
Index

- Aarhus Convention 100, 153, 183–4,
283, 431, 432
- abatement of nuisance 400
- access to justice 30, 174, 183–4, 432
- accountability 153, 155, 358, 359, 370,
371
- healthy environment, right to 170,
173
- acidification, ocean 283
- adaptive management approach 484–5,
495–7, 508
- administrative law 427, 428, 430, 435,
438, 440
- enforcement: criminal or 133–4, 136
- advocacy 162
- aesthetics 392
- African Charter on Human and Peoples’
Rights (1981) 100, 101, 183, 284,
294
- African Commission on Human and
Peoples’ Rights 101, 294
- African customary law 319
- African Union (AU) 96, 284
- Agenda 21 29, 34, 68–9, 352
- agriculture 57, 70, 395
- criminal law 402
 - land 401
 - intergenerational equity 500
 - sustainable use 485–6
 - waste, doctrine of 401
- negligence 401
- air 4–5, 8, 149, 172, 173
- property rights 398, 403, 405, 406,
408
 - taxes, environmental 122
 - US Clean Air Act 1970 131, 132,
379–81
 - see also* atmosphere
- Alexy, R. 39, 40
- Allmende system 24–5
- ambiguity
- in dubio pro natura* 180
- amenity 392, 402–3
- American Convention on Human Rights
San Salvador Protocol 100, 183
- amparo* action 179
- Anderson, M.R. 172
- Angola 172, 176, 179, 191
- Anheier, H. 98
- animals 162
- welfare 402
 - wildlife crime 137
 - see also* endangered species;
interspecies equity; species
impact assessments; species
impact statements
- Antarctic
- Convention on the Conservation of
Antarctic Marine Living
Resources 33
 - Whaling* case 236–41, 289
- Antarctica 309, 315
- Anthropocene 28, 40, 50, 51, 52, 75,
103
- capacity of law to respond to 57–9
 - crisis 158
 - and enhanced regulation 88–91
- anthropocentric approach 9, 15, 23,
27–8, 43, 44
- Agenda 21 68–9
- common heritage of mankind 307
 - diverging from exclusively 169
 - environmental ethics 168
 - human rights 152
 - right to healthy environment 171,
172–3
- aquaculture/fish farming 398
- adaptive management approach
484–5, 497
- Arab Charter on Human Rights (2004)
100
- arbitration 227
- Iron Rhine* arbitration 288–9, 296
- archaeological objects 322
- Arctic Sunrise* case 290
- Argentina 179, 191–2, 294

- artisanal and subsistence fishers 282
- ASEAN (Association of Southeast Asian Nations) 284
- Asian Human Rights Charter (1998) 100
- Asian non-theist traditions 319
- atmosphere 57, 242
 - CHM and 306, 309–10, 326, 327
 - see also* air
- Australia 24, 149, 227
 - adaptive management approach 484–5, 495–6, 497
 - conservation of biological diversity and ecological integrity principle 504–5
 - civil proceedings 507–8
 - criminal proceedings 508
 - EIAs 423, 426, 487–8
 - ‘jurisdictional fact’ approach 435–8
 - standing 431
 - fires 58
 - fisheries 405
 - integration 357, 488–9
 - EIA 487–8
 - intergenerational equity 487–8, 498, 500–501, 503–4
 - climate change 502–3
 - cultural heritage and 502
 - interpretation, statutory 380
 - interspecies equity 503–4
 - intragenerational equity 503–4
 - policy objectives 373
 - polluter pays principle 512–13
 - precautionary principle 487–8, 490, 491
 - adaptive management approach 495–6, 497
 - burden of proof 494
 - margin for error 495
 - prohibiting the development 497–8
 - types of measures 494
 - property rights 398, 405
 - Rylands v Fletcher* case 401
 - sustainable use 483–6
- Baetens, F. 296
- Bangladesh 101
- Barad, K. 160
- barrier to entry by new firms 117
- Bartlett, R. 382–3
- Bates, G. 373
- Belgium 192
 - Scientific Support Plan for a Sustainable Development 356
- Belize Alliance* case 438
- benefit sharing 250, 322, 323, 325
- Benford, R. 97
- Berry, T. 206
- best available technique/technology (BAT) 122–3, 137
 - not entailing excessive costs (BATNEEC) 122, 123
- best practical means (BPM) 123
- Beyerlin, U. 28
- Bhutan 192–3
- bias
 - Eurocentric epistemic 157
- Biermann, F. 88
- biocapacity 23
- biocultural rights discourse 162
- biodiversity 57, 87–8, 230, 249, 295–6, 309, 315, 316
 - Agenda 21 69
 - CBD 66, 67, 69, 237, 280–281, 316
 - open texture of language 250, 264
 - coral reefs 376
 - definition 504
 - ecological integrity principle and conservation of 504–8
 - healthy environment 172, 183
 - integrative approach to principles of equity 503–4
 - intergenerational equity 316, 499, 503–4
 - OSPAR 283
- biosecurity 402
- biotechnologies 34, 159
- Birmie, P. 297, 373, 462
- Bodansky, D. 93, 94
- Bolivia 176, 179, 193, 199, 202–3, 210
- Bosselmann, K. 481, 488, 489, 499–500
- boundary object 427
- Boyd, D. 101, 153, 169–70, 183
- Boyle, A. 373, 462

- Brazil 61, 172, 176–7, 181, 182, 194, 294, 311
- Brown Weiss, E. 28, 499
- Brundtland Report (1987) 23, 24, 26, 29, 278–9, 293, 295, 337, 338, 341, 350–353, 361, 372, 479, 480, 486
- Brunnée, J. 310, 316
- burden of proof
in dubio pro natura 180
 nature, rights of 201
 precautionary principle 234, 459–60, 493–4
- Burroughs, John 149
- Calabresi, G. 126
- Callon, M. 428
- Calvert Cliffs* case 16
- Canada
 ecological integrity 35–6
 EIAs 423
 Great Lakes Water Quality Agreement 32–3
 intergenerational equity 498, 502
 property rights 398
- Cape Verde 179, 194–5
- capitalism 150, 210, 212, 394, 395
- capture, regulatory 135
- Caring for the Earth 29
- Carson, Rachel 149
- charges, environmental 121–2
- chemical factories in India 512
- chemicals governance 97
 EU 97, 263, 264, 265
 SAICM 95–6
- China 156, 370
 Hong Kong 178
- Chirico, F. 97
- Christianity 319
- Christiansen, E. 180
- citizenship, global ecological 324
- civil rights movement 204
- civil society 66, 97, 98, 101–2, 433
- Clean Air Foundation* case 178
- clean development mechanism (CDM) 262–3, 264, 265, 281–2
- climate change 25, 86, 151, 159, 203, 210, 223, 249, 283, 285, 393
- common heritage of mankind 309–10, 315–16, 326, 327
- convergence 94
- corporations 156–7
- domestic laws 85
- EIAs 425
- environmental policy integration 339, 353
- fragmentation 87–8
- indicators 386
- intergenerational equity and 281, 502–3
- Intergovernmental Panel on 339
- new materialism 161
- Paris Agreement 85, 371, 375, 386
 INDCs/NDCs 309–10, 378
- policy objective: avoiding dangerous 375–9, 384, 386
- precautionary principle 468
- property rights 405, 407, 408
- regime complex 85
- restoration, ecological 50, 55
- UNFCCC 85, 315–16, 375–9, 384, 386, 407
- Copenhagen Accord 376–7
- fragmentation 88
- Kyoto Protocol 85, 132, 262–3, 281–2
- NDCs/INDCs 309–10, 378
- objective 309
- open texture of language 250–251, 264
- Paris Agreement 85, 309–10, 371, 375, 378, 386
- sustainable development 280, 281, 294–5
- US Clean Air Act 1970 380–381
- Club of Rome 277
- Coase theorem 114–15, 118, 121, 136, 395
- coastal environment
 New Zealand 481–2
 restoration, ecological 69, 72, 73
 mangroves 56–7, 74
 Vietnam 56
- codes of conduct 260

