# Trade and the Environment

## Trade and the Environment

## Law and Policy

#### THIRD EDITION

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*To Sue, Zach, and Mats* —C.W.

I dedicated the first edition to my wife, Cassandra. We jointly dedicate this third edition to the next generations — our children Ingrid and Seth, their spouses Jeremiah and Amy, and our granddaughters Sadie, Margaret and Noelle — with the fervent hope that, as we face urgent challenges today, we will build for them economically sound and environmentally sustainable societies, at home and around the world. -S.G.

## Contents

Preface	xxvii
General Introduction	xxvii
Teaching Trade and the Environment	xxviii
Overall Approach	xxix
A General Note on Information and Research Sources	xxxiii
General Texts	xxxiii
General Sources	xxxiv
Official	xxxiv
Academic/Research	XXXV
Advocacy	xxxvi
Table of Cases	xxxvii
List of Acronyms	xlix
Chapter 1 • The Tension between Trade and Environment	3
I. Trade and Environment: Congruence or Conflict?	3
A. General Premises	3
Questions and Discussion	7
B. Trade and the Problems of Scale, Regulatory, and Competitiveness	
Effects	7
1. The Environmental Critique of Trade Policy	8
Herman E. Daly, Problems with Free Trade	9
2. The Rebuttal	11
Jagdish Bhagwati, The Case for Free Trade	12
Questions and Discussion	13
3. Testing the Critiques	15
4. Afterword on Conflict or Congruence	17
II. Trade in the Context of Globalization	18
A. Economic Integration	18
Questions and Discussion	20
B. The North-South Divide	21
C. The Rise of the Non-State Actor and the Vertical Loss of Sovereignty	23
Questions and Discussion	24
D. Globalization and Trade-Environment Issues	24
Questions and Discussion	25
III. Key Concepts in Trade and Environment	26
A. Concepts of International Economics	27
1. Comparative Advantage	27
John Jackson, The World Trading System	27

CONTENTS

Questions and Discussion	30
2. Cost Internalization: The Polluter-Pays Principle and Trade Policy	35
a. The Polluter-Pays Principle	36
Organisation for Economic Cooperation and Development,	
Recommendation of the Council on Guiding Principles	
Concerning International Economic Aspects of	
Environmental Policies	36
Questions and Discussion	37
b. Trade Effects of Differences in National Environmental Standards	38
Jagdish Bhagwati, Trade and Environment: The False Conflict?	40
Questions and Discussion	42
3. The Free Movement of Goods and Core International Trade	
Principles	43
B. Environmental Concepts and Principles	46
1. The State of the World	47
2. The Challenge of Sustainability	49
Robert Costanza et al., An Introduction to Ecological	
Economics	50
a. Ecological Footprints and Effective Consumption Populations	52
b. National Accounting Practices	53
Questions and Discussion	55
3. Sustainable Development	56
World Commission on Environment and Development,	
Our Common Future ["The Brundtland Report"]	57
Questions and Discussion	63
4. The Legal Challenge of Sustainable Development	64
IV. Trade and Sustainable Development: A Path to Congruence of Trade	
and Environment?	65
A. Trade's Benefits for Sustainable Development Redux	66
Questions and Discussion	67
B. The Environmental Critique of Trade <i>Redux</i>	68
Free Trade's Green Hurdles	69
Questions and Discussion	70
C. Towards Mutually Reinforcing Paradigms	72
Stewart Hudson, Trade, Environment and the Pursuit of	
Sustainable Development	72
Chapter 2 • The World Trade Organization, Dispute Settlement, and	
the Domestic Legal Effect of Trade Agreements	75
I. Introduction	75
II. Creating a Multilateral Trading System	78
John Jackson, The World Trading System	79
Mitsuo Matsushita, Thomas J. Schoenbaum & Petros	
Mavroidis, The World Trade Organization: Law,	
Practice, and Policy	80
Questions and Discussion	83

viii

III. The Structure of the WTO	83
A. Overview	83
B. The Administration of the WTO	85
1. Ministerial Conference	87
2. General Council	87
3. Dispute Settlement Body	88
4. Councils and Committees	88
5. The Secretariat	89
C. The WTO, the Members, and Environmental Organizations	90
Gregory C. Shaffer, The World Trade Organization under	
Challenge	92
Questions and Discussion	94
IV. The WTO's Dispute Settlement System	95
A. The Legal Character of Disputes in the WTO	97
Mitsuo Matsushita, Thomas J. Schoenbaum & Petros	
MAVROIDIS, THE WORLD TRADE ORGANIZATION: LAW,	
Practice, and Policy	98
Questions and Discussion	99
1. "Nullification or Impairment"	100
a. "Violation" Cases	100
b. "Nonviolation Nullification or Impairment" Cases	101
2. "Actionable Harm"	102
United States-Sections 301-310 of the Trade Act of 1974	103
Questions and Discussion	106
B. The DSU Process	106
1. Consultations	107
2. Establishment of a Panel	107
3. The Panel Process	108
4. Adopting the Decision	108
5. Appeals	109
6. Implementation	109
7. Remedies	110
8. Repeal of Trade Suspensions	111
Questions and Discussion	112
A Note on the Appellate Body	118
C. Transparency, Democracy, and the DSB	120
1. Public Access to Dispute Settlement Proceedings	121
United States-Continued Suspension of Obligations in the	
EC-Hormones Dispute	122
Procedural Ruling Concerning the Opening of the Oral	
Hearing to Public Observation in United States-Continued	
Suspension and Canada-Continued Suspension	124
2. Amicus Curiae Briefs	125
United States-Imposition of Countervailing Duties on	
Certain Hot-Rolled Lead and Bismuth Carbon Steel	
Products Originating in the United Kingdom	126

CONTENTS	
----------	--

European Communities-Trade Description of Sardines	128
Questions and Discussion	128
D. Selected Issues in WTO Jurisprudence	129
1. The Legal Effect of Dispute Settlement Findings	129
2. Compliance with DSB Rulings	131
Questions and Discussion	132
3. Deference to National Authorities	134
Questions and Discussion	135
4. "Case or Controversy": Ripeness and Mootness	137
Raj Bhala, International Trade Law:	
Interdisciplinary Theory and Practice	138
Questions and Discussion	138
5. Approaches to Interpretation and the Relevance of International	
Law	139
Claus-Dieter Ehlermann, Six Years on the Bench of the "World	
Trade Court": Some Personal Experiences as Member of the	
Appellate Body of the World Trade Organization	140
John H. Knox, The Judicial Resolution of Conflicts between	
Trade and the Environment	142
Questions and Discussion	146
V. National Negotiation and Implementation of Trade Agreements	147
A. The United States	147
1. The "Fast-Track" Process	147
2. Trade Promotion Authority and Environmental Issues	149
Questions and Discussion	151
B. The European Union	153
Jens Ladefoged Mortensen, The World Trade Organization	
and the European Union	154
C. Other Countries	157
Hal Shapiro & Lael Brainard, Trade Promotion Authority	
Formerly Known As Fast Track: Building Common Ground	
on Trade Demands More than a Name Change	157
Questions and Discussion	157
Chapter 3 • Border Issues – Tariffs, Quotas, and Export Restrictions	161
I. Introduction	161
II. Tariffs	162
A. GATT's Permissible Means of Protectionism	162
B. Exceptions to MFN for Tariffs: Free Trade Areas, Customs Unions,	
and GSP	165
C. The Special Case of Tariffs on Agricultural Products	167
D. Classification and Valuation of Products	167
Questions and Discussion	170
E. Environmental Impacts of Tariffs	171

х

Nigel Sizer, David Downes & David Kaimowitz, <i>Tree Trade</i> :	
Liberalization of International Commerce in	
Forest Products: Risks and Opportunities	172
Questions and Discussion	175
III. The Prohibition against Quantitative Restrictions	179
A. Border Measures and Internal Measures	180
Questions and Discussion	183
B. Export Restrictions	185
BARBARA FLIESS ET AL., EXPORT CONTROLS AND	
Competitiveness in African Mining and	
Minerals Processing Industries	185
1. The Salmon and Herring Case	187
In the Matter of Canada's Landing Requirement for Pacific	
Coast Salmon and Herring	187
Questions and Discussion	191
2. Environmental Consequences of Export Restrictions	192
Robert Repetto, The Forest for the Trees? Government Policies	
and the Misuse of Forest Resources	193
Questions and Discussion	194
Katila & Simula, Sustainability Impact Assessment	
OF PROPOSED WTO NEGOTIATIONS	196
3. Domestically Prohibited Goods	198
Questions and Discussion	199
C. Import Quotas and Other Nontariff Barriers	201
Questions and Discussion	202
Chapter 4 • Trade and the Regulation of Goods: GATT Article III, "Like	
Products," and Processes and Production Methods (PPMs)	205
I. Introduction	205
II. The GATT's Nondiscrimination Obligations	208
A. Article I: The Most Favored Nation Obligation	208
Questions and Discussion	209
B. Article III: The National Treatment Obligation	209
1. The Structure of Article III	209
2. The Scope and Purpose of Article III	212
Japan–Taxes on Alcoholic Beverages	215
Questions and Discussion	217
III. "Like Products"	218
A. "Like Products" under Article III:2	219
1. The "Aim and Effect" Test	219
United States–Taxes on Automobiles	220
Questions and Discussion	221
2. Reframing the Issues: Japan–Alcoholic Beverages II	222
Japan–Taxes on Alcoholic Beverages	223

Questions and Discussion	228
B. "Like Products" and Regulations under Article III:4	230
European Communities-Measures Affecting Asbestos and	
Asbestos-Containing Products	231
Questions and Discussion	240
IV. Processes and Production Methods (PPMs)	240
A. The <i>Tuna/Dolphin</i> Disputes	242
1. Tuna/Dolphin I	242
United States-Restrictions on Imports of Tuna	244
Discussion: Border Measures and Internal Measures Revisited	246
2. Tuna/Dolphin II	248
Questions and Discussion	249
B. Reformulated Gasoline	251
United States-Standards for Reformulated and Conventional	
Gasoline	253
Questions and Discussion	255
C. Proposals for New Approaches to PPM-Based Trade Measures	256
1. Defining and Classifying PPMs and PPM-Based Trade Measures	257
Sanford E. Gaines, Processes and Production Methods:	
How to Produce Sound Policy for Environmental	
PPM-Based Trade Measures?	257
Questions and Discussion	260
2. Re-Reading GATT Article III to Permit PPM-Based Trade	
Measures	261
Robert Howse & Donald Regan, The Product/Process	
Distinction — An Illusory Basis for Disciplining	
"Unilateralism" in Trade Policy	261
Sanford E. Gaines, Processes and Production Methods:	
How to Produce Sound Policy for Environmental	
PPM-Based Trade Measures?	264
Questions and Discussion	266
3. Broader Models for Policy Reform	268
Steve Charnovitz, Environmental Harmonization and	
Trade Policy,	268
William J. Snape, III & Naomi Lefkovitz, Searching for	
GATT's Environmental Miranda: Are "Process Standards"	
Getting "Due Process?"	271
Questions and Discussion	274
V. Border Tax Adjustments	276
A. Environmental Taxes	276
B. An Introduction to Border Tax Adjustments	277
C. The Superfund Case	280
United States–Taxes on Petroleum and Certain Imported	
Substances	280
Questions and Discussion	283
D. National Climate Legislation and Border Adjustments	284

