



Northwestern School of Law
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ENVIRONMENTAL LAW

MAKING TRADE AND ENVIRONMENTAL POLICIES MUTUALLY REINFORCING: FORGING COMPETITIVE SUSTAINABILITY

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The authors assert that environmental and international trade policies must become mutually reinforcing so that environmental policies do not distort trade flows and economic activities do not continue in an unsound and unsustainable manner. Competitive sustainability is the mechanism for achieving sustainable development by harmonizing domestic and international environmental standards through the use of competitive forces which reward the cleanest and most efficient economic actors. An international system of incentives and disincentives will create a mutually reinforcing mechanism for directing trade and environmental policies toward improving the worldwide standard of living.

I INTRODUCTION

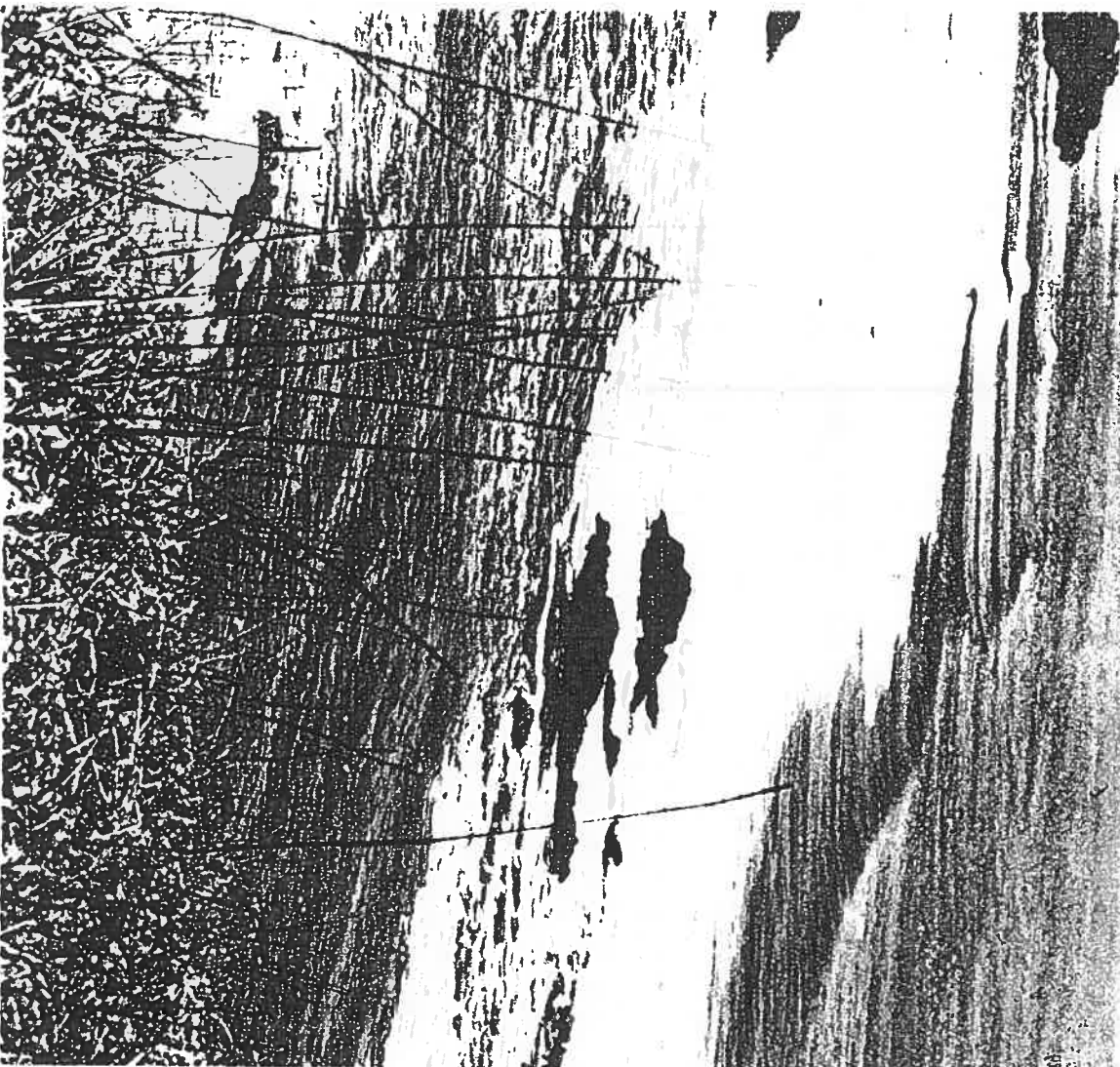
Former U.S. Ambassador to the General Agreement on Tariffs & Trade¹ Michael Smith astutely noted that the environment is the trade issue of the 1990s, and that, unless a considered solution is developed to allow constructive interaction between trade and the environment, each of these vital policy spheres may find themselves compromised.² Put in "Smithese," "[t]he question is

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1. An administrative body established to oversee the General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. Part 5, 55 U.N.T.S. 187 (GATT).

2. Mark Magnier, *Power of Environmentalists Called Trade Issue of '90s*, J.



whether you want to lay down in front of the train or get in the cab and steer it."³ Steering is the preferable approach.

As the contributions to this issue demonstrate, the steering process for trade and environment policy indeed has begun. The dialogue is rapidly evolving from its early emphasis on potential conflicts between trade and environmental policies to a more positive attempt to minimize or eliminate frictions between these two policy spheres. Though this evolution is positive from both trade and environmental perspectives, it simply does not go far enough. We need to rethink the course we want to steer. True advancement of both ecological and economic imperatives will occur only when trade and environmental policies are mutually reinforcing.⁴ "Competitive sustainability" defines a mechanism for realizing sustainable development through the "upward harmonization" of domestic and international environmental standards, using competitive forces to create a level playing field for commerce at consistently higher levels of environmental and social protections that reward the cleanest and most efficient economic actors for their efforts.⁵ The goal here is not to overburden economic activities, but to put them to work for the environment. By focusing economic activities, through incentives and disincentives, in directions that yield both economic and environmental benefits, these economic activities can become engines to drive standards of living—broadly defined to include economic, environmental, social, and health stability and security—upwards.

A. *The Untenable Status Quo*

Environmental policies have long relied on trade sanctions to advance their goals,⁶ and trade tribunals nearly a decade ago found environmental laws in conflict with trade rules.⁷ Yet, it was

Com., July 20, 1992, at 3A (paraphrasing Ambassador Smith).

3. *Id.* at 3A (quoting Ambassador Smith).

4. See Robert F. Houman & Durwood J. Zaelke, *Trade, Environment & Sustainable Development: A Primer*, 15 *HASTINGS INT'L & COMP. L. REV.* 535, 610 (1992).

5. See Richard B. Stewart, *Controlling Environmental Risks Through Economic Incentives*, 13 *COLUM. J. ENVTL. L.* 153 (1988).

6. See, e.g., Fishermen's Protective Act of 1967, 22 U.S.C. §§ 1971-1980 (1988) (restricting the import of fishery or wildlife products from countries which violate international environmental programs).

7. See, e.g., *United States—Taxes on Petroleum and Certain Imported Sub-*

not until the *Tuna-Dolphin* decision⁸ that trade and environmental policies were perceived as significant threats to each other.⁹ Only in the wake of the *Tuna-Dolphin* panel's sweeping pronouncements did trade advocates come to fear environmentalists and vice versa. There has been no rush, however, to use environmental policies to disrupt the trading system or to use trade policies to undermine environmental protections. Thus, the current ecological and economic state of the world—the status quo—is a product of coexisting trade and environmental policies.

Yet, even a cursory glance at the Earth's "vital signs" shows that this status quo is simply not working.¹⁰ Environmental degradation, driven principally by economic activities, is already occurring at a rate and scale that places both ecological and economic systems at risk.¹¹ Take, for example, the threat of global warming caused chiefly by carbon dioxide emissions.¹² Assuming the present growth rate in greenhouse gases remains constant, we may have already committed the planet to a mean global warming of three to eight degrees Fahrenheit (1.5°C to 4.5°C).¹³ Global warming is expected to cause a mean sea-level rise of approxi-

stances, GATT Doc. L/6175 (June 17, 1987) (the "Superfund" case).

8. Dispute Settlement Panel Report on United States Restrictions of Imports of Tuna, Aug. 16, 1991, 30 I.L.M. 1594.

9. See, e.g., Ad Hoc Working Group of Legal and Technical Experts for the Preparation of a Protocol on Chlorofluorocarbons to the Vienna Convention for the Protection of the Ozone Layer (Vienna Group), Report of the Ad Hoc Working Group on the Work of Its Third Session, UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) at 17-18, U.N. Doc. WG.172 (1987) (GATT Secretariat legal expert's opinion to the Montreal Protocol negotiators that the trade provisions of the Protocol were consistent with the GATT) [hereinafter GATT Report]; *Unfair Trade Practices: Hearings Before the Subcommittee on Oversight and Investigation of the House of Representatives Committee on Energy and Commerce*, 101st Cong., 2d Sess. 179 (1990) (The Marine Mammal Protection Act is consistent with GATT).

10. See Lester R. Brown et al., *VITAL SIGNS 1992*, at 15-19 (1992).

11. HERMAN DALY & JOHN COBB, FOR THE COMMON GOOD: REDIRECTING THE ECONOMY TOWARDS COMMUNITY, THE ENVIRONMENT AND A SUSTAINABLE FUTURE 2 (1989).

12. See U.S. CONGRESS, OFFICE OF TECH. ASSESSMENT, CHANGING BY DEGREES: STEPS TO REDUCE GREENHOUSE GASES 53-58 (1991). Climate models suggest that a 30% increase in carbon dioxide projected for the period between 1985 and 2030 will add 0.45°C to 1.3°C to expected global temperatures. *Id.* at 57.

13. *Id.* at 58; Dean Edwin Abrahamson, *Global Warming: The Issue, Impacts, Responses*, in *THE CHALLENGE OF GLOBAL WARMING* 10 (Dean Edwin Abrahamson ed., 1989).

mately twenty-eight to ninety-eight centimeters by 2090.¹⁴ A rise of only twenty-five centimeters would render countless island-states uninhabitable, as well as the delta regions of the Nile, the Ganges and the Yangtze rivers, displacing millions of people.¹⁵ Given these and other consequences, the potential economic and social effects of global warming are substantial.

Global warming is just one of the many threats that jeopardize the long-term prosperity of both our ecological and economic systems. Ozone depletion will also place major burdens on these systems. Scientists have recently detected record high levels of ozone-depleting chlorine monoxide over New England and Canada.¹⁶ These record levels are troubling when one considers that epidemiologists estimate that *each* one percent loss of stratospheric ozone leads to an increased incidence of skin cancer of three percent or more.¹⁷ The human and economic costs of increasing cancer rates by even three percent are substantial, to say the least.

The deliberate overutilization of natural resources is compromising global economic and ecological security¹⁸ by threatening biodiversity and depleting the world's economic capital reserves.

The result is that our standard of living is falling. Environmental harms, such as air and water pollution, are causing greater numbers of people to become afflicted with illnesses such as respiratory disease and cancer.¹⁹ Meanwhile, the overexploitation of resources jeopardizes our ability to feed the world's current popu-

14. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE: THE IPCC IMPACTS ASSESSMENT, at 5-1 to 5-2 (1990).

15. *Id.*

16. See Kathy Sawyer, *Ozone-Hole Conditions Spreading: High Concentrations of Key Pollutants Discovered over the U.S.*, WASH. POST, Feb. 4, 1992, at A1.

17. BROWN ET AL., *supra* note 10, at 62 (citing UNEP, ENVIRONMENTAL EFFECTS OF OZONE DEPLETION: 1991 UPDATE (1991)).

18. For example, the overexploitation of fisheries already threatens a number of commercially significant species, including Atlantic Cod, Haddock, Atlantic Herring, Capelin, Southern African Pilchard, Pacific Ocean Perch, King Crab, and Peruvian Anchoveta. *Id.* at 30 (citing UNEP, ENVIRONMENTAL DATA REPORT 1991-92 (1991)).

19. See ENVIRONMENTAL EXCHANGE, AIR POLLUTION SOLUTIONS 6 (1992) (EPA estimates provide that roughly 140,000 Americans alive today will get cancer from toxic industrial air emissions).

lation at a time when that population is steadily increasing.²⁰ Simply put, everything that should be increasing is decreasing and everything that should be decreasing is increasing. Economic activities are intended to make our lives better, yet in their current form they are making our lives worse.

It follows that we have to rethink the direction of economic activity. The global economy must be directed toward activities that not only reap economic benefits but, at a minimum, do not degrade the environment, and preferably work in some way to ameliorate past environmental trespasses. Paul Hawken, the founder of the environmentally conscious Smith & Hawken company, summarized this need in the following manner: "Business is the only mechanism on the planet today powerful enough to produce the changes necessary to reverse global environmental and social degradation."²¹ In rethinking the course of economic activity, Hawken goes on to state that "[t]here is an economy of degradation, which is one objective way to describe industrialization, and there is a restorative economy that is nascent but real, whose potential size is as great as the entire world economy is today."²² The question remains: How can the global economy be encouraged to follow a restorative path? One of the principal mechanisms for encouraging this conversion is the international trade system.

B. *Where Trade Fits into Competitive Sustainability*

With the mass globalization of economic activity now occurring,²³ economic activity is rapidly becoming synonymous with international trade.²⁴ In the United States, for example, from 1988 to 1991, gross domestic product (GDP) increased \$129.8 billion in constant dollars.²⁵ Exports of products alone accounted for seventy percent of that growth.²⁶ Moreover, at least one group of ex-

20. See WILLIAM OPHULS, *ECOLOGY AND THE POLITICS OF SCARCITY* 48-56 (1977).

21. Paul Hawken, *The Ecology of Commerce*, Inc., Apr. 1992, at 93, 94.

22. *Id.*

23. See Derek Leebaert, *Innovations and Private Initiatives as Frontiers*, 15 WASH. Q. 107, 113-19 (1992).

24. See *id.*

25. See Ed Rubenstein, *The Be GATTs*, NAT'L REV. Apr. 27, 1992, at 14.

26. *Id.*

perts, the Council of Economic Advisors, estimates that if the current Uruguay Round of the GATT can be successfully completed, the United States will add \$1.1 trillion (in constant 1989 dollars) to GDP over the next ten years.²⁷

The numbers are equally impressive at the international level. Although growth has been sluggish over the past three years, in 1991 the volume of world trade in merchandise reached a new peak of \$3.53 trillion.²⁸ The services sector contributed an additional \$360 billion to world trade volume—a figure that even GATT cautions is likely to be an underestimate.²⁹

If one follows the Ricardo and Smith schools of thought,³⁰ free trade allows each country to do that which it does best at a "comparative advantage."³¹ The efficiency and comparative advantage of individual countries, acting through free trade, result in a magnified efficiency of the global economy.³² In addition, trade rules, like the U.S. Internal Revenue Code, provide incentives for certain activities and disincentives for others, directing, to a degree, what activities will be undertaken.³³ In a perfect system, trade provides incentives for, and magnifies the effects of, economic activities that benefit larger numbers of people around the world.³⁴ But if, as is now occurring, economic activities decrease human well-being, trade actually makes economic activity more efficient at diminishing the overall standard of living.³⁵

If free trade is a mechanism to advance other goals—as opposed to a goal unto itself—the current condition that allows trade to lower standards of living is unacceptable. This is not to

27. *Id.*

28. Frances Williams, *GATT Disquiet at Slower Trade Growth*, FIN. TIMES, Mar. 18, 1992, at 18.

29. *See id.*

30. *See generally* DAVID RICARDO, ON THE PRINCIPLES OF POLITICAL ECONOMY AND TAXATION (London, J. Murray 1817); ADAM SMITH, THE WEALTH OF NATIONS (London, J.M. Dent & Sons 1966).

