

SOLVEIG GASCHE

Responsible Trading in Raw Materials

*Max-Planck-Institut
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Mohr Siebeck

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Responsible Trading in Raw Materials

Regulatory Challenges of
International Trade in Raw Materials

Mohr Siebeck

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To my parents

Preface

This book emerged from my dissertation entitled “Regulatory Challenges of International Trade in Raw Materials – The Governance Concept of Responsible Trading”, which I wrote as part of my work as a research assistant at the Institute for Maritime Law and Maritime Trade Law at the University of Hamburg under the auspices of Prof. Dr. Dr. h. c. Marian Paschke. I defended the dissertation at the Faculty of Law of the University of Hamburg in December 2021. For the publication, I considered case law and literature up to April 2021. The following comments add completion and contextualisation for legislative activities and political events of relevance concerning the regulation of raw materials since then.

In autumn 2021, Germany adopted the Lieferkettensorgfaltspflichtengesetz (Supply Chain Act), an implementation of the previous draft with only minor deviations. Thus, in Germany, a societal-normative change from a social market economy to a social-ecological market economy is taking place. The same transformation is also taking shape, and seeing further developments, in the European Union. On 23 February 2022, the Commission of the European Union published a proposal for a directive on corporate sustainability due diligence. The directive would foster sustainable and responsible corporate behaviour and anchor human rights and environmental considerations in company operations and corporate governance. Thus far, the proposal provides for corporate liability in cases of non-compliance. This represents a turnaround on the part of the European Union, from regulation through voluntary or soft transparency or reporting obligations to regulation through hard sanctioning mechanisms, including a corporate civil liability regime. The proposal has stimulated and promoted the debate on “environmental-social governance”. This book both contributes to this general debate on environmental social governance and to specific governance challenges in the extractive raw materials sector.

On 24 February 2022, the EU Commission imposed restrictive measures on Russia in response to Russia’s military aggression against Ukraine. Since then, the EU Commission has imposed many more sanctions on Russia, and the question of resource supply has suddenly been brought into public focus to a much greater extent. The Russia-Ukraine war shows that restrictive measures represent a considerable and consequential means of foreign trade. Moreover, this war violently demonstrates that the aspect of raw materials supply security is

of existential importance, especially for the raw materials importing countries. The threat to their own supply of raw materials then becomes a determining factor for (foreign trade) policy and action. Whether the implementation of the responsible trading governance concept in the raw materials sector will succeed under these conditions remains open. Nevertheless, these circumstances could be a turning point. The EU Commission's proposal for a directive on corporate sustainability due diligence shows that a corresponding legislative will does indeed exist.

The latest developments demonstrate that regulatory challenges come up constantly in the raw materials sector. They also show how important it is to look at them thoroughly. Thus, I would like to thank some of the people who granted me the time and freedom to take a thorough look as well as those who accompanied and supported me over the course of my dissertation.

First, I would like to take this opportunity to express my special thanks to my doctoral supervisor Prof. Dr. Dr. h. c. Marian Paschke, both for the instructive and enriching time at the chair as well as for his enthusiasm and perseverance with my doctoral topic. I will always look back on this time with joy. Without his confidence, trust (both in me and in the success of the research) and conviction in the necessity of responsible trade, this research would have neither started nor been completed. I would also like to thank him for his continued questioning, motivation and valuable suggestions, without which I would not have persevered.

I would also like to thank my dissertation's second examiner, Prof. Dr. Heinrich Julius, who thankfully examined and critically appraised it at lightning speed and enriched it holistically through his comments.

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I would also like to thank the directors of the Max Planck Institute for Comparative and International Private Law in Hamburg for including my work in this series. I would like to thank the Institute and the publishing house Mohr Siebeck for their friendly and helpful cooperation during the printing process.

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I would also like to thank the German Academic Exchange Service for the generous doctoral scholarship that enabled me to spend time researching in Brazil. Direct involvement, with both jurisprudential and public debate in a country like Brazil where extractive (especially mining) industries enjoy high social and economic status, was particularly instructive. I am thankful to Prof. Dr. Nora

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Without extensive support from my family, I would probably not have been able to successfully complete my doctorate. A big thank you, therefore, to my parents, Sigrid and Hans-Erich, who made my studies possible in the first place. Thank you for always being there for me and for covering for me, even in face of the chaos of family life, for being unconditionally sympathetic to my many years of education, with undergraduate and graduate study and traineeship, and for supporting me so generously from the time I matriculated to the time this book went to press.

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Hamburg, September 2022

Solveig Gasche

Content Overview

Preface	VII
Contents	XIII
List of Abbreviations and Acronyms	XXV
List of Statutes and Agreements	XXIX
Chapter 1: Introduction	1
<i>A. Motivation</i>	<i>1</i>
<i>B. Research Issue and Synopsis</i>	<i>4</i>
<i>C. Methods</i>	<i>5</i>
<i>D. Scope and Definition of Raw Materials</i>	<i>6</i>
Chapter 2: Historic, Economic and Regulative Fundamentals of International Trade in Raw Materials	19
<i>A. Minerals Supply Chain</i>	<i>19</i>
<i>B. Raw Materials Markets</i>	<i>21</i>
<i>C. Raw Materials Governance</i>	<i>34</i>
<i>D. Conclusion</i>	<i>55</i>
Chapter 3: Good Raw Materials Guidance, Strategies and Governance	57
<i>A. International Soft Law Guidance and Strategies</i>	<i>57</i>
<i>B. International Strategies and Governance</i>	<i>89</i>
<i>C. German Good Raw Materials Strategies and Governance</i>	<i>165</i>
<i>D. Conclusion</i>	<i>198</i>

Chapter 4: The Governance Concept of Responsible Trading in Raw Materials	203
<i>A. Classification of Responsibility</i>	203
<i>B. Differentiation</i>	229
<i>C. Definition</i>	259
<i>D. Enforcement</i>	264
<i>E. German Private-Level Enforcement</i>	295
<i>F. Conclusion</i>	383
Chapter 5: Summary and Final Remarks	387
<i>A. Fundamentals of International Trade in Raw Materials</i>	387
<i>B. Good Raw Materials Guidance, Governance and Strategies</i>	388
<i>C. Responsible Trading</i>	389
<i>D. Legal Enforcement</i>	391
<i>E. Final Remarks</i>	394
References	397
Online References	443
<i>A. Online Documents and Statutes</i>	443
<i>B. Websites</i>	450
Index	455

Contents

Preface	VII
Content Overview	XI
List of Abbreviations and Acronyms	XXV
List of Statutes and Agreements	XXIX
Chapter 1: Introduction	1
<i>A. Motivation</i>	<i>1</i>
<i>B. Research Issue and Synopsis</i>	<i>4</i>
<i>C. Methods</i>	<i>5</i>
<i>D. Scope and Definition of Raw Materials</i>	<i>6</i>
I. Raw Materials in a Wider Sense	6
II. Raw Materials in a Narrower Sense	11
1. Critical and Strategic Raw Materials	11
2. Conflict Minerals	14
3. Rare Earth Materials	16
III. Scope of Application	17
Chapter 2: Historic, Economic and Regulative Fundamentals of International Trade in Raw Materials	19
<i>A. Minerals Supply Chain</i>	<i>19</i>
<i>B. Raw Materials Markets</i>	<i>21</i>
I. Market Allocation	21
II. Transportation	23
III. Physical and Electronic Trade	24
1. Raw Materials Exchange Markets	24
a) Synthesis	24
b) Main Characteristics	25
c) Exceptions	26
2. Auctions	26
3. Trade in Derivatives	26
IV. Price Volatility	27

V.	Price Quotation	29
1.	Exchange Market Price Quotation	30
a)	Raw Materials Indices	30
b)	Futures-Contracts	31
2.	Miscellaneous Price Quotation	32
VI.	Conclusion	33
C.	<i>Raw Materials Governance</i>	34
I.	Raw Materials Governance before 1945	34
1.	Paris Sugar Convention	35
2.	German Regulation	35
3.	Brussels Sugar Convention	36
4.	Anglo-Dutch Phase	36
5.	International Regulation since 1929	37
6.	Conclusion	38
II.	Raw Materials Governance after 1945	38
1.	Atlantic and Havana Charter	39
2.	GATT 1947	39
a)	Legislative Purpose	39
b)	Regulative Content	40
c)	Part IV and UNCTAD	42
3.	GATT 1994 and WTO	42
4.	Multilateral Commodity and Raw Materials Agreements	43
a)	Multilateral Contract System	43
b)	Contemporary Contractual Characteristics	44
5.	Conclusion	45
III.	Foreign Trade Supply Regulation	45
1.	Raw Materials Supply Strategies	46
2.	Import Restrictions	47
a)	Tariff Barriers	47
b)	Non-tariff Barriers	48
c)	Tariff Escalation	48
3.	Export Restrictions	49
a)	Positive Impact	50
b)	Negative Impact	50
4.	Licencing Regimes	52
5.	Direct Foreign Ownership and Nationalised Corporations	53
6.	Foreign Mining	54
7.	Conclusion	54
IV.	Conclusion	55
D.	<i>Conclusion</i>	55