- collective human responsibility 319
- colonialism 66, 101, 157
- command and control regulation 30, 117, 121, 136
 - and economic instruments compared 130–133
- Commission on Global Governance 327–8
- common but differentiated responsibilities 37, 66, 67, 308
 - UNFCCC 281
- common concern 61–2, 315–16, 326
- common heritage of mankind (CHM) 306–28
 - core elements of 316–18
 - incorporation into agreements
 - Antarctica 315
 - biodiversity 316
 - climate change 315–16
 - law of the sea 312–14
 - natural and cultural heritage 314–15
 - outer space and the Moon 314
 - as normative concept
 - common interest 320
 - emergence of form of trust 320–323
 - ethical foundations 319
 - origins as legal concept 311–12
 - relevant legal principles
 - common interests 308–9
 - management of common areas 309–10
 - state sovereignty 307–8
 - towards CHM 310–311
 - towards application of 323–5
 - earth system 327
 - global atmosphere 326
 - human genome 325–6
 - marine living resources 325
 - UN Trusteeship Council 327–8
- common interest 320
- communication and public relations
 - tools 379–80
- companies 9, 86, 135, 155–7, 158, 199–200, 396
 - company law 156, 428
 - ISO 14001 98
 - oil 101
- complexity 382–3
 - of ecological systems
 - precautionary principle 451–2, 453
- compulsory takings of land 404
- consent(s) 259, 260, 308
 - ICJ 222, 223
 - prior informed 95
 - resource 404, 406, 408
- conservation areas 396
- conservation of biological diversity and ecological integrity principle 504–8
- conservation covenants 403
- constitutional environmental rights 100, 101, 153, 170, 174–6, 183
 - environmental values 173, 175–6
 - fundamental rights 176–7, 182
 - healthy environment, right to 12–14, 99–100, 168–71, 175, 183–5
 - applications 179–82
 - defining 171–3
 - examples of national provisions 191–5
 - justiciability 170, 178
 - self-execution 177, 184
 - standing 178, 179
 - substantive and procedural rights 173–4, 181
 - interpretation of national legislation and 180–181
 - long-term commitments and values 176
- constitutionalism, global environmental 324
- consumers 452
- contract law 403, 428
- Convention on Biological Diversity (CBD) 66, 67, 69, 237, 280–281, 316
 - Cartagena Protocol 281
 - Nagoya Protocol 281
 - open texture of language 250, 264
- Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment 283

- Convention on the Conservation of Antarctic Marine Living Resources 33
- Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) 149
- Convention on International Trade in Endangered Species (CITES) 237
 - precautionary approach 458
- Convention on the Law of the Non-navigational Uses of International Watercourses 11–12, 231, 283
- Convention on the Law of the Sea (UNCLOS) 10, 239, 398, 405, 466
 - common heritage of mankind 311, 313–14, 318, 320, 321, 323
 - benefit sharing 322, 325
 - marine living resources and 325
 - fisheries and EEZ 236, 282
- Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) 283
- convergence
 - human rights and environmental protection: tension and 146, 151–5
 - legal and economic analysis
 - compared: divergence or 121–4, 134, 136–7
 - transnational environmental law (TEL) 93, 94–6, 100
- Coole, D. 159
- cooperation 42, 67, 258, 308, 309–10, 316
 - approach to enforcement 134–5, 137
 - common heritage of mankind 317
 - Nile Basin Initiative (NBI) 262
 - ozone layer 250
- coral reefs 376
- Cordonier Segger, M.-C. 511
- Corfu Channel* case 223, 226
- corporations *see* companies
- cosmopolitanism 324
- cost-benefit analysis 112, 115–16, 428, 439
 - formulating environmental standards 122–3
 - minimization of accident costs 126–7
 - precautionary principle 124, 357, 453, 454, 495
 - subsidies 510
- Costa Rica 13–14
- costs 114–15, 117, 118, 119, 392
 - command and control instruments 131
 - EIAs 426
 - emissions trading 131–2
 - full life cycle of 509
 - internalization of environmental costs principle
 - improved valuation and pricing and 479–80, 509–13
 - minimization of accident costs:
 - efficient care levels 126–7
 - strict liability and negligence
 - compared 127–9
 - transaction 115, 121, 136, 395
- covenants, restrictive 402–3
- Coyle, C. 150
- criminal law 7, 18, 260, 402, 428, 508
 - economic and legal approaches 133–4, 136
 - emission standards 122
 - polluter pays principle 512, 513
- critical legal studies (CLS) 159, 160, 205
- Cross, F. 381–2
- Crutzen, P. 57, 88–9
- cultural heritage and intergenerational equity 502
- cultural and natural heritage 311–12, 314–15, 320–321
- customary international law 100, 276, 308
 - do no harm 307
 - drift net ban 261, 264
 - environmental quality, right to 153
 - precautionary principle 254, 462–3, 465–6
 - prevention principle 230
 - sustainability 409
 - sustainable development 233
 - treaty law and 260

- Dalby, S. 90
 Dales, J.H. 131
 Daly, E. 184
 damages 14–15, 118–19, 257–8, 399, 400
 Dangerman, J. 155–6
Danube Dam case 226, 231–3, 241, 254–9, 288, 289, 310
 database
 Toronto Initiative for Economic and Social Rights (TIESR) 170, 178
 Deep Seabed Mining Authority
 precautionary principle 468
 democracy 42, 210, 324, 433
 constitutions 176
 deficit 323
 environmental policy integration 353–4, 358, 359–60, 362
 precautionary principle 468
 Denmark 135
 deregulation 371, 395
 desertification 66, 68, 72, 75
 deterrence-based enforcement strategy 135, 137
 developing countries
 biodiversity 316
 clean development mechanism (CDM) 262–3, 264, 265, 281–2
 European Union 285
 law of the sea 313, 318
 persistent organic pollutants 283
 Rio Declaration (1992) 31, 66, 67
 technology transfer 313
 waste exported to 120
 development, right to 31, 146, 174, 284, 294, 297
 disaster risk reduction
 Sendai Framework 73–4
 distributive justice 313–14, 318, 322, 500, 503–4
 do no harm principle 307, 308–9, 310
 Doha Round 284
 Donnelly, J. 148
 Dovers, S. 384
 driftnet fishing 261–2, 264, 265
 due diligence 466
 Dworkin, R. 38, 476
 Earth Charter 30, 32, 37, 40, 44
 Earth Summit (2002)
 Plan of Implementation 486–7
 Earth System governance 90–91, 92–3
 Earth System science 58, 90, 92, 327
 easements 402–3
 eco-constitutional state 42, 43
 ecocentric environmental ethics 168
 ecocide 28
 ecological function of property 182
 ecological integrity 30, 40, 44, 169, 172
 conservation of biological diversity and 504–8
 as core of sustainability 32–7
 economic approaches to environmental governance 111–37
 economic and command and control instruments compared 130–133, 136
 environmental liability 125, 135–7
 goals of liability rules 125–6
 minimization of accident costs 126–7
 strict liability and negligence compared 127–30
 government involvement 132–3
 issues in context 111–12
 legal and economic analysis compared 113–14, 135–6
 convergence or divergence 121–4, 134
 goals of economic policy 114–16
 instruments 116–17
 principles 118–21
 optimal enforcement mechanisms 133, 136
 administrative or criminal law 133–4
 strategy 134–5
 economic growth 111–12, 198, 277, 279, 281, 361
 property rights 407
 Ecuador 162, 197, 200–202, 209, 210
Ecuador Rivers Pollution case 202
 Edgar, A. 434
 Edley, C. 440
 Egypt 61
 emission standards 122, 123

