

Index

- agriculture
 - direct payments, EU 155–6
 - non-productive investments, EU 161–5
 - see also* land use
- air pollution
 - environmental noise and air pollution exposure, correlation between 115–16
 - EU coal subsidies and phase-out 99
 - South Korea, environmental pollution and tax incentives 127–9
 - see also* pollution
- air traffic, and noise pollution taxation 118, 120–21
- Åkerfeldt, S 17
- Alberici, S 100
- Alcon, F 172
- Alexander, G 77
- Alexandre, A 125
- Allcott, H 96
- Almanza, C 172
- Amazonian forest protection issues 147
 - see also* Brazil, tax revenue distribution
- Andersen, M 3, 20–32
- Astoria, R 187–201
- auction revenues
 - Canada 42–3
 - reverse auctions, Australia 70–71
- Australia
 - carbon price mechanism 22
 - Clos Farming Estates v Easton* 77
 - electricity sector *see* electricity sector, carbon ‘lock in’ and environmental consequences, Australia
 - Re Ellenborough Park* 77
 - King v David Allen & Sons Billposting Ltd* 80
 - Lace v Chantler* 77
 - Milirrpum v Nabalco Pty Ltd* 77
 - Radaich v Smith* 77
 - Yanner v Eaton* 77
- Australia, federal greenhouse gas cap-and-trade 50–66
 - Carbon Pollution Reduction Scheme (CPRS) 51–2, 54, 55, 56, 57, 60, 62
 - Carbon Pricing Mechanism (CPM) 52, 54, 55, 56, 57, 58–9, 60, 62
 - Carbon Pricing Mechanism (CPM), EU Emissions Trading Scheme (ETS) link 57, 58
 - climate policy 51
 - compliance mechanisms 57–8
 - coverage sustainability 53–4
 - Department of the Environment and Energy support 61
 - Emission Reduction Fund (ERF) 52, 55, 56, 57, 58
 - flexibility mechanisms 56
 - impacts 58–9
 - Jobs and Competitiveness Program 56
 - Kyoto Protocol 52
 - NGO involvement 60–61
 - Paris Agreement 51
 - permit allocation 55
 - politics of 59–62
 - price management 56–7
 - public opinion 59–60
 - revenue use 55–6
 - Safeguard Mechanism (SM) 52–3
 - sector-specific involvement 61, 62
- Australia, private property and market-based emissions 67–80
 - Carbon Credits Act 69, 71, 72, 73–4, 75–6
 - Carbon Neutral Program 72–3
 - carbon offset providers 72–3

- Clean Energy Regulator 69–71
- Clean Energy Regulator, ‘carbon maintenance obligations’ (CMO) 74–5
- Emission Reduction Fund (ERF) 69–70, 71
 - land-use change encouragement measures 72–4
 - and private property rights 74–6
- emissions by economic sector 70, 71
- emissions-intensive products and carbon offsets 72–3
- ‘Future Forests’ program 73
- Kyoto Protocol 69
- land ownership rights 67–8
- land-use, change and forestry (LULUCF) activities 70, 71, 75
- Paris Agreement 69
- permanence periods 75–6
- regulatory context 68–71
- reverse auctions 70–71
- self-interest privilege 68
- ‘Axe the Tax’ campaign, Canada 39, 40
- Aydos, E 27, 50–66

- Babie, P 78
- Bautista, G 175
- Bayles, J 230
- Beck, M 36
- Behrens, C 232
- Berggren, H 16
- bicycle promotion, South Korea 129
- Biello, D 232
- Birol, E 172
- border adjustments and carbon prices
 - see* carbon prices and border adjustments
- Bowater, D 231
- Brack, D 23
- Brand, C 96
- Brand, S 230–31
- Branger, F 29
- Brazil, tax revenue distribution 141–53
 - Amazonian forest protection issues 147
 - distortion problems 147
 - environmental criteria for intergovernmental sharing 146–8
 - evaluation period 148
 - federalism effects 142–3, 149–50
 - Green ICMS (Service and Merchandise Circulation Tax) 142–4
 - challenges 148–50
 - incentive effect 144–5
 - positive effects 144–6
 - land restrictions 142–3
 - policy transparency and knowledge 149
 - polluter-pays principle 143
 - positive externalities 142, 143
 - protector-beneficiary principle 143
 - qualitative criteria and conservation units 147
 - quantitative criteria and policy implementation 146–7
 - redistributive impacts 148–9
 - social criteria adoption 145–6
 - ‘virtuous circle’ notion 145
- Bruvoll, A 17
- Bryan, B 79
- business-as-usual approach, electricity sector 207
- Butler, K 131–3