1. Carbon or Energy Taxes	285
a. Carbon Taxes	285
b. Taxes on Carbon Emissions	286
c. Taxes on Energy Inputs to Products	286
Questions and Discussion	289
2. Emissions Trading Systems, "Leakage," and Border Adjustments	289
Carbon Market Watch, A Brief Explanation of the Carbon	
Border Adjustment Mechanism (CBAM)	291
Questions and Discussion	293
VI. Trade Discrimination in the Domestic Law of Federal Systems	294
A. The "Dormant" Commerce Clause in the United States	294
City of Philadelphia v. New Jersey	295
Chemical Waste Management, Inc. v. Hunt	297
Minnesota v. Clover Leaf Creamery Co.	302
Questions and Discussion	304
B. The Free Movement of Goods and National Regulation in Europe	307
Treaty on the Functioning of the European Union	307
Jan H. Jans & Hans H.B. Vedder, European, Environmental	
Law: After Lisbon	308
Rewe-Zentral AG v. Bundesmonopolverwaltung für Branntwein	309
Commission v. Denmark (Danish Bottles)	310
Jan H. Jans & Hans H.B. Vedder, European Environmental	
Law: After Lisbon	314
Questions and Discussion	315
A Note on Proportionality	316
Jan H. Jans & Hans H.B. Vedder, European Environmental	
Law: After Lisbon	317
Questions and Discussion	318
C. The Canada Free Trade Agreement	319
Canada Free Trade Agreement	320
Report of the Article 1704 Panel Concerning a Dispute	
between Alberta and Canada Regarding the	
Manganese-Based Fuel Additives Act	321
Questions and Discussion	326
Daniel A. Farber & Robert E. Hudec, GATT Legal Restraints	
on Domestic Environmental Regulations	326
Chapter 5 • The Article XX Exceptions	329
I. Introduction	329
II. The Scope of Article XX	330
United States-Restrictions on Imports of Tuna	
(Tuna/Dolphin I)	333
Questions and Discussion	336
United States-Restrictions on Imports of Tuna	
(Tuna/Dolphin II)	340
Note — The <i>Tuna/Dolphin</i> Aftermath	342

xiv

Questions and Discussion

х	١.	/
-		

411	
111	

Chapter 6 • The Agreement on Technical Barriers to Trade,	
Ecolabeling, and the Question of Harmonization	415
I. Introduction	415
A. The Economic Case for Harmonization	415
B. Environmental Concerns and Benefits of Harmonization	417
Daniel C. Esty, Greening the GATT: Trade,	
Environment and the Future	417
Questions and Discussion	419
II. The Agreement on Technical Barriers to Trade	419
A. The Purpose and Structure of the TBT Agreement	419
Questions and Discussion	423
B. The Scope of the TBT Agreement	425
1. Defining "Technical Regulation"	425
European Communities-Measures Affecting Asbestos and	
Asbestos-Containing Products	426
European Communities-Trade Description of Sardines	428
Questions and Discussion	430
2. Processes and Production Methods and the TBT Agreement	432
a. Parsing the Language	433
b. The 2012 U.STuna II Dispute	434
United States-Measures Concerning the Importation,	
Marketing and Sale of Tuna and Tuna Products	437
United States-Measures Concerning the Importation,	
Marketing and Sale of Tuna and Tuna Products	439
Questions and Discussion	442
C. Toward Harmonization	446
1. Recognized International Standardizing Bodies	447
a. The U.STuna II Dispute	447
United States-Measures Concerning the Importation,	
Marketing and Sale of Tuna and Tuna Products	448
b. An Introduction to Codex and ISO	451
2. Relevant International Standards	452
European Communities-Trade Description of Sardines	452
Questions and Discussion	453
3. The Substantive Requirements of Article 2.4	455
European Communities-Trade Description of Sardines	456
Questions and Discussion	460
D. The TBT Agreement's Nondiscrimination Obligations and	
Duty Not to Create Unnecessary Obstacles to Trade	463
1. The National Treatment Obligation of Article 2.1	465
United States-Measures Concerning the Importation,	
Marketing and Sale of Tuna and Tuna Products	465
Questions and Discussion	474
2. Article 2.2 and Unnecessary Obstacles to Trade	475

United States–Measures Concerning the Importation,	
Marketing and Sale of Tuna and Tuna Products	475
Questions and Discussion	481
United States-Measures Affecting the Production and Sale	
of Clove Cigarettes	486
E. The Way Forward?	490
1. Transparency	490
Questions and Discussion	491
2. Equivalence and Mutual Recognition	491
3. Harmonizing Ecolabels	492
a. Codex and ISO Efforts	493
b. Universal Ecolabel Criteria: The Forest Stewardship Council	493
Questions and Discussion	495
III. Harmonization in the Environmental Context	496
A. When to Harmonize Environmental Requirements	496
Richard B. Stewart, Environmental Regulation and	
International Competitiveness	498
Questions and Discussion	500
B. Approaches to Harmonization	500
Daniel C. Esty & Damien Geradin, Market Access,	
Competitiveness, and Harmonization: Environmental	
Protection in Regional Trade Agreements	501
Questions and Discussion	507
C. Rethinking Harmonization	508
1. Values and Harmonization	508
Questions and Discussion	509
2. The "New Approach" to Harmonization in the EU	510
Questions and Discussion	513
Chapter 7 • Sanitary and Phytosanitary Measures: Science, Risk	
Assessment, and Risk Management	515
I. Introduction	515
II. An Introduction to Risk Assessment and Risk Management	517
Adapted from Vern R. Walker, <i>Keeping the WTO from</i>	
Becoming the "World Trans-Science Organization":	
Scientific Uncertainty, Science Policy, and Factfinding in	
the Growth Hormones Dispute	518
Questions and Discussion	520
III. The Scope and Structure of the SPS Agreement	521
Agreement on the Application of Sanitary and Phytosanitary	
Measures	522
Questions and Discussion	526
A. What Is an SPS Measure?	526
Questions and Discussion	529
B. The Goal of Harmonization	529
Questions and Discussion	531

CONTENTS	
SOUTERING	

C. The Right to Adopt Higher Levels of Protection	531
US/Canada-Continued Suspension of Obligations in the	
EC-Hormones Dispute	532
India-Measures Concerning the Importation of Certain	
Agricultural Products	534
Costa Rica-Measures Concerning the Importation of Fresh	
Avocados from Mexico	535
European Communities-Measures Concerning Meat	
and Meat Products (Hormones)	536
Questions and Discussion	537
D. The Appropriate Level of Protection	538
United States-Measures Affecting the Importation of	
Animals, Meat and Other Animal Products	539
Questions and Discussion	542
IV. Risk Assessment	543
A. Risk Assessment for Additives, Contaminants, Toxins,	
and Disease-Carrying Organisms	543
1. The EC-Hormones Dispute	543
2. The Scope of a Risk Assessment	545
US/Canada-Continued Suspension of Obligations in the	
EC-Hormones Dispute	546
Questions and Discussion	550
3. Specificity of the Risk Assessment in Relation to the SPS Measure	553
US/Canada-Continued Suspension of Obligations in the	
EC-Hormones Dispute	553
Questions and Discussion	556
Japan–Measures Affecting the Importation of Apples	557
B. Risk Assessment for the Spread of Pests and Diseases	560
1. The Scope of a Risk Assessment	560
2. Alternatives Analysis	562
Japan–Measures Affecting the Importation of Apples	562
Questions and Discussion	563
C. Standard of Review and Deference to National Decisions	564
US/Canada-Continued Suspension of Obligations in the	
EC-Hormones Dispute	565
Questions and Discussion	568
Jacqueline Peel, Risk Regulation under the WTO SPS Agreement:	
Science as an International Normative Yardstick?	570
D. Provisional Measures, Levels of Protection, and International	
Standards	571
1. US/Canada–Continued Suspension	572
US/Canada-Continued Suspension of Obligations in the	
EC-Hormones Dispute	573
Questions and Discussion	581
2. The Relationship Between the Precautionary Principle and	
Article 5.7	583

CONTENTS
----------

European Communities–Measures Concerning Meat	
and Meat Products (Hormones)	583
Questions and Discussion	584
V. The Application of Risk Management in Trade Disputes	586
A. Article 5.5: Regulating Comparable Situations Similarly	587
Australia-Measures Affecting the Importation of Salmon	588
Questions and Discussion	591
B. Article 5.6: "Not More Trade-Restrictive than Required"	594
Australia-Measures Affecting the Importation of Apples	
from New Zealand	596
Questions and Discussion	597
VI. Equivalence	602
Patti Goldman, <i>The Democratization of the Development of</i>	
United States Trade Policy	604
Questions and Discussion	606
Chapter 8 • Subsidies and Countervailing Duties	609
I. Introduction	609
II. The SCM Agreement's Definition of Subsidy	612
Agreement on Subsidies and Countervailing Measures	613
A. "Financial Contribution" and "Benefit Conferred"	615
1. Financial Contribution	615
2. Benefit Conferred	617
Questions and Discussion	618
B. "Specificity"	619
United States-Subsidies on Upland Cotton	621
Questions and Discussion	623
C. "Subsidy" in Context: The Softwood Lumber Dispute	624
1. Do the Stumpage Fees Constitute a "Subsidy"?	626
United States-Final Countervailing Duty Determination	
with Respect to Softwood Lumber from Canada	626
Questions and Discussion	634
2. Was the Subsidy Specific?	634
United States-Final Countervailing Duty Determination	
with Respect to Softwood Lumber from Canada	634
Questions and Discussion	638
III. The Restraint of Subsidies in the Trading Regime	640
A. Early Restraints on Subsidies	640
B. The SCM Agreement's Traffic Light System	640
1. Prohibited Subsidies	641
2. Actionable Subsidies	642
3. Nonactionable Subsidies	643
C. Countermeasures and Countervailing Duties	644
1. Economic Impacts of Countervailing Duties	644
Alan O. Sykes, Countervailing Duty Law: An Economic	
Perspective	644

2. Actions for Imposing Countervailing Duties and Countermeasures	647
3. Threshold Issues: "Like Product" and "Domestic Industry"	648
4. Injury and Serious Prejudice	650
United States-Subsidies on Upland Cotton	652
Questions and Discussion	654
IV. Environmental and Natural Resource Subsidies	656
A. Brown Subsidies	657
1. Introduction	657
2. Does the Failure to Regulate Constitute a Subsidy?	660
Thomas K. Plofchan, Recognizing and Countervailing	
Environmental Subsidies	662
Charles S. Pearson & Robert Repetto, Reconciling Trade and	
Environment: The Next Steps	663
Questions and Discussion	664
B. Green Subsidies	666
1. Are Green Subsidies Efficient?	667
2. Green Subsidies and the Polluter Pays Principle	668
Charles S. Pearson, <i>Testing the System: GATT + PPP = ?</i>	669
3. Green Subsidies and the SCM Agreement	670
Questions and Discussion	670
C. Fisheries Subsidies	671
1. The Environmental and Economic Effects of Fisheries Subsidies	671
United States, Environmental and Trade Benefits of Removing	
Subsidies in the Fisheries Sector	673
Questions and Discussion	675
2. The Way Forward?	676
Agreement on Fisheries Subsidies	677
Questions and Discussion	679
V. Subsidies in the Climate Context	680
A. Fossil Fuel Subsidies	682
Questions and Discussion	684
B. Subsidies for Renewable Energy	685
1. Feed-in-Tariff Programs	685
Canada–Renewable Energy	686
Questions and Discussion	693
2. Emissions Trading Systems	696
Department of Commerce, Issues and Decision	
Memorandum for the Final Affirmative Determination	
of the Countervailing Duty Investigation of Forged Steel	
Fluid End Blocks from the Federal Republic of Germany	698
Questions and Discussion	700
VI. Agriculture, Subsidies, and Development	701
A. Introduction	701
B. Governmental Farm Policies	703
1. Domestic Support Measures	703

