

2010

Eleventh Annual Grotius Lecture Series: Focusing on the Good or the Bad: What Can International Environmental Law Do to Accelerate the Transition Towards a Green Economy?

Achim Steiner

Follow this and additional works at: <http://digitalcommons.wcl.american.edu/auilr>



Part of the [Environmental Law Commons](#), and the [International Law Commons](#)

Recommended Citation

Steiner, Achim. "Focusing on the Good or the Bad: What Can International Environmental Law Do to Accelerate the Transition Towards a Green Economy?" *American University International Law Review* 25 no. 5 (2010): 843-875.

This Article is brought to you for free and open access by the Washington College of Law Journals & Law Reviews at Digital Commons @ American University Washington College of Law. It has been accepted for inclusion in *American University International Law Review* by an authorized administrator of Digital Commons @ American University Washington College of Law. For more information, please contact fbrown@wcl.american.edu.

**ELEVENTH ANNUAL GROTIUS LECTURE
SERIES**

**“FOCUSING ON THE GOOD OR THE BAD:
WHAT CAN INTERNATIONAL
ENVIRONMENTAL LAW DO TO
ACCELERATE THE TRANSITION TOWARDS A
GREEN ECONOMY?”***

ACHIM STEINER**

* Delivered to the 103rd Annual Meeting of the American Society of International Law, Eleventh Annual Grotius Lecture Series, Washington, DC, March 25, 2009.

** United Nations Under-Secretary General, UNEP Executive Director and Director-General of the United Nations Office at Nairobi. Acting on the nomination of Secretary-General Kofi Annan, the UN General Assembly in 2006 unanimously elected Achim Steiner as the Executive Director of UNEP for a four-year term. He became the fifth Executive Director in UNEP's history. At its 83rd plenary meeting in 2010, the UN General Assembly, on the proposal of the Secretary-General Ban Ki-moon, re-elected Mr. Achim Steiner as Executive Director of the United Nations Environment Programme for another four-year term. In 2009, the Secretary-General also appointed Mr. Steiner as Director General UNON which provides the administrative, conference, security and logistics services to the UN family in Kenya, which hosts offices and projects of more than 60 UN agencies, Funds and Programmes, and over 5,000 staff. Before joining UNEP, Mr. Steiner served as Director General of the World Conservation Union from 2001 to 2006, and prior to that as Secretary General of the World Commission on Dams. His professional career has included assignments with governmental, non-governmental and international organizations in different parts of the world. He worked both at grassroots level as well as at the highest levels of international policy-making to address the interface between environmental sustainability, social equity and economic development. Mr. Steiner, a German and Brazilian national, was born in Brazil in 1961. His educational background includes a BA from the University of Oxford as well as an MA from the University of London with specialization in development economics, regional planning, and international development and environment policy. He also studied at the German Development Institute in Berlin as well as the Harvard Business School. He serves on a number of international advisory boards, including the China Council for

OPENING REMARKS	844
I. WHAT IS A GREEN ECONOMY? WHAT DOES IT MEAN AND WHAT ARE THE ELEMENTS?	845
II. THE GLOBAL GREEN NEW DEAL AND THE GREEN ECONOMY	848
III. EVOLUTION OF INTERNATIONAL ENVIRONMENTAL LAW	851
IV. THE MONTEVIDEO PROGRAMMES 1982-2009: EVOLUTION	853
V. INVISIBLE HANDS AND INVISIBLE ELBOWS	856
VI. THE IMPORTANCE OF INTERNATIONAL LAW	857
VII. MATCHING INTERNATIONAL LAW AND NATIONAL LAW TO MAKE THE TRANSITION	865
VIII. GLOBAL MINISTERIAL ENVIRONMENT FORUM	868
IX. HOW DO WE MOVE FORWARD?	869
X. INTERNATIONAL ENVIRONMENTAL GOVERNANCE ("IEG") FOR THE TWENTY-FIRST CENTURY	870
CONCLUSION	874

OPENING REMARKS

I wish to begin by thanking the American University Washington College of Law for inviting me to deliver the 2009 Grotius Lecture. This year is the 400th anniversary of the publication of "The Freedom of the Seas."¹ I doubt that Hugo Grotius in 1609 knew the profound impact that his treatise would have on transforming the world economy.²

The notion that the seas were international territory and all nations were free to use it for seafaring trade—what is now a basic principle

International Cooperation on Environment and Development.

