

# INDEX

- ACARE (Advisory Council for Aeronautics Research in Europe), 112
- Aeromobility, 6, 10, 45, 88, 201, 202, 203, 214
- Aeronautical technologies, 10, 89, 93, 104, 111, 137
- Aéroports de Paris (ADP), 134, 136, 137
- Aerotropoli, 5
- Africa (air traffic growth in), 59, 60, 208
- AirAsia, 54, 56
- Air France, 20, 140, 149, 187
- Air Navigation Service Providers (ANSPs), 101–102, 208
- Air Passenger Duty (APD, UK), 113, 120
- Air pollution, 17, 18, 103, 157, 177
- Air traffic control (ATC), 56, 101–102, 166
- Air traffic management, 8, 20, 117, 208
- Air traffic movements, 6
- Airbus
  - A300, 96
  - A320neo, 20, 56
  - A340, 96
  - A380, 74, 90, 132
- Aircraft
  - decommissioning, 29
  - design, 74–75, 93, 97, 98
  - engines (high-bypass turbofans and open rotors), 90, 95, 99
  - maintenance, 91, 111
  - manufacturing, 50, 91, 93
  - turnarounds, 91, 92
- Aircraft noise
  - annoyance, 16, 30, 155–171
  - human health impacts, 17, 159
  - measurement, 20, 30
  - mitigation measures, 30
  - policies, 158–160, 163, 164, 166
  - pollution, 8, 16, 18, 30, 170
  - sources, 157, 163
- Aircraft atmospheric pollution
  - carbon dioxide (see separate entry)
  - methane, 90, 91
  - nitrous oxides (NO<sub>x</sub>), 91, 112
  - NMVOCs (non-methane volatile organic compounds), 90–91
  - sulphurous oxides (SO<sub>x</sub>), 91
  - water vapour, 90–91
- Airline
  - alliances, 148
  - bankruptcy, 21, 69, 99
  - seat capacity, 42, 47
  - traffic, 45, 46, 49
- Airport
  - capacity, 6, 26, 48, 52, 81, 134, 135, 140, 147, 223, 225, 226, 233, 234
  - cities (see also aerotropoli), 5, 256–257
  - companies, 132, 134–138, 139, 141–148, 149, 150
  - connectivity, 12, 187, 243, 256

- expansion, 8, 9, 17, 24, 25, 26, 52, 150, 166, 188, 229, 230, 231, 232–235, 243–245, 260
- failure/closure, 13
- governance, 241–243, 252, 259–261
- hubs, 38, 40, 41, 44, 133, 134, 135, 140, 143, 185, 240, 246, 250
- infrastructure, 10, 51–54
- key city-pairs, 45, 46
- operations, 17, 30, 92, 102–103, 105
- operators, 19, 20, 102, 103, 141, 242, 250, 255, 260
- opposition, 11, 25, 52, 250, 257
- ownership, 30, 134, 146
- policy, 25, 132, 140, 143, 158, 162–163, 166
- privatisation, 30, 147
- retailing, 13, 92, 141
- revenue, 121, 124, 137, 144, 145, 148
- security, 7, 15, 201, 204
- Airports
  - as cargo hubs, 135
  - as Large Technical Systems, 242
  - as passenger hubs, 40, 135
- AirportWatch, 20
- Airports Commission (see also Davies Commission), 233–234
- Air-rail
  - competition, 176, 177, 179–185
  - integration, 185–193
  - substitution, 177–179
- Airspace, 101, 102, 200, 201, 202, 205–213
- Air travel
  - as embedded social practice, 10
  - disruption caused by ash cloud, 200–201, 205–206, 209–210, 213
  - global passenger demand, 14, 27
- Alternative fuels (see also biofuels), 8, 14, 19, 20, 50, 75, 99
- Anti-airport protest campaigns, 8–9, 14, 17, 30
- ATAG (Air Transport Action Group), 20
- Aviation
  - economic growth, 14, 47, 70, 132, 147, 223, 224, 225, 232, 233
  - economic impact, 16, 29, 88, 111, 120, 125, 150
  - futures, 3–31, 214
  - social benefits, 16
  - policy, 10, 25, 26, 28, 29, 31, 66–68, 221, 224, 241
- Aviation fuel – tax exemptions, 13
- BAA (formerly British Airports Authority), 136
- Biofuels (see also alternative fuels), 20, 57, 100, 105, 120, 126
  - feedstocks, 20, 57, 75, 100
  - trial flights, 100
- Blended wing aircraft, 97
- Boeing
  - B707, 94
  - B737MAX, 20
  - B747 ‘Jumbo Jet’, 95
  - B777LR Freighter, 47
  - B787 Dreamliner, 96
- Boris Island airport (see also Thames Estuary Airport), 232
- BRIC economies, 42
- British Airways, 20, 23, 94