- barrier to entry by new firms 117
- emissions trading schemes (ETs)
 - 131–3, 136, 395, 407, 408, 409
- endangered ecological communities
 - 503–4
 - conservation of biological diversity
 - and ecological integrity
 - principle 507–8
- endangered species 373, 450, 507
 - CITES 237
 - precautionary approach 458
- energy sector 24, 25, 156, 285, 395, 396
 - criminal law 402
 - geothermal 406, 409
 - intergenerational equity 500–501
 - nuclear power 311
 - court review of NRC
 - decision-making 438–40
 - liability caps 137
 - strict liability 129
 - permits 393
- enforcement 113, 486
 - common heritage of mankind 323–4
 - economic and legal approaches 113,
 - 117, 133, 136
 - administrative or criminal law
 - 133–4
 - strategies 134–5
 - EIAs 431
 - healthy environment, right to 170,
 - 180, 183
 - human rights 153
 - nature, rights of 202
 - taxes, environmental 117, 133
 - waste, doctrine of 401
- environmental impact assessments
 - (EIAs) 16–17, 18, 71, 296, 422–41
 - boundary object 427
 - courts 229, 233, 234, 428, 429–30
 - ‘hard look’ approach 438–40
 - ‘jurisdictional fact’ approach
 - 435–8
 - reviewing EIA decision-making
 - 434–40
 - standing 430–433
 - tensions between procedure and
 - outcome 433–4
 - healthy environment, right to 174
 - as ‘hot law’ 422, 428–9
 - integration 356–7, 487–8
 - key legal features 423–4
 - as administrative process 427–8
 - as classification system 426–7
 - as procedure 424–6
 - precautionary principle 457, 460,
 - 461, 466, 467
 - deep seabed mining 468
 - Rio Declaration (1992) 423–4
 - transplantation 94
- environmental impact statements (EISs)
 - 425
- environmental policy integration (EPI)
 - see* integration
- environmentalism 150, 154
- Equator Principles 87
- erga omnes* obligations 5, 248, 324
- Espoo Convention (1991) 423
 - Protocol 283
- Estai* case 236
- ethics 29, 37, 55–6, 147, 168, 209, 319,
 - 324
 - proximity principle 119–20
 - stewardship 150
 - see also* morality
- Eurocentric epistemic bias 157
- European Central Bank (ECB) 157
- European Convention on Human Rights
 - 100, 183
- European Court of Human Rights 100,
 - 101, 294
- European Union 86, 96–7, 100
 - Amsterdam Treaty (1997) 341–2, 343
 - Charter of Fundamental Rights 286
 - chemical governance framework 97,
 - 263, 264, 265
 - climate change 132, 285, 376
 - Commission 124, 285, 293, 357, 358
 - Council of Ministers 342
 - Court of Justice of 292–3, 457–8,
 - 463–5
 - Directives
 - emissions trading 132
 - environmental liability 130
 - IPPC 122, 123, 137
 - screening equipment 120
 - EIAs 356–7, 423, 424

- direct effect 433–4
- scoping 44–5
- standing 431–2
- emissions trading scheme 132
- environmental policy integration (EPI) 337, 338, 339, 349, 350, 352–3, 357, 358
 - European Environment Agency (EEA) 338, 339, 340, 344, 345–6, 347, 354, 358
 - as governing principle 286, 293, 341–5
- Europe 2020 285
- European Council 342
- precautionary principle 124, 286, 291, 292
 - burden of proof 459
 - Pfizer* case 457–8
 - role of courts 463–5
- SEAs 356–7
- sustainable development 284–7, 291, 341–4
 - CJEU 292–3
 - Treaty on the European Union (TEU) 285, 286
 - Treaty on the Functioning of the European Union (TFEU) 285–6, 293, 342
- evaluation of policies and programs 382–3, 384, 387
 - indicators 385–6, 387
- exclusive economic zone (EEZ) 10, 236, 261, 282, 405
- externalities
 - internalization of 114, 117, 118–19, 121, 136
 - market failure 114–16, 121, 395, 509–10
 - positive 116, 120
- extractive industries 401
 - mining *see separate entry*
- feminism 204, 211
- feudalism 396
- fines 7, 134, 136, 512, 513
- Finlayson, Christopher 203
- Finnis, J. 39–40, 41
- fires 58–9
- First Corporate Shipping* case 292–3
- Fisher, D. 441
- Fisher, E. 94, 357, 358, 359
- fisheries 71
 - coastal fishing communities 290
 - coral reefs 376
 - driftnet fishing 261–2, 264, 265
 - ecological integrity 34–5
 - exclusive economic zone (EEZ) 282
 - fish farming 398
 - adaptive management approach 484–5, 497
 - Fisheries Jurisdiction* cases 235–6
 - ITLOS: sustainable management 289–90
 - maximum sustainable yield 69, 70, 72, 282, 290
 - precautionary principle 282, 290, 459, 497
 - moratoria 468
 - Southern Bluefin Tuna* cases 466
 - property rights 393, 395, 398, 405–6, 408, 409
 - quotas 393, 395, 405–6, 408, 409
 - straddling and migratory fish stocks 236, 282, 459
- Fitzmaurice, M. 226
- flooding 70
- food prices 37
- forests/woodlands 24–5, 59, 149, 281, 395, 396, 435, 451
 - Agenda 21 68
 - Brazil: Atlantic rainforest vegetation 182
 - conservation of biological diversity and ecological integrity principle 507–8
 - Global Partnership for Forest Landscape Restoration 63
 - intergenerational equity 501–2
 - intragenerational equity 503
 - legal standing 433
 - logging 492
 - property rights 393, 398, 408
 - resource management 405, 406
 - restoration, ecological 54
 - Sustainable Development Goals 72, 73, 74

