

International Trade Implications of Pollution Control

William Scott Ferguson

Follow this and additional works at: <http://scholarship.law.cornell.edu/clr>

 Part of the [Law Commons](#)

Recommended Citation

William Scott Ferguson, *International Trade Implications of Pollution Control*, 58 Cornell L. Rev. 368 (1973)
Available at: <http://scholarship.law.cornell.edu/clr/vol58/iss2/6>

This Note is brought to you for free and open access by the Journals at Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell Law Review by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact jmp8@cornell.edu.

NOTE

INTERNATIONAL TRADE IMPLICATIONS OF POLLUTION CONTROL

Present pollution control efforts of American industry will require major adjustments in the national economy.¹ Although the precise nature and extent of these adjustments cannot yet be determined,² one immediate consequence in many industries has been the channeling of funds normally spent for modernization and expansion towards the purchase and maintenance of antipollution equipment facilities.³ The impact of pollution control efforts on America's position in international trade may be even more profound.⁴ There is growing concern that the cost of pollution control, as reflected in the price of American industrial goods, will endanger this nation's competitive economic

1 The President's Council on Environmental Quality has noted that radical economic adjustments may be a necessary and inevitable cost of effective pollution control.

Protecting the environment and reducing the harmful effects of pollution will not be without adjustments. Some firms and activities will find it difficult to accommodate to new rules. A few may well find it impossible. To deny that there will be transitional problems, including temporary loss of jobs, would be to deny that any major shift of resources can be accomplished without some dislocation and some turmoil.

PRESIDENT'S COUNCIL ON ENVIRONMENTAL QUALITY, SECOND ANNUAL REPORT 121 (1971) [hereinafter cited as CEQ REPORT].

2 As one recent report noted: "It is important to recognize that many of the issues in the field have not yet surfaced, nor have the potential problems become widespread and acute." PRESIDENT'S COMM'N ON INT'L TRADE AND INVESTMENT POLICY, UNITED STATES INTERNATIONAL ECONOMIC POLICY IN AN INTERDEPENDENT WORLD 129 (1971) [hereinafter cited as ECONOMIC POLICY REPORT].

3 It has been estimated that manufacturing plants and utilities in the United States spent at least \$1.5 billion on air and water pollution control during 1971. During the next five years pollution control expenditures should total approximately \$20 billion. Bylinsky, *The Mounting Bill for Pollution Control*, FORTUNE, July 1971, at 87. The United States Chamber of Commerce estimates that up to 15% of future capital spending in industry will be for antipollution equipment. *Where Pollution Control Is Slowing Industrial Growth*, U.S. NEWS & WORLD REPORT, Aug. 23, 1971, at 50. See generally *Environmental Quality*, 8 WEEKLY COMP. PRES. DOCS., 1216 (Aug. 14, 1972). An executive at Bethlehem Steel observed that in general it cost twice as much to maintain pollution control equipment as to maintain steelmaking tools. Bylinsky, *supra* at 130.

4 David Rockefeller, Chairman of the Board, Chase Manhattan Bank, observed: "If we go about the business of solving our nation's pollution problems without regard to our competitive position in world markets, we could conceivably price ourselves out of certain important areas of world trade." *Where Pollution Control Is Slowing Industrial Growth*, U.S. NEWS & WORLD REPORT, Aug. 23, 1971, at 47. A similar observation was made by C.A. Gerstacker, Chairman of the Board, Dow Chemical Co., in a speech delivered before the Economic Club of Detroit, Feb. 22, 1972. See Gerstacker, *Profits and Pollution: The International Scene*, 38 VITAL SPEECHES 367, 368 (1972).

position relative to countries which impose less stringent, and consequently less costly, environmental quality standards.⁵ Such a competitive handicap may result in increasing pressure for the erection of new trade barriers designed to protect American industry.⁶ In dealing with the problems of pollution, therefore, America must be aware not only of the potential national economic impact of pollution control but of possible effects on international trade as well.⁷

I

EFFECTS OF POLLUTION CONTROL ON WORLD TRADE

A. *Production Costs and Competition*

Pervasive concern over pollution and environmental deterioration has led the United States and other industrial nations to enact strict, comprehensive legislation designed to ensure the preservation of environmental quality.⁸ The cost to American industry of compliance with

⁵ The United States is not alone in its concern. As Germany's Minister of the Interior Genscher observed:

We must . . . avoid a situation in which individual countries exclude themselves from making investments for environmental protection, thereby securing competitive advantages for their own economy vis-à-vis those countries who do meet their responsibilities.

Quoted in Russell & Landsberg, *International Environmental Problems—A Taxonomy*, 172 SCIENCE 1307, 1310 (1971).

The Common Market is presently reviewing plans to discuss nontariff barriers, such as subsidies and tax benefits, which result from pollution control efforts in an attempt to reduce pollution and to maintain its economic position vis-à-vis countries applying less stringent controls. *See* N.Y. Times, April 2, 1972, at 3, col. 1.

⁶ In the context of pollution control, possible trade distortions (*see note 7 infra*) can be of two general types. First, tariff and nontariff barriers may be established to prohibit the importation of products which tend to create pollution during consumption or use, as, for example, automobiles, high sulphur fuels, or food product imports containing chemical residues. For a discussion of such consumer based trade disruptions, see ECONOMIC POLICY REPORT 135-37. Second, tariffs, subsidies, duties, or other devices may aid, prevent, or inhibit trade patterns which develop in response to variations in pollution control laws which raise industrial production costs. For a detailed analysis of the economic effects of pollution control, see Kirgis, *Effective Pollution Control in Industrialized Countries: International Economic Disincentives, Policy Responses, and the GATT*, 70 MICH. L. REV. 860 (1972).

