actors 6–7, 15, 20, 271–3
decision makers 7, 271
‘honest broker’ 107–8
knowledge brokers 7, 272
knowledge producers/providers 7, 272
NGO analysts 165, 168
policy consultants 165, 169
agenda setting 4–11, 18, 37–9, 81–3, 94, 105, 146, 289
assessment techniques
Environmental Impact Assessment (EIA) 149
strategic environmental assessment (SEA) 149–50
asylum applications/targets 231–3, 240
see also immigration control
‘bounded rationality’ 36
Brundtland report: Our Common Future 65

Capacities
definition of 22–3
China 131, 236
climate change (and the) 233–7, 241 see also United Kingdom (UK)
Convention on Long-Range Transboundary Air Pollution 65
Intergovernmental Panel on 65
Kyoto Protocol 234–6
reduction of greenhouse-gas emissions 241
Stern Review on the Economics of Climate Change (Stern, 2007) 146
computer models used in practice (and) 109–16
model impact and utility in ‘real world’ policy formulation activities 109
practical lessons learned in matching process 113–16 see also SEAMLESS
when and how used 111–13
computerized models 100–120 see also model-based future studies
conclusions for 116–18
feeding knowledge into policy formulation 107–8 see also scientist, four roles of
linked to other policy formulation tools 106–7
and policy formulation tasks 104–6 see also policy formulation purposes of 101–4
use of in different policy formulation venues 245–64 see also MARKAL energy model
used in different policy formulation venues see MARKAL energy model
used in practice see computer models used in practice
Convention on Long-Range Transboundary Air Pollution 65
cost–benefit analysis (CBA) (and) 14, 62, 142–57 see also India
conclusions for 156–7
cost–benefit analysis in the real world 150–55
influence of 152–5
use and quality of 150–52
definition of 144
discussion of/conclusions 156–7
indicators 16
other decision-making procedures 148–50
as policy formulation tool 144–6
policy venues 146
rationale for 143
cost-effectiveness analysis (CEA) 63
critical notions 35–6
Cyprus 191, 193, 195–7
defence procurement 237–40
and MoD performance reports, targets and PIs 238
overall judgement of (at end of 2000s) 239–40
Defence Procurement Agency (DPA) 237
Defence Logistics Organisation (DLO) 237
DEFRA 146, 234–5
PSA and the Future 234
Delphi methods 58
de Jouvenel, H. 54, 57
Denmark 191, 193–8, 200
DG Research 113–16 see also SEAMLESS
differentiation and unification 37, 39, 275
The Discovery of the Future 64
Drivers–Pressures–State–Impacts–Responses (DPSIR) scheme 58
Ecological Indicators 89
EIONET (Environment Information and Observation Network) 65 see also FLIS
Essay on the Principle of Population 64
EURURALIS model 109–10
European Commission (EC) (and) 66, 195–8
cost–benefit analysis (CBA) 147
Evaluation of Socio-Economic Development (EC Guide 2013) 133
Framework Programme funding 185
Guidelines Annex 11 on tools/models for assessing impact 194
Jacques Delors and Forward Studies Unit (1989) 65
European Policy Advisers, Bureau of (BEPA) 65
European Union (EU) (and)
Common Agricultural Policy (CAP) 110
mid-term review of 73
Lisbon Process competitiveness indicators 78
multi-criteria analysis (MCA) 132
Regional Policy 157
Structural and Cohesion Funds and CBA 147–8
Water Framework Directive 34
Finland 191, 193, 195–7, 200
FLIS (Forward-Looking Information and Scenarios) working group 65
Forecasting normative 63
Forecasts definition of 53
Foresight definition of 53
future studies definition of 52–3
futures studies
model based: projections, predictions, speculation and exploration 104
Greece 191, 193, 195–7
Habermas, J. 35, 41
and ‘communicative rationality’ 83
immigration control 230–33, 241
India (and) 205–9 see also World Bank cases of tool use 208–12
cost–benefit analysis (CBA) in dam building policy 208–9
the design of CBA 209
the execution of CBA 209–10
key issues in water allocation policy 211–12
outcomes of CBA 210
tool design for water allocation policy 212
tool execution for water allocation policy 212
use of participatory tools in water allocation policy 211
independent regulatory agencies (IRAs) 207–8
legislation: the MWRRA Act (2005) 211, 214–15
Maharashtra Water Resources Regulatory Authority (MWRRA) 211, 215
State Water Policy Policy 211
tool use by IRAs 214–19
design of participatory tool 215–16
execution of participatory tool
216–18
policy outcomes of tariff regulations 219
Water Resources Department (WRD) 211
indicators 76–99
as governance tools 76–7
and influence of performance measurement: paradoxes and dilemmas 91–3
conclusions for 94–6
instrumental, conceptual and political functions of 83–4
in practice see indicators in practice theoretical approaches 90–91
types and purposes of 77–84 see also indicator types
indicators in practice (and) 84–91
indicator constituencies 89–90
indicator use and indicator influence 85
institutionalization, codification and mandatory use 88–9
lack of intended use of indicators and ways of enhancing use 85–8
unanticipated consequences of indicators 90
indicator types (and)
descriptive, performance and composites 78, 80–81
intended functions of indicators 79
level of governance 81–2
and policy formulation 82–3
International Institute for Applied systems Analysis (IIASA) 67
and GAINS model 67
International Monetary Fund 66
International Multi-Criteria Decision Society (IMCDM) 121
Ireland 191, 193–7
knowledge creation 16
Kyoto Protocol of the United Nations Framework Convention on Climate Change see climate change