Chapter 3: Good Raw Materials Guidance, Strategies and Governance	57
<i>A. International Soft Law Guidance and Strategies</i>	<i>57</i>
I. Principles of Soft Law Guidance and Strategies	58
II. Voluntary Principles on Security and Human Rights	60
III. UN Guidance	60
1. UN Raw Materials Study Groups and General Guidelines	61
2. UN Global Compact	61
a) UN Global Compact Principles	62
b) Organisational System	62
c) Conclusion	63
3. UN Guiding Principles for Business and Human Rights	64
a) Protect Principles	65
b) Respect Principles	65
c) Remedy Principles	67
d) Conclusion	68
IV. Global Reporting Initiative	70
V. Extractives Industries Transparency Initiative	71
VI. Equator Principles	73
VII. ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy	74
VIII. ISO 26000 Guidance on Social Responsibility	74
IX. OECD Framework	75
1. OECD Guidelines	75
2. OECD Due Diligence Guidance	76
a) OECD Common Approaches	76
b) OECD Raw Materials Due Diligence Guidance	77
aa) OECD DDG	77
bb) OECD Recommendations of Practical Actions	78
cc) OECD DDG Responsible Business Conduct	79
dd) OECD DDG Meaningful Stakeholder Engagement	80
3. Conclusion	80
X. Mineral Supply Chain Due Diligence	81
1. Kimberley Process Certification Scheme	81
2. Conflict Minerals	82
3. Responsible Sourcing	84
4. Conclusion	86
XI. Conclusion and Outlook	87
<i>B. International Strategies and Governance</i>	<i>89</i>
I. Multilateral Good Raw Materials Governance	90
1. G7	90
2. G 20	90

a)	Main Objectives and Resource Efficiency	91
b)	Overcapacity	91
c)	Conclusion	92
3.	Multilateral Agreements	93
a)	International Covenant on Economic, Social and Cultural Rights	93
b)	CETA	93
c)	Conclusion	94
4.	Conclusion	95
II.	US-American Raw Materials Strategy	96
1.	Dodd-Frank Wall Street Reform and Consumer Protection Act	96
a)	Section 1502 Dodd-Frank Act	96
b)	Section 1503 Dodd-Frank Act	97
c)	Effects of Corporate Implementation	97
d)	Enforcement	98
e)	Conclusion	99
2.	Punitive Tariffs on Steel and Aluminium	100
3.	Conclusion	101
III.	Chinese Raw Materials Strategies	102
1.	Economic Determinants of the Chinese Raw Materials Market	102
2.	Chinese Raw Materials Documents and Policy	104
3.	Conclusion	106
IV.	Latin American Raw Materials Strategies	106
1.	Extractivism	107
2.	Neo-Extractivism	107
a)	Implementation	108
b)	Criticism	109
3.	Post-Extractivism	109
4.	EU-Mercosur FTA	110
5.	Brazilian Raw Materials Strategy	111
a)	Brazilian Raw Materials Market	111
aa)	Market Allocation	111
bb)	Economic Outlook	112
cc)	Socio-environmental Impacts	112
dd)	Challenges	113
b)	National Mining Plan	114
c)	New Mining Code	115
aa)	National Mining Agency	115
bb)	Financial Compensation and Licencing	116
cc)	Industrial and Societal Consent	117
d)	Conclusion	117
6.	Conclusion	118
V.	EU Raw Materials Governance and Strategy	119
1.	Competence	119

2. EU Foreign Trade Promotion	120
a) Legislative Basis	120
b) Value-based Trade Policy	121
3. Raw Materials Strategy	123
a) Kimberley Process Certification	123
b) Raw Materials Initiative	123
c) Resource Efficiency	124
d) Conclusion	125
4. CSR Directive 2014/95/EU	125
5. EU Conflict Minerals Regulation 2017/821	127
a) Legislative Procedure and Objectives	127
b) Material Regulation	128
aa) Subject Matter and Scope of Application	129
bb) Supply Chain Due Diligence	130
(1) Recognition of Supply Chain Due Diligence Schemes	130
(2) Upstream and Downstream Operators	131
(3) Management System Obligations	131
(4) Risk Management Obligations	132
(5) Third-Party Audit Obligations	133
(6) Disclosure Obligations	134
(7) List of Global Responsible Smelters and Refiners	134
cc) Implementation and Enforcement	135
(1) Ex-post Checks	135
(2) Remedial Action	136
(3) Assessment Reporting	136
(4) Entry into Force	137
dd) Conclusion	137
c) WTO Compatibility	138
aa) Detrimental Impact	139
bb) Justification	140
(1) Art. XXI GATT	141
(2) Art. XX GATT	142
(a) Chapeau	142
(aa) Necessary Public Measure	142
(bb) Environmental Requirements	144
(b) Art. XX lit. a GATT	144
(c) Art. XX lit. b GATT	145
(d) Art. XX lit. e GATT	146
(e) Art. XX lit. g GATT	147
(3) Art. 11 Draft Articles on Responsibility of States for Internationally Wrongful Acts	149
(4) Conclusion	150
d) Conclusion	150
6. Conclusion	152

VI.	European UNGP National Action Plans and Implementing Acts	153
1.	UK NAP and Implementation Acts	154
a)	UK NAP Good Business	154
b)	UK Companies Act 2006 and UK Modern Slavery Act	155
c)	Spill-over Effect	157
2.	Loi de Vigilance	157
a)	Scope of Application	157
b)	Plan of Vigilance	158
c)	Torts Liability	158
d)	Evaluation	159
3.	Wet Zorgplicht Kinderarbeid	160
4.	Conclusion	161
VII.	Conclusion	162
C.	<i>German Good Raw Materials Strategies and Governance</i>	165
I.	German Raw Materials Determinants	165
II.	2010 Raw Materials Strategy	166
1.	Research and Information	167
2.	IMA Monitoring and German Mining Network	167
3.	Centres of Raw Materials Competence	167
4.	Intergovernmental Raw Materials Partnerships	168
5.	Untied Loan Guarantees	168
6.	ProgRes	169
7.	Conclusion	169
III.	2020 Raw Materials Strategy	169
1.	Sustainability and Research	170
a)	Sustainable Mining Standards	170
b)	GeoIDG	170
c)	Extraction in Local and European Depositories	170
d)	Research and Education	171
2.	Corporate Level Playing Field	172
3.	International Cooperation and Investment	172
a)	Centres of Raw Materials Competence	172
b)	Untied Loan Guarantees	173
c)	DERA Raw Materials Monitoring	173
d)	Climate Smart Mining	174
4.	Recycling and Substitution	174
a)	Recycling and Substitution Processes	174
b)	ProgRes III and Lightweight Construction	175
5.	Raw Materials Sustainability and Transparency Efforts	175
a)	Mineral Supply Chain Due Diligence	175
b)	The EU Conflict Minerals Regulation and the EITI	176
6.	International Guidance and Cooperation	177
7.	Conclusion	177

IV. German National Action Plan UNGPs	178
V. Sustainable Supply Chain Act	180
1. Initial Regulatory Proceedings	181
2. SorgGE	182
a) Scope of Application	182
b) Due Diligence	183
c) Sanctioning	184
3. Conclusion	186
VI. Raw Materials State Export Management	187
1. Hermes Covers and Untied Loan Guarantees	189
2. Legislative and Procedural Basis	189
3. Award Criteria	191
a) Eligibility and Special State Interest	192
b) Risk Justifiability	193
c) Sustainability Assessment	193
d) Customary Conditions of Contractual Terms	194
4. Compatibility of Awarding Criteria	194
5. Conclusion	196
VII. Conclusion	197
<i>D. Conclusion</i>	198

**Chapter 4: The Governance Concept of Responsible Trading
in Raw Materials** 203

<i>A. Classification of Responsibility</i>	203
I. Semantic and Historical Derivation	204
1. Semantics	204
2. Aristotle's Perception of Equitable Liability	205
3. Respondere in Roman Law	205
4. Verantwortung	206
5. Moral and Philosophical Interpretation	206
a) Moral Theology on Accountability	206
b) Imputation	207
c) Self-Responsibility and Freedom	207
d) Responsibility in 19th and 20th Century Philosophy	208
6. Conclusion	209
II. General Categorisations	209
1. Relation and Reference of Responsibility	210
2. Negative, Positive and Chronological Determination	211
3. Self-Responsibility and the Communicative Process	212
4. Role-, Liability-, Capacity- and Causal Responsibility	213
5. Conclusion	214
III. Legal Categorisation	214

1. Responsibility and Liability	215
2. Liability and Guilt	215
3. Imputation of Action and Damage	216
4. Conclusion	216
IV. Responsibility in German law	217
1. Criminal Law	217
2. Civil Law	218
a) Express Reference	218
b) Liability	218
c) Conclusion	220
3. Public Law	220
a) Constitutional Law	220
aa) Generic Reference	220
bb) Parliamentary Responsibility	222
cc) Conclusion	223
b) Administrative Law	223
aa) Individual and Joint Responsibility	223
bb) Abstract Categorisation	224
cc) Responsible Person and Liability	225
dd) Conclusion	225
c) Conclusion	226
4. Conclusion	226
V. Conclusion	228
<i>B. Differentiation</i>	<i>229</i>
I. Responsible Lending	229
II. Business Ethics	230
1. Generic Legal Aspects of Ethics and Morality	230
a) Ethics and Morality	231
b) Law and Morality	232
c) Conclusion	234
2. Business Ethics	234
a) Definition	234
b) Sympathy of the Well-informed Observer	235
c) Economism	236
d) European Economic and Political Ethics	236
e) Conclusion	237
3. Ethical Business Practices	238
a) Art. 1 lit. e Annex 2-D EU-Korea FTA	238
b) Art. 4 (1) Annex 2-D EU-Korea FTA	239
c) Interpretation	239
d) Conclusion	240
4. Conclusion	240
III. CSR	240

1. Derivation and Definitions	241
2. Contemporary Concept	242
3. Conclusion	244
IV. Good Governance and Corporate Citizenship	244
1. Good Governance	245
a) Good Global Governance	245
b) Good Corporate Governance	246
2. Corporate Citizenship	247
3. Conclusion	248
V. Ecological Economics and Ecological Ethics	249
1. Ecological Economics	249
2. Ecological Ethics	249
3. Conclusion	250
VI. Sustainability	250
1. Weak and Strong Sustainability	251
2. Sustainable Business	251
3. Conclusion	252
VII. Fair Trade	252
1. Fairness and Fair Play	253
2. Fair Trade and Protectionism	254
3. Fair Trade according to the World Fair Trade Organisation	254
4. Contemporary Fair Trade Measures	255
5. Criticism	256
6. Conclusion	257
VIII. Conclusion	257
C. <i>Definition</i>	259
I. Scope	260
II. Values and Objectives	261
III. Responsible Trading in Raw Materials	262
D. <i>Enforcement</i>	264
I. General Features	264
II. Initiators	265
1. State	265
2. Companies	268
3. Third Players	270
4. Conclusion	273
III. Legal Enforcement	274
1. Regulative Areas and Instruments	274
2. Transparency and Liability	275
a) Liability under Public or Private Law	276
b) Corporate Liability under Criminal and Administrative Offences	277
c) State Liability	278

d) Conclusion	279
3. Socio-Environmental Policies in Public Procurement	279
a) EU Public Procurement Regime	280
b) International Regulation	281
c) Transnational Private Regulation	281
d) Conclusion	283
4. Litigation	283
a) Instruments of Litigation Enforcement	283
b) Strategic Litigation	284
c) Evidence of Liability Causation	286
d) Determination and Calculation of Damages	287
e) Conclusion	288
IV. Linkage to Mineral Supply Chains	289
1. Electronic Trade and Contracts	289
2. Harmonised Scope of Application	290
3. Trade Regulation	291
4. Economic Operators	291
5. Raw Materials Participative Cooperation Tools	292
V. Conclusion	293
<i>E. German Private-Level Enforcement</i>	<i>295</i>
I. International Procedure and Private Law	296
1. Jurisdiction	296
a) Regulations Internationally	297
b) The EU Regulation	298
c) Conclusion	300
2. Conflict of Laws	300
a) Determining Procedure	300
b) Contractual Obligations	301
c) Torts	303
aa) Art. 4 (1) Rome II Regulation	303
bb) Arts. 4 (2) and (3) Rome II Regulation	304
cc) Art. 7 Rome II Regulation	305
dd) Conclusion	307
d) Ordre Public	307
e) Overriding Mandatory Provisions	308
f) Rules of Safety and Conduct	310
g) Conclusion	310
3. Conclusion	311
II. Contract Design	312
1. General Features	312
2. Common Welfare Terms	314
a) Contractual Fairness and Trust	314
b) Fundamental Rights and Ethical Values	315
c) Good Faith and Morality	316
d) Conclusion	317