1. See David Armitage, *Introduction* to HUGO GROTIUS, *THE FREE SEA* xi (David Armitage ed., Richard Hakluyt trans., Liberty Fund 2004) (1609) (noting that the 1609 pamphlet-sized work titled *Mare Liberum* was originally published anonymously).

2. See *id.* at xii (acknowledging the "influence and importance" of *Mare Liberum*). But see, Nina Tannenwald, *Law Versus Power on the High Frontier: The Case for a Rule-Based Regime for Outer Space*, 29 *YALE J. INT'L L.* 363, 392 (2004) (explaining how Great Britain's eventual embrace of freedom of the seas was due in part to changing world economic interests and philosophies, and Great Britain's acceptance of those changes).

of international maritime law—led to opposition that sparked the First Anglo-Dutch War.³ Yet, the principles of free trade and economic freedom advocated then persist today.

There is an important lesson that Grotius taught us: that law can be a conduit for transformative economic change. As the “Freedom of the Seas” provided an important foundation for international free trade,⁴ I believe that law has a critical role to play in providing the foundation for accelerating the transition towards a green economy.

This presentation explores how international law can and must work to support the transition to a green economy. In doing so, I highlight areas where I think that international law has a critical role to play, but in the end we will need people like you—the eminent experts in the field—to ensure that international law works to help and not hinder the transition. But before I do this, I would like to say a few words about what is a green economy.

I. WHAT IS A GREEN ECONOMY? WHAT DOES IT MEAN AND WHAT ARE THE ELEMENTS?

The global financial crisis has been devastating but in every crisis there arises an opportunity.⁵ Leaders around the world have seen such an opportunity and are creating stimulus packages that will not only create economic recovery but will also build on green fundamentals of energy efficiency and diversification, waste minimization, and sensible use of natural resources.⁶

3. See Tannenwald, *supra* note 2, at 391 (describing how the Dutch and English, while attacking ships to disrupt commerce, would advocate for “free seas” or “closed seas” depending on whether they dominated a certain sea trade route); Gerald A. Bunting, *GATT and the Evolution of the Global Trade System: A Historical Perspective*, 11 ST. JOHN'S J. LEGAL COMMENT. 505, 508 n.10 (1996) (“The First and Second Anglo-Dutch Wars . . . were fought purely over commercial rivalries.”) (citing JONATHAN I. ISRAEL, *THE DUTCH REPUBLIC: 1477-1806: ITS RISE, GREATNESS, AND FALL* (1995)).

4. See Christopher A. Ford, *Preaching Propriety to Princes: Grotius, Lipsius, and Neo-Stoic International Law*, 28 CASE W. RES. J. INT'L L. 313, 339-40 n.154 (1996) (describing both *Mare Liberum*'s influence in international law of the sea and Grotius' articulation of the relationship between free trade and freedom of the seas during the commercial dispute between the British and the Dutch).

5. See Anna Gelpern, *Financial Crisis Containment*, 41 CONN. L. REV. 1051, 1068-69 (2009) (echoing a widely held sentiment that crises are “wasted” when they do not lead to some kind of reform).

6. See, e.g., American Recovery and Reinvestment Act of 2009, Pub. L. No.

While it is clear that governments and the international community face multiple and serious challenges, the situation also presents real opportunities to make profound changes in our economies: moving toward a green and low-carbon economy will deliver multiple benefits for the international community and governments in addressing food, energy and water security and “will ultimately result in achieving sustainable development and the Millennium Development Goals [“MDGs”].”⁷

We also have an opportunity to re-examine the capacity of governance structures at the national and global levels to assess whether they are adequate to meet multiple environmental and development challenges and whether they are flexible enough to capitalize on emerging opportunities.

Essentially, “[t]he term ‘green economy’ as defined by [the United Nations Environment Programme (“UNEP”)] describes an economic system that recognizes the properties of healthy ecosystems as the backbone of economic and social well-being and as a precondition

111-5, pmbll., 123 Stat. 115, 115 (2009) (codified as amended in scattered sections of the U.S.C.) (listing energy efficiency as one of the Act’s goals); Jon Strand & Michael Toman, “*Green Stimulus, Economic Recovery, and Long-Term Sustainable Development 2* (World Bank Pol’y Res. Paper, Working Paper No. 5163, 2010), available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/01/04/000158349_20100104121602/Rendered/PDF/WPS5163.pdf (discussing the economic benefits of a “green stimulus,” including job creation and a competitive global advantage for countries that create such programs); Paul Steele & Yusuke Taishi, *Green Growth, Climate Change, and the Future of Aid: Challenges and Opportunities in Asia-Pacific 3* (High-Level Reg’l Conf. & Special Seminar on the Impact of the Global Econ. Slowdown on Poverty and Sustainable Dev. in Asia and the Pacific, Working Paper, 2009), available at <http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/WG6-green-growth-Steele-paper.pdf> (“The concept of green growth . . . embraces the promise of delivering continued prosperity while reducing the strains on natural environment and maintain an ecosystem that helps build resilience to climate change.”).

