

Towards Institutional Symbiosis: Business and the United Nations in Environmental Governance

Maria Ivanova, David Gordon and Jennifer Roy

This article analyses the potentially symbiotic role of business and the United Nations (UN) in global environmental governance. Contending that a stronger and more coherent UN in the realm of the environment is in the interest of the business community, we focus on three main issues: what the UN needs to become stronger in environmental affairs; what business could provide on this behalf; and how business could benefit from a strengthened UN. We consider the current structural dilemmas of the UN environmental system, including concerns about institutional multiplicity and how these may affect business engagement. After reflecting on perceived and actual challenges and opportunities for business participation, we conclude with three substantive solutions towards more efficient collaboration. These solutions centre on the continuation of an interactive database begun by the Global Environmental Governance Project, a joint initiative of the Yale Center for Environmental Law and Policy and the College of William and Mary.

INTRODUCTION

On 11 January 2007, the International Chamber of Commerce issued a statement that 'a strong, efficient and effective [United Nations] in . . . environmental management is central to the interests of business'.¹ Speaking on behalf of members of the business community, the association urged for greater coordination and efficiency of environmental management within the United Nations (UN). At first glance such a call may seem puzzling – why does business demand strong and effective governmental action at the international level in the area of environment? Traditionally seen as the culprit in pollution and resource depletion, business has often lobbied against regulation.² More

recently, however, with increased awareness of the interconnectedness of the planetary ecosystem and the profound impact human actions exert on the environment, business leaders from various industries and sectors have come forth with calls to governments to create the necessary regulatory frameworks and facilitate environmentally responsible behaviour on the part of business.³

A vigorous debate has emerged regarding business objectives in adopting 'green' policies, reducing environmental footprints and improving social responsibility.⁴ It has been suggested by some observers that new corporate environmental leadership may amount to no more than a desire by the firm to 'greenwash' its image by insuring reputation through projects possessing negligible environmental value.⁵ Other analysts argue that many businesses have begun greening their operations because of increased public pressure and awareness;⁶ some contend that the new policies amount to little more than business as usual;⁷ and yet

³ United Nations, *United Nations Global Compact: The Ten Principles* (UN, 2007), available at <<http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>>.

⁴ J.P. Therien and V. Pouliot, 'The Global Compact: Shifting the Politics of International Development?', 12:1 *Global Governance* (2006), 55; G. Kell, 'The Global Compact – Origins, Operations, Progress and Challenges', 11:1 *Journal of Corporate Citizenship* (2003), 35; D.C. Esty, and A. Winston, *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage* (Yale University Press, 2006); J. Bendell, 'Flags of Inconvenience? The Global Compact and the Future of the United Nations', 22 *ICCSR Research Paper Series* (2004); P. Utting, 'The Global Compact and Civil Society: Averting a Collision Course', 12:5 *Development in Practice* (2002), 644; and P. Utting, 'The Global Compact: Why All the Fuss?', 11:1 *United Nations Chronicle* (2003), 65.

⁵ W. Laufer, 'Social Accountability and Corporate Greenwashing', 43:3 *Journal of Business Ethics* (2003), 253.

⁶ R. Falkner, 'Private Environmental Governance and International Relations: Exploring the Links', 3:2 *Global Environmental Politics* (2003), 72.

⁷ C. Gregoratti, *The UN Global Compact's Growing Sustainable Business Initiative: A Critical Assessment*, paper presented at Conference on World Orders and Global Governance: New Perspectives and Challenges (University of Manchester, 19 January 2007).

¹ International Chamber of Commerce, *ICC Comment on 'Delivering as One', Report of the UN Secretary-General's High-Level Panel on System-Wide Coherence* (ICC, 2007).

² J.G. Speth, *Red Sky at Morning: America and the Crisis of the Global Environment* (Yale University Press, 2004), at 82–83 and 88.

others point out that, ultimately, operating in an environmentally sustainable way is simply good business.⁸

In fact, with operations spanning the globe, business has confronted as well as generated international environmental problems. As the only organization encompassing 192 of the world's sovereign governments,⁹ the UN is the intergovernmental forum that business expects to provide guidance for environmental concerns of global proportions. Yet, the UN has often lagged behind in delivering strong, coherent and unequivocal guidance to business in environmental management.¹⁰ As a forum for all nations, the UN has gained a reputation for consensus-building but generally has not received the same high marks for effectiveness and efficiency. Numerous experts and panels have thus called for a strengthening of the UN and its various bodies and have offered options for reform.

In this article, we seek to understand and demonstrate why and how a strengthened and renewed UN would be in the interest of both business and the environment. Our central contention is that a stronger and more coherent UN in the environmental field would benefit business in three main ways. First, a more coordinated approach among the agencies in the UN system would allow for a more targeted business contribution to specific problems, better use of scarce resources and the delivery of concrete results where most needed. Second, common standards and guidelines would give business a benchmark as well as allow for predictability in the system and for productive competition. Third, a strong, effective and efficient UN promoting and ensuring environmental sustainability would facilitate the attainment of business' fundamental goal – sustained growth. Only through sustainable use of resources and socially responsible activities can business ensure continued profitability and, ultimately, its existence. In essence, a potentially symbiotic relationship between business and the UN might hold promise of addressing global environmental concerns. Just as natural ecosystems function on the basis of cooperation, interaction and mutual dependence, so could the institutions of business and the UN with regard to the global environment.

The analysis proceeds in three steps. We begin with a summary of the main concepts and definitions. We then focus on three key questions that form the core of the inquiry: (1) what does the UN need to become a stronger and more coherent organization that could deliver on the contemporary environmental agenda? (2) What could business provide to facilitate this

process? (3) How would business benefit from the strengthening of the UN? The article concludes with a vision of some concrete actions that could promote better cooperation between the UN and the private sector.