Jussi Lankoski, Environmental Effects of Agricultural Trade	
Liberalization and Domestic Agricultural Policy Reforms	704
2. Export Subsidies	705
3. Tariffs	707
4. Environmental Subsidies	707
U.S. Department of Agriculture, Economic Research Service	
Conservation Programs	707
Questions and Discussion	710
C. Environmental Consequences	711
Questions and Discussion	713
D. The Agreement on Agriculture	715
1. Negotiations	715
Raj Bhala & Kevin Kennedy, World Trade Law	716
2. The Basics of the Agriculture Agreement	716
a. Domestic Support Measures	717
b. Export Subsidies	718
c. Market Access	719
d. Nontrade Concerns	720
e. The "Due Restraints" Clause	720
Questions and Discussion	721
3. The U.SBrazil Cotton Dispute	722
Questions and Discussion	724
4. The Doha Agenda	726
Report by the Chairperson, H.E. Ms. Gloria Abraham Peralta	
to the Trade Negotiations Committee	727
Questions and Discussion	728
E. Repurposing Agricultural Subsidies	730
Madhur Gautum et al., Options to Transform Agriculture	
and Food Systems to Better Serve the Health of People,	
Economies, and the Planet	731
Questions and Discussion	735
Chapter 9 • Climate Change and the Rules of Trade	737
I. Introduction	737
II. The Agreement on Trade-Related Investment Measures	739
A. Introduction	739
Agreement on Trade-Related Investment Measures	739
B. The Solar Disputes	740
Canada–Renewable Energy	741
Questions and Discussion	749
III. The Agreement on Safeguards	751
General Agreement on Tariffs and Trade	751
Agreement on Safeguards	751
A. U.S. Safeguard Measures on Chinese Photovoltaic Cells	753
United States-Safeguard Measure on Imports of	
Crystalline Silicon Photovoltaic Products	754

#### CONTENTS

Questions and Discussion	762
B. U.S. Safeguard Measures on Canadian Photovoltaic Cells	765
Crystalline Silicon Photovoltaic Cells Safeguard Measure	766
Questions and Discussion	774
IV. The General Agreement on Trade in Services	775
A. The General Agreement on Trade in Services	775
1. Defining Measures "Affecting Trade in Services"	776
2. GATS Commitments	777
B. Trade Measures in the Climate Regime	779
C. Carbon Trading and the WTO Agreements	780
Questions and Discussion	782
Chapter 10 • Trade Rules and Multilateral Environmental Agreements	783
I. Introduction	783
II. Setting the Stage for Conflict: Trade Restrictions in MEAs	785
A. Import/Export Licensing Schemes	785
B. Notice and Consent Requirements	787
C. Import and Export Bans and Restrictions	788
D. Trade Bans/Sanctions for Noncompliance	789
E. Trade and Other Restrictions with Nonparties	790
Questions and Discussion	790
III. Strategies for Reconciliation	791
A. Who Reconciles?	792
1. Dispute Settlement in MEAs	794
2. Dispute Settlement in the WTO	796
Understanding on Rules and Procedures Governing the	
Settlement of Disputes	796
Questions and Discussion	796
B. The Rules of Reconciliation	798
1. The Rules of Treaty Interpretation	799
Vienna Convention on the Law of Treaties	799
a. Primacy Clauses	801
b. Lex Posterior and Lex Specialis	802
Chris Wold, Multilateral Environmental Agreements and	
Trade Rules: Conflict and Resolution	802
c. Parties versus Nonparties	803
Questions and Discussion	804
2. Waivers	805
Questions and Discussion	806
3. Rules-Based Approaches	806
Report (1996) of the Committee on Trade and Environment	806
Questions and Discussion	809
India, Relationship between Specific Trade Obligations	
Set Out in MEAs and WTO Rules	812
4. Article XX Strategies	816
Questions and Discussion	816

5. Actions Pursuant to MEAs	817
Questions and Discussion	818
6. Trade and Environment Synergies	818
Questions and Discussion	820
C. What Law Applies?	821
Vienna Convention on the Law of Treaties	822
1. The Early Decisions	823
2. EC–Biotech	826
European Communities–Measures Affecting the Approval	
and Marketing of Biotech Products	827
Questions and Discussion	830
IV. Intellectual Property Rights, Conservation, and the Interplay between	
the Convention on Biological Diversity and the TRIPS Agreement	834
A. Overview of the CBD	834
B. Overview of the TRIPS Agreement	836
Howard Mann & Steve Porter, The State of Trade and	
Environment Law 2003: Implications for Doha and Beyond	837
Questions and Discussion	844
Chapter 11 • Investment	847
I. Introduction	847
II. The Economics and Environmental Consequences of Foreign	
Investment	848
A. The Economics of Investment	848
Questions and Discussion	849
B. The Environmental Consequences of Investment	850
David Hunter, James Salzman & Durwood Zaelke,	
International Environmental Law and Policy	851
Questions and Discussion	853
III. Legal Protections for Foreign Investors	855
Questions and Discussion	856
A. The Procedural Arrangements	857
1. The Traditional Investor-State Process	857
2. The Investor-State-Citizen Process?	859
B. The Scope of Investment Treaties	860
1. Defining "Investment"	860
Questions and Discussion	861
2. Defining "Measure"	862
3. Defining "Relating to"	862
Methanex v. United States of America	863
Questions and Discussion	864
C. The Substantive Requirements	865
1. Overview	865
2. National Treatment	866
NAFTA	866
a. The S.D. Myers Case	867

S.D. Myers, Inc. v. Government of Canada	868
b. The Pope & Talbot Case	871
Pope & Talbot v. Canada	871
Questions and Discussion	872
3. Minimum Standard of Treatment	877
a. The Neer Test and the Early NAFTA Cases	877
S.D. Myers, Inc. v. Government of Canada	878
Questions and Discussion	880
b. Legitimate Expectations and the Glamis Gold Case	882
Glamis Gold, Ltd. v. United States of America	883
Questions and Discussion	888
4. Expropriation	889
a. The NAFTA Cases	890
Pope & Talbot v. Canada	891
Glamis Gold, Ltd. v. United States of America	893
Questions and Discussion	894
b. The Post- <i>NAFTA</i> IIAs	895
U.SChile Free Trade Agreement	895
Questions and Discussion	896
D. Climate Change, The Energy Charter Treaty, and Protections	
for Energy Investments	899
NextEra Energy Global Holdings B.V and NextEra Energy	
Spain Holdings B.V v. Spain	901
Questions and Discussion	907
IV. A New Era of Investor-State Relations?	909
A. Procedural Reforms	910
Questions and Discussion	912
B. Safeguard Provisions	912
1. "Right to Regulate" Provisions	913
Infinito Gold Ltd. v. Republic of Costa Rica	913
Questions and Discussion	915
2. GATT Article XX in the Investment Context	916
Canada–Colombia Free Trade Agreement	916
Eco Oro Minerals Corp. v. Republic of Colombia	917
Questions and Discussion	920
3. Carve-outs	921
Questions and Discussion	922
Chapter 12 • Environment Provisions in Regional Trade Agreements	925
I. Introduction	925
II. The Origins of Environmental Concerns in RTAs: The NAFTA	
Negotiations	926
Questions and Discussion	929
III. Environmental Provisions in RTAs	929
A. The NAAEC	930
1. Structure and Governance of the CEC	931

Questions and Discussion	932
2. Independent Secretariat Reports	934
Questions and Discussion	935
3. Cooperative Programs	936
Mary E. Kelly & Cyrus Reed, The CEC's Trade and	
Environment Program: Cutting-Edge Analysis but	
Untapped Potential	937
Questions and Discussion	938
B. Citizen Submissions on Enforcement Matters	940
North American Agreement on Environmental Cooperation	941
1. Legislative Measures and "Failures to Enforce Environmental Law"	944
2. Eligibility Requirements	945
Questions and Discussion	946
3. Government Defenses	947
Article 15(1) Notification to Council that Development of	
Factual Record Is Warranted (Migratory Birds)	948
Questions and Discussion	951
4. Matters Subject of a Pending Judicial or Administrative	
Proceeding	952
Secretariat Determination under Article 15(1) (Oldman River I)	953
Questions and Discussion	954
5. Factual Records	956
a. Cozumel	956
b. BC Hydro	957
Final Factual Record for BC Aboriginal Fisheries	
Commission et al. (BC Hydro)	957
Questions and Discussion	959
6. Limiting the Scope of Factual Records	962
Secretariat Notification to Council under Article 15(1)	
(Migratory Birds)	962
International Environmental Law Project (IELP), Issues	
Relating to Articles 14 & 15 of the North American	
Commission on Environmental Cooperation	965
Questions and Discussion	968
C. The Party-to-Party Sanctions Process	970
1. Origins in the NAAEC	970
2. Post-NAAEC FTAs and the USMCA	971
Questions and Discussion	974
D. Has the CEC Fulfilled Its Mission?	975
Greg M. Block, <i>Trade and Environment in the Western</i>	
Hemisphere: Expanding the North American Agreement	076
on Environmental Cooperation into the Americas	976
Ten-Year Review and Assessment Committee, Ten Years of	
North American Environmental Cooperation: Report of the	
Ten-Year Review and Assessment Committee to the Council	070
of the Commission for Environmental Cooperation	978

Questions and Discussion	980	
V. U.SMexico NAFTA-Related Bodies	981	
A. The U.SMexico Border Plan		
B. The U.SMexico Border Environment Cooperation Agreement		
Questions and Discussion	985	
VI. Beyond NAFTA: Free Trade in the Western Hemisphere		
A. The U.SPeru FTA Annex on Forest Sector Governance		
1. Requirements of the Forest Annex		
U.S.–Peru FTA	988	
2. Implementation of the Forest Annex	990	
Questions and Discussion	993	
B. The USMCA	993	
USMCA	993	
Questions and Discussion	999	
VII. Environment and the European Union	1000	
A. Introduction	1000	
B. EU Institutions and Governance	1001	
Questions and Discussion	1002	
C. Trade and the Environment within the EU	1004	
1. Subsidiarity and Harmonization	1004	
Jan H. Jans & Hans H.B. Vedder, European		
Environmental Law: After Lisbon	1005	
Questions and Discussion	1007	
2. Implementation and Enforcement of Environmental Law	1008	
European Commission v. Republic of Bulgaria	1008	
Questions and Discussion	1013	
3. Citizen Complaints		
Questions and Discussion	1015	
D. Trade and the Environment in the EU's External Relations	1017	
EU–Colombia–Peru FTA	1017	
Questions and Discussion	1019	
LSE Consulting, Comparative Analysis of TSD		
Provisions for Identification of Best Practices		
to Support TSD Review	1020	
Chapter 13 • Public Participation and Trade Law	1023	
I. Introduction	1023	
II. Access to Trade Decisions and Documents	1024	
A. Dispute Settlement in the GATT and the WTO	1024	
B. Investment Tribunals	1026	
Questions and Discussion		
C. Trade Agreement Negotiations and Trade Policy Making	1027 1028	
1. Negotiating Documents		
Questions and Discussion	1028 1029	
2. Trade Advisory Committees and Trade Committee Work	1030	

