

# International Sustainable and Ethical Investment Rules Project

## The Environment and Non-Discrimination in Investment Regimes: International and Domestic Institutions

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# **The Environment and Non-discrimination in Investment Regimes: International and Domestic Institutions**

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## ***Abstract***

Non-discrimination is a universal principle that applies in a wide range of international regimes, including trade, investment, and environment. It also applies at national and sub-national levels of governance. The institutions required to secure non-discrimination will vary, however, according to the problem that is being addressed. This paper identifies a variety of concerns that need to be taken into consideration when seeking non-discrimination in investment by considering how environmental regimes approach this issue. Investment is central to the prospects for achieving more sustainable forms of development. The paper concludes that investment rules at all levels must be capable of balancing private rights and public goods in a manner that is legitimate, transparent, and accountable. Since most existing international regimes are incapable of meeting this standard, it suggests a pragmatic approach based on a framework agreement outlining principles and their implementation in a range of individual international agreements that seek to protect public goods.

## **1. *Introduction***

The central principle embodied in international investment agreements is that of “non-discrimination,” the principle that under like circumstances all investors should be treated in a non-discriminatory manner. The desirability of treating all investors in a non-discriminatory manner under like circumstances seems self-evident. Yet there has not been much discussion about the principle and how best to achieve it, and virtually none about the likely impact of international agreements on domestic institutions that seek to ensure “non-discrimination” between investors within a country, whether they are foreign or not.

It is widely assumed that the trade regime offers a template for achieving “non-discrimination” in investment since “non-discrimination” is also the fundamental goal of the trade regime. Most favoured nation treatment, national treatment, a measure of transparency, and a dispute settlement mechanism are the institutions that are used to achieve non-discrimination in trade.<sup>1</sup> The assumption that these institutions will also secure “non-discrimination” for investors has been embodied in most investment agreements over the past decades.

There are many such agreements: several multilateral agreements and more than 2000 bilateral agreements, as well as investment provisions in some regional trade agreements such as the North American Free Trade Agreement (NAFTA) and in the General Agreement on Trade in Services and the Energy Charter Treaty. One indicator of the differences between trade in goods and investment is that the EU Treaties, the basis of the most highly developed international regime, deal quite differently with the two issues.

Upon closer scrutiny it becomes evident that even though a goal of both trade and investment regimes is non-discrimination, the institutions required to achieve this goal are actually quite distinct. This counter-intuitive result reflects the fact that institutions must reflect the structure of the problem that is being addressed.<sup>2</sup> Thus, issues that exhibit different problem structure require different institutions even when pursuing an identical goal. The central challenge of legislation or international negotiation is to ensure a proper fit between institutions and the goals that are being pursued.

Over the past fifty years, the trade regime has evolved from an agreement for mutual tariff reductions and non-discrimination to a complex structure involving numerous “behind-the-border” issues such as non-tariff barriers to trade, technical barriers to trade, sanitary and phyto-sanitary measures and hidden forms of protectionism, i.e. discrimination, in general. The reality of increasingly integrated markets forced governments to dig deeper and deeper into a range of domestic practices to ensure that gains made in the area of tariff reductions were not dissipated by further layers of protection.

The central dilemma has been the need to distinguish between legitimate measures with unavoidable protectionist effect and protectionist measures masquerading as legitimate. The original framers of the General Agreement on Tariffs and Trade (GATT) were well aware of the problem but it is doubtful that they anticipated the complexities involved in addressing it. Fortunately there was time to develop multilateral disciplines as trade expanded.

Investment agreements are likely to exhibit a similar dynamic, with a need to delve deeply into domestic investment practices to ensure that hard won gains at the international level are not lost to continued discrimination. Indeed, because of the nature of investment, the scope for such practices is much larger. Investment is at the centre of economic development and touches virtually every aspect of economy, society and environment.

Moreover, because globalization is now in full swing, there is much less scope for trial and error. It is inexcusable to negotiate international investment agreements that are not fully aware of the domestic implications, that is, their possible impact on existing institutions designed to ensure non-discrimination with respect to investments within countries. Yet, there has been only limited consideration of these institutions in the international debate about investment agreements.

The lack of attention to the interplay between international agreements and domestic institutions may be due, in part, to the fact that the earliest investment agreements were bilateral treaties between OECD countries and newly sovereign states that had emerged from colonization. The purpose of these agreements was to ensure the rights of colonial investors in the newly independent states. There was not much concern about the existence of domestic institutions to promote non-discrimination because most of these countries did not have such capabilities.

The situation is dramatically different when similar investment agreements involve countries with highly developed regulatory structures designed to ensure a proper balance between private investor rights and the protection of public goods.<sup>3</sup> If drafting is not sufficiently prudent, the resulting dynamic between international rules and domestic institutions is bound to be full of surprises.

Environmental regimes illustrate the issue of institutions and “fit.” The ultimate goal of any environmental regime is to preserve the environment so that it supports human activities and other living organisms. Many of the institutions that are used to achieve these goals recur in most environmental regimes: scientific research, assessment, monitoring, transparency, and public participation. Yet different environmental issues require different institutional mixes. The hazardous waste regime uses highly developed documentation systems and bans. The toxics regime uses packaging, labelling, classification, testing, and hazard assessment and risk assessment. The stratospheric ozone regime is based on the control of production and use. Wildlife regimes typically require habitat protection. The common institutions are modified in each regime to fit the changed circumstances that are defined by the nature of the problem that is being addressed.

Thus the two central questions that must be addressed in any investment agreement are first, the interplay between international and domestic institutions, and second, the fit between the problem and the institutions employed to address it. This paper will seek initial responses to these questions by focusing on the relationship between investment and sustainable development.

## ***2. Non-discrimination and Sustainable Development***

It is hard to overstate the importance of investment to the attainment of sustainable development. To the extent that current economic activity is unsustainable, it will take investment to replace it with more sustainable activities. Indeed, investment is the tool of choice to shift from less sustainable to more sustainable activities. Consequently all investment agreements are of vital concern from the perspective of sustainable development, even as policy makers face the hard question how to channel investment—a private activity—towards the goal of achieving greater sustainability—a public good.

Foreign investment represents a particular case where the investor is a foreign national, whether a person or a corporation, and consequently is not integrated into the legal order

in the same way that a domestic investor would be. Foreign direct investment has been growing rapidly (UNCTAD). The development of an international legal framework that permits a proper balancing of investor rights and public goods is consequently a priority for promoting sustainable development.

The first question that needs to be answered is whether non-discrimination in an investment structure is always desirable from the perspective of sustainable development. The response to this question is much like the response to the idea that *economic growth* is environmentally beneficial: it depends. Clearly, a highly discriminatory investment system will be inefficient, subject to distortion, and exhibit large rents that are liable to be defended with no regard to any broader societal values, including sustainable development. Consequently, discriminatory investment regimes are more likely to be unsustainable than non-discriminatory ones.

