## Contents

|   |     |  | page  |
|---|-----|--|-------|
|   |     | ole of EU legislation  | xiv   |
|   |     | ole of international conventions                             | xviii |
|   |     | ole of legislation   | XX    |
|   |     | ole of cases   | xxii  |
|   |     | knowledgements   | xxix  |
|   | Pre | eface  | xl    |
|   | Pa  | rt I Introduction: Law in Context                            | 1     |
|   | Pre | face to Part I   | 1     |
| 1 | Εn\ | rironmental law in context                                   | 9     |
|   | 1   | Introduction   | 9     |
|   | 2   | The scientific paradigm                                      | 12    |
|   |     | (a) The role of science                                      | 12    |
|   |     | (b) Risk assessment and the environment                      | 15    |
|   |     | (c) Scientific uncertainty and the precautionary principle   | 18    |
|   |     | (d) Accounting for the authority of science                  | 31    |
|   | 3   | Environment and economics                                    | 34    |
|   |     | (a) Cost benefit analysis                                    | 37    |
|   | 4   | Beyond expertise: the political (and popular)                |       |
|   |     | dimension of environmental protection                        | 40    |
|   | 5   | 'Alternative' ways of viewing the world: ecological theories | 47    |
|   |     | (a) Deep ecology   | 48    |
|   |     | (b) Social ecology   | 50    |
|   |     | (c) Ecofeminism  | 51    |
|   |     | (d) Gaia theory  | 54    |
|   |     | (e) Ecological law?  | 55    |
|   | 6   | Conclusions  | 57    |
|   | 7   | Further reading  | 59    |
| 2 | Gei | netically modified organisms: introducing a dilemma          | 61    |
|   | 1   | Introduction   | 61    |
|   | 2   | Environmental concerns                                       | 64    |
|   | 3   | Human health concerns  | 64    |

|   | 4   | 'Other' issues  | 65  |
|---|-----|---|-----|
|   | 5   | The benefits of GM technology                                     | 72  |
|   | 6   | Consultation and beyond in the UK                                 | 76  |
|   |     | (a) Science and GMOs  | 77  |
|   |     | (b) Economics and GMOs  | 79  |
|   |     | (c) The public debate   | 79  |
|   |     | (d) The public dialogue on GMOs: the response                     | 81  |
|   | 7   | Conclusions   | 83  |
|   | 8   | Further reading   | 84  |
| 3 | Pu  | blic participation in environmental decision making               | 85  |
|   | 1   | Introduction  | 85  |
|   | 2   | The attractions of public participation                           | 87  |
|   |     | (a) The process rationale for public participation                | 87  |
|   |     | (b) The substantive rationale for public participation            | 93  |
|   |     | (c) The Aarhus Convention   | 97  |
|   |     | (d) Why participation?  | 100 |
|   | 3   | Access to environmental information                               | 101 |
|   | 4   | Public participation in environmental decision making             | 110 |
|   | 5   | Access to justice in environmental matters                        | 114 |
|   | 6   | The challenges of public participation                            | 128 |
|   | 7   | Conclusions   | 132 |
|   | 8   | Further reading   | 134 |
| 0 | Pa  | rt II The EU Context  | 135 |
|   | Pre | face to Part II   | 135 |
| 4 | The | e development and state of EU environmental law and policy        | 143 |
|   | 1   | Introduction  | 143 |
|   | 2   | Current EU environmental law and policy                           | 145 |
|   |     | (a) Environmental policy  | 145 |
|   |     | (b) Legislative framework   | 151 |
|   | 3   | An evolutionary framework: four phases                            | 155 |
|   |     | (a) First phase: recognising the need for action                  | 156 |
|   |     | (b) Second phase: establishing a firm legal base                  | 158 |
|   |     | (c) Third phase: 'new' environmental governance and 'integration' | 164 |
|   |     | (d) Fourth phase: constitutionalism                               | 170 |
|   | 4   | 'Free and fair trade'? Trade/environment dilemmas and the EU      | 171 |
|   |     | (a) Internal trade  | 176 |
|   |     | (b) External trade  | 182 |
|   | 5   | Conclusions   | 184 |
|   | 6   | Further reading   | 184 |
|   |     |   |     |