⁷ The "norm," for the purpose of defining distortions in international trade, is a pattern of trade in which all sectors of the world economy perform at maximum comparative efficiency. Distortions in the form of tariffs or nontariff barriers tend to modify artificially relative advantages in capital, labor, natural endowments, or other variables that countries may possess. For discussions of the principles of free trade, see C. KINDLEBERGER, *INTERNATIONAL ECONOMICS* 202-17 (4th ed. 1968); P. SAMUELSON, *ECONOMICS: AN INTRODUCTORY ANALYSIS* 668-80 (8th ed. 1970).

⁸ *See, e.g.*, Clean Air Act, 42 U.S.C. §§ 1857-1857l (1970) (United States); National En-

this new legislation is generally conceded to be staggering.⁹ Many of the American industries most strongly affected¹⁰ not only maintain a significant position in the national economy but are also deeply involved in primary and secondary transactions in international trade.¹¹

In most instances domestic industry is able to transfer increased production costs to the consumer through higher prices for products.¹² Industries engaged in international trade, however, cannot so easily meet increased production costs by raising consumer prices.¹³ Certain nations do not share America's concern with environmental quality¹⁴

Environmental Policy Act, 42 U.S.C. §§ 4321-47 (1970) (United States); Rivers (Prevention of Pollution) Act of 1951, 14 & 15 Geo. 6, c. 64 (Great Britain). For a description of legislation in France, Germany, and socialist countries, see ENVIRONMENT, Oct. 1970, at 38-39.

The broad support accorded the recent United Nations Conference on the Human Environment evidences the extent of the concern over pollution. See generally Eldin, *The Need for Intergovernmental Co-operation and Co-ordination Regarding the Environment*, OECDE OBSERVER, Feb. 1971, at 3; Humpstone, *Pollution: Precedent and Prospect*, 50 FOREIGN AFFAIRS 325, 335-38 (1972).

While less developed countries are not enthusiastic about pollution control, they have shown an interest in limiting agricultural and urban pollution. Gardner, *U.N. As Policeman*, SATURDAY REVIEW, Aug. 7, 1971, at 47-50.

⁹ See note 3 *supra*.

¹⁰ According to the Commission on Environmental Quality, few American industries will escape increased production costs due to pollution control. The pulp and paper, primary metals, and chemical industries will be especially burdened. CEQ REPORT 123-24. See also Bylinsky, *supra* note 3, at 88.

¹¹ Concern in the United States with the trade effects of pollution control is especially important since the nation has 6% of the world's population, while contributing 40% of the world's pollution (*Treating Pollution as a Business Cost*, BUSINESS WEEK, Oct. 17, 1970, at 88) and 21.3% of the world's trade. U.S. DEP'T OF COMMERCE, BUREAU OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES: 1971, at 687. Although a substantial part of United States export trade consists of goods manufactured without high pollution control costs, approximately 20% is sustained by high polluting industries. Pulp and paper, petroleum, chemicals, iron and steel, and nonferrous base metals industries are responsible for more than \$7 billion in United States exports per year. CEQ REPORT 132-33. This figure may be low since it may not take into consideration pollution control costs in non-primary industries such as motor vehicle manufacturing, the goods and equipment of which comprise approximately 10% of American exports. ENVIRONMENTAL PROTECTION AGENCY, THE ECONOMICS OF CLEAN AIR: ANNUAL REPORT TO THE CONGRESS OF THE UNITED STATES 5-17 (1972).

¹² CEQ REPORT 129. *But see* Diamond, *What Business Thinks*, FORTUNE, Feb. 1970, at 172 (only 24% of domestic industries transfer pollution control costs to consumers).

¹³ Some businesses are able to pass on to the consumer the entire cost of buying new pollution control equipment, altering production processes, replacing product lines, and paying higher taxes. Others can pass along little if any of such outlay because of price pressures from intra-industry, inter-industry, and international competition. *Cleanup Costs: Who Will Pay?*, THE MAGAZINE OF WALL ST., Sept. 27, 1971, at 27.

¹⁴ An ecologist at Chile's Austral University observed that in less developed economies governments "resist establishing controls that could limit in any way the rate of industrialization." Statement of Francesco di Castri, *quoted in* Gillette, *Human Environment*

and, as a result, the prices of competing goods of those nations do not reflect increased production costs resulting from pollution control efforts.¹⁵ If American industry, faced with the financial burden of pollution control, seeks to transfer its increased production costs to foreign consumers, it may jeopardize its international market.¹⁶

The loss of foreign markets is obviously a prospect that American industry will view with alarm; however, the potential loss of large segments of the domestic market because of required pollution control expenditures is an equally serious threat to American industrial economy. If the price of American goods must be raised in order to amortize the cost of pollution control, then that price may very well be non-competitive in domestic as well as foreign markets. Absent protectionist trade barriers which will increase the price of foreign goods,¹⁷ American consumers will have a financial incentive to import goods manufactured in nations that have not set onerous pollution control standards.¹⁸

Conference: Slow Start Toward Stockholm, 172 SCIENCE 1011, 1012 (1971). See generally May, *Preserving a Human Environment at the World Scale*, AIP JOURNAL, July 1971, at 267; note 32 *infra*.