- tropical 499
- frack wastewater injection wells
 - 199–200
- fracking/hydraulic fracturing 102, 199, 200, 399, 402
- fragmentation of IEL 87–8
- France 25, 122, 156
 - EIAs 423
 - interpretation, statutory 382
 - strict liability 129
- Francioni, F. 326
- free riders 260
- Frost, S. 159
- Fuel Retailers* case 99, 180–181
- functions of rights and obligations in environmental law 5–8
- fundamental rights and constitutions 176–7, 182
- The Future We Want* 35, 70–71, 279
- Galaz, V. 58
- Gearty, C. 154
- Gellers, J.C. 153
- General Energy* 199–200
- genetic heritage: human genome 325–6
- genetic resources 250, 281
 - CHM, benefit sharing and marine 325
 - intellectual property rights 316
- genetically modified organisms 159, 281, 400, 451
- Germain, C. 382
- Germany 24–5, 156
 - emission standards 122
 - precaution 449
 - strict liability 129
 - water effluent charges 122
 - West
 - EIAs 423
- Giant Burrowing Frog 507
- global environmental law 92, 151, 422
- global environmental right 153
- Global Partnership for Forest Landscape Restoration 63
- globalization 84–6, 89, 157, 158
- gold mining 202
- Goldsmith, E. 277
- governance 30, 59, 102–3
 - Earth System 90–91, 92–3
 - evolution of polycentric 8–10
 - government to 86–7
 - regional environmental 96
 - resource management 403–7
- Gray, K. 408
- Green Network* case 292
- green washing 207
- Gross, M. 55
- grundnorm 38–9, 40, 42, 43
- Hall, M. 52
- Hamilton, Alexander 175
- Hansen, J. 376
- Haraway, D. 160, 161
- ‘hard look’ approach 438–40
- hard and soft law *see* normativity, from absolute to relative
- Harding, R. 358, 359
- harmonization and integration
 - transnational environmental law (TEL) 96–7
- Hart, H.L.A. 249, 476
- hazardous activities 130
- hazardous substances 14–15
- hazardous waste 95, 119, 512
- health, right to 152
- healthy environment, right to 99–100, 168–95
 - applications 179–80
 - intergenerational equity 181–2
 - interpretation of national legislation 180–181
 - property 182
 - constitutions and environmental rights 12–14, 100, 101, 153, 174–6
 - fundamental rights 176–7
 - justiciability 170, 178
 - self-execution 177, 184
 - standing 178, 179
 - defining the right 171–3
 - examples of national provisions 191–5
 - substantive and procedural rights 173–4, 181
- high seas 69, 236, 261, 309, 312, 314, 318, 325
 - see also* law of the sea

- Hiskes, R. 181
 historic objects 322
 historical data gaps 451, 452–3
 historical perspective on sustainability 24–6
 Hobbes, T. 394
 Hohfeld, W.N. 206
 Holocene 57, 58
 Holzinger, K. 93
 Hong Kong 178
 Hooks, Bell 204
 HS2 case 434
 human dignity 4, 152, 168–9, 177
 human genome 325–6
 human rights 40–41, 87, 183–4, 206, 208, 210, 282, 284, 297, 320
 collective action 146
 environment and 6, 13, 14, 30, 31–2, 42, 146–62, 210
 central structural challenges 155–6
 contemporary structural challenges 156–7
 continuing tensions 154
 emerging convergences 152–3
 future foundations 159–62
 going deeper 157–8
 new materialism 160–162
 normative context 151–2
 origins of environmental protection 149–51
 origins of human rights 147–9
 healthy environment, right to *see separate entry*
 individualism 146
 origins of 9, 147–9
 regional courts 294
 Hussey, K. 384
- Iceland
 fisheries 405–6
 identity-based rights 210
 illegal trade 452
in dubio pro natura 180
 indeterminacy of ecological systems 452, 453
- India 12–13
 intergenerational equity 501–2
 cultural heritage and 502
 intragenerational equity 503
 judicial analysis of language of ESD 481
 polluter pays principle 490, 512
 precautionary principle 490
 transnational environmental law (TEL) 101
 indicators, use of 72–3, 385–6
 indigenous peoples 15, 24, 158, 162, 202, 203, 393, 502
 Agenda 21 69
 private property rights and 398, 406–7, 409
 industrialization 25–6, 157–8
 industries
 chemical 512
 coke- or coal-consuming 512
 leases of industrial land 401
 inequality 208, 312
 information
 access to 30, 174, 183–4
 asymmetry of 120
 costs 128–9
 precautionary principle
 information gaps 451, 452, 461
 obtaining further information 453, 494–5
 property and resource data 409
 infrastructure
 government subsidies 510
 injunctions 7, 399, 400, 512
 Institute for European Environmental Policy (IEEP) 339, 345
 integrated approach to principles of equity 503–4
 integration 9, 30, 31–2, 296, 297, 337–40, 479
 achievement of 488–9
 concept of 486–8
 enhancing EPI as policy output 354
 ‘canon for practical judgment’ 355
 political will 358–60
 science, assessments and precautionary principle 356–8
 first-order principle 343–4, 348–50, 351, 355, 358, 359, 361

- major EPI orientations
 - EEA-OECD 'evaluation framework' 345–6
 - governing principle in EU 286, 293, 341–5
 - policy analysis and learning 346–8
 - three pillars and decoupling 340–341
- sectoral policy trade-offs
 - first-order principle 348–50
 - principled priority 350–354
- WTO rules 291–2
- integration and harmonization:
 - transnational environmental law (TEL) 96–7, 101
- integrity, ecological 30, 40, 44, 169, 172
 - conservation of biological diversity and 504–8
 - as core of sustainability 32–7
- intellectual property rights 316
- Inter-American Human Rights system 101, 183, 294
- Inter-American Program on Sustainable Development (PIDS) 284
- intergenerational equity 28–9, 37, 50, 297, 426, 498, 499, 500, 503–4
 - biodiversity 316, 499, 503–4
 - climate change and 281, 502–3
 - common heritage of mankind 317
 - constitution 181–2
 - long-term interests and 176
 - cultural heritage and 502
 - environmental sustainability and 500–502
 - property rights 410
 - needs and value premises 392
 - whale stocks: ICRW 240
- Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) 53
- internalization of environmental costs principle
 - improved valuation and pricing and 479–80, 509–13
- International Commission of Stratigraphy 58
- international commons 309, 313, 317
- International Convention on the Elimination of all Forms of Racial Discrimination (CERD) 148
- International Convention for the Regulation of Whaling (ICRW) 237, 238–41
- International Court of Justice (ICJ) 221–43
 - classifications of cases 226–7
 - freshwater resources and ecosystems 231
 - Danube Dam* case 226, 231–3, 241, 254–9, 288, 289, 310
 - Pulp Mills* case 226, 230–231, 234–5, 287–8
 - jurisdiction 222–3
 - legal status of decisions of 225–6
 - list of cases on environmental matters 223–5
 - marine living resources 222, 235
 - Fisheries Jurisdiction* cases 235–6
 - Whaling in the Antarctic* case 236–41, 289
 - organization of 225
 - precautionary principle 466–7
 - Statute: sources of law 225, 248
 - sustainable development 287–8, 289
 - transboundary environmental harm 227, 230–231
 - Nuclear Tests* cases (1974) 226, 227–9
 - Nuclear Tests* case (1995) 226, 229
 - Nuclear Weapons* Advisory Opinion 229–30
- International Covenant on Civil and Political Rights (ICCPR) 148
- International Covenant on Economic, Social and Cultural Rights (ICESCR) 148
- International Labour Organization (ILO) 95
- International Law Commission (ILC) 242, 255, 326
- International Monetary Fund (IMF) 157
- International Organization for Standardization (ISO) 98
- International Rights of Nature Tribunal 101–2