31. *See generally* JOHN H. JACKSON, THE WORLD TRADING SYSTEM: LAW AND POLICY OF INTERNATIONAL ECONOMIC RELATIONS 10-14 (1989).

32. *See generally Trade and Environment: Factual Note by the Secretariat*, GATT Doc. L/6896 (Sept. 18, 1991).

33. *See Jackson, supra* note 31, at 83.

34. *See generally id.*

35. *See* Herman E. Daly, From Adjustment to Sustainable Development: The Obstacle of Free Trade, address at Loyola Law School (Feb. 29, 1992).

say that trade is the "great destroyer,"³⁶ but that the incentives trade currently provides to economic activities are misplaced. The key is to alter trade incentives to encourage economic activities that provide increasing levels of economic and ecological well-being. Redirecting these incentives so that trade and environmental policies are mutually reinforcing will rejuvenate economic and social bases, encourage increased efficiency in economic systems, and provide additional support for each nation's comparative advantage.

Competitive sustainability provides a theoretical framework for thinking about mutually reinforcing economic and ecological systems. One of the principle goals of competitive sustainability is a concurrent increase in domestic and international environmental standards. The theory further provides that the best mechanism for encouraging this upward harmonization is the use of competitive forces to create a level playing field for commerce at consistently higher levels of environmental and social protections through a set of incentives that reward the cleanest and most efficient economic actors for their efforts.³⁷

These incentives must, however, be coupled with the more traditional command-and-control type baseline standards. These baseline standards function as an environmental safety net to ensure that market failures do not allow serious environmental or human health threats to occur. They also ensure that all competitors in a given market begin internalizing the environmental and health costs of their production activities.

II. PUTTING THEORY INTO PRACTICE

A. Environmental Countervailing Duties

One of the central tenets of competitive sustainability, recog-

36. *But see* David Morris, *Free Trade: the Great Destroyer*, 20 THE ECOLOGIST 190 (1990).

37. On the domestic level a similar approach to environmental regulation has been advanced by those who advocate a market-based approach to environmental protection. *See* Richard B. Stewart, *Controlling Environmental Risks Through Economic Incentives*, 13 *COLUM. J. ENVTL. L.* 153 (1988); Joel A. Mintz, *Economic Reform of Environmental Protection: A Brief Comment on a Recent Debate*, 15 *HARV. ENVTL. L. REV.* 149 (1991); FREDERICK A. ANDERSON ET AL., ENVIRONMENTAL IMPROVEMENT THROUGH ECONOMIC INCENTIVES (1977).

nized both by free traders and environmentalists,³⁸ is that environmental costs must be internalized into product costs.³⁹ The environmental costs of production wreaked upon society, such as poisoned water and air, traditionally have not been borne by products, but must now be included in the cost of these products at market. There are several ways that this can be accomplished in domestic markets. Production permits can be required and fees paid for the privilege of polluting.⁴⁰ These permit fees would be added to the costs of production and make environmental costs into real costs. Similarly, command-and-control requirements, such as installing a scrubber, also internalize environmental costs to a degree. Internationally, neither the economic nor ecological systems have developed to the extent necessary to establish a multinational permit scheme or regulatory framework, although such a system has been discussed in the context of efforts to combat global warming.⁴¹

Since there is no mechanism for complete environmental cost internalization, products produced under standard environmental laws or weak enforcement regimes are traded freely on international markets at a competitive cost advantage over products from nations with strong environmental laws.⁴² In essence,

38. See *id.*; OECD, *The Polluter Pays Principle: Definition, Analysis, Implementation*, (discussing guiding principles concerning international economic aspects of environmental policies) May 26, 1972, C(72)128 (1975); Frank Ackerman, *Waste Management: Tearing the Trash Away*, ENVIRONMENT, June 1992, at 2; Ursula Kettlewell, *The Answer to Global Pollution? A Critical Examination of the Problems and Potential of the Polluter Pays Principle*, 3 *COLO. J. INT'L ENVTL. POL'Y* 429 (1992).

39. Housman & Zaelke, *supra* note 4, at 605-06.

40. See, e.g., Clean Air Act Amendments of 1990, 42 U.S.C. §7651(b) (Supp. 1991) (electrical utilities pollution allowances); see generally, Larry B. Parker et al., *Clean Air Act Allowance Trading*, 21 *ENVTL. L.* 2021 (1991).

41. See, e.g., Donald M. Goldberg, *Reducing Greenhouse Gas Emissions: A Combined Strategy Using Permits, Fees and Country Commitments* 2 (Feb. 1992) (on file with Center for International Environmental Law).

42. See generally, Thomas K. Plotchan, Jr., *Recognizing and Countervailing Environmental Subsidies*, 26 *INT'L. L.* 763 (1992) (discussing ways in which international trade law may be used to effect greater worldwide environmental protection); RESEARCH AND POLICY COMMITTEE, COMMITTEE FOR ECON. DEV., *BRACING NEW GROUND IN U.S. TRADE POLICY* 73 (1991). While, if properly crafted, the vast majority of environmental laws can improve manufacturing efficiency and yield a competitive advantage, even the most efficient corporations cannot compete with competitors who receive the basic raw materials for production at no cost. In essence, the lack of environmental regulation amounts to free air, water, and land to

products produced without environmental protection requirements receive a subsidy by passing the costs of their environmental harms downstream.⁴³ These costs are then borne by the general public (who pay both environmentally, through air they can't breathe; and economically, through rising health care costs) and by downstream producers (who find that their activities are compromised by the environmental costs passed on by upstream activities).⁴⁴ In sum, the current incentives are backwards.

Perhaps the simplest way to eliminate the competitive advantage held by companies producing products in nations not enforcing environmental laws is to allow nations to apply a countervailing duty on these products equal to the environmental subsidy the products receive when they enter the importing nation's market.⁴⁵ Applying environmental countervailing duties would have a number of positive effects. First, it would level the competitive playing field upward by removing the incentive to pollute. Second, by removing the competitive incentive given by lower environmental standards, these duties would encourage exporting countries to adopt and enforce environmental laws at home. Third, allowing economically harmed companies to com-

despoil while competitors pay for these goods. Thus, while environmental laws can help a company "use" less air and often become more efficient, they cannot reduce the costs of using natural resources below zero—the cost of free resources in countries without acceptable environmental laws. Moreover, opponents of this theory argue that there is no competitive advantage from the lack of environmental laws because, in most cases, the costs of compliance are less than two percent. This view fails to take into account at least two critical factors. First and foremost, it fails to mention that the costs of compliance can be much higher for industries that cause the greatest environmental harms. Further, while two percent seems like a very low number, if that percentage is taken from the total cost of a product that has a high cost or is taken from the total cost of buying large numbers of low cost products, even a two percent difference can amount to a substantial cost difference.

43. See Kenneth S. Komoroski, *The Failure of Governments to Regulate Industry: A Subsidy Under the GATT*, 10 *HOUS. J. INT'L. L.* 189, 209 (1988); see also Plotchan, *supra* note 42, at 780.

44. For example, an upstream plant that dumps toxics into the water poisons the fish which downstream fishermen rely upon for their livelihood. Thus, the environmental costs of the dumping are borne by the fishermen and not the factory; the fishermen are subsidizing the factory. On a global level, ozone depletion will at some point compromise the resort industries of many countries. As upstream producers deplete the ozone, people will no longer be able to safely go to certain beaches, and resorts at these beaches will lose clientele.

45. See Plotchan, *supra* note 42, at 780.

plain of environmentally unsound practices abroad would put the substantial resources of private economic actors behind the international policing of environmental laws. Moreover, environmental countervailing duty cases would provide a public forum that could focus public scorn on companies and nations acting without concern for the health and safety of people and the planet.

Opponents of the use of environmental countervailing duties argue that such a system would: 1) prove unadministrable; 2) be a breeding ground for protectionism; 3) harm developing countries; and 4) allow one nation to impose its values on other nations. While these are all valid concerns, a properly structured countervailing duty system could address them.⁴⁶

46. Apart from whether environmental countervailing duties are a proper policy choice, it is possible that many of these subsidies could already be recognized as subsidies and countervailed under existing laws. Subsidies exist in two forms: export subsidies and domestic subsidies. Export subsidies are defined as government programs or practices that "[i]ncrease] the profitability of export sales but [do] not similarly increase the profitability of sales for domestic consumption." *Id.* at 766 (quoting Alan O. Sykes, *Countervailing Duty Law: An Economic Perspective*, 89 *Colum. L. Rev.* 199, 203-04 (1989)). Domestic subsidies are defined as "governmental programs that are sufficiently targeted to a specific enterprise or industry, or group of enterprises or industries," and that provide an advantage to the producers not found in the marketplace." *Id.* (quoting 19 U.S.C. § 1677(5)(B) (1988)). Environmental subsidies do not typically provide a benefit targeted only to exports, and so they are generally not export subsidies. However, environmental subsidies typically do provide a producer with an advantage in the marketplace and could conceivably be characterized as "domestic subsidies." See *id.* at 770-71. Moreover, at least one commentator believes that environmental subsidies meet the test for a domestic subsidy set out under U.S. law. *Id.* at 771 (citing 19 U.S.C. § 1677(5)(A)(iv)(IV) (1988)).

If any difficulty arises in defining environmental subsidies, that difficulty is whether these subsidies are countervailable. See *id.* at 772. Countervailability requires three elements. The subsidy must: 1) be targeted to a specific industry or group of industries; 2) inflict a material injury to the importing country's domestic industries; and 3) be capable of being valued. *Id.* at 771. If one defines a group of industries by its relative means of production and disposal (e.g., all industries that use chlorinated fluorocarbons or dispose of their wastes into waters), then it is clear that environmental subsidies provide a targeted benefit to a discernible group or class of companies. See *id.* at 771. As to the second prong, material injury, U.S. law requires that, in order to find a material injury, a causal link must exist between the subsidy provided to the imports in question and a negative or threatened trend in the domestic industry. *Id.* at 771-74. This test requires a case-by-case analysis that does not permit generalization as to when environmental subsidies are countervailable under existing law. The third test for countervailability is valuation. See *id.* at 771. While environmental subsidies may not be easy

1. Administrability

Opponents of using environmental countervailing duties argue that the failure to impose environmental laws is not a sufficiently targeted benefit to a particular industry or group of industries to constitute a "subsidy." Rather, lower environmental standards are more like generalized societal benefits such as roads or educational systems.⁴⁷ This argument fails to recognize that the international trading system is coming to recognize that certain governmental policies, like the failure to enforce intellectual property protections, provide a benefit—a subsidy—to a class of industries that can be defined by their means of production.⁴⁸ The same can be said of the failure to enforce environmental laws, that is, the discernable class can be defined from such processes as their disposal of wastes into water.⁴⁹

Opponents of environmental countervailing duties also argue that, given the vast range of approaches to environmental protection from command-and-control regulations to market-based strategies, it would be difficult to determine when two countries' different approaches applied to the same environmental problem are equivalent. Similarly, they argue that even if equivalence in standards can be determined, it would be difficult to calculate the degree of advantage gained through a lower standard for the purposes of setting the amount of duty to impose.⁵⁰

Each of these two administrative difficulties can be overcome by returning to the purposes of environmental countervailing duties. Environmental countervailing duties serve two purposes: (1) to internalize otherwise externalized costs, leveling the playing fields for trade; and (2) to encourage environmental protection. Based on these goals, differences in standards and the amount of

to value, similar valuation problems have been overcome with regard to other forms of subsidies such as the failure to enforce antitrust laws.

47. See GATT Report *supra* note 9, at 20.

48. See, e.g., *Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*, GATT Doc. MTN.TNC/W/FA (Dec. 20, 1991), [hereinafter *Dunkel Draft*] (trade related aspects of intellectual property); North American Free Trade Agreement (NAFTA), Sept. 6, 1992, ch. 15 (competition policy and monopolies), ch. 17 (intellectual property) available in Westlaw, NAFTA database.

49. See Plofchan, *supra* note 42, at 771.

50. See *id.* at 774-75.

duties could be determined from the per-product unit cost of environmental compliance between similar, or "like," imported and domestic goods.⁵¹ Where an importing nation believes that the different costs of compliance reflect differences not in the level of protection but rather in the efficiency of the regulatory approach, that country should be allowed to show that their regulatory approach achieves an equivalent level of environmental, health, and safety protection. This showing would prevent the imposition of a countervailing duty and encourage the other party to adopt the more efficient regulatory approach. Existing scientific techniques have the capability of providing the information necessary to make these determinations.

Moreover, a properly constructed system of environmental countervailing duties would look at all the environmental regulations concerning a whole production system. Thus, if the environmental laws imposed on a production facility in one country are more stringent with regard to water disposal, perhaps because the country lacks water resources, this could offset slightly lower air standards. This offset program would prevent disputes from arising over minor differences in standards. It would also allow for disputes to arise where a country's standards are not substantially lower in one area, but are slightly lower in all or many areas, with the net effect of creating a competitive advantage. This multimedia approach to environmental countervailing duties accords with the general direction all environmental regulation must follow.⁵²

2. Protectionism

As with any type of government regulation over markets, if improperly used, environmental countervailing duties could become a tool for protectionist interests.⁵³ However, the potential for abuse is a weak ground for dismissing the use of such duties in an environmental context, especially when one sees the wide ar-

51. See *id.*

52. Accord Robert A. Frosch & Nicholas E. Gallopoulos, *Strategies for Manufacturing*, Sci. Am., Sept. 1989, at 144, 152 (discussing industrial ecology principles).

53. See Patrick Low & Raed Safadi, *Trade Policy and Pollution, in INTERNATIONAL TRADE AND THE ENVIRONMENT* (Patrick Low ed., 1992) (2 World Bank Discussion Papers 29, 39); GATT Report *supra* note 9, at 5.

ray of other interests protected by similar trade sanction schemes at the risk of protectionism.⁵⁴ Rather, the risk of protectionism is one reason to ensure that the system under which such duties are applied is set up in such a way as to prevent their misuse.

The creation of a "reverse 301" process⁵⁵ is one example of how to achieve the benefits of environmental countervailing duties while minimizing the threats of protectionism.⁵⁶ Under section 301 of the Trade Act of 1974, as amended, private parties may petition the U.S. Trade Representative (USTR) to initiate an investigation of a practice or policy of a foreign government that violates a trade agreement, is inconsistent with the international rights of the United States, or is otherwise contrary to the provisions of section 301.⁵⁷ If the USTR determines that the foreign practice violates one of these obligations, she must impose retaliatory measures, such as duties, unless the violation falls within certain exceptions.⁵⁸ Section 301 also provides for disre-

54. See, e.g., 19 U.S.C. § 1387 (Supp. 1990) (trade sanctions for patent infringement). In fact, a whole host of widely divergent interests have been advanced through U.S. trade sanctions. See Barry E. Carter, *International Economic Sanctions: Improving the Haphazard U.S. Legal Regime*, 75 CAL. L. REV. 1162 (1987).

55. Section 301 of the Trade Act of 1974, *infra* note 57, was designed to encourage other nations to open their markets; the vast majority of § 301 cases involve foreign practices that impede U.S. exports. Alan O. Sykes, "Mandatory" Retaliation for Breach of Trade Agreements: Some Thoughts on the Strategic Design of Section 301, 8 B.U. INT'L L.J. 301, 302 (1990). Thus, legislation designed to prevent unfair imports, which § 301 also provides for, would be a "reverse 301."

56. See *id.*; Richard Diamond, *Changes in the Game: Understanding the Relationship Between Section 301 and U.S. Trade Strategies*, 8 B.U. INT'L L.J. 351, 360-61 (1990) (Professor Diamond notes that, as amended, § 301's short time frames for negotiation could increase the credibility of threats by mandating retaliation at the end of the time frames if agreement is not reached). *But see* Fusae Nara, Note, *A Shift Toward Protectionism Under § 301 of the 1974 Trade Act: Problems of Unilateral Trade Retaliation Under International Law*, 19 HOFSTRA L. REV. 229 (1990).