¹⁵ Even with the unlikely implementation of international pollution control laws, differences in the norm of cleanliness may create wide variances in the cost of production. A recent study indicates that in some industries the cost of purifying an effluent to a 99% level may be double that of a 90% standard. *GATT Fears Pollution Controls Could Result in Establishment of New Barriers to World Trade*, 200 OIL, PAINT & DRUG RPT., Aug. 30, 1971, at 43.

¹⁶ Some estimates place the loss to the nation's international trade directly attributable to pollution control engendered price increases at \$700 million per year. COUNCIL ON ENVIRONMENTAL QUALITY, U.S. DEP'T OF COMMERCE & ENVIRONMENTAL PROTECTION AGENCY, *THE ECONOMIC IMPACT OF POLLUTION CONTROL* 14 (1972).

Although not all observers are pessimistic, the hopes of continued strength in American trade seem to depend on a relatively weak counterbalancing factor. As one study observed: "Our initial technological lead, coupled with growing foreign concern over pollution, might lead to substantial receipts in our balance of payments in the form of exports of pollution abatement equipment and the licensing of related technology." ECONOMIC POLICY REPORT 132.

¹⁷ See notes 34-37 and accompanying text *infra*.

¹⁸ The actual costs of industrial production are not always apparent. Certain expenses may be shifted to the public as mutual consumers of air and water resources rather than retained as industry-borne costs. As pollution of the environment increases, such production "externalities" are evidenced in greater incidence of disease and in water and air contamination which leads to higher purification costs.

While there is a tendency toward this diseconomy in industrial production, it is not invariably harmful. In small quantities, air and water pollution is eliminated from the environment naturally through precipitation or chemical and biological degradation. Public tolerance of certain externalities, moreover, may permit industry to lower environmental quality. In any event, the relative insignificance of industrial pollution in some instances or the natural cleansing effect in others may eliminate externalities of industrial production or at least reduce them to a level sufficient to allow precedence to other, more immediate economic and social objectives. See generally A. KNEESE & B. BOWER, *MANAGING*

These imported goods may well erode the domestic market of other American industries. The United States will in effect be unintentionally "exporting" pollution through its purchases from uncontrolled foreign industry.¹⁹ In short, America's efforts to fight pollution may seriously undermine the competitive position of its own industries in both world and domestic markets.²⁰

Higher production costs of American primary industries may also injure the trade of secondary industries, since pollution costs will be passed on to such industries in their capacity as purchasers of primary industry goods. Thus, there is a possibility that the whole price structure of American goods may rise.²¹ As a result, the competitiveness in international trade of goods and services far removed from initial pollution control costs may also be damaged.

B. *Domestic and Foreign Responses*

Pollution control efforts will differ among nations according to the assimilative capacity of each country's environment, the relative balance of its national economic and social objectives, and its technological and industrial levels.²² The cost of production in various nations will reflect these differences in pollution control factors. Certainly, the implementation of stringent environmental protection programs in other countries will benefit American industry by reducing or eliminating the cause of the competitive handicap of American goods²³ and by mitigating the dangers of disruptive shifts in our economy. Similar cost increases caused by international implementation of uniform pollution control programs will tend to preserve present competitive positions or

WATER QUALITY: ECONOMICS, TECHNOLOGY, INSTITUTIONS 89-90, 97-98 (1968), C. MEYERS & A. TARLOCK, SELECTED LEGAL AND ECONOMIC ASPECTS OF ENVIRONMENTAL PROTECTION 1-19 (1971); TAX FOUNDATION, INC., POLLUTION CONTROL: PERSPECTIVES ON THE GOVERNMENT ROLE 16-18 (1971).

¹⁹ Some nations are not so haphazard in the export of pollution. Japan is a prime example of a country seeking to export its most polluting industries. See Economic Comm'n for Latin America, *The Human Environment and Development in Latin America* 71, U.N. Doc. ST/ECLA/Conf.40/L.2 (1971) (iron production); N.Y. Times, Feb. 13, 1972, at 11, col. 1 (paper mill). See also note 30 *infra*. Concerning the overall effect of pollution on the world environment, see Humpstone, *supra* note 8, at 331-32.

²⁰ In the absence of national protective measures which would preserve the competitive position of present domestic industries, at least in their home market, the national economy would necessarily adjust to meet foreign competition. This adjustment would mean less production in high pollution and high cost industries and, perhaps, a shift of investment capital and labor from these industries altogether. See generally ENVIRONMENTAL PROTECTION AGENCY, *supra* note 11, at 5-1 to 5-3.

²¹ Russell & Landsberg, *supra* note 5, at 1310.

²² *Id.* at 1312.

²³ See notes 14-20 and accompanying text *supra*.

at least will allow gradual movement of labor and capital in adjustment to weakening markets. Implementation of pollution standards in developing countries has met serious resistance, however.²⁴

International agreements, of course, could establish uniform environmental quality standards and perhaps create innovative methods of financing pollution control.²⁵ Political and economic difficulties,²⁶ however, compounded by inadequate scientific knowledge upon which to base a system of norms,²⁷ probably constitute an insurmountable obstacle to effective international agreement in this area. International acceptance of broad policy statements furnishes no real solution to the world-wide pollution problem.²⁸ Any modification of environmental policy that causes economic repercussions will generate intense reaction, particularly among developing nations.²⁹ It may be that standards of pollution control, in any form, will be possible only in narrowly de-

²⁴ See note 14 *supra* and notes 30 & 33 *infra*.

