

Index

- agriculture
 - adaptation in developing countries, 51–3
 - carbon dioxide (CO₂) emissions sinks, 121–2, 134–7, 163–5
 - climate change affecting yields, 130–1
 - emissions reduction projects, 163–5
 - reducing emissions of, 131–4
 - safeguarding forests, 117–18
- Alpine skiing, climate change affecting, 34
- alternate energy sources, transition to, 86–4
- Asian rainforests, deforestation of, 8–10
- Balzac, Honoré de, *La Comédie Humaine*
 - and rentiers, 169–70
- Belchatow power station, Poland, 88–9, 97–8
- biofuels
 - CO₂ emissions and, 59
 - subsidies funding development for, 128
- biomass, as energy source, 59, 77–80, 129
- Brazil, production of carbon credits in, 157
- cap-and-trade system, 115–16
- capitalism
 - climate change and, 4–6
 - globalized, 220–1
- carbon budget
 - carbon rent, 170–2, 177–8
 - typical types of, 58
- carbon dioxide (CO₂)
 - atmospheric concentration of, 17–19
 - carbon cycle and gas flow rate, 18–21
- carbon dioxide emissions
 - coal and carbon capture, 65, 81–4
 - Copenhagen Accord and CO₂ emitters, 208–12
 - factors of, 60–1
 - oil prices and, 65
 - reduction of, 70–1, 105–8
 - retroactive effects of emissions on
 - climates, 22–3
 - sinks for, 91–187
 - sources of, 58–60
 - transportation and building, 108–10
- carbon market
 - allowances and rents on, 183–5
 - allowances effects on economic growth, 178–81
 - buying and selling allowances, 99–100, 173–7
 - cap-and-trade system, 115–16
 - carbon rent distribution, 115–89
 - credits, 165–7
 - distribution models, 183–5
 - emissions trading and, 6, 89–91
 - rent sharing on European, 173–7
 - security and differential rent in, 173–7
- carbon offsetting
 - project-based mechanisms for, 148–50
 - South Korean acidic petrol plant, 147–8

Cambridge University Press

978-0-521-17568-5 - Economic Choices in a Warming World

Christian de Perthuis

Index

[More information](#)

248 • Index

- carbon price, 88–9
 - concept of, 208–12
 - disruptive effects of, 208–12
 - economic effects of, 189–90
 - introduction of, 70–1
 - market equilibrium, 103–5
 - oil rents and, 84–5
 - tropical forests and, 140–2
- carbon rent, 170–2, 177–8
- carbon sinks
 - agriculture and, 121–2, 134–7, 163–5
 - for carbon dioxide emissions, 91–187
 - deforestation and, 121–2, 168
- CDM. *See* Clean Development Mechanism
- CFCs (chlorofluorocarbons) and ozone layer, 192
- China
 - coal power stations, 81–4
 - Copenhagen Conference (2009), negotiations at, 203–5
 - energy consumption, 62–3
 - production of carbon credits, 155–6
 - timber sources, 139–40
- chlorofluorocarbons (CFCs) and ozone layer, 192
- Clean Air Act (US) emissions cap on sulphur dioxide (SO₂), 90
- Clean Development Mechanism (CDM), 146
 - large industrial projects, 153–4
 - rules of, 151–3
- climate change, 11. *See also* global warming
 - adapting to, 35–7, 39–41
 - adaptive policies for, 42–5, 56
 - capitalism and, 4–6
 - development and, 55–6
 - fossil fuels and, 6
 - geoengineering of, 27–9
 - global impacts of, 38
 - global warming and, 8–10, 19, 38
 - history of, 11
 - impacts of, 34
 - international governance of, 206–7
 - international negotiations, 191–2
 - (*See also* Kyoto Protocol (1997))
 - ‘Majinot Line’ defence against, 46–7
 - regional variations in, 24
 - risks of runaway, 30–1
 - temperature fluctuations, 8–10
- climate risks
 - action and inaction included in, 217–19
 - climatology research and, 33
 - global warming and, 8–10, 19
 - infrastructure and, 217–19
 - philosophers’ view, 221–2
 - runaway changes in, 30–1
 - urbanization and, 49–50
- climatology research
 - greenhouse effect, 16
 - Intergovernmental Panel on Climate Change (IPCC), 11
 - modelling and simulation of environments, 21–2
 - precautionary principle, 32–3
 - sun as main source of heat, 13–15
- CO₂. *See* carbon dioxide
- coal
 - as energy source, 65, 81
 - carbon capture and, 65, 81–4
 - China, coal power stations in, 81–4
- Coase, Ronald, 89–90
- La Comédie Humaine* (Balzac) and rentiers, 169–70
- Copenhagen 217–19
- Copenhagen Accord
 - CO₂ emitters and, 208–12
 - drawn up, 200–2
 - financing, 213–14
 - Russian Federation and, 212
- Copenhagen Conference (2009)
 - Annex 1 countries commitment, 203–5
 - Chinese and US negotiations at, 203–5
 - climate agreement credibility, 215–16
 - outcome of, 203
- Crocker, Tom, 89–90
- Dales, John, 89–90
- deforestation
 - agriculture and emissions affecting, 117–20
 - of Asian rain forests, 8–10
 - carbon sinks and, 121–2, 168
 - dangers of, 137–40
 - IPCC tropical deforestation report, 119–20
 - REDD, 142–3, 163–5, 168
- Descartes, René, world view of, 221
- dietary models
 - choices of, 126–7
 - food insecurity and, 125–6
- Drax power station, Yorkshire, UK, 88–9, 96–7