- Brundtland Commission, 11, 12  
 Brussels, 44, 182, 183, 187–192
- Carbon  
 allowances, 114, 116, 118, 122  
 budgets, 65–83  
 footprint, 149, 150  
 market, 114, 116  
 price, 29, 67, 83, 114, 116, 120, 121, 124, 125
- Carbon dioxide (CO<sub>2</sub>), 7, 18, 19, 57, 102  
 climate effects, 91  
 emissions, 7–8, 18, 57–58, 67–68, 70, 72–74, 76, 78, 80, 102, 110–111, 113–114, 120, 123  
 regulation, 113
- CDU (Christian Democratic Union, Germany), 240, 250, 258
- Charles de Gaulle Airport, Paris, 187
- Chicago Convention, 13, 112, 117–118
- China, 21, 29, 54–55, 70–71, 73, 78, 260
- Citizen/public participation, 241, 247, 261
- CIVETS nations, 42
- Civil protest, 247
- Climate change  
 causes, 39, 66, 68, 78, 90  
 consequences, 66, 68, 78  
 models, 68  
 dangerous climate change, 68  
 2°C threshold, 69, 83
- Coalition Government (UK), 19, 52
- Committee on Climate Change (UK), 7–8, 19
- Composite materials, 74, 95, 96
- Conservative Party, 152, 234–235, 237
- Continuous climb departures (CCDs), 20, 101–102
- Continuous descent approaches (CDAs), 101–102
- Contrails, 8, 19, 23, 91
- Copenhagen Accord, 68
- Crisis Management, 199–214
- Coalition Government (UK), 19, 52
- Committee on Climate Change (UK), 7–8
- Composite materials, 74, 95, 96
- Conservative Party, 152, 234–235
- Continuous climb departures (CCDs), 20, 101–102
- Continuous descent approaches (CDAs), 101–102
- Contrails, 8, 19, 23
- Copenhagen Accord, 68
- Crisis Management, 30, 199–213
- Davies Commission (see Airports Commission), 25–26
- Decision-making (political), 9, 18
- de Havilland Comet, 58, 94
- Demand management, 22, 24, 25, 89, 90
- Democracy, 165, 257
- Department for Transport (UK), 230
- Deregulation, 6, 9, 70
- Developing economies, 5, 51
- Direct action movements, 8
- Dubai, 38, 41, 44, 45, 51
- EACCC (European Aviation Crisis Coordination Cell), 205, 207, 208, 210–213

- Ecological Modernisation, 23, 156, 161–163, 165, 168, 170, 235
- Emissions growth, 18, 76, 78  
 domestic, 76, 78, 111  
 international, 11
- Emission pathways, 65, 69
- Emissions trading, 8, 11, 21, 23, 29, 57–58, 67, 109–126 (see also EU ETS)
- Environmental groups, 9, 20, 133, 145, 232, 233
- Environmental politics, 228–231, 248
- EU ETS (Emissions Trading System), 21, 58, 67, 111, 113, 114–126  
 directives/legislation, 114, 116, 117  
 impacts, 111, 120–125  
 mechanism/permit allocation, 21, 67, 114–116
- EUROCONTROL, 200, 205, 206, 207, 208, 211
- Europe, 6, 13, 20, 30, 57, 60, 114, 116, 133, 146, 149, 150, 157, 159, 175–194, 208, 214, 240
- European Commission (EC), 20, 58, 112, 114–117, 119, 125, 145, 193, 211
- European Union (EU), 11, 13, 21, 29, 57, 58, 66–67, 109–126, 143, 148, 192–194
- Exercise Volcex, 200, 205
- Eyjafjallajökull, 15, 205
- scheduled services, 38, 43, 47
- Fossil fuels (aviation's reliance on), 7, 50, 57, 75, 80, 95
- Frankfurt/Main Airport  
 controversy, 248–249, 255–257  
 expansion, 240, 243–245, 248, 251, 252, 259  
 history, 241, 246–248
- Fraport AG, 137, 240, 250
- Friends of the Earth, 156, 162, 231, 232
- Fuel costs, 14, 120
- Fuel efficiency, 8, 20–21, 57, 74, 89, 93, 95, 98, 101, 112
- Functional Airspace Blocks (FABs), 208
- Gatwick Airport, London, 52
- Germany, 31, 110, 147, 165, 182, 188, 189, 241–245, 260
- Global economy, 6, 8, 10, 12, 13, 42, 47, 50, 59, 88
- Global Infrastructure Partners (GIP), 145–146
- Global recession (2008) – effects  
 on air travel demand, 6
- Globalisation, 6, 25, 113
- Goldsmith, Zac, 226, 231
- Greenhouse gases (GHGs), 7, 17, 20, 39, 54, 66, 68–69, 110–111, 113–116, 126
- Greening, Justine, 229–231
- Greenpeace, 23, 232
- G8 nations, 68, 81
- HACAN Clearskies, 14, 16
- Haneda Airport, Tokyo, 40
- Hartsfield Airport, Atlanta, 40
- Heathrow Airport, London, 16, 25, 103, 137, 145–146, 229, 230, 233
- Ferrovial, 144, 145–146
- Flag carriers, 132, 143, 148, 182
- Flights  
 global provision of air services, 48, 134, 182