This does not, however, imply that the converse holds -- that all non-discriminatory investment systems will necessarily promote sustainability. Inappropriately rigid investment rules that do not provide for the use of essential market disciplines, or lax rules that provide tools for irresponsible investors to escape legitimate regulation, will both be detrimental to sustainable development, whether they are non-discriminatory or not.

Similarly, there may be *discriminatory* investment regimes that actively promote sustainable development, such that their replacement by non-discriminatory principles without taking account of the need to protect public goods could result in a net loss of environmental values. In other words, investment frameworks need to explicitly address sustainable development. That is more easily said than done.

Promoting sustainable development through investment agreements requires further analysis and discussion, in order to ensure that the issues are properly framed, that the institutions needed to achieve desired results are properly identified, and that an appropriate organisational framework is created to ensure that results correspond to the identified needs. It is unlikely, however, that this goal can be achieved by making marginal adjustments to the trade regime so as to incorporate investment disciplines.

The central dilemma of any investment regime is the need to balance private rights of investors with the promotion of public goods. This is also central to the achievement of non-discriminatory environmental management in domestic society.

### **3. *Non-discrimination in Domestic Environmental Policy***

Non-discrimination is a fundamental principle of democratic societies. It is generally articulated as equal treatment before the law. This is achieved through a complex institutional structure, designed to balance the rights of individuals against the needs of the community. In terms of investment and environment, investor rights are typically individual rights, while environmental measures are typically of community interest.

In an increasingly globalised world, there is a need to extend the principle of non-discrimination in an appropriate manner to foreigners. In doing so, however, it is vital to respect the rules that have grown up around the principle of non-discrimination within many jurisdictions -- in other words, to ensure that foreigners have the same rights *and the same obligations* as citizens.

Non-discrimination is also an issue at all levels of environmental policy, within countries as well as at the international level. It reflects the need to craft policies that meet essential criteria of fairness and equality before the law, while still reflecting the diversity of environmental conditions. Since this is a new area of environmental policy, only a few suggestive comments can be made at this point.

### **Environmental Problem Structure**

The environment poses some unusual challenges to the institutional capabilities of even the most highly developed societies. Knowledge of the environment is limited, and is largely derived from scientific research that was never intended to lead to practical policy measures. Environmental management itself represents an attempt to change the behavior of people so as to change the natural environment. It is difficult enough to change behavior through regulations or economic incentives but the ultimate goal of environmental management is not changed behaviour but improved environmental conditions. The result is something like shooting around corners, fraught with uncertainties and consequently subject to contestation. A number of phenomena are characteristic for the resulting problem structure of environmental management.

#### *Exhaustible Resources*

It is by now well-established that every natural system has a limited capacity to tolerate human interference, although technology can be used to reduce such impacts. Indeed, the traditional distinction between “renewable” and “non-renewable” resources turns out to be increasingly dubious, at least insofar as it suggests that exhaustion of renewable resources is less serious than exhaustion of non-renewable ones. “Non-renewable” resources are by definition inert; it also turns out that they are often substitutable and their useful life can be extended by technological means. “Renewable” resources are living resources or flow resources. They depend on the ecosystems within which they exist and are consequently sensitive to ecosystem changes. Moreover, renewable resources are often substitutable by other renewable resources, perpetuating the problem. The paradox is therefore that “renewable” resources may ultimately prove to be more exhaustible than “non-renewable” ones.

Ecosystems that once appeared inexhaustible turn out not to be. The allocation of these scarce resources is at the heart of the economic dimension of environmental management. Claims on them are frequently cumulative in nature. The classic example is a river that can accommodate some discharges without recognisable environmental damage. Certain limits are eventually reached, as the number of dischargers grows, and environmental policy-makers must balance the rights of established dischargers against the right of new dischargers to establish their activities.

In environmental policy, it is widely accepted that a new facility may need to be subject to significantly more stringent requirements than existing facilities -- or may have to pay to reduce discharges from existing facilities. Existing facilities will need to converge towards the new standards as they are modified and updated. Nevertheless, much discretion remains for those responsible for issuing permits. The overall result is that there is an important time factor governing the stringency of environmental controls. Later entrants are unlikely to be treated in the same manner as earlier ones.

### *Irreversible Effects*

Some environmental changes are irreversible, or at least within a period that is economically or socially meaningful. Atmospheric emissions, for example, are effectively irreversible, making necessary a more precautionary approach. Moreover, atmospheric emissions tend to be widely dispersed, so that effects can occur some time after the emissions have occurred or at some distance. As time and distance increase, it becomes progressively difficult to establish causality, rendering the balancing between private rights and public goods more uncertain and more difficult.

In other areas of environmental management, not the action but the effects of human intervention can prove to be irreversible. The most extreme case is that of species extinction, a natural phenomenon that has been vastly accelerated by human intervention. But numerous other environmental effects can prove irreversible, at least within a time frame that is relevant to policy making. Thus a natural forest that is cut down will take many generations to regenerate, with temperate forests recovering faster than boreal ones, which in turn are more likely to regenerate in their original state than tropical forests. Similarly mutation, caused by the introduction of toxic substances or by the release of genetically modified organisms, is effectively irreversible.

### *Cumulative Effects*

A variety of factors can cause emissions to have a cumulative effect. Certain toxic substances may be emitted in very small amounts yet have disproportionate effect because of the presence of other substances, either naturally occurring or anthropogenic. Persistence can lead to similar outcomes because recent emissions must take into account the presence of a pool of previous emissions. Finally, existing facilities can exhaust the absorptive ability of ecosystems, making any additional emission unacceptable.

A vivid example is the accumulation of lead in the soil in London, attributable to the presence of trace amounts of lead in coal burned over more than a century. On account of the properties of lead, the result is high background values that make the addition of further emissions an unacceptable risk. This led the British government to adopt measures to ensure the phase out of leaded gasoline at a time when most other European countries did not consider the health effects associated with lead use sufficient to warrant action (as opposed to the need to introduce catalytic converters). Again, the outcome is formally different treatment of individuals under otherwise like circumstances.



### *Threshold Phenomena*

Ecosystems are complex and not entirely understood. In some instances, they exhibit threshold phenomena. An environmental resource that appears to be holding up fairly well under human pressure will suddenly deteriorate dramatically. Threshold phenomena are particularly problematic when harvesting exhaustible natural resources from stocks. Thus fisheries are prone to collapse. As stocks are depleted, harvest effort increases so as to maintain yield. What is actually happening is an acceleration of decline, often manifested in deteriorating quality such as smaller and immature fish.