- Campos, L 151
- Canada, bottom-up carbon pricing 33–49
 - New Environmental Federalism 33–4
 - Paris Agreement 33
 - pricing sustainability 34, 37, 43
- Canada, bottom-up carbon pricing, British Columbia carbon tax 34–41
 - ‘Axe the Tax’ campaign 39, 40
 - beetle infestation effects 38
 - carbon tax introduction 22, 38–9, 40–41
 - crude oil price increase effects 39
 - economic effects 35–6, 40
 - Low Income Climate Action Tax Credit 35
 - market-based climate protection 39–40
 - Northern and Rural Homeowner Benefit 35, 36
 - political conditions 37–41
 - revenue recycling to households 36

- Scientific Research and Experimental Development Tax Credit 35
- sector-specific industry effects 36, 40–41
- state-based cap-and-trade schemes 37, 40
- Western Climate Initiative (WCI) 37
- Canada, bottom-up carbon pricing, Quebec and Ontario carbon markets 42–6
- auction revenues 42–3
- cap-and-trade system 42, 43–4, 45–6
- emissions allowances 42
- inter-jurisdictional coordination 44–5
- political conditions 44–6
- price collars 43
- product standards 44
- tracking systems 43
- Trudeau's carbon pricing initiative 45–6
- Western Climate Initiative (WCI) 42, 43–4, 44–5
- Cantley-Smith, R 202–21
- cap-and-trade system
 - Australia *see* Australia, federal
 - greenhouse gas cap-and-trade
 - Canada, British Columbia carbon tax 37, 40
 - Canada, Quebec and Ontario carbon markets 42, 43–4, 45–6
 - South Korea 135, 136
- capacity mechanisms, EU coal subsidies and phase-out 106–7
- Carbon Credits Act, Australia 69, 71, 72, 73–4, 75–6
- carbon 'lock in', electricity sector *see* electricity sector, carbon 'lock in' and environmental consequences
- carbon offset providers, Australia 72–3
- carbon prices and border adjustments 20–32
 - border arrangements, prospective 23–6
 - 'Carbon Pricing Leadership Coalition' (CPLC) 20–21
 - diplomacy of 28–30
 - estimation of carbon content of products 25–6
 - EU emissions trading system (ETS) 21–2, 23–4, 25–8, 29
 - free-allocation approach, effects of 26–7, 28
 - future of carbon pricing 26–8
 - Intergovernmental Panel on Climate Change (IPCC) 21
 - International Civil Aviation Organisation (ICAO) and emissions offset 29
 - international trade law 29
 - most-favoured nation clause 25
 - national treatment principle 24–5
 - Paris Agreement and nationally determined contributions (NDCs) 20, 23, 29
 - products processed with the use of fossil fuels 24
 - tax refunds for exported products 24 and WTO GATT 24–5, 27–8, 29
- carbon pricing, Canada *see* Canada, bottom-up carbon pricing
- Carbon Pricing Mechanism (CPM), Australia 52, 54, 55, 56, 57, 58–9, 60, 62
- carbon tax *see* taxation
- carbon-trading market effects, South Korea 134–6
- Chatterton, R 135
- Chazan, G 99
- Chico-Almaden, C 169–83
- China
 - emissions trading scheme 22
 - green protectionism concerns 29–30
 - noise pollution 121
- Choi, S 137
- Choi, Y 137
- Christensen, S 80
- Chrobog, K 137
- Clarke, H 66
- clean energy
 - Clean Energy Regulator, Australia 69–71, 74–5
 - Environmental Protection Agency (EPA) Clean Power Plan, US 223
 - see also* non-fossil fuels; renewable energy