BUSINESS, THE UNITED NATIONS AND THE ENVIRONMENT

Certain confusion exists about the core concepts in this article: business, the UN and the environment. For the purposes of this analysis, therefore, we have developed the following definitions. We use 'business' in a macro-focused fashion not denoting any particular company or sector but rather the sum of all market-based entities that provide a product or service to society. This definition also includes the fact that businesses have the capacity to regulate their processes and thus can respond to and interact with various stakeholders and government systems. This interaction may be in the form of representative organizations such as the International Chamber of Commerce or the World Business Council for Sustainable Development. While we recognize that business is not a monolithic entity – it ranges from manufacturing and industry to media, trade and services¹¹ – and that environmental impacts also occur on a sector-specific level, the business community as a whole may be affected by similar environmental challenges¹² and may develop similar strategies to address them (see figure 1). The findings in this

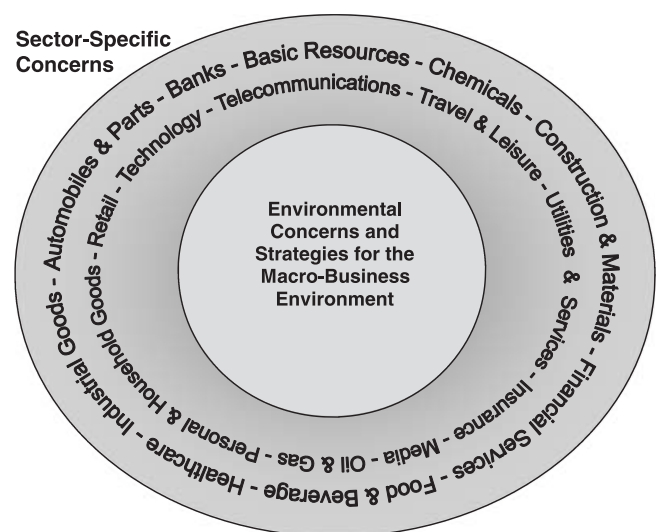


FIGURE 1

⁸ See D.C. Esty and A. Winston, n. 4 above.

⁹ The Holy See, which holds the sovereignty over the Vatican, is the only non-Member State and holds observer status since 1964.

¹⁰ J. Clapp, 'Global Environmental Governance for Corporate Responsibility', 5:3 *Global Environmental Politics* (2005), 23.

¹¹ SAM Group and Price Waterhouse Coopers, *The Sustainability Yearbook 2007* (SAM Group, 2007).

¹² Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Opportunities and Challenges for Business and Industry* (Millennium Ecosystem Assessment, 2005), available at <<http://www.millenniumassessment.org>>.

article, therefore, while on a fairly general level, may provide insights to various sectors and businesses.

When discussing the UN, we are concerned specifically with the programmes, funds, specialized agencies, treaty secretariats and the UN Secretariat, rather than the representatives of the world's governments in the General Assembly of the UN. We regard the various organizations within the UN system as relatively autonomous bodies rather than simply as the forums for or instruments of governments.¹³ For our empirical analysis, we use the 44 international organization members of the Environment Management Group of the UN (see table 2).

We conceptualize the environment as encompassing 12 specific issue areas: agriculture, air pollution, biodiversity, chemicals, climate change, desertification, energy, fisheries, forests, invasive species, trade in endangered species and water. While not an exhaustive list of all environmental issues, these areas exemplify the core concerns on the contemporary policy agenda. Table 1 provides the rationale for focusing on these 12 areas that may guide empirical research.

Contemporary environmental problems present close to insurmountable challenges to traditional forms of governance. Having evolved over time from minor nuisances (emissions from the local factory) to serious health hazards (the smog across the industrialized world) to global concerns (transboundary air and water pollution, deforestation, fisheries depletion, biodiversity loss and climate change), environmental problems span numerous jurisdictions and even the globe. Governments alone have neither the authority nor the tools to deal with such concerns, despite the serious impacts on their national citizens, economies and natural endowments. A 2006 study of air pollution in India, for example, found that millions of Indians in cities and villages were exposed to numerous dangerous chemicals, including carcinogens, some of which were present at levels 32,000 times higher than globally accepted standards.¹⁴ Even though most often such chemicals are discharged by local factories, persistent organic pollutants may travel thousands of miles and cause serious health problems far from the source of pollution.

Traditionally seen as the culprit, corporations are now considered a critical tool in solving the toughest environmental problems as they exert an impact both on

the environment and on the success of environmental protection.¹⁵ Business operations often use significant natural resources and, when environmental costs are not internalized, emit significant amounts of pollutants. Businesses also influence the formation, maintenance and disintegration of environmental regimes.¹⁶ This influence can be direct, through business lobbying on key international agreements or involvement in finding solutions to specific environmental problems such as substitutes for the ozone-depleting chlorofluorocarbons (CFCs) for example. Influence can also be indirect through the 'structural power' of large corporations in the economy or the implicit threat of relocation.¹⁷

The influence of business has indeed become so significant that, some argue, it may hold the key to addressing today's pressing environmental challenges. As Ray Anderson, Founder and Chairman of Interface Corporation, contends:

There is only one institution on earth that is large enough, powerful enough, pervasive enough, wealthy enough and influential enough to really lead humankind in a different direction; out of this mess that we created for ourselves. And that is the institution of business and industry.¹⁸

However, despite its power, the institution of business cannot on its own solve inherently global problems such as ocean pollution, ozone depletion or climate change, among others. The UN is the primary institution at the international level with the responsibility, authority and legitimacy in these matters. An effective UN organization is necessary, though not sufficient, for addressing global environmental challenges.

WHAT DOES THE UN NEED TO BECOME STRONGER IN ENVIRONMENTAL AFFAIRS?

As the only truly global intergovernmental organization, the UN possesses a high degree of legitimacy.¹⁹ Constrained by its Member States and mired in management challenges, however, the UN does not possess the requisite authority for *solving* global environmental problems. It can provide information but not act on its

¹³ For a discussion of international organizations as autonomous actors, see, e.g., M. Barnett, and M. Finnemore, *Rules for the World: International Organizations in Global Politics* (Cornell University Press, 2004).

¹⁴ Reuters, 'Indian Air is Highly Polluted, Study Finds', *New York Times* (4 June 2006), at 14.

¹⁵ E. Morgera, 'The UN and Corporate Environmental Responsibility: Between International Regulation and Partnerships', 15:1 *RECIEL* (2006), 93.

¹⁶ P. Newell, 'Business and International Environmental Governance: The State of the Art', in D. Levy and P. Newell, *The Business of Global Environmental Governance* (MIT Press, 2005), 21.

¹⁷ See J. Clapp, n. 10 above, at 24.

¹⁸ C. Dean, 'Executive on a Mission: Saving the Planet', *New York Times* (22 May 2007), section F, at 1.

¹⁹ See M. Barnett, and M. Finnemore, n. 13 above.

