

## 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
- About 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
- Amatil (Australian bottler), 253
- Amazon, 15, 262
- Amdocs (billing company), 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

- 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), 318  
 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, 245–47, 247
  - markets for, 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, 155–66
  - 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
  - genetically 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
- EI 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
- Enercom (wind power company), 194
- Enerdel (battery company), 38
- energy efficiency investment  
CVC, 55  
Intel Capital, 68  
venture capital investors, 24, 31, 38, 336  
Walmart, 290
- Energy Independence and Security Act (2007), 327
- Energy Policy Act (2005), 327
- Energy Solutions, 97
- energy storage  
CVC investment in, 55  
venture capital investors, 37–40
- 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, 175, 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
- ethanol. *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
- Flodesign 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, 301–05  
 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  
 leveled energy costs, 175  
 subsidies, 177
- Fox, Vicente, 244
- Fraleigh, 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

- genetically modified (GM) foods. *See also* food biotechnology alternatives to, 319–21 and Monsanto, 301–09 costs, 309–10 demand for, 327–28 environmentalist opposition, 310–12 global usage of, 318–19 in Europe, 312–14
- geothermal power, 70–71, 175, 176
- Gevo (biofuel company), 43
- Ghosh, Carlos, 119, 126, 127
- Gilliland, Mike, 268
- Gilster-Mary Lee (food company), 209
- Glaceau (food company), 228
- Global Animal Partnership, 285
- global dimensions  
genetically modified (GM) foods, 318–19  
nutrition, 204, 204–05  
of sustainable choices, 4  
wind energy, 181–87, 182, 185
- Global Food Safety Initiative (GFSI), 265
- Global Greenhouse Gas Register, 251
- Global Solar Energy, 74
- Global Star Fund (GSF), 97
- Global Water Challenge, 249
- glyphosate, 315, 325
- Goldwind (Chinese wind power), 185–86, 193
- Gooch, Sandy, 268
- Google Green campaign, 62
- Google Ventures. *See also* startups, corporate venture capital and Bloom Energy, 30 and Nest, 23, 26  
business model evolution, 59  
CVC investments, 30, 36, 45, 52, 55, 56, 54–58, 338–40  
early-stage startups, 68–71  
environmental commitment, 61–66  
late-stage investing, 77–81  
variation stage, 5
- Granoff, Michael, 125
- Graphene Energy, 39
- Great Atlantic & Pacific Tea Company (A&P), 270
- green buildings, 251
- green gold, 2
- Green Mountain (food company), 254
- Green Mountain Coffee (food company), 228
- greenhouse gases. *See* climate change
- Greenpeace (environmental group), 62, 63, 66, 299, 314
- Grid Net (smart grid company), 60
- Gross, Bill, 70
- Grove, Andy, 57
- guaranteed purchasing agreement (PPA), 181
- Guodian United Power (Chinese wind power), 186
- Hallo (transportation sharing company), 80
- Hampton Creek Foods, 46
- Hanergy (solar power company), 34, 74, 74
- Hansen Juices. *See* Monster
- Hansen, Peder, 171
- Hanwha (solar energy company), 78
- Harbin Electric Machinery (Chinese wind company), 183
- Hareon (solar company), 95
- Harnett, Tony, 268
- Harper's Magazine*, 62
- Harvard Business Review* (journal), 20, 298
- Healthy Weight Commitment Foundation (HWCF), 214–15
- Hearthside Food Solutions, 209
- Heinz, 320
- HelioVolt, 74
- Henry's Marketplace, 268
- Hewlett Packard, 15, 58, 67, 124
- Hidden Villa Ranch (food distributor), 269
- high fructose corn syrup (HFC), 263–66, 320
- Hitachi, 38, 117
- Holden Foundation Seeds (biotechnology company), 302
- Holliday, Chad, 299, 316
- Honda  
fuel-cell vehicles, 166–67  
hybrid vehicles, 158–61
- Honest Tea (food company), 228
- Honeywell, 29
- Horowitz, Andrew, 80

- 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, 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, 244  
   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  
   early-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  
 Kauffman Foundation, 20  
 Kellogg, John Harvey, 211  
 Kellogg's  
   advertising controversy, 218–23  
   and Bloom Energy, 30



- Kellogg's (*cont.*)  
 cereal nutrition, 211–12, 216–18, 344  
 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

- Magenn 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
- 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
- Millenium 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

- 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
- Odebrecht 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
- Solexel (solar power company), 34
- Solibro (solar company), 74, 74
- Solutia (biotechnology company), 303, 318
- Solyndra (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

- 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, Tulsı, 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
- Tetrick, Josh, 46
- TFG 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
- Thornley, 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  
 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  
 Verfaillie, 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

- 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 Obesity, 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