Patti Goldman, The Democratization of the Development of	
United States Trade Policy	1030
Questions and Discussion	1035
III. Environmental Impact Assessment and Trade Agreements	1036
A. The U.S. National Environmental Policy Act	1036
Questions and Discussion	1038
B. Environmental Assessments and Sustainability Impact Assessments	
of Trade Agreements	1040
1. "Environmental Reviews" in the United States	1040
Environmental Review of Trade Agreements, Exec. Order	
No. 13,141	1040
Questions and Discussion	1042
USTR, Final Environmental Review of the Dominican	
<b>Republic–Central America–United States Free</b>	
Trade Agreement	1043
2. Canada's Environmental Assessments	1046
Global Affairs Canada Environmental Assessments of Trade	
Agreements: Process and Revised Framework	1046
Questions and Discussion	1051
3. The European Union	1051
4. Rethinking Environmental Assessments of Free Trade	
Agreements	1052
Questions and Discussion	1053
Selected Bibliography	1057
~ 1	

Index

1091

## Preface

### **General Introduction**

In 1991, the *Tuna/Dolphin* dispute brought international trade law to the attention of environmental advocates in many countries. In 1998, with protesters lining the streets of Seattle in turtle costumes in reference to the *Shrimp/Turtle* dispute, the relevance of the World Trade Organization to environmental policy was brought to the attention of citizens worldwide. As the first edition of this book went to press, the United States and Europe were about to become engaged in another trade dispute, this one over trade in genetically modified foods. In late 2010, as the second edition went to press, the United States was contemplating a possible trade complaint against China for rules and subsidies giving an advantage to Chinese makers of solar panels and wind turbines. Mexico had initiated a dispute over U.S. "dolphinsafe" labels for tuna. This third edition includes many rulings, cases, and analyses in the last 12 years as national governments and the World Trade Organization face new disputes and environmental policies and issues evolve particularly with respect to climate change.

Despite the earlier high profile cases, or perhaps because of them, the intersection of trade law and environmental policy remains poorly understood. It is still often portrayed as a struggle between good and evil. In this simplified view, trade experts think liberalized trade is good because it promotes economic efficiency and raises standards of living, and they fear environmental trade measures because they threaten to undo hard-won gains for open market access. For environmental advocates, the simplified view is that trade's promotion of growth increases pollution and depletion of natural resources, open market competition drives standards down, and trade rules limit policy options for pursuing environmental objectives in an environmentally challenged world. By immersing our readers in the detail of the law we hope to challenge these simplified constructions and explore the more complex relationship between international trade law and the law of environmental protection.

The ambition of this textbook, then, is to present students and other readers with the complexity and ambiguity of the real world where trade and environment meet. Trade law leaves space for environmental trade measures, but trade measures have commercial consequences, so there are pre-conditions for such measures to be allowed. Are those pre-conditions overly stringent? On the other side, open international trade can help with diffusion of green technology — particularly those needed

to combat climate change — and with the environmental battle against agricultural and natural resources subsidies, but governments have proven reluctant to live up to their free trade principles on these matters. This book deals repeatedly with these difficult issues.

The complexity and ambiguity run deep. Environmental effects of production of traded goods vary from product to product and are mostly mediated through national regulations that vary from country to country. Equally, the specific effects of trade law on environmental protection efforts depend on the details of regulatory implementation. Sensitive issues also arise in the relationship between international cooperation and independent national action, between harmonization of policy in global markets and national prerogatives to set national goals and requirements. For all these reasons, sweeping generalizations about trade and environment are often misleading. Only a detailed examination of the law and the factual circumstances in each situation will yield meaningful understanding and insight. Extensive excerpts from WTO dispute settlement reports are designed to give readers that detail. In the process, we hope that each community will not only understand the other but with that understanding can earn the confidence and respect of the other.

Trade and the environment is not a subject for specialists only. It is an element of a larger (and endless) discussion about the organization and objectives of our social, economic, and political systems and their situation in the world of natural ecological systems. When and to what extent should the pursuit of nontrade values such as labor rights, human rights, or environmental protection be freed from, or be subject to, the stringent market-opening disciplines of international trade law? In the quest for sustainable development, how are trade and nontrade values balanced and blended? To what institutions — national or international — can we turn for rules and guidance? Such issues are already topics of national discussion and international negotiation. We hope this book encourages teachers and students alike to become participants in that discussion.

### Teaching Trade and the Environment

The field of "Trade and Environment" law and policy demands a lot from students — and from professors — because it requires some basic mastery of principles, concepts, and legal doctrines in both the trade realm and the environmental realm. The primary objective of this textbook is to provide the material for students to gain such basic mastery. Each realm has a broad sweep and myriad details; the combination can be daunting, but is at the same time fascinating and, more importantly, an element of the ongoing struggle by international policy makers to forge rules and institutions for a sustainable world.

Study of trade and environment is not made easier — though perhaps teaching is made more interesting — by the clash of cultures and by the endless, occasionally fruitless, debate about how these two realms should best co-exist, if not achieve the

ideal state of becoming "mutually supportive." Our textbook presents much of that debate and the cultural differences that underlie it, but tries at the same time to ask critical questions about the arguments presented by all participants in the debate. We hope in that way to provide a reliable and yet provocative introduction to the field and a foundation for further study by both students and professors.

Although both authors are from the United States, and the text material is presented in the style customary for law textbooks at U.S. law schools, we have tried to give the book an international cast so that it can be easily used by teachers around the world who are teaching classes in English. Some of the major WTO cases involve the United States, but others center on environmental issues and trade practices in other parts of the world, providing material to engage the interest of students in all regions of the world. Apart from the WTO cases, the reading selections encompass economics and political science as well as law and reflect a variety of national and regional perspectives. At appropriate places there are materials specific to U.S. law, EU law, and Canadian law that can be used to give a particular local orientation to the course or as a basis for comparative law analysis of national trade law and policy.

### **Overall Approach**

The numerous linkages between trade and environmental policy made this a rather large book. Chapter 1 begins by exploring the underlying principles of free trade and sustainable development. It sets out the trade and environment debate by highlighting the criticisms and defenses of free trade through critiques of free trade by prominent environmentalists and ecological economists, on the one hand, and well-known trade economists who believe that trade liberalization is the world's most powerful force for social good, on the other. It also explores the goal of sustainable development and asks whether trade liberalization can help achieve that goal.

Chapter 2 takes a close look at the institutions and decisionmaking process of the World Trade Organization (WTO). Because so much of the trade and environment debate is framed by the decisions of trade panels, it also explores in detail the structure and composition of the WTO's Dispute Settlement Body and the legal standards used to decide trade disputes.

Chapters 3 through 8 examine the substantive law of the General Agreement on Tariffs and Trade (GATT) and other WTO agreements. Chapters 3 and 4 introduce the core components of trade law that are central to the trade and environment debate. This material is organized to be taught consecutively, though not all sections of each chapter need to be covered. Chapter 3 explores the GATT rules on tariffs, quotas, and other import and export restrictions and the environmental implications of such measures. It focuses on timber policy—quotas, bans, and taxes—to highlight the environmental implications of these GATT rules.

Chapter 4 examines the GATT's core nondiscrimination obligations: the most favored nation and national treatment obligations. These two obligations are at the

heart of the trade and environment debate because they require WTO Members to tax and regulate foreign and domestic "like products" with equal favor. Because environmental advocates want to tax and regulate "green" products more favorably than similar products they deem environmentally harmful, the GATT consistency of such measures hinges on whether those products are considered "like." In particular, this chapter assesses whether countries may and should tax or regulate products differently depending on the processes and production methods (PPMs) used to make them.

Chapter 5 looks at the evolving nature of the exceptions to GATT's core obligations for measures necessary to protect human, animal, and plant life or health and measures relating to the conservation of exhaustible natural resources. Early interpretations of the exceptions by trade panels, such as in *Tuna/Dolphin*, made it very difficult for countries to justify their trade-related environmental policies under the GATT. The *Shrimp/Turtle* decisions, however, appear to have opened the door to many of the trade-related environmental policies sought by environmental advocates — provided certain steps are followed.

Chapters 6, 7, and 8 look at specialized agreements within the WTO from which students and professors may wish to select: the Agreement on Technical Barriers to Trade (TBT Agreement), the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), and the Agreement on Subsidies and Countervailing Measures (SCM Agreement). Each agreement focuses on unique environmental issues that require an understanding of Chapters 3 to 5, but the chapters in this set stand independently of each other. Chapter 6 examines the TBT Agreement, focusing somewhat on its effect on ecolabeling efforts. Chapter 7 asks whether the SPS Agreement adequately balances the public interest in a safe food supply with trade interests in health and safety regulations that do not protect domestic producers. Chapter 8 tackles industrial and agricultural subsidies by assessing the environmental soundness of subsidies and their economic rationale.

Chapter 9 delves into the impacts of trade law on efforts to combat climate change. Although certain climate-related issues are addressed in other chapters (e.g., border carbon adjustments in Chapter 4, subsides in Chapter 8, and investor disputes concerning renewable energy incentives in Chapter 11), this chapter looks at specific disputes concerning renewable energy under the Agreement on Trade-related Investment Measures and the Agreement on Safeguards. It also introduces possible conflicts with the General Agreement on Trade in Services.

Chapter 10 explores the complicated relationship between international trade agreements and multilateral environmental agreements. This important trade and environment issue receives close scrutiny, because policymakers at the highest levels have been debating whether environmental treaties should be allowed to use trade restrictions in light of the WTO's antipathy to trade restrictions. Because this chapter describes the trade measures used in environmental agreements, it also offers a means to review earlier chapters, particularly Chapters 3, 4, and 5. It also briefly

introduces the Agreement on Trade-Related Aspects of Intellectual Property Rights and its relation to genetic resources under the Convention on Biological Diversity.

Chapters 11 and 12 turn to substantive and environmental provisions of regional agreements and entities. Chapter 11 focuses on the investment provisions of the regional trade agreements (RTAs) and international investment agreements (IIAs) that grant rights to private, foreign investors to challenge governmental measures that they believe discriminate against them or their investments or that "expropriate" their investment. Environmental advocates have found investment provisions of free trade agreements particularly pernicious, and we explore whether those concerns have merit. Chapter 12 reviews the specific ways that RTAs and IIAs incorporate environmental decisionmaking into a trade framework or into trade decisionmaking, including through citizen submission processes, something the WTO has so far refused to do.

Chapter 13 closes with an examination of the role of public participation. Environmental advocates have long fought against the culture of confidentiality that dominates trade decisionmaking. Looking at the United States, this chapter tracks the strategies that environmental advocates have used to pry open the door to the trade world, sometimes with success and other times with failure. It also reviews the use of environmental impact assessment in the United States, European Union, and Canada as a means to evaluate the potential effects of trade agreements.

Because of the complexity and ambiguity of the trade-environment linkage and because of the depth of trade-environment linkages, we have opted not to provide a synthesis or conclusion at the end of this book. Instead, each chapter offers some ideas on how a particular component of trade law can be reshaped to better achieve environmental goals while also achieving trade goals. These sections are entitled, for example, "Rethinking Article XX(g)" or "The Way Forward." We hope that this strategy helps make learning trade law *and* imagining how trade law and environmental law can be made mutually reinforcing more manageable.