Similarly, lakes may exhibit threshold phenomena when it comes to pollution exposure. As acidity or nutrient concentrations increase, not much response is observed until a certain threshold is reached when a sudden change may occur. Acidity levels, for example, may reach critical levels for certain species or overwhelm the buffering capacity of adjacent soils. Nutrients may increase to a level where the respiration of the organisms that feed off the nutrients removes a critical amount of oxygen, causing eutrophication.

Threshold phenomena pose particular challenges as the limited resource must be allocated to competing uses in such a manner that natural functions are maintained. This creates particularly difficult problems where a resource faces competing claims for human uses—such as irrigation, navigation, and power generation on a river—and for ecosystem functions—such as maintenance of healthy fish populations. The resulting conflicts require highly sophisticated institutions to ensure that decisions achieve the acceptance necessary for their respect and implementation.

### *Changing Knowledge*

Knowledge about the environment has increased over time. Nonetheless, it remains fragmentary in many areas. This poses two dilemmas: the uncertainty associated with fragmentary knowledge, and the need to adjust to changing knowledge. Scientific research is an institution to generate reliable information about natural phenomena. Yet it is always also associated with uncertainty. Coping with this uncertainty has given rise to some of the most intractable international conflicts.

As scientific information accumulated, and as public perceptions of environmental hazards changed, it became necessary to engage in a continual process of adjusting environmental standards. Countries dealt with this process differently, largely depending on their legal traditions. In some countries, permits were initially viewed as akin to “property rights,” so that changing them was comparable to a “taking” and possibly subject to compensation.

In other countries, public authorities issued only temporary permits, anticipating a continuous need to adjust over time. As a consequence, new investments were treated differently in different countries: authorities who anticipate opportunities for later

improvements can be more lenient initially than those who must attempt to maximise the initial impact. In the latter case, there is also likely to be a much greater difference between requirements for new and existing facilities (von Moltke, 1985, 1983).

Under these circumstances, non-discrimination requires an elaborate structure of standards and extensive procedural safeguards. These institutions differ from one country to another, reflecting political and social traditions and historical experience. Nowhere are these differences more pronounced than when dealing with the problem of scientific uncertainty, largely encapsulated in the debate about risk assessment and the precautionary principle (von Moltke, 2000).

As knowledge evolved, so have the available technologies. Again, this leads to significantly different treatment for new and existing facilities. Moreover, complex industrial facilities are each unique in terms of their technology and environmental impact. Even the permits for facilities as comparable as large combustion plants turn out to be difficult to compare with one another (von Moltke, 1983).

#### *“Cross-media” Effects and Integration*

“Environmental policy” is actually a complex of related policies designed to map the natural environment and its problems onto political, social and economic institutions. Issues as diverse as air pollution and landscape protection, biodiversity and water pollution, climate change and waste management, or toxic substances and ozone depletion all form part of environmental policy. Each of these issues has its own problem structure, requiring a range of institutional responses and frequently involving a number of organisations (von Moltke, 1995).

The result is a very large and complex mix of policy interests. In some countries, environmental law by now represents the largest single body of law. At the international level, similar developments can be observed. While no reliable measure of comparison exists, it is a plausible assumption that international environmental law is, or soon will be, the largest single body of international law.

At a relatively early stage in addressing environmental issues, it became clear that there were certain trade-offs between areas of policy. Vigorous control of air and water pollution led to a dramatic increase in waste streams--pollutants were removed from one medium only to be deposited in another, resulting in a crisis of hazardous waste management. In some processes, the choice is between waste disposal to water or the atmosphere, so that lowering atmospheric emissions resulted in a much increased need for wastewater treatment, and vice versa. The control of persistent pesticides led to the introduction of pesticides that were more toxic but less persistent. Increased wastewater treatment caused additional air pollution as pollutants were volatilized from the treatment facility.

Each of these trade-offs represented regulatory choices, with consequences for economic actors. To ensure that these choices are made in a non-discriminatory manner requires

extraordinarily elaborate regulatory activities, and involves not only the specification of *standards* but also (increasingly) the definition of *procedures*, from environmental assessment, to public information, to public participation. In most OECD countries, these procedures have become an integral part of the work of environmental agencies at all levels.

Maintaining non-discrimination under these circumstances has become a continuing preoccupation of environmental authorities, requiring substantial institutional resources. This is particularly true for federal systems, which can exhibit quite significant variations in actual practice, despite the best efforts of federal authorities to achieve a measure of uniformity in the interests of non-discrimination (Liroff (undated), von Moltke, 1985).

### *Institutional Consequences*

The issues raised in the previous sections lead to a number of characteristic institutional responses in environmental management. One is the prevalence of procedural rather than substantive non-discrimination, that is, investors will be subject to the same procedures even though the outcomes may be significantly different. Another is the use of transparency and public participation as key policy tools.

Since non-discrimination in domestic environmental management is hard to achieve in substantive terms, the almost universal response has been the creation of an elaborate structure of procedural rules. The goal is to achieve non-discrimination by submitting investors to the same procedures, even though the outcome of these procedures may differ widely. Consequently, domestic environmental law is characterised by a large number of procedural requirements, involving testing, environmental assessment, permitting, public information, participation, monitoring, review, labelling or packaging. High procedural standards will require a strong, continuing presence of foreign investors in the relevant jurisdictions, and the first and most fundamental right of these investors is equal access to all domestic procedural safeguards against discrimination.

Environmental management is not just a matter of public authorities applying certain rules in the process of issuing licenses to applicants. Because a facility's environmental performance can have unanticipated effects on people and property in its neighbourhood and beyond, and because public authorities cannot monitor all facilities continuously, public participation has become a major feature of environmental management in democratic societies. In practice, public participation helps identify environmental impacts that may otherwise be overlooked. Public participation also helps authorities in monitoring and setting priorities for enforcement action. Consequently, environmental law in many countries is characterised by extensive procedural safeguards to ensure timely and adequate information and to create opportunities for public participation. This has profound implications for non-discrimination.

## **The Problem Structure of Investment**

Investment is the heartbeat of an economy and a crucial decision for any corporation because it largely determines future operations. In market economies, investment is a private activity. Public budgets do not include a balance sheet of assets and liabilities, nor is there any requirement to achieve a return on public “investments” to amortize them. Thus a road or a school may generate economic benefits akin to investment but there is never an accounting for those benefits nor an economic penalty—other than higher taxes—when they fail to materialize. The central dynamic of investment is the relationship of risk to return. In practice, however, investment decisions are influenced by a large number of factors, the only one of which is determining by itself concerns the existence of markets for output and the ability to access those markets.

Other than access to market, factors which influence investment decisions and returns include the availability of labor and of skilled labor in particular, access to inputs, energy costs, taxes and charges, transportation and other infrastructure concerns, waste disposal and other environmental issues, and the regulatory environment, especially whether decisions are reasonably predictable and reliable. All of these factors involve public resources or public goods in some fashion.