57. Trade Act of 1974, §§ 301-302, 19 U.S.C. §§ 2411-2412 (1988). Cases may also commence at the USTR's initiation. *Id.* § 2412(a)-(b). While many in the international community have sharply opposed § 301's provisions, it is important to note that developments in the Uruguay Round seem to be leading towards an international acceptance of § 301-type provisions. See Judith Bello & Alan F. Holmer, *GATT Dispute Settlement Agreement: Internationalization or Elimination of Section 301*, INT'L LAW, Fall 1992, at 799-800; see also John H. Jackson, *RESTRUCTURING THE GATT SYSTEM* 71 (1990) (discussing opposition to § 301).

58. Sykes, *supra* note 55, at 303-05; Judith H. Bello & Alan F. Holmer, *Unilateral Action to Open Foreign Markets: The Mechanics of Retaliation Exercises*,

tionary retaliation where the USTR finds that a foreign practice is unreasonable or discriminatory and burdens or restricts U.S. commerce.⁶⁰ Despite section 301's draconian appearance the USTR retains a great deal of discretion in both mandatory and discretionary cases in setting the retaliatory measure.⁶¹ One of the principal ways the USTR handles a section 301 case is to negotiate with the foreign party to eliminate the offending practice.⁶² The delegation of negotiation and retaliatory authority to the USTR provides a buffer to minimize the protectionist use of the section's provisions.⁶³ Because of its structure, section 301 has proven an effective device to encourage other nations to enter into consultations directed at eliminating unfair trade practices.⁶⁴

Under a reverse-301 environmental provision, a foreign party exporting products to the United States, who failed to provide baseline environmental protections concerning the production processes of these products, could be threatened with countervailing duties. These countervailing duties would be used to encourage the foreign party to enact and enforce comparable environmental laws.

3. *Developing Country Concerns*

Opponents of environmental countervailing duties also argue that developing countries cannot afford to meet the environmental laws of the developed world, and thus, the imposition of countervailing duties against their products would freeze them out of world markets.⁶⁵ Opponents further argue that environmental protection in the developing world will only come through growth. Therefore, blocking these countries from world markets will stymie the global expansion of environmental protection.⁶⁶ One scholar went so far as to argue that environmental laws should be "appropriate" not for some environmental protection goal, but for

22 INT'L LAW 1197, 1198 (1988).

59. 19 U.S.C. § 2411(b).

60. *Id.* § 2411(a)(1)(B)(ii), (b)(2), (c).

61. *See id.* § 2411(c)(1)(C); Sykes, *supra* note 55, at 304.

62. *See* Sykes, *supra* note 55, at 311.

63. Diamond, *supra* note 56, at 360-61.

64. *See* Piritta Sorsa, *GATT and Environment: Basic Issues and Some Developing Country Concerns*, in INTERNATIONAL TRADE AND THE ENVIRONMENT, *supra* note 53, at 325, 326.

65. *See generally* GATT Report, *supra* note 9, at 17-19.

a country's level of development.⁶⁶

There are ample grounds for concern that developing countries who lack the means to comply with the environmental standards of the developed world would be frozen out of international markets if a system of environmental countervailing duties is created.⁶⁷ However, the costs of unsustainable growth, in both developed and developing countries, are higher than profits from the growth.⁶⁸ Thus, developing countries must be encouraged to undertake sustainable growth from the outset. A system of environmental countervailing duties can provide developing countries with the funds necessary to enhance environmental protection, while eliminating the incentives for unsustainable growth.

One method of balancing the concerns of developing countries with the need to enhance environmental protection is to return a substantial portion, if not all, of the revenues generated by environmental countervailing duties to the developing country of origin. A bill for exactly this type of scheme was proposed by Senator Boren.⁶⁹ If enacted, the International Pollution Deterrence Act of 1991 would have amended the countervailing duty laws of the United States to establish that the failure to enact and enforce environmental laws is a subsidy for the purposes of imposing countervailing duties. The bill further provided that fifty percent of the revenues generated through the application of its provisions would be allocated to a fund that would be distributed by the Agency for International Development to assist developing countries in purchasing environmentally sound technologies.⁷⁰

4. *Imposing Values Abroad*

Another argument against the use of countervailing duties in an environmental context is that the use of such duties is an infringement of the sovereign right of each nation to determine acceptable practices within their borders. Put into moral terms, the

66. Gene Grossman, *In Poor Regions Environmental Laws Should Be Appropriate*, N.Y. TIMES, Mar. 1, 1992, at C11.

67. *See* Sorsa, *supra* note 64.

68. *See* Davy & Cobb, *supra* note 11.

69. S. 984, 102d Cong., 1st Sess. (1991).

70. *Id.* § 4(d). The other 50% of the revenues generated would go to a fund administered by U.S. EPA to assist companies in developing new technologies. *Id.* § 4(c).

use of countervailing duties imposes the values of one nation upon the rest of the world, which may see things in a different light.⁷¹ This argument also suffers from a number of flaws. First, countervailing duties have nothing to do with what other countries choose to allow within their own borders; it has everything to do with what the importing nation chooses to allow within its own borders. Countervailing duties do not require a foreign government to change its laws; they simply internalize the costs externalized by these laws—all within the borders of the importing nation. Moreover, even with such duties in place, the foreign product can still be sold at its subsidized price within the country-of-origin's markets.

Opponents respond that assessing countervailing duties still amounts to an imposition of values because the end result is that the exporting country can either forego trade opportunities or change its practices at home. This is absolutely true and entirely proper. For example, nations that enslave their people or use prison labor are often told to choose between ending these practices or foregoing trade opportunities.⁷² There is no reason that environmental trespasses can not be similarly addressed. Assuming the validity of the "effects test,"⁷³ and given that environmental harms like ozone depletion and global warming directly endanger people around the world, there is an even stronger rationale for using trade sanctions to encourage environmentally sound behaviors. Further, since the failure of foreign countries to enforce environmental laws places U.S. competitors at a competitive disadvantage, the effects test would also allow a country to impose countervailing duties to counteract this improper advantage.⁷⁴ Some believe that many environmental threats are purely local in nature and that the use of countervailing duties and other trade measures to address such localized threats is inappropriate

71. See Craig Obey, Comment, *Trade Incentives and Environmental Reform: The Search for a Suitable Incentive*, 4 GEO. INT'L ENVTL. L. REV. 421, 434-437 (1992); GATT Report *supra* note 9, at 20, 24-25.

72. See Carter, *supra* note 54 (discussing the use of trade sanctions).

73. The effects test provides that a state has jurisdiction to prescribe law with respect to conduct that has a substantial effect within its territories. *Restatement (Third) of Foreign Relations Law of the United States* § 402(1)(c) (1986).

74. Cf. *United States v. ALCOA*, 148 F.2d 416 (2d Cir. 1945) (economic effects in the United States of anticompetitive behaviors taking place abroad gave U.S. jurisdiction to regulate the conduct in question).

in any case. This argument fails because environmental threats are global, cumulative, and persistent.⁷⁵

5. *Changing the Incentives*

Under the current rules of international trade, it would be a violation of the GATT, in most circumstances, for a country to impose environmental countervailing duties upon imported products made in countries with substandard environmental protections.⁷⁶ These rules should be changed to provide a framework that allows countries to agree to impose such duties. Absent such a change, the United States should enact environmental countervailing duty provisions that provide for unilateral sanctions in order to force the evolution of the GATT.⁷⁷

B. *The Carrot and the Stick*

The goal of competitive sustainability would be significantly advanced by adopting a system of countervailing duties to force environmentally lax countries to internalize their costs of production. However this "stick" should have a corresponding "carrot," or trade incentive program.⁷⁸ An environmental trade incentive program would encourage countries, particularly developing countries, to adopt more environmentally sound practices. The financial benefits of these inducements would help developing countries pay the costs of becoming more environmentally aware.⁷⁹ An

75. See GEORGE HEATON ET AL., *TRANSFORMING TECHNOLOGY: AN AGENDA FOR ENVIRONMENTALLY SUSTAINABLE GROWTH IN THE 21ST CENTURY* 6 (1991) ("[P]ollution has come to be recognized as a global and chronic phenomenon. This means not only that pollution can be found everywhere but also that its impacts are now large enough to alter the fundamental natural processes that support life").

76. See GATT Report *supra* note 9, at 17.

77. See Robert E. Hudec, *Thinking About the New Section 301: Beyond Good and Evil*, in *AGGRESSIVE UNILATERALISM: AMERICA'S 301 TRADE POLICY AND THE WORLD TRADING SYSTEM* 113 (Jagdish Bhagwati & Hugh T. Patrick eds., 1990) (discussing "justified disobedience" as allowing for violations of GATT in order to force its evolution).

78. See Obey, *supra* note 71, at 443.

79. See *id.* In 1980, it was estimated that developing countries would need to spend approximately \$14 billion on pollution control in order to meet U.S. standards. See Steven Shrybman, *International Trade: In Search of an Environmental Conscience*, EPA J., Jul.-Aug. 1990, at 18.

incentive program would alleviate the need to resort to trade sanctions in many cases, thereby minimizing disruptions to the international trading system.

This carrot-and-stick approach is proving effective in combating ozone depletion. The Montreal Protocol⁸⁰ adopts a system of trade sanctions against trade in ozone depleting chemicals,⁸¹ in conjunction with trade and other economic benefits,⁸² to encourage countries to join the Protocol and abide by its provisions.⁸³ Due at least in part due to these trade sticks and financial carrots, the Protocol is one of the most effective international environmental agreements. Other trade and economic incentives can be used to encourage the development of environmental protections in other nations.⁸⁴ For example, short-term direct financial assistance can be provided to developing nations to offset the added costs of complying with higher environmental standards.⁸⁵

A second trade-driven approach would draw upon the Generalized System of Preferences, which provides listed developing countries with preferential trade treatment, and would grant developing countries trade offsets to make up for the burdens of higher levels of environmental protection needed to meet environmental and trade requirements in developed world markets.⁸⁶ A third, necessary mechanism for offsetting trade burdens would be to provide developing countries with increased access to developed world technologies.⁸⁷ The availability of such technologies is

essential to empower these nations and their industries to become more ecologically sustainable trading partners. The need for technology transfer has been acknowledged in a wide array of international instruments and fora.⁸⁸ In addition to access to developed world technologies, developing countries also need access to developed world expertise if they are to be expected to become more environmentally sound trading partners.⁸⁹ Here again, a number of international agreements include provisions for technical cooperation.⁹⁰

C. Widening the Scope of Allowable Standards: Cradle to Grave

For the vast majority of products, the greatest environmental costs occur not at the consumer stage, but at the production and post-consumer stages. Under existing international trade law, a party is prohibited from enacting standards relating to the production process method by which an imported product is made.⁹¹ This limitation renders any attempt by a country to use trade measures to encourage companies to adopt more sustainable production and disposal processes inconsistent with GATT. Removing the entire production and disposal cycles from the concept of

80. See Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, S. TREATY Doc. No. 10, 100th Cong., 1st Sess., 26 I.L.M. 1541 (1987).

81. *Id.* art. 4(2)-(3), 26 I.L.M. at 1554.

82. *Id.* art. 5, 26 I.L.M. at 1555-56.

83. See generally Dale S. Bryk, *The Montreal Protocol and Recent Developments to Protect the Ozone Layer*, 15 HARV. ENVTL. L. REV. 275, 283-97 (1991).

84. See John Ntambirweki, *The Developing Countries in the Evolution of International Environmental Law*, 14 HASTINGS INT'L & COMP. L. REV. 905, 911-17 (1991).

85. Following the *Tuna-Dolphin* issue, the United States offered to offset Mexico's costs for increased dolphin protection. See *Sell the Whale*, ECONOMIST, June 27, 1992, at 16.

86. *Differential and More Favorable Treatment Reciprocity and Fuller Participation of Developing Countries*, GATT Doc. L/4903 (Nov. 28, 1979); see also JOHN H. JACKSON & WILLIAM J. DAVEY, *LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS* 1149 (2d ed. 1986).

87. See Ntambirweki, *supra* note 84, at 917-20.

88. See, e.g., G.A. Res. 3281, 29 U.N. GAOR, Supp. No. 31, at 51, U.N. Doc. A/9631 (1974), reprinted in 14 I.L.M. 251 (1975); Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, (opened for signature) Mar. 22, 1989, art. 10, para. 2(d), S. TREATY Doc. No. 5, 102d Cong., 1st Sess., 28 I.L.M. 649 (1984) (4 U.N. Doc. UNEP/TG. 80/3); Vienna Convention for the Protection of the Ozone Layer, May 22, 1985, art. 4, para. 2, S. TREATY Doc. No. 9, 98th Cong., 1st Sess., 26 I.L.M. 1516 (1987).

89. See Ntambirweki, *supra* note 84, at 917-20.

90. See *id.*

91. See generally *United States—Restrictions on Imports of Tuna*, 41, GATT Doc. DS21/R (Sept. 3, 1991) [hereinafter *Tuna-Dolphin Report*]; Housman & Zaetke, *supra* note 4, at 540-41; Frederick L. Kirgis, Jr., *Effective Pollution Control in Industrialized Countries: International Economic Disincentives, Policy Responses, and the GATT*, 70 MICH. L. REV. 860, 893-901 (1972). Under GATT Article III, a party can establish point of importation requirements that affect the product. *Text of the General Agreement, in GENERAL AGREEMENT ON TRADES AND TRADE, BASIC INSTRUMENTS AND SELECTED DOCUMENTS* (Vol. IV, 1969) (General Agreement as in force Mar. 1, 1969). Production process standards that do not affect the physical or chemical makeup of the product cannot qualify for this allowance. *Id.* Further, GATT's Article XX exceptions only allow for measures that apply within the jurisdiction of the enacting party, production process standards cannot qualify under the GATT exceptions. See *infra* notes 92-94.

production deals a serious blow to advancing competitive sustainability. In order to encourage cleaner growth and require environmental cost internalization, countries must be allowed to ensure that the full life cycle of imported products—from cradle to grave—meets the standards applicable to similar domestic goods. Thus, the term "product," as used in GATT Article III jurisprudence, must be augmented to include the production and disposal cycles of the product as it appears at market.

D. Judging Environmental Standards

Environmental countervailing duties are the sword for enacting competitive sustainability. However, shielding environmental standards that are challenged as unnecessary trade barriers is equally important. Environmental standards will continue to place restrictions on imported products and at times these restrictions will raise trade concerns. The issue then becomes how these environmental standards are to be judged, and by whom.

1. The Standard of Review

Under the current rules of international trade, an environmental, health, or safety standard can run afoul of GATT's general obligations if the standard, *inter alia*: (1) applies differently to foreign and domestic products;⁹² (2) applies differently to foreign products based upon their country-of-origin,⁹³ or (3) sets a quantitative restriction on trade.⁹⁴ Once a standard violates any one of these basic GATT obligations, it can only be consistent with GATT if it qualifies as an Article XX exception.

The two Article XX exceptions most germane to environmental, health, and safety standards are Article XX(b), which allows for nondiscriminatory and nonarbitrary measures "necessary to protect human, animal or plant life or health";⁹⁵ and, Article

XX(g), which allows for nondiscriminatory and nonarbitrary measures "primarily aimed at" conserving exhaustible natural resources taken in conjunction with domestic restrictions on the consumption of such resources.⁹⁶ Despite the apparently broad scope of these exceptions, they have been applied quite narrowly in practice. Under current GATT jurisprudence, a party arguing that its standard falls within these exceptions must show that the standard adopted the least trade-restrictive alternative reasonably available to the party to meet its objective.⁹⁷ Whether the party's environmental experts have chosen the least trade-restrictive alternative reasonably available from the universe of possible standards is judged by a panel of trade experts *ex post facto*. Considering the complexity of the environmental problems, this overly restrictive standard makes environmental standards vulnerable to trade challenges and has a chilling effect on the adoption of more stringent standards which are needed to advance competitive sustainability.