- coal
 coal-fired power plants, South Korea 128
 natural gas as alternative in electricity sector 207
 subsidies and phase-out, EU *see* EU coal subsidies and phase-out
see also fossil fuels
- Cohen, F 77
- competitiveness issues
 EU carbon taxes 9–11, 12, 14
 Jobs and Competitiveness Program, Australia 56
- compliance mechanisms, Australia, federal greenhouse gas cap-and-trade 57–8
- conservation units, Brazil, tax revenue distribution 147
- conservativeness principle, EU 156–7
- contingent valuation method (CVM), Philippines, Cagayan de Oro river basin 172
- Cook, J 224, 231
- Crisp, J 99
- cyber attacks on nuclear facilities 228–9
- De Bruyn, S 26, 27
- Dechert, S 138
- Denmark, carbon taxes *see* EU carbon taxes, Denmark
- Di Muzio, T 198
- diesel cars
 scrapping incentive, South Korea 129
 taxation *see under* EU vehicle taxation
- Dineen, D 96
- distortion problems, Brazil, tax revenue distribution 147
- distributed energy resources (DER), US, New York's Reforming the Energy Vision (REV) 187, 189, 193, 194–7
- dominance of fossil fuels, challenging, EU electricity sector 208–12
- Domingues, J 141, 144
- Donn, J 231
- Drummond, J 143
- Durrant, N 80
- economic considerations
 Canada, British Columbia carbon tax 35–6, 40
 total economic value (TEV) *see* Philippines, Cagayan de Oro river basin, total economic value (TEV)
- economic considerations
 EU carbon taxes 4–5
 noise pollution taxation 118–21
 returns on non-productive investments in agriculture, EU 162, 164
- Edis, T 65
- Ekins, P 28
- Eklund, K 16, 17
- electricity sector, New York *see* US, New York's Reforming the Energy Vision (REV)
- electricity sector, carbon 'lock in' and environmental consequences 202–21
 business-as-usual approach 207
 energy infrastructure 202–3, 206, 207, 211, 215
 fossil fuel dominance concerns 205–6
 fossil fuels and greenhouse gas emissions 204–7
 global demand for energy sources, rising 203–4
 global prevalence of fossil fuels 203–4
 natural gas as alternative to coal 207
 Paris Agreement 206–7, 211
 renewable energies integration considerations 225
- electricity sector, carbon 'lock in' and environmental consequences, Australia
 dominance of fossil fuels, supporting 212–15
 Energy Efficiencies Opportunity Act 213
 energy market, foundations for decarbonised 213–15
 Finkel Review and Clean Energy Target (CET) 214
 fossil fuels and greenhouse gases 212–13
 renewable energy targets 213–14

- voluntary emissions reduction scheme 213
- electricity sector, carbon 'lock in' and environmental consequences, EU dominance of fossil fuels, challenging 208–12
- Emissions Trading System (EU ETS) 209–10
- energy markets and greenhouse gases 208
- non-fossil fuels 208
- electricity sector, carbon 'lock in' and environmental consequences, EU energy markets, policy foundations for decarbonised 209–12
- Elgie, S 35, 36, 38
- emissions *see* greenhouse gas emissions
- Endres, A 33, 63
- energy apartheid, New York 192
- energy democracy, New York 192
- Energy Efficiencies Opportunity Act, Australia 213
- energy efficiency improvements, Denmark 12
- energy infrastructure, electricity sector 202–3, 206, 207, 211, 215
- energy market, foundations for decarbonised, electricity sector, Australia 213–15
- energy markets and greenhouse gases, electricity sector, EU 208
- energy sources, global demand for 203–4
 - see also* electricity sector, carbon 'lock in' and environmental consequences
- Engel, K 47
- environmental tax reform (ETR), EU 6–7
- Epstein, A 231
- estimation of carbon content of products 25–6
 - see also* carbon prices and border adjustments
- EU
 - Budget on Climate Action 155–61
 - electricity sector *see* electricity sector, carbon 'lock in' and environmental consequences, EU
 - Emissions Trading Scheme (ETS) 21–2, 23–4, 25–8, 29, 57, 58, 107, 209–10
 - END Directive 114, 116, 117–18, 121
 - Eurovignette Directive 119–20
 - Horizon 2020 and LIFE Programme 155, 157, 158
 - Rural Development Programmes (RDPS) 161
- EU carbon taxes 3–19
 - CO₂ taxation and environmental tax reform (ETR) 6–7
 - competitiveness concerns 9–11, 12, 14
 - economic background 4–5
 - industry support schemes 12
 - policy support 12–15
 - taxation recycling 7–10
- EU carbon taxes, Denmark
 - carbon tax 6, 7
 - in accordance with usage 10
 - and competitiveness concerns 9–10, 12, 14
 - and policy support 12–13, 14, 15
 - economic background 4–5
 - energy efficiency improvements 12
 - energy taxes 7, 9, 11, 13
 - industry support schemes 12
 - taxation recycling 8, 9–10
 - wetland projects and non-productive investments 162, 163, 164
- EU carbon taxes, Finland
 - carbon tax 6–7
 - and competitiveness concerns 10, 11
 - and policy support 13, 14, 15
 - economic background 5
 - energy taxation 10, 13
 - taxation recycling 8, 10
- EU carbon taxes, Sweden
 - carbon tax 7
 - and competitiveness concerns 11, 14
 - and policy support 13–15
 - economic background 5
 - energy taxes 7, 11
 - taxation recycling 8–9
- EU, climate change-related action and non-productive investments 154–68