Limits to Growth: report to Club of Rome 64
London’s Supersewer, evaluation of 153–4
lumpiness thesis (Voyer) 166

MARKAL energy system model (and) 245–64
as a boundary object 256–9
conclusions for 259–60
its changing use in UK policy development 246–8
theoretical perspectives 248–9
variation and change in the use of (by) 250–56
and the 2003 Energy White Paper 251–3
and the 2007 Energy White Paper 253–4
academic policy modellers 250
in relation to the Climate Change Act 254–5
the UK Committee on Climate Change 255–6
other policy venues 256
UK government departments 250–51
MCA see multi-criteria analysis
modelling 63
and role of stakeholders in model development 113
models see also computerized models
EURARALIS 109–10
GAINS 67
MARKAL energy system model see subject entry
NRM 109
use of computerized models in different policy formulation venues 245–64 see also MARKAL energy model
multi-criteria analysis 121
conclusions for 136–7
and goal programming 121
in policy practice see multi-criteria analysis in policy practice
multi-criteria analysis: methodological aspects 122–9
evaluating policy options 125–6
identifying objectives and criteria 124–5
identifying policy options to achieve set of objectives 125
interactive methods 127–8
multi-attribute utility/value methods 126–7
outranking methods 127
sensitivity and robustness analysis 128–9
multi-criteria analysis in policy practice (and) 129–36
formal requirements prescribing MCA 131–2
main policy areas 130–31
quality and legitimacy of MCA in practice (and) 133–6
opening up the policy formulation process 133–4
results as directly and indirectly policy-relevant 135–6
reasons for choosing MCA 132–3
users 129–30
venues 129
National Ecosystems Assessment (2011) 146
Netherlands
Central Planning Bureau (CPB) 68–9
Dutch Scientific Council for Policy (WRR) 56
economic, social and environmental planning offices 65
Environmental Assessment Agency/RIVM 69–70
Sustainability Outlook 70
New Public Management agenda 15–16, 77, 198
Organisation for Economic Co-operation and Development (OECD) 16, 65, 77–8, 86, 89, 151, 184, 198, 225, 271, 278–9
best practices 276
country reviews 86
development of environmental policy instruments 77
Environmental Performance Indicators 78
Facing the Future: Mastering the Probable and Managing the Unpredictable 65
policy appraisal systems in OECD countries 184
report on/use of CBA 151, 278
Service Delivery Agreements (SDAs) 227
tool use in 16
participatory assessment 33–51
conclusions for 45–6
methods and tools 39–42
agenda setting and problem conceptualization 39–40
decision making 42
identification and appraisal of potential policy options 40–41
specification of policy objectives 40
and the policy formulation process 37–9
in practice 42–5
tools 33–7 see also tools origins and rationales of 34–7
performance indicators (PIs) 225–7
performance measurement 91–3 see also indicators
Poland 191, 193, 195–7
policy formulation see also actors definition of 6–7, 17–20
Howlett 227
and models 104–7
processes and tasks 8–10
tool 19, 269
tools of see tools of policy formulation
venues 10–12, 20, 22, 273–7 policy analysis, new subfield of see tools of policy formulation
policy formulation, advice and appraisal
analytical tools and policy analysis 163–5
conclusions for 176–9
Andrew J. Jordan and John R. Tumpenny - 9781783477043
Downloaded from Elgar Online at 03/02/2019 05:38:50AM
via free access
data and methods 166–9 see also surveys
distribution of analytical tools 166
findings 169–76
distribution of capacities within government: venues and tools 169–73
overall distribution of capacity between governmental/non-governmental actors 173–6
‘lumpy’ hypothesis: (uneven) distribution of policy analysis across government 165–6
policy formulation tool use in emerging policy spheres (and) 205–24 see also India
conclusions for 219–20
future prospects for 221–2
policy formulation tools and appraisal motivations in practice (and) 191–6
tool use patterns: guidance vs practice 193–4
tool use patterns and jurisdiction-level motivations for appraising 194–6
tool use in practice 191–3
policy formulation tools in policy appraisal (and) 184–204
conclusions for 196–201
new directions 196–201
policy formulation tools and appraisal motivations in practice see subject entry
understanding the relationship between tools and appraisal motivations 187–90
Potočnik, J. 52 (EU Environment Commissioner)
Public Service Agreements (PSAs) 226–41
regulatory impact assessment 16, 164
Rio Conference (1992) 94
Royal Dutch Shell 64
scenarios (and/and their) 52–75
conclusions for 71–3
definition of 53
expertise/knowledge needed in development of 61–2
credibility, legitimacy, saliency 62
exploratory 63
historical evolution as policy influencing tool 64–6
international environmental negotiations: trans-boundary air pollution 66
links with other policy formulation tools 62–3
model-based 63
performance of policy formulation tasks 60–61
reasons for importance of 53–4
selection and design of 56–9
problem characterization 57
problem conceptualization 57–8
scenario assessments 59
scenario description 59
scenario framing 58–9
story-and-simulation 63
strategic planning 64
surprising futures 59–60
three types of 56
uncertainty and complexity 54–6 see also definitions
use in international policy venues 66
use in national policy venues 67–71
used in Millennium Ecosystem Assessment, definition of 55
scientist, Pielke’s four roles of 107–8
issue advocate 107–8
pure scientist 107
science arbiter 107
The Honest Broker 107–8
SEAMLESS (DG Research) 113–16
social indicators 88–9, 94
SMART targets 227
surveys (on)
census-of-1937 people undertaking policy-related work (2006–07) 167
internal Canadian policy analysts (2006–2009) 165
National Capital Region-based (Ottawa-Hull) policy employees (2010, 2009) 167
sustainability (RIVM, 2004) 70–71
The tools of policy formulation