2. Toward a Better Standard of Review

Countries moving toward sustainable development must be able to adopt environmental, health, and safety standards which provide incentives for environmentally sound actors, and place disincentives on unsound actors. Therefore, the current "least trade-restrictive reasonably available" standard of review should be changed to provide nations with wider leeway in adopting the standards needed to focus markets in the direction of competitive sustainability.⁹⁸

A better standard of review would differentiate between standards which are discriminatory on their face and standards which are only discriminatory as they are applied. If a standard facially discriminates between products from different nations (either *vis-à-vis* domestic products or *vis-à-vis* other importers), such discrimination should be "necessary"⁹⁹ to the standard's objective.

92. GATT, *supra* note 1, art. III, 61 Stat. at A18; Housman & Zaelke, *supra* note 4, at 539; *Tuna-Dolphin Report*, *supra* note 91, at 50; GATT SECRETARIAT, *supra* note 32, at 11.

93. See GATT, *supra* note 1, art. I, 61 Stat. at A12; Housman & Zaelke, *supra* note 4, at 538-39; GATT SECRETARIAT, *supra* note 32, at 10.

94. GATT, *supra* note 1, art. XI, 61 Stat. at A33; Housman & Zaelke, *supra* note 4, at 542-43.

95. GATT, *supra* note 1, art. XX(1)(b), 61 Stat. at A61.

96. See *Canada—Measure Affecting Exports of Unprocessed Herring and Salmon*, GATT Doc. L/6268 (Mar. 22, 1988). See also GATT, *supra* note 1, art. XX(1)(g), 61 Stat. at A61; Steve Charnovitz, *Exploring the Environmental Exceptions in GATT Article XX*, 25 J. WORLD TRADE, Oct. 1991, at 37, 38-47.

97. Housman & Zaelke, *supra* note 4, at 546-51.

98. See *id.* at 608-10.

99. See *supra* text accompanying note 95 (discussing "necessary test").

For example, the question would be posed as follows: Is it necessary to discriminate between U.S. beef and Japanese beef in order to protect the health of Japanese consumers?¹⁰⁰ To meet this test, the party challenging the standard would have to prove by a *prima facie* showing of the evidence that the discrimination in the standard does not serve the nonprotectionist objective of the standard.

When judging a standard that is discriminatory only as applied, the standard of review should give greater deference to the environmental standard. Environmental standards that are neutral on their face should be presumed to be GATT-consistent, unless the challenging party can prove that the standard is not "rationally" related to some legitimate environmental, health or safety goal.¹⁰¹ Under this standard of review, a reviewing body would retain the right to find against environmental standards that are simply disguised protection. However, the burden of proving protectionism would be substantially higher than it is currently. The greater deference embodied by the rationality standard would provide countries with the leeway to adopt the standards necessary to bring about upward harmonization. It should also be noted that a two-tier deference approach similar to the one set out here is currently used within the United States to determine whether state standards improperly discriminate against out-of-state products.¹⁰²

3. *Multilateralism and Unilateralism*

The trend in international trade policy thinking is toward greater leeway for using trade measures or standards in the context of international environmental agreements, while limiting the

100. See Paul Blustein, *Scrapping Trade Barriers to U.S. Beef*, Wash. Post, Mar. 31, 1991, at H1; *Fight with Japan Has Been His Long-Running Beef*, CHI. TRIB., May 30, 1988, at C5.

101. See *Hodel v. Virginia Surface Mining & Reclamation Ass'n*, 452 U.S. 264, 276 (1981) (setting out "rationality" standard of review). With regard to placing the burden of proof on the challenging party, a similar allocation of the burden of proof has been used in the North American Free Trade Agreement. See NAFTA, *supra* note 48, arts. 765.6, 914.4.

102. Compare *Philadelphia v. New Jersey*, 437 U.S. 617 (1978) with *Raymond Motor Transp. v. Rice*, 434 U.S. 429 (1978); see also Richard B. Stewart, *International Trade and Environment: Lessons From the Federal Experience*, 49 WASH. & LEE L. REV. 1329, 1335-37 (1992).

use of unilateral trade measures for environmental purposes. Multilateral approaches to environmental problems are preferable, particularly with regard to global problems or problems affecting the global commons. However there is a danger in limiting the ability of countries to use unilateral measures because the measures provide impetus for the international community to act on a problem. For example, the United Nations driftnet moratoria followed unilateral threats by the United States that it would take trade measures to halt this environmentally devastating practice. Similarly, the threat of U.S. trade sanctions have played a major role in bringing about international efforts to save hawks-bill turtles,¹⁰³ whales, and now, in the wake of the *Tuna-Dolphin* dispute, dolphin in the Eastern Tropical Pacific Ocean.¹⁰⁴ Without unilateral efforts, it is unlikely that the slothful international community would have responded to these threats in time.¹⁰⁵

International trade rules should not compromise the ability of nations to use unilateral measures to spur international action on an environmental threat. A method must be devised for determining whether a unilateral trade measure is an appropriate response to a given threat. First, if the threat has a direct effect on the enacting country, then the standard of review should be whether the unilateral use of a trade measure was rationally related to addressing the environmental threat.

Second, if the trade measure seeks to address a threat to the global commons, the standard of review should also be rationality. In determining if a measure to protect the commons is rationally related to the alleged environmental goal, a number of factors should be considered, including: (1) Is there already an international regime designed to combat the threat?; (2) If a regime exists, how effective is it?; (3) Has the country adopting the measure sought to build an international protection regime to combat the threat?; (4) What degree of imminent harm does the threat present?; (5) How great is the harm; (6) How great is the burden

103. Stewart, *supra* note 102, at 1359.

104. See Michael Parish, *U.S. Approves Pact to Protect Pacific's Dolphins*, L.A. TIMES, Oct. 9, 1992, at D2; *Tuna: Agreement Announced to Lift Mexico-Venezuela Ban*, Greenwire, June 18, 1992, available in LEXIS, Nexis library, GRNWRB file.

105. See David B. Hunter, *Toward Global Citizenship in International Environmental Law*, 28 WILLAMETTE L. REV. 547, 552 (1992); PHILIP ALLOTT, *EUNOMIA: NEW ORDER FOR A NEW WORLD* 238 (1990).

to the restricted parties' trade rights?; (7) Are less trade inconsistent protection methods immediately apparent?; (8) How necessary is the complained of practice to the use of the resource?; and (9) Are less environmentally harmful methods available?

Third, if the measure is taken to combat a threat that is completely localized within the territory of the exporting country, and has no effect on the importing country (a rarity in the environmental realm)¹⁰⁶, then the appropriateness of the unilateral measure should be determined under the rationality standard taking into account a number of factors, including: (1) How great is the environmental threat addressed?; (2) How great is the trade burden?; (3) How focused is the measure adopted *vis-à-vis* the threat?; (4) Did the enacting country seek, through diplomatic measures, to have the importing country end the complained-of practice?; (5) Is there an international environmental standard in place, and how does it compare with the complained-of behavior?; (6) How effective is the international standard generally?; and (7) How effective would the international standard be as applied in this specific case? Whether a unilateral measure of this type is trade-compatible is moot if the measure qualifies as an environmental countervailing duty.¹⁰⁷

4. *Who Judges?*

Under the current system of trade dispute review at the international level, an environmental standard alleged to violate trade rules is reviewed by a panel of trade experts appointed under the aegis of GATT.¹⁰⁸ The natural effect of the appointment process is an implicit and unavoidable bias in favor of trade rules. Here again, review of environmental standards could be improved by a multi-tier process. If the standard in question is adopted by a country to implement a multilateral environmental agreement, then a panel of environmental experts formed under the aegis of the multilateral environmental agreement's secretar-

iat¹⁰⁹ should pass judgment as to whether the implementation measure is a reasonable (in the case of facially neutral standards) or necessary (in the case of facially discriminatory standards) approach to implementing the agreement. The trade panel convened under the GATT would then defer to the environmental panel's conclusion and would apply it in passing on the trade law issues in the case.

If the standard in question is a unilateral environmental, health, or safety measure, review may properly take place under the aegis of a trade panel. However, the panel should be required to obtain environmental expertise in making its determination. Under this system, an environmental experts panel would be formed to take testimony and review evidence as to whether the measure is reasonably related or necessarily related to the desired environmental objective. The environmental magistrates would then issue a report on the appropriateness of the standard in question. The trade dispute panel in issuing its report would defer to any conclusions in the experts' report regarding the environmental aspects of the standard unless the conclusions in the report are patently erroneous.

5. *Expanding the Players*

Under existing international trade agreements, if a dispute arises over an environmental standard, the review of the standard by a trade panel occurs on an intergovernmental level.¹¹⁰ The public is completely excluded from this process. Individuals and nongovernmental organizations (NGOs), who have the real stake in ensuring that environmental standards are not compromised, are not allowed to present factual information directly to the reviewing panel. They must filter it through their governments and hope it is used. Moreover, the panel process and the parties' submissions to this process are considered confidential and cannot lawfully be released to the public.¹¹¹

To bring about competitive sustainability, it is necessary to put environmental, health, and safety enforcement powers in the hands of parties who have the most to gain by an upward level-

106. See Sanford E. Gaines, *Taking Responsibility for Transboundary Environmental Effects*, 14 *HASTINGS INT'L & COMP. L. REV.* 781, 781 (1991). Sanford Gaines, currently with USTR, states eloquently that "[t]he ecological truth [is] that the nations of the world are bound together in an indivisible ecosystem for which we are jointly and severally responsible" *Id.*

107. See *supra* note 58 and accompanying text.

108. See Housman & Zaelke, *supra* note 4, at 557-58.

109. See generally JACKSON, *supra* note 31.

110. See Housman & Zaelke, *supra* note 4, at 557-58.

111. See *id.*

ling of the playing field, that is, private companies who are disadvantaged if their foreign competitors may operate under less stringent environmental laws. These private parties have the financial, technical, and legal resources necessary to bring about the upward harmonization desired.

Trade dispute resolution processes must be altered to provide real parties in interest (citizens, private companies, and other NGOs) with the ability to drive the process of upward harmonization. Under a best case scenario, trade dispute processes would be opened up to allow these parties to participate directly in initiating and conducting challenges. Given the existing antidemocratic nature of international law,¹¹² and the fear of abuse, it is unlikely that this scenario will develop quickly. An alternative approach that is less likely to threaten the status quo would be to provide citizens with broader participatory rights in their respective governments' trade decisionmaking processes and access to the information prepared and submitted in these disputes. Under this approach individuals and groups must also have the ability to monitor the conduct of disputes, and to submit, in the form of *amicus* briefs, relevant information into the process. They would not, however, participate directly in the international case.

A third approach to allow trade dispute resolution to continue at the intergovernmental level while providing the public participation necessary to advance competitive sustainability, would be to provide NGOs and citizens with access to alternative dispute resolution processes. Under this approach, private parties could bring an action against the foreign government for failing to execute its laws, or, in the alternative, against the subsidized foreign competitors, through an arbitration mechanism. If the arbitration panel finds an environmental trespass, the international agreement or domestic legislation could require the involved governments to begin the consultation and dispute process. The use of international arbitration by private parties through trade agreements has already received acceptance in NAFTA's provisions on intellectual property and antitrust.¹¹³

The benefits of public participation in enforcing environmen-

tal laws could also be achieved outside of trade fora through international agreements. These agreements would extend the ability to sue to enforce these laws to aggrieved parties located in trading partner countries. Thus, in the context of United States-Mexico trade, a U.S. company or NGO who believes that lack of Mexican environmental enforcement is harmful could commence an action, applying Mexican substantive law, in a U.S. federal court. Then, the finding of the U.S. court could be enforced by a Mexican court under traditional principles of international law.¹¹⁴ This equal access to justice approach has already been adopted by Denmark, Finland, Norway, and Sweden in the Nordic Environmental Protection Convention.¹¹⁵ While nontrade tribunals hearing environmental enforcement cases might lack the remedy of trade measures, their ability to order the more direct remedy of actual enforcement of existing laws may make this option the most favorable option among nations with similar environmental standards.

E. Environmental Subsidies

Under the current system of trade rules, subsidies that produce a benefit for the company or industry receiving the benefit and an injury in another trading partner country, are subject to traditional trade disciplines such as countervailing duties.¹¹⁶ The threat of a subsidy challenge has already had a chilling effect on a Canadian reforestation project and has raised concerns about the technology funding aspects of the Montreal Protocol. Consequently, trade rules must be rethought.¹¹⁷

First, if the subsidy is provided to a country's industries, or

114. See Joel A. Gallob, *Birth of the North American Transboundary Environmental Plaintiff: Transboundary Pollution and the 1979 Draft Treaty for Equal Access and Remedy*, 15 HARV. ENV'T. L. REV. 85, 143-48 (1991). With regard to the principles surrounding enforcement in Mexico of a U.S. court's decision, see Joel R. Paul, *Comity in International Law*, 32 HARV. INT'L L.J. 1 (1991).

115. *Convention on the Protection of the Environment*, Feb. 19, 1974, 1092 U.N.T.S. 279; see also Gallob, *supra* note 114, at 108-11.

116. See Magnier, *supra* note 2 (discussing "green-subsidies"). For example, trade rules may recognize a subsidy when the government pays a company to install a pollution control device. However, trade rules do not recognize that a subsidy has been made when a country does not impose laws requiring a factory to install the device. See Komoroski, *supra* note 43 and accompanying text.

117. See Magnier, *supra* note 2.

112. See Hunter, *supra* note 105 at 552; ALLOTT, *supra* note 105 at 238.

113. See NAFTA, *supra* note 48, ch. 11, subch. B (Settlement of Disputes Between a Party and an Investor of Another Party).