3.	Raw Materials Contracts	317
a)	Bilateral Contracts	318
b)	Framework Contracts	318
c)	Long-Term Supply Contracts	319
d)	Venture Contracts	319
4.	General Terms and Conditions	320
5.	Statutory Warranty Provisions	321
6.	Public Incentive Arrangements	323
7.	Private Insurance Awarding Criteria	325
a)	EU Regulation	325
b)	German Implementation	326
c)	Awarding Criteria	326
8.	Conclusion	327
III.	Environmental Liability	328
IV.	Corporate Law	330
1.	Corporate Statute	330
2.	Internal Liability	332
3.	External liability	336
a)	Piercing the Corporate Veil	337
b)	Economic Union	338
c)	Direct Liability	339
d)	Enterprise liability	340
4.	Raw Materials Due Diligence	342
a)	MinRohSorgG	343
b)	CSR-Richtlinie-Umsetzungsgesetz	344
aa)	Non-Financial Statement according to § 289 b HGB	345
bb)	Contents of the Non-Financial Statement according to § 289 c HGB	345
cc)	Omission of Information according to § 289 e HGB	347
dd)	Sanctioning and Liability	347
ee)	Voluntary vs Obliging Implementation	348
ff)	Conclusion	349
c)	DCGK	349
d)	Labour Contracts	351
e)	Contract for the Benefit of Third Parties	352
5.	Conclusion	353
V.	Torts Law	355
1.	Primary Liability	355
2.	Applicability of Human Rights	356
3.	Vicarious Liability	358
a)	Organisational and Devolved Liability	358
b)	Attribution of Conduct	359
4.	Conclusion	360
VI.	Unfair Competition Law	361

1. Conflict of Laws	361
2. Objectives	362
3. Legal Consequences	363
4. Unfair Commercial Practices	363
a) Prohibition of Unfair Commercial Practices – § 3 UWG	363
b) Breach of Law – § 3a UWG	364
aa) Entrepreneurial Self-Obligation as a Commercial Practice – § 2 (1) No. 1 UWG	365
bb) Codes of Conduct – § 2 (1) No. 5 UWG	366
c) Conclusion	367
5. Misleading Commercial Practices – § 5 UWG	367
a) Labels, Seals and Certifications	368
b) Socio-Environmental Advertising	371
c) Product-Related Advertising	372
d) Cause-Related Marketing	373
e) Company-Related Advertising	374
aa) Entrepreneurial Self-Commitment	374
bb) Transfer of Principles	375
6. Misleading by Omission – § 5 a UWG	377
7. CE Marking	378
8. Conclusion	379
VII. Conclusion	381
<i>F. Conclusion</i>	<i>383</i>
Chapter 5: Summary and Final Remarks	387
<i>A. Fundamentals of International Trade in Raw Materials</i>	<i>387</i>
<i>B. Good Raw Materials Guidance, Governance and Strategies</i>	<i>388</i>
<i>C. Responsible Trading</i>	<i>389</i>
<i>D. Legal Enforcement</i>	<i>391</i>
<i>E. Final Remarks</i>	<i>394</i>
References	397
Online References	443
<i>A. Online Documents and Statutes</i>	<i>443</i>
<i>B. Websites</i>	<i>450</i>
Index	455

List of Abbreviations and Acronyms

Journal abbreviations and similar formulations are listed in the bibliography.

3TG	Tantalum, Tin, Tungsten and Gold
AA	Auswärtiges Amt (Foreign Office)
Aff.	Affirmative
AFP	Analytical Fingerprint
ANM	Agência Nacional de Mineração (Brazilian National Mining Agency)
Art.	Article
ASM	Artisanal and Small-Scale Mining
BCOM	Bloomberg Commodity Index
BDI	Bundesverband der deutschen Industrie (Federation of German Industries)
Berlin Consensus	Berliner CSR-Konsens zur Unternehmensverantwortung in Liefer- und Wertschöpfungsketten (Berlin Consensus)
BGH	Bundesgerichtshof (Federal Court of Justice)
BGR	Bundesanstalt für Geowissenschaften und Rohstoffe (Federal Institute for Geosciences and Natural Resources)
BGR MPI	German BGR metal price index
BM&FBOVESPA	Bolas de Valores, Mercadorias e Futuros de São Paulo
BMAS	Bundesministerium für Arbeit und Soziales (Federal Ministry of Labour and Social Affairs)
BMF	Bundesministerium für Finanzen (Federal Ministry of Finance)
BMU	Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)
BMWI	Bundesministerium für Wirtschaft und Energie (Federal Ministry for Economic Affairs and Energy)
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)
BVerfG	Bundesverfassungsgericht (Federal Constitutional Court)
CBOT	Chicago Board of Trade
CC	Conseil Constitutionnel (French Constitutional Court)
cf.	confer (compare)
CFEM	Compensação Financeira pela Exploração de Recursos Minerais (Brazilian Financial Compensation Mechanism for the Exploration of Mineral Resources)
CFTC	Commodity Futures Trading Commission
CIF	Cost Insurance Freight

CJEU	Court of Justice of the European Union
CME	Chicago Mercantile Exchange
CMRT	Conflict Minerals Reporting Template
Covid-19	Corona Virus Disease 2019 caused by SARS-COV-2 (Severe Acute Respiratory Syndrome Coronavirus-2)
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CSR	Corporate Social Responsibility
CTC	Certified Trading Chains
DCGK	German Corporate Governance Code (DCGK)
DERA	Deutsche Rohstoffagentur (Mineral Resources Agency)
DG	Directorate-General
DIHK	Deutscher Industrie- und Handelskammertag (German Association of Chambers of Commerce and Industry)
D&O insurance	Directors' and Officers' Insurance
DRC	Democratic Republic of the Congo
DU	Depleted Uranium
EBA	European Banking Authority
ECB	European Central Bank
EFTA	European Fair Trade Organisation
e. g.	Example Given
EIOPA	European Insurance and Occupational Pensions Authority
EITI	Extractive Industries Transparency Initiative
EP	Equator Principles
EPRM	European Partnership for Responsible Minerals
ESFS	European System of Financial Supervision
ESG	Environmental Social Governance
ESMA	European Securities and Market Authority
ESRB	European Systemic Risk Board
et al.	et alii (and others)
EU	European Union
EU RMI	EU Raw Materials Initiative
f.	following page/recital
ff.	following pages/recitals
FOB	Free on Board
FOR	Free on Rail
FTA	Free Trade Agreement
FTAA	Free Trade Area of the Americas
FPIC	Free, Prior, and Informed Consent
German NAP UNGP	German National Action Plan Implementation of the UNGPs
GeSI	Global e-Sustainability Initiative
GRI	Global Reporting Initiative
GTAI	Germany Trade & Invest
HG	Haushaltsgesetz (Federal Annual Budget Law)
HIF	Helmholtz-Institut Freiberg für Ressourcentechnologie (Helmholtz Institute for Resource Technology)
i. a.	inter alia

IBRAM	Instituto Brasileiro de Mineração (Brazilian National Institute for Mining)
ICC	International Chamber of Commerce
ICE	Intercontinental Exchange Futures U. S.
ICGLR	International Conference of the Great Lakes Region
ICJ	International Court of Justice
ICMM	International Council on Minerals and Metals
ICSG	UN International Copper Study Group
IFC	International Finance Corporation
ILC	UN International Law Commission
ILO	International Labour Organisation
ILZSG	UN International Lead and Zinc Study Group
IMA	Interministerieller Ausschuss Rohstoffe (Inter-ministerial Committee for Resources)
INSG	UN International Nickel Study Group
IPC	Integrated Programme for Commodities
IPIS	International Peace Information Service
IQS	International Quota System
IRP	International Resource Panel
ISO	International Organisation for Standardisation
ISS	International Stock System
iTSCi	ITRI Tin Supply Chain Initiative
KfW IPEX-Bank	KfW Internationale Projekt- und Exportfinanzierung Bank
KPCS	Kimberley Process Certification Scheme
lit.	littera
LME	London Metal Exchange
LSM	Large-Scale Mining
MERCOSUR	Mercado Comum do Sur (Common Market of the South)
NAP	National Action Plan
NDRC	Chinese National Development and Reform Commission
NGO	Non-Governmental Organisation
NMC	National Mining Company
NYCE	New York Cotton Exchange
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OECD Common Approaches	OECD Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence
OECD DDG	OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas
OECD DDG Meaningful Stakeholder Engagement	OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector
OECD DDG Responsible Business Conduct	OECD Due Diligence Guidance for Responsible Business Conduct
OECD Guidelines	OECD Guidelines for Multinational Enterprises