The breadth of the subject matter made limiting the scope of this book challenging. In the end, we omitted important influences on trade and environmental issues, such as the role of the International Monetary Fund, the World Bank, and the regional development banks. Although these institutions have played important roles in promoting liberalized trade, the development of environmental law, and the financing of projects that have significant impacts on the environment, we chose to adhere more closely to environmental issues more directly affected by trade rules rather than globalization issues. We also omitted a meaningful discussion of the Anti-Dumping Agreement, despite the large number of cases bearing on natural resources.

In addition, we have not covered in any detailed or systematic way the skewed distribution effects of liberalized trade policies that have failed to alleviate poverty in the least developed countries. Poverty alleviation can have significant impacts on the environment, both positive and negative. This particular issue, while enormously important and closely associated with the defense of globalization, liberalized trade policies, and the achievement of sustainable development, encompasses a broader range of issues and policies than the law related to the trade and environment debate. Nevertheless, we incorporate issues of equity, differential and special treatment, and poverty throughout the book. We also highlight the distinctive perspectives that developed and developing countries bring to bear on trade and environment issues, such as ecolabeling and regulatory distinctions based on processes and production methods, among others. These perspectives of course are often tightly linked to a country's development status or unique economic interests.

A third issue that this book does not explicitly cover is the use of economic power in the development of trade rules and in resolving trade disputes. Until recently, developing countries have found it difficult to use their advantage in numbers to overcome their economic disadvantage. At this moment, with little progress on the Doha Development Agenda and the collapse of the Appellate Body, one could easily argue that international trade has swung back to a power orientation rather than one truly embracing the needs of developing countries.

We close with a note of heartfelt thanks to the large number of people who have made important contributions to this book through its three editions. We would like to thank Ashlee Albies, Eleanor Garretson, Candice Rutter, Debby Scott, Josh Smith, Mario Williams, and Jessica Yeh, all students at Lewis & Clark Law School when they provided their valuable research and editing talents. A special thanks to and Zachary Pavlic, for his fantastic work on this third edition. Past and present staff of the Boley Law Library at Lewis & Clark Law School have provided tremendous assistance; thank you Tami Gierloff, Sarah Hunsberger, Brian Hulsey, Kim Jurney, Rob Truman, and Lynn Williams. We also thank Andy Marion and Lisa Frenz for assisting with word processing. We would also like to thank our colleagues who took the time to carefully review draft chapters: David Downes, David Gantz, Geoffrey Garver, Patti Goldman, Eban Goodstein, David Markell, Errol Meidinger, John Knox, Stephen Powell, Richard Tarasofsky, Martin Wagner, Jake Werskman, David Wirth, and Durwood Zaelke. Finally, we are most grateful to our wives — Sue and Cassandra — who have patiently endured a seemingly endless writing process.

We welcome comments on the strengths of this book as well as where it can be improved. Comments can be sent to Chris Wold (wold@lclark.edu).

CHRIS WOLD Sanford Gaines Portland, OR March 2023

## A General Note on Information and Research Sources

The textbook has a selected bibliography immediately preceding the index. We offer here some general notes and commentary on a few of the items in that bibliography, and general guidance on sources for further research.

### **General Texts**

In spite of an active academic and advocacy literature on trade and environment, there are only a few general texts on the subject. Our book remains, as far as we know, the only published text for teachers and students that attempts to cover the whole subject from a legal perspective. The other single comprehensive book on trade and environment policy is the dated but still enormously valuable analysis of the issues by Daniel Esty, now a professor at Yale: GREENING THE GATT: TRADE, ENVIRONMENT, AND THE FUTURE (1994). In addition, attorneys with the Center for International Environmental Law have published a book which provides short summaries and commentaries on, together with large excerpts from, trade-environment reports and other reports with jurisprudential significance. BERNASCONI-OSTERWALDER ET AL., ENVIRONMENT AND TRADE: A GUIDE TO WTO JURISPRUDENCE (2005). Another book covers much of the same material as included in this textbook but from a human rights perspective: BERTA ESPERANZA HERNÁNDEZ-TRUYOL & STEPHEN POWELL, JUST TRADE: A NEW COVENANT LINKING TRADE AND HUMAN RIGHTS (2009).

A number of books, some from the early years and some more recent, are less comprehensive but nevertheless address the broad interface between trade and environment. Among the more recent is a compendium of views from various experts under the title TRADE AND ENVIRONMENT: RECENT CONTROVERSIES (2003), edited by Singer, Hatti & Tandon, available from the Indian publishing house Vedams. For a more idiosyncratic theoretical analysis, *see* OREN PEREZ, ECOLOGICAL SENSITIVITY AND GLOBAL LEGAL PLURALISM: RETHINKING THE TRADE AND ENVIRONMENT CONFLICT (2004). An earlier edited volume presenting various perspectives is TRADE AND ENVIRONMENT: CONFLICT or COMPATIBILITY, Duncan Brack, ed. (1998), available from Earthscan. For Francophones, a rare text in French is SANDRINE MALJEAN-DUBOIS, DROIT DE L'ORGANISATION MONDIALE DU COMMERCE ET PROTECTION DE L'ENVIRONNEMENT (2003).

Some very useful volumes focus on trade and environment in a regional context. In particular, there are a number of books examining the North American Free Trade Agreement and its associated environmental agreement. We draw your attention to two of them. On a general level, for a very useful assessment of NAFTA's environmental consequences by an economist, *see* Kevin Gallagher, Free Trade And The Environment: Mexico, NAFTA, and Beyond (2004). The best available examination of the operation of the environmental side agreement is John Knox & David Markell, eds., Greening NAFTA: The North American Commission For Environmental Cooperation (2003). In addition, two journal have volumes dedicated to trade and environment in a regional context: 45 Wake Forest L. Rev. (2010) and 28 St. Louis Univ. Public L. Rev. (2008).

There are a few general texts on trade law that have significant coverage of trade and environment. In our opinion, the best and most current of these is: Peter Van Den Bossche & Werner Zdouc, The Law and Policy of the World Trade Organization: Text, Cases, and Materials (5th ed. 2022) and Mitsuo Matsushita et al., The World Trade Organization: Law, Practice, and Policy (3d ed. 2015). Another valuable general text is: Raj Bhala & Kevin Kennedy, World Trade Law (1998).

In the environmental literature, the best that exists are relatively short chapters on trade and environment in some environmental law teaching texts, including DAVID HUNTER, JAMES SALZMAN & DURWOOD ZAELKE, INTERNATIONAL ENVIRON-MENTAL LAW AND POLICY (6th ed. 2022) and PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY (9th ed. 2021). For serious study of trade and environment issues, the obvious limitation of these environmental textbooks is that they do not, and do not claim to, treat trade-environment issues in a comprehensive way.

At the general level, there are also some reports and a number of advocacy statements. A significant general report that was inadvertently omitted in the Selected Bibliography was prepared by two economists on the WTO secretariat staff: Nordstrom & Vaughan, Trade and the Environment (1999), available through the WTO website.

#### **General Sources**

There are many different sources of information and analysis available through the Internet. Here is a sampling of major sites that have substantial materials:

#### Official

www.wto.org A very complete site with full text of all WTO agreements, dispute settlement reports, minutes of meetings of the Committee on Trade and Environment, and many other documents, reports, data sources, and news items.

- www.oecd.org The Organisation for Economic Cooperation and Development has prepared a number of papers and reports on different issues in the trade and environment subject area.
- www.unep.org The United Nations Environment Programme has participated on occasion in the international policy deliberations and negotiations on trade and environment issues.
- www.cec.org The North American Commission for Environmental Cooperation has been a pioneer in the rigorous analysis of the environmental effects of trade liberalization in North America.
- http://www.cec.org This is the official website of the Secretariat of the Commission for Environmental Cooperation, with full text of environmental texts associated with the United States-Mexico-Canada Free Trade Agreement, including citizen submissions on enforcement matters.
- www.worldbank.org/icsid The official site of the International Center for the Settlement of Investment Disputes, which handles many investor-state arbitrations under trade agreements.

Many national trade agencies, maintain sections of their websites devoted to trade and environment. A few environmental agencies do the same. Some examples:

U.S.:	www.ustr.gov (U.S. Trade Representative)
	www.epa.gov (U.S. Environmental Protection Agency)
Canada:	www.international.gc.ca/international/index.aspx (Global Affairs Canada)
EU:	europa.eu/pol/comm/index_en.htm (This is the English language portal to all EU activities and bodies dealing with "external trade.")
Australia:	www.dfat.gov.au/trade/ (Department of Foreign Affairs and Trade)

#### Academic/Research

www.ictsd.org (International Centre for Trade and Sustainable Development)

- https://ielp.worldtradelaw.net (International Economic Law and Policy Blog, which includes commentary from trade professors, lawyers, and specialists)
- www.iisd.org (International Institute for Sustainable Development)

www.ciel.org (Center for International Environmental Law)

www.wti.org (The World Trade Institute is an educational and research organization devoted to the law and economics of world trade, based in Switzerland)

### Advocacy

Depending on the organization or the particular study, these may include references to reports or other substantive analysis.

www.sierraclub.org

www.publiccitizen.org

www.oxfam.org

www.wwf.org

www.wwfus.org

www.cato.org

# **Unadopted GATT Panel Reports**

Canada–Measures Affecting the Sale of Gold Coins, GATT Panel Report, L/5863 (Sept. 17, 1985) (unadopted), 455

United States–Restrictions on Imports of Tuna, GATT Panel Report, DS21/R (Sept. 3, 1991) (unadopted) (*Tuna/Dolphin I*), **244–246**, **333–336**, 464

United States-Restrictions on Imports of Tuna, GATT Panel Report, DS29/R (June 16, 1994) (unadopted) (*Tuna/Dolphin II*), 248–249, 331, **340–341** 

United States–Taxes on Automobiles, GATT Panel Report, DS31/R (Oct. 11, 1994) (unadopted) (*Taxes on Automobiles* or *Auto Taxes*), **220–221**, 251

## Adopted GATT Panel Reports

## Note: BISD refers to Basic Instruments and Selected Documents

Canada–Administration of the Foreign Investment Review Act, GATT Panel Report, L/5504, B.I.S.D., 30th Supp. 140 (1984) (adopted Feb. 7, 1984) (*FIRA*), 184, 336

Canada–Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies, GATT Panel Report, DS17/R, L/6304, B.I.S.D., 39th Supp. 27 (adopted Feb. 18 1992), 455

Canada–Measures Affecting Exports of Unprocessed Herring and Salmon, GATT Panel Report, L/6268, B.I.S.D., 35th Supp. 98 (1988) (adopted Mar. 22, 1988) (*Herring and Salmon*), 187, 341–342

EEC–Measures on Animal Feed Proteins, GATT Panel Report, L/4599, B.I.S.D., 25th Supp. 49 (1979) (adopted Mar. 14, 1978), 218

EEC–Payments and Subsidies Paid to Processors and Producers of Oilseeds and Related Animal–Feed Proteins, GATT Panel Report, L/6627, B.I.S.D. 37th Supp. 86 (adopted Jan. 25, 1990) (*EEC–Oilseeds*), 101–102

Italian Discrimination Against Imported Agricultural Machinery, GATT Panel Report, L/833, B.I.S.D., 7th Supp. 60 (1959) (adopted Oct. 23, 1958) (*Italian Agricultural Machinery*), 213

Japan–Customs Duties, Taxes and Labelling Practices on Imported Wines and Alcoholic Beverages, GATT Panel Report, L/6216, B.I.S.D., 34th Supp. 83 (1988) (adopted Nov. 10, 1987) (*Japan–Alcoholic Beverages I*), 219, 256