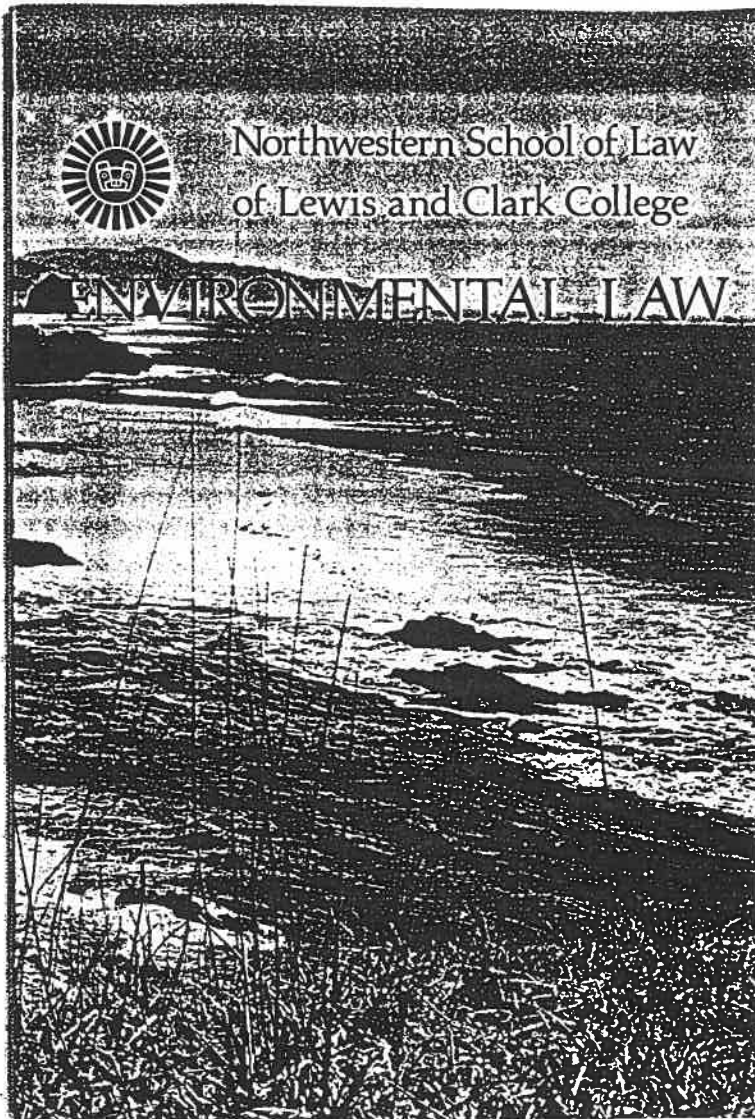
to a country to be passed on to its industries, under the auspices of a multilateral environmental accord, such as the Montreal Protocol, then that subsidy should not be actionable. If, however, the subsidy is not part of a multilateral environmental agreement, then it must be subjected to a more considered analysis. Environmental and trade reasons require that a country cannot generally be allowed to pay the environmental costs of its industries without its trading partners having recourse against it for the subsidy it is providing to these industries. However, in many developing countries some amount of subsidization is necessary to encourage cleaner growth. To the extent that a developing country subsidizes a private company to ensure that basic environmental protections are provided, that subsidy should not be countervailable. In judging whether a developing country's subsidies meet this test the "rationality" standard of review set out above should be used.¹¹⁸

Similarly, even in developed countries, some forms of environmental subsidy should not be open to wholesale challenge. For example, if a government subsidizes a company to exceed existing environmental standards, such as in a pilot program, and that subsidy is limited to the amount of excess cost imposed by the higher standard, and does not give the company a significant economic competitive advantage, that subsidy should not be actionable. Similarly, if the subsidy produces only minor or tangential short-term benefits to the "subsidized" company or industry, but produces a much larger long-term benefit to the citizenry, that subsidy also should not be actionable. For example, if Canadian companies are paid to reforest their lands with hardwood trees, which can take a substantial period of time to reach harvestable age, it is arguable that the companies' benefits are tangential to the greater societal benefits, particularly if the lands are open to public use. In determining whether such a program constitutes a subsidy the benefit to the company or industry should be prorated to include the benefit to the public. If using the prorated company or industry benefit still produces an injury in the trading country, only then would the subsidy be actionable.

III. CONCLUSION

The interplay of trade and environmental policies offers a unique set of challenges. Unless environmental issues are dealt with, the public may come to perceive the international trading system as a rogue actor out of touch with their concerns, and compromising the already shaky legitimacy of the system. For environmentalists, who often have an aversion to the economics of environmentalism and development, trade's cross-cutting complexities require an appreciation that is not always forthcoming. Given these difficulties, there is a certain false appeal to merely putting trade and environmental policies back on separate, and hopefully parallel, tracks. However, in order for both trade and environmental policies to be most efficient, these policy spheres must be made mutually reinforcing. Environmental policies must not unnecessarily distort trade flows; they must reward through the comparative advantage the most ecologically and economically efficient actors. By the same token, trade policies must direct market actors to engage in economic activities that are environmentally restorative and sustainable and must penalize those who act in an environmentally unsound and unsustainable manner. Competitive sustainability sets a course for steering trade and environmental policies toward a mutually reinforcing destination.

118. See *supra* note 101 and accompanying text.



MAKING TRADE AND ENVIRONMENTAL
POLICIES MUTUALLY REINFORCING:
FORGING COMPETITIVE SUSTAINABILITY

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The authors assert that environmental and international trade policies must become mutually reinforcing so that environmental policies do not distort trade flows and economic activities do not continue in an unsound and unsustainable manner. Competitive sustainability is the mechanism for achieving sustainable development by harmonizing domestic and international environmental standards through the use of competitive forces which reward the cleanest and most efficient economic actors. An international system of incentives and disincentives will create a mutually reinforcing mechanism for directing trade and environmental policies toward improving the worldwide standard of living.

I. INTRODUCTION

Former U.S. Ambassador to the General Agreement on Tariffs & Trade¹ Michael Smith astutely noted that the environment is the trade issue of the 1990s, and that, unless a considered solution is developed to allow constructive interaction between trade and the environment, each of these vital policy spheres may find themselves compromised.² Put in "Smithese," "[t]he question is

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1. An administrative body established to oversee the General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. Part 5, 55 U.N.T.S. 187 (GATT).

2. Mark Magnier, *Power of Environmentalists Called Trade Issue of '90s*, J.

whether you want to lay down in front of the train or get in the cab and steer it."³ Steering is the preferable approach.

As the contributions to this issue demonstrate, the steering process for trade and environment policy indeed has begun. The dialogue is rapidly evolving from its early emphasis on potential conflicts between trade and environmental policies to a more positive attempt to minimize or eliminate frictions between these two policy spheres. Though this evolution is positive from both trade and environmental perspectives, it simply does not go far enough. We need to rethink the course we want to steer. True advancement of both ecological and economic imperatives will occur only when trade and environmental policies are mutually reinforcing.⁴ "Competitive sustainability" defines a mechanism for realizing sustainable development through the "upward harmonization" of domestic and international environmental standards, using competitive forces to create a level playing field for commerce at consistently higher levels of environmental and social protections that reward the cleanest and most efficient economic actors for their efforts.⁵ The goal here is not to overburden economic activities, but to put them to work for the environment. By focusing economic activities, through incentives and disincentives, in directions that yield both economic and environmental benefits, these economic activities can become engines to drive standards of living—broadly defined to include economic, environmental, social, and health stability and security—upwards.

A. The Untenable Status Quo

Environmental policies have long relied on trade sanctions to advance their goals,⁶ and trade tribunals nearly a decade ago found environmental laws in conflict with trade rules.⁷ Yet, it was

COM., July 20, 1992, at 3A (paraphrasing Ambassador Smith).

3. *Id.* at 3A (quoting Ambassador Smith).

4. See Robert F. Housman & Durwood J. Zaelke, *Trade, Environment & Sustainable Development: A Primer*, 15 HASTINGS INT'L & COMP. L. REV. 535, 610 (1992).

5. See Richard B. Stewart, *Controlling Environmental Risks Through Economic Incentives*, 13 COLUM. J. ENVTL. L. 163 (1988).

6. See, e.g., Fishermen's Protective Act of 1967, 22 U.S.C. §§ 1971-1980 (1988) (restricting the import of fishery or wildlife products from countries which violate international environmental programs).

7. See, e.g., *United States—Taxes on Petroleum and Certain Imported Sub-*

mately twenty-eight to ninety-eight centimeters by 2090.¹⁴ A rise of only twenty-five centimeters would render countless island-states uninhabitable, as well as the delta regions of the Nile, the Ganges and the Yangtze rivers, displacing millions of people.¹⁵ Given these and other consequences, the potential economic and social effects of global warming are substantial.

Global warming is just one of the many threats that jeopardize the long-term prosperity of both our ecological and economic systems. Ozone depletion will also place major burdens on these systems. Scientists have recently detected record high levels of ozone-depleting chlorine monoxide over New England and Canada.¹⁶ These record levels are troubling when one considers that epidemiologists estimate that each one percent loss of stratospheric ozone leads to an increased incidence of skin cancer of three percent or more.¹⁷ The human and economic costs of increasing cancer rates by even three percent are substantial, to say the least.

The deliberate overutilization of natural resources is compromising global economic and ecological security¹⁸ by threatening biodiversity and depleting the world's economic capital reserves.

The result is that our standard of living is falling. Environmental harms, such as air and water pollution, are causing greater numbers of people to become afflicted with illnesses such as respiratory disease and cancer.¹⁹ Meanwhile, the overexploitation of resources jeopardizes our ability to feed the world's current popu-

14. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE: THE IPCC IMPACTS ASSESSMENT, at 5-1 to 5-2 (1990).

15. *Id.*

16. See Kathy Sawyer, *Ozone-Hole Conditions Spreading; High Concentrations of Key Pollutants Discovered over the U.S.*, WASH. POST, Feb. 4, 1992, at A1.

17. BROWN ET AL., *supra* note 10, at 62 (citing UNEP, ENVIRONMENTAL EFFECTS OF OZONE DEPLETION: 1991 UPDATE (1991)).

18. For example, the overexploitation of fisheries already threatens a number of commercially significant species, including Atlantic Cod, Haddock, Atlantic Herring, Capelin, Southern African Pilchard, Pacific Ocean Perch, King Crab, and Peruvian Anchoveta. *Id.* at 30 (citing UNEP, ENVIRONMENTAL DATA REPORT 1991-92 (1991)).

19. See ENVIRONMENTAL EXCHANGE, AIR POLLUTION SOLUTIONS 6 (1992) (EPA estimates provide that roughly 140,000 Americans alive today will get cancer from toxic industrial air emissions).

not until the *Tuna-Dolphin* decision⁸ that trade and environmental policies were perceived as significant threats to each other.⁹ Only in the wake of the *Tuna-Dolphin* panel's sweeping pronouncements did trade advocates come to fear environmentalists and vice versa. There has been no rush, however, to use environmental policies to disrupt the trading system or to use trade policies to undermine environmental protections. Thus, the current ecological and economic state of the world—the status quo—is a product of coexisting trade and environmental policies.

Yet, even a cursory glance at the Earth's "vital signs" shows that this status quo is simply not working.¹⁰ Environmental degradation, driven principally by economic activities, is already occurring at a rate and scale that places both ecological and economic systems at risk.¹¹ Take, for example, the threat of global warming caused chiefly by carbon dioxide emissions.¹² Assuming the present growth rate in greenhouse gases remains constant, we may have already committed the planet to a mean global warming of three to eight degrees Fahrenheit (1.5°C to 4.5°C).¹³ Global warming is expected to cause a mean sea-level rise of approxi-

stances, GATT Doc. L/6175 (June 17, 1987) (the "Superfund" case).

8. Dispute Settlement Panel Report on United States Restrictions of Imports of Tuna, Aug. 16, 1991, 30 I.L.M. 1594.

9. See, e.g., AD HOC WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS FOR THE PREPARATION OF A PROTOCOL ON CHLOROFLUOROCARBONS TO THE VIENNA CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (VIENNA GROUP), REPORT OF THE AD HOC WORKING GROUP ON THE WORK OF ITS THIRD SESSION, UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) at 17-18, U.N. Doc. WG.172 (1987) (GATT Secretariat legal expert's opinion to the Montreal Protocol negotiators that the trade provisions of the Protocol were consistent with the GATT) (hereinafter GATT Report); *Unfair Trade Practices: Hearings Before the Subcommittee on Oversight and Investigation of the House of Representatives Committee on Energy and Commerce*, 101st Cong., 2d Sess. 179 (1990) (The Marine Mammal Protection Act is consistent with GATT).

10. See LESTER R. BROWN ET AL., VITAL SIGNS 1992, at 15-19 (1992).

11. HERMAN DALY & JOHN COBB, FOR THE COMMON GOOD: REDIRECTING THE ECONOMY TOWARDS COMMUNITY, THE ENVIRONMENT AND A SUSTAINABLE FUTURE 2 (1989).

12. See U.S. CONGRESS, OFFICE OF TECH. ASSESSMENT, CHANGING BY DEGREES: STEPS TO REDUCE GREENHOUSE GASES 53-58 (1991). Climate models suggest that a 30% increase in carbon dioxide projected for the period between 1985 and 2030 will add 0.45°C to 1.3°C to expected global temperatures. *Id.* at 57.

13. *Id.* at 58; Dean Edwin Abrahamson, *Global Warming: The Issue, Impacts, Responses*, in THE CHALLENGE OF GLOBAL WARMING 10 (Dean Edwin Abrahamson ed., 1989).

lation at a time when that population is steadily increasing.¹⁶ Simply put, everything that should be increasing is decreasing and everything that should be decreasing is increasing. Economic activities are intended to make our lives better, yet in their current form they are making our lives worse.

It follows that we have to rethink the direction of economic activity. The global economy must be directed toward activities that not only reap economic benefits but, at a minimum, do not degrade the environment, and preferably work in some way to ameliorate past environmental trespasses. Paul Hawken, the founder of the environmentally conscious Smith & Hawken company, summarized this need in the following manner: "Business is the only mechanism on the planet today powerful enough to produce the changes necessary to reverse global environmental and social degradation."¹⁷ In rethinking the course of economic activity, Hawken goes on to state that "[t]here is an economy of degradation, which is one objective way to describe industrialization, and there is a restorative economy that is nascent but real, whose potential size is as great as the entire world economy is today."¹⁸ The question remains: How can the global economy be encouraged to follow a restorative path? One of the principal mechanisms for encouraging this conversion is the international trade system.

B. Where Trade Fits into Competitive Sustainability

With the mass globalization of economic activity now occurring,¹⁹ economic activity is rapidly becoming synonymous with international trade.²⁰ In the United States, for example, from 1988 to 1991, gross domestic product (GDP) increased \$129.8 billion in constant dollars.²¹ Exports of products alone accounted for seventy percent of that growth.²² Moreover, at least one group of ex-

20. See WILLIAM OPHULS, *ECOLOGY AND THE POLITICS OF SCARCITY* 48-56 (1977).

21. Paul Hawken, *The Ecology of Commerce, Inc.*, Apr. 1992, at 93, 94.

22. *Id.*

23. See Derek Loebart, *Innovations and Private Initiatives as Frontiers*, 15 WASH. Q. 107, 113-19 (1992).

24. *See id.*

25. See Ed Rubenstein, *The Be GATTs*, NAT'L REV. Apr. 27, 1992, at 14.

26. *Id.*

perts, the Council of Economic Advisors, estimates that if the current Uruguay Round of the GATT can be successfully completed, the United States will add \$1.1 trillion (in constant 1989 dollars) to GDP over the next ten years.²⁷

The numbers are equally impressive at the international level. Although growth has been sluggish over the past three years, in 1991 the volume of world trade in merchandise reached a new peak of \$3.53 trillion.²⁸ The services sector contributed an additional \$850 billion to world trade volume—a figure that even GATT cautions is likely to be an underestimate.²⁹

If one follows the Ricardo and Smith schools of thought,³⁰ free trade allows each country to do that which it does best at a "comparative advantage."³¹ The efficiency and comparative advantage of individual countries, acting through free trade, result in a magnified efficiency of the global economy.³² In addition, trade rules, like the U.S. Internal Revenue Code, provide incentives for certain activities and disincentives for others, directing, to a degree, what activities will be undertaken.³³ In a perfect system, trade provides incentives for, and magnifies the effects of, economic activities that benefit larger numbers of people around the world.³⁴ But if, as is now occurring, economic activities decrease human well-being, trade actually makes economic activity more efficient at diminishing the overall standard of living.³⁵

If free trade is a mechanism to advance other goals—as opposed to a goal unto itself—the current condition that allows trade to lower standards of living is unacceptable. This is not to

27. *Id.*

28. Frances Williams, *GATT Disquiet at Slower Trade Growth*, *FIN. TIMES*, Mar. 18, 1992, at 18.

29. *See id.*

30. *See generally* DAVID RICARDO, *ON THE PRINCIPLES OF POLITICAL ECONOMY AND TAXATION* (London, J. Murray 1817); ADAM SMITH, *THE WEALTH OF NATIONS* (London, J.M. Dent & Sons 1966).

31. *See generally* JOHN H. JACKSON, *THE WORLD TRADING SYSTEM: LAW AND POLICY OF INTERNATIONAL ECONOMIC RELATIONS* 10-14 (1989).

32. *See generally* *Trade and Environment: Factual Note by the Secretariat*, GATT Doc. L/6896 (Sept. 18, 1991).

33. *See* JACKSON, *supra* note 31, at 83.