OHCHR	UN Office of the High Commissioner for Human Rights
OPEC	Organisation of Petroleum Exporting Countries
OTC	Over the Counter
p.	page
PIL	Private International Law
pp.	pages
PL	Projeto de Lei (Brazilian Draft of Law)
PNM	Plano Nacional de Mineração 2030 (Brazilian National Mining Plan)
ProgRes	German Resource Efficiency Programme
RBA	Responsible Business Alliance
Rec.	Recital
RMAP	Responsible Minerals Assurance Process
RMI	Responsible Minerals Initiative
RSN	Responsible Sourcing Network
S.	Sentence
SDG	UN Sustainable Development Goals
SEC	US Securities Exchange Commission
SHFE	Shanghai Futures Exchange
SITC	Standard International Trade Classification
SME	Small and Medium-sized Enterprise
UK	United Kingdom
UK NAP UNGP	UK NAP Good Business
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Program
UNGP	UN Guiding Principles on Business and Human Rights
UN-Habitat	UN Human Settlement Programme
UN-Norms	UN Norms on the Responsibility of Transnational Corporations and Other Business Enterprises with regard to Human Rights
UN SDG	UN Sustainable Development Goals
UNTS	United Nations Treaty Series
US	United States of America
VPSHR	Voluntary Principles on Security and Human Rights
WFTO	World Fair Trade Organisation
WTO	World Trade Organisation

List of Statutes and Agreements

Agenda 21	United Nations Conference on Environment & Development, Rio de Janeiro, Brazil, 3 to 14 June 1992, Agenda 21
AktG	Aktiengesetz (Stock Corporation Act)
AMSA	Australian Modern Slavery Act 2018
ArbSchG	Arbeitsschutzgesetz (Protection of Labour Act)
ASR	UN Draft Articles on Responsibility of States for Internationally Wrongful Acts
ATG	Gesetz über die friedliche Verwendung der Kernenergie und den Schutz gegen ihre Gefahren (Atomic Energy Act)
Atlantic Charter	Atlantic Charter, Joint Declaration of President Roosevelt and Prime Minister Churchill from 1941
ATS	US-American Tort Statute
BauGB	Baugesetzbuch (Building Law Code)
BBerg	Bundesberggesetz (Federal Mining Code)
BBodSchG	Gesetz zum Schutz vor schädlichen Bodenveränderungen und zur Sanierung von Altlasten (Federal Soil Protection Act)
BGB	Bürgerliches Gesetzbuch (Civil Code)
BNatSchG	Bundesnaturschutzgesetz (National Nature Conservation Act)
Brussels Convention	1968 Brussels Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters
Brussels I	Council Regulation (EC) No 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters
Brussels I Recast	Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast), OJEU L 351/1, 20 December 2012
CEA	US-American Commodity Exchange Act
CETA	Comprehensive Economic and Trade Agreement between Canada and the EU and its Member States
CISG	UN Convention on Contracts for the International Sale of Goods
Code Civil	Code Civil (French Civil Code)
Code de Commerce	Code de Commerce (French Commercial Code)
Conflict Minerals Regulation	Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas

CSR Directive	Directive 2014/95/EU of the European Parliament and of Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups
CSR-RUG	Gesetz zur Stärkung der nichtfinanziellen Berichterstattung der Unternehmen in ihren Lage- und Konzernberichten (CSR-Richtlinie-Umsetzungsgesetz) (Implementation Act of the CSR Directive)
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act
DR-CAFTA	Dominican Republic-Central America Free Trade Agreement
DRV	Deutscher Rahmenvertrag (German Master Agreement)
DSU	WTO Understanding on Rules and Procedures Governing the Settlement of Disputes
EMA	European Master Agreement
ENWG	Energiewirtschaftsgesetz (Energy Industry Act)
EU-Chile Association Agreement	2002 EU-Chile Association Agreement
EU Council Directive 98/29/EC	EU Council Directive 98/29/EC on harmonisation of the main provisions concerning export credit insurance for transactions with medium and long-term cover, OJEU L 148/22
EU Council Regulation 806/2003/EC	Council Regulation (EC) No 806/2003 of 14 April 2003 adapting to Decision 1999/468/EC the provisions relating to committees which assist the Commission in the exercise of its implementing powers laid down in Council instruments adopted in accordance with the consultation procedure (qualified majority)
EU Directive 2005/29/EC	Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (Unfair Commercial Practices Directive)
EU Directive 2008/48/EC	Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC
EU Directive 2008/98/EC	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, OJEU L 312/3
EU Directive 2012/19/EU	EU Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment
EU Directive 2014/17/EU	Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/201
EU Directive 2014/65/EU	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast)

EU Eco-Basis Regulation	Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91 (EU Eco-Basis Regulation)
EU GSP Regulation	Regulation (EU) No 978/2012 of the European Parliament and of the Council of 25 October 2012 applying a scheme of generalised tariff preferences and repealing Council Regulation (EC) No 732/2008
EU Regulation (EC) 765/2008	Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93
EU Regulation (EU) No 1233/2011	EU Regulation 1233/2011 of the European Parliament and of the Council of November 2011 on applying specific guidelines in the field of officially supported export credits and repealing Council Decisions 2001/76/EC and 2001/77/EC
EU Regulation (EU) No 648/2012	Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories
EU Regulation (EU) No 600/2014	Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012
EU-Ukraine Association Agreement	2014 EU-Ukraine Association Agreement
European Charter	Charter of Fundamental Rights of the European Union, 2012/C 326/02
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GenG	Genossenschaftsgesetz (Cooperative Societies Act of the German Empire)
GenTG	Gesetz zur Regelung der Gentechnik (Act on Genetic Engineering)
GeoIDG	Geologiedatengesetz (Geological Data Act)
GG	Grundgesetz (Constitution)
GPA	Government Procurement Act
HaftPflG	Haftpflichtgesetz (Liability Act)
Havana Charter	Final Act and Related Documents of the UN Conference on Trade and Employment held at Havana, Cuba, from November 21, 1947 to March 24, 1948
HGB	Handelsgesetzbuch
ICESCR	International Covenant on Economic, Social and Cultural Rights
International Sugar Agreement	International Sugar Agreement of 1937
International Wheat Agreement	International Wheat Agreement 1971, United Nations, Treaty Series, UNTS Vol. 1146, A-1140
ISDA MA	International Swaps and Derivatives Association Master Agreement
ISO 26000:2010	ISO 26000:2010, Guidance on Social Responsibility
KLS	Bundes-Klimaschutzgesetz (Climate Change Protection Act)

Loi de Vigilance	Loi n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre in France (French Vigilance Act)
Loi Pacte	Loi n° 2019-486 du 22 mai 2019 relative à la croissance et la transformation des entreprises (French Act on Business Growth and Transformation)
LuftVG	Luftverkehrsgesetz (Air Transportation Act)
MarkenG	Markengesetz (Trademark Act)
PL 5.807/2013	Novo Marco Regulatório da Mineração (Brazilian New Mining Code)
MinRohSorgG	Mineralische-Rohstoffe-Sorgfaltspflichten-Gesetz (Mineral Resources Due Diligence Act)
NAWKG	Gesetz zur nachhaltigen Gestaltung globaler Wertschöpfungsketten (Sustainable Supply Chain Act Draft)
North German Federation	North German Federation's law for cooperative and industrial and provident societies Gesetz, betreffend die privatrechtliche Stellung der Erwerbs- und Wirtschafts-Genossenschaften (Law of the North German Federation concerning the private legal status of cooperative and industrial and provident societies)
OECD Arrangement	OECD Arrangement on Officially Supported Export Credits, TAD/PG(2020)1
OECD Common Approaches	Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence (The "Common Approaches Approaches"), TAD/ECG(2016)3
ÖISG	Gesetz über die Haftung und Entschädigung für Ölverschmutzungsschäden durch Seeschiffe (Liability and Compensation Act for Oil Pollution Damage by Seagoing Vessels)
OWiG	Ordnungswidrigkeitengesetz (Regulatory Offences Act)
ProdHaftG	Gesetz über die Haftung für fehlerhafte Produkte (Product Liability Act)
Prussian Tariff Act	Gesetz über den Zoll und die Verbrauchssteuer von ausländischen Waren und über den Verkehr zwischen den Provinzen des Staates 1818 (Prussian Tariff Act)
Rio-Declaration	Rio Declaration on Environment and Development 1992, A/CONF.151/26 (Vol. I)
ROG	Raumordnungsgesetz (Federal Spatial Planning Act)
Rome I Regulation	Regulation (EC) 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I)
Rome II Regulation	Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II)
SGB	Sozialgesetzbuch (Code of Social Law)
StGB	Strafgesetzbuch (Criminal Code)
StVG	Straßenverkehrsgesetz (Road Traffic Act)
StVollzG	Strafvollzugsgesetz (Law of Enforcement of Sentences)

Temporary Framework	Communication 2020/C 91 I/01 regarding the Temporary Framework for State aid measures to support the economy in the COVID-19 outbreak
TFEU	Treaty on the Functioning of the European Union (2012/C 326/1)
Trade Expansion Act	US Safeguarding National Security of the Trade Expansion Act 1962 (Trade Expansion Act)
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UK Companies Act 2006	UK Companies Act 2006, 2006 Chapter 46
UK Modern Slavery Act	UK Modern Slavery Act 2015, 2015 Chapter 30
UMAG	Gesetz zur Unternehmensintegrität und Modernisierung des Anfechtungsrechts (Corporate Integrity and Modernization of the Right of Avoidance Act)
UmweltHG	Umwelthaftungsgesetz (Environmental Liability Act)
UN Convention on Biological Diversity	8 th Convention on Biological Diversity, Rio de Janeiro, 5 June 1992
Union Customs Code	Regulation (EU) 952/2013 of 9 October 2013 laying down the Union Customs Code, OJEU L 269/68
USchadG	Gesetz über die Vermeidung und Sanierung von Umweltschäden (Environmental Damage Act)
UWG	Gesetz gegen unlauteren Wettbewerb (Law against Unfair Competition)
VAG	Gesetz über die Beaufsichtigung von Versicherungsunternehmen (Insurance Supervision Act)
VCLT	Vienna Convention on the Law of Treaties
Wet Zorgplicht Kinderarbeid	Wet van 24 oktober 2019 houdende de invoering van een zorgplicht ter voorkoming van de levering van goederen en diensten die met behulp van kinderarbeid tot stand zijn gekomen (Dutch Child Labour Due Diligence Act)
WHG	Gesetz zur Ordnung des Wasserhaushalts (Water Supply Regulation Act)
Wirtschafts-Genossenschaftsgesetz	Gesetz, betreffend die privatrechtliche Stellung der Erwerbs- und Wirtschafts-Genossenschaften von 1868 (Industrial and Provident Societies Act)

Chapter 1

Introduction

This introductory chapter provides a synopsis of the dissertation. First of all, section A illustrates the underlying motivation behind this thesis. Section B then highlights the core research issue and gives an overall outline of the analysis. Further on, section C classifies the methodological approach and positions this dissertation within a larger doctrinal context. Finally, section D defines the terms and scope of the respective raw materials relevant to this disquisition.