TABLE 1²⁰

AIR POLLUTION	AGRICULTURE	BIODIVERSITY	CHEMICALS
<p><i>Definition and significance</i> Air pollution results most often from industrial processes and carries a high economic toll especially in urban settings. Air pollution exerts direct health effects, impairs many ecosystem functions directly or as a result of acid rain, and leads to losses in production and tourism.</p>	<p>Agriculture, the process of producing food, feed, fibre and other goods by the systematic raising of plants and animals, relies heavily on the use of natural resources. As one of the largest drivers of the global economy, agriculture is also a significant contributor to pollution, soil erosion and climate change.</p>	<p>Biodiversity sustains life on Earth. Biodiversity provides fundamental ecosystem services such as water purification, nutrient cycling and climate stabilization. In addition, the protection of biodiversity and genetic resources is intricately linked to solving major diseases through new pharmaceutical discoveries.</p>	<p>To date, over 10,000 chemical compounds have been identified, including among them known carcinogens, immuno-toxins and hormone disrupters. Human-made chemical compounds have been found in even the most remote areas of every continent. Some chemicals bioaccumulate, poisoning not only human beings but also other level organisms, as in the case of birds poisoned with DDT.</p>
CLIMATE CHANGE	DESERTIFICATION	ENERGY	FISHERIES
<p><i>Definition and significance</i> Climate change is defined by the United Nations Framework Convention on Climate Change as any change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time period. Climate change is one of the most salient issues on the global agenda, cross-cutting nearly every environmental concern.</p>	<p>Desertification occurs most often as a result of human activity and climate change. The loss of productive topsoil associated with desertification reduces biomass productivity and arable land. For example, desertification removes 12 million hectares of land from production each year which could have been used to produce 20 million tons of grain.²¹</p>	<p>Energy encompasses both production and conservation measures. Energy programmes receive enormous subsidies from national governments around the world. The search for alternative energy sources is also increasing. The extraction and consumption of energy resources such as coal and oil contribute to air and water pollution, as well as increased greenhouse gas concentrations and subsequently climate change.</p>	<p>Fisheries, especially ocean fisheries, have been in rapid decline as a result of rapid technological improvements in fishing fleets. About half of the wild marine fish stocks for which information is available are fully exploited and offer no scope for increased catches. Like agriculture, fisheries provide enormous impetus to the global economy. Fisheries also provide a key source of protein for millions of people around the world, many in developing nations.</p>
FORESTS	INVASIVE SPECIES	TRADE IN ENDANGERED SPECIES	WATER
<p>Forests are classified by the level of canopy cover in an area, and any reduction of canopy cover is considered to be deforestation or degradation. Forests present an important carbon sink for greenhouse gases but are cleared at increasing rates around the world, especially so in tropical regions. Currently, there exists no international environmental organization or convention focused on forests but a large number of non-governmental organizations work exclusively in this field.</p>	<p>Invasive species have become an increased threat that represents the 'globalization of nature'.²² For example, waters in North America are heavily invaded by mollusks transported in ship ballast water tanks in a pattern corresponding to trade routes. The Great Lakes have suffered from the introduction of the zebra mussel native to the Black Sea. Similarly, the American comb jellyfish in the Black Sea has led to the destruction of 26 fish stocks.</p>	<p>Trade in endangered species encompasses the illicit dealing of protected plant and animal specimens. The international illegal trade in wildlife and wildlife products such as ivory endangers the species, which are often already threatened. Such trade also poses a security risk: transnational criminal organizations engaged in the trade of endangered species have been found also to engage in arms, narcotics and human trafficking.²³</p>	<p>Water, the most vital natural resource to human survival, is in short supply in many parts of the world. Globally, from 5% to 25% of freshwater use exceeds long-term accessible supplies and is now met either through engineered water transfers or overdraft of groundwater supplies. Water scarcity poses both a health and a security risk to numerous nations and regions as conflicts arise over water use.</p>

²⁰ M. Ivanova and J. Roy, 'The Architecture of Global Environmental Governance: The Pros and Cons of Multiplicity', in L. Swart and E. Perry, *Global Environmental Governance: Perspectives on the Current Debate* (Center for UN Reform Education, 2007).

²¹ See Millennium Ecosystem Assessment, n. 12 above.

²² *Ibid.*

²³ J. Lin, 'Tackling Southeast Asia's Illegal Wildlife Trade', *Singapore Year Book of International Law and Contributors* (2005), 191.

own accord. It can advise but not always implement.²⁴ It is divided into multiple functional bodies focusing on a specific set of problems but often also competing with each other for limited resources, staff and attention. It is thus weakened by multiplicity, unproductive competition and management difficulties²⁵ and significantly constrained by the sovereign wishes of Member States.

Ultimately, the UN needs coherence and authority in order to improve delivery on global environmental matters. Though these attributes could be granted by Member States, they also need to be gained. Coherence can come through better targeting and management of expertise and resources, and authority can come from continuous effectiveness and ability to produce results. In the current institutional set-up, the UN will hardly be able to deliver results without the active involvement of business and non-governmental organizations (NGOs). The multiplicity of institutions, however, presents a challenge to meaningful business involvement and is thus the issue we focus on in this analysis. While State constraints on the ability of the UN to implement solutions are significant, they may be at least partially overcome through effective partnerships with business and NGOs as the implementing organizations.

The number of international environmental organizations and treaties has exploded since the 1970s. In contrast to other global governance regimes such as health, trade and economic concerns, the institutional architecture for the environment possesses much less clarity and coherence at the global level. Current international cooperation in the environment exists within multiple institutions, organizations and meetings which are not necessarily linked.²⁶ No single agency has emerged as the environmental leader and centre of gravity, as an 'anchor organization'.²⁷ Instead, responsibility and activities are spread across numerous entities creating a complex maze.

Institutional proliferation has been viewed as excessive and detrimental to effectiveness, efficiency and

equity in global environmental governance.²⁸ Although organizational multiplicity has been cited by some as reflective of a productive overlap of goals and efforts,²⁹ multiplicity may also be indicative of fragmentation, conflict and inefficiency in the field of the environment.³⁰ Table 2 provides merely a snapshot of the complexity of the global environmental governance system by charting environmental organizations working in some of the most pertinent issues at this time. The table includes only organization members of the Environment Management Group, a coordinating mechanism for the environment within the UN.³¹

As table 2 illustrates, jurisdictional overlap between and among organizations in the environmental arena is the norm, not the exception. More than 20 international organizations possess significant roles in water-related issues. At least 20 international organizations are active in the chemicals regime. To the chagrin of business, the gaps, overlaps and duplication of effort lead to operational inefficiency and inconsistencies. Moreover, institutional fragmentation and duplication act as obstacles in the effort to engage effectively the business community in environmental governance. In a 2007 statement, the International Chamber of Commerce recognized an overall need for 'coherence and efficiency through the elimination of fragmentation and duplication of effort' which has currently limited the ability of both business and the UN to engage with each other.³²

Incompatibilities in organizations' goals or actions resulting from extensive multiplicity³³ is especially troublesome to business when it leads to incongruities

²⁴ See M. Karns and K. Mingst, *International Organizations: The Politics and Processes of Global Governance* (Lynne Rienner Publishers, 2004).