34. *See generally id.*

35. *See* Herman E. Daly, *From Adjustment to Sustainable Development: The Obstacle of Free Trade*, address at Loyola Law School (Feb. 29, 1992).

say that trade is the "great destroyer,"³⁶ but that the incentives trade currently provides to economic activities are misplaced. The key is to alter trade incentives to encourage economic activities that provide increasing levels of economic and ecological well-being. Redirecting these incentives so that trade and environmental policies are mutually reinforcing will rejuvenate economic and social bases, encourage increased efficiency in economic systems, and provide additional support for each nation's comparative advantage.

Competitive sustainability provides a theoretical framework for thinking about mutually reinforcing economic and ecological systems. One of the principle goals of competitive sustainability is a concurrent increase in domestic and international environmental standards. The theory further provides that the best mechanism for encouraging this upward harmonization is the use of competitive forces to create a level playing field for commerce at consistently higher levels of environmental and social protections through a set of incentives that reward the cleanest and most efficient economic actors for their efforts.³⁷

These incentives must, however, be coupled with the more traditional command-and-control type baseline standards. These baseline standards function as an environmental safety net to ensure that market failures do not allow serious environmental or human health threats to occur. They also ensure that all competitors in a given market begin internalizing the environmental and health costs of their production activities.

II. PUTTING THEORY INTO PRACTICE

A. Environmental Countervailing Duties

One of the central tenets of competitive sustainability, recog-

36. *But see* David Morris, *Free Trade: the Great Destroyer*, 20 *THE ECOLOGIST* 190 (1990).

37. On the domestic level a similar approach to environmental regulation has been advanced by those who advocate a market-based approach to environmental protection. *See* Richard B. Stewart, *Controlling Environmental Risks Through Economic Incentives*, 13 *COLUM. J. ENV'T. L.* 153 (1988); Joel A. Mintz, *Economic Reform of Environmental Protection: A Brief Comment on a Recent Debate*, 16 *HARV. ENV'T. L. REV.* 149 (1991); FREDERICK A. ANDERSON ET AL., *ENVIRONMENTAL IMPROVEMENT THROUGH ECONOMIC INCENTIVES* (1977).

nized both by free traders and environmentalists,³⁸ is that environmental costs must be internalized into product costs.³⁹ The environmental costs of production wreaked upon society, such as poisoned water and air, traditionally have not been borne by products, but must now be included in the cost of these products at market. There are several ways that this can be accomplished in domestic markets. Production permits can be required and fees paid for the privilege of polluting.⁴⁰ These permit fees would be added to the costs of production and make environmental costs into real costs. Similarly, command-and-control requirements, such as installing a scrubber, also internalize environmental costs to a degree. Internationally, neither the economic nor ecological systems have developed to the extent necessary to establish a multinational permit scheme or regulatory framework, although such a system has been discussed in the context of efforts to combat global warming.⁴¹

Since there is no mechanism for complete environmental cost internalization, products produced under substandard environmental laws or weak enforcement regimes are traded freely on international markets at a competitive cost advantage over products from nations with strong environmental laws.⁴² In essence,

38. *See id.*; OECD, *The Polluter Pays Principle: Definition, Analysis, Implementation*, (discussing guiding principles concerning international economic aspects of environmental policies) May 26, 1972, C(72)128 (1975); Frank Ackerman, *Waste Management: Taxing the Trash Away*, *ENVIRONMENT*, June 1992, at 2; Ursula Kettlewell, *The Answer to Global Pollution? A Critical Examination of the Problems and Potential of the Polluter Pays Principle*, 3 *COLO. J. ENV'T. ENV'T. POL'Y* 429 (1992).

39. Housman & Zaelke, *supra* note 4, at 605-06.

40. *See, e.g.*, Clean Air Act Amendments of 1990, 42 U.S.C. §7651(b) (Supp. 1991) (electrical utilities pollution allowances); *see generally* Larry B. Parker et al., *Clean Air Act Allowance Trading*, 21 *ENV'T. L.* 2021 (1991).

41. *See, e.g.*, Donald M. Goldberg, *Reducing Greenhouse Gas Emissions: A Combined Strategy Using Permits, Fees and Country Commitments* 2 (Feb. 1992) (on file with Center for International Environmental Law).

42. *See generally* Thomas K. Plofchan, Jr., *Recognizing and Countervailing Environmental Subsidies*, 26 *ENV'T. L.* 763 (1992) (discussing ways in which international trade law may be used to effect greater worldwide environmental protection); RESEARCH AND POLICY COMMITTEE, COMMITTEE FOR ECON. DEV., *BREAKING NEW GROUND IN U.S. TRADE POLICY* 73 (1991). While, if properly crafted, the vast majority of environmental laws can improve manufacturing efficiency and yield a competitive advantage, even the most efficient corporations cannot compete with competitors who receive the basic raw materials for production at no cost. In essence, the lack of environmental regulation amounts to free air, water, and land to

products produced without environmental protection requirements receive a subsidy by passing the costs of their environmental harms downstream.⁴³ These costs are then borne by the general public (who pay both environmentally, through air they can't breathe; and economically, through rising health care costs) and by downstream producers (who find that their activities are compromised by the environmental costs passed on by upstream activities).⁴⁴ In sum, the current incentives are backwards.

Perhaps the simplest way to eliminate the competitive advantage held by companies producing products in nations not enforcing environmental laws is to allow nations to apply a countervailing duty on these products equal to the environmental subsidy the products receive when they enter the importing nation's market.⁴⁵ Applying environmental countervailing duties would have a number of positive effects. First, it would level the competitive playing field upward by removing the incentive to pollute. Second, by removing the competitive incentive given by lower environmental standards, these duties would encourage exporting countries to adopt and enforce environmental laws at home. Third, allowing economically harmed companies to com-

despoil while competitors pay for these goods. Thus, while environmental laws can help a company "use" less air and often become more efficient, they cannot reduce the costs of using natural resources below zero—the cost of free resources in countries without acceptable environmental laws. Moreover, opponents of this theory argue that there is no competitive advantage from the lack of environmental laws because, in most cases, the costs of compliance are less than two percent. This view fails to take into account at least two critical factors. First and foremost, it fails to mention that the costs of compliance can be much higher for industries that cause the greatest environmental harms. Further, while two percent seems like a very low number, if that percentage is taken from the total cost of a product that has a high cost or is taken from the total cost of buying large numbers of low cost products, even a two percent difference can amount to a substantial cost difference.

43. *See* Kenneth S. Komoroki, *The Failure of Governments to Regulate Industry: A Subsidy Under the GATT*, 10 *Hous. J. ENV'T. L.* 189, 209 (1988); *see also* Plofchan, *supra* note 42, at 780.

44. For example, an upstream plant that dumps toxics into the water poisons the fish which downstream fishermen rely upon for their livelihood. Thus, the environmental costs of the dumping are borne by the fishermen and not the factory; the fishermen are subsidizing the factory. On a global level, ozone depletion will at some point compromise the resort industries of many countries. As upstream producers deplete the ozone, people will no longer be able to safely go to certain beaches, and resorts at these beaches will lose clientele.

45. *See* Plofchan, *supra* note 42, at 780.

plain of environmentally unsound practices abroad would put the substantial resources of private economic actors behind the international policing of environmental laws. Moreover, environmental countervailing duty cases would provide a public forum that could focus public scorn on companies and nations acting without concern for the health and safety of people and the planet.

Opponents of the use of environmental countervailing duties argue that such a system would: 1) prove unadministrable; 2) be a breeding ground for protectionism; 3) harm developing countries; and 4) allow one nation to impose its values on other nations. While these are all valid concerns, a properly structured countervailing duty system could address them.⁴⁶

46. Apart from whether environmental countervailing duties are a proper policy choice, it is possible that many of these subsidies could already be recognized as subsidies and countervailed under existing laws. Subsidies exist in two forms: export subsidies and domestic subsidies. Export subsidies are defined as government programs or practices that "[increase] the profitability of export sales but [do] not similarly increase the profitability of sales for domestic consumption". *Id.* at 766 (quoting Alan O. Sykes, *Countervailing Duty Law: An Economic Perspective*, 89 *COLUM. L. REV.* 199, 203-04 (1989)). Domestic subsidies are defined as "governmental programs that are sufficiently targeted 'to a specific enterprise or industry, or group of enterprises or industries,' and that provide an advantage to the producers not found in the marketplace." *Id.* (quoting 19 U.S.C. § 1677(5)(B) (1988)). Environmental subsidies do not typically provide a benefit targeted only to exports, and so they are generally not export subsidies. However, environmental subsidies typically do provide a producer with an advantage in the marketplace and could conceivably be characterized as "domestic subsidies." *See id.* at 770-71. Moreover, at least one commentator believes that environmental subsidies meet the test for a domestic subsidy set out under U.S. law. *Id.* at 771 (citing 19 U.S.C. § 1677(6)(A)(ii)(IV) (1988)).

If any difficulty arises in defining environmental subsidies, that difficulty is whether these subsidies are countervailable. *See id.* at 772. Countervailability requires three elements. The subsidy must: 1) be targeted to a specific industry or group of industries; 2) inflict a material injury to the importing country's domestic industries; and 3) be capable of being valued. *Id.* at 771. If one defines a group of industries by its relative means of production and disposal (e.g., all industries that use chlorinated fluorocarbons or dispose of their wastes into waters), then it is clear that environmental subsidies provide a targeted benefit to a discernable group or class of companies. *See id.* at 771. As to the second prong, material injury, U.S. law requires that, in order to find a material injury, a causal link must exist between the subsidy provided to the imports in question and a negative or threatened trend in the domestic industry. *Id.* at 771-74. This test requires a case-by-case analysis that does not permit generalization as to when environmental subsidies are countervailable under existing law. The third test for countervailability is valuation. *See id.* at 771. While environmental subsidies may not be easy

duties could be determined from the per-product unit cost of environmental compliance between similar, or "like," imported and domestic goods.⁵¹ Where an importing nation believes that the different costs of compliance reflect differences not in the level of protection but rather in the efficiency of the regulatory approach, that country should be allowed to show that their regulatory approach achieves an equivalent level of environmental, health, and safety protection. This showing would prevent the imposition of a countervailing duty and encourage the other party to adopt the more efficient regulatory approach. Existing scientific technologies have the capability of providing the information necessary to make these determinations.

Moreover, a properly constructed system of environmental countervailing duties would look at all the environmental regulations concerning a whole production system. Thus, if the environmental laws imposed on a production facility in one country are more stringent with regard to water disposal, perhaps because the country lacks water resources, this could offset slightly lower air standards. This offset program would prevent disputes from arising over minor differences in standards. It would also allow for disputes to arise where a country's standards are not substantially lower in one area, but are slightly lower in all or many areas, with the net effect of creating a competitive advantage. This multimedia approach to environmental countervailing duties accords with the general direction all environmental regulation must follow.⁵²

2. Protectionism

As with any type of government regulation over markets, if improperly used, environmental countervailing duties could become a tool for protectionist interests.⁵³ However, the potential for abuse is a weak ground for dismissing the use of such duties in an environmental context, especially when one sees the wide ar-

51. *See id.*

52. Accord Robert A. Frosch & Nicholas E. Gallopoulos, *Strategies for Manufacturing*, *SCI. AM.*, Sept. 1989, at 144, 152 (discussing industrial ecology principles).

53. *See* Patrick Low & Raed Safadi, *Trade Policy and Pollution*, in *INTERNATIONAL TRADE AND THE ENVIRONMENT* (Patrick Low ed., 1992) (2 World Bank Discussion Papers 29, 39); GATT Report *supra* note 9, at 5.

I. Administrability

Opponents of using environmental countervailing duties argue that the failure to impose environmental laws is not a sufficiently targeted benefit to a particular industry or group of industries to constitute a "subsidy." Rather, lower environmental standards are more like generalized societal benefits such as roads or educational systems.⁴⁷ This argument fails to recognize that the international trading system is coming to recognize that certain governmental policies, like the failure to enforce intellectual property protections, provide a benefit—a subsidy—to a class of industries that can be defined by their means of production.⁴⁸ The same can be said of the failure to enforce environmental laws, that is, the discernable class can be defined from such processes as their disposal of wastes into water.⁴⁹

Opponents of environmental countervailing duties also argue that, given the vast range of approaches to environmental protection from command-and-control regulations to market-based strategies, it would be difficult to determine when two countries' different approaches applied to the same environmental problem are equivalent. Similarly, they argue that even if equivalence in standards can be determined, it would be difficult to calculate the degree of advantage gained through a lower standard for the purposes of setting the amount of duty to impose.⁵⁰

Each of these two administrative difficulties can be overcome by returning to the purposes of environmental countervailing duties. Environmental countervailing duties serve two purposes: (1) to internalize otherwise externalized costs, leveling the playing fields for trade; and (2) to encourage environmental protection. Based on these goals, differences in standards and the amount of

to value, similar valuation problems have been overcome with regard to other forms of subsidies such as the failure to enforce antitrust laws.

47. *See* GATT Report *supra* note 9, at 20.

48. *See, e.g., Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*, GATT Doc. MTN.TNC/WFA (Dec. 20, 1991), [hereinafter *Dunkel Draft*] (trade related aspects of intellectual property); North American Free Trade Agreement (NAFTA), Sept. 6, 1992, ch. 15 (competition policy and monopolies), ch. 17 (intellectual property) available in Westlaw, NAFTA database.

49. *See* Plofchan, *supra* note 42, at 771.

50. *See id.* at 774-75.

ray of other interests protected by similar trade sanction schemes at the risk of protectionism.⁵⁴ Rather, the risk of protectionism is one reason to ensure that the system under which such duties are applied is set up in such a way as to prevent their misuse.

The creation of a "reverse 301" process⁵⁵ is one example of how to achieve the benefits of environmental countervailing duties while minimizing the threats of protectionism.⁵⁶ Under section 301 of the Trade Act of 1974, as amended, private parties may petition the U.S. Trade Representative (USTR) to initiate an investigation of a practice or policy of a foreign government that violates a trade agreement, is inconsistent with the international rights of the United States, or is otherwise contrary to the provisions of section 301.⁵⁷ If the USTR determines that the foreign practice violates one of these obligations, she must impose retaliatory measures, such as duties, unless the violation falls within certain exceptions.⁵⁸ Section 301 also provides for discre-

54. *See, e.g.,* 19 U.S.C. § 1337 (Supp. 1990) (trade sanctions for patent infringement). In fact, a whole host of widely divergent interests have been advanced through U.S. trade sanctions. *See* Barry E. Carter, *International Economic Sanctions: Improving the Haphazard U.S. Legal Regime*, 76 *CAL. L. REV.* 1162 (1987).

55. Section 301 of the Trade Act of 1974, *infra* note 57, was designed to encourage other nations to open their markets; the vast majority of § 301 cases involve foreign practices that impede U.S. exports. Alan O. Sykes, "Mandatory" Retaliation for Breach of Trade Agreements: Some Thoughts on the Strategic Design of Section 301, 8 *B.U. INT'L L.J.* 301, 302 (1990). Thus, legislation designed to prevent unfair imports, which § 301 also provides for, would be a "reverse 301."

56. *See id.*; Richard Diamond, *Changes in the Game: Understanding the Relationship Between Section 301 and U.S. Trade Strategies*, 8 *B.U. INT'L L.J.* 351, 360-61 (1990) (Professor Diamond notes that, as amended, § 301's short time frames for negotiation could increase the credibility of threats by mandating retaliation at the end of the time frames if agreement is not reached). *But see* Fusae Nara, Note, *A Shift Toward Protectionism Under § 301 of the 1974 Trade Act: Problems of Unilateral Trade Retaliation Under International Law*, 19 *HORRSTRA L. REV.* 229 (1990).

57. Trade Act of 1974, §§ 301-302, 19 U.S.C. §§ 2411-2412 (1988). Cases may also commence at the USTR's initiation. *Id.* § 2412(a)-(b). While many in the international community have sharply opposed § 301's provisions, it is important to note that developments in the Uruguay Round seem to be leading towards an international acceptance of § 301-type provisions. *See* Judith Bello & Alan F. Holmer, *GATT Dispute Settlement Agreement: Internationalization or Elimination of Section 301*, *INT'L LAW.*, Fall 1992, at 799-800; *see also* JOHN H. JACKSON, *RESTRUCTURING THE GATT SYSTEM 71* (1990) (discussing opposition to § 301).