Japan-Measures on Imports of Leather, GATT Panel Report, L/5623, B.I.S.D., 31st Supp. 94 (1985) (adopted May 15–16, 1984), 137, 180

Japan–Trade in Semi–Conductors, GATT Panel Report, L/6309, B.I.S.D., 35th Supp. 116 (1989) (adopted May 4, 1988) (*Semi–Conductors*), 180

#### TABLE OF CASES

- Spain–Tariff Treatment of Unroasted Coffee, GATT Panel Report, L/5135, B.I.S.D., 28th Supp. 102 (1982) (adopted June 11, 1981), 218
- Thailand–Restrictions on Importation of and Internal Taxes on Cigarettes, GATT Panel Report, DS10/R, B.I.S.D., 37th Supp. 200 (1991) (adopted Nov. 7, 1990) (*Thai Cigarettes*), 332
- United States–Final Dumping Determination on Softwood Lumber from Canada, Appellate Body Report, WT/DS264/AB/R (published Aug. 11, 2004) (adopted Aug. 31, 2004), 639
- United States–Investigation of the International Trade Commission in Softwood Lumber from Canada, Panel Report, WT/DS277/R (published Mar. 22, 2004) (adopted Apr. 26, 2004), 639
- United States–Measures Affecting Alcoholic and Malt Beverages, GATT Panel Report, DS23/R, B.I.S.D., 39th Supp. 206 (1993) (adopted June 19, 1992) (*United States–Alcoholic Beverages*), 219, 455
- United States–Measures Affecting Imports of Softwood Lumber from Canada, GATT Panel Report, SCM/162, B.I.S.D., 40th Supp. 358 (1993) (adopted Oct. 27–28, 1993) (*Lumber III*), 625
- United States–Section 337 of the Tariff Act of 1930, GATT Panel Report, L/6439, B.I.S.D., 36th Supp. 345 (1990) (adopted Nov. 7, 1989) (*Section 337*), 214, 336
- United States–Taxes on Petroleum and Certain Imported Substances, GATT Panel Report, L/6175, B.I.S.D., 34th Supp. 136 (1988) (adopted June 17, 1987) (*Superfund*), 101, 214–215, **280–283**

# Reports of WTO Panels and the WTO Appellate Body

Note: In the text of the book, we have referred to the date of adoption of the report by the Dispute Settlement Body, not the date of publication by the panel or the Appellate Body. Both dates are included below when available.

- Argentina–Measures Affecting the Export of Bovine Hides and the Import of Finished Leather, Panel Report, WT/DS155/R (published Dec. 19, 2000) (adopted Feb. 16, 2001), 180
- Argentina–Measures Affecting Imports of Footwear, Textiles, Apparel and Other Items, Appellate Body Report, WT/DS56/AB/R (published Mar. 27, 1998) (adopted Apr. 23, 1998), 137
- Australia–Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, Panel Report, WT/DS435/R, WTDS441/R (published June 28, 2018) (adopted June 29, 2020), 443
- Australia–Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, Appellate Body Report, WT/DS435/R, WTDS441/R (published June 28, 2018) (adopted June 29, 2020), 432
- Australia–Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, Panel Report, WT/DS458/R, WT/DS467/R (published June 28, 2018) (adopted Aug. 27, 2018), 443

- Australia–Measures Affecting Importation of Salmon, Appellate Body Report, WT/DS18/AB/R (published Sept. 17, 1998) (adopted Nov. 6, 1998) (*Australia–Salmon*), 135, 561, **588–589**
- Australia–Measures Affecting Importation of Salmon: Recourse to Article 21.5 by Canada, Panel Report, WT/DS18/RW (published Feb. 18, 2000) (adopted Mar. 20, 2000), 560
- Brazil–Export Financing Programme for Aircraft, Appellate Body Report, WT/ DS46/AB/R (published Aug. 2, 1999) (adopted Aug. 20, 1999), 619
- Brazil–Export Financing Programme for Aircraft: Recourse to Arbitration under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement by Brazil, Decision by the Arbitrators, WT/DS46/ARB (Aug. 28, 2000), 654
- Brazil–Export Financing Programme for Aircraft: Second Recourse by Canada to Article 21.5 of the DSU, Panel Report, WT/DS46/RW2 (published July 26, 2001) (adopted Aug. 23, 2001), 616
- Brazil–Measures Affecting Imports of Retreaded Tyres, Panel Report, WT/ DS332/R (published June 12, 2007) (adopted Dec. 17, 2007), 180, 336, **351–353**
- Brazil–Measures Affecting Imports of Retreaded Tyres, Appellate Body Report, WT/DS332/AB/R (published Dec. 3, 2007) (adopted Dec. 17, 2007), **353–359**, **405–407**,
- Canada–Certain Measures Affecting the Automotive Industry, Appellate Body Report, WT/DS139/AB/R, WT/DS142/AB/R (published May 31, 2000) (adopted June 19, 2000), 777
- Canada–Certain Measures Affecting the Renewable Energy Generation Sector/ Canada–Certain Measures Relating to the Feed–in tariff Program, Appellate Body Report, WT/DS412/AB/R, WT/DS426/AB/R (published May 6, 2013) (adopted May. 24, 2013), 616, 685, **686–693**, 740, **741–748**
- Canada–Continued Suspension of Obligations in the EC–Hormones Dispute, WT/DS321/AB/R, Appellate Body Report (published Oct. 16, 2008) (adopted Nov. 14, 2008), 112, 532–534, 536, 545, 546–550, 553–556, 565–568, 573–580
- Canada–Measures Affecting Exports of Civilian Aircraft, Appellate Body Report, WT/DS70/AB/R (published Aug. 2, 1999) (adopted Aug. 20, 1999), 617
- Canada–Measures Affecting the Importation of Milk and the Exportation of Dairy Products, Panel Report, WT/DS103, WT/DS113 (published May, 17, 1999) (adopted Oct. 27 1999), 721
- Chile–Measures Affecting the Transit and Importation of Swordfish, Communication from Chile, WT/DS193/3/add.1 (Apr. 9, 2001), 793
- China–Measures Related to the Exportation of Rare Earths, Tungsten, and Molybdenum, Appellate Body Report, WT/DS431AB/R, WT/DS432/AB/R, WT/DS433/AB/R (published Aug. 7, 2014) (adopted Aug. 29, 2014), 376
- China–Measures relating to the Exportation of Certain/Various Raw Materials, Appellate Body Report, WT/DS394/AB/R, WT/DS395/AB/R, WT/DS398/ AB/R (published Jan. 30, 2012) (adopted Feb. 22, 2012), 192, 377
- Costa Rica–Measures Concerning the Importation of Fresh Avocados from Mexico, Panel Report, WT/DS524/R (published Apr. 13, 2022) (adopted May 31, 2022), **535–536**

- European Communities–Computer Equipment, Appellate Body Report, WT/ DS62/AB/R, WT/DS67/AB/R, WT/DS68/AB/R, para. 84 (June 5, 1998) (adopted June 22, 1998), 833
- European Communities–Conditions for the Granting of Tariff Preferences to Developing Countries, Appellate Body Report, WT/DSB246/AB/R (published Apr. 7, 2004) (adopted Apr. 20, 2004), 170
- European Communities–Countervailing Measures on Dynamic Random Access Memory Chips from Korea, Panel Report, WT/DS299/R (June 17, 2005) (adopted Aug. 3, 2005), 615, 618
- European Communities–Export Subsidies on Sugar, Panel Report WT/DS265, WT/DS266 and WT/DS283 (published Oct. 15, 2004) (adopted as modified by the Appellate Body May 19, 2005), 725
- European Communities–Export Subsidies on Sugar, Appellate Body Report, WT/DS265/AB/R, WT/DS266/AB/R, WT/DS283/AB/R (published April 28, 2005) (adopted May 19, 2005), 725
- European Communities–Measures Affecting Asbestos and Asbestos Containing Products, Panel Report, WT/DS135/R (published Sept. 18, 2000) (adopted as modified by the Appellate Body Apr. 5, 2001) (*EC–Asbestos*), 230, 344, **344–348**
- European Communities–Measures Affecting Asbestos and Asbestos-Containing Products, Appellate Body Report, WT/DS135/AB/R (published Mar. 12, 2001) (adopted Apr. 5, 2001) (*EC-Asbestos*), 203, **231–239**, 424, **426–428**
- European Communities–Measures Affecting the Approval and Marketing of Biotech Products, Panel Report, WT/DS291/R, WT/DS292/R, WT/DS293/R (published Sept. 29, 2006) (adopted Nov. 21, 2006), 527, 602
- European Communities–Measures Concerning Meat and Meat Products (Hormones), Panel Report, WT/DS26/R/USA, WT/DS48/R/CAN (published Aug. 18, 1997) (adopted as modified by the Appellate Body Feb. 13, 1998) (*EC– Hormones*), 544
- European Communities–Measures Concerning Meat and Meat Products (Hormones), Appellate Body Report, WT/DS26/AB/R, WT/DS48/AB/R (published Jan. 16, 1998) (adopted Feb. 13, 1998) (*EC–Hormones*), 111, 114, 135, 530, 544, **583–584**
- European Communities–Regime for the Importation, Sale, and Distribution of Bananas, Panel Report, WT/DS27/R/USA (published May 22, 1997) (adopted as modified by the Appellate Body Sept. 25, 1997), 778
- European Communities–Regime for the Importation, Sale and Distribution of Bananas, Appellate Body Report, WT/DS27/AB/R (published Sept. 9, 1997) (adopted Sept. 25, 1997), 424, 717, 776
- European Communities–Measures Prohibiting the Importation and Marketing of Seal Products, Appellate Body Report, WT/DS400/AB/R, WT/DS401/AB/R (published May 22, 2014) (adopted June 18, 2014), 361, 431
- European Communities–Regime for the Importation, Sale and Distribution of Bananas, Appellate Body Report, WT/DS27/AB/R (published Sept. 9, 1997) (adopted Sept. 25, 1997) (*EC–Bananas*), 424, 717, 776