A. Motivation

Human rights violations, inadequate social and labour conditions, and environmental infringements occur as structural problems in many resource industry sectors.¹ A striking combination of adverse socio-environmental and human rights impacts is particularly apparent in the mining industry.

For instance, in 2015 a dam failure in Mariana, Brazil caused immense toxic contamination of essential rivers and their environs. Apart from the severe and large-scale environmental damage, even today many people still die in mine collapses. In 2016 and 2017, mineworkers were trapped and killed in mine accidents and collapses in Turkey. In February 2018, more than 900 mining workers were trapped for two days in the Beatrix gold mine in South Africa. In 2019, Brumadinho, Brazil and the DRC both experienced humanitarian and environmental catastrophes caused by dam failures. In China, mining accidents represent standard incidents; for example, as recently as December, 2020, twenty-three mineworkers died in a mining accident in the Diashuidong Mine in Chongqing, and in January 2021, nine mineworkers were killed in a mine collapse in Qixia.

¹ *Vedanta Resources PLC and others v Lungowe and others* [2019] UKSC 20; *Okpabi & CRS v Royal Dutch Shell Plc* [2018] EWCA Civ 191; *Nevsun Resources Ltd. v Araya*, 2020 SCC 5; *AAA and others v Unilever Plc and Unilever Tea Kenya Limited* [2018] EWCA Civ 1532; LG Dortmund, Judgement of 10.1.2019 – 7 O 95/15; see also *Domej*, in Reinisch/Hobe/Kieninger/Peters, *Unternehmensverantwortung*, 229 (233 f.); *Görger*, *Unternehmerische Haftung*, p. 66 ff.; *Herdegen*, *Internationales Wirtschaftsrecht*, §4, Rec. 64; *Hofmann/Schleper/Blome*, *Journal of Business Ethics* 147 (2018), 115 (118); *Saage-Maaß/Hackmack*, *Comply* 2016, 66 (66 ff.).

Unfortunately, the list of environmental and social catastrophes in raw materials extraction and trade is much longer. In the extractive industry, substantial environmental and human rights infringements, such as forced resettlement and repression, water pollution and river contamination and general adverse environmental impacts such as dust nuisances or blasting occur regularly.² Especially in the artisanal and small-scale mining (ASM) sector, degrading workplace conditions and environmental pollution in the form of releases of mercury are common.

Mines also frequently collapse, and retention basins or dams fail. The humanitarian, social and environmental damage these events generate is usually disastrous and irreversible. It is mostly the resource exporting countries of the Global South that experience severe economic and social effects of the so-called resource curse.³ Frequently, labour law infringements indicate concurrent corporate deficiencies in other areas.⁴ In the raw materials sector, this assumption is applicable to environmental and human rights violations and to child labour or modern slavery. Mine collapses and failures of dams or retention basins caused by deficient safety and workplace standards generate adverse socio-environmental and human rights impacts. Such incidents continuously occur in the extraction, trade and manufacture of raw materials.

Moreover, women and children are significantly affected by human rights violations.⁵ The extractive industry faces structural problems concerning socio-environmental and human rights violations.⁶ The digital progress of the twenty-first century and its corresponding dependence on raw materials has gone hand in hand with scandalous socio-environmental and human rights standards in the extractive industry.

In the textiles industry, the fire and collapse of the Rana Plaza textile factory in Dhaka, Bangladesh on April 24, 2013, stands out as an industrial and workplace disaster that subsequently led to substantial improvements in international labour and safety standards.⁷ For instance, the Accord on Fire and Building

² See also *Verdonck*, HRILD (1) 2015, 34 (37 f.).

³ See further *WTO*, World Trade Report 2010, p. 91 ff.; *Auty*, in Halvorsen/Layton, Handbook on the Economics of Natural Resources, 140 (144 f.); *Burchardt/Peters*, in Peters/Burchardt, Umwelt und Entwicklung, 33 (50 ff.); *Hattendorff*, The Resource Curse Revisited, p. 25 ff.; *Hilpert/Mildner*, in idem, Nationale Alleingänge oder internationale Kooperation, 11 (13); *Müller-Koné/Croll*, in Hartard/Liebert, Competition and Conflicts on Resource Use, 39 (41 ff.); *UN ESCAP*, Responsible Business and Sustainable Investment in the Natural Resources Sector in Asia and the Pacific, p. 30 ff.

⁴ *Blüthner*, Welthandel und Menschenrechte, p. 462; see also *Simons/Macklin*, The Governance Gap, p. 22 ff.

⁵ *Huck*, EuZW 2018, 266 (267); *Hofmann/Schleper/Blome*, Journal of Business Ethics (147) 2018, 115 (119).

⁶ *Hofmann/Schleper/Blome*, Journal of Business Ethics 147 (2018), 115 (118 f.); *Kieninger*, IPRax 2020, 60 (60 f.).

⁷ See further *Görge*n, Unternehmerische Haftung, p. 110; *Heinlein*, NZA 2018, 276

Safety in Bangladesh implemented general monitoring obligations. Moreover, the textiles industry and civil society founded various initiatives.⁸ The Rana Plaza incident thus had a stimulating effect on the implementation of recognised labour law standards. Nonetheless, substantial socio-environmental challenges have prevailed overall in the resource sector, particularly in the extractive industries.

These severe harms stand in contrast to the often fruitless pursuit of compensation claims in international litigation. Frequently, the legal and judicial systems in the countries where the damage occurred do not provide sufficient legal infrastructure or remedies. Consequently, injured parties seek compensation abroad. There, however, challenges of establishing jurisdiction and a substantive basis for any claims or a lack of proficiency in the foreign legal system frequently impedes the success of attempts to enforce rights through international litigation. And so the severe socio-environmental and human rights damage is accompanied by a severe and ethically unjustifiable gap in the availability of compensation and other legal remedies.

Raw materials governance has, in a long tradition, been influenced by historic, economic and political determinants. Constant socio-environmental infringements, however, clearly indicate that the current raw materials governance approaches are in need of amendment. In this respect, a prospective governance concept of responsible trading in raw materials appears as a potential game-changer. To date, no general or legal treatise has taken up the issue of responsible trading as such. As a consequence, no comprehensive analysis of responsible trading is available.

In contrast, while there has been research into responsible trading, its status is inadequate. But European Union (EU) organs have been referring to responsible trading in press releases and legal documents anyway, though, notably, without referring to a particular conception of responsible trade. In the end, however, legal scholarship thrives and depends on current interdisciplinary debates such as these.

That is why this thesis thoroughly analyses the concept of responsible trading by applying it to international trade in raw materials. Also, the following conceptualisation of responsible trading refers to national and international governance challenges in the raw materials sector. Therefore, this thesis addresses the challenges of legal regulation and enforcement, particularly at the private law level. This also raises the question whether the governance concept of responsible trading is suited to bridge the legal remedy and compensation gap.

Finally, this thesis raises the overriding question of whether the premise of free trade is the determining factor in international trade, or whether responsible

(277 f.); *Kaleck/Saage-Maaß*, Unternehmen vor Gericht, p. 99 ff.; *Rühmkorf*, Corporate Social Responsibility, p. 213 ff.; *Thiede/Bell*, RIW 2017, 263 (264).

⁸ See further *Ehrlich*, Politics of Fair Trade, p. 5 ff.

trading provides trading opportunities inside or apart from the WTO regime. Likewise, this thesis questions whether the principle of responsible trading is an adequate legal concept by which to adjust the current free trade system and legal constitution of trade relations. In this respect, the potential and suitability of responsible trading as an overriding doctrine of international trade is evaluated. Accordingly, this thesis questions the general competence and suitability of international trade law as a means of regulating and enforcing responsible trading objectives.

Thereby, this work aims to fill the current doctrinal gap. Overall, this thesis contributes to a modern understanding of international trade law and a responsible and welfare-oriented supply of raw materials. The following presentation is explicitly not exhaustive but is limited instead to international trade in raw materials.

B. Research Issue and Synopsis

The overall research is dedicated to analysing the impact of responsible trading in the international raw materials trade and to evaluating thereby the potentially overriding role of foreign trade law.

Therefore, this thesis has four aims: first, to illustrate the current frame of international trade in raw materials; second, to analyse good raw materials governance and strategies as applied; third, to conceptualise the governance concept of responsible trading in raw materials; and fourth, to illustrate and evaluate both general and specifically German legal enforcement mechanisms. The approach to enforcing responsible trading in raw materials particularly takes private law enforcement into account.

To this end, this analysis begins by illustrating current common practices of international trade in raw materials in chapter 2, highlighting the historical, economic and regulative fundamentals of international trade in raw materials. In general, international trade law and the law of commercial contracts are hybrids, each incorporating private and public law elements.⁹ Likewise, a synthesis of raw materials governance is provided; in particular, focus is placed on foreign trade supply regulation as the decisive tool of raw materials governance.

Subsequently, chapter 3 presents the challenges of regulating and establishing an environmentally and socially sustainable international trade in raw materials by illustrating both the international and the German approaches to good raw materials guidance, governance and strategies. This chapter therefore con-

⁹ *Paschke*, in *Stober/Paschke*, *Deutsches und Internationales Wirtschaftsrecht*, C § 1, p. 64, Rec. 93.

siders the current international soft law of good raw materials guidance, global good raw materials governance and raw materials trading strategies. Particular emphasis is given to good raw materials governance in the EU and to the German approach.

The following chapter, chapter 4, generally conceptualises a future environmentally and socially sustainable governance concept of trade in raw materials through responsible trading. The concept of responsible trading is elaborated abstractly. The chapter draws on a semantics of responsibility based on legal and philosophical approaches and lays out various related principles. It also provides a definition of responsible trading in raw materials.