²⁵ Jones, *The Economics of a Global Antipollution Code*, N.Y. Times, May 2, 1971, at 3, col 1; CHEMICAL WEEK, May 5, 1971, at 24.

Several types of standards have been proposed. A discharge standard is a quantitative norm of unacceptable pollutant level from a specific source (*e.g.*, amount of certain gas emissions in automobile exhaust). This standard is fundamentally different from quality or ambient standards which establish a tolerable pollution level within the environment itself (*e.g.*, amount of mercury or DDT in the oceans). Operational standards are norms governing how activities which may lead to pollution are conducted (*e.g.*, construction and navigation of oil tankers).

²⁶ Closely associated with the establishment of pollution standards is the sensitive issue of monitoring. The placement of measuring devices may be unobjectionable when intended for researching the patterns of natural currents and dissemination of substances, since such scientific pursuits do not threaten industrial interference. But inspection associated with regulation raises conflict and suspicion. See generally Intergovernmental Working Group on Monitoring or Surveillance, U.N. Doc. A/Conf.48/PC.11/Add.1 (1971).

²⁷ For a discussion of the technical complexity of establishing norms, see TAX FOUNDATION, INC., *supra* note 18, at 26-30.

²⁸ The United Nations Declaration on the Human Environment, which is an international statement of principles and goals of environmental protection, met considerable opposition in its formative stages. See Intergovernmental Working Group on the Declaration of The Human Environment, Report, U.N. Doc. A/Conf.48/PC.12, Annex II (1971). The issues of population growth and product distribution and consumption manifest themselves differently in various regions and nations. While in some countries the problems are overpopulation and excessive consumption, in others there is a need to increase birth rates and consumption. N.Y. Times, Jan. 25, 1971, at 60, col. 1.

²⁹ To minimize dissension among nations, or at least that between developed and developing nations, George F. Kennan has suggested that "leading industrial and maritime nations" unilaterally create an agency to analyze and guide world environmental programs. Kennan, *To Prevent a World Wasteland: A Proposal*, 48 FOREIGN AFFAIRS 401 (1970). Such a solution would avoid the complexities and delay accompanying broader international involvement and, conversely, the disruptive effects of controls imposed by one nation alone.

financed economic areas among a limited number of nations with similar interests.

In light of this diversity of national economic, social, and environmental circumstances, it is not surprising that some countries are already establishing themselves as "pollution havens."³⁰ Lax pollution control standards will undoubtedly aid industrially immature nations which, because of inefficiency, less advanced technology, or diseconomies of scale, suffer in trade competition with developed countries.³¹ The United States will face increasing competition in international trade from countries expanding their industry at the cost of environmental resources.³² Although this trade advantage may be only temporary, developing countries may willingly accept a short range policy permitting environmental deterioration as a necessary cost of industrialization.³³

³⁰ Russell & Landsberg, *supra* note 5, at 1310. The United States serves as a haven for Japanese industries:

To the extent that [coal and lumber] exports are stimulated by lower prices, made possible by a lack of strip-mining regulation and of control of timber overcutting, the United States is functioning as a pollution haven, suffering land erosion, acid mine drainage, reduction of wildlife stocks, and disruption of natural vistas in order to support domestic employment in export industries.

Id.

³¹ The willingness of developing nations to suffer harmful industrial pollutants to gain the immediate benefits of employment and favorable trade balance is particularly tragic since their poverty makes the deleterious impact of pollution and environmental degradation even more pronounced. See notes 34-35 and accompanying text *infra*. The difficulties of reconciling the aims of environmental protection and industrial development are discussed in Kasdan, *Third World War—Environment Versus Development?*, 26 RECORD OF N.Y.C.B.A. 454 (1971); Panel of Experts Convened by the Secretary-General of the United Nations Conference on the Human Environment, *The Founex Report on Development and Environment*, INT'L CONCILIATION, Jan. 1972, at 7.

³² The outcries by ardent environmentalists against the inherent "ecological immorality" of development's by-products in their own countries, are regarded by many leaders of developing states as smokescreens behind which the rich will eventually attempt to justify either a reduced commitment to the economic development of the poor on the one hand, or heightened trade barriers against products produced in the "environmental sweatshops" of the poor on the other. INT'L BANK FOR RECONSTRUCTION AND DEVELOPMENT, THE WORLD BANK AND THE WORLD ENVIRONMENT 5 (1971).

³³ Statement by Robert S. McNamara, at a meeting of the Commission on International Trade and Investment Policy (United States), in Washington, D.C., Feb. 25, 1971.

Erosion of the competitive position of industrial countries in international trade does not necessarily benefit developing countries, however. A shift of resources to pollution control may create unavoidable increases in the cost of manufactured goods required by developing countries and obtainable only from the United States or other major industrial nations. Economic Comm'n for Latin America, *supra* note 19, at 71. Even though an emerging nation may develop its own industry or gain industry by the relocation of pollution causing manufacturing processes which are faced with high pollution costs and adverse competition at home, the nation has also invited environmental problems which may over-

II

IMPORT BURDENS AS A POSSIBLE SOLUTION

Some observers fear that America may attempt to maintain a trade position competitive with that of countries not adopting stringent pollution control measures through the implementation of protectionist trade restrictions.³⁴ Individual industries have been strong advocates of trade protectionism in particular product fields.³⁵ The sweeping impact of pollution control requirements, however, may induce a correspondingly wide protectionist response from all sectors of the American economy.³⁶

whelm the already inadequate resources of its emerging economy. If political and economic pressure from industrial nations requires that pollution control measures be taken in developing countries, the balance of payments of these nations would be adversely affected by the added cost and financial drain associated with the initial construction or modification of industrial plants.