- European Communities–Trade Description of Sardines, Appellate Body Report, WT/DS231/AB/R (published Sept. 26, 2002) (adopted Oct. 23, 2002) (*Sardines*), **128**, **428–430**, **452–453**, **456–460**
- European Communities and Certain Member States–Measures Affecting Trade in Large Civil Aircraft, Appellate Body Report, WT/DS316/AB/R (published May 18, 2011) (adopted June 1, 2011), 641
- European Union–Certain Measures concerning Palm Oil and Oil Palm Crop-Based Biofuels, WT/DS593/11, 696
- European Union–Countervailing Measures on Certain Polyethylene Terephthalate from Pakistan, Appellate Body Report, WT/DS486/AB/R, para. 5.169 (published May 16, 2018) (adopted May 25, 2018), 650
- India–Certain Measures Relating to Solar Cells and Solar Modules/Products, Appellate Body Report, WT/DS456/AB/R (published Sept. 16, 2016) (adopted Oct. 14, 2016), 361, 696, 740
- India–Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products, Panel Report, WT/DS90/R (published on Aug. 23, 1999) (adopted as upheld by the Appellate Body Sept. 22, 1999), 179
- Indonesia–Certain Measures Affecting the Automobile Industry, Panel Report, WT/DS54/R, WT/DS54/R, WT/DS59/R, WT/DS64/R (published July 2, 1998) (adopted July 23, 1998), 648
- Indonesia–Importation of Horticultural Products, Animals and Animal Products, Appellate Body Report, WT/DS477/AB/R, WT/DS478/AB/R (published Nov. 9, 2017) (adopted Nov. 22, 2017), 401
- Indonesia–Measures Concerning the Importation of Chicken Meat and Chicken Products, Panel Report, WT/DS484/R (published Oct. 17, 2017) (adopted Nov. 22, 2017), 364
- Japan–Countervailing Duties on Dynamic Random Access Memories from Korea, Appellate Body Report, WT/DS336 (published Nov. 28, 2007) (adopted Dec. 17, 2007), 616
- Japan–Measures Affecting Agricultural Products, Appellate Body Report, WT/ DS76/AB/R (published Feb. 22, 1999) (adopted Mar. 19, 1999) (*Agricultural Products II*), 582
- Japan–Measures Affecting Consumer Photographic Paper, Panel Report, WT/ DS44/R (published Mar. 31, 1998) (adopted Apr. 22, 1998), 102
- Japan–Measures Affecting the Importation of Apples, Appellate Body Report, WT/DS245/AB/R (published Nov. 26, 2003) (adopted Dec. 10, 2003) (*Japan–Apples*), 557–559, 562–563
- Japan–Taxes on Alcoholic Beverages, Appellate Body Report, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R (published Oct. 4, 1996) (adopted Nov. 1, 1996) (*Japan–Alcoholic Beverages II*), 130, **215–217**, **223–228**, 486, 833
- Korea–Measures Affecting Government Procurement, Panel Report, WT/ DS163/R (published May 1, 2000) (adopted June 19, 2000), 585, 824
- Korea–Measures Affecting Import of Fresh, Chilled & Frozen Beef, Appellate Body Report, WT/DS161/AB/R, WT/DS169/AB/R (published Dec. 11, 2000) (adopted Jan. 10, 2001), 214, 361

- Korea–Taxes on Alcoholic Beverages, Appellate Body Report, WT/DS75/AB/R, WT/DS84/AB/R (published on Jan. 18, 1999) (adopted Feb. 17, 1999), 228
- Mexico–Tax Measures on Soft Drinks and other Beverages, Appellate Body Report, WT/DS308/AB/R (adopted Mar. 24, 2006), 797
- Russian Federation–Measures on the Importation of Live Pigs, Pork and Other Pig Products from the European Union, Panel Report, WT/DS475/R (published Aug. 16, 2016) (adopted Mar. 21, 2017), 582

United States-Anti-Dumping Measure on Shrimp from Ecuador, Panel Report, WT/DS335/R (published Jan. 30, 2007) (adopted Feb. 20, 2017), 404

United States–Certain Measures Relating to the Renewable Energy Sector, WT/ DS510/R (published June 27, 2019), 696, 749

United States–Countervailing Measures on Certain Hot-Rolled Carbon Steel Flat Products from India, Appellate Body Report, WT/DS436/AB/R (published Dec. 8, 2014) (adopted Dec. 19, 2014), 620

United States–Final Countervailing Duty Determination with Respect to Softwood Lumber from Canada, Appellate Body Report, WT/DS257/AB/R (published Jan. 19, 2004) (adopted Feb. 17, 2004), 625, **626–634** 

United States–Final Countervailing Duty Determination with Respect to Softwood Lumber from Canada, Panel Report, WT/DS257/R (published Aug. 29, 2003) (adopted as modified by the Appellate Body Feb. 17, 2003), **634–638**, 639

United States–Import Prohibition of Certain Shrimp and Shrimp Products, Panel Report, WT/DS58/R (published May 15, 1988) (adopted as modified by the Appellate Body Nov. 6, 1998) (*Shrimp/Turtle*), 251

United States–Import Prohibition of Certain Shrimp and Shrimp Products, Appellate Body Report, WT/DS58/AB/R (published Oct. 12, 1998) (adopted Nov. 6, 1998) (*Shrimp/Turtle*), 114, 332, **372–376**, **388–396**, 825

United States–Import Prohibition of Certain Shrimp and Shrimp Products: Recourse to Article 21.5 of the DSU by Malaysia, Appellate Body Report, WT/DS58/AB/RW (published Oct. 22, 2001) (adopted Nov. 21, 2001) (*Shrimp/ Turtle*), 396

United States–Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom, Appellate Body Report, WT/DS138/AB/R (published May 10, 2000) (adopted June 7, 2000), **126–127**, 618

United States–Measures Affecting the Importation of Animals, Meat and Other Animal Products from Argentina, Panel Report, WT/DS475/R (adopted Aug. 31, 2015), 530

United States–Measures Affecting the Production and Sale of Clove Cigarettes, Appellate Body Report, WT/DS406/AB/R (published April 4, 2012) (adopted April 24, 2012), 432, 485, **486–487** 

United States–Measures Affecting Trade in Large Civil Aircraft (2nd Complaint): Recourse to Article 21.5, Appellate Body Report, WT/DS353/ AB/R (published Mar. 28, 2019) (adopted Apr. 11, 2019), 617

xlii

- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, Panel Report, WT/DS381/R (published Sept. 15, 2011) (adopted as modified by the Appellate Body June 13, 2012), 437–439
- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, Appellate Body Report, WT/DS381/AB/R, para.
  405 (published May 16, 2012) (adopted June 13, 2012), 424, 439–442, 448–450, 465–474, 475–480
- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products from Mexico–Recourse to Article 21.5 of the DSU by Mexico, Panel Report, WT/DS381/RW (published Apr. 14, 2015) (adopted Dec. 3, 2015), 482
- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products from Mexico–Recourse to Article 21.5 of the DSU by Mexico, Appellate Body Report, WT/DS381/AB/RW (published Nov. 20, 2015) (adopted Dec. 3, 2015), 482
- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products–Recourse to Article 22.6 of the DSU by the United States, Decision by the Arbitrator, WT/DS381/ARB (published Apr. 25, 2017) (authorized May 22, 2017), 482
- United States–Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products from Mexico–Recourse to Article 21.5 of the DSU by the United States, Appellate Body Report, WT/DS381/AB/RW2 (published Dec. 14, 2018) (adopted Jan. 11, 2019), 483
- United States–Preliminary Determinations with Respect to Certain Softwood Lumber from Canada, Panel Report, WT/DS236/R (published Sept. 27, 2002) (adopted Nov. 1, 2002), 625
- United States–Safeguard Measure on Imports of Crystalline Silicon Photovoltaic Products, Panel Report, WT/DS562/R (published Sept. 2, 2021), **754–762**
- United States–Safeguard Measures on Imports of Fresh, Chilled or Frozen Lamb Meat from New Zealand and Australia, Appellate Body Report, WT/ DS177/AB/R, WT/DS178/AB/R (published May 1, 2001) (adopted May 16, 2001) (*United States–Lamb*), 649, 763
- United States–Standards for Reformulated and Conventional Gasoline, Panel Report, WT/DS2/R (published Jan. 1, 1996) (adopted as modified by the Appellate Body May 20, 1996) (published on Jan. 29, 1996) (*Reformulated Gasoline*), **253–255**, 332
- United States–Standards for Reformulated and Conventional Gasoline, Appellate Body Report, WT/DS2/AB/R (published Apr. 29, 1996) (adopted May 20, 1996) (*Reformulated Gasoline*), 141, **365–370**, **383–386**, 823
- United States–Subsides on Upland Cotton, Panel Report, WT/DS267/R (published Feb. 6, 2003) (adopted as modified by the Appellate Body Mar. 21, 2005), **621–623**, **652–653**, 722
- United States–Subsidies on Upland Cotton, Appellate Body Report, WT/DS267/ AB/R (published Mar. 3, 2005) (adopted Mar. 21, 2005), 651, 653, 722

- United States–Subsidies on Upland Cotton Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement, WT/DS267/ARB/1 (published Aug. 31, 2009), 648
- United States–Tax Treatment for Foreign Sales Corporations, Appellate Body Report, WT/DS108/AB/R (published Feb. 24, 2000) (adopted Mar. 20, 2000), 617
- United States–Tax Treatment for Foreign Sales Corporations: Recourse to Arbitration under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement by the United States, Decision by the Arbitrator, WT/DS108/ARB (Aug. 30, 2002), 655
- WTO Appellate Body, Procedural Ruling Concerning the Opening of the Oral Hearing to Public Observation in United States–Continued Suspension and Canada–Continued Suspension WT/DS320/AB/R, Annex IV (published Oct. 16, 2008) (adopted Nov. 14, 2008), 124–125, 532–534, 536, 545, 546–550, 553–556, 565–568, 573–580

#### Arbitral, Administrative, Judicial Decisions

- ADF Group Inc. v. United States of America, ICSID Case No. ARB(AF)/00/1, Second Submission of Canada Pursuant to NAFTA Article 1128 (July 19, 2002), 881
- Archer Daniels Midland Co. & Tate & Lyle Ingredients Americas, Inc. v. Mexico, ICSID Case No. ARB(AF)/04/5, Award (Nov. 21, 2007), 874
- Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687, 115 S. Ct. 2407, 132 L. Ed. 2d 597 (1995), 895
- Bayview Irrigation District v. United Mexican States, ICSID Case No. ARB(AF)/05/1, (Award), ¶122 (June 19, 2007), 861
- Canadian Cattlemen for Fair Trade v. United States of America (Award on Jurisdiction) (Jan. 28, 2008), 861
- Center for International Environmental Law v. United States Trade Representative, 237 F. Supp. 2d 17 (D.D.C. 2002), 1028, 1030
- Certain German Interests in Polish Upper Silesia, 1926 P.C.I.J., (ser. A) No. 7, 144
- Chemical Waste Management, Inc. v. Hunt, 504 U.S. 334; 112 S. Ct. 2009; 119 L. Ed. 2d 121 (1992), **297–302**
- Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1971), 399
- City of Philadelphia v. New Jersey, 437 U.S. 617; 98 S. Ct. 2531; 57 L. Ed. 2d 47 (1978), **295–297**, 298, 299, 300, 301, 302, 305
- Clayton v. Canada, Permanent Court of Arbitration (PCA) Case No. 2009–04, Award on Jurisdiction and Liability, para. 432 (Mar. 17, 2015), 880
- Commission v. Belgium, Case C-2/90 [1992] ECR I-4331 (Walloon Waste), 308, 314
- Commission v. Denmark, Case 302/86, [1988] ECR 4607 (1989) (*Danish Bottles*), 309, **310–313**, 316, 317
- Corn Prod. Int'l, Inc. v. Mexico, ICSID Case No. ARB(AF)/04/01, Decision on Responsibility (Jan. 15, 2008). 875
- Council Resolution 04–03 (Ontario Logging), C/C.01/03–02/RES/05/final, (Apr. 22, 2003), 964