²⁵ United Nations High-Level Panel on System Wide Coherence, *Delivering as One: Report of the Secretary General's High Level Panel on System-Wide Coherence* (UN, 2006), available at <<http://www.un.org/events/panel/resources/pdfs/HLP-SWC-FinalReport.pdf>>; Report of the Secretary-General of the United Nations, *In Larger Freedom: Towards Development, Security, and Human Rights for All* (A/59/2005, September 2005).

²⁶ World Trade Organization, *Trade and Environment: Special Studies 4* (WTO, 1999).

²⁷ M. Ivanova, *Can the Anchor Hold? Rethinking the United Nations Environment Programme for the 21st Century* (Yale School of Forestry & Environmental Studies, 2005).

²⁸ S. Charnovitz, 'Toward a World Environment Organization: Reflections upon a Vital Debate', in F. Biermann and S. Bauer, *A World Environment Organization* (Ashgate, 2005), 87; M. Ivanova and J. Roy, n. 14 above; E. Nowotny, Opening Statement of Ambassador Eva Nowotny at UNEO Seminar (Georgetown University, 29 June 2006); and E. Berruga, and P. Maurer, Co-Chair's Summary of the Informal Consultative Process on the Institutional Framework for the UN's Environmental Activities (27 June 2006).

²⁹ S. Oberthur and T. Gehring, 'Reforming International Environmental Governance: An Institutionalist Critique of the Proposal for a World Environment Organization', 4:4 *International Environmental Agreements* (2007), 359; A. Najam, 'The Case Against GEO, WEO, or Whatever-else-EO', in D. Brack and J. Hyvarinen, *Global Environmental Institutions: Perspectives on Reform* (Royal Institute of International Affairs, 2002); A. Najam, 'The Case Against a New International Environmental Organization', 9:3 *Global Governance* (2003), 367.

³⁰ See S. Charnovitz, n. 28 above; D.C. Esty, 'The Case for a Global Environmental Organization', in P. Kenen, *Managing the World Economy: Fifty Years After Bretton Woods* (Institute for International Economics, 1994), 287.

³¹ Global Environmental Governance Project, *Issue Area Involvement Database* (GEG Project, 2006), available at <<http://www.environmentalgovernance.com>>.

³² See ICC, n. 1 above, at 1.

³³ See S. Oberthur and T. Gehring, n. 29 above.

TABLE 2 INTERNATIONAL ORGANIZATIONS AND TREATY SECRETARIATS ACTIVE IN ENVIRONMENTAL ISSUES

	AGRICULTURE	AIR POLLUTION	BIODIVERSITY	CHEMICALS	CLIMATE CHANGE	DESERTIFICATION	ENERGY	FISHERIES	FORESTS	INVASIVE SPECIES	TRADE IN ENDANGERED SPECIES	WATER
International Organizations and Major Treaty Secretariats ³⁴	UNCCD	CSD	Cartagena	CSD	CBD	CBD	CSD	CBD	CBD	CBD	CBD	CBD
	CSD	ECE	Protocol	ECE	CSD	CSD	ECLAC	CITES	CSD	FAO	CITES	CSD
	ECA	ECLAC	CBD	FAO	ESCAP	UNCCD	GEF	CSD	GEF	GEF	Interpol	Ramsar
	FAO	ESCAP	CITES	GEF	ESCWA	ECA	IAEA	FAO	FAO	GISP	IUCN	ECA
	IFAD	ESCWA	CMS	IAEA	GEF	ESCAP	IEA	ILO	IFAD	IMO	UNEP	ECE
	ILO	GEF	Ramsar	IFAD	ICAO	FAO	UNDP	IMO	ITTO	IUCN		ESCAP
	ITC	ICAO	ECA	ILO	IEA	GEF	UNEP	ITLOS	IUCN	UNEP		ESCWA
	ITU	ILO	ECLAC	IMO	IPCC	IFAD	UPU	WTO	UNEP	WTO		GEF
	IUCN	OECD	ESCAP	OECD	ISDR	ISDR	World Bank	UNEP	UNFF			IMO
	OCHA	OHCHR	ESCWA	OHCHR	OECD	ITU		WTO	UNHCR			ITU
	OSS	UNEP	FAO	SBC	UNCTAD	OECD			World Bank			UNDP
	UNCTAD	UN-HABITAT	GEF	UNCTAD	UNDP	OCHA			Bank			UNEP
	UNDP	WHO	IUCN	UNDP	UNEP	UNDP			WTO			UNESCO
	UNEP	World Bank	UNDP	UNEP	UNESCO	UNEP						UNFPA
	World Bank	WMO	UNEP	UN-HABITAT	UNFCCC							UNICEF
	WTO		UNESCO	UNHCR	UNITAR							UNU
			UNU	UNICEF	WHO							WHO
			WIPO	UNIDO	WMO							WMO
			World Bank	UNITAR	World Bank							World Bank
			WTO	WFP	WTO							WWC
			WHO									
			WMO									
			WTO									

in international law, hindering its credibility and coherence and confusing potential business partners.³⁵ Incompatibility and conflict is also evident in private governance schemes that have emerged when inter-governmental mechanisms have not been devised, as in the area of forests, for example. Several certification programmes for sustainably harvested timber exist, including the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI), and base their certifications on different guidelines and requirements.

For example, while the SFI allows the use of genetically modified organisms, the FSC bans genetically modified timber.³⁶

The explosion in the number of stakeholders demands a company's attention and increases the difficulty of effective engagement. However, the factors which limit engagement stem from more than the complex web of organizations and conventions. Businesses sometimes conflict over global environmental governance objectives and design. For example, US energy and car companies initially responded to the climate change threat by lobbying against regulation, while similar industries in Europe began investing in

³⁴ Please see table 3 at the end of this article for a key to all of abbreviations in table 2.

³⁵ K. Raustiala and D.G. Victor, 'The Regime Complex for Plant Genetic Resources', 58:2 *International Organization* (2004), 277; S. Andresen, 'Global Environmental Governance: UN Fragmentation and Co-ordination', in O.S. Stokke and O.B. Thommessen, *Yearbook of International Co-operation on Environment and Development* (Earthscan Publications, 2001).