7. U.N. Env’t Programme [UNEP], *Globalization and the Environment – Global Crises: National Chaos?*, ¶ 5, delivered to the Twenty-fifth Session of the Governing Council/Global Ministerial Env’t Forum, Nairobi, Kenya, Feb. 16-20, 2009, UNEP/GC.25/16 (Dec. 24, 2008) [hereinafter *Global Crises: National Chaos?*]; see also Millennium Declaration, G.A. Res. 55/2, ¶ 19, U.N. Doc. A/Res/55/2 (Sept. 18, 2000) (resolving, by 2015, to cut in half the number of people: living on less than one dollar a day; suffering from hunger; and lacking access to safe drinking water).

for poverty reduction.”⁸ This means that nature is integral to the design and planning process so that the notion of infrastructure is extended to food production, the use of raw materials, and provisions for wildlife. A green economy is a “system in which the costs arising from the degradation of ecosystems are internalized,” where industries that employ clean and efficient technologies and where agriculture is sustainable “serve as major engines of economic growth, job creation, and poverty reduction.”⁹

In hard terms, our analysis at UNEP finds that,

this means, among other things, investing at least \$60–90 billion per year in sustainable environmental management in the developing world, which is necessary to reduce environment-related poverty alone; a re-alignment of agricultural subsidies, currently amounting to more than \$300 billion a year, toward sustainable agriculture, forestry and fisheries; and a shift from subsidies for fossil fuels, currently estimated at \$240–310 billion per year or around 0.7 per cent of global GDP, to research and development on renewable energies.

...

Such investment and realignment can also be expected to reduce greenhouse gas emissions by some 6 per cent by increasing energy efficiency, while channelling revenues to people living in poverty. The green economy also presents substantial employment opportunities, by creating jobs for rural and indigenous peoples based on the management of ecosystem goods and services valued at around \$5 trillion.¹⁰

UNEP explains that, under the UNEP Green Economy Initiative, the shift towards a green economy is founded on three principles:

- (a) Appreciation of the full potential for environmental industries to become mainstream, sustainable economic activities;

8. *Global Crises: National Chaos?*, *supra* note 7, ¶ 33.

9. *Id.*

10. *Id.* ¶ 34-35; *see also* UNEP, THE ECONOMICS OF ECOSYSTEMS & BIODIVERSITY 38 (2008) [hereinafter TEEB REPORT] (asserting that conservation is a good investment under a cost-benefit analysis basis, such that \$45 billion in annual investments could protect \$5 trillion of natural services).

-
-
- (b) Understanding of, and solutions to, financial, policy and
 - (c) institutional barriers to the shift towards a green economy;

Strong government leadership in providing macroeconomic policy support for the transition.¹¹

The “priority green economic sectors” that UNEP identifies are:

- (a) Clean and efficient technologies, including renewable energy technologies and a focus on rural energy access;
- (b) Biodiversity-based businesses, including agriculture, forestry, marine and nature-based tourism;
- (c) Ecological infrastructure, including nature reserves, protected areas and watersheds;
- (d) Chemicals and waste management, including waste reduction, recycling and reuse;
- (e) Low carbon cities, buildings and transport.¹²

The shift towards a green economy cannot occur without adopting and implementing “coherent policies integrating economic, social and environmental aspects. This requires collaboration between various sectoral ministries at the national level and cohesion between the organizations and institutions dealing with various aspects of sustainable development at the international level.”¹³ The contours of this approach, a “Global Green New Deal,” will be the next focus of this discussion.

II. THE GLOBAL GREEN NEW DEAL AND THE GREEN ECONOMY

Seventy-five years ago, at the nadir of the Great Depression, U.S. President Franklin D. Roosevelt launched a wide-ranging series of

11. *Global Crises: National Chaos?*, *supra* note 7, ¶ 36.

12. *Id.* ¶ 37.