Attempts to identify causality of specific investment decisions to these numerous secondary factors generally founder on the reality that none of them is determining by itself. Moreover, existing investment agreements affect only a few of these secondary factors. It is consequently hardly surprising that there is no clear empirical evidence that investment agreements actually contribute to changing investment flows.

Like most economic processes, investment benefits from an unambiguous metric. Ultimately all factors are measured in financial terms, and the overall outcome of an investment can be calculated in a convincing manner in terms of its return on capital. This clarity of metric stands in stark contrast to the agenda of environment and sustainable development where no such measurements exist.

## ***IV. Non-discrimination in International Environmental Management***

Environmental management has an inescapable (and growing) international component. This has resulted in the development of a substantial body of international environmental law, which has implications for non-discrimination in both trade and investment. International environmental law promotes equivalency in environmental safeguards across national frontiers, because environmental protection efforts in one country can be defeated by lack of similar efforts in another, and also to ensure that these measures do not distort economic competition. They also seek to allocate effort between countries when confronting international environmental issues such as global warming, or the allocation of resources in a shared river basin.

The international dimension of environmental management creates a unique interface with the trade regime — and with an incipient international investment framework — taking it beyond the realm of national jurisdictions alone. As noted earlier, this part of international environmental law is characterised by a high degree of reliance on procedural and institutional, rather than substantive, responses.

### **Trans-Boundary Environmental Management**

A web of legal provisions, developed bilaterally and regionally, rather than at the global level, extends domestic rules for non-discrimination across borders, especially in border regions (Smets, 1998). These rules date back more than seventy years to the Trail Smelter case between Canada and the United States, which established the responsibility of polluters in one country for damage in the neighbouring country (Sands, 1995, pp 243-44).

Cross-border responsibility was further elaborated in Principle 21 of the Stockholm Declaration, which reaffirmed the sovereign right of States to exploit their own natural resources, but imposed a “responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction” (Sands, 1995, pp. 186-94).

In many instances, this has led to the recognition of rights of residents to participate in administrative proceedings when they may be affected by actions on the other side of the border. In the NAFTA countries, these rights have been codified in the so-called “environmental side agreement”, establishing the Commission on Environmental Cooperation, which has rights of investigation and reporting; in particular, when inadequate or discriminatory application of environmental measures are alleged (Johnson and Beaulieu, 1996).

These broad rights and responsibilities become much more problematic when the principle of non-discrimination is extended to cover the activities of citizens of one country in another. In some industries, it has become common practice for enterprises to establish universal standards that are applied to all facilities wherever they may be established, and in some instances even to suppliers. This approach is desirable where no relevant local regulations exist, or where these are less stringent. Nevertheless, it does not pre-empt the right of public authorities to impose other standards on operations within their jurisdiction, provided this is done in a non-discriminatory manner.

### **Non-discrimination in the European Union**

The European Union has developed a large and detailed body of environmental law, including more than 300 legal instruments and covering virtually every aspect of environmental management. Arguably, this entire effort can be viewed as a structure to ensure non-discrimination in environmental affairs within the European Union. European environmental law utilizes a number of instruments to achieve this goal, and specifies a number of procedures (see Table One).

**Table One**

**Selected EU Legal Instruments for the Environment  
and their Institutions**

<b>Source</b>	<b>Title</b>	<b>Institutions</b>
76/464/EEC	Directive on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community	Black list substances; gray list substances; pollution reduction programmes; discharge permits; designation of “competent authority; emission standards; quality objectives; limit values; best technical means; monitoring; reporting; publication; priority list of substances; new facilities; comparative assessment; daughter directives.
75/442/EEC 91/156/EEC	Directive on waste	Waste prevention, reduction and recovery; technology development; best available technology not entailing excessive cost; network of disposal installations; competent authorities; waste management plans; permits; record-keeping; polluter pays principle; list of wastes; implementation reports
96/62/EC	Directive on ambient air quality assessment and management	Air quality standards; daughter directives; limit values; alert thresholds; target values; guidelines; monitoring; modeling; zoning; reporting; improvement plans; scientific and technical progress; committee; competent authorities
67/548/EEC 92/32/EEC	Directive on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances	Classification, packaging, labelling, notification; testing; assessment; inventories; safety data sheets; competent authority; committee for adaptation; confidentiality; reporting

The EU process is increasingly complemented by agreements at the broader European level, sometimes including countries that are candidates for EU membership, sometimes a broader range of European countries such as the Council of Europe, and sometimes all the members of the United Nations Economic Commission for Europe, that is also the United States and Canada. The result is a network of international environmental agreements that range from the Treaty on Long Range Transboundary Air Pollution (LRTAP) to the Århus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.

## **International Environmental Regimes**

International environmental regimes are designed to frame environmental issues that require international action in an equitable fashion. In dealing with countries, they impose equal obligations in some areas; in others, these obligations are “equal but differentiated,” reflecting a range of additional considerations, such as level of development, technological capability, and “historical responsibility” for the environmental problem being addressed. This is analogous to “special and differential treatment” for developing countries in trade agreements.

The task of allocating the attendant obligations within their country is the exclusive responsibility of the respective governments, subject to the procedures and safeguards that exist in each country to ensure non-discrimination. Consequently, the extent to which differential treatment carries over to individuals within a country remains a matter of subsequent negotiation. In several regimes, a number of issues have arisen that may cause complications in ensuring that the consequences of international environmental regimes are non-discriminatory.

The Convention on Biodiversity (CDB) is concerned both with the preservation of biodiversity and with its utilisation. Concerns have arisen over the exploitation of traditional knowledge and the registration of patents based on biological materials found in developing countries. These concerns have clear implications for the principle of non-discrimination in an investment regime and need to be addressed explicitly, particularly in light of a growing perception that the Agreement on Trade-Related Intellectual Property Rights (TRIPS) has led to the creation of significant rents for holders of patents from developed countries without equivalent benefits for developing countries.

Many multilateral environmental agreements (MEAs) also articulate the notion of preferential access to the technologies needed to address a particular environmental problem, but none has yet been able to operationalise this notion very effectively.<sup>4</sup> The implications for investments incorporating such technologies are clear, and once again, need to be addressed explicitly. At the very least, technological preferences parallel the idea of “performance requirements” -- and are therefore closely related to the principle of non-discrimination.

The Basel Convention on the Transboundary Transport of Hazardous Wastes and Their Disposal is based on dividing countries into several groups -- primarily OECD and non-OECD countries (although not all OECD countries have ratified the Convention and the key provisions concerning export bans have not yet entered into force). It involves a ban on the transport of hazardous wastes from OECD to non-OECD countries but does not develop any rules for enterprises operating in non-OECD countries but controlled by enterprises based in OECD countries. Certainly, any investment to relocate production with a view to escaping controls on the disposal of hazardous wastes would be viewed as a highly controversial and problematic development, and could give rise to calls for more far reaching controls than are currently in place.