| 5 | Mu  | ulti-level decision making: the EU and GMOs                   | 186 |
|---|-----|---|-----|
|   | 1   | Introduction  | 186 |
|   | 2   | Risk regulation and GMOs: the authorisation process           | 189 |
|   |     | (a) The judiciary and science                                 | 198 |
|   |     | (b) Politics and science                                      | 199 |
|   |     | (c) The purposes of the legislation                           | 200 |
|   |     | (d) The authorisation process                                 | 201 |
|   | 3   | Co-existence and the EU's 'market citizen'                    | 202 |
|   | 4   | Conclusions   | 208 |
|   | 5   | Further reading   | 209 |
|   | Pa  | rt III The International Context                              | 211 |
|   | Pre | eface to Part III   | 211 |
| 6 | Su  | stainable development: quality of life and the future         | 217 |
|   | 1   | Introduction  | 217 |
|   | 2   | The evolution of sustainable development in international law | 219 |
|   | 3   | The elements of sustainable development                       | 231 |
|   |     | (a) The future and sustainable development                    | 231 |
|   |     | (b) The 'three pillars' and global poverty                    | 237 |
|   | 4   | The implementation of sustainable development: the UK         | 243 |
|   | 5   | Sustainable development and environmental limits              | 250 |
|   | 6   | Sustainable development as a normative objective              | 256 |
|   | 7   | Conclusions   | 262 |
|   | 8   | Further reading   | 263 |
| 7 | 'G  | lobalisation' and international trade                         | 264 |
|   | 1   | Introduction: the international trading system                | 264 |
|   | 2   | The promise of trade: Johannesburg and                        |     |
|   |     | sustainable development                                       | 266 |
|   | 3   | Trade and the environment                                     | 270 |
|   |     | (a) The main issues   | 270 |
|   |     | (b) The legal regime: domestic measures                       | 272 |
|   |     | (i) The basic provisions                                      | 272 |
|   |     | (ii) Science and risk in the WTO                              | 283 |
|   |     | (c) The legal regime: multi-lateral environmental agreements  | 303 |
|   | 4   | Reconstructing world trade?                                   | 306 |
|   |     | (a) Participation in decision making                          | 307 |
|   |     | (b) Environmental integration                                 | 310 |
|   |     | (c) Environmental standards: domestic or international?       | 311 |
|   | 5   | Conclusions   | 316 |
|   | 6   | Further reading   | 318 |

|    |     | rt IV Mechanisms of Regulation I: Pollution Control         | 319  |
|----|-----|---|------|
|    | Pre | eface to Part IV  | 319  |
| 8  | The | e institutional architecture of pollution control           | 323  |
|    | 1   | Introduction  | .323 |
|    | 2   | The historical context of pollution control                 | 325  |
|    | 3   | The modern machinery of government                          | 331  |
|    | 4   | The Environment Agency                                      | 334  |
|    | 5   | Advisory bodies   | 339  |
|    | 6   | An environmental court?                                     | 340  |
|    | 7   | The role of the modern common law                           | 341  |
|    | 8   | Conclusions   | 350  |
|    | 9   | Further reading   | 351  |
| 9  | Lic | ensing as a regulatory technique: the example of            |      |
|    | int | egrated pollution prevention and control                    | 352  |
|    | 1   | Introduction  | 352  |
|    | 2   | The integration of pollution control                        | 354  |
|    | 3   | Flexibility and decentralisation in the IPPC Directive      | 358  |
|    | 4   | Standard setting in environmental regulation                | 362  |
|    | 5   | Soft harmonisation and flexibility                          | 369  |
|    | 6   | Proceduralisation   | 373  |
|    |     | (a) Reflexive law?  | 374  |
|    |     | (b) Public participation                                    | 375  |
|    | 7   | Conclusions   | 380  |
|    | 8   | Further reading   | 380  |
| 10 | En  | forcement and implementation of direct regulation           | 381  |
|    | 1   | Introduction  | 381  |
|    | 2   | National enforcement of environmental law                   | 382  |
|    |     | (a) The criminal law: the principal water pollution offence | 382  |
|    |     | (b) Discretion in enforcement                               | 387  |
|    |     | (c) Sanctions: fines and beyond                             | 394  |
|    |     | (d) Alternatives to the criminal law                        | 400  |
|    | 3   | Implementation of EC environmental law                      | 403  |
|    |     | (a) The Commission as guardian of the treaties              | 403  |
|    |     | (b) Reform  | 411  |
|    |     | (i) EU-level reform: enforcement                            | 411  |
|    |     | (ii) National reform: implementation                        | 412  |
|    | 4   | Conclusions   | 415  |
|    | 5   | Further reading   | 415  |
| 11 | Re  | gulatory techniques: beyond licensing                       | 417  |
|    | 1   | Introduction: 'Command and control'?                        | 417  |
|    | 2   | Economic instruments  | 421  |