- International Seabed Authority (ISA) 313
- International Tribunal for the Law of the Sea (ITLOS) 289–90, 465–6
- interpretation 249, 252
 - statutory 370, 371, 380–382, 387
 - constitutional provisions and 180–181
 - in dubio pro natura* 180
 - treaty 248, 380
 - see also* normativity, from absolute to relative
- interspecies equity 37, 499–500, 503–4
- intragenerational equity 28, 37, 281, 297, 498–9, 500, 503–4
 - common heritage of mankind 317–18
- invasive species 50, 55
- Iron Rhine* arbitration 288–9, 296
- irrigation 510
- Islamic law 319
- Italy 52
- IUCN Academy of Environmental Law 97
- IUCN (International Union for the Conservation of Nature and Natural Resources) 64, 278
- Japan 156, 222, 238–9
- Johannesburg Declaration (2002) 30, 279
- Johannesburg Plan of Implementation (2002) 69–70, 71
- joint and several liability 129
- judicial analysis of SD principle 99, 235, 287–95
 - ICJ 232–3, 241, 287–8
- judicial comparative borrowing 99, 101
- judicial development of ESD 232–3, 234, 409, 475–514
 - adaptive management approach 484–5, 495–7, 508
 - ecological integrity principle
 - conservation of biological diversity and 479, 504–8
- integration 479
 - achievement of 488–9
 - concept of 486–8
- intergenerational equity 479, 498, 499, 500, 503–4
 - climate change and 502–3
 - cultural heritage and 502
 - environmental sustainability and 500–502
- internalization of environmental costs principle
 - improved valuation and pricing and 479–80, 509–13
- interspecies equity 499–500, 503–4
- intragenerational equity 498–9, 500, 503–4
- meaning of ESD
 - importance of language 479–80
 - requiring an outcome 480–483
- precautionary principle 235, 240–241, 479, 487–8, 507
 - adaptive management approach 495–7
 - burden of proof 234, 493–4
 - concept of precaution 489–91
 - further information 494–5
 - margin for error 495
 - prohibiting development 497–8
 - scientific certainty, lack of 492
 - threat of serious or irreversible damage 457–8, 491–2, 493
 - types of precautionary measures 494
- role of judiciary 475
 - adjudication, process of 475–6
 - developing ESD 477–8
 - sustainable use 479
 - judicial analysis of language of 484–6
 - language of 483
 - ‘jurisdictional fact’ approach 435–8
- jus cogens* 248, 260, 308, 462
- justice 19, 37, 40, 58, 153, 162, 210–211, 248
 - access to 30, 174, 183–4, 432
 - distributive 313–14, 318, 322, 500, 503–4
 - social 29, 481
 - economic and 489
- justiciability 7–8, 100, 148

- healthy environment, right to 170, 178
- Kant, I. 39, 40, 207, 355
- Kelsen, H. 38, 39, 40
- Kennel, C. 377
- Kenya 101
- Keohane, R. 85
- Khalfan, A. 511
- Kiss, A. 320
- Knill, C. 93
- Knox, John 184
- Knutti, R. 376–7
- Koskenniemi, M. 251–3
- Kramer, Bruce 200
- Kulovesi, K. 263
- Kuznets curve, environmental 111–12
- Kysar, D. 92–3
- Lafferty, W.M. 350
- land registration 403, 409
- land use policies 8, 59
- Larouche, P. 97
- Latin America 179, 184
see also individual countries
- law of the sea 87–8, 312
common heritage of mankind 311, 312–14, 318, 320, 321, 323
benefit sharing 322, 325
marine living resources 325
Convention on the (UNCLOS) *see separate entry*
ITLOS 289–90, 465–6
see also fisheries
- League of Nations 222
- leases 402–3
waste, doctrine of 401
- legal formalism 248–9, 251–3, 264–5, 436
Danube Dam case 254–9
soft law 259–60
- legal instrumentalism 248–9, 251–3, 264–5
Danube Dam case 254–9
soft law 259
- legal positivism 319, 476
- Lenschow, A. 342–5, 349, 350, 351
- Leopold, A. 37, 408, 481
- liability, environmental 125, 135–7
goals of liability rules 125–6
minimization of accident costs
efficient care levels 126–7
strict liability and negligence
compared 127, 129–30
ancillary issues 128–9
economic approach 127–8
- liberalism 211
- Liberatore, A. 343
- life, right to 13, 152
- Limits to Growth* 277
- Lin, J. 91
- Linzey, Thomas 200
- Lipman, Z. 373
- Livingstone, J. 208, 209
- lock-in 156
- Locke, J. 394, 395
- London Protocol on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 282
- Lorde, A. 211
- Lutz, E. 29
- Majone, G. 455
- Malta 315–16, 327
- mangroves 56–7, 74
- margin for error
precautionary principle 495
- marine environment 281, 282–3, 321, 322–3, 325, 327, 374, 384
law of the sea *see separate entry*
marine living resources 10, 33, 34–5, 325
Fisheries Jurisdiction cases 235–6
Whaling in the Antarctic case 236–41, 289
- Sustainable Development Goals 72, 73
see also fisheries
- markets 371, 509
failure 114–16, 121, 395, 509–10
rationality 158
- Marsh, George Perkins 51–2, 149
- Mashaw, J. 430
- May, J. 184
- Mazmanian, D. 348
- megafires 58–9

- Merchant, C. 157–8
- Millennium Declaration 30
- Millennium Development Goals (MDGs) 377
- mimicry 94
- minerals 6, 36, 66, 210, 227, 291, 482, 502
- law of the sea 313, 314
 - property rights 392, 393, 395, 396, 397
 - resource management 404, 405
- mining 393, 395, 396, 405, 497–8
- conservation of biological diversity and ecological integrity principle 507–8
 - criminal law 402
 - deep seabed 313, 314, 468
 - environmental impact assessments (EIAs) 487–8
 - integration principle 487–8
 - intergenerational equity 487–8, 502–4
 - interspecies equity 503–5
 - intragenerational equity 503–4
 - law of the sea 313
 - nature, rights of 199, 202
 - precautionary principle 487–8
 - property law: right of support 402
- Minors Oposa* case 177, 181
- monitoring 508
- Moon Treaty (1979) 314, 318
- morality 38, 207–10, 319
- see also* ethics
- Morrow, K. 150, 152
- MOX Plant* case 290, 466
- Moyn, S. 210
- Muir, John 149
- multi-lateral environmental agreements (MEAs) 4, 222–3, 229, 242, 308
- see also* individual agreements
- multi-stakeholder approach 69
- multinational corporations 86
- Munasinghe, M. 29
- Naff, John 204
- national parks 8, 396
- natural and cultural heritage 311–12, 314–15, 320–321
- natural law 39–41, 43–4, 147, 175
- natural resources
- Moon 314
 - permanent sovereignty over 307, 316
- nature, rights of 196–212
- Bolivia 199, 202–3, 210
 - constructive critique 204–5
 - final conquest of nature: moral dimension 207–10
 - monopolising space: political dimension 210–211
 - rights: troublesome concept 205–7
- context 198
- Ecuador 162, 197, 200–202, 209, 210
- enforcement 202
- New Zealand 162, 197, 203
- United States 196–7, 199–200, 204
- Nauru* case 227
- necessity 232, 255, 256
- negligence 118–19, 136, 401
- and strict liability compared 127
 - ancillary issues 128–9
 - economic approach 127–8
 - environmental liability 129–30
- neoliberalism 156–7, 158, 371, 391, 395
- Nepal 199
- Netherlands 61, 294–5
- Advisory Council for Research on Spatial Planning Nature and the Environment (RMNO) 356
 - effluent charge 121–2
 - intergenerational equity 503
- network effects 97
- networks
- epistemic 86, 97
 - expert 94
 - transnational environmental law (TEL) 86, 94, 97–8, 100
- New Delhi Declaration 30, 31–2
- new materialism 160
- re-imagining law 161–2
- New Zealand 15–16, 149, 227, 294
- ecological integrity 36
 - fisheries 405, 406
 - forests 406
 - intergenerational equity 503