Finally, the Framework Convention on Climate Change (UNFCCC) is in many respects an international investment agreement. Its purpose is to shift investment (in particular, in energy, transport and infrastructure) towards projects that involve fewer greenhouse gas emissions. The UNFCCC distinguishes between Annex I countries and other countries, and its Kyoto Protocol has established several “flexibility mechanisms” that build on this distinction. Investments and investors are treated differently in this structure, depending on both the country of origin and the host country. While the resultant treatment may be “fair and equitable”, it may not be viewed as strictly “non-discriminatory.”

## **V. Subsidiarity**

The principle of subsidiarity -- the idea that action should be taken at the lowest level of governance consistent with effectiveness -- is in many ways a basic principle of good governance. This principle has given rise to extensive discussions within the European Union, where it is enshrined in Article 3b of the Treaty of Maastricht<sup>5</sup>

Subsidiarity applies differently to economic and environmental regimes. While economic regimes deal largely in “universals” and generally seek to develop global rules of equal application wherever they apply, environmental regimes more closely follow the subsidiarity principle. This difference is likely to render the balancing of economic and environmental priorities within an international investment framework increasingly difficult as economic decisions become more globalised.

All countries struggle to a greater or lesser degree with the problem of subsidiarity in environmental affairs. Specific decisions on environmental quality (and on permitting) must be locally-based. In a few countries (e.g. the UK), permits for the largest installations involving the greatest environmental hazards are undertaken by a national Inspectorate. This Inspectorate operates on the basis of “guidance” -- indicative standards that recognise the need to vary decisions to take local conditions into account.

Even a country as relatively small as Denmark must address the problems associated with subsidiarity, especially when confronting European Union and other international requirements: “Under the Danish Environmental Protection Act and other environmental legislation, the competence to set standards is decentralised to local councils (municipalities and counties) -- supported by guidelines from the Danish Environmental Protection Agency, together with access by way of administrative appeal to national agencies and boards. With few exceptions, local councils are also granted the discretion to decide when and how to enforce environmental legislation” (Pagh, 1999, pp 303-304). It is clear that such a system requires an elaborate institutional structure to ensure non-discrimination.

Federal countries have much the most elaborate institutional structures for achieving a measure of balance between the need for nationally consistent, non-discriminatory rules and local authority in those areas where differentiation is viewed as essential. The United



States, with its unique system of independent branches and levels of government that exercise often competing jurisdiction over the same issue, resorts to extensive judicial interpretation to maintain an appropriate balance. Germany achieves a high degree of subsidiarity by reserving the implementation of many federal laws (e.g. income tax collection) to the Länder. All federal environmental laws are implemented exclusively by the Länder, with nominal federal supervision (although strong federal supervision has traditionally been limited to the rather special domain of nuclear power).

Apart from posing significant challenges to the national implementation of certain international mandates, the principle of subsidiarity poses major difficulties for the balancing of conflicting international priorities. This problem has not even been resolved within the highly developed institutional framework of the European Union.

During the Third WTO Ministerial in Seattle, a conflict arose when the Commission made certain concessions concerning biotechnology, based on authority derived from the "Article 133 Committee." This committee, established by Article 133 of the EU Treaties, was designed to remove trade policy from the purview of the foreign ministries, which control the EU Council. While nominally subject to the Council, the Article 133 Committee enjoys much autonomy in the day-to-day conduct of trade negotiations. It is composed of high level officials of the economics ministries of the EU member states.

The concessions made in Seattle were immediately opposed unanimously by EU Environment Ministers, acting through the Council. With the inconclusive outcome of the Seattle meeting, this conflict did not need to be resolved in a definitive manner, but it did demonstrate a continuing problem in determining who has the authority to make decisions when an issue subject to the exclusive jurisdiction of the European Union (such as trade) must be balanced against one subject to shared jurisdiction and operating within a framework of subsidiarity (such as environmental management). For the time being, significant aspects of the EU investment agenda are handled separately from the trade agenda, and are therefore not dealt with within the Article 133 Committee structure.<sup>6</sup>

The problems created by an incoherent international policy making structure are magnified at the wider international level where no institutions exist to balance conflicting priorities. In many ways, they are at the heart of the relationship between environment and trade, and contributed significantly to public perceptions concerning both the Seattle Ministerial and the Multilateral Agreement on Investment (MAI). Such problems can be "dodged" for some time in relation to relatively simple issues like trade liberalisation. However, they are central to any broadly-based investment framework, and must therefore be resolved before any such framework can be implemented, especially if public acceptance is to be obtained.

## **VI. *Enforcement and Voluntary Measures***

The complexities of environmental management imply that public authorities must be selective in which enforcement measures they undertake. Obviously, most public authorities seek to exert effort where there is an expectation of results, so that any

significant enforcement measure also implies an assessment of an enterprise's record, the quality of its management and the likelihood of encountering problems. This in turn creates a range of discretionary authority, and involves an inescapable degree of discrimination. Achieving an appropriate level of protection against unjustifiable discrimination against foreign investors is a delicate task.

In this context, public awareness and public perception can play important roles. On the one hand, neighbours of an enterprise observe its activities on a continuing basis, in a manner not possible for public authorities. They are an important source of information. On the other hand, unrelated conflicts between an enterprise and affected citizens can lead to a range of unwarranted responses. Again, protection against discrimination solely on account of the nationality of an investor is not easy.

Faced with insurmountable difficulties in establishing systematic controls, public authorities are increasingly turning to voluntary action on the part of enterprises to secure environmental quality. Such voluntary programs are liable to be monitored by industry associations (generally dominated by domestic enterprises, and with possible biases against foreign investors) or by a process of self-reporting that requires a high degree of trust between public authorities and the enterprise. Such trust can generally only be built up over time.

In some instances, perceptions about the quality and stringency of environmental management in the country of origin of a particular investor should play a role in deciding how much trust is warranted. It is certainly conceivable, and may in fact be appropriate for industries likely to have a long-term impact on environmental values, that foreign enterprises may be denied the opportunity to invest on account of information available concerning their past practices, practices of their associates, or the stringency of environmental controls in their home jurisdiction. It is hard to imagine, for example, that the Malaysian forest product company, Kumpulan Emas, would not face vigorous scrutiny as a foreign investor after its operations were suspended by the government of the Solomon Islands. Similar constraints may face Jaya Tiasa, which has "been heavily criticised for its operations in Papua New Guinea" (Grieg-Gran et al 1998).