³⁶ Meridian Institute, *Comparative Analysis of the Forest Stewardship Council and Sustainable Forestry Initiative Certification Programs* (Meridian Institute, 2001), available at <http://www2.merid.org/comparison/FSC_SFI_Comp_Analysis-Exec_Summary.pdf>.

alternative technologies.³⁷ The Montreal Protocol on ozone depleting substances,³⁸ originally opposed by leading chemical firms, was eventually supported by DuPont and subsequently by other companies, a fact often cited as a major reason for its success.³⁹ Conflicts on environmental impacts and strategy weaken the ability of businesses to speak in a uniform voice and request a specific policy when engaging in environmental politics.⁴⁰ In addition, the UN's current institutional capacities generally confine progress on environmental involvement to large companies. Achievements accomplished with these businesses often trump any progress made by small and medium-sized business because 'small companies often lack the knowledge and resources to make significant changes in their organization or technologies'.⁴¹

Cooperation between the UN and the business community usually takes three major forms: (1) projects with individual companies; (2) projects with trade and industry associations; and (3) voluntary initiatives with specific industry sectors.⁴² As UN bodies work toward increasingly engaging the private sector into their activities, partnerships with business are likely to increase. Many of the current partnerships, however, focus on matching business and government on very specific concerns and less on the macro issues of how businesses may learn about and become involved in global environmental governance or how these institutions may better involve businesses in the overall goal of environmental improvement. If industry-wide and UN-wide cooperation is required for true environmental advances to be made, an overall approach towards business partnership needs to be developed. Such an approach should provide a coherent framework, assemble best practices and promote concrete results alongside systemic learning.

WHAT CAN BUSINESS PROVIDE TO HELP THE UN BECOME STRONGER?

The UN is positioned to be an indispensable partner, tool and resource for business. In a 2005 statement, Kofi Annan, then UN Secretary-General, noted that

'the business community is increasingly appreciative of the role of the UN', especially in promoting peace and security; setting standards in areas such as trade, shipping, aviation, telecommunications and postal services; and tackling pressing issues of poverty, environmental degradation and social conflict. The actions of the UN provide a 'stable and favorable framework for business and development'.⁴³ For example, reducing poverty helps build healthy workforces and eases social tensions, increasing productivity and demand for business. A report of the UN Joint Inspection Unit comes to the same conclusion: business is aware and would like to take advantage of the 'favourable environment for the activities of the private sector' that the UN provides.⁴⁴

Concrete, result-driven collaborations with business can, in turn, lead to a strengthened UN through: (1) effective partnerships that deliver results at the local level; (2) improved economic and technical expertise within the UN system when business is engaged as a knowledge-broker; and (3) an increased authority for the UN as a result of wide participation and effectiveness.

While business has acknowledged that fragmentation and duplication of effort are problematic within the UN system for the environment,⁴⁵ it has accepted an increasingly important role as a partner to many of the UN organizations.⁴⁶ The World Summit on Sustainable Development in Johannesburg in 2002 confirmed this new governance approach – partnerships between international organizations, governments, industry and NGOs to translate principles into projects. Even though at the time of the World Summit on Sustainable Development in Johannesburg, UN-business partnerships were already well established – the UN Fund for International Partnerships (UNFIP) hosted 311 partnership projects in 122 nations worth US\$594 million in the decade 1994–2004⁴⁷ – the Summit solidified support for such arrangements and encouraged additional partnerships, which have increased in number and scope.⁴⁸

The rationale for partnerships stems from the realization that global problems often require global solutions and the involvement of all sectors of society – governments, NGOs, international organizations and business. With a set of complementary expertise, authority and

³⁷ See P. Newell, n. 20 above.

³⁸ Montreal Protocol on Substances that Deplete the Ozone Layer to the Vienna Convention for the Protection of the Ozone Layer (Montreal, 16 September 1987).

³⁹ See P. Newell, n. 20 above.

⁴⁰ See R. Falkner, n. 6 above.

⁴¹ World Resources Institute, 'Are Business and Industry Taking Sustainability Seriously?', in WRI, *World Resources 1998–1999* (World Resources Institute, 1999), at 4.

⁴² UNEP, *Guidelines on Co-operation Between the United Nations Environment Programme and Business* (UNEP, 2004), available at <<http://www.uneptie.org/Outreach/home/Pub-Priv-SG-Guidelines-UNEPversionFINAL.pdf>>.

⁴³ United Nations, Secretary-General's address to meeting on 'The Business Contribution to the Millennium Development Goals' (14 June 2005), available at <<http://www.un.org/apps/sg/sgststats.asp?nid=1508>>.

⁴⁴ F. Mezzalana and L. Ouedraogo, *Private Sector Involvement and Cooperation with the United Nations System: Report of the Joint Inspection Unit* (UN, 1999).

⁴⁵ See ICC, n. 1 above.

⁴⁶ *Ibid.*

⁴⁷ See P. Newell, n. 20 above.

⁴⁸ See J. Clapp, n. 10 above.

resources, it is assumed that previously intractable problems may become less ominous. Partnering with business is said to bring technology, investment, or organizational and managerial skills.⁴⁹ Partnering with government can provide investment in infrastructure and public services that may be unattractive to private firms working alone.⁵⁰ Non-governmental and international organizations, on the other hand, provide meaningful involvement at the local and the global level, pressure for accountability and a source of legitimacy.

Just as working with the UN opens opportunities for businesses to tap previously unknown resources, UN–business involvement offers new supply networks, new monetary resources and new sources of legitimacy to UN agencies. Some have posited that today’s business partnerships stem from a strategic move at the turn of the millennium to revitalize UN efficiency, effectiveness and reputation.⁵¹ Partnerships are perceived as separate from the bureaucracy of the organization, and therefore may be considered to be more efficient than the UN’s own work.⁵² Partnerships with the private sector became especially attractive during a time of budgetary and political crisis within the UN, especially with the withdrawal of US funding commitments in the 1990s. At the time, Kofi Annan began actively to seek close cooperation with business and civil society as an integral part of UN reform. The importance of business to the UN continues to be a vital component of UN reform due to the influence, practical expertise and reach of businesses globally. Business involvement in the UN has been emphasized as a critical tool for the organization in the recent *Delivering as One* report of the High-Level Panel on UN System-Wide Coherence.⁵³

While the creation and perpetuation of partnerships is notable, their success to date is questionable. In fact, partnerships are seriously struggling across three critical dimensions – representation, accountability and effectiveness.⁵⁴ Rather than broadening global relations and involving multiple stakeholders as intended, most partnerships consist of a narrow group of stakeholders mirroring already existing relationships. And rather than encouraging the privatization of environmental governance, partnerships are reasserting governmental

authority. For example, as of 2005, the private sector was involved in only 20% of the 311 registered partnerships and led only 2%. Instead, Organization for Economic Cooperation and Development (OECD) nations’ governments led 33%, western-based international NGOs 35% and international organizations 26%.⁵⁵ Moreover, the effectiveness of these arrangements is in doubt. In 2005, only 59 of the 311 partnerships had submitted progress reports and only 1% of those had reported that they had met their goals. Effectiveness in the broader environmental sense is seriously inhibited by a disconnect between the partnerships and international environmental agreements.⁵⁶ Without specific guidelines and governance arrangements, no scaling up of results is possible even if partnerships are successful at the local level.