- action plans 178
- agricultural direct payments 155–6
- agriculture, non-productive
 - investments 161–5
- climate change needs, assessment of 159
- conservativeness principle 156–7
- economic returns on non-productive investments in agriculture 162, 164
- EU Budget on Climate Action 155–61
 - planned climate spending 155–6
- European Agricultural Fund for Rural Development (EAFRD) 155, 156, 159–60, 161, 162
- European Court of Auditors (ECA) recommendations 154, 156–7, 158–61, 162–5
- European Maritime and Fisheries Fund (EMFF) 155, 161
- European Regional Development Fund (ERDF) 155, 156, 157
- European Structural and Investment Funds (ESIF) 155, 156, 161
- Horizon 2020 and LIFE Programme 155, 157, 158
- indicators development 160–61
- inter-institutional methodological concerns 156–7
- mainstreaming approach 155, 158, 161
- multiannual consolidation exercise 158–9
- overestimation corrections 159–60
- performance information concerns, non-productive investments in agriculture 165
- policy area and changing responsibilities 157–8
- potential opportunities 161
- public funding control 154, 162
- reporting framework 159
- Rural Development Programmes (RDPs) 161
- specific targets, absence of 157
- Sustainable Development Goal (SDGs) 154
- tracking system of climate spending 158, 160
- EU coal subsidies and phase-out 98–112
 - air pollution considerations 99
 - capacity mechanisms 106–7
 - coal-fired power 104–7
 - conventional power phase-out trends 99
 - Emissions Trading Scheme (ETS), Modernisation Fund 107
 - Europe 2020 Strategy 100–101
 - fossil fuel subsidy commitments 99–101
 - global coal demand peak 98
 - information transparency concerns 102–4, 107
 - mining 102, 104, 105–7
 - Paris Agreement and just transition away from coal 107–9
 - renewable energy sources 109–10
 - supporting role 101–2, 104–5, 106–7
 - tracking coal subsidies 101–2
- EU vehicle taxation 83–97
 - acquisition (registration), effects of 84–92, 93
 - diesel-driven cars 87, 91–4
 - CO₂ taxation 92–5
 - European Commission Strategy for Low Emission Mobility 83–4
 - ownership taxes 84–92, 93
 - petrol-driven cars 86, 87–91
 - CO₂ taxation 89–91, 94–5
- Europe 2020 Strategy 100–101
- European Agricultural Fund for Rural Development (EAFRD) 155, 156, 159–60, 161, 162
- European Commission Strategy for Low Emission Mobility 83–4
- European Court of Auditors (ECA) recommendations 154, 156–7, 158–61, 162–5
- European Court of Human Rights
 - Fadeyeva v Russia* 116
 - Guerra v Italy* 116
 - Hatton v the United Kingdom* 116
 - López Ostra v Spain* 116
- European Maritime and Fisheries Fund (EMFF) 155, 161
- European Regional Development Fund (ERDF) 155, 156, 157