Finally, chapter 4 also highlights a legal approach to responsible trading in raw materials. It discusses general enforcement possibilities and means of integrating responsible trading into mineral supply chains. Overall, this chapter examines whether responsible trading is suited to incentivise and enhance international trade in raw materials from a legal perspective. Thus, the dissertation aims at analysing the effectiveness and impact of current good raw materials governance and legal enforcement possibilities. In this respect, this dissertation critically appraises the aforementioned German approach to responsible trading in raw materials, addressing questions of legal compensation, good raw materials regulation, private law compliance and international raw materials litigation. In this respect, procedural challenges of raw materials litigation are discussed, considering in particular the options for pursuing private legal remedies. Special emphasis is placed on socio-environmental and human rights due diligence in mineral supply chains. Finally, the findings inform an evaluation of the status quo of responsible trading in raw materials.

Chapter 5 concludes with a summary and final remarks.

All in all, this dissertation demonstrates the fundamentals of the concept of responsible trading and the status quo of responsible trading in raw materials. In this regard, this thesis questions what is being done to implement and enforce responsible trading in raw materials and whether it appears appropriate in order to achieve the objectives envisaged by responsible trading in raw materials.

C. *Methods*

Methodologically, this doctoral thesis focuses on a theoretical and abstract analysis of responsible trading in raw materials. Accordingly, this thesis pursues an abstract systematisation of the general concept of responsible trading and the elaboration of precise possibilities for its implementation and enforcement. At first take, the coverage seems broad.

However, it is merely broad regarding the analysis of responsible trading as a proper trading concept. Interdisciplinary aspects of law, economics, humanities

and political and natural sciences are considered for the purpose of comprehending responsible trading's overall bent. To thoroughly integrate trade in raw materials with responsible trading, this dissertation applies a systematic analysis based on international trade relations concerning commodities produced by the metals and minerals extractive industries. This thesis illustrates and compares the German with the international guidance and governance approach to the raw materials trade. In turn, the analysis of potential enforcement possibilities pursues a narrow coverage. Hence, in thoroughly analysing responsible trading the overall methodology is positioned as normative research.

D. Scope and Definition of Raw Materials

Section D is dedicated to understanding the scope of the notion of raw materials. Therefore, a definition and concretisation of the term "raw materials" is required.

Classifications of raw materials exist in large number. Naturally, the specific classification is highly dependent on the particular point of view. Starting from common parlance, there are notable further economic, social, scientific and political categorisations. Apart from that, chemical and geological classifications related to the place and quantity of mineral deposits are at hand. Scientific categorisations are plenty and, at the same time, precise.¹⁰

Not every approach, however, is illustrated. Approaches outside the scope of the study are explicitly not considered. Nonetheless, the examined approaches target considerably different objects and, in part, prove to be useless or even misleading for understanding "raw materials" in legal terms. That is why this thesis requires such a thorough determination of the scope and definition of the term. Accordingly, subsections I and II illustrate the use and interpretation of "raw materials" both in a broader and a narrower sense. In particular, raw materials are distinguished from commodities and natural resources. Further on, the terms "critical raw materials", "conflict minerals" and "rare earth materials" will be delineated. Finally, subsection III provides a definition suited to the overall scope of this thesis.

I. Raw Materials in a Wider Sense

The coverage of the term "raw materials" is broad. Frequently, raw materials are referred to as either *natural resources* or *commodities* even though both words have widely accepted specific meanings. These designations relate to

¹⁰ A precise overview is available in Dewulf/Mancini/Blengini/Sala/Latunussa/Pennington, *Journal of Industrial Ecology* 19 (2015), 963 (965).

raw materials as understood in a wider sense. Understood broadly, “resources” as such might mean anything of value, e. g., knowledge, time, education and so on.¹¹

However, the common term “resource” derives from the Latin verb *resurgere*, meaning to restore, revive or arise out of something.¹² Hence, the term’s origin as such does not imply any strict reference to raw materials.¹³ In the political sciences, the definition varies depending on the analysed social context, and it often leads to spatial-theoretical classifications.¹⁴ In contrast, what counts as a *resource* is also determined in relation to the extreme mobility of raw materials, so resources in the end are defined depending on their application and integration into economic processes. Moreover, these economic processes are set in a historical context and in changes in sociological needs.¹⁵ Notably, in geoscience, *resources* are classified either as resources available for economic extraction and segregation or as explored reserves or identified deposits suitable for extraction.¹⁶

Furthermore, in the sense of environmental material, the general term *natural resources* serves as a productive input for transforming the natural resource into a “raw material” in the sense of a basic good. Such *natural resources* include biotic and abiotic resources, energy and mineral resources, marine and submarine resources and many other kinds.¹⁷ Nowadays, even water or drinking water is considered a valuable resource and access to it even a human right.¹⁸ Thus, when “raw materials” is interpreted to mean “resources”, this indeed depicts an expansive interpretation.

As raw materials have always been both subjects and catalysts of trade and prosperity, they were simply referred to as *natural* or *primary commodities*.¹⁹

¹¹ Zepf/Achzet/Reller, in Hartard/Liebert, Competition and Conflicts on Resource Use, 259 (260).

¹² Note the conjunction with the French term *resoudre*.

¹³ Zepf/Achzet/Reller, in Hartard/Liebert, Competition and Conflicts on Resource Use, 259 (259 f.).

¹⁴ Among others see Bringezu, Ressourcennutzung in Wirtschaftsräumen, p. 23 ff., p. 100 ff.; accord Czierpka/Oerters/Thorade, in Czierpka/Oerters/Thorade, Regions, Industries and Heritage, 3 (3 ff.); Fehrmann, Effektivität interregionaler Kooperation; Thorade, in Czierpka/Oerters/Thorade, 73 (73 ff.).

¹⁵ Haumann/Thorade, in Ziegler, Rohstoffräume, 1 (3).

¹⁶ See Pelikahn, Internationale Rohstoffabkommen, p. 46.

¹⁷ On the classification on materials’ flows see Bringezu, Ressourcennutzung in Wirtschaftsräumen, p. 74 ff.

¹⁸ See further OHCHR/UN-Habitat/WTO, Fact Sheet 35, p. 3 ff.; Grafton/Wheeler, in Halvorsen/Layton, Handbook on the Economics of Natural Resources, 401 (403 ff.); Bringezu, Ressourcennutzung in Wirtschaftsräumen, p. 81, 90 ff.; Barbier/Markandya, New Blueprint for a Green Economy, p. 26 ff.; Loperena, FS Rehbinder, 433 (449 f.).

¹⁹ Clark/Lesourd/Thiéblemont, International Commodity Trading, p. 2; Stuhlmacher/Sessel-Zsebik, in Zerey, Finanzderivate, § 11, p. 286, Rec. 12.

Inversely, one could also argue that all commodities are traceable to natural resources and that this fact justifies the application of a wide definition.²⁰ The addition of *primary* before “commodities” certainly refers to the unprocessed status of the materials.²¹ Originating from the Latin *commodum*, meaning “convenience, benefit or interest”, *commodities* refers to all goods that can possibly be traded and that possess standard qualities.²² The term’s usage was shaped in particular by the economic sciences. The seemingly most popular definitions are found in the 2005 ISDA Commodity Definitions. However, the definitions used are to define the commodity’s price and hence do not offer any precise definition of commodities. The document contains a list of the most frequent and widespread globally traded commodities.²³

At the same time, *natural commodities* are referred to as non-durable intermediate inputs, as opposed to durable inputs. These productive inputs are used for transformation into *secondary commodities*.²⁴ The first part of transforming goods lies in obtaining natural commodities. In general, the process of transforming something from a natural commodity into a manufactured commodity only requires a few steps.

Natural commodities are basically of no particular use for consumers in their immediate status after being extracted. Therefore, at least a second processing stage is necessary to produce a good convenient for consumers and trade even though the quantity of steps in the whole process differs by specific material. Starting out as *basic commodities*, natural commodities are subsequently processed into primary commodities, which in the end are also designated as *intermediate goods*. Intermediate goods are goods produced from natural resources after one or two agricultural or industrial transformation steps.²⁵ These *secondary goods* can be referred to as *manufactured or (high-) technological goods*. Finally, this differentiation is dependent on the specific raw material at stake.

Traditional classifications into energy commodities, mineral commodities, agricultural commodities, textile commodities or marine commodities are still in use. Other goods have only recently been commoditised, such as electricity,²⁶

²⁰ See among others *Dasgupta*, in idem, Selected Papers II, 346 (346 ff.).

²¹ See also *Radetzki/Wårell*, Handbook of Primary Commodities, p. 29 ff.

²² *Clark/Lesourd/Thiéblemont*, International Commodity Trading, p. 3 ff.; *Stuhlmacher/Sessel-Zsebik*, in Zerey, Finanzderivate, § 11, p. 286, Rec. 12; *Geman*, Commodities and Commodity Derivatives, p. 333 f.

²³ Notably, the 2005 ISDA Commodity Definitions differentiate between agricultural products, energy, freight, metals and paper, however, the list is not exclusive, see Section 7.1, Sub-Annex A, p. 75 ff. 2005 ISDA Commodity Definitions.

²⁴ *Clark/Lesourd/Thiéblemont*, International Commodity Trading, p. 2.

²⁵ *Clark/Lesourd/Thiéblemont*, International Commodity Trading, p. 3.

²⁶ *Stuhlmacher/Sessel-Zsebik*, in Zerey, Finanzderivate, § 11, p. 286, Rec. 15 ff.

telecommunication services,²⁷ emissions certificates and allowances,²⁸ weather derivatives²⁹ or a carrier's cargo rates^{30,31}

In addition to that, industrial and agricultural products can be divided into *hard* and *soft commodities*.³² *Hard commodities* refer to finite resources whose deposits will soon be running low or whose extraction is no longer profitable. Such hard-energetic commodities are, for instance, crude and fuel oil, diesel, unleaded gasoline and natural gas. Hard commodities in the sense of “noble metals” are gold, platinum, palladium or silver and industrial metals such as aluminium, copper, lead, nickel, tin or zinc.³³

Note that energy is listed apart from commodities even though the term includes various raw materials. First of all, energy can be understood as a physical measure with the potential to create power. Still, the German legal definition of energy according to § 3 No. 14 Energiewirtschaftsgesetz (EnWG) only includes electricity and natural gas if they are used in a performance-bound energy supply. Hence, the EnWG states a narrow definition of the term “energy” that, in practice, does not include oil, biomass or carbon dioxide and only partially includes coal.³⁴ Hence, the following discussion excludes materials considered as energy.