- judicial analysis of language of ESD 481–2
- nature, rights of 162, 197, 203
- precautionary principle
 - adaptive management approach 496–7
 - prohibiting the development 497
- property rights 398
 - customary rights 407
 - resource management governance 403–4, 405, 406
 - Rylands v Fletcher* case 401
- Nile Basin Initiative (NBI) 262, 264, 265
- Nilsson, M. 346, 348, 350, 354
- no harm principle 307, 308–9, 310
- Nollkaemper, A. 349
- non-governmental organizations (NGOs) 9, 69, 86, 149
 - EIAs 431–2
 - networking and TEL 97–8
- non-linear projections 453
- non-state actors 42, 82, 85–6, 87, 92, 94–5, 97, 98, 101–2, 260, 308
- Nordic Council 338
- normativity, from absolute to relative 248–66
 - Danube Dam* case 254–9
 - hard law and softness 264–5
 - of language 249–51
 - of structure 251–3
 - soft law 265
 - normativity of 259–60
 - in practice 261–4
 - relative normativity 260
 - summary 264–6
- North Sea Ministerial Conferences 449
- Norway 353
- nuclear power 311
 - court review of NRC
 - decision-making 438–40
 - liability caps 137
 - strict liability 129
- Nuclear Tests* cases (1974) 226, 227–9
- Nuclear Tests* case (1995) 226, 229
- Nuclear Weapons* Advisory Opinion 229–30
- nuisance 393, 398, 399–400, 401, 503
- objectives *see* policy objectives
- oceanic species 452
- OECD (Organisation for Economic Cooperation and Development)
 - environmental policy integration 338, 339, 347, 350, 358
 - decoupling 340–341
 - Drivers Pressures States Impacts Responses (DPSIR) model 341, 345
 - EEA-OECD ‘Evaluation Framework’ 345–6
 - political will 359, 360
 - indicators 385–6
- Ogus, A. 120, 134
- oil
 - companies 101
 - pollution damage 129
- open space covenant 403
- Organisation of American States 284
- origins of environmental protection in international law 149–51
- Our Common Future* (1987) 23, 24, 26, 29, 278–9, 293, 295, 337, 338, 341, 350–353, 361, 372, 479, 480, 486
- outer space 309, 311, 314, 327
- ozone layer 11, 95, 250, 264, 468
- pacta sunt servanda* 253, 255, 256, 257, 258
- Pakistan 101, 294
 - precautionary principle 494–5
- Pardo, Arvid 311, 312–13, 314, 319, 321, 322–3, 324–5, 326
- path dependency 156
- peaceful use 318, 320
- pearl farm 497
- Peczenik, A. 253
- Peel, J. 458
- penalties 134, 136, 406, 512, 513
- Percival, R. V. 92, 151, 422
- Pereira Di Salvo, C.L. 455
- peremptory norms/*jus cogens* 248, 260, 308, 462
- Permanent Court of Arbitration (PCA) 288–9

- Permanent Court of International Justice (PCIJ) 221–2
- Permanent Peoples' Tribunal 102
- persistent organic pollutants 95, 283
- Persson, Å. 346–8, 350, 354
- Pfizer* case 457–8
- Philippines 177, 181, 195, 501
- Philippopoulos-Mihalopoulos, A. 160
- Pigou, A. 117, 118
- pilgrims 503
- polar bears 451, 452
- policy objectives 369–87
 - creating and measuring 383–5, 387
 - use of indicators 385–6
 - emergence of 369–71
 - functions of 379, 387
 - communication and PR tools 379–80
 - criteria for success 382–3
 - interpretation aid 380–382
 - objective approach, lack of support for 371–2
 - quantitative and qualitative 371, 374–5, 383–5, 386, 387
 - use of 372
 - climate change, avoiding dangerous 375–9
 - sustainable development 372–5, 386
- politics 64, 248–9, 264, 370, 409
 - environmental policy integration (EPI)
 - political will for SD 338, 358–60
 - and law 433
 - nature, rights of 210–211
 - polluter pays principle 37, 280, 286, 287, 296, 308, 480, 490, 509, 510–513
 - legal and economic analysis 115, 118–19, 121, 136
- polycentric governance, evolution of 8–10
- population growth 23
- Portugal 101
- positive law 38, 39, 40, 147, 252
- postmodernism 454
- poverty/poor 27, 30, 154, 203, 262, 279, 317–18, 352, 355
- Rio Declaration (1992) 31
- precautionary principle 37, 50, 226, 308, 449–50
 - approach or principle 450, 456
 - burden of proof 234, 459–60, 493–4
 - constitutional environmental rights 182
 - cost-benefit analysis 124, 357, 453, 454, 495
 - customary international law 254, 462–3, 465–6
 - economic and legal approaches 120–121, 123–4
 - environmental policy integration (EPI) 338, 354, 356–8, 359
 - European Union 124, 286, 291, 292
 - burden of proof 459
 - Pfizer* case 457–8
 - role of courts 463–5
 - fish stocks 282, 290, 459, 466, 468, 497
 - implementing role 296
 - institutional context 462–3, 467
 - international tribunals 456, 464–7
 - regional courts 463–4
 - judicial development 235, 240–241, 479, 487–8, 507
 - adaptive management approach 495–7
 - burden of proof 234, 493–4
 - concept of precaution 489–91
 - further information 494–5
 - margin for error 495
 - prohibiting development 497–8
 - scientific certainty, lack of 492
 - threat of serious or irreversible damage 457–8, 491–2, 493
 - types of precautionary measures 494
 - looking forward 467–9
- New Delhi Declaration 30
- ozone layer 250, 468
- precaution, risk and uncertainty
 - overcoming uncertainty 452–3
 - precaution 450–452
 - risk assessment and precaution 453–4
- property rights 392

- puzzles of interpretation 454–5, 461, 467, 469
- anti-scientific 455, 460, 461, 467, 469
- binding or non-binding: principle or approach 450, 456
- burden of proof 459–60
- temporary or indefinite 460–461
- trigger or threshold 456–9
- uncertainty paradox 458–9, 468
- rights of nature cases 201
- Rio Declaration (1992): Principle 15
120, 240, 280, 357, 449, 454–5, 457, 469, 490–491
- science, assessments and 356–8
- WTO: SPS Agreement 460–461, 465
- precedent 225
- prevention principle 230–231, 232–3, 240, 286, 292, 296, 308
- privacy 100, 146
- private interest theory of regulation 132
- privatization 395, 396
- property rights 6, 8, 26, 42, 43, 158, 316, 371, 391–410
- constitutions and 177
- healthy environment, right to 174, 182
- economic perspectives 118, 395–6
- environmental governance 397
- changing nature of rights in 407–9
- common law constraints 398–403
- property rights in general 397–8
- statutory measures 403–7
- human genome 325–6
- human rights 146
- healthy environment, right to 174, 177, 182
- intellectual 316
- legal perspectives 396–7
- Moon Treaty (1979) 314
- nature of ‘property’ 393–4
- political perspectives 394
- protectionism 124
- proximity principle 119–20
- public health 32, 149
- US Clean Air Act 1970 379–80
- see also* healthy environment, right to
- public interest 3–4, 203, 477, 478
- EIAs 425, 427–8, 431
- property rights 393, 395, 396, 408
- public law 427, 428, 430, 431, 433
- public nuisance 400
- public participation 30, 153, 183–4, 297
- EIAs 425
- healthy environment, right to 170, 173–4
- precautionary principle 468
- public relations 66, 379–80
- Pulp Mills* case 226, 230–231, 234–5, 287–8
- Rackham, O. 54
- randomness 452, 453
- Raymond, L. 455
- recessions 452
- reciprocity 323–4
- rectify environmental damage at source 286
- Redgwell, C. 462
- regime complex 85
- regional courts 101, 149, 292–4, 463
- Court of Justice of EU 292–3, 457–8, 463–5
- regional environmental governance 96
- religion 319
- rent-seeking behaviour 117
- Repetto, R. 28–9
- res communis (omnium)* 317, 321, 478
- res nullius* 317, 321
- resource management governance 403–7
- restoration, ecological 50–75
- capacity of law to respond to
- Anthropocene 57–9
- concept of 51–5
- historical trajectory approach 53, 54–5, 59, 65, 75
- international instruments 59–60, 74
- Agenda 21 68–9
- Johannesburg Plan of Implementation 69–70, 71
- Rio+20 and *The Future We Want* 70–71
- Rio Declaration 66–8
- Sendai Framework 73–4
- Stockholm Declaration 60–64, 71