HOW CAN BUSINESS BENEFIT FROM STRENGTHENING THE UN?

The UN is simultaneously an instrument, an arena and an actor in the eyes of business.⁵⁷ As an instrument of States for provision and maintenance of global public goods, the UN crafts guidelines and legal norms as well as incentives for business. As an arena, the UN is the most representative assembly for discussion and consensus on issues of importance to international business. As an actor, the UN plays the role of full-fledged partner or semi-autonomous financier of environmental and business projects.

A stronger and more coherent UN in the environmental field carries a number of benefits for business and for the environment. First, a more coordinated approach among the agencies in the UN system would allow for a more targeted business contribution to specific problems, better use of scarce resources and the delivery of concrete results where most needed. Second, common standards and guidelines would give business a benchmark as well as allow for predictability and productive competition. Third, a strong, effective and efficient UN promoting and ensuring environmental sustainability would facilitate the attainment of business’ ultimate goal – sustained growth.

⁴⁹ A. Zammit, *Development at Risk: Rethinking UN-Business Partnerships* (UNRISD, 2003).

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² K. Buse and G. Walt, ‘The World Health Organization and Global Public–Private Health Partnerships: In Search of “Good” Global Health Governance’, in M.R. Reich, *Public–Private Partnerships for Public Health* (Harvard Center for Population and Development Studies, 2002).

⁵³ See United Nations, n. 25 above.

⁵⁴ K. Bäckstrand, ‘Multi-Stakeholder Partnerships for Sustainable Development: Rethinking Legitimacy, Accountability and Effectiveness’, 16:5 *European Environment* (2006), 290.

⁵⁵ K. Bäckstrand, *Accountability and Legitimacy of Networked Governance*, paper presented at the 2005 Berlin Conference on the Human Dimensions of Global Environmental Change (Berlin, 2–3 December 2005), at 13–14.

⁵⁶ Ibid.; L.B. Andonova, *International Institutions, Inc: The Rise of Public–Private Partnerships in Global Governance*, paper presented at the 2005 Berlin Conference on the Human Dimensions of Global Environmental Change (Berlin, 2–3 December 2005).

⁵⁷ M. Ivanova, ‘Partnerships, International Organizations, and Global Environmental Governance’, in J.M. Witte *et al.*, *Progress or Peril? Partnerships and Networks in Global Environmental Governance: The Post-Johannesburg Agenda* (Global Public Policy Institute, 2003).

Only through sustainable use of resources and socially responsible activities can business ensure continued profitability and even existence.

The representative nature of the UN offers business an opportunity to be part of an overall system of co-operation in order to meet ecosystem challenges. Beginning in the 1990s, business representatives have been invited to observe as well as contribute to debates at global conferences which have served to shape the current agenda of the UN.⁵⁸ In a sense, business was able to transition from the role of 'rule taker' to a 'rule maker' involved in the crafting of policy. Advocacy groups such as the World Business Council for Sustainable Development and the International Chamber of Commerce have also increased the visibility and influence of business in international forums.⁵⁹ By directly engaging in the activities of the UN, business can mobilize the implementation of new technology as well as increase the creativity and global reach of environmental solutions.⁶⁰ Indeed, the majority of partnerships funded by the UN Fund for International Partnerships are pairings of businesses with agencies that have broad technical mandates, such as the World Health Organization (WHO), UN Children's Fund (UNICEF) and UN Development Programme (UNDP) and possess the capacity to conduct operational activities and yield tangible results for both the UN and their partnering businesses.⁶¹

Cooperation with the UN's regulatory and legislative side may also include access and participation in UN meetings that provide insight into emerging environmental trends. Access to up-to-date environmental information extends the shadow of the future and reduces the 'stroke of the pen' risk of sudden new regulation.⁶² Information from and partnerships with the UN also open the door for business access to new and emerging markets and opportunities. Businesses have been quick to realize the potential gains from prospective UN actions. For example, the emergence of climate change as an environmental threat high on the international agenda offered business incentives to react with innovation in the face of potential regulation. Businesses such as BP, Hydro Quebec and Daimler-Chrysler have worked together to establish one of several funds within the global carbon trading market, which is projected to increase from over US\$300 million in 2003 to between US\$10 to 40 billion by

2010.⁶³ In the past two decades, businesses have even demanded leadership roles in the creation and realization of environmental regimes, notably climate change and ozone protection. For example, in the most widely cited success story in global environmental governance, international manufacturer DuPont offered an alternative to ozone-depleting substances, CFCs, fundamentally influencing the effectiveness of the Montreal Protocol and the subsequent reversal of the ozone hole. Businesses have also been integral in the creation of the Clean Development Mechanism of the Kyoto Protocol for climate change.⁶⁴

Some of the most compelling reasons for business to work with the UN are predictability and the establishment of rules and norms. Rules that secure property, investment, and intellectual and scientific discoveries are requisite for markets to perform effectively and corporations benefit from a 'global partner to fashion the norms and regulations of this new world order'.⁶⁵ Common regulation would benefit business, whose leaders often bemoan the inefficiency of creating technologies and products under different specifications for different countries or regions.⁶⁶ A similar trend occurred at the national level in the USA in the late 1960s and early 1970s when car manufacturers previously opposed to any regulation lobbied for uniform federal standards to replace the widely divergent State emission standards.⁶⁷ Additionally, current debates on carbon emissions within the USA exhibit a similar rationale. Corporations in America have begun to lobby the federal government for a nationwide system regarding carbon emissions as companies view coping with the emerging patchwork of State controls much more difficult.⁶⁸

As an international body, the UN has the capacity to create a level playing field for business with common frames of scientific understanding as well as common policy goals. While it is not a global regulatory body and cannot produce binding regulation, the UN can set the benchmarks and frameworks through guidelines, information and quality policy assessments. This

⁵⁸ See F. Mezzalama and L. Ouedraogo, n. 44 above.

⁵⁹ J. Clapp, 'Transnational Corporations and Global Environmental Governance', in P. Dauvergne, *Handbook of Global Environmental Politics* (Edward Elgar, 2003).

⁶⁰ See E. Morgera, n. 19 above.

⁶¹ L. Andonova, *International Organizations as Entrepreneurs of Public-Private Cooperation*, paper presented at the Forty-Eighth Annual ISA Convention (Chicago, 28 February-3 March 2007).