Some environmental effects can be long-lasting, creating significant problems with regard to the assignment of liability. This has been a major obstacle to implementing the US Superfund legislation, which provides for cleanup of sites containing hazardous wastes. A foreign investor with limited interests in a given country may decide to withdraw from that country, rather than face its environmental liability. This has occurred in the US and Australian mining industries, and leaves public authorities in the host country with no effective recourse against the foreign investor. Insurance schemes or performance bonds can be used to internalise known future liabilities, but are generally not effective with respect to unanticipated effects.

Attention also needs to be paid to the potential for a "flag of convenience" problem in an international investment framework. Numerous enterprises, including most large multinational corporations, utilise off-shore jurisdictions as "havens" to shield their

investments from taxation. In some instances, the controlling interests are clearly identified and can be held accountable for actions relating to their foreign investments. In others, however, they cannot be identified, and no controls over environmental performance exist in the off-shore jurisdiction. It appears reasonable for a host country to submit such investors to much closer scrutiny than those who are openly identified, especially when sensitive environmental resources are at stake.

## **VII. Problem Structure, Institutions, Organisations**

The preceding analysis is suggestive rather than exhaustive. The issues surrounding the integration of environmental (and other) policy considerations into an international investment framework require significant additional research. Nevertheless, some preliminary conclusions concerning the most appropriate approach are already possible.

In developing international environmental regimes, the standard practice has been to first identify the structure of the problem being addressed, and then to consider the institutions that may be appropriate for its management. Only as a last step are the legal and organisational forms considered. The result has been a remarkable degree of institutional innovation in international environmental regimes, presumably necessitated by the demanding problem structure of most environmental issues, as well as by the limited range of options available in traditional international regimes.

The process of developing international *economic* regimes, on the other hand, has seen a very different dynamic. Although institutional innovation has occurred at a sometimes breathtaking pace in the private sector, international economic governance has been characterised by great reluctance to innovate. This may be because of the risks involved in false starts, such as the various attempts to maintain exchange rate stability once fixed exchange rates were abandoned.

Even the creation of the WTO -- the last major organisational innovation in this field -- was marked by a lack of institutional innovation, with the notable exception of the Dispute Settlement Understanding. Nor has there been much general discussion in the literature of the need for institutional innovation. Consequently, crises such as the breakdown of the MAI negotiations or the failure of the Seattle Ministerial leave the economic policy community with few options and limited experience of the processes required to innovate.

An issue such as the interface between environment and investment is very likely to require some measure of institutional innovation, if it is to be successfully addressed. The precise details will emerge as the structure and functions of an international investment regime come more clearly into focus. What is evident thus far is that none of the available templates—BITs, NAFTA, MAI—meets the requirements set out in this paper.

Non-discrimination in environmental affairs is achieved at the domestic level through a complex institutional structure. Any international agreement that impacts upon that structure—as an effective agreement on investment must—will there fore be measured by

the standard of these institutions. To promote non-discrimination at the international level, an investment agreement must meet the fundamental standards of legitimacy, transparency, and accountability that have been achieved through many years of institutional innovation in environmental policy at the national and international level.

In light of the complexity of the underlying issues, and the need to balance private investor rights against the protection of public goods such as the environment, it is reasonable to assume that an international investment regime will have to be characterized by institutional sophistication and a significant level of review and accountability to avoid mistakes that could undermine its acceptance. On the other hand, one of the great strengths of the trade regime is its institutional simplicity, or elegance, in that it achieves the goal of promoting non-discrimination in trade with relatively modest institutional means. It is inconceivable that these institutional structures, largely replicated in the draft MAI, will be sufficient to meet the needs of integrating environment and investment objectives.

The central dilemma faced by a multilateral investment agreement is how to balance trade and investment priorities with other legitimate goals of public policy—represented at the international level by regimes that have traditionally been entirely separate from each other—while still ensuring the necessary degree of predictability that is one of the most important fruits of international co-operation. An initial approach to this dilemma in the trade context sought to avoid the issue by pointing out that all states can choose the level of social and environmental protection they desire. This is presumably adequate to deal with most social issues, including labour rights. This approach does not work in the case of environmental issues because a large number of environmental issues have an *international* dimension—a dimension that is not adequately represented by the preferences of individual states.

Most likely, addressing the investment/environment interface will entail a set of agreed rules setting out certain procedural safeguards. These must be designed to ensure an adequate degree of non-discrimination while recognising that actual levels of protection — and the institutional means to achieve them — will first need to be determined by environmental regimes at the appropriate levels, and only later become incorporated within the investment framework.

Clearly, institutional innovation will be needed in the environmental arena as well. Most importantly, the highly fragmented structure of environmental regimes — actually one of the strengths of the international environmental management structure -- makes it all but impossible to articulate the international environmental interest in a manner that is readily comprehensible to economic policy makers (Von Moltke, 1995).

To resolve this problem, some analysts have suggested the creation of a “World Environment Organisation” modelled after the WTO (Esty, 1994). A more appropriate response, one which respects the problem structure of environmental management, has emerged through the UNEP process on International Environmental Governance (UNEP). The UNEP proposal recognizes the need to strengthen the overall system of international environmental governance as well as its essential elements. To do so, the

United Nations Environment Programme (UNEP) must obtain the necessary legal and financial means to provide focus and structure to international environmental governance. Steps must be undertaken to ensure greater coherence among the multilateral environmental agreements (MEAs), probably through a process of clustering (Von Moltke, 2001). The work of UN organs in environmental matters must be better integrated.

### ***VIII. The "Architecture" of a Sustainable Investment Regime***

Non-discrimination is a universal principle but it requires specific institutional realisation. To achieve non-discrimination between goods in international trade, it has sufficed to apply the disciplines of MFN and national treatment, to provide for a measure of transparency, and then to deal with problems that may arise through a dispute settlement process. These disciplines hinge on the interpretation of the notion of "like product." Difficulties have arisen as the trade regime has expanded to TRIPS, and has had to confront environmental issues, which require that distinctions be made between otherwise "like" products on the basis of process and production methods (PPMs). These difficulties are surmountable, yet they provide some indication of the increasing institutional sophistication that will be required as increasingly complex issues, involving the rights of ever larger numbers of individuals, are addressed.

It is unlikely that a single universal regime will be able to address the investment dimension of sustainable development. The distance is too great between actual environmental decision-making and the broad principles underlying a global investment system. Moreover, the balancing of individual rights and the needs of communities, which is implied in most productive or long term investments, should be undertaken as close as possible to the actual investment, perhaps with provisions for subsequent review at a more global level (but limited to issues of universal significance).