Cambridge University Press

978-0-521-17568-5 - Economic Choices in a Warming World

Christian de Perthuis

Index

[More information](#)

Index • 249

- economic crisis
 - effects on economic growth, 178–81
 - food insecurity and, 123–4
 - recessions, 3
 - speculation and predation, 52–3
- emissions. *See also* carbon dioxide emissions
 - agriculture and forestry linked to, 117–20
 - carbon market trading and, 6
 - reduction of, 67–9, 70–1
 - retroactive effects of carbon, 22–3
- energy sector
 - changes in, 129
 - insecurity, 63, 65, 109–10
 - investment in, 71–4, 159–60
- energy sources
 - biomass, 59, 77–80, 129
 - coal, 65, 81
 - nuclear energy, 67–8, 80–1
 - renewable, 74–7, 154
 - transition to alternate sources, 86–4
- European Union (EU)
 - allowances cap procedures, 96–9
 - border adjustments in, 113–14
 - carbon leakage outside of, 110–13
 - carbon market trading and Kyoto Protocol, 94–6
 - climate policy and market, 93–4
 - emissions trading scheme (EU ETS), 88–9
 - signed Kyoto Protocol (1997), 93–4
- food insecurity
 - agricultural production and, 51–3, 219
 - dietary models and, 125–6
 - economic crisis and, 123–4
- forests and forestry. *See also* deforestation; tropical forests
 - agriculture as safeguard for, 117–18
 - China, timber sources for, 139–40
 - emissions, forestry linked to, 117–20
- fossil fuels and climate change, 6
- Fourrier, Jean-Baptiste, greenhouse effect described by, 17–19
- fraud and misuse of regulation, 101–3
- Geneva Conference (1979) and creation of IPCC, 194–5
- geoengineering of climate change, 27–9
- global economic crisis of 2008–2009. *See* economic crisis
- global impacts
 - assessments models of, 38
 - climate change and, 8–10
 - global warming. *See also* climate change
 - climate change and, 8–10, 19, 38
 - climate risks and, 19
 - extent of, 9–10
 - polar ice caps, 9–10
- greenhouse effect
 - amplification of, 24
 - Earth warming due to, 17–19
 - effects on Mars and Venus, 16–17
 - elements of, 16
 - Fourrier, described by, 17–19
 - gas emissions, 23–4
 - photosynthesis and, 22–3
- Hardin, Garrett, and ‘The Tragedy of the Commons’, 191–2
- India
 - Bagepalli village methanizer project, 146
 - production of carbon credits, 156
- infrastructure, climate risks and
 - characteristics of, 47–9
- insurance industry’s role in pricing of risks
 - due to climate change, 41–2
- Intergovernmental Panel on Climate Change (IPCC)
 - climate sceptics and, 30–2
 - climatology research, 11, 20–1
 - creation of, 194–5
 - greenhouse gases, 20–1
 - tropical deforestation report, 119–20
- international cooperation
 - beginning of, 194–5
 - climate change
 - international governance of, 206–7
 - international negotiations regarding, 191–2 (*See also* Kyoto Protocol (1997))
 - on tropical forests, 142–3
- IPCC. *See* Intergovernmental Panel on Climate Change
- Joint implementation (JI), lessons of, 157–63
- Kyoto Protocol (1997), 6
 - carbon price
 - concept of, 208–12
 - disruptive effects of, 208–12
 - CDM, 146
 - emissions cap and, 94–6