58. Sykes, *supra* note 55, at 303-05; Judith H. Bello & Alan F. Holmer, *Unilateral Action to Open Foreign Markets: The Mechanics of Retaliation Exercises*,

tionary retaliation where the USTR finds that a foreign practice is unreasonable or discriminatory and burdens or restricts U.S. commerce.⁵⁹ Despite section 301's draconian appearance the USTR retains a great deal of discretion in both mandatory and discretionary cases in setting the retaliatory measure.⁶⁰ One of the principal ways the USTR handles a section 301 case is to negotiate with the foreign party to eliminate the offending practice.⁶¹ The delegation of negotiation and retaliatory authority to the USTR provides a buffer to minimize the protectionist use of the section's provisions.⁶² Because of its structure, section 301 has proven an effective device to encourage other nations to enter into consultations directed at eliminating unfair trade practices.⁶³

Under a reverse-301 environmental provision, a foreign party exporting products to the United States, who failed to provide baseline environmental protections concerning the production processes of these products, could be threatened with countervailing duties. These countervailing duties would be used to encourage the foreign party to enact and enforce comparable environmental laws.

3. Developing Country Concerns

Opponents of environmental countervailing duties also argue that developing countries cannot afford to meet the environmental laws of the developed world, and thus, the imposition of countervailing duties against their products would freeze them out of world markets.⁶⁴ Opponents further argue that environmental protection in the developing world will only come through growth. Therefore, blocking these countries from world markets will stymie the global expansion of environmental protection.⁶⁵ One scholar went so far as to argue that environmental laws should be "appropriate" not for some environmental protection goal, but for

22 INT'L. LAW. 1197, 1198 (1988).

59. 19 U.S.C. § 2411(b).

60. *Id.* § 2411(a)(1)(B)(ii), (b)(2), (c).

61. *See id.* § 2411(c)(1)(C); Sykes, *supra* note 55, at 304.

62. *See Sykes, supra* note 55, at 311.

63. Diamond, *supra* note 56, at 360-61.

64. *See Piritta Sorsa, GATT and Environment: Basic Issues and Some Developing Country Concerns, in INTERNATIONAL TRADE AND THE ENVIRONMENT, supra* note 53, at 325, 326.

65. *See generally* GATT Report, *supra* note 9, at 17-19.

use of countervailing duties imposes the values of one nation upon the rest of the world, which may see things in a different light.⁷¹ This argument also suffers from a number of flaws. First, countervailing duties have nothing to do with what other countries choose to allow within their own borders; it has everything to do with what the importing nation chooses to allow within its own borders. Countervailing duties do not require a foreign government to change its laws; they simply internalize the costs externalized by these laws—all within the borders of the importing nation. Moreover, even with such duties in place, the foreign product can still be sold at its subsidized price within the country-of-origin's markets.

Opponents respond that assessing countervailing duties still amounts to an imposition of values because the end result is that the exporting country can either forego trade opportunities or change its practices at home. This is absolutely true and entirely proper. For example, nations that enslave their people or use prison labor are often told to choose between ending these practices or foregoing trade opportunities.⁷² There is no reason that environmental trespasses can not be similarly addressed. Assuming the validity of the "effects test,"⁷³ and given that environmental harms like ozone depletion and global warming directly endanger people around the world, there is an even stronger rationale for using trade sanctions to encourage environmentally sound behaviors. Further, since the failure of foreign countries to enforce environmental laws places U.S. competitors at a competitive disadvantage, the effects test would also allow a country to impose countervailing duties to counteract this improper advantage.⁷⁴ Some believe that many environmental threats are purely local in nature and that the use of countervailing duties and other trade measures to address such localized threats is inappropriate

71. *See* Craig Obey, Comment, *Trade Incentives and Environmental Reform: The Search for a Suitable Incentive*, 4 GEO. INT'L ENVTL. L. REV. 421, 434-437 (1992); GATT Report *supra* note 9, at 20, 24-25.

72. *See* Carter, *supra* note 54 (discussing the use of trade sanctions).

73. The effects test provides that a state has jurisdiction to prescribe law with respect to conduct that has a substantial effect within its territories. *Restatement (Third) of Foreign Relations Law of the United States* § 402(1)(c) (1986).

74. *Cf. United States v. ALCOA*, 148 F.2d 416 (2d Cir. 1945) (economic effects in the United States of anticompetitive behaviors taking place abroad gave U.S. jurisdiction to regulate the conduct in question).

a country's level of development.⁶⁶

There are ample grounds for concern that developing countries who lack the means to comply with the environmental standards of the developed world would be frozen out of international markets if a system of environmental countervailing duties is created.⁶⁷ However, the costs of unsustainable growth, in both developing and developed countries, are higher than profits from the growth.⁶⁸ Thus, developing countries must be encouraged to undertake sustainable growth from the outset. A system of environmental countervailing duties can provide developing countries with the funds necessary to enhance environmental protection, while eliminating the incentives for unsustainable growth.

One method of balancing the concerns of developing countries with the need to enhance environmental protection is to return a substantial portion, if not all, of the revenues generated by environmental countervailing duties to the developing country of origin. A bill for exactly this type of scheme was proposed by Senator Boren.⁶⁹ If enacted, the International Pollution Deterrence Act of 1991 would have amended the countervailing duty laws of the United States to establish that the failure to enact and enforce environmental laws is a subsidy for the purposes of imposing countervailing duties. The bill further provided that fifty percent of the revenues generated through the application of its provisions would be allocated to a fund that would be distributed by the Agency for International Development to assist developing countries in purchasing environmentally sound technologies.⁷⁰

4. Imposing Values Abroad

Another argument against the use of countervailing duties in an environmental context is that the use of such duties is an infringement of the sovereign right of each nation to determine acceptable practices within their borders. Put into moral terms, the

66. Gene Grossman, *In Poor Regions Environmental Laws Should Be Appropriate*, N.Y. TIMES, Mar. 1, 1992, at C11.

67. *See Sorsa, supra* note 64.

68. *See DALY & COBB, supra* note 11.

69. S. 984, 102d Cong., 1st Sess. (1991).

70. *Id.* § 4(d). The other 50% of the revenues generated would go to a fund administered by U.S. EPA to assist companies in developing new technologies. *Id.* § 4(c).

in any case. This argument fails because environmental threats are global, cumulative, and persistent.⁷⁵

5. Changing the Incentives

Under the current rules of international trade, it would be a violation of the GATT, in most circumstances, for a country to impose environmental countervailing duties upon imported products made in countries with substandard environmental protections.⁷⁶ These rules should be changed to provide a framework that allows countries to agree to impose such duties. Absent such a change, the United States should enact environmental countervailing duty provisions that provide for unilateral sanctions in order to force the evolution of the GATT.⁷⁷

B. The Carrot and the Stick

The goal of competitive sustainability would be significantly advanced by adopting a system of countervailing duties to force environmentally lax countries to internalize their costs of production. However this "stick" should have a corresponding "carrot," or trade incentive program.⁷⁸ An environmental trade incentive program would encourage countries, particularly developing countries, to adopt more environmentally sound practices. The financial benefits of these inducements would help developing countries pay the costs of becoming more environmentally aware.⁷⁹ An

75. *See* GEORGE HEATON ET AL., *TRANSFORMING TECHNOLOGY: AN AGENDA FOR ENVIRONMENTALLY SUSTAINABLE GROWTH IN THE 21ST CENTURY* 6 (1991) ("[P]ollution has come to be recognized as a global and chronic phenomenon. This means not only that pollution can be found everywhere but also that its impacts are now large enough to alter the fundamental natural processes that support life.").

76. *See* GATT Report *supra* note 9, at 17.

77. *See* Robert E. Hudec, *Thinking About the New Section 301: Beyond Good and Evil, in AGGRESSIVE UNILATERALISM: AMERICA'S 301 TRADE POLICY AND THE WORLD TRADING SYSTEM* 113 (Jagdish Bhagwati & Hugh T. Patrick eds., 1990) (discussing "justified disobedience" as allowing for violations of GATT in order to force its evolution).

78. *See* Obey, *supra* note 71, at 443.

79. *See id.* In 1980, it was estimated that developing countries would need to spend approximately \$14 billion on pollution control in order to meet U.S. standards. *See* Steven Shrybman, *International Trade: In Search of an Environmental Conscience*, EPA J., Jul.-Aug. 1990, at 18.

incentive program would alleviate the need to resort to trade sanctions in many cases, thereby minimizing disruptions to the international trading system.

This carrot-and-stick approach is proving effective in combatting ozone depletion. The Montreal Protocol⁸⁰ adopts a system of trade sanctions against trade in ozone depleting chemicals,⁸¹ in conjunction with trade and other economic benefits,⁸² to encourage countries to join the Protocol and abide by its provisions.⁸³ Due at least in part due to these trade sticks and financial carrots, the Protocol is one of the most effective international environmental agreements. Other trade and economic incentives can be used to encourage the development of environmental protections in other nations.⁸⁴ For example, short-term direct financial assistance can be provided to developing nations to offset the added costs of complying with higher environmental standards.⁸⁵

A second trade-driven approach would draw upon the Generalized System of Preferences, which provides listed developing countries with preferential trade treatment, and would grant developing countries trade offsets to make up for the burdens of higher levels of environmental protection needed to meet environmental and trade requirements in developed world markets.⁸⁶ A third, necessary mechanism for offsetting trade burdens would be to provide developing countries with increased access to developed world technologies.⁸⁷ The availability of such technologies is

80. See Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, S. TREATY DOC. NO. 10, 100th Cong., 1st Sess., 26 I.L.M. 1541 (1987).

81. *Id.* art. 4(2)-(3), 26 I.L.M. at 1554.

82. *Id.* art. 5, 26 I.L.M. at 1555-56.

83. See generally Dale S. Bryk, *The Montreal Protocol and Recent Developments to Protect the Ozone Layer*, 16 HARV. ENVTL. L. REV. 275, 283-97 (1991).

84. See John Ntambirweki, *The Developing Countries in the Evolution of International Environmental Law*, 14 HASTINGS INT'L & COMP. L. REV. 905, 911-17 (1991).

85. Following the Tuna-Dolphin issue, the United States offered to offset Mexico's costs for increased dolphin protection. See *Sell the Whale*, ECONOMIST, June 27, 1992, at 16.

86. *Differential and More Favorable Treatment Reciprocity and Fuller Participation of Developing Countries*, GATT Doc. L/4903 (Nov. 28, 1979); see also JOHN H. JACKSON & WILLIAM J. DAVY, *LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS* 1149 (2d ed. 1986).

87. See Ntambirweki, *supra* note 84, at 917-20.

production deals a serious blow to advancing competitive sustainability. In order to encourage cleaner growth and require environmental cost internalization, countries must be allowed to ensure that the full life cycle of imported products—from cradle to grave—meets the standards applicable to similar domestic goods. Thus, the term "product," as used in GATT Article III jurisprudence, must be augmented to include the production and disposal cycles of the product as it appears at market.

D. Judging Environmental Standards

Environmental countervailing duties are the sword for enforcing competitive sustainability. However, shielding environmental standards that are challenged as unnecessary trade barriers is equally important. Environmental standards will continue to place restrictions on imported products and at times these restrictions will raise trade concerns. The issue then becomes how these environmental standards are to be judged, and by whom.

1. The Standard of Review

Under the current rules of international trade, an environmental, health, or safety standard can run afoul of GATT's general obligations if the standard, *inter alia*: (1) applies differently to foreign and domestic products,⁹² (2) applies differently to foreign products based upon their country-of-origin,⁹³ or (3) sets a quantitative restriction on trade.⁹⁴ Once a standard violates any one of these basic GATT obligations, it can only be consistent with GATT if it qualifies as an Article XX exception.

The two Article XX exceptions most germane to environmental, health, and safety standards are Article XX(b), which allows for nondiscriminatory and nonarbitrary measures "necessary to protect human, animal or plant life or health";⁹⁵ and, Article

92. GATT, *supra* note 1, art. III, 61 Stat. at A18; Housman & Zaelke, *supra* note 4, at 539; *Tuna-Dolphin Report*, *supra* note 91, at 50; GATT SECRETARIAT, *supra* note 32, at 11.

93. See GATT, *supra* note 1, art. I, 61 Stat. at A12; Housman & Zaelke, *supra* note 4, at 538-39; GATT SECRETARIAT, *supra* note 32, at 10.

94. GATT, *supra* note 1, art. XI, 61 Stat. at A33; Housman & Zaelke, *supra* note 4, at 542-43.

95. GATT, *supra* note 1, art. XX(1)(b), 61 Stat. at A61.

essential to empower these nations and their industries to become more ecologically sustainable trading partners. The need for technology transfer has been acknowledged in a wide array of international instruments and fora.⁸⁸ In addition to access to developed world technologies, developing countries also need access to developed world expertise if they are to be expected to become more environmentally sound trading partners.⁸⁹ Here again, a number of international agreements include provisions for technical cooperation.⁹⁰

C. Widening the Scope of Allowable Standards: Cradle to Grave

For the vast majority of products, the greatest environmental costs occur not at the consumer stage, but at the production and post-consumer stages. Under existing international trade law, a party is prohibited from enacting standards relating to the production process method by which an imported product is made.⁹¹ This limitation renders any attempt by a country to use trade measures to encourage companies to adopt more sustainable production and disposal processes inconsistent with GATT. Removing the entire production and disposal cycles from the concept of

88. See, e.g., G.A. Res. 3281, 29 U.N. GAOR, Supp. No. 31, at 51, U.N. Doc. A/9631 (1974), reprinted in 14 I.L.M. 251 (1975); Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, (opened for signature) Mar. 22, 1989, art. 10, para. 2(d), S. TREATY DOC. NO. 6, 102d Cong., 1st Sess., 28 I.L.M. 649 (1984) (4 U.N. Doc. UNEP/IG. 80/3); Vienna Convention for the Protection of the Ozone Layer, May 22, 1985, art. 4, para. 2, S. TREATY DOC. NO. 9, 99th Cong., 1st Sess., 26 I.L.M. 1516 (1987).

89. See Ntambirweki, *supra* note 84, at 917-20.

90. See *id.*

91. See generally *United States—Restrictions on Imports of Tuna*, 41 GATT Doc. DS21/R (Sept. 3, 1991) [hereinafter *Tuna-Dolphin Report*]; Housman & Zaelke, *supra* note 4, at 540-41; Frederick L. Kirgis, Jr., *Effective Pollution Control in Industrialized Countries: International Economic Disincentives, Policy Responses, and the GATT*, 70 MICH. L. REV. 860, 893-901 (1972). Under GATT Article III, a party can establish point of importation requirements that affect the product. *Text of the General Agreement, in GENERAL AGREEMENT ON TARIFFS AND TRADE, BASIC INSTRUMENTS AND SELECTED DOCUMENTS* (Vol. IV, 1969) (General Agreement as in force Mar. 1, 1969). Production process standards that do not affect the physical or chemical makeup of the product cannot qualify for this allowance. *Id.* Further, GATT's Article XX exceptions only allow for measures that apply within the jurisdiction of the enacting party, production process standards cannot qualify under the GATT exceptions. See *infra* notes 92-94.

XX(g), which allows for nondiscriminatory and nonarbitrary measures "primarily aimed at" conserving exhaustible natural resources taken in conjunction with domestic restrictions on the consumption of such resources.⁹⁶ Despite the apparently broad scope of these exceptions, they have been applied quite narrowly in practice. Under current GATT jurisprudence, a party arguing that its standard falls within these exceptions must show that the standard adopted the least trade-restrictive alternative reasonably available to the party to meet its objective.⁹⁷ Whether the party's environmental experts have chosen the least trade-restrictive alternative reasonably available from the universe of possible standards is judged by a panel of trade experts *ex post facto*. Considering the complexity of the environmental problems, this overly restrictive standard makes environmental standards vulnerable to trade challenges and has a chilling effect on the adoption of more stringent standards which are needed to advance competitive sustainability.