⁶² See D.C. Esty and A. Winston, n. 4 above, at 71.

⁶³ See Millennium Ecosystem Assessment, n. 12 above; D. Levy, 'Business and the Evolution of the Climate Regime: The Dynamics of Corporate Strategies', in D. Levy and P. Newell, *The Business of Global Environmental Governance* (The MIT Press, 2004), 73.

⁶⁴ See D. Levy, *ibid.* See Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 11 December 1997), Article 12.

⁶⁵ R. Helmke and S. Tesner, *Partnering with the Private Sector: The Return of the UN-Business Partnership*, lecture at New York University (30 October 2000), available at <<http://www.nyu.edu/classes/UNcourse/fall00/additionalrdgs/speakernotes/foreignaffairswithbibliooct30.doc>>.

⁶⁶ 'Everybody's Green Now', 383:8531 *The Economist* (2 June 2007), at 6.

⁶⁷ D. Vogel *et al.*, 'Environmental Federalism in the European Union and the United States', in F. Wiken *et al.*, *Handbook of Globalization and National Environmental Policy: National Government Interventions in a Global Arena* (Edward Elgar Publishing, 2003).

⁶⁸ See 'Everybody's Green Now', n. 66 above.

standard-setting role of the UN is becoming increasingly important as companies extend their work and their products across borders and would come to demand increased accountability from their peers, as well as from host governments. However, auditing and sanctions for non-compliance are rarely used in inter-governmental forums within the UN, despite their use within private governance arrangements in areas such as forest certification and management.⁶⁹

Working with the UN can also be directly beneficial economically to business. For example, partnerships with international organizations can increase a firm's geographical representation and open it to new customer networks.⁷⁰ A figure from 1999 estimates the value of business opportunities emanating from the UN system and the development banks as close to US\$30 billion annually.⁷¹ Additionally, legitimate partnerships can protect and enhance a company's valuable image.⁷² Maintaining or improving a firm's intangible (not book) value is indeed a priority for many of today's business leaders. For example, BP's US\$200 million investment in its 'Beyond Petroleum' re-branding campaign generated an estimated gain of over US\$3 billion in brand value.⁷³ Intangible value builds trust in a company and plays a role in attracting good workers.⁷⁴ The value of brand name and other intangibles can be staggering: of Coca-Cola's US\$115 billion worth, US\$100 billion is intangible value.⁷⁵ Partnerships with UN agencies that serve to enhance a firm's 'green' or 'socially responsible' reputation could certainly yield similar favourable results to business.

Ultimately, business' goal is sustainable growth and profitability. What a strong UN could provide is not only a platform for business influence that has been viewed critically by many NGOs, but a means for meaningful engagement in preserving the very resources that would ensure our societies' and thus business' continued existence. As Kofi Annan argued, 'at a time when businesses spend much of their time fighting the perception that they are responsible for many of the world's ills, playing a stronger role in the fight against poverty would show that business can be part of the solution'.⁷⁶ The same is true in the environmental field. The challenge, however, is for business to understand the complex maze of institutions in the UN system and contribute to the delivery of concrete results.

CONCLUSION

Analysts have called our reality, the 'engagement era', where governments, business and NGOs realize their inability to solve the environmental, economic and social issues inherent in achieving sustainable development through individual action alone.⁷⁷ In addition, technological innovation, which has amplified transparency across the board, has made it difficult for corporations to hide the deleterious impacts of production processes. More corporations now understand the need to earn the right to operate,⁷⁸ which requires interacting with various stakeholder groups. They are also aware that cooperation can align international political frameworks with long-range business investment cycles in addition to reducing uncertainty for investments with environmental impacts.⁷⁹ However, despite the realities of the engagement era and a clear need to work in collaborative arrangements, the vast majority of businesses remain unengaged.⁸⁰

Various organizations – business, NGOs and international organizations – agree on a future role of business as part of an overall system of cooperation to address ecosystem challenges. The WBCSD suggests that successfully addressing our contemporary environmental predicament 'depends on scientists and business strategists with different world views developing shared perspectives and research'.⁸¹ An analysis by the World Resources Institute (WRI), UN Environment Programme (UNEP) and WBCSD conveys that environmental improvement through business contribution will only come through the cooperation between environmental interests and company objectives.⁸² The World Trade Organization also contends that to engage businesses in a more holistic fashion, 'the way forward . . . is to *strengthen the mechanism and institutions for multilateral environmental cooperation*'.⁸³ Strengthening multilateral environmental cooperation will require purposeful engagement from all actors where workable global frameworks and standards will form.⁸⁴

Building awareness and fostering cooperation will require effort from both business and government. However, without a sound understanding of the

⁶⁹ See P. Newell, n. 20 above.

⁷⁰ See A. Zammit, n. 49 above.

⁷¹ See United Nations, n. 25 above.

⁷² J. Richter, *Engineering of Consent: Uncovering Corporate PR Strategies*, Briefing No 6 (The Cornerhouse, 1998).

⁷³ See D.C. Esty and A. Winston, n. 4 above, at 135–137.

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*, at 154.

⁷⁶ See United Nations, n. 43 above.

⁷⁷ Stakeholder Research Associates Canada Inc., *The Stakeholder Engagement Manual Volume 1: The Guide to Practitioners' Perspectives on Stakeholder Engagement* (Alcan Inc., 2005), at 18.

⁷⁸ Schulich School of Business, *Sustainable Enterprise Academy: Report on the Seventh Business Leader Seminar* (Schulich School of Business at York University, 2004).

⁷⁹ WBCSD, *Policy Directions to 2050: A Business Contribution to the Dialogues of Cooperative Action* (WBCSD, 2007).

⁸⁰ See Stakeholder Research Associates Canada Inc., n. 77 above.

⁸¹ See WBCSD, n. 79 above, at 16.

⁸² WRI, UNEP and WBCSD, *Tomorrow's Markets: Global Trends and their Implications for Business* (WRI, 2006).

⁸³ See WTO, n. 26 above, at 7.

⁸⁴ WBCSD, *From Challenge To Opportunity: The Role of Business in Tomorrow's Society* (WBCSD, 2002).