Cambridge University Press

978-0-521-17568-5 - Economic Choices in a Warming World

Christian de Perthuis

Index

[More information](#)

250 • Index

- Kyoto Protocol (1997), (*cont.*)
 EU carbon market trading, 94–6
 Europe signed, 93–4
 failed ambitions of, 197–200
- Ladurie, Emmanuel Le Roy, on history of temperature fluctuations, 8–10, 11
- Lunn, Arnold, on Alpine skiing development, 34
- ‘Magenot Line’ defence against climate change, 46–7
- Manaus, Brazil, wealth due to rubber boom, 1–2
- Mars and greenhouse effect, 16–17
- methanizer biogas as energy source, Bagepalli village project (India), 146–7
- modelling and simulation of environments, 21–2
- Montreal Protocol (1987), 192, 215
- natural resources, efficient use of, 143–4
- nuclear energy, 67–8, 80–1
- offsets. *See* carbon offsetting
- oil prices. *See also* energy sector; energy sources
 CO₂ emissions and, 65
 effects of high, 65
 investment in, 71–4, 159–60
 oil rents and carbon, 84–5
- ozone layer and CFCs, 192
- photosynthesis
 biofuels and, 59
 carbon and, 17–18, 87
 greenhouse effect and, 22–3
 models and simulations of, 21–2
- Poland
 Belchatow power station, 88–9, 97–8
 Polaniec power station, 97–8
 Polaniec power station, Poland, 97–8
 polar ice caps and global warming, 9–10
- rainforests, Asian, deforestation of, 8–10
- Reducing Emissions from Deforestation and Forest Degradation (REDD), 142–3, 163–5, 168
- regulation, fraud and misuse of, 101–3
- renewable energy sources, 74–7, 154
- rubber boom in Manaus, Brazil, wealth from, 1–2
- Russian Federation and Copenhagen Accord, 212
- simulation and modelling of environments, 21–2
- South Korea, carbon offsetting from acid factory, 147–8
- Spinoza, Baruch, world view of, 221–2
- sulphur dioxide (SO₂), Clean Air Act (US) emissions cap on, 90
- sun, as main source of heat, 13–15
- taxation, 89–91, 108–10
- temperature
 fluctuations in planetary, 8–10
 historical fluctuations noted, 8–10, 11
 melting ice scenario for sea level rise, 25–6
- ‘The Tragedy of the Commons’ (Hardin), 191–2
- tropical forests
 carbon price and, 140–2
 deforestation of Asian rainforests, 8–10
 international negotiations and, 142–3
 tropical deforestation report, 119–20
- United Kingdom (UK), Drax power station in Yorkshire, 88–9, 96–7
- United Nations (UN)
 CDM projects registration, 152–3
 Framework Convention on Climate Change (UNFCCC; Climate Convention)
 ratification and functioning of, 194–5
 three pillars of, 195–7
 IPCC as part of, 11
 projects registration and funding, 214–15
- United States (US)
 Copenhagen Conference (2009), negotiations at, 203–5
 markets in, 114–15
 SO₂ Clean Air Act emissions cap, 90
 urbanization and climate risk, 49–50
- Venus and greenhouse effect, 16–17
- Women for Development, as Bagepalli village project sponsor, 146–7