

guide for minimizing tensions. The authors quite rightly dismiss option number one. Dispute resolution is likely to generate a process of integrating trade and environmental policies that is cumbersome, slow, and inconsistent. Within the category of ‘negotiated’ solutions, they conclude – quite probably correctly – that amending the WTO to authorize a waiver from GATT obligations and other WTO provisions for climate change policies would be too difficult. They offer more hope that a ‘green space’ might be created within the WTO structure, perhaps by means of a new Annex 4 code, offering some flexibility for national efforts to reduce greenhouse gas emissions. They also see some value in seeking guidance from the officials implementing any new climate change treaty for WTO interpretations of how far Article XX exceptions should go.

Perhaps the most promising of the options identified is the idea of a new ‘Code of Good WTO Practice on Greenhouse Gas Emissions Controls’. The PIIE team offers a draft of such a Green Code in Chapter 5 of their volume, spelling out when and how trade-related greenhouse gas trade measures or border tax adjustments might be permitted, how to define ‘like products’ in the context of climate change regulations, and what sorts of emissions allowance allocation schemes might be seen as legitimate (and not a subsidy). These practical suggestions offer the most far-reaching program yet put forward for ensuring that a new climate change regime can co-exist with the international trading system. The ideas presented are thoughtful, carefully grounded in trade law and WTO precedent, built on sound understanding of environmental policy (promoting market mechanisms rather than command and control regulations), and properly limited. As a result, the PIIE Code offers a readymade frame for discussion as policymakers bear down on the need for a practical way to integrate emissions controls and trade obligations.

Global Warming and the World Trading System represents the best tradition of the Peterson Institute for International Economics. It takes on a hard problem at a critical juncture and offers insightful analysis as well as practical policy solutions that promise to advance understanding and policymaking at both the national and global levels. Much more work needs to be done to ensure that the world community succeeds in responding to climate change while promoting trade liberalization, but a starting point for the requisite conversation is now available.

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Trade and the Environment: Fundamental Issues in International Law, WTO Law and Legal Theory

By Erich Vranes

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Under the rules of the World Trade Organization (WTO), WTO members can adopt trade-related measures aimed at protecting the environment, subject to certain carefully crafted conditions. The three trade and environment cases brought under the WTO dispute settlement mechanism to date (the *US–Gasoline*, *US–Shrimp* and *Brazil–Retreaded Tyres* cases) have confirmed WTO members’ ability to adopt

trade-related environmental measures and have addressed several key concepts of the legal interconnections between trade and environment.

That being said, a number of other legal issues at the juncture of trade and environment remain to be clarified and have been intensely debated in the literature, in particular the consequences of the extraterritoriality of certain domestic environmental measures and the risk of fragmentation of public international law. Erich Vranes' publication intends to shed further light on these legally complex issues. The recent policy debate on the effect of climate-related domestic measures on trade rules also makes this publication particularly timely.

The publication presents in a rather unique fashion the legal linkages between trade and environment from three complementary perspectives: (i) the 'horizontal' relationship between WTO law and public international law, including treaty law as contained in multilateral environmental agreements; (ii) the 'vertical' linkages between domestic measures that regulate the protection of the environment, including their consequences in other countries, and WTO law; and (iii) the linkages between trade and environment in the context of relevant WTO rules and fundamental principles. The final section of this book applies this three-dimensional analytical framework to two concrete environmental problems of global importance: ozone and climate protection.

Vranes' examination of the first dimension, that is the relationship between WTO law and public international law, focuses on the question of conflicts of norms and the fragmentation of international law. The well-known citation of the WTO Appellate Body in the *US-Gasoline* case that WTO Agreements should not be read in 'clinical isolation' from public international law takes on all its meaning in this chapter. Vranes reviews in detail the general principles for resolving conflicts of norms, such as *lex specialis* and *lex posterior*, and discusses how the different principles would interplay, including in the context of the WTO dispute settlement mechanism. In his analysis of the different types of norms, Vranes also tackles the challenging question of whether, and to what extent, a permission may conflict with a prescriptive norm, that is an obligation or a prohibition. He provides a comprehensive review of the existing legal analysis in this domain.