Soft commodities on the other hand describes renewable and live resources.³⁵ Hence, soft commodities are agricultural raw materials traded on the stock exchanges. Such materials are coffee, grain,³⁶ cotton, sugar or livestock such as live cattle or lean hogs.³⁷ Raw materials are arranged either as physical raw materials at the spot markets in the sense of being a capital asset or their value is

²⁷ See *Clark/Lesourd/Thiéblemont*, International Commodity Trading, p. 5 f.

²⁸ See *Barbier/Markandya*, New Blueprint for a Green Economy, p. 122 f.; *Stuhlmacher/Sessel-Zsebik*, in *Zerey*, Finanzderivate, § 11, p. 292, Rec. 36 ff.; Emission certificates are traded at the European Energy Exchange in Leipzig and at the European Climate Exchange, see <<https://www.boerse.de/rohstoffe/Co2-Emissionsrechte/XC000A0C4KJ2>>; <<http://www.finanzen.net/rohstoffe/co2-emissionsrechte>>.

²⁹ *Jahn/Fried*, in *Stürner/Eidenmüller/Schoppmeyer*, MüKo InsO, § 104, Rec. 134; *Stuhlmacher/Sessel-Zsebik*, in *Zerey*, Finanzderivate, § 11, p. 301 ff., Rec. 67 ff.; *Zenke/Dessau*, in *Theobald/Kühling*, Energierecht, 140, Rec. 27 ff.; see also Sub-Annex C.1, p. 345 of 2005 ISDA Commodity Definitions.

³⁰ On the necessity of cargo rates for European trade see CJEU, Judgement of 12.10.2016 – C-92/15, in *RdTW* 2016, 411 (411 f.); on German maritime cargo law see *Paschke*, in *Oetker*, HGB, Vor § 476, Rec. 2 ff.

³¹ *Stuhlmacher/Sessel-Zsebik*, in *Zerey*, Finanzderivate, § 11, p. 286, Rec. 13 f.; <<https://www.boerse.de/grundlagen/rohstoffe/Rohstoff-Klassifizierung-19>>.

³² See further *Geman*, Commodities and Commodity Derivatives, p. 153 ff.

³³ *Geman*, Commodities and Commodity Derivatives, p. 171.

³⁴ *Stuhlmacher/Sessel-Zsebik*, in *Zerey*, Finanzderivate, § 11, p. 285, Rec. 11.

³⁵ See further *Bringezu*, Ressourcennutzung in Wirtschaftsräumen, p. 61 ff.

³⁶ Grain i. a. includes corn, soybeans, wheat, soybean oil and meal.

³⁷ <<https://www.boerse.de/grundlagen/rohstoffe/Rohstoff-Klassifizierung-19>>.

represented in the shares of a company or a fund operating on the raw materials markets.³⁸

The most famous reference to raw materials in the sense of their being commodities derives from the Havana Charter of 1948. Today, the term “raw material” is usually defined by Art. 56 (1) Havana Charter.³⁹ However, the wording of Art. 56 (1) Havana Charter states that

“the term ‘primary commodity’ means any product of farm, forest or fishery or any mineral, in its natural form or which has undergone such processing as is customarily required to prepare it for marketing in substantial volume in international trade.”

Hence, the Havana Charter does not define the term “raw material”, even though this section is referred to as the historical definition and the basis for contemporary perception. However, in the end, the provision merely states that minerals are considered to be primary commodities. The Havana Charter does not provide any further content. Therefore, the definition in Art. 56 (1) Havana Charter proves unsuitable as a precise distinction.

Nonetheless, this shows that the term “raw material” is generally used as a synonym for a wide range of commodities. Likewise, in times of globalisation, both the variety and quantity have risen significantly of “commodities” in the sense of them being primary products. The expansive interpretation becomes further apparent through the various components of commodity indexes. In 2017, the Bloomberg Commodity Index (BCOM) listed industrial metals like copper, aluminium, zinc and nickel or precious metals such as gold or silver next to other components like energy, grains, softs and livestock.⁴⁰ Other indexes only list the categories of softs, metals and energy.⁴¹

Thus, the term “raw material” is to be understood as a synonym for a wide range of commodities in the broader sense. As shown, the illustrated expansive interpretation of commodities does not tease apart the term *raw* from the term *material* in the sense of a good or commodity.⁴² Instead, the expansive interpretation refers to raw materials as a material like any other.⁴³ However, a broad understanding of raw materials expands the focus too much and is therefore not well suited to the following discussion.

³⁸ See *Stuhlmacher/Sessel-Zsebik*, in Zerey, *Finanzderivate*, § 11, p. 285, Rec. 9 f.

³⁹ See *Weiss*, in Tietje, *Internationales Wirtschaftsrecht*, § 6, p. 297, Rec. 2; accord *Klett*, *Chancen und Risiken von Rohstoffinvestments*, p. 7.

⁴⁰ See <<https://www.bloomberg.com/company/announcements/2017-target-weights-for-the-bloomberg-commodity-index-announced/>>.

⁴¹ *Stuhlmacher/Sessel-Zsebik*, in Zerey, *Finanzderivate*, § 11, p. 285, Rec. 5.

⁴² Transferred to German, this approach equalised the terms “Rohstoff” and “Ware”.

⁴³ See also *Eurostat*, *EW-MFA*, p. 9, Rec. 1; *Bringezu*, *Towards Sustainable Resource Management in the European Union*, p. 14 ff.

Index

- 3TG *see* conflict minerals
- advertising 380
 - cause-related 373
 - company-related 374
 - product-related 372
 - socio-environmental 371
- Anglo-Dutch phase 36–37
- artisanal and small-scale mining *see* mining
- Atlantic Charter 38–39, 45
- awarding criteria 185, 188, 190, 192, 194–198, 325–328
- auditing 70–80, 84, 88, 97, 130–136, 153, 196–199, 243, 255, 269, 272–275, 289, 370–371, 385, 392
- blood diamonds *see* raw materials
- Brazilian
 - national mining plan 114–115, 117–118
 - new mining code 115–118
 - raw materials market 111–113, 117–118
- Brussels sugar convention 36, 38
- buen vivir* 110, 118, 163, 252
- business ethics *see* ethics
- centres of raw materials competence 167–168, 172–173
- certification 59, 75, 128–129, 135, 167, 174, 185, 199–200, 256–259, 269, 272, 281, 368–371, 383, 394
- CETA 93–94
- Chinese
 - rare earth dispute 17, 21, 51–52, 103–104
 - raw materials strategy 102–106, 163, 178
 - raw materials market 15, 22, 23, 33, 51, 89, 102–106, 108, 112–113, 148
- climate
 - change 85, 191, 222, 229, 249–250, 262, 287, 330, 388,
 - smart mining *see* mining
- code of conduct 61, 63, 73, 240, 316, 352–353, 361, 363–364, 366–367, 374–375
- commercial practices
 - unfair 363–367
 - misleading 367–377
 - misleading by omission 377, 378
- commodities *see* raw materials
- common welfare terms 314–317, 327
- conflict free 82, 99
- conflict minerals *see* raw materials
- conflict of laws 300–311, 361
- contract design 312–328, 382, 386, 393, 395
- contract for the benefit of third parties 352–353
- compensation 3, 5, 115–118, 219, 224, 251–252, 259, 264, 268, 276–277, 289, 328–329, 339, 355, 363, 381
 - gap 3, 300, 307, 311, 338, 354, 391
- corporate
 - citizenship 247–248, 258, 375, 384
 - liability *see* liability
 - statute 330–334
 - veil 155, 330, 337–339, 353, 384
- corporate social responsibility
 - Berlin Consensus 181
 - contemporary concept of 235, 238, 242–244, 246, 248, 293, 383
 - definition of 241–242
 - Directive 2014/95/EU 125–127, 152, 153, 382, 393

- German implementation 182–187, 344–350
- programs and initiatives 59, 74, 75, 293
- reporting 187, 344–350, 354
- and soft law 68, 163
- and voluntary regulation 200, 258, 321, 348, 380, 382
- critical and strategic materials *see* raw materials
- damages 183, 276, 294–295, 306, 313, 327, 393
 - and evidence of liability causation 286–287
 - determination and calculation of 287–289
 - liability for 161, 219, 276, 294–295, 313–314, 329–330, 333, 336, 353, 356, 382
- DCGK 269, 333, 349–351, 366
- diamonds *see* raw materials
- direct foreign ownership 46, 53, 55
- disclosure 15, 27, 70, 77, 99, 122, 126, 127, 156, 194, 201, 258, 353–354, 360
 - obligations 27, 97, 99, 130–136, 139, 158, 164, 343–350, 382, 393
- Dodd-Frank Act 96–102, 128–129, 137–138, 163, 199–200
- downstream *see* operators
- due diligence
 - EU conflict minerals regulation 2017/821 130–138
 - German supply chain act 182–187
 - mineral supply chain 81–89, 175–176, 342–355
 - OECD DDG 14, 19, 76–80, 84–85, 129–132, 138–153, 175–176, 272, 343–344
 - schemes 130, 132, 137, 139, 143, 200, 389
- ecological
 - economics 249–250, 258–259
 - ethics 249–250, 258–259
- economic union 338–339, 353
- EITI 60, 71–72, 90, 96, 100, 114, 166, 170, 171, 176, 195, 270, 274
- Ehrbare Kaufmann* 349–350
- electronic trade 24–27, 32, 33, 289–290
- enforcement 264–294
 - legal 274–289
 - German private-level 295–383
- enterprise liability *see* liability
- environmental
 - damage 1–2, 50, 86, 107, 110–117, 137, 151, 185, 200, 225, 244, 250, 264, 277, 286–289, 303–311, 328–330, 353, 382
 - liability 225, 277, 287, 328–330
 - social governance VII, 57, 58–88, 93–95, 119–164, 178–186, 249–250, 259–264
- Equator Principles 73, 326
- ethics
 - and business 227, 230–241, 248, 257–258,
 - and business practices 238–240
 - and morality 230–234
- EU
 - conflict minerals regulation 2017/821 78, 83, 127–153, 164, 176, 200, 250, 280, 29–295, 343, 354, 382–388, 393–395
 - raw materials initiative 123–125, 152, 169, 280, 291
 - raw materials strategy 119–153
- European charter *see* fundamental rights
- export
 - management 187–198, 386, 392–394
 - restrictions 43, 46, 49–54, 84, 92, 122
- extraction 2, 7, 9, 11–16, 19–21, 30–38, 50, 53, 82, 84, 103, 107–108, 112–118, 125, 137, 146, 151, 163, 170–171, 189, 262–263, 269, 290–292, 319–321, 353–356, 388–391, 396
 - conflict free 82–84
- extractivism 107
 - neo- 108–109
 - post- 109–110
- fair trade 151, 181, 252–259, 262, 364, 390
- foreign mining *see* mining
- foreign trade VII, 4, 21, 45–55, 92, 108, 120–122, 152, 163, 165, 167, 194, 196, 328, 381