2. Toward a Better Standard of Review

Countries moving toward sustainable development must be able to adopt environmental, health, and safety standards which provide incentives for environmentally sound actors, and place disincentives on unsound actors. Therefore, the current "least trade-restrictive reasonably available" standard of review should be changed to provide nations with wider leeway in adopting the standards needed to focus markets in the direction of competitive sustainability.⁹⁸

A better standard of review would differentiate between standards which are discriminatory on their face and standards which are only discriminatory as they are applied. If a standard facially discriminates between products from different nations (either *vis-à-vis* domestic products or *vis-à-vis* other importers), such discrimination should be "necessary"⁹⁹ to the standard's objective.

96. See *Canada—Measures Affecting Exports of Unprocessed Herring and Salmon*, GATT Doc. L/6268 (Mar. 22, 1988). See also GATT, *supra* note 1, art. XX(1)(g), 61 Stat. at A61; Steve Charnovitz, *Exploring the Environmental Exceptions in GATT Article XX*, 25 J. WORLD TRADE, Oct. 1991, at 37, 38-47.

97. Housman & Zaelke, *supra* note 4, at 546-51.

98. See *id.* at 608-10.

99. See *supra* text accompanying note 95 (discussing "necessary test").

For example, the question would be posed as follows: Is it necessary to discriminate between U.S. beef and Japanese beef in order to protect the health of Japanese consumers?¹⁰⁰ To meet this test, the party challenging the standard would have to prove by a *prima facie* showing of the evidence that the discrimination in the standard does not serve the nonprotectionist objective of the standard.

When judging a standard that is discriminatory only as applied, the standard of review should give greater deference to the environmental standard. Environmental standards that are neutral on their face should be presumed to be GATT-consistent, unless the challenging party can prove that the standard is not "rationally" related to some legitimate environmental, health or safety goal.¹⁰¹ Under this standard of review, a reviewing body would retain the right to find against environmental standards that are simply disguised protection. However, the burden of proving protectionism would be substantially higher than it is currently. The greater deference embodied by the rationality standard would provide countries with the leeway to adopt the standards necessary to bring about upward harmonization. It should also be noted that a two-tier deference approach similar to the one set out here is currently used within the United States to determine whether state standards improperly discriminate against out-of-state products.¹⁰²

3. Multilateralism and Unilateralism

The trend in international trade policy thinking is toward greater leeway for using trade measures or standards in the context of international environmental agreements, while limiting the

100. See Paul Blustein, *Scrapping Trade Barriers to U.S. Beef*, WASH. POST, Mar. 31, 1991, at H1; *Fight with Japan Has Been His Long-Running Beef*, CHI. TRIB., May 30, 1988, at C5.

101. See *Hodel v. Virginia Surface Mining & Reclamation Ass'n.*, 452 U.S. 264, 276 (1981) (setting out "rationality" standard of review). With regard to placing the burden of proof on the challenging party, a similar allocation of the burden of proof has been used in the North American Free Trade Agreement. See NAFTA, *supra* note 48, arts. 765.6, 914.4.

102. Compare *Philadelphia v. New Jersey*, 437 U.S. 617 (1978) with *Raymond Motor Transp. v. Rice*, 434 U.S. 429 (1978); see also Richard B. Stewart, *International Trade and Environment: Lessons From the Federal Experience*, 49 WASH. & LEE L. REV. 1329, 1335-37 (1992).

to the restricted parties' trade rights?; (7) Are less trade inconsistent protection methods immediately apparent?; (8) How necessary is the complained of practice to the use of the resource?; and (9) Are less environmentally harmful methods available?

Third, if the measure is taken to combat a threat that is completely localized within the territory of the exporting country, and has no effect on the importing country (a rarity in the environmental realm)¹⁰³, then the appropriateness of the unilateral measure should be determined under the rationality standard taking into account a number of factors, including: (1) How great is the environmental threat addressed?; (2) How great is the trade burden?; (3) How focused is the measure adopted *vis-à-vis* the threat?; (4) Did the enacting country seek, through diplomatic measures, to have the importing country end the complained-of practice?; (5) Is there an international environmental standard in place, and how does it compare with the complained-of behavior?; (6) How effective is the international standard generally?; and (7) How effective would the international standard be as applied in this specific case? Whether a unilateral measure of this type is trade-compatible is moot if the measure qualifies as an environmental countervailing duty.¹⁰⁷

4. Who Judges?

Under the current system of trade dispute review at the international level, an environmental standard alleged to violate trade rules is reviewed by a panel of trade experts appointed under the aegis of GATT.¹⁰⁶ The natural effect of the appointment process is an implicit and unavoidable bias in favor of trade rules. Here again, review of environmental standards could be improved by a multi-tier process. If the standard in question is adopted by a country to implement a multilateral environmental agreement, then a panel of environmental experts formed under the aegis of the multilateral environmental agreement's secreta-

106. See Sanford E. Gaines, *Taking Responsibility for Transboundary Environmental Effects*, 14 HARV. ENV'T & CONZ. L. REV. 781, 781 (1991). Sanford Gaines, currently with USTR, states eloquently that "[t]he ecological truth [is] that the nations of the world are bound together in an indivisible ecosystem for which we are jointly and severally responsible . . ." *Id.*

107. See *supra* note 58 and accompanying text.

108. See Housman & Zaelke, *supra* note 4, at 557-58.

use of unilateral trade measures for environmental purposes. Multilateral approaches to environmental problems are preferable, particularly with regard to global problems or problems affecting the global commons. However there is a danger in limiting the ability of countries to use unilateral measures because the measures provide impetus for the international community to act on a problem. For example, the United Nations driftnet moratoria followed unilateral threats by the United States that it would take trade measures to halt this environmentally devastating practice. Similarly, the threat of U.S. trade sanctions has played a major role in bringing about international efforts to save hawksbill turtles,¹⁰⁹ whales, and now, in the wake of the *Tuna-Dolphin* dispute, dolphin in the Eastern Tropical Pacific Ocean.¹⁰⁴ Without unilateral efforts, it is unlikely that the slothful international community would have responded to these threats in time.¹⁰⁵

International trade rules should not compromise the ability of nations to use unilateral measures to spur international action on an environmental threat. A method must be devised for determining whether a unilateral trade measure is an appropriate response to a given threat. First, if the threat has a direct effect on the enacting country, then the standard of review should be whether the unilateral use of a trade measure was rationally related to addressing the environmental threat.

Second, if the trade measure seeks to address a threat to the global commons, the standard of review should also be rationality. In determining if a measure to protect the commons is rationally related to the alleged environmental goal, a number of factors should be considered, including: (1) Is there already an international regime designed to combat the threat?; (2) If a regime exists, how effective is it?; (3) Has the country adopting the measure sought to build an international protection regime to combat the threat?; (4) What degree of imminent harm does the threat present?; (5) How great is the harm; (6) How great is the burden

103. Stewart, *supra* note 102, at 1359.

104. See Michael Parish, *U.S. Approves Pact to Protect Pacific's Dolphins*, L.A. TIMES, Oct. 9, 1992, at D2; *Tuna: Agreement Announced to Lift Mexico-Venezuela Ban*, GREENWIRE, June 18, 1992, available in LEXIS, Nexis library, GRNWIRE file.

105. See David B. Hunter, *Toward Global Citizenship in International Environmental Law*, 28 WILLAMETTE L. REV. 547, 552 (1992); PHILLIP ALLOTT, *ECONOMIA: NEW ORDER FOR A NEW WORLD* 238 (1990).

riat¹⁰⁶ should pass judgment as to whether the implementation measure is a reasonable (in the case of facially neutral standards) or necessary (in the case of facially discriminatory standards) approach to implementing the agreement. The trade panel convened under the GATT would then defer to the environmental panel's conclusion and would apply it in passing on the trade law issues in the case.

If the standard in question is a unilateral environmental, health, or safety measure, review may properly take place under the aegis of a trade panel. However, the panel should be required to obtain environmental expertise in making its determination. Under this system, an environmental experts panel would be formed to take testimony and review evidence as to whether the measure is reasonably related or necessarily related to the desired environmental objective. The environmental magistrates would then issue a report on the appropriateness of the standard in question. The trade dispute panel in issuing its report would defer to any conclusions in the experts' report regarding the environmental aspects of the standard unless the conclusions in the report are patently erroneous.

5. Expanding the Players

Under existing international trade agreements, if a dispute arises over an environmental standard, the review of the standard by a trade panel occurs on an intergovernmental level.¹⁰⁷ The public is completely excluded from this process. Individuals and nongovernmental organizations (NGOs), who have the real stake in ensuring that environmental standards are not compromised, are not allowed to present factual information directly to the reviewing panel. They must filter it through their governments and hope it is used. Moreover, the panel process and the parties' submissions to this process are considered confidential and cannot lawfully be released to the public.¹⁰⁸

To bring about competitive sustainability, it is necessary to put environmental, health, and safety enforcement powers in the hands of parties who have the most to gain by an upward level-

109. See generally JACKSON, *supra* note 31.

110. See Housman & Zaelke, *supra* note 4, at 557-58.

111. See *id.*

ling of the playing field, that is, private companies who are disadvantaged if their foreign competitors may operate under less stringent environmental laws. These private parties have the financial, technical, and legal resources necessary to bring about the upward harmonization desired.

Trade dispute resolution processes must be altered to provide real parties in interest (citizens, private companies, and other NGOs) with the ability to drive the process of upward harmonization. Under a best case scenario, trade dispute processes would be opened up to allow these parties to participate directly in initiating and conducting challenges. Given the existing antidemocratic nature of international law,¹¹² and the fear of abuse, it is unlikely that this scenario will develop quickly. An alternative approach that is less likely to threaten the status quo would be to provide citizens with broader participatory rights in their respective governments' trade decisionmaking processes and access to the information prepared and submitted in these disputes. Under this approach individuals and groups must also have the ability to monitor the conduct of disputes, and to submit, in the form of *amicus* briefs, relevant information into the process. They would not, however, participate directly in the international case.

A third approach to allow trade dispute resolution to continue at the intergovernmental level while providing the public participation necessary to advance competitive sustainability, would be to provide NGOs and citizens with access to alternative dispute resolution processes. Under this approach, private parties could bring an action against the foreign government for failing to execute its laws, or, in the alternative, against the subsidized foreign competitors, through an arbitration mechanism. If the arbitration panel finds an environmental trespass, the international agreement or domestic legislation could require the involved governments to begin the consultation and dispute process. The use of international arbitration by private parties through trade agreements has already received acceptance in NAFTA's provisions on intellectual property and antitrust.¹¹³

The benefits of public participation in enforcing environmen-

112. See Hunter, *supra* note 105 at 552; ALLOTT, *supra* note 105 at 238.

113. See NAFTA, *supra* note 48, ch. 11, subch. B (Settlement of Disputes Between a Party and an Investor of Another Party).

tal laws could also be achieved outside of trade fora through international agreements. These agreements would extend the ability to sue to enforce these laws to aggrieved parties located in trading partner countries. Thus, in the context of United States-Mexico trade, a U.S. company or NGO who believes that lack of Mexican environmental enforcement is harmful could commence an action, applying Mexican substantive law, in a U.S. federal court. Then, the finding of the U.S. court could be enforced by a Mexican court under traditional principles of international law.¹¹⁴ This equal access to justice approach has already been adopted by Denmark, Finland, Norway, and Sweden in the Nordic Environmental Protection Convention.¹¹⁵ While nontrade tribunals hearing environmental enforcement cases might lack the remedy of trade measures, their ability to order the more direct remedy of actual enforcement of existing laws may make this option the most favorable option among nations with similar environmental standards.

E. Environmental Subsidies

Under the current system of trade rules, subsidies that produce a benefit for the company or industry receiving the benefit and an injury in another trading partner country, are subject to traditional trade disciplines such as countervailing duties.¹¹⁶ The threat of a subsidy challenge has already had a chilling effect on a Canadian reforestation project and has raised concerns about the technology funding aspects of the Montreal Protocol. Consequently, trade rules must be rethought.¹¹⁷

First, if the subsidy is provided to a country's industries, or

114. See Joel A. Gallob, *Birth of the North American Transboundary Environmental Plaintiff: Transboundary Pollution and the 1979 Draft Treaty for Equal Access and Remedy*, 15 HARV. ENVTL. L. REV. 85, 143-48 (1991). With regard to the principles surrounding enforcement in Mexico of a U.S. court's decision, see Joel R. Paul, *Comity in International Law*, 32 HARV. INT'L L.J. 1 (1991).

115. *Convention on the Protection of the Environment*, Feb. 19, 1974, 1092 U.N.T.S. 279; see also Gallob, *supra* note 114, at 108-11.

116. See Magnier, *supra* note 2 (discussing "green-subsidies"). For example, trade rules may recognize a subsidy when the government pays a company to install a pollution control device. However, trade rules do not recognize that a subsidy has been made when a country does not impose laws requiring a factory to install the device. See Komoroski, *supra* note 43 and accompanying text.

117. See Magnier, *supra* note 2.

to a country to be passed on to its industries, under the auspices of a multilateral environmental accord, such as the Montreal Protocol, then that subsidy should not be actionable. If, however, the subsidy is not part of a multilateral environmental agreement, then it must be subjected to a more considered analysis. Environmental and trade reasons require that a country cannot generally be allowed to pay the environmental costs of its industries without its trading partners having recourse against it for the subsidy it is providing to these industries. However, in many developing countries some amount of subsidization is necessary to encourage cleaner growth. To the extent that a developing country subsidizes a private company to ensure that basic environmental protections are provided, that subsidy should not be countervailable. In judging whether a developing country's subsidies meet this test the "rationality" standard of review set out above should be used.¹¹⁸

Similarly, even in developed countries, some forms of environmental subsidy should not be open to wholesale challenge. For example, if a government subsidizes a company to exceed existing environmental standards, such as in a pilot program, and that subsidy is limited to the amount of excess cost imposed by the higher standard, and does not give the company a significant economic competitive advantage, that subsidy should not be actionable. Similarly, if the subsidy produces only minor or tangential short-term benefits to the "subsidized" company or industry, but produces a much larger long-term benefit to the citizenry, that subsidy also should not be actionable. For example, if Canadian companies are paid to reforest their lands with hardwood trees, which can take a substantial period of time to reach harvestable age, it is arguable that the companies' benefits are tangential to the greater societal benefits, particularly if the lands are open to public use. In determining whether such a program constitutes a subsidy the benefit to the company or industry should be prorated to include the benefit to the public. If using the prorated company or industry benefit still produces an injury in the trading country, only then would the subsidy be actionable.

118. See *supra* note 101 and accompanying text.

III. CONCLUSION

The interplay of trade and environmental policies offers a unique set of challenges. Unless environmental issues are dealt with, the public may come to perceive the international trading system as a rogue actor out of touch with their concerns, and compromising the already shaky legitimacy of the system. For environmentalists, who often have an aversion to the economics of environmentalism and development, trade's cross-cutting complexities require an appreciation that is not always forthcoming. Given these difficulties, there is a certain false appeal to merely putting trade and environmental policies back on separate, and hopefully parallel, tracks. However, in order for both trade and environmental policies to be most efficient, these policy spheres must be made mutually reinforcing. Environmental policies must not unnecessarily distort trade flows; they must reward through the comparative advantage the most ecologically and economically efficient actors. By the same token, trade policies must direct market actors to engage in economic activities that are environmentally restorative and sustainable and must penalize those who act in an environmentally unsound and unsustainable manner. Competitive sustainability sets a course for steering trade and environmental policies toward a mutually reinforcing destination.