In the context of the second dimension of the trade and environment interface, the author discusses the extent to which unilateral trade measures that are intended to deal with extraterritorial concerns may be permissible, from a domestic and an international point of view. An interesting link is being made between extraterritoriality and the use of the concept of 'proportionality' or 'balancing' of the trade measure with the objective at hand. The author argues that the conflicting rights of the state resorting to unilateral trade measures for environmental purposes and those of the states affected by such measures should be reconciled by a balancing operation that is structured by the tests of necessity and proportionality.

Regarding the permissibility of unilateral trade measures that address extraterritorial environmental concerns, Vranes argues that trade measures addressing such concerns should be regarded as the exception to the general rule of cooperation as laid down in Article 1 of the United Nations Charter, and in Principle 12 of the Rio Declaration specifically regarding environmental problems. Principle 12 provides that unilateral actions to deal with environmental challenges outside the jurisdiction of the importing

country should be avoided and that environmental measures addressing transboundary environmental problems should be based on an international consensus. This is an interesting point that is particularly relevant in the context of the current multilateral negotiations on climate change under the United Nations Framework Convention on Climate Change (UNFCCC) and the parallel development of national legislations on climate change mitigation.

Finally as a third dimension, the author studies in great detail a number of fundamental issues in WTO law, as they relate to the protection of the environment. For instance, Vranes proposes a three-tier structure for the judicial review of the General Agreement on Tariffs and Trade (GATT) principle of non-discrimination: (i) a finding of likeness, (ii) a finding of differential treatment, and (iii) the examination of whether this differential treatment can be justified under the exception clause of GATT Article XX. Concerning this last aspect, Vranes' analysis of WTO case law led him to the conclusion that justification under Article XX is predominantly determined by considerations of suitability and necessity of the measure in pursuing a legitimate policy goal. Fundamental trade disciplines pursuant to the Technical Barriers to Trade (TBT) Agreement are also reviewed by the author. For instance, through a careful interpretation of Annex 1 of the TBT Agreement, in line with the canon of treaty interpretation set forth in the Vienna Convention on the Law of Treaties, Vranes argues that measures regulating processes and production methods of specific products that do not leave a physical trace in the resulting products can be regarded as being 'related' to such products, and therefore fall under the coverage of the TBT Agreement.

In the final chapter, Vranes applies this three-dimensional analytical framework to two current environmental debates: ozone protection and climate change mitigation. The international regimes on ozone and climate change raise a number of different legal challenges in relation to the trade regime. For instance, the legal framework created by the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol raise unique jurisdictional issues in relation to possible trade measures against non-parties.

The author points out that unlike the Montreal Protocol, the Kyoto Protocol to the UNFCCC does not prescribe precise domestic measures that its parties must use in order to reduce greenhouse gas emissions, nor does it explicitly 'permit' such measures. In fact, the case study on climate change focuses on 'vertical conflicts' between domestic measures and WTO rules. In particular, it discusses a few examples of measures (such as carbon labelling), mainly technical requirements, subject to the TBT Agreement. In this context, the author addresses briefly the issue of the relevance of WTO rules to the conduct of private persons, for instance in the context of voluntary labelling schemes. With today's proliferation of privately set environmental standards (such as food miles labelling), this legal issue would have probably deserved further analysis.

Overall, this book goes beyond other publications on the topic of trade and environment by focussing on the legal interplay between trade and environment and dealing with fundamental legal questions in a comprehensive scholarly fashion. Throughout the publication, the author suggests practical ways and legal analysis to approach the trade and environment debate in a mutually supportive and constructive manner so as to avoid a situation of fragmentation of international law. Vranes' treatise provides a valuable contribution to the debate on the legal relationship between trade rules and

domestic and international environmental policies. And his analytical framework could probably be applied also to a number of other ‘trade and ...’ issues, such as trade and labor or trade and health.

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¹ The views expressed are without prejudice to the positions of WTO Members and to their rights and obligations under the WTO.