13. *Id.* ¶ 38. See generally UNEP, GLOBAL GREEN NEW DEAL: POLICY BRIEF (2009) [hereinafter GGND], (emphasizing an integrated approach to impact a variety of sectors such as sustainable energy, sustainable transport, energy efficient building construction, agriculture, and freshwater restoration).

programs “to provide employment and social security, reform tax policies and business practices, and stimulate the economy. These programs [known collectively as the New Deal] included the construction of homes, hospitals, schools, and other public buildings, roads, dams, and electrical grids, apart from policy and institutional reforms.”¹⁴ This New Deal provided employment for millions of Americans while at the same time modernizing the U.S. infrastructure.¹⁵

UNEP recognized these parallels:

Today’s multiple crises demand the same kind of visionary government leadership, but at the global scale and embracing a wider vision. A Global Green New Deal (“GGND”) is proposed as a manifestation of that leadership. It refers to a set of globally coordinated large-scale stimulus packages and policy measures that have the potential to bring about global economic recovery in the short term while laying the foundation for sustained economic growth in the medium- and long-term.¹⁶

The world needs a GGND because: 1) the market has proven incompetent to resurrect itself from a failure of a historical proportion without significant and coordinated government interventions; 2) “green sectors” such as renewable energy technologies have the prospect of leading the global economy recovery while addressing large-scale environmental degradation; and 3) the multiples crises are at the global level, affecting developing countries disproportionately and thus requiring fair and just global solutions.¹⁷

14. GGND, *supra* note 13, at 3; *see generally* Steven A. Ramirez, *The Law and Macroeconomics of the New Deal at 70*, 62 MD. L. REV. 515, 531-62 (2003) (describing the Social Security Act, Civilian Conservation Corps, National Labor Relations Act, and other legislation used to implement some of the social security, employment, and labor programs undertaken during Franklin D. Roosevelt’s administration).

15. GGND, *supra* note 13, at 3; *see also* Ramirez, *supra* note 14, at 556-57 (tracing the creation of 500,000 civilian jobs and the reintegration of thirteen million veterans into the labor force).

16. GGND, *supra* note 13, at 3.

17. *See id.* at 4 (discussing various arguments in favor of a GGND and stressing that “there is a unique historical opportunity now to create the basis of a new Green Economy that is able to allocate natural capital and financial capital in a far more effective and efficient manner into the foreseeable future”).

The overall objectives of a GGND are to:

- revive the world economy, save and create jobs, and protect vulnerable groups;
- reduce carbon dependency and ecosystem degradation; and
- further the MDGs including ending extreme poverty by 2025.¹⁸

“These objectives are to be achieved by including and implementing a number of common elements” in the global responses to the prevailing financial and economic crisis.¹⁹ These elements fall under two categories: 1) inclusion of major green sectors to be included in stimulus packages; and 2) creating enabling conditions to ensure the success of green investments.²⁰ Further,

[i]n promoting a GGND, the principle of “[shared] but differentiated responsibilities” must be upheld with regard to developed countries, emerging economies, countries with economies in transition, and least developed countries. The financial [and energy crises,] which ha[ve] triggered the call for a GGND, [are largely] the making of developed countries [but has global impacts.] The crisis is causing massive job losses worldwide and is hitting the poor in developing countries especially hard.

A fair and just GGND, therefore, should consider including . . . additional support to [developed countries, particularly] the least developed countries, in the areas of finance, trade, technology, and capacity building . . .²¹

At the same time, it must be acknowledged that non-industrialized countries are on different development trajectories and have their particular circumstances, which justify their priorities that “may be

18. *Id.* at 5.

19. *Id.*

20. *Cf. id.* at 5-6 (describing the categories of common elements of the GGND as 1) “sectorally targeted fiscal stimulus”, 2) “domestic policy reforms to enable the success of green investments,” and 3) reforms to international policy and coordination to support national efforts).

21. *Id.* at 6.

different from those of developed countries when it comes to large-scale public spending programmes and policy measures.”²²

After mapping out the vision of a green economy, I want to now turn to the reason why we are gathered here; the role of law in delivering this vision.