|    |     | (a) Green taxes   | 422        |
|----|-----|---|------------|
|    |     | (b) Emissions allowance trading: greenhouse gases   | 428        |
|    |     | (c) Criticisms of economic instruments  | 432        |
|    | 3   | 'Reflexive' law   | 435        |
|    |     | (a) The EU's Environmental Management and   |            |
|    |     | Audit Scheme (EMAS)   | 437        |
|    | 4   | Green consumers?  | 446        |
|    | 5   | The example of waste: diversity in regulation   | 451        |
|    |     | (a) Waste management licensing  | 454        |
|    |     | (b) Reducing landfill: taxing and trading   | 454        |
|    |     | (c) Recycling obligations   | 456        |
|    | 6   | Conclusions   | 458        |
|    | 7   | Further reading   | 459        |
|    | Pa  | rt V Mechanisms of Regulation II: Controls Over Land  |            |
|    |     | e and Development   | 461        |
|    |     | eface to Part V   | 461        |
|    | 110 |   | 701        |
| 12 | His | storical context of land use and development controls   | 469        |
|    | 1   | Introduction  | 469        |
|    | 2   | Origins   | 470        |
|    |     | (a) Public health and 'amenity'   | 470        |
|    |     | (b) Utopianism and the garden city movement   | 471        |
|    | 3   | Phases of development of controls over land   | 475        |
|    |     | (a) Early planning law  | 475        |
|    |     | (b) The post-war land settlement and the great divide   |            |
|    |     | between urban planning and countryside controls   | 479        |
|    |     | (c) Enhancing participation   | 487        |
|    |     | (d) Entrepreneurial planning  | 489        |
|    |     | (e) Planning and sustainable development  | 494        |
|    | 4   | Conclusions   | 502        |
|    | 5   | Further reading   | 503        |
| 13 | DI: | anning and environmental protection   | 505        |
| 13 | 1   | Introduction  | 505        |
|    | 2   |   | 510        |
|    | 2   | Elements of the planning system   | 511        |
|    |     | (a) Planning policy (b) Scope of town and country planning  | 513        |
|    |     | (b) Scope of town and country planning  (c) Applications for planning permission                        |            |
|    |     | (c) Applications for planning permission  (d) Interrelationship between planning and pollution controls | 515<br>516 |
|    |     | (d) Inter-relationship between planning and pollution controls  | 516        |
|    |     | (e) The decision: reasons, appeals and enforcement  | 518        |
|    | _   | (f) Major infrastructure projects   | 521        |
|    | 3   | Integrated spatial planning   | 522        |
|    |     | (a) Origins: European spatial planning and other influences   | 523        |
|    |     | (b) 'Bringing in' space: reform of the planning system  | 526        |