TABLE 3 ABBREVIATIONS

Cartegema Protocol	Cartegena Protocol on Biosafety		
CBD	Convention on Biological Diversity	UNCCD	United Nations Convention to Combat Desertification
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	UNCTAD	United Nations Conference on Trade and Development
CMS	Convention on Migratory Species	UNDESA/DSD	United Nations Department of Economic and Social Affairs, Division for Sustainable Development
CSD	Commission on Sustainable Development		
ECA	Economic and Social Commission for Africa	UNDP	United Nations Development Programme
ECE	United Nations Economic Commission for Europe	UNEP	United Nations Environment Programme
ECLAC	Economic and Social Commission for Latin America and the Caribbean	UNESCO	United Nations Educational, Scientific and Cultural Organization
ESCAP	Economic and Social Commission for Asia and the Pacific	UNFCCC	United Nations Framework Convention on Climate Change
ESCWA	Economic and Social Commission for West Asia	UNFF	United Nations Forum on Forests
		UNFPA	United Nations Population Fund
FAO	Food and Agriculture Organization	UN-HABITAT	United Nations Human Settlements Programme
GEF	Global Environment Facility	UNHCR	United Nations High Commissioner for Refugees
GISP	Global Invasive Species Programme		
IAEA	International Atomic Energy Agency	UNICEF	United Nations Children's Fund
ICAO	International Civil Aviation Organization	UNIDO	United Nations Industrial Development Organisation
IEA	International Energy Agency		
IFAD	International Fund for Agricultural Development	UNITAR	United Nations Institute for Training and Research
ILO	International Labour Organization	UNU	United Nations University
IMO	International Maritime Organization	UPU	Universal Postal Union
IPCC	Intergovernmental Panel on Climate Change		
ISDR	United Nations International Strategy for Disaster Reduction	WFP	World Food Programme
ITC	International Trade Centre	WHO	World Health Organization
ITU	International Telecommunications Union	WIPO	World Intellectual Property Organization
OCHA	Office for the Coordination of Humanitarian Affairs	WMO	World Meteorological Organization
OECD	Organization for Economic Cooperation and Development		
OHCHR	Office of the High Commissioner for Human Rights	World Bank	The World Bank Group
OSS	Sahara and Sabel Observatory		
Ramsar	Ramsar Convention on Wetlands	WTO	World Trade Organization
SBC	Secretariat of the Basel Convention	WWC	World Water Council

current global environmental governance structure and how its systems relate to business involvement in environmental affairs, progress will at best be haphazard. We therefore see three concrete undertakings as steps toward the more meaningful engagement of business in international environmental affairs in collaboration with the UN.

First, mapping the environmental governance system of organizations active across the 12 environmental

issue areas outlined in the beginning of this article will highlight the pros and cons of multiplicity. A database of international organizations active in environmental issues has already been launched by the Global Environmental Governance Project.⁸⁵ This initiative seeks to

⁸⁵ See Global Environmental Governance (GEG) Project, *International Organization Environmental Issue Area Involvement* (GEG Project, undated), available at <<http://www.environmentalgovernance.com/database>>.

clarify and comprehend the roles, responsibilities and resources of three core groups of actors in global environmental governance: international environmental organizations and conventions, development banks and organizations, and other UN agencies and large NGOs. Only with such an understanding can the competing propositions that fragmentation is a sign of duplication or complementarity be tested. The assessment would reveal institutions' comparative advantages, highlight the current division of labour and enable the development of reform proposals grounded in fact rather than fable.

Second, mapping business involvement across the same environmental issues will reveal areas with significant business undertakings and areas with little business engagement. These new data may be utilized by both businesses and policy makers to enhance the effectiveness of the current environmental governance system. The business community will be able to note environmental areas of concern and discover opportunities for participation by referencing institutions where opportunities for contribution exist. Policy makers can highlight issue areas in need of greater business engagement and opportunities for collaboration amongst organizations with varying methods of business involvement. Broadly, the data will clarify the role business currently plays in the global environmental governance system to reveal what its role may be in the future. These conclusions will enhance business engagement based on concrete knowledge of where improvement remains necessary, where business initiatives may collaborate and where involvement overlaps.

Third, connecting the two databases of international organizations and business involvement in environmental governance will reveal a more complete and accurate picture of the contemporary institutional landscape. By analysing engagement across three dimensions – operational, analytical and normative work – multiplicity problems can be untangled. For example, business is most often engaged in operational activities: i.e. 'on the ground' actions such as the implementation of projects or the provision of services in specific localities. International organizations are usually in charge of analytical and normative activities such as research, monitoring, assessment and analysis, as well as the formulation of new norms, rules, standards, guidelines and policies. Findings from a study of the activities of business and international organizations in biodiversity, climate change, water, or chemicals, among others, would provide information on business partnering schemes to both business and policy makers, and foster more effective partnerships. The approach will also provide a broad view of the strengths and weaknesses of current methods to business involvement throughout the environmental issue areas, thus increasing the ability to improve business cooperation in this field.

An understanding of the complete picture of the current global environmental governance architecture will assist the UN in initiating more productive partnerships with business. Provided with a comprehensive map of the system, executives of corporations may be able to overcome 'standards fatigue' or the confusion concerning the tools and standards and how they may be applied or related.⁸⁶ Availability and accessibility of the right information will be key elements in the creation of a stronger governance system and a better environment.

Dr Maria Ivanova is Assistant Professor of Government and Environmental Policy at the College of William and Mary and the Director of the Global Environmental Governance Project (<<http://www.environmentalgovernance.com>>). A Bulgarian national, Dr Ivanova holds graduate degrees in international relations and environmental policy from Yale University. She has worked at the Environment Directorate of the Organization for Economic Cooperation and Development (OECD) in Paris and at the Swedish Environmental Protection Agency in Stockholm on water quality standards and environmental regulatory reform in Russia. Her research focuses on the development and performance of the international environmental architecture and on climate change. She is the co-editor of *Global Environmental Governance: Options and Opportunities* (with Daniel Esty) and author and co-author of articles and chapters on governance, globalization and the environment.

David Gordon is a research assistant for the Global Environmental Governance Project and a student at the College of William and Mary. His current work under a Mellon Foundation Scholarship focuses on business participation in global environmental governance. David studies both business and environmental management and through his work with the Global Environmental Governance Project participated at the twelfth session of the Conference of the Parties at the UN Framework Convention on Climate Change in Nairobi in 2006.

Jennifer Roy is a research assistant for the Global Environmental Governance Project and a student at the College of William and Mary. In the course of her studies in public policy and environmental management, Jennifer has analysed a wide range of topics, including the effectiveness of the UN Convention to Combat Desertification, the global challenge of fisheries depletion and institutional multiplicity in international environmental governance. Through her work with the Global Environmental Governance Project, Jennifer participated at the twelfth session of the Conference of the Parties of the UN Framework Convention on Climate Change in Nairobi in 2006 and followed the informal consultations on international environmental governance at the UN General Assembly in January 2007.

⁸⁶ E. Ligteringen and S. Zadek, *Executive Briefing: The Future of Corporate Responsibility Codes, Standards and Frameworks* (Global Reporting Initiative, 2005).