- Criminal Proceedings against Gourmetterie Van den Burg, Case C–169/89, 1990 ECJ I–2143 (1990) (*Dutch Red Grouse*), 338
- Crystalline Silicon Photovoltaic Cells Safeguard Measure (USA–CDA–2021–31–01), Final Report (Feb. 15, 2022), 766
- Department of Commerce, Issues and Decision Memorandum for the Final Affirmative Determination of the Countervailing Duty Investigation of Forged Steel Fluid End Blocks from the Federal Republic of Germany, 85 ITADOC 80011 (Dec. 11, 2020), **698–700**
- Earth Island Institute v. Evans, 2004 U.S. Dist. LEXIS 15729 (N.D. Cal. Aug. 9, 2004), 436
- Eco Oro Minerals Corp. v. Republic of Colombia, ICSID Case No. ARB/16/41, Decision on Jurisdiction, Liability and Directions on Quantum (Sept. 9, 2021), 917–919
- Estonia v. Commission, Case T-263/07 (Judgments of 23 September 2009).
- European Commission v. Republic of Bulgaria, Case C97/17 (Apr. 26, 2018), 1008–1013
- Extraordinary Challenge Committee, Panel No. ECC-94-1904-01 USA, 1994 FTAPD LEXIS 11 (Aug. 3, 1994), 625
- Exxon Corp. v. Governor of Maryland, 437 U.S. 117, 98 S. Ct. 2207; 57 L. Ed. 2d 91 (1978), 304
- Final Factual Record for BC Aboriginal Fisheries Commission et al. (BC Hydro), A14/SEM/97–001 (May 30, 2000), **957–959**
- Final Factual Record for Migratory Birds, SEM–99–002 (Apr. 22, 2003), 947, 948–951
- Factual Record of BC Mining, Attachment 2: Comments of Canada, SEM-98-004 (June 27, 2003), 960, 964
- Final Factual Record of the Cruise Ship Pier Project in Cozumel, Quintana Roo (Cozumel), A14/SEM/96–001/13/FFR (Oct. 24, 1997), 956
- Final Factual Record of the Río Magdalena Submission (Rio Magdalena), SEM-97-002 (Oct. 24, 2003), 960
- Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources, 504 U.S. 353 (1992), 298 (note 3)
- Free Zones Case, 1930 P.C.I.J. (ser. A) No. 24, 144
- Gabcikovo-Nagymoros Project (Hung. v. Slovk.), 1997 I.C.J. 3 (Sept. 25, 1997), 63
- Glamis Gold, Ltd. v. United States of America, UNCITRAL, Award, (June 8, 2009), **883–888**, **893–894**
- Infinito Gold Ltd. v. Republic of Costa Rica, ICSID Case No. ARB/14/5, Award (June 2, 2021), **913–915**
- In the Matter of Canada's Landing Requirement for Pacific Coast Salmon and Herring, U.S.–Canada Free Trade Agreement Panel Report, No. CDA–89– 1807–01, 1989 FTAPD LEXIS 6 (Oct. 16, 1989) (Salmon and Herring), **187–191**, 386
- In the Matter of Certain Softwood Lumber Products from Canada, No. ECC– 94–1904–01 USA, 1993 FTAPD LEXIS 10 (Sept. 17, 1993), 1993 FTAPD LEXIS 15 (Dec. 17, 1993), 625

- In the Matter of Certain Softwood Lumber Products from Canada: Final Affirmative Threat of Injury Determination, Second Remand Decision of the Panel (NAFTA), Secretariat File No. USA–CDA–2002–1904–07, (Aug. 31, 2004), 639
- In the Mattter of Cross–Border Trucking Services (Mex. v. U.S.), NAFTA Arb. Panel, USA–MEX–98–2008–01 (Feb. 6, 2001), 1039
- In the Matter of Lobsters from Canada, U.S.–Canada Free Trade Agreement Panel Report, No. USA 89–1807–01, 1990 FTAPD LEXIS 11 (May 25, 1990) (Lobsters), 182
- In the Matter of Puerto Rico's Regulations on the Import, Distribution and Sale of U.H.T. Milk from Quebec, 1993 FTAPD LEXIS 18 (June 3, 1993), 102, 604
- Loewen Group, Inc. v. United States of America, ICSID Case No. ARB(AF)/98/3, Award on Jurisdiction (Jan. 5, 2001), 862, 881
- Lujan v. National Wildlife Federation, 497 U.S. 871 (1990), 139
- Made in the U.S.A. Foundation v. United States, 242 F.3d 1300 (11th Cir. 2001), 152
- Metalclad Corp. v. Mexico, ICSID Case No. ARB(AF)/97/1, Award (Aug. 30, 2000), 890
- Methanex v. United States of America, UNCITRAL, Final Award of the Tribunal on Jurisdiction and Merits) (August 3, 2005),
- Methanex v. United States of America, UNCITRAL, Preliminary Award on Jurisdiction and Admissibility (Aug. 7, 2002), **863–864**, 876
- Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 470–474; 101 S. Ct. 715; 66 L. Ed. 2d 659 (1981), **302–304**
- Mondev Int'l Ltd. v. United States of America, ICSID Case No. ARB(AF)/99/2, Final Award (Oct. 11, 2001), 881
- Municipality of Almelo v. NV Energiebedrijf Ijsselmij, Case C-393/92, [1994] E.C.R. I-1477 (1994), 634
- NextEra Energy Global Holdings B.V. and NextEra Energy Spain Holdings B.V. (NextEra), ICSID Case No. ARB/14/11 (March 12, 2019), 900, **901–905**

Northwest Ecosystem Alliance v. Office of the United States Trade Representative, No. C99–1165R (W.D. Wash. Nov. 9, 1999), 1033

- Opinion 1/94, Competence of the Community to Conclude International Agreements Concerning Services and the Protection of Intellectual Property, 1994 E.C.R. I–5267, P 5, [1995] 1 C.M.L.R. 205, 158
- Philip Morris Asia Limited (Hong Kong) v. The Commonwealth of Australia, Award on Jurisdiction and Admissibility, PCA Case No. 2012–12 (Dec. 17, 2015), 909
- Philip Morris Brand Sàrl (Switzerland) v. Oriental Republic of Uruguay, Award, ICSID Case No. ARB/10/7 (July 8, 2016), 909
- Pike v. Bruce Church, Inc., 397 U.S. 137 (1970), 303, 305
- Pope & Talbot, Inc. v. Canada, UNCITRAL, Interim Award (June 26, 2000), 861, 891–893
- Pope & Talbot v. Canada, UNCITRAL, Award on the Merits of Phase 2 (Apr. 10, 2001), 871–872,

- Presidential Proclamation 9693 of January 23, 2018, 83 Fed. Reg. 3541 (Jan. 25, 2018), 753
- Presidential Proclamation 10101 of October 10, 2020, 85 Fed. Reg. 65639 (Oct. 16, 2020), 753
- Presidential Proclamation 10339 of February 4, 2022, 87 Fed. Reg. 7357 (Feb. 9, 2022), 764, 774
- Public Citizen v. Department of Transportation, 316 F.3d 1002 (9th Cir. 2003), 1039
- Public Citizen v. Office of the United States Trade Representative, 804 F. Supp. 385 (D.D.C. 1992), 120, 1024
- Public Citizen v. Office of the United States Trade Representative, 970 F.2d 916 (D.C. Cir. 1992), 1037
- Public Citizen v. Office of the United States Trade Representative, 822 F. Supp. 21 (D.D.C. 1993), 1037
- Public Citizen v. Office of the United States Trade Representative, 5 F.3d 549 (D.C. Cir. 1993), *cert. denied*, 510 U.S. 1041 (1994), 1038

Report of the Article 1704 Panel Concerning a Dispute Between Alberta and Canada Regarding the Manganese–based Fuel Additives Act, File No. 97/98–15–MMT–P058 (June 12, 1998), **321–326** 

- Rewe–Zentral AG v. Bundesmonopolverwaltung für Branntwein, (*Cassis de Dijon*), Case 120/78, [1979] ECR 649 (1979), **309–310**
- Secretariat Notification to Council under Article 15(1) (Migratory Birds) A14/ SEM/99-002/11/ADV (Dec. 15, 2000), **948-951**, **962-963**
- S.D. Myers v. Government of Canada, UNCITRAL, Partial Award (Nov. 13, 2000), 868–870, 878–879,
- Slowakische Republik v Achmea BV, Case C-284/16 (2018), 912
- Tecnicas Medioambientales Tecmed, S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award (May 29, 2003), 882
- Union of Concerned Scientists v. Wheeler, 954 F.3d 11 (1st Cir. 2020), 1034
- United Mexican States v. Metalclad Corp., 2001 B.C.S.C. 664 (2001), 891
- United States (L.F. Neer) v. United Mexican States, 4 R.I.A.A. 60 (Mex.–U.S. General Claims Commission 1926), 878
- Vellore Citizens Welfare Forum v. Union of India & Others, WP 914/1991 Scale (PIL) 1981–97 (India 1996), *available at* http://www.elaw.org, 145
- Washington Toxics Coalition v. Office of the U.S. Trade Representative, No. COO–73OR (W.D. Wash. Jan. 16, 2003), 1033
- Waste Management v. Mexico (Award), ICSID Case No. ARB(AF)/00/3, Arbitral Award (Apr. 30, 2004), 894
- Wyoming v. Oklahoma, 502 U.S. 437, 112 S. Ct. 789; 117 L. Ed. 2d 1 (1992), 300
- Zia v. WAPDA, P.L.D. 1994 Supreme Court 693 (Pakistan 1994), *available at* http://www.elaw.org, 145

# List of Acronyms

AIT	Canadian Agreement on International Trade
APA	U.S. Administrative Procedure Act
BECA	U.SMexico Border Environment Cooperation Agreement
BECC	Border Environmental Cooperation Commission
BISD	Basic Instruments and Selected Documents
BITs	Bilateral Investment Treaties
CAFE	Corporate Average Fuel Economy
CEC	Commission for Environmental Cooperation (of North America)
CFCs	Chlorofluorocarbons
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CTE	Committee on Trade and Environment
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
DR-CAFTA	U.S.–Dominican Republic–Central American Free Trade Agreement
EA	Environmental Assessment
EC	European Communities
EIA/EIS	Environmental Impact Assessment/Statement
EPA	U.S. Environmental Protection Agency
ESI	Environmental Sustainability Index
EU	European Union
FACA	Federal Advisory Committee Act
FACA	Federal Advisory Committee Act
FAO	U.N. Food and Agriculture Organization

### LIST OF ACRONYMS

FDI	Foreign Direct Investment
FOIA	Freedom of Information Act
FTAA	Free Trade Area of the Americas
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GMF/GMO	Genetically Modified Food/Organism
GSP	Generalized System of Preferences
HTS	Harmonized Tariff System
ICJ	International Court of Justice
ICSID	International Centre for Settlement of Investment Disputes
IIA	International Investment Agreement
ISO	International Organization of Standardization
ITO	International Trade Organization
JPAC	Joint Public Advisory Committee
MEAs	Multilateral Environmental Agreements
MFN	Most Favored Nation
MMPA	U.S. Marine Mammal Protection Act
NAAEC	North American Agreement for Environmental Cooperation
NAFTA	North American Free Trade Agreement
NGOs	Nongovernmental Organizations
NEPA	U.S. National Environmental Policy Act
OECD	Organization for Economic Cooperation and Development
PCBs	Polychlorinated Biphenyls
PPMs	Processes and Production Methods
PPP	Polluter Pays Principle
TBT Agreement	Agreement on Technical Barriers to Trade
TEDs	Turtle Excluder Devices
TNCs	Transnational Corporations

TPA	U.S. Bipartisan Trade Promotion Authority Act
TRIPs	Agreement on Trade-related Intellectual Property Rights
SCM Agreement	Agreement on Subsidies and Countervailing Measures
U	e e
SPS Agreement	Agreement on the Application of Sanitary and
	Phytosanitary Measures
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	U.N. Conference on Trade and Development
UNDP	U.N. Development Program
UNEP	U.N. Environment Program
USTR	U.S. Trade Representative
WHO	World Health Organization
WTO	World Trade Organization