- European Structural and Investment Funds (ESIF) 155, 156, 161
- fair value doctrine, US, New York's Reforming the Energy Vision (REV) 188–9
- federalism
 Australia *see* Australia, federal
 greenhouse gas cap-and-trade
 Brazil, tax revenue distribution 142–3, 149–50
 New Environmental Federalism, Canada 33–4
- Finkel Review and Clean Energy Target (CET), electricity sector, Australia 214
- Finland, carbon taxes *see* EU carbon taxes, Finland
- fishing sector *see under* Philippines, Cagayan de Oro river basin, total economic value (TEV)
- flood control benefits, Philippines, Cagayan de Oro river basin 174
- Fölster, S 17
- food waste pollution, South Korea 129–30, 131–3
- fossil fuels
 dominance concerns, electricity sector 205–6, 208–12
 global prevalence, electricity sector 203–4
 and greenhouse gas emissions, electricity sector, Australia 212–13
 subsidy commitments, EU 99–101 *see also* coal
- France, noise pollution tax 114, 120–21
- France-Hudson, B 77
- Frantzeskaki, N 217
- free-allocation approach, EU emissions trading system (ETS) 26–7, 28
- Fried, B 198
- Friedman, D 231
- fundamental rights, and noise pollution 116–17
- future of carbon pricing 26–8
- 'Future Forests' program, Australia 73
- Gago, A 125
- Gallagher, K 96
- Garnaut, R 64
 geological repositories for nuclear waste 229
- Gerlagh, R 97
- Germany, fossil fuel subsidies 102, 104, 106
- Gholami, Z 35
- global coal demand peak, EU 98
- global demand for energy sources, rising 203–4
- Goines, L 123
- Granovetter, M 198
- Grau Ruiz, M 154–68
- Gray, A 124
- Greene, D 96
- greenhouse gas emissions
 allowances, Canada, Quebec and Ontario carbon markets 42
 electricity sector, carbon 'lock in' and environmental consequences, Australia 212–13
 electricity sector, carbon 'lock in' and environmental consequences, EU 208
 Emission Reduction Fund (ERF), Australia 52, 55, 56, 57, 58, 72–4
 Emissions Trading Scheme (ETS), EU 107, 209–10
 emissions-intensive products and carbon offsets, Australia 72–3
 European Commission Strategy for Low Emission Mobility 83–4
 greenhouse gas cap-and-trade, Australia *see* Australia, federal greenhouse gas cap-and-trade
 International Civil Aviation Organisation (ICAO) and emissions offset 29
 market-based *see* Australia, private property and market-based emissions
 private property and market-based, Australia 69–70, 71, 72–3
 South Korea 127–9, 130, 134–5
 voluntary emissions reduction scheme, electricity sector, Australia 213

- zero emission credits for nuclear power plants *see* US, zero emission credits for nuclear power plants
- see also* pollution
- Grieg-Gran, M 143
- Gros-Désormaux, J-R 141–53
- Gulati, S 35

- Hagler, L 123
- Hahn, R 64
- Hammar, H 17
- Hanemann, M 173
- Hansen, J 225, 231
- Harrison, K 37, 38, 39, 40, 44, 45
- health concerns of noise exposure 114–15
- Hempling, S 198
- Henriksen, I 16
- Holdren, J 232
- Holt, M 232
- Huber, M 199

- industrial sector
 - noise pollution taxation 118, 121
 - water supply, Philippines, Cagayan de Oro river basin 169, 172, 173, 175–7
- industry support schemes, EU carbon taxes 12
- information transparency concerns, EU coal subsidies and phase-out 102–4, 107
- infrastructure, energy infrastructure, electricity sector 202–3, 206, 207, 211, 215
- inter-institutional methodological concerns, EU 156–7
- Intergovernmental Panel on Climate Change (IPCC) 21
- intergovernmental sharing, Brazil, tax revenue distribution 146–8
- International Civil Aviation Organisation (ICAO) and emissions offset 29
- international trade law, carbon prices and border adjustments 29
- investments, non-productive, EU *see* EU, climate change-related action and non-productive investments

- Ison, N 220
- Italy
 - fossil fuel subsidies 104
 - non-productive agricultural investments 162–3

- Jaccard, M 38, 41
- Janjua, S 126
- Japan, carbon price mechanism 22
- Johansson, B 17
- Johnson, N 217
- Johnston, V 67–80
- Jones, D 99
- Jotzo, F 65
- Joyce, S 231

- Kawakatsu, T 33–49
- Kettner, C 83–97
- Kim, Y 137
- King, E 124
- Kirchgässner, G 64
- Klein, N 22
- Kletzan-Slamanig, D 83–97
- Kline, R 199
- Klitkou, A 217
- Kossoy, A 22
- Kreibergs, J 16
- Kreiser, L 222–32
- Kuan Liu, H 126
- Kuramochi, T 96
- Kyoto Protocol 20, 26, 42, 52, 53, 56, 69

- land use
 - change, Australia, private property and market-based emissions 70, 71, 72–4, 75
 - land ownership rights, Australia 67–8
 - restrictions, Brazil 142–3 *see also* agriculture
- Larsen, B 17
- Leaton, J 98, 109
- Lee, M 36
- Lee, P 127–38
- Lee, Socheol 22
- Lee, Stephanie 127–38
- Leicester, A 126
- Leinert, S 97
- Lochbaum, D 231–2
- Lockwood, M 172