III. EVOLUTION OF INTERNATIONAL ENVIRONMENTAL LAW

The past forty years have witnessed an evolution in domestic and international environmental law. Early environmental law focused on command and control—to protect, to contain and to even punish. Much of the focus of this law was on endangered or migratory species, specific ecosystems (such as wetlands), natural heritage, or trans-boundary ecosystems such as watersheds, river basins, or mountain systems.²³

Following the 1972 U.N. Conference on the Human Environment, the development of law in these areas accelerated. Countries developed, over a very short period, several important multilateral agreements dealing with all aspects of the environment such as trade including issues such as trade in endangered species, and ozone.²⁴

As one commentator observed,

International environmental agreements now bear[] little resemblance to the agreements concluded in the [1950s], which focused on boundary rivers, fishing rights, and protection of particularly valued animal species. Today there are agreements to control pollution in all environmental media, conserve habitats, protect global commons, and protect resources located within countries that are of concern

22. *Id.*

23. See generally Michael P. Vandenberg, *An Alternative to Ready, Fire, Aim: A New Framework to Link Environmental Targets in Environmental Law*, 85 KY. L.J. 803, 825-55, 867-81 (1997) (providing a critical history of command-and-control environmental regulation and international experiences with similar regulatory efforts).

24. See Joel B. Eisen, *From Stockholm to Kyoto and Back to the United States: International Environmental Law's Effect on Domestic Law*, 32 U. RICH. L. REV. 1435, 1446-47 (1999) (noting that the 1972 Conference spurred existing environmentalist efforts and paved the way for new instruments for international environmental law, including multilateral agreements aimed at safeguarding resources and mitigating pollution).

to the international community. Moreover, the [1992] the U.N. Conference on Environment and Development [(“UNCED”) and the 2002 U.N. World Summit on Sustainable Development produced] . . . a new phase in international environmental law in which environmental and economic issues [were increasingly] joined.²⁵

We used international law as a guardian to protect the environment. Environmental principles such as polluter pays and the precautionary principle have been important restraints on the harmful effects of economic development.²⁶ But as environmental law began to grow and develop, a new dimension emerged of the important role that law and the economy can play together not only by restricting but by using market incentives to actively promote environmental objectives.

Today, environmental treaties use a mix of both command and control and market incentives to their achieve objectives—and there are now successful examples of market incentives such as the Kyoto Protocol’s market-based Clean Development Mechanism (“CDM”) that grew at an extraordinary pace, to \$4.8 billion in transfer payments to developing countries in 2006 year from less than \$100 million in 2002.²⁷

There has been a lot of debate in the international arena on what constitutes environmental law. More recent thinking has been focused on how to influence laws in the context of sustainable development more generally, rather than how to influence sectoral laws dealing with agriculture, energy, transport, and other sectors.²⁸

25. Edith Brown Weiss, *International Environmental Law: Contemporary Issues and the Emergence of a New World Order*, 81 GEO. L.J. 675, 679 (1993);

26. See generally, Candice Stevens, *Interpreting the Polluter Pays Principle in the Trade and Environment Context*, 27 CORNELL INT’L L.J. 577 (1994) (providing detailed analysis of the cost allocation and internalization aspects of the polluter pays principle); John S. Applegate, *The Taming of the Precautionary Principle*, 27 WM. & MARY ENVTL. L. & POL’Y REV. 13 (2002) (arguing that the force of the precautionary principle has weakened over time despite the fact that it has become more accepted as customary international law).

27. See Emily Boyd et al., *The Clean Development Mechanism: An Assessment of Current Practice and Future Approaches for Policy* 14 (Tyndal Ctr. for Climate Change Res., Working Paper No. 114, 2007) (estimating the money flowing to developing countries through the CDM program to be in the range of \$3.8 to \$4.8 billion).

28. See generally Elli Louka, *Cutting the Gordian Knot: Why International*

While the 1992 UNCED and its outcomes was a major milestone, when one looks at the environmental situation 17 years later—and over 20 years since the release of the Brundtland Commission report²⁹—it is evident we are not making sufficient progress. In fact, the fourth edition of the UNEP Global Environmental Outlook tells us that an assessment of most indicators shows we are in fact moving backwards, whether it be in relation to climate change, fisheries, forests, or water.³⁰ At the same time many good examples of progress exist but they are not of a transformative scale.³¹

It is this imperative that leads me to the discussion on the need to make the transition towards a green economy and to have international and domestic laws support this transition—the transformative change that is needed to achieve sustainable development will not happen any other way.

IV. THE MONTEVIDEO PROGRAMMES 1982-2009: EVOLUTION

A crucial part of UNEP's mandate is the promotion of environmental law, both at national and international levels.³² Since 1982, UNEP has realized this task following a strategic and

Environmental Law Is not only About the Protection of the Environment, 10 TEMP. INT'L & COMP. L.J. 79, 80-92 (1996) (contrasting the sectoral and transnational interests shaping international environmental law).