526

|    | 4  | Public participation in planning                                 | 530 |
|----|----|--|-----|
|    |    | (a) The argument for enhanced public participation               | 530 |
|    |    | (b) Procedural safeguards  | 536 |
|    |    | (c) Participation in practice                                    | 538 |
|    |    | (d) Public perceptions of risk as material considerations        | 542 |
|    | 5  | Conclusions  | 545 |
|    | 6  | Further reading  | 547 |
| 14 | En | vironmental assessment   | 548 |
|    | 1  | Introduction   | 548 |
|    | 2  | The positive idea of environmental assessment: changing          |     |
|    |    | the conditions and nature of decision making                     | 550 |
|    |    | (a) Environmental assessment as a regulatory technique           | 551 |
|    |    | (i) Procedure/self-regulation                                    | 551 |
|    |    | (ii) Anticipation/integration                                    | 556 |
|    |    | (iii) Participatory democracy and protest                        | 557 |
|    |    | (b) Operationalising sustainable development via                 |     |
|    |    | environmental assessment   | 560 |
|    |    | (c) The 'power to seduce': the Kentish Flats wind farm           | 563 |
|    | 3  | Environmental impact assessment                                  | 567 |
|    |    | (a) EIA Directive  | 568 |
|    |    | (b) Assessment procedure under the EIA Directive                 | 572 |
|    |    | (i) Screening: the selection of projects for                     |     |
|    |    | environmental assessment   | 573 |
|    |    | (ii) Scoping and the gathering of information                    | 580 |
|    |    | (iii) Consultation and participation                             | 583 |
|    |    | (iv) Problems of implementation: the case of 'revived'           |     |
|    |    | mining permissions   | 587 |
|    |    | (v) The decision: what difference does environmental             |     |
|    |    | assessment make?   | 590 |
|    | 4  | Extending EIA: Strategic Environmental Assessment                | 597 |
|    |    | (a) SEA Directive  | 599 |
|    | _  | (b) Sustainability analysis                                      | 601 |
|    | 5  | / 1  | 604 |
|    |    | (a) Post-assessment monitoring: 'living assessments'             | 604 |
|    | 6  | (b) Digitalisation and freedom of access to information          | 607 |
|    |    | Conclusions  | 608 |
|    | /  | Further reading  | 609 |
| 15 | Na | ture conservation and biodiversity: the technique of designation | 611 |
|    | 1  | Introduction   | 611 |
|    | 2  |  | 614 |
|    |    | (a) Sites of Special Scientific Interest                         | 618 |
|    |    | (b) The demise of voluntary controls                             | 625 |

Index

|    | 2  | European cites   | 627                                   |
|----|----|--|---------------------------------------|
|    | 3  | European sites  (a) Special protection areas           | 627                                   |
|    |    | (b) Special areas of conservation                      | 634                                   |
|    |    | (i) The designation process                            | 636                                   |
|    |    | (ii) Economic and political influences                 | 639                                   |
|    |    |  | 647                                   |
|    |    | (iii) The protection regime                            | 04/                                   |
|    |    | (iv) Threats: an 'appropriate assessment' and          | 610                                   |
|    |    | general prohibition on development                     | 649                                   |
|    |    | (v) Walland Marsh wind farm: an 'inappropriate         | · · · · · · · · · · · · · · · · · · · |
|    |    | assessment'?   | 655                                   |
|    |    | (vi) The general prohibition on development and        |                                       |
|    |    | derogations  | 661                                   |
|    |    | (c) Natura 2000: the inter-relation of the Birds       |                                       |
|    |    | and Habitats Directives                                | 665                                   |
|    | 4  | Conclusions  | 668                                   |
|    | 5  | Further reading  | 669                                   |
| 16 | Na | ture conservation and biodiversity: beyond designation | 670                                   |
|    | 1  | Introduction   | 670                                   |
|    | 2. | Biodiversity action plans                              | 671                                   |
|    | 3  | Integrating conservation in planning                   | 673                                   |
|    |    | (a) Environmental 'compensation'                       | 677                                   |
|    | 4  | Changing agricultural practices                        | 680                                   |
|    | _  | (a) The 'reform' of the CAP                            | 682                                   |
|    |    | (b) An ethic of stewardship?                           | 685                                   |
|    |    | (c) The story of field margins                         | 687                                   |
|    |    | (d) Protecting hedgerows                               | 689                                   |
|    | 5  |  | 691                                   |
|    |    | Further reading  | 692                                   |
|    |    | Turther reading  |                                       |
| 17 | Wi | nd farm development and environmental conflicts        | 694                                   |
|    | 1  | Introduction   | 694                                   |
|    | 2  | Planning policy conflicts                              | 698                                   |
|    |    | (a) Central government policy                          | 699                                   |
|    |    | (b) Overcoming local resistance                        | 709                                   |
|    | 3  | Offshore wind farm development                         | 719                                   |
|    |    | (a) The new licensing regime                           | 721                                   |
|    |    | (b) Invoking environmental assessment                  | 723                                   |
|    |    | (c) Robin Rigg in the Solway Firth                     | 730                                   |
|    | 4  | Conservation objections                                | 735                                   |
|    |    | Conclusions  | 742                                   |
|    |    | Further reading  | 743                                   |
|    |    |  |                                       |

745