
Securing America’s Future Energy (advocacy group), 125
selection onset stage and macroenvironment, 342–43
business model evolution, 5
selection stage, 5
semiconductor energy efficiency, 31, 32
Shanghai Electric (Chinese wind power), 193
Shapiro, Robert, 298–99, 302, 305, 346
Sharp Corporation, 72, 78–79, 90, 339
Siemens, 29, 39, 193, 194
Silent Spring (book), 304
silicon and solar power, 32, 34, 67, 90
compared to thin-film technology, 71–76, 93, 99–102, 340–41
supply, 95–96, 97
Silver Spring Networks. See Spring Networks
Sinovel (Chinese wind power), 186, 193
SJF Ventures, 16
SK Energy, 38
SK Innovation, 74
Skiles, Mark, 266
Skytron Energy (solar company), 93
Smitty’s (food store), 269
snack food consumption, 236–37, 237, 238
SoBe (food company), 228
social media investing, 22
social responsibility. See sustainability
Sodastream (soft drinks company), 253
sodium and snack food consumption, 237
in batteries, 38–39
software (investing in), 54–55
Solar City, 93
solar energy. See also wind energy
CVC investment in, 55, 77–81
DuPont, 298
Google Ventures, 68–70
hybrid vehicles, 155–66
levelized energy costs, 175
thermal, 31, 66, 68–70, 79, 175
venture capital investment, 24, 31–35, 337
Walmart, 287
world competition in, 85–89, 88
Solar Energy Industries Association (SEIA), 107
solar-thermal (ST) power, 31, 66, 68–70, 79, 175
Solarion (solar company), 74
SolarReserve (solar company), 79–80, 339
SolarWorld (German solar company), 87, 104, 106
Solecture (solar company), 71–76, 74, 338
Solectrix (solar power company), 34
Solibro (solar company), 74, 74
Solutia (biotechnology company), 303, 318
Solodyna (solar company), 19, 21, 32, 74, 74, 99
Sony, 61
Soraa (energy efficiency company), 25
Soros, George, 30
South Africa and solar power, 79–80
electric vehicles in, 140
nutrition, 205
solar energy, 99
South America. See Latin America
Southern California Edison, 181
SpaceX (space travel company), 115
Spark Capital, 23
SpectraWatt (solar energy company), 66–67, 338
sports drinks market, 231–32
Spring Networks (smart-grid company), 22, 29
Sprouts Farmers Market (food company), 260, 261, 273
Index

stages
corporate investment in, 50
evolution model of business
innovation, 4–8
startups. See also Kleiner Perkins
Caufield & Byers, Khosla
Ventures, Intel Capital, Google
Ventures
evolution stages of, 5
sustainability, 336–40
venture capital investors, 50–51,
66–81
Stion (solar power company), 33
Straubel, J. B., 117
subsidies (energy), 177–78, 191
sugar
and carbonated soft drinks, 226–27
and obesity, 212, 219
in cereals, 214–18
in ready-made cereals, 211–12
Sulfurcell. See Solecture
Sun Microsystems, 16
Sungen (solar company), 72
SunPower (solar energy company), 17,
78, 95
Suntech
and DuPont, 298
and trade wars, 87–89, 88, 106
business model evolution, 95–99,
340–41
financing, 17, 94, 94–95
selection onset stage, 5
solar supplier, 79
technology, 99–102
supply chain
Walmart, 289–92
wind energy, 187–93
sustainability. See also innovation
and carbonated soft drinks
companies, 226–55
business evolution stages, 4–8, 259
business models, 340–45
clean energy, 13–48
DuPont, 296–98
food retailers, 264
major chemical companies, 321
path to, 1–8, 332–34, 336–40
Walmart, 280
Whole Foods, 277–79
Sustainability Consortium, 291