- Sustainable Development Goals
 - 71–3, 74, 75
- World Charter for Nature 64–6
- need for 55–7
- novel ecosystems 53–4
- rewilding 53–4
- restrictive covenants 402–3
- Rio+20 (2012)
 - The Future We Want* 35, 70–71, 279
- Rio Declaration (1992) 29, 30, 44, 66, 69, 229, 242, 260, 307
- Preamble 34
- Principle 1
 - sustainable development 279
- Principle 2
 - transboundary harm 223
- Principle 3 498
 - development, right to 31
- Principle 4
 - integrative approach 30–31, 279, 280
- Principle 5
 - poverty alleviation 31
- Principle 7 66–8, 71
 - common but differentiated responsibilities 66, 67
 - conserve, protect and restore 34, 67
 - Earth's ecosystem 34, 67
- Principle 10
 - participatory rights 153, 173–4, 184
- Principle 15
 - precautionary principle 120, 240, 280, 357, 449, 454–5, 457, 469, 490–491
- Principle 16
 - polluter pays principle 280
- Principle 17
 - environmental impact assessment 280, 423–4
- sustainable development 279, 280, 352
- risk assessment
 - precautionary principle 124, 450, 453–4, 457, 460, 461, 465, 467
 - democratic processes 468
 - margin for error 495
 - WTO: SPS Agreement 460–461
- risk management 124, 357, 453
- risk-risk trade-offs 120–121
- River Oder* case 222
- Robinson Township* case 182
- Rolston, H. II 205
- Roman law 319
- Routley, R. and V. 209
- rule of law 42–3
- rules of competence 6, 8, 10, 11, 14, 15, 19
- rules of limitation 6–7, 8, 10, 11, 14, 19
- Russell, B. 102, 252
- Rylands v Fletcher* case 398, 400–401
- Sabatier, P.A. 348
- Sagoff, M. 206–7
- Salamon, L.M. 98
- sanctions 262
- Sand, P.H. 324
- Sands, Ph. 295–7
- Sartre, J.-P. 102
- Sax, J. 425
- Schellnhuber, H.J. 155–6
- Schrijver, N. 297
- science 32, 160
 - based management plans 71
 - biodiversity 281
 - climate change
 - 2°C target 376–8
 - Earth System 58, 90, 92, 327
 - environmental policy integration (EPI) 338
 - science, assessments and precautionary principle 356–8
 - fish stocks 282, 290
 - International Convention for the Regulation of Whaling (ICRW)
 - scientific research 237, 238–9, 240
 - knowledge sharing 322
 - precautionary principle 124
 - anti-scientific 455, 460, 461, 467, 469
 - science assessments and 356–8
- Scott, J. 91
- Sendai Framework 73–4
- SERAC* case 101, 294
- sewerage and drainage systems 503
- Shaffer, G. 93, 94

- shareholders 156
- sharing of benefits/economic profits
 - 250, 322, 323, 325
- shark fin trade 452
- Shavell, S. 129
- Shelton, D. 153, 169, 259–60
- Sierra Club* case 196–7, 204, 207, 432
- Sinden, A. 156
- Singapore Land Reclamation* case 290
- small and medium-sized enterprises 135
- Smith, A. 394, 395
- social contract 174, 394
- social movements 162
 - transnational 97
- Society for Ecological Restoration (SER) 52–3, 54
- soft and hard law *see* normativity, from absolute to relative
- soil 55
 - clean 170, 172, 173
 - conservation 68
 - erosion 54
 - fertility 396
 - pollution 129, 130, 512
 - protection 149
 - restoration 64
 - rights 205, 209
- Sommerer, T. 93
- South Africa 99, 195
 - healthy environment, right to
 - constitutional provisions and interpretation of legislation 180–181
 - text of Art 24 (Bill of Rights) 195
 - judicial analysis of language of ESD 480–481
 - National Environmental Management Act 1998 5
- Southern Bluefin Tuna* cases 466
- sovereignty 4, 6, 10, 97, 251, 253, 359
 - common heritage of mankind 306, 307–9, 312, 313, 314, 316, 321, 323, 324, 326
- species impact assessments (SIS) 424, 435, 436
- species impact statements 495
- Sri Lanka 101, 502
- standards, environmental
 - formulation of 122–3
 - ISO 14001 98
- standing 153, 196–7, 228, 242, 295, 324
 - common interest 241
 - constitutions and environmental rights 178, 179
 - environmental impact assessments (EIAs) 430–433
 - United States 199
 - Sierra Club* case 197, 432
- Star, S.L. 427
- stewardship ethics 150
- stochastic systems 452
- Stockholm Declaration (1972) 4, 22–3, 82, 99, 168–9, 223, 242, 260, 277–8, 307
 - ecological restoration 60–64, 71, 75
 - human rights and environment 151–2
 - new approach 9
- Stockholm Environment Institute (SEI) 345
- Stoermer, E. 89
- Stone, C. 196–7, 204, 206–7, 433
- strategic environmental assessments (SEAs) 283, 287, 424
 - integration 338, 356–7, 487
 - standing 432–3
- strict liability 118, 136, 399
 - and negligence compared 127
 - ancillary issues 128–9
 - economic approach 127–8
 - environmental liability 129–30
- subsidiarity 359
- subsidies 137, 510
- subsistence fishers 282
- sunk costs 510
- Sunstein, C. 455
- support, right of (property law) 402
- sustainability 9, 22, 50, 57, 90, 155–6, 161, 207
 - assessments 424
 - in context of environmental law 22–4
 - ecological integrity as core of 36–7
 - international instruments 32–5
 - national instruments 35–6
 - future need for 43–4
 - grundnorm 38–9, 40, 42, 43
 - historical perspective 24–6