Pollution considerations may also have an effect on foreign investment and foreign aid. Although there is the possibility that financial resources once available for investment in developing countries will be retained in order to install control facilities in developed nations, of more immediate concern is the threat that pollution control standards will be imposed as a condition for loans. The World Bank has recently created the post of Environmental Adviser to study the adverse effects of foreign aid on the environment. See INT'L BANK FOR RECONSTRUCTION AND DEVELOPMENT, *supra* note 32, at 6. Developing countries have been highly critical of this imposition of added expense, especially in light of their already unfavorable balance of trade, less exploited environment, desire for industrial development, and sensitivity about their national sovereignty. See generally Panel of Experts Convened by the Secretary-General of the United Nations Conference on the Human Environment, *supra* note 31, at 21-33.

³⁴ See, e.g., *GATT Fears Pollution Controls Could Result in Establishment of New Barriers to World Trade*, *supra* note 15, at 43.

³⁵ See Greenwald, *Protectionism in America*, in 63 DEP'T STATE BULL. 724, 725 (1970).

³⁶ In a different context it has been said that "[f]irms are opposed to changes in a status quo which ensures comfortable profits, while labor unions fear the dislocation which a revamping of the industrial structure would entail." Statement by Robert S. McNamara, *supra* note 33, at 6. The same principle is applicable to pollution control developments.

Some authorities have suggested that lax pollution laws in competing nations be treated as subsidies to foreign industry, justifying American imposition of countervailing duties on imports from those countries. See Vasek, *International Environmental Damage Control: Some Proposals for the Second Best of All Possible Worlds*, 59 KY. L.J. 673, 689 (1971). Another commentator agrees that surcharges on imports "not subject to the extra costs of production under environmentally safe conditions" are a distinct possibility. Statement of Augustine Marusi, *quoted in* CHEMICAL WEEK, May 5, 1971, at 24. The difficulty in measuring the extent of foreign "assistance" and the danger of retaliation for what may appear to be an American violation of international trade agreements make this suggestion unworkable. The imposition of tariffs, quotas, or duties would likely be met by reciprocal exactions from the exporting country and thus be self-defeating. In recognition of this danger, the United States Commission on International Trade and Investment Policy recommended that "the United States itself avoid, and oppose internationally, the imposition of general systems of border adjustments (export rebates and import surcharges) for the

Although there are appealing arguments in favor of discouraging or burdening imports from countries imposing weak pollution control requirements,³⁷ the long range cost of such trade protectionism might well exceed its immediate economic benefits. The imposition of tariffs and other trade barriers tends to destroy the comparative advantages of an exporting nation's production. According to free trade theory, this distortion decreases overall world income, since each country is unable to export the goods it can produce with greatest comparative efficiency.³⁸ Absent response from other trading nations, the United States may derive certain immediate benefits from trade barriers, yet the long term effect would be to lower both domestic and foreign income.³⁹

If protection of domestic industry is necessary to ease the immediate impact of foreign competition and the initial costs of pollution control, less provocative measures than tariff and certain nontariff trade barriers should be employed.

III

THE SUBSIDY SOLUTION

A. *Background and Domestic Considerations*

The payment of production subsidies to industry has been frequently proposed as a way to preserve America's competitive position in international trade while promoting environmental quality.⁴⁰ Al-

purpose of offsetting pollution control costs." ECONOMIC POLICY REPORT 135 (emphasis omitted). The Commission went on to observe that "[i]f other countries do use border adjustments to offset costs of production pollution control, we recommend that the United States consider imposing compensatory duties and rebates to protect the legitimate interests of our export and import-competing industries." *Id.* (emphasis omitted).

³⁷ Some observers say that world growth and consumption practices have assumed such inertia, volume, and complexity that even immediate measures may be too late to stop ecological collapse. See generally P. EHRlich & A. EHRlich, POPULATION, RESOURCES, ENVIRONMENT: ISSUES IN HUMAN ECOLOGY (1970); R. FALK, THIS ENDANGERED PLANET (1971).

³⁸ See Barceló, *Antidumping Laws as Barriers to Trade—The United States and the International Antidumping Code*, 57 CORNELL L. REV. 498, 499-500 (1972).

³⁹ See note 7 *supra*.

⁴⁰ The United States has had an extensive history of subsidies to industry: maritime trade, air and land transport carriers, agriculture, and research and development. SENATE FINANCE COMMITTEE, 90TH CONG., 2D SESS., COMPENDIUM OF PAPERS ON LEGISLATIVE OVERSIGHT: REVIEW OF U.S. TRADE POLICIES 34-44 (1968). In the area of pollution control, state and federal governments have permitted special tax incentives and write-offs and low cost access to municipal waste treatment facilities. U.S. DEP'T OF INTERIOR, THE ECONOMICS OF CLEAN WATER 6 (1970); see A. KNEESE & B. BOWER, *supra* note 18, at 175-76; C. MEYERS & A. TARLOCK, *supra* note 18, at 181-83. Not surprisingly, a recent poll revealed that almost

though argument persists over what form of governmental pollution control aid would best serve the needs of society,⁴¹ the purpose of such aid in any form is to compensate industry for pollution control costs in order to avert adverse trade effects.