- Third runway, 9, 25, 147, 225, 229, 232–233, 240, 247
- Terminal 5 (T5), 54, 141, 144
- Heathrow Airport Holdings (HAH), 134, 141, 146
- High-speed rail, 175
  - connectivity, 187
  - development, 192
  - effect on demand, 184, 187
  - environmental impact, 178, 185
  - High-Speed 2 (UK), 147, 230
- IATA (International Air Transport Association), 6, 12, 13, 20, 21, 112, 206
- ICAO (International Civil Aviation Organisation), 21, 49, 54, 55, 66, 67, 79, 80, 110, 120, 205, 212, 242
- Indonesia, 5, 41, 42, 56, 59, 205
- Infectious disease, 15, 89, 92
- Jakarta, 40, 41, 42, 46, 56, 135
- Jet A/A1 fuel, 20
- Johnson, Boris, 52, 230, 231
- KLM, 20, 100, 149
- Kloten Airport, Zurich, 30, 158, 164
- Kyoto Protocol, 58, 66, 111, 113, 114
- Labour Party, 25
- Liberal Democrats, 229
- Liberalisation, 6, 9, 113, 192, 204
- Lion Air (Indonesian low-cost carrier), 42, 56
- Logistics, 88, 138, 214
- London airports (see also Heathrow, Gatwick and Stansted), 16, 144, 147, 152
- London Volcanic Ash Advisory Centre, 205
- Long-haul flights, 191, 203
- Low-cost carriers, 6, 9, 16, 41, 70
- Luanda, Angola, 50
- Lufthansa, 20, 136, 142, 148, 182, 183, 186, 248, 249, 254, 255, 256
- Manchester Airports Group (MAG), 26, 146
- Market regulation, 22, 23, 25, 145
- McLoughlin, Patrick, 230, 233, 234
- Mediation, 132, 157, 240, 245, 248, 249, 254, 255, 256, 257, 260, 261
- Middle East, 28, 37, 47, 51, 52, 71, 72, 76, 77, 80, 103, 212
- Narita Airport, Tokyo, 8
- NATS, 102
- New technology, 74, 89, 95, 101, 102
- NGOs (Non-Governmental Organisations), 66, 82, 133, 257
- NIABY-style protest (Not In Anybody's Back Yard), 232
- NIMBY-style protest (Not In My Back Yard), 229, 232
- Notre-Dame-Des-Landes Airport, Nantes, 9
- Oil, 7, 14, 19, 22, 23, 24, 39, 42, 49, 57, 93, 95, 209, 214
  - consumption, 73, 88
  - price, 39, 42, 49, 95
  - supply, 39, 49, 50, 54
- Orly Airport, Paris, 140
- Paris, 38, 40, 41, 52, 53, 133, 134, 140, 151, 176, 182, 187, 189, 191, 269

- Participatory practices, 169, 170  
 Passenger demand, 14, 19, 27  
 Peak oil, 7, 14, 19, 22, 23, 50, 185  
 Plane Stupid, 17, 232  
 Policy instruments, 4, 9, 22, 25, 118, 169, 228, 269  
 Political actors, 222  
 Political process, 256  
 Political power, 133, 167  
 Precision Area Navigation, 20, 89  
 Protest groups, 161, 162, 163, 165  
  
 Regional governance, 239, 241—243, 258  
 Roth, Petra, 240, 250, 257, 258  
 Runways, 52, 75, 91, 145, 169, 246, 249  
  
 Schiphol Airport, Amsterdam, 158, 170  
 SPD (Social Democratic Party, Germany), 240, 258  
 Sixth freedom hubs, 44  
 Social justice, 15, 17  
 Stansted Airport, London, 16, 140, 145  
 Stop Stansted Expansion, 17, 26  
 Surface access, 17, 92, 103–104  
 Sustainable Aviation Group (UK), 10, 20  
  
 Sustainable aviation, 10, 11, 12, 20, 28, 44, 132, 147, 151, 156, 241  
 Sustainable development, 8, 11, 22, 235  
 Sustainable transport, 9, 24  
  
 Taxes/taxation regimes, 13, 112, 145, 226  
 Thames Estuary Airport (see also Boris Island airport), 61  
 Tradable permits, 67, 114  
  
 UK, 4, 7, 19, 20, 23, 27, 47, 66, 67, 94, 102, 113, 122, 146, 147, 179, 204, 209, 233, 235, 265  
 Umweltpolitik (Green politics), 248  
 United Arab Emirates, 5, 44  
 United Nations Framework Convention on Climate Change (UNFCCC), 66, 111, 113  
 United States of America, 21, 24, 43, 47, 50, 55, 58, 59, 70, 73, 76, 78, 80, 82, 94, 98, 114, 157, 159, 204, 211  
  
 Video conferencing, 22  
  
 Waste disposal, 92, 269  
 World War One, 93  
 World War Two, 5, 6, 27, 94, 104, 133, 156, 157