- instrumental responses to 29–32
- legal nature of 37–43, 409
- property rights 392, 403, 406, 408–10
- sustainable development *see separate entry*
- sustainable development 13, 17–18, 19, 26, 150, 276–97, 308, 348–53, 361–2
- common heritage of mankind 318, 324
- conceptual responses 27–9
- constitutional provisions
 - interpretation of national legislation and 181
- Conventions 280
 - environmental law 280–283
 - regional environmental law 284–7
 - WTO 283–4
- current legal status 295–7
- definitions 23, 29, 341, 372
- emergence of principle of 277–80
 - Brundtland Report (1987) *see separate entry*
 - from 1972 to 1982 277–8
 - Rio+20 (2012) 70–71, 279
 - Rio Declaration (1992) *see separate entry*
- European Union 284–7, 291, 341–4
 - CJEU 292–3
- future role, potential 295–7
- institutional responses 26–7
- integration: political will for 338, 358–60
- judicial analysis 99, 235, 287
 - domestic courts 294–5
 - ICJ 232–3, 241, 287–8
 - ITLOS 289–90
 - PCA 288–9
 - regional courts 292–4
 - WTO Appellate Body 290–292
- policy objective 71–3, 74, 75, 338, 372–5, 384, 385, 386
- sustainable use 10, 30, 32, 280–281, 297, 391, 479
 - language of 250, 483
 - judicial analysis of 484–6
- Sweden 17–19, 61, 64, 129
- Sydney Freshwater Wetland 507
- tanneries 512
- Tarlock, D. 150–151, 154
- Tasmania 48
- taxation 8, 371
 - environmental 116, 117, 118, 121, 122, 130, 131, 132–3, 136
 - fish quotas 406
- technology transfer 313
- telecommunications 492
- Thoreau, Henry David 149
- Timbarra* case 436–7
- Toronto Initiative for Economic and Social Rights (TIESR) database 170, 178
- tort law 8, 125–6, 398–9, 428
 - negligence 118–19, 136, 401
 - and strict liability compared 127–30
- nuisance 393, 398, 399–400, 401, 503
 - Rylands v Fletcher* case 398, 400–401
- trespass to land 393, 398, 399
- Torture Convention 148
- tourism 376
- town planning 397
 - and resource management governance 403–7
- trade sanctions 262
- tragedy of the commons 235, 306, 326, 327, 391, 395
- transaction costs 115, 121, 136, 395
- transnational corporations 157
- transnational environmental law (TEL) 82–103
 - conceptual state of the art 91–3
 - emergence of 83–4
 - Anthropocene and enhanced regulation 88–91
 - fragmentation 87–8
 - from government to governance 86–7
 - globalization 84–6, 89
 - processes of 93
 - convergence 94–6
 - integration and harmonization 96–7
 - judicial comparative borrowing 99

- networking 97–8
- transplantation 94
- regime complex 85
- transnational environmental rights in
 - context of
 - context 99–100
 - emergence of transnational
 - juridical processes 100–102
- transparency 173, 359, 370, 371
 - precautionary principle 358, 458–9, 468, 469
- transplantation 94, 101
- treaty making
 - precautionary principle 462
- trespass to land 393, 398, 399
- trust/trustees 182, 311, 317, 320–323, 324
 - UN Trusteeship Council 327–8
- Tuerk, H. 311
- tuna farm 484–5, 497
- Turkey 176, 195, 199
- Turner, S. 155–6
- Uganda 101
- UNESCO (United Nations Educational, Scientific and Cultural Organization) 60, 312, 314–15
- United Kingdom 134, 156, 227
 - EIAs 427, 435, 438
 - parliamentary privilege 434
 - standing 432–3
 - National Parks and Access to the Country Act 1949 65
 - Rylands v Fletcher* case 401
 - Science Advisory Council (SAC) 356
 - strict liability 129
- United Nations 64, 148, 222
 - Charter 147, 371
 - Development Program (UNDP) 378
 - Environment Programme (UNEP) 64, 88, 95, 278
 - environmental policy integration 339
 - General Assembly 60, 70, 203, 278, 283
 - 2030 Agenda for SD 242
 - driftnet fishing 261–2, 264, 265
 - goals and targets 71–3, 74, 75, 373–5, 384, 385
 - outer space 311
 - ICJ 222, 223
 - Special Rapporteur 184
 - sustainable development 242, 277–8
 - goals and targets 71–3, 74, 75, 338, 373–5, 384, 385
 - Trusteeship Council 327–8
- United States 52, 65, 97, 149, 156, 357, 371–2
 - CERCLA 14–15
 - Clean Air Act 1970 131, 132, 379–81
 - Clean Water Act 1972 32
 - Constitution 175
 - standing 179
 - constitutions, state 12, 175
 - intergenerational equity 182
 - justiciability 12, 178
 - driftnet fishing 262
 - EIAs 16–17, 94, 422, 424, 425–6, 427, 430
 - ‘hard look’ approach 438–40
 - standing 432
 - emission standards 117
 - emissions trading 131–2
 - Great Lakes Water Quality Agreement 32–3
 - interpretation, statutory 380–382
 - law of the sea 313
 - National Council for Science and the Environment (NCSE) 356
 - National Environmental Policy Act 16–17
 - nature, rights of 196–7
 - property rights 398
 - standing 197, 199, 432
 - sustainable development 290–291
 - taxes, environmental 117
 - wetlands 72–3
- Universal Declaration of Human Rights (UDHR) 99, 147–8
- Universal Declaration of the Rights of Mother Earth 202–3
- US Shrimp Turtle* case 290–291
- user pays principle 480, 509, 510, 511
- usufruct 407
- values 4, 19, 24, 152, 158, 408
 - constitutions 170, 173, 175–6

- non-economic environmental 392, 395–6, 410
- van Asselt, M.B.A. 453–4, 457–8
- Vermont Yankee* case 440
- Victor, D. 85, 377
- Vienna Convention on the Law of Treaties (VCLT) 248, 380
- Vietnam 56
- Vietnam War Crimes Tribunal 102
- Vilcabamba* case 201–2
- von Schomberg, R. 357
- Vos, E. 453–4, 457–8

- Waldron, J. 208, 209
- Walton* case 432
- war 452
- Warkworth Sands Woodland 507–8
- waste 130–131
 - disposal facility
 - agricultural land 485–6, 500
 - doctrine of 401
 - dumping at sea 283
 - hazardous 95, 119, 512
 - proximity principle 119–20
- water 8, 72, 130–131, 172, 173, 374
 - Convention on the Law of the Non-navigational Uses of International Watercourses 11–12, 231, 283
 - efficiency plans 70
 - effluent charge 121–2
 - Great Lakes Water Quality Agreement 32–3
 - integrated water resources management plans 70
 - nature, rights of 197, 199–200, 201, 203, 207, 209–10
 - Nile Basin Initiative (NBI) 262, 264, 265
 - property rights 398, 403–4, 405, 406, 408, 409
 - River Oder* case (PCIJ) 222
 - watershed protection and restoration 70
- Weil, P. 258, 259
- wetlands 70, 72–3, 149, 197, 230, 481, 507
- whaling 468
 - Whaling in the Antarctic* case 236–41, 289
- Wiener, J. 91–2
- wilderness 209, 392, 396
- wildlife crime 137
- Williams, P. 205
- Wolfrum, R. 320
- World Bank 86, 339
- World Charter for Nature (1982) 33–4, 44, 64–6, 260, 278
- World Commission on Environment and Development (WCED)
 - Our Common Future* (1987) 23, 24, 26, 29, 278–9, 293, 295, 337, 338, 341, 350–353, 361, 372, 479, 480, 486
- World Conservation Strategy 278
- World Resources Institute (WRI) 378
- World Summit on Sustainable Development (2002)
 - Plan of Implementation 486–7
- World Trade Organization (WTO) 157, 283–4
 - dispute resolution 465
 - Appellate Body 284, 290–293
 - SPS Agreement 460–461, 465
- Yang, T. 92, 151, 422
- Yellow-bellied Glider 507
- Young, M.D. 510
- Yugoslavia 61

- Zaire 64