Suzlon (Indian wind energy), 187
swapping stations (battery), 135–36
Symantec, 15
Syngenta (biotechnology company),
313, 316, 318, 319, 321
Synteri (biotechnology company), 303
Taiwan, 88
Tandem Technologies, 15
Tantie, Tulsi, 187
Target, 261, 262, 265, 272–73
Tauber, Gayle, 219
Tauber, Philip, 219
TCSB. See turbo charged selective
breeding
tea sales, 229, 230, 230–31
technology. See innovation
Tendril (energy efficiency company),
76
Tennessee Consolidated Retirement
System, 14
Tesco (retailer), 291
Tesla (electric automobile company)
and Fisker, 36
business model evolution, 110–42,
341–42
collaboration with Toyota, 168
promising future of, 334
selection onset stage, 5
Tesla, Nicola, 114
Tettrock, Josh, 46
TGF Radiant, 74
thin-film cells
and solar power, 32–35, 67, 95
business model evolution, 71–76, 74,
93, 340
technology of, 99–101
Think (electric automobile company),
122
Think Global (electric car company),
129
Thorley, Evan, 133
Three Capers Community Market, 268
Tianwei (solar company), 95
Time Magazine, 63
Time Warner Cable, 76–77
Tony’s Farm (Chinese agriculture
company), 46
TopTier (web portal company), 124
Total (gasoline company), 43
Toyota and Tesla, 120, 140
environmental commitment, 147–48
toyota and tesla, 120, 140
example of selection stage, 5
fuel-cell vehicles, 138–39, 167–69
hybrid vehicles, 156–61, 161, 165
macroenvironment assumptions, 342
TPI (wind energy supplier), 192
trade wars (solar), 87–89, 88, 102–06
Transform (semiconductor efficiency company), 31, 32
Transforming Global Transportation (white paper), 124
transportation
CVC investment in, 55, 80–81
electric cars, 110–42
hybrid vehicles, 155–66
macroenvironment assumptions, 342–43
venture capital investors, 35–37
Trina (solar company), 72, 95, 106
Tropicana (food company), 228
True North (venture capital), 90
TSMC (Taiwanese semiconductor company), 33
turbo charged selective breeding (TCSB), 319–20, 328
Turner (solar company), 91
twitter (social networking site), 23
Uber (transportation sharing company), 80–81, 339
Ulukaya, Hamdi, 220
uncertainty in clean energy venture capital investment success, 14–15, 56
in solar energy investment, 20
in sustainability future, 1–8, 332–34
of fossil fuel supply, 154–55
Unicorn Village (food store), 267
Unilever, 228, 313
Union of Concerned Scientists, 299, 310
unions
and Walmart, 282–83
and Whole Foods, 281–82
United Farm Workers (union), 282
United States
bottled water consumption, 233
wind energy, 179–81
United States Department of Agriculture, 216, 265, 311
United States Department of Commerce (DOC), 104, 106–07
United States Department of Energy (DOE), 120, 122, 153, 175, 193, 196
United States Federal Trade Commission (FTC), 269
United States Food and Drug Administration (FDA), 265
United States Green Building Council, 251
United States Insurance Institute for Highway Safety, 157
United States National Highway Traffic Safety Administration (NHTSA), 157
United States Securities and Exchange Commission (SEC), 250, 268
United Technologies Corporation (UTC), 79
US Renewables Group, 79
Valero Corporation, 43
values. See mission-based business model
VantagePoint Capital Partners, 115, 126, 131, 132
variation stage, 5
venture capital investors corporate, 51–58, 336–40
private, 24, 13–48, 336–40
Verfaille, Hendrik, 314
Vestas Wind Systems, 171–74, 174, 178, 189–93, 194–95, 343
View (energy efficiency company), 25
Vogel, D., 2
W. K. Kellogg Foundation, 214–15
Wall Street Journal (newspaper), 95, 278
Walmart
and Wild Oats, 271–75, 274
as mission-based business, 263–66, 346
being inexpensive, 270
competition, 259–63, 264
environmental commitment, 286–92
food, 209–10
Index

in Mexico, 244
labor relations, 282–83
organic food imports, 275–77
retention stage, 5
sustainability, 280
Walton family, 94
Walton, John, 88, 90, 91
Walton, Sam, 280
Wang Yuan, 186
Wanxiang Group (Chinese company), 37
water
bottled, 233, 232–34
environmental stewardship, 247–50
in India, 242–43, 253
Watson, James, 302
Weihl, Bill, 63–64
Welch, Jack, 171
Weller, Craig, 266
Wellspring Grocery, 267
Whirlpool, 61
Whole Foods
and Wild Oats, 268–71
as mission-based business, 263–66, 346
competition, 259–63, 264
environmental commitment, 284–86, 323
expansion of, 271, 266–71
labor relations, 280–82
retention stage, 5
sustainability, 277–79
Whole Planet Foundation, 279, 280
Whole Trade Guarantee (initiative), 280
Wild Oats (food company), 260, 268–74
Wilson, Andrew, 66–67
wind energy. See also solar energy
business model evolution, 2009, 172, 174, 171–74
competition in, 183–94
CVC investment in, 55
global markets, 179–83
Google investment in, 64
jobs, 189
levelized energy costs, 175
macroenvironment assumptions, 343
offshore, 192–93
private venture capital investors, 44–45, 337
subsidies, 177
Walmart investment in, 287
Whole Foods investment in, 284
WindAid (wind power company), 45
wins
for Whole Foods and suppliers, 263
in sustainability, 1
Winston, A., 2
Wolfensohn, James, 126
Woolard, Edgar, 296
World Business Council for Sustainable Development, 251
World Economic Forum, 251
World Health Organization, 326
World Resources Institute, 251
World Trade Organization (WTO), 104
WTO. See World Trade Organization
Wuerth Solar, 74
X.com (financial services email company), 115
Xcel Energy (wind energy), 181
XEMC (Chinese wind power), 186
XFINITY Home, 76
Xtreme Energetics (solar company), 67
Yale Rudd Center for Food Policy and Obesities, 215–16
Yingli (solar company), 35, 72, 79, 95, 298
Yoki Alimentos (Brazilian food company), 211
Yucaipa (private equity firm), 269
Zam Zam (soft drink company), 246, 247
Zarur, Andrey, 124, 126, 132
Zhengrong Shi, 88, 89, 95
Zico (food company), 228
Zip2 (software company), 115
Zoellick, Robert, 314
Zoltek (wind energy supplier), 192