- London, H 230
 Loorbach, D 217
 Loureiro, W 145
 Low Income Climate Action Tax Credit, Canada 35
 low- and moderate-income (LMI) affordability programs, New York 192, 193–4, 195, 196
 Low-Income Home Energy Assistance Program (LIHEAP), New York 190–91
- Mcclay, J 35
 McGuire, P 198
 mainstreaming approach, EU, climate change-related action and non-productive investments 155, 158, 161
 market-based climate protection, Canada 39–40
 market-based emissions, Australia *see* Australia, private property and market-based emissions
 Marshall, A 141
 Martinez-Paz, J 172
 Mattauch, L 217
 Mehling, M 23, 26
 Meier, H 127–38
 Melendez-Obedencio, M 169–83
 Melton, N 36
 Meng, S 22
 Metcaf, G 35–6
 mining *see under* EU coal subsidies and phase-out
 Mirrlees Review, noise pollution taxation 113
 Monjon, S 25, 27, 28
 most-favoured nation clause, carbon prices and border adjustments 25
 Muehlegger, E 96
 Murphy E 124
 Murray, B 35, 47
 Myoung, M 137
- national treatment principle, carbon prices and border adjustments 24–5
 nationally determined contributions (NDCs) and Paris Agreement 20, 23, 29
- natural gas as alternative to coal, electricity sector 207
 Naughton, B 216, 217
 Navarro, M 169–83
 New York *see* US, New York's Reforming the Energy Vision (REV)
 NGO involvement, Australia 60–61
 Nobrega, B 141–53
 noise pollution taxation 113–26
 air traffic 118, 120–21
 environmental noise and air pollution exposure, correlation between 115–16
 environmental relevance 114–17
 EU END Directive 114, 116, 117–18, 121
 EU Eurovignette Directive 119–20
 health concerns of noise exposure 114–15
 industrial noise 118, 121
 local prevention measures 115
 Mirrlees Review 113
 noise mapping 117–21
 noise pollution and fundamental rights, relationship between 116–17
 political and economic considerations 118–21
 road traffic noise 118, 119–20
 source identification 116
 tax incentives for mitigation approach 122
- Nolte, C 147
 non-fossil fuels
 electrical power systems transition, New York 191–2, 194–5
 electricity sector, EU 208
see also clean energy; renewable energy
 non-productive investments, EU *see* EU, climate change-related action and non-productive investments
 Nordhaus, W 79
 nuclear power plants *see* US, zero emission credits for nuclear power plants
 Nye, D 199

- Oates, W 33
 O'Connor, P 80
 O'Dea, C 126
 O'Gorman, M 65
 oil, crude oil price increase effects,
 Canada 39
 Oreskes, N 223–4
 Ostrom, E 34
- Palanca-Tan, R 169–83
 Paris Agreement
 Australia, federal greenhouse gas
 cap-and-trade 51
 Australia, private property and
 market-based emissions 69
 Canada, bottom-up carbon pricing
 33
 electricity sector, carbon 'lock in'
 and environmental
 consequences 206–7, 211
 EU coal subsidies and phase-out
 107–9
 and nationally determined
 contributions (NDCs) 20, 23,
 29
 Patel, S 98–112
 payment for environmental services
 (PES) scheme, Philippines,
 Cagayan de Oro river basin
 169–71, 175
 Pearce, B and D 126
 Pedersen, T 35, 36, 38
 performance information concerns,
 non-productive investments in
 agriculture, EU 165
 Perl, L 198
 permit allocation, Australia 55
 Perry, M 230
 Peters, J 36
 petrol cars *see under* EU vehicle
 taxation
 Philippines, Cagayan de Oro river
 basin, total economic value (TEV)
 169–83
 contingent valuation method (CVM)
 172
 fishing sector 170, 173–4
 artisanal fishing 178–80
 full-time fishing and trading
 180–81
 flood control benefits 174
 households in downstream
 communities 170, 172, 174–5,
 179
 identification of beneficiaries of
 ecosystem services 170–71
 industrial/commercial sector 170
 payment for environmental services
 (PES) scheme 169–71, 175
 study site 171–2
 tourism industry 170, 173
 tourism industry, resort/cottage-
 related trade 178
 tourism industry, white water rafting
 176–7
 use and non-use values 172–4
 water supply for commercial,
 industrial and institutional
 establishments 169, 172, 173,
 175–7
 willingness to pay (WTP) 172, 173
 Pigou, A 141, 144, 192
 Piketty, T 198
 policy area and changing
 responsibilities, EU 157–8
 policy implementation, and
 quantitative criteria, Brazil 146–7
 policy support, EU carbon taxes
 12–15
 policy transparency and knowledge,
 Brazil 149
 political considerations
 Australia 59–62
 Canada, British Columbia carbon
 tax 37–41
 Canada, Quebec and Ontario
 carbon markets 44–6
 noise pollution taxation 118–21
 polluter-pays principle, Brazil 143
 pollution
 air *see* air pollution
 noise *see* noise pollution taxation
 and tax incentives, South Korea *see*
 South Korea, environmental
 pollution and tax incentives
 see also greenhouse gas emissions
 poverty, obligation to serve the poor,
 New York 189–90, 191, 192,
 193
 see also 'low income' headings