Since subsidies would tend to remove pollution control costs from the economics of production, they have the attraction of being the most direct solution to the economic problems resulting from the implementation of environmental quality standards. Moreover, since the abatement of pollution serves the public good with little direct economic value to the producer,⁴² control of pollution can be considered a social benefit to which all should contribute. Conversely, although some governmental aid may be necessary to reduce the initial costs of production change, numerous arguments on both the domestic and international levels militate against direct grants to industry.⁴³ The critical question is whether these reservations outweigh the advantages of the subsidy approach.

The most serious criticism of subsidies is that they do not provide a long term incentive for the abatement of pollution.⁴⁴ Governmental intervention admittedly might tend to preserve inefficient and polluting industries and their associated vested interests. Yet such intervention need not merely enshrine a rigid status quo when applied only to mitigate short term financial burdens in order to accomplish extensive reallocation of resources and capital in an economic and efficient

75% of the businessmen questioned believe that government tax credits, grants, and subsidies are the most effective incentives for pollution abatement. Diamond, *supra* note 12, at 172. For further discussion of United States and foreign subsidies, see R. BALDWIN, *NONTARIFF DISTORTIONS OF INTERNATIONAL TRADE* 119, 122-23 (1970); A. KNEESE & B. BOWER, *supra* note 18, at 175-78; SENATE FINANCE COMMITTEE, *supra* at 342-45; TAX FOUNDATION, INC., *supra* note 18, at 31-34.

⁴¹ The subsidy concept is subject to various interpretations. It has been construed to include tax benefits and grants from both state and federal governments. See notes 55-57 and accompanying text *infra*. For further discussions of the subject, see C. MEYERS & A. TARLOCK, *supra* note 18, at 176-83; Surrey, *Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures*, 83 HARV. L. REV. 705 (1970).

⁴² According to Edgar B. Speer, President, United States Steel Corporation, "[w]hat-ever relief provisions are adopted, [Congress] should recognize that expenditures for these [pollution control] facilities, including land, buildings, and equipment, are not a productive investment." *Quoted in* IRON AGE, Oct. 30, 1969, at 19.

⁴³ See notes 44-46 and accompanying text *infra*.

⁴⁴ Although it must assist in eliminating the large backlog of capital requirements, the Federal Government cannot and should not finance local waste treatment indefinitely. . . . Charges based on use of treatment facilities provide long-run incentives for the abatement of pollution.

PRESIDENT'S COUNCIL OF ECONOMIC ADVISERS, ANNUAL REPORT 124 (1966).

manner.⁴⁵ Subsidy programs, including tax credits, exemptions and amortization, low cost loans, and grants, are widely used by both state and federal governments to encourage pollution control.⁴⁶ The danger remains, however, that such aid will not resolve the basic problem, but will only postpone the inevitable shift of the production resources.

B. *Subsidies in the Context of GATT*

The General Agreement on Tariffs and Trade (GATT)⁴⁷ was created to lower tariff and nontariff barriers to international trade.⁴⁸ GATT's treatment of subsidies, however, reflects the general complexity, imprecision, and confusion encountered in any attempt to regulate nontariff barriers.⁴⁹

Since subsidies can assume varying forms and, in many cases, sustain honest disagreement as to whether they do, in fact, create trade

⁴⁵ These domestic concerns may be of secondary importance, however, when international reactions are considered. See notes 58-62 and accompanying text *infra*.

⁴⁶ Note, *Economic Incentives for Pollution Abatement: Applying Theory to Practice*, 12 ARIZ. L. REV. 511, 517-21, 525-34 (1970).

⁴⁷ Oct. 30, 1947, 61 Stat. pt. 5, at A11, T.I.A.S. No. 1700, 55 U.N.T.S. 194 (1950) [hereinafter cited as GATT]. In 1947, 22 nations endorsed GATT as a preliminary stage to ratification of a permanent institution called the International Trade Organization. When the latter failed to be formed, GATT continued and has evolved into the principal regulatory institution in international trade for over 70 nations, including the United States. For a detailed historical background, see G. CURZON, *MULTILATERAL COMMERCIAL DIPLOMACY* 15-33 (1965); K. DAM, *THE GATT: LAW AND INTERNATIONAL ECONOMIC ORGANIZATION* 10-16 (1970); J. JACKSON, *WORLD TRADE AND THE LAW OF GATT* 35-57 (1969).

GATT has reduced the average American tariff from a high in 1930 of 50% to 9% in 1972. This percentage compares to 8.6% in the Common Market countries, 10.8% in the United Kingdom (prior to entry into the Common Market), and 10.7% in Japan. R. BALDWIN, *supra* note 40, at 1; Greenwald, *supra* note 35, at 724.

⁴⁸ U.S. DEP'T OF STATE, *ANALYSIS OF GENERAL AGREEMENT ON TARIFFS AND TRADE* 1-3 (1947).

⁴⁹ Nontariff barriers include such disparate devices as quantitative restrictions, arbitrary customs practices, restrictive government procurement policies, and unreasonable application of health and safety standards. They even include such nongovernmental practices as industrial standards and specifications that can make the use of imported products more difficult.