Such a balancing requires a credible structure of accountability if it is to be acceptable to a wide range of people. At least for democratic societies, it must also be seen to be legitimate and transparent. No existing international economic regime other than the European Union meets these criteria. The World Bank has struggled to move in that direction, despite a governance structure that tends to favour the interests of developed countries. In general, this suggests that an international investment structure will need to be multi-tiered and well integrated with relevant international environmental regimes. It will probably need organisational realisation at "regional" and global levels, as well as within key environmental regimes (such as the climate regime, the regime for biodiversity, commodity regimes, or regimes governing certain commons such as the oceans and, possibly, Antarctica).

Most international investment agreements have utilized two existing institutions for dispute settlement: the International Center for the Settlement of Investment Disputes (ICSID), attached to the World Bank, and the United Nations Commission for International Trade Law (UNCITRAL). Both institutions are clearly inadequate for the needs of balancing private rights against public goods because they lack legitimacy, transparency, and accountability. UNCITRAL dispute settlement procedures are

somewhat more problematic than those of ICSID because a complete lack of transparency leads to a corresponding lack of accountability, which undermines whatever legitimacy the process may have. In fact, however, the processes of ICSID are also deeply problematic (Vol Moltke and Mann, 2001).

An international investment framework must first of all respect the elaborate institutional arrangements in many countries (and within groups of countries, such as the European Union), to achieve non-discrimination. It should act only when the opportunities for redress offered by these institutions have been exhausted — or when they have been denied.

When a country has strong safeguards guaranteeing equality before the law and extends these to foreigners in a non-discriminatory manner, an international investment structure should “second-guess” the results of these institutions only under the most exceptional of circumstances. When a country has weak safeguards, a way needs to be found to strengthen these without immediate reliance on a international dispute settlement procedure. It does not seem sensible to attempt to fill a domestic institutional void through an international institution, which will almost always be lacking in essential attributes to ensure legitimacy, and which will be dangerously remote from the actual level of decision-making.

In general, the institutions required to determine whether unjustifiable discrimination between otherwise “like” investments has occurred are unlikely to be effective at the global level. They involve a degree of understanding of domestic processes, a respect for differences in environmental and social conditions, and an ability to weigh conflicting policy priorities that is unlikely to be achievable at the global level. This suggests that it may be appropriate to develop a general framework at the global level, but to undertake its implementation primarily in other contexts, where a better balancing of rights and obligations may be achieved, and where similarities and differences between jurisdictions can be properly weighed. Regional agreements and certain specialised global agreements offer obvious advantages in this respect.

A global framework agreement on investment should set out the underlying principles but should leave implementation to subsequent agreements — protocols in effect — and to regional efforts. In addition to articulating the principle of non-discrimination and the goal of sustainable development, such a framework agreement must reaffirm the rights of public authorities to set priorities, and to ensure that all market participants contribute to the achievement of these priorities.

The European Union is, among other things, a “regional economic integration organisation.” It has the institutional capacity to make difficult distinctions appropriate to balancing conflicting policy requirements. It is certainly an appropriate location for investment provisions, and for balancing these with the overarching requirements of sustainable development. After a lengthy process, the EU Treaties now properly reflect these factors and the process of implementing these requirements is now under-way.

The original EC Treaties were modified versions of trade agreements from the immediate post-war era, including the GATT. During the 1970s, the EC attempted to address emerging environmental (and a range of social) issues within this original legal framework. This approach proved untenable<sup>7</sup>, ultimately leading to several treaty amendments, beginning with the Single European Act, followed later by the Maastricht Treaty and the Treaty of Amsterdam. This process continues today. The result has been comprehensive institutional reform, including the development of treaty norms and institutions related to the environment. The complexity of this process is illustrated by the fact that each of the treaty amendments thus far has included further adjustments to the existing environmental provisions (Von Moltke, 1994).

While the EU experience may be viewed in some respects as a “benchmark,” it remains a unique phenomenon in international society. Lessons should be drawn with some caution. The EU experience does, however, suggest that the environmental issues are complex and that the necessary responses may take several steps and a significant amount of time to develop. Any attempt to compress the entire process into a single step is likely to be fraught with great risks, as illustrated by the MAI experience.

Other regional economic agreements — notably NAFTA and Mercosur — are not designed to achieve a comparable level of integration or institutional development. Nevertheless, they may provide an appropriate forum for addressing some of the issues that link investment and sustainable development. The NAFTA provisions on investment are problematic, but they are susceptible to being improved (Von Moltke and Mann, 2001). Mercosur is modelled on the original EC Treaties and consequently has a potentially significant institutional structure. At present, Mercosur provisions on investment are cautious, keeping national governments in control of the process. They have not yet been tested (Fundacion Ambiente). NAFTA represents a development of the principles and institutions of the GATT/WTO system. It involves few innovations, and one of the most important—the investor-state dispute settlement provisions of Chapter 11—was poorly designed (Von Moltke and Mann, 2001).

In the case of both NAFTA and Mercosur, even the limited institutional provisions of the treaties have not (yet) been fully implemented. For example the trade secretariat is not a single institution but has been formed from three national secretariats. This leaves individual governments in charge, and that may be the intention. The lack of implementation creates problems, however, when specific provisions of the treaties need clarification, when common regional interests need to be articulated, and when problems arise with implementation. It also creates a significant deficit in terms of accountability, since the actions of the individual governments concerned are not reported together, and relevant information frequently cannot be accessed. An appropriate goal would therefore be an institutional structure that is less highly-developed than the European Union, but stronger than either NAFTA or Mercosur.

Investment is a significant issue for a number of MEAs, both in terms of creating economic incentives to allocate investment in the desired fashion, and to ensure that investors who follow the “rules of the game” defined by the MEA investment framework

are appropriately secure in their rights. In some instances, notably in the climate regime and in those frameworks concerned with the sustainable use of renewable resources, it may be appropriate to introduce the necessary investment provisions directly into the environmental agreement. Dispute settlement could then reflect the dual concerns of the framework (investment and sustainable development).

This approach has already been used in the General Agreement on Trade in Services (GATS) and the Energy Charter Treaty. The GATS contains modest provisions concerning investments necessary for certain “modes” of delivery of services—which are of course bolstered by the state-to-state dispute settlement system of the WTO. The Energy Charter Treaty seeks to create a legal framework for OECD energy investments in the former Soviet Union. It incorporates a full range of provisions providing protection to investors, as well as an investor/state dispute settlement procedure.<sup>8</sup> Neither approach is directly transferable to the agenda of sustainable development but both create clear precedents for sectoral approaches to investment agreements.

The multi-tiered approach outlined above responds constructively to the investment needs of sustainable development. The main objection is presumably the risk entailed in fragmenting the investment framework. The need for “universal rules” is, however, not as great for an investment regime as it is for the trade regime. Investments (at least the major productive investments) represent single, complex decisions with highly individual characteristics. While international investment flows are very large, this is the result of many case-by-case decisions, rather than the outcome of increasing or decreasing the volume of production in a process that is widely replicable. Consequently, an international investment framework must reflect the structure of the issue that it addresses, and retain the ability to make case-by-case determinations on a routine basis.