- price management, Australia, federal greenhouse gas cap-and-trade 56–7
- pricing, bottom-up *see* Canada, bottom-up carbon pricing
- private property, Australia *see* Australia, private property and market-based emissions
- product standards, Canada, Quebec and Ontario carbon markets 44
- products processed with use of fossil fuels 24
- protector-beneficiary principle, Brazil 143
- public funding control, EU 154, 162
- public opinion, Australia 59–60
- public transportation improvements, South Korea 129
see also road traffic
- Quirion, P 25, 27, 28
- renewable energy
 integration considerations, electricity sector 225
 sources, EU coal subsidies and phase-out 109–10
 targets, electricity sector 213–14
see also clean energy; non-fossil fuels
- revenue
 auction revenues, Canada 42–3
 distribution, Brazil *see* Brazil, tax revenue distribution
 recycling to households, Canada, British Columbia carbon tax 36
 use, Australia 55–6
see also taxation
- reverse auctions, Australia 70–71
- river basin, total economic value (TEV)
 see Philippines, Cagayan de Oro river basin, total economic value (TEV)
- Rivers, N 35, 36, 47
- road traffic
 noise 118, 119–20
 petrol and diesel cars *see under* EU vehicle taxation
 public transportation improvements, South Korea 129
- Rocha, M 98, 106
- Rogan, F 97
- Roncisvalle, C 145
- Rose, M 199
- Rubinstein, F 141
- Rubio-Sereñas, C 169–83
- Rudolph, S 33–66
- Safeguard Mechanism (SM), Australia 52–3
- Sairinen, R 17
- Sartor, O 100
- Scaff, F 142
- Schaufele, B 35, 36
- Schilling, C 231
- Schlissel, D 109
- Schmalensee, R 66
- Schneider, F 33, 64
- Scientific Research and Experimental Development Tax Credit, Canada, British Columbia carbon tax 35
- sector-specific involvement
 Australia 61, 62, 70, 71
 Canada, British Columbia 36, 40–41
- Selander, J 124
- self-interest privilege, Australia 68
- Selznick, P 199
- Seroa da Mota, R 147
- Shah, A 150
- Shearer, C 99, 216, 221
- Singapore, noise pollution 121
- social criteria adoption, Brazil 145–6
- Sopher, P 64
- South Korea, environmental pollution and tax incentives 127–38
 air pollution 127–9
 bicycle promotion 129
 cap-and-trade system 135, 136
 carbon-trading market and effects on trade 134–6
 coal-fired power plants 128
 diesel cars, scrapping incentive 129
 food waste pollution 129–30, 131–3
 Four Major Rivers Restoration Project 134
 greenhouse gas emissions 127–9, 130, 134–5
 Hwang Sa (yellow dust) damage 127–8
 public transportation improvements 129

- solutions to environmental problems 134–6
- water pollution 130–34
 - see also* pollution
- Spain, noise pollution 117
- Speck, S 17
- Spencer, T 100
- Sprohge, H 222–32
- Stansfeld, S 123
- Stavins, R 66
- Sterner, T 17
- Stewart, R 33
- Stiftung, B 138
- subsidies, coal, EU *see* EU coal subsidies and phase-out
- Sullivan, J 198
- Sussams, L 98, 109
- Sustainable Development Goal (SDGs), EU 154
- Sweden, carbon taxes *see* EU carbon taxes, Sweden