W. ROTH, *FUTURE UNITED STATES FOREIGN TRADE POLICY: REPORT TO THE PRESIDENT* 18 (1969). For a list of nontariff barriers and unfair trade practices affecting trade, see *Hearing on Nomination of Carl J. Gilbert To Be Special Representative for Trade Negotiations Before the Senate Finance Comm.*, 91st Cong., 1st Sess. 31-32 (1969). See generally R. BALDWIN, *supra* note 40.

Governmental subsidies are designed to improve the domestic welfare by stimulating growth in depressed industries, by mitigating problems caused by diseconomies of scale, by cushioning the financial impact of new regulations, and by removing other inefficiencies and handicaps of industrial producers. *Id.* at 181. Such subsidies, however, may well have the effect of discouraging imports by making the domestic market artificially competitive. *Id.* They may thus engender a retaliatory foreign response which will diminish the economic benefits the subsidy was designed to achieve. The extent to which GATT will permit retaliation against American subsidies is not yet clear.

distortions, GATT contains no explicit prohibition of either direct or indirect governmental grants to industry. According to Article XVI, GATT contracting parties are constrained only by requirements of notification and consultation.

If any contracting party grants or maintains any subsidy, including any form of income or price support, which operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into, its territory, it shall notify the Contracting Parties in writing of the extent and nature of the subsidization, of the estimated effect of the subsidization on the quantity of the affected product or products imported into or exported from its territory and of the circumstances making the subsidization necessary. In any case in which it is determined that serious prejudice to the interests of any other contracting party is caused or threatened by any such subsidization, the contracting party granting the subsidy shall, upon request, discuss with the other contracting party or parties concerned, or with the Contracting Parties, the possibility of limiting the subsidization.⁵⁰

This GATT provision seems sufficiently broad to encompass all types of pollution control subsidies. On its face it requires notification or consultation only when a domestic subsidy increases exports or reduces imports. In 1960, however, a working party on the question of subsidies observed that "it is not sufficient to consider increased exports or reduced imports only in an historical sense."⁵¹ The panel was referring to a 1948 interpretation of GATT which provided that the expression "increased exports" in Article XVI of the agreement included "the concept of maintaining exports at a level higher than would otherwise exist in the absence of the subsidy, as made clear in . . . the Havana Charter."⁵² The panel added that such an interpretation should also apply in determining the effect on imports, and concluded that "[t]he criterion is therefore what would happen in the *absence* of a subsidy."⁵³

⁵⁰ GATT pt. 2, art. XVI, 61 Stat. pt. 5, A51-A52 (1947).

⁵¹ GATT, BASIC INSTRUMENTS AND SELECTED DOCUMENTS 191 (9th Supp. 1961).

⁵² 2 *id.* at 44 (1950). The applicable part of the Havana Charter reads as follows:

If any Member grants or maintains any subsidy, including any form of income or price support, which operates directly or indirectly to maintain or increase exports of any product from, or to reduce, or prevent an increase in, imports of any product into, its territory, the Member shall notify the Organization in writing of the extent and nature of the subsidization, of the estimated effect of the subsidization on the quantity of the affected product or products imported into or exported from its territory and of the circumstances making the subsidization necessary.

U.S. DEP'T OF STATE, HAVANA CHARTER FOR AN INTERNATIONAL TRADE ORGANIZATION 23 (1948).

⁵³ GATT, BASIC INSTRUMENTS AND SELECTED DOCUMENTS 191 (9th Supp. 1961) (emphasis in original).

A pollution control subsidy would result, of course, in increased imports and decreased exports.⁵⁴

The term "subsidy" has also assumed a broad and flexible meaning. In 1961 the Panel on Subsidies noted

that it was neither necessary nor feasible to seek an agreed interpretation of what constituted a subsidy. It would probably be impossible to arrive at a definition which would at the same time include all measures that fall within the intended meaning of the term in Article XVI without including others not so intended. . . . In any event the Panel felt that the lack of a precise definition had not, in practice, interfered [*sic*] with the operation of Article XVI.⁵⁵

Another 1961 report observed that "the word 'subsidies' covered not only actual payments, but also measures having an equivalent effect."⁵⁶ The report went on to note that duties or taxes imposed or exempted equally on exported as well as domestically consumed products should not be considered a subsidy.⁵⁷

Although there is a danger that competing nations may impose countervailing duties in response to pollution control subsidies,⁵⁸ this possibility is less likely than if tariff barriers were used to protect America's competitive position. The lack of cognizable criteria in GATT for

⁵⁴ The breadth of this interpretation has particular significance in relation to Article VI (*see* notes 60-62 and accompanying text *infra*) since it could possibly justify countervailing duties against a trade distorting subsidy, even in the absence of a showing that such aid had materially altered the status quo.

⁵⁵ GATT, BASIC INSTRUMENTS AND SELECTED DOCUMENTS 208 (10th Supp. 1962).

⁵⁶ GATT, ANTI-DUMPING AND COUNTERVAILING DUTIES 20 (1961).

⁵⁷ *Id.*

This distinction may be significant in determining the kind of government aid selected to meet pollution control. While the terms of GATT may be broad enough to include most forms of direct government grants for such a purpose, tax benefits with the same result may invoke less adverse foreign reaction. This observation gains added weight from Article VI, para. 3, which prohibits countervailing duties in response to tax benefits applied equally to goods destined for both domestic and international markets:

No product of the territory of any contracting party imported into the territory of any other contracting party shall be subject to anti-dumping or countervailing duty by reason of the exemption of such product from duties or taxes borne by the like product when destined for consumption in the country of origin or exportation, or by reason of the refund of such duties or taxes.

GATT pt. 2, art. VI, para. 3, 61 Stat. pt. 5, A24 (1947). *Compare id.* art. III, para. 1, 61 Stat. pt. 5, A18 (1947).

⁵⁸ A countervailing duty may be defined as a surtax, in addition to normal customs duties, imposed on imports whose exportation has been facilitated through a bounty or similar assistance in the exporting country. The additional duty is intended to neutralize the foreign subsidy, and thus prevent injury to the producers of comparable products in the importing country who operate without the benefit of such bounties.

Ehrenhaft, *Protection Against International Price Discrimination: United States Countervailing and Antidumping Duties*, 58 COLUM. L. REV. 44, 54 (1958).

determining the circumstances in which countervailing duties will be justified tends to render unpredictable the international response in the event that subsidies are introduced.

In instances where "serious prejudice" to the interests of contracting parties is caused or threatened by a subsidy, GATT Article XVI provides that "the contracting party granting the subsidy shall, upon request, discuss . . . the possibility of limiting the subsidization."⁵⁹ Under the GATT terms, the objecting nation may make a unilateral determination of injury, without consulting other contracting parties of GATT. The term "serious prejudice" in this context is not defined by GATT nor by amplifying studies.

Article VI, on the other hand, allows contracting parties to impose countervailing duties to neutralize a "bounty or subsidy determined to have been granted, directly or indirectly, on the manufacture, production or export of such product in the country of origin or exportation, including any special subsidy to the transportation of a particular product."⁶⁰ The same Article restricts this authority by requiring that before duties are imposed the objecting party must determine that "the effect of the dumping or subsidization, as the case may be, is such as to cause or threaten material injury to an established domestic industry, or is such as to retard materially the establishment of a domestic industry."⁶¹

GATT does not more explicitly define the extent of injury necessary to justify retaliatory duties. Thus, there exist no guidelines by which to determine whether or not a particular foreign imposition of

⁵⁹ GATT pt. 2, art. XVI, 61 Stat. pt. 5, A51-A52 (1947).

⁶⁰ *Id.* art. VI, para. 3, 61 Stat. pt. 5, A24 (1947), *as amended*, 62 Stat. 3682 (1948). While Article VI is the principal remedy for foreign subsidies, two other Articles are pertinent. Article XIX provides that if for any reason "any product is being imported into the territory of [a] contracting party in such increased quantities and under such conditions as to cause or threaten serious injury to domestic producers," the party may suspend GATT obligations and concessions upon proper notice. *Id.* art. XIX, para. 1(a), 61 Stat. pt. 5, A58 (1947). Article XXIII allows an escape from GATT obligations if any benefit accruing to the contracting party under the agreement is being nullified or impaired by foreign subsidies or other measures. *Id.* art. XXIII, para. 1, 61 Stat. pt. 5, A64 (1947). *See also* GATT, BASIC INSTRUMENTS AND SELECTED DOCUMENTS 224 (3d Supp. 1955).

⁶¹ GATT pt. 2, art. VI, para. 6, 61 Stat. pt. 5, A24 (1947), *as amended*, 62 Stat. 3683 (1948).

At the outset of their discussions on the use of the injury concept, the Group stressed that anti-dumping measures should only be applied when material injury, i.e., substantial injury, is caused or threatens to be caused. It was agreed that no precise definitions or set of rules could be given in respect of the injury concept, but that a common standard ought to be adopted in applying this criterion and that decisions about injury should be taken by authorities at a high level.

GATT, BASIC INSTRUMENTS AND SELECTED DOCUMENTS 149-50 (8th Supp. 1960).

countervailing duties is justified.⁶² Even though subsidies may provide a mild alternative to disruptive tariff and nontariff barriers, they may easily lead to abuses for which countervailing duties would be the proper and legitimate response. It would be nonsensical, however, to argue that uncertainties over what degree of injury will justify retaliatory duties should preclude the imposition of subsidies in all cases.

CONCLUSION

The United States must continue its policy of promoting pollution control efforts in areas where technology and political objectives allow agreement. But it should be apparent from the diverse reactions possible to the subsidy of industrial pollution control and the uncertain terms of international trade agreements that a more effective international framework of assessment and negotiation should be designed.

Problems presented by pollution control subsidies illustrate the need for stronger, more centralized, and more responsive GATT administration. An arbitration procedure or arbitral commission should be created in GATT and charged with hearing complaints and assessing the trade effects of pollution control subsidies or similar nontariff distortions. Ameliorating the international trade effects of pollution control subsidies may be one fundamental key to the success of national efforts. GATT can be put to yet one more use: aiding nations in their attempts to improve the environment.

William Scott Ferguson

⁶² Some national laws, such as those of the United States, do not require a finding of material injury before imposing countervailing duties. *See, e.g.*, Tariff Act of 1930, ch. 497, § 303, 46 Stat. 687 (1930), *as amended*, 19 U.S.C. § 1303 (1970). Such a provision is inconsistent with GATT but is permitted by the Protocol of Provisional Application exempting "existing legislation." J. JACKSON, *supra* note 47, at 425.