sustainable development 70–71, 73, 77, 81, 85–6, 90, 94, 108, 234
System of Integrated Environmental and Economic Accounts (SEEA) 89
System of National Accounts (SNA) 89
Systems Analysis Unit (US Defense Department) 13–15
Programme Planning and Budgeting System (PPBS) 13–15
tools (and/or) see also participatory assessment and tools of policy formation
analytical tools 3
citizens’ and science courts 35
consensus conferences 35
‘dealing with an angry public’ 35
deliberative tools in urban planning (Germany) 35
discursive representation:
  Q methodology 39–40
  Repertory Grid Technique 39–40
empowering, learning and legitimating 33–4
focus groups 35
Participatory Action Research 35
Participatory Rural Appraisal 35
policy-analytic methods 3
science mediation 35
simulation and gaming 35
tools of policy formulation (and/or the) 3–6, 12–25
analycentric turn in policy analysis 12–14
analytical framework 20–25
actors 20
capacities 22–3
effects 23
plan of the book 23–5
venues 20, 22
definition and typology 19–20
and policy formulation tasks 19–21
Laswellian perspective on 14
existing literature 17–19

turn away from 14–15
turn back to 16–17
tools of policy formulation: new perspectives and new challenges (and) 267–93
actors 271–3 see also actors, capacities 277–9
conclusions for 287–90
definitions and typologies 268–71
effects of 279–80
theorizing: reassembling the pieces 281–7
policy formulation as control 283–5
policy formulation as rationality 281–3
policy formulation tools as institutions 285–7
venues 273–7
of use: by whom, for what purposes, in what form tools used? 273–5
of use: what factors shape selection and deployment of tools 275–7
trade-off analysis 63
trade-offs 6, 58, 71, 81, 86–7, 91–2, 102, 107–8, 116–7, 127, 132, 246
‘type 3 error’ 36
uncertainty 93, 103–4, 106, 125–8, 145, 230, 255, 276, 282
analysis 114–15
management 63, 67
United Kingdom (UK) (and) 195, 197–9
2000 PSA and 2002 Service Delivery Agreement 230
2012 Summer Olympic Games (London) 154
Border Agency (UKBA) 230
Cabinet Office review on use of analysis in policymaking 16–18
cases of policy formulation see climate change; defence procurement and immigration control
Central Policy Review Staff 13
Climate Change, Office of (OCC) 235
Climate Change Act (2008) 233
Comprehensive Spending Review (1998) 234
cost–benefit analysis as mandatory in 194
effects of targets and indicators (PIs) on policy formulation (and) 225–44
conclusions for 240–42
Energy and Climate Change, Department of (DECC) 233
Environment Agency 146
Environment, Food and Rural Affairs, Department for (DEFRA) 233
Environment, Transport and the Regions, Department of the (DETR) 233
Foresight Horizon Scanning Centre 65
Home Office 230
and asylum seekers 231–3
House of Commons
Home Affairs Committee 232
Public Administration Select Committee 232–3
Treasury Select Committee 228
Ministry of Defence (MoD) 237–41
National Audit Office (NAO) 226, 229, 232, 237
Public Administration Select Committee 229
Public Service Agreements (PSAs) 226, 227–9
Service Delivery Agreements (SDAs) 227
Thames Water: London’s sewage system/'Supersewer’ 153
training on Standard Cost Model 194
Treasury 116, 227–8, 234–5 see also climate change
PSA Delivery Agreement 27 (2007) 236
Royal Commission on Environmental Pollution 236
United Nations
Food and Agriculture Organization (FAO) 132
Framework Convention on Climate Change (UNFCCC) 65, 132
High Commissioner for Refugees (UNHCR) 33
United States (US)
Negotiated Rulemaking Act 42
RAND (military think tank) 64
Systems Analysis Unit (US Defense Department) 13 see also subject entry
Utopia 64
‘venue shopping’ 10–11
wicked, ill-structured or unstructured problem 36
World Bank 33, 278
use of CBA in 150–52
and water reform processes in India 211–12
World Food Programme 33