- Tamiotti, L 29
- taxation
 - carbon tax introduction, Canada, British Columbia carbon tax 38–9, 40–41
 - EU *see* EU carbon taxes
 - incentives, South Korea *see* South Korea, environmental pollution and tax incentives
 - Low Income Climate Action Tax Credit, Canada, British Columbia carbon tax 35
 - noise pollution *see* noise pollution taxation
 - refunds for exported products 24
 - Scientific Research and Experimental Development Tax Credit, Canada, British Columbia carbon tax 35
 - vehicle *see* EU vehicle taxation *see also* revenue
- terrorist attacks on nuclear waste 229–30
- Tobey, R 199
- Toni, F 149
- total economic value (TEV) *see* Philippines, Cagayan de Oro river basin, total economic value (TEV)
- tourism industry *see under* Philippines, Cagayan de Oro river basin, total economic value (TEV)
- tracking systems
 - Canada, Quebec and Ontario carbon markets 43
 - climate spending, EU 158, 160
 - coal subsidies, EU 101–2
- Trägårdh, L 16
- transparency, information
 - transparency concerns, EU coal subsidies 102–4, 107
- Tupiassu, L 141–53
- Twomey, P 65

- UK
 - fossil fuel subsidies 104, 106, 109
 - non-productive agricultural investments 163
- Unruh, G 205–6, 217
- US
 - emissions trading scheme, California 22–3, 44
 - Environmental Protection Agency (EPA) Clean Power Plan 223
 - Federal Power Commission v Hope Natural Gas Co.* 187–91, 192, 193, 194, 195
 - Hurricane Katrina 38
 - noise pollution tax 114, 122
 - NY & Queens Gas Co. v McCall* 198
 - Regional Greenhouse Gas Initiative (RGGI) 22, 37, 44–5
 - Smyth v Ames* 188
 - taxation on Ozone Depleting Substances 24
 - Waxman-Markey proposal on border arrangements 29–30
- US, New York's Reforming the Energy Vision (REV) 187–201
- Bill Discount Pledge (BDP) Program 196
- capex bias 189, 195–6
- Community Choice Aggregation (CCA) 195
- Community Distributed Generation order (CDG) 195
- distributed energy resources (DER) 187, 189, 193, 194–7
- energy apartheid 192

- energy democracy 192
- Environmental Justice Location Incentive 196
- 'fair value' doctrine 188–9
- harmonization of existing programs 193–4
- Hope* regulatory framework 187–91, 192, 193, 194, 195
- low- and moderate-income (LMI) affordability programs 192, 193–4, 195, 196
- Low-Income Home Energy Assistance Program (LIHEAP) 190–91
- New Deal federal loan guarantee programs 191
- New York Department of Public Service (NYDPS) 187, 188, 190, 193, 194, 195, 196–7
- non-fossil electrical power systems transition 191–2, 194–5
- NY Green Bank 194, 196
- obligation to serve the poor 189–90, 191, 192, 193
- rate base value 189
- US, zero emission credits for nuclear power plants 222–32
- arguments in favour, and misleading premise 223–7
- arguments in favour of 223
- cyber attacks on nuclear facilities 228–9
- and Environmental Protection Agency (EPA) Clean Power Plan 223
- geological repositories for nuclear waste 229
- law making dilemma and conflicting information 227–8
- nuclear meltdown risks 228
- risks associated with 222
- temperature data, adjusted 224–7
- terrorist attacks on nuclear waste 229–30
- Valentine, K 138
- Van der Burgh, L 98–112
- Vaughan, A 109
- vehicle taxation
- EU *see* EU vehicle taxation
- see also* road traffic
- Vehmas, J 17
- Villar Ezcurrea, M 113–26
- 'virtuous circle' notion, Brazil, tax revenue distribution 145
- voluntary emissions reduction scheme, electricity sector, Australia 213
- Wallace, J 231
- water pollution, South Korea 130–34
- water supply for commercial, industrial and institutional establishments, Philippines, Cagayan de Oro river basin 169, 172, 173, 175–7
- Watts, A 231
- Weishaar, S 3–19
- Western Climate Initiative (WCI)
- Canada, British Columbia carbon tax 37
- Canada, Quebec and Ontario carbon markets 42, 43–4, 44–5
- Whitley, S 98–112
- Wilcox, D 198
- willingness to pay (WTP), Philippines, Cagayan de Oro river basin 172, 173
- Wood, T 65
- Woody, T 138
- Worrall, L 98–112
- Wozny, N 96
- WTO Dispute Settlement
- Superfund* 24
- US – Shrimp-Turtle* 25
- WTO GATT, carbon prices and border adjustments 24–5, 27–8, 29
- Wynn, G 109
- Yamazaki, A 36
- Young, C 145
- Zapfel, P 26
- zero emission credits for nuclear power plants, US *see* US, zero emission credits for nuclear power plants