29. See World Comm'n on Env't & Dev. [WCED], *Report of the World Comm'n on Env't & Dev.: "Our Common Future"*, delivered to the General Assembly, U.N. Doc. A/42/427 (Aug. 4, 1987) (proposing a massive agenda for worldwide change in a comprehensive environmental report known as the "Brundtland Commission Report").

30. Cf. UNEP, GLOBAL ENVIRONMENT OUTLOOK 3, at 97, 157, 183-84, 210-16 (2002) (noting that there has been some progress, but warning that these areas still face severe problems).

31. See *id.* at 216.

Meeting the Kyoto targets will be just a first step in coping with the problem of climate change because it will have a marginal effect on the greenhouse gas concentration in the atmosphere. Even if, in the long term, a stabilization of atmospheric greenhouse gas concentrations is achieved, warming will continue for several decades, and sea levels will continue to rise for centuries with serious consequences for millions of people.

Id.

32. See G.A. Res. 2997 (XXVII), ¶ I.2.a, U.N. Doc. A/8730 (Dec. 15, 1972) (stating that one of the functions of the Governing Council of UNEP is the promotion of international environmental cooperation).

systematic approach, through the adoption of ten-year environmental law programs, known as Montevideo Programmes (from the city where the first was adopted).³³ At its twenty-fifth session held in February, 2009 the UNEP Governing Council/Global Ministerial Environmental Forum (“GC/GMEF”) adopted the fourth version of the Montevideo Programme.³⁴ Through decision 25/11 the GC/GMEF adopts the strategy as “a broad strategy for the international law community and [UNEP] in formulating the activities in the field of environmental law for the decade commencing in 2010.”³⁵

With changing environmental perspectives, the focus of UNEP has shifted from specific environmental concerns, which have in many cases been addressed through guidelines and legally-binding instruments (e.g. ozone, biodiversity), to promoting the effectiveness of environmental law, the implementation of existing Multilateral Environmental Agreements (“MEAs”) and seeing how environmental considerations can be integrated in other areas of law and how coherence among different legal regimes can be improved.³⁶ There are, however, still some areas where UNEP is called to promote the development of new legally-binding instruments to address specific concerns (e.g. mercury).³⁷

33. UNEP, Environmental Law Programme, http://www.unep.org/law/About_prog/introduction.asp (last visited May 30, 2010) (“UNEP’s Environmental Law activities are carried out within the framework of strategic Programmes for the Development and Periodic Review of [E]nvironmental Law (The Montevideo Programmes) approved by the Governing Council every ten years.”).

34. UNEP, *Proceedings of the Governing Council/Global Ministerial Environment Forum at Its Twenty-fifth Session*, Annex I, UNEP/GC.25/17 (Feb. 26, 2009) (adopting Montevideo Programme IV).

35. *Id.* Annex I, ¶ 1.

36. See UNEP, *Background Paper Presented by the Executive Director: Trade and Environment*, ¶ 1, delivered to the Twenty-Fifth Session of the Governing Council/Global Ministerial Env’t Forum, Nairobi, Kenya, Feb. 16-20, 2009, U.N. Doc. UNEP/GC.22/10/Add.2 (Dec. 31, 2002) (explaining the UNEP’s shift from viewing environmental problems in isolation from other policies to integrating environmental issues into those policies while considering other countries’ development agendas).

37. See, e.g., UNEP, *Report of the Ad Hoc Open-Ended Working Group on Mercury on the Work of Its Second Meeting*, Annex II, ¶¶ 16-22, U.N. Doc. UNEP(DTIE)/Hg/OEWG.2/13 (describing the advantages of a legally-binding multilateral environmental agreement for controlling mercury releases into the environment).

The evolving focus is reflected in the changing content of the subsequent Montevideo Programmes. Montevideo Programme I, for instance, identified the following as major subject areas:

1. marine pollution from land based sources;
2. protection of the stratospheric ozone layer; and
3. transport, handling and disposal of toxic and dangerous wastes.³⁸

It identified additional subject areas, which once again focused on specific environmental problems—environmental emergencies, coastal zone management, soil conservation, transboundary air pollution, etc. It also identified some crosscutting areas such as pollution damage and Environmental Impact Assessment (“EIA”).³⁹