- free trade 3, 4, 22, 35–36, 38, 43–45, 47, 56, 238–240, 254, 387, 391, 394
- free, prior, and informed consent 292
- fundamental rights 62, 88, 93, 158, 261, 309, 315–316, 329, 362
- GATT
 - 1947 38–42
 - 1994 42–43, 45, 49, 52, 100–101, 139–150, 254, 291
- general terms and conditions 191, 312–315, 320–321, 328, 382
- global reporting initiative 70–71
- good faith 80, 143, 261, 316–317, 339, 341
- governance
 - gap 3, 58, 69, 87, 88, 89, 98, 107, 153, 164, 197, 201, 244, 265–269, 302, 317, 381–389, 394–396
 - good 44–247
 - concept of responsible trading 259–294, 389–396
- hard law 59, 64, 82, 89, 156, 163, 200–201, 242–243, 261, 275, 302, 316, 389, 392,
- Havana Charter 10, 38–39, 45
- Hermes covers 189–198
- human rights
 - liability 356–358
 - violations 1–2, 64–68, 156, 164, 196, 200, 277–279, 288, 297, 306–307, 323, 345–360, 377, 382–396
- illegal mining *see* mining
- ILO59, 62, 64, 69, 74–75, 79, 113, 122, 246, 255, 262, 379
- import restrictions *see* restrictions
- imputation 205–212, 216–219, 226–228, 278, 356
- jurisdiction 3, 139, 146–150, 155–162, 185, 211, 262, 277–278, 284, 296–313, 319, 322, 338, 340, 353, 373, 380–388, 391
- Kimberley process certification scheme 16, 60, 81–90, 123
- labels 59, 82, 254–259, 275, 281, 368–383, 394
- labour
 - child 2, 20, 79, 122, 151, 157, 160–161, 181, 255
 - conditions 1, 103, 255, 359
 - contracts 305, 351
- liability
 - causation 286, 287, 289, 294
 - corporate VII, 247, 275, 277–279, 285, 328, 330–386, 391–394
 - enterprise 338, 340–342
 - environmental 225–228, 277, 287, 295–296, 300, 328–330, 382–383
 - torts 158, 276, 295, 298, 300, 303–307, 310, 322, 329, 331, 338, 340, 341, 347, 350, 352, 354, 355–361, 383, 393
 - state 221, 278, 279, 294
 - vicarious 358–361
- licencing 46, 52, 53, 55, 113, 115, 116
- Lieferkettensorgfaltspflichtengesetz see* supply chain
- litigation
 - enforcement 68, 159, 283–289
 - human rights 68, 159, 182, 285, 315
 - raw materials 3, 5, 287, 294–300, 304–311, 325, 351–360, 381, 386, 393
 - strategic 284–286, 288
- Loi de Vigilance see* national action plans
- minerals supply chain 19–21
 - due diligence 81–89
 - EU Conflict Minerals Regulation 2017/821 127–152
 - German sustainable supply chain act 180–187
- mining
 - artisanal and small-scale (ASM) 2, 83, 98–99, 108, 111, 114, 138, 199, 256, 291–292
 - climate smart 174
 - foreign 46, 50, 54, 55, 60, 73, 105, 106, 167
 - illegal 15, 103, 108, 112–115, 138, 163, 391, 395
 - large-scale 291, 292
 - and mercury 2, 113, 183

- responsible 84
- smart 167
- monitoring 3, 35–38, 55, 74–75, 79, 88–89, 98, 112–113, 127, 133–134, 149, 154–155, 160, 167, 173, 176, 179–181, 186–187, 193, 196, 243, 155, 271, 290, 293, 318, 325, 332–335, 358–359, 371, 378–380, 392–393
- morality 207, 208, 216, 230–236, 240, 261, 314, 316
- national action plan 153–164
 - UK 154–157
 - *Loi de Vigilance* 157–160
 - *Wet Zorgplicht Kinderarbeid* 160–161
 - German 178–187
- nationalised corporations 27, 28, 33, 46, 53, 55, 108, 111, 166
- non-financial reporting 126–127, 152–153, 158–159, 243–244, 258, 344–349, 354, 383, 386, 393,
- non-governmental organisations 62, 70, 80, 93, 185, 250, 270–274, 366
- normative
 - effect 59, 68, 70, 102, 225, 226, 262, 354, 394
 - ethics 231, 245
 - evaluation 212, 214, 225, 226, 391
 - legitimacy 80, 201, 288
 - value 59, 70, 78, 87, 94, 102, 150, 162, 201, 260, 273, 389
- OECD
 - due diligence 14, 19, 76–80, 84–85, 129–132, 138–153, 175–176, 272, 343–344
 - guidelines 69, 75–80, 85, 130, 132, 138, 285, 367
 - common approaches 76–77, 169
- operators
 - economic 80, 95, 129, 131, 280, 283, 289, 291–292, 371, 378, 385, 386, 392
 - mineral 86, 99, 167, 256
 - upstream and downstream 131–132, 134–137
- ordre public* 303, 307, 308
- overcapacity 31, 90, 91–92, 105
- overriding mandatory provisions 159, 185, 303, 308–309, 383
- Paris Sugar Convention 35–36, 38
- price
 - quotation 12, 23, 29–34
 - volatility 24–25, 27–29, 31–34, 51–56
- protectionism 35–36, 39, 47, 254
- procurement 156, 160, 268, 275, 279–283, 294
 - EU 279–281, 392–394
 - German 168, 179, 188, 348, 368, 385, 392–394
- punitive tariffs *see* tariff
- rare earth materials *see* raw materials
- raw materials
 - 3TG 11, 13–16, 77, 78, 96, 127, 129, 133, 137, 140, 343
 - conflict minerals 14–16, 77–78, 81–84, 92, 96–100, 123, 127–138, 150–152, 176
 - contracts 56, 312, 317–320, 323, 324, 387
 - critical and strategic materials 11–14, 26, 50, 106, 172
 - definition of 6–18, 41–42
 - diamonds 14, 16, 59, 81, 82, 85, 123
 - governance 34–55, 89–201, 259–264, 289–294, 342–355
 - markets 21–34, 36, 38, 51–56, 61, 83, 89, 102–104, 111–120, 173, 265
 - rare earth 13, 16, 17, 21, 31, 50, 51, 104, 180
 - responsible trading in 259–264, 389–391
 - strategy 96–153, 165–201
 - steel and aluminium 96, 100–101
 - trade in 19–56, 387–388
- recycling 11, 119, 125, 131, 134, 169, 263, 267, 271
 - resource efficiency 90, 91, 119, 123–125, 162, 166, 175
 - ProgRes 169, 175
 - and substitution 124–125, 162, 169, 174–175, 177
- refiner *see* smelter

- remedy 3, 79, 81, 135, 136, 157, 179, 270, 283, 284, 288, 300, 321, 342, 351, 363, 384, 393, 395
 - principles 65–68, 154–155, 159–161, 184, 187, 267
 - gap 311, 338, 381, 391
- reporting *see* non-financial reporting
- resource
 - curse 2, 107, 113, 251, 263,
 - efficiency *see* recycling
 - energy 50, 71–72
 - natural 6–9, 11–12, 16, 21, 28, 36, 37, 39–43, 49, 61, 71–72, 90–92, 102, 106, 147–148, 252, 306, 320, 324
 - mineral *see* raw materials
- responsibility
 - general 209–214
 - legal 214–229
 - semantics 204–209
- responsible sourcing 81–87, 128, 134, 136, 151, 152, 200, 263, 290, 291
- responsible trading
 - definition of 259–264, 389–396
 - differentiation 229–259
 - enforcement 264–294, 391–396
 - German enforcement 295–386, 391–394
 - governance concept 203–383, 389–396
 - in raw materials 81–87, 128, 134, 136, 151, 152, 200, 262–264, 290, 291, 389–396
- restrictions 13, 41, 43–54, 92, 106, 122, 143, 148, 150–151, 252, 303, 352, 387
- risk management 73, 81, 86, 132–133, 136, 139, 183, 186, 270, 294, 333, 344–346, 382, 386, 393
- smelter 83, 385
 - and refiner 20, 84, 97, 129, 130, 131, 134, 135, 137, 292
- soft law 57–89, 139, 141, 150, 156, 162–163, 200–201, 245, 248, 268, 274, 281–285, 302, 315, 316, 343, 354, 355, 357, 385, 386, 389, 392–394
- stabilisation clauses 323–325, 328
- strategic litigation 284–288
- supply chain
 - Act (SorgGE/LkSG) VII, 180–187, 197, 355, 393–394
 - due diligence 78, 81–89, 129–138, 143–154, 161–163, 175–176, 181–187, 197–201, 269–279, 285, 290, 294, 342–355, 382, 389
- sustainability
 - due diligence VII, 192–194
 - reporting 70–71, 243, 272, 344, 366–367
 - term of 250–252
- tantalum, tin, tungsten and gold *see* raw materials, 3TG
- tariff
 - barriers 47–48
 - escalation 48–49, 319
 - punitive 36, 48, 100–102, 178
- torts *see* liability
- trust 222, 235, 247, 261, 314–315, 317
- UN
 - global compact 61–64, 367
 - guiding principles 64–70, 85, 153–164, 175–187, 197, 267, 284–285, 315, 346, 354, 367, 382, 389
 - sustainable development goals 72, 74, 91, 125, 252, 258, 382
- unfair competition law 276, 304, 361–383, 393
 - CE marking 378
 - conflict of laws 361
 - objectives 362
 - misleading commercial practices 367–377
 - unfair commercial practices 363–367
- untied loan guarantees 168–169, 173, 188–198
- Vedanta Resources* 1, 295–300, 337, 353
- voluntary enforcement 59, 135, 156, 164, 180, 199, 348, 363
- Wet Zorgplicht Kinderarbeid* *see* national action plans
- WTO 42–45
 - compatibility 138–150
 - dispute settlement 101, 150, 245