Forty years ago, the OECD adopted the Code of Liberalisation of Capital Movements and the Code of Liberalisation of Current Invisible Operations. Twenty-six years ago, it adopted the Declaration and Decisions on International Investment and Multinational Enterprises. All of these instruments have been updated.

Over the past twenty years, however, the international economy has changed beyond all recognition. At the same time, environmental issues have emerged as a major issue on the international policy agenda. By some measures, MEAs now constitute one of the largest “enterprises” in international society.<sup>9</sup> It may be time to rethink not only the details, but also the basic structure of the approach to investment agreements, and to consider whether it still meets the needs of a globalising economy with interdependent states confronting global environmental challenges.



## References

Commission of the European Communities, (1990) "The Principle of Subsidiarity," *Communication of the Commission to the Council and the European Parliament*, SEC(92) final 27.10.92.

Esty, Daniel C. (1994) *Greening the GATT*. Washington, DC: Institute for International Economics.

Fundacion Ambiente y Recursos Naturales and Instituut voor Milieuvraagstukken (IVM), *Mercosur y Ambiente*, Report to the Interamerican Development Bank. Available at [www.iadb.org](http://www.iadb.org).

Grieg-Gran, Maryann et al (1998), *Foreign Portfolio Investment and Sustainable Development. A Study of the Forest Products Sector in Emerging Markets*. London: International Institute for Environment and Development, p. vi. 23.

Halvorsen, Anita Margrethe (1999) *Equality Among Unequals in International Environmental Law. Differential Treatment for Developing Countries*. Boulder, CO: Westview Press

Johnson, Pierre Marc and André Beaulieu (1996), *The Environment and NAFTA*. Washington, DC: Island Press.

Liroff, Rich et al., *Environmental Policy in a Federal System: The United States and the European Community*. Report prepared for the Netherlands Ministry of Housing, Physical Planning and Environment (Contract DGM/ABJ no. 1439053).

Pagh, Peter (1999) "Denmark and EC Environmental Law," in: *Journal of Environmental Law*, vol. 11 no. 2, pp 303-304.

Sands, Philippe (1995) *Principles of International Environmental Law, vol I: Frameworks, Standards and Implementation*. Manchester: Manchester University Press.

Smets, Henri (1998) "Le Principe de Non-discrimination en Matière de Protection de l'Environnement." Draft manuscript, December.

UNEP, Open-ended Intergovernmental Group of Ministers or their Representatives on International Environmental Governance. See <http://www.iisd.ca/linkages/unepgc/gmef3/>.

United Nations Conference on Trade and Development (UNCTAD), *World Investment Report*. New York and Geneva: United Nations, (annual).

von Moltke, Konrad (2001) "On Clustering International Environmental Agreements". Paper for the French Ministry of Environment. July. Also at: <http://www.iiss1.iisd.ca/trade>.

von Moltke, Konrad and Howard Mann (1991), "Misappropriation of Institutions: Some Lessons from the Environmental Dimension of the NAFTA Investor-State Dispute Settlement Process," *International Environmental Agreements*, vol. 1 no. 1 (January), pp. 103-123.

von Moltke, Konrad (2000) *The Precautionary Principle, Risk Assessment and the World Trade Organisation*. Winnipeg: International Institute for Sustainable Development, 2000. Also at [www.iisd1.iisd.ca/trade/pubs](http://www.iisd1.iisd.ca/trade/pubs).

von Moltke, Konrad (1995) *International Environmental Management, Trade Regimes and Sustainability*, Winnipeg: International Institute for Sustainable Development, <http://www.iisd1.iisd.ca/trade/pubs>.

von Moltke, Konrad (1993) *Comparison of Regulatory Trends in the West and Central and Eastern Europe*. Report for the European Bank for Reconstruction and Development, London.

von Moltke, Konrad (1985) Rechtsvergleich deutsch-niederländischer Emissionsnormen zur Vermeidung von Luftverunreinigungen Teil 1: Bundesrepublik Deutschland; Teil 2: Niederlande; Teil 3: Tabellen. (Teil 1 also in Dutch: Rechtsvergelijking van duits-nederlandse emissienormen ter bestrijding van luchtverontreiniging) Bonn: Institute for European Environmental Policy. (with Fred Boerwinkel and Hubert Meiners).

von Moltke, Konrad (1977). "The Legal Basis for Environmental Policy of the European Communities". *Environmental Policy and Law*. Vol. 3.4 (December).

Young, Oran (2002) *The Institutional Dimensions of Environmental Change. Fit, Interplay, and Scale*. Cambridge, MA: MIT Press.

Young, Oran (1999a) "Towards a Theory of Institutional Change," in Oran Young, *Governance in World Affairs*. Ithaca, NY: Cornell University Press, , pp. 133-162.

Young, Oran (1999b) "Science Plan for the Project on the Institutional Dimensions of IHDP Report No. 9. Bonn: International Human Dimensions Programme on Global Environmental Change.

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### **Endnotes**

<sup>1</sup> The term "institution" is used in this paper to mean the "agreed rules of the game." In this sense, marriage is an institution, as are property rights or scientific research. "Institutions" are distinguished from "organisations," which are entities with budgets, staff and buildings. See Young, 1999a and 1999b.

<sup>2</sup> For a discussion of the underlying theory, see Young 2002.

<sup>3</sup> Public goods have three characteristics. They yield to *non-rivalrous* consumption, that is one person's use of them does not deprive others from using them. They are *non-excludable*, that is if one person consumes them it is impossible to restrict others from consuming them. They are *non-rejectable*, that is individuals cannot abstain from their consumption even if they want to. Many environmental goods—for example clean air, clear views, wildlife, and ecosystems—are public goods.

<sup>4</sup> For example the Framework Convention on Climate Change, Art 4: "All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall ... promote and co-operate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic

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emissions of greenhouse gases not controlled by the Montreal Protocol...” Article 16 of the Convention on Biodiversity deals entirely with Access to and Transfer of Technology. See, in general, on differential treatment Halvorsen 1999.

<sup>5</sup> “In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.” See also: Commission of the European Communities (1990).

<sup>6</sup> During the most recent revision of the EU Treaties in Nice in December 2000 the Commission sought to have investment included in Article 133 but this was not accepted.

<sup>7</sup> For one of the earliest critiques, see Von Moltke (1977).

<sup>8</sup> For more information about the Energy Charter see <http://www.encharter.org>.

<sup>9</sup> The Earth Negotiations Bulletin, a reporting service of IISD, provides one measure. It covers more than thirty formal sessions every year, involving over 150 days of negotiation. See <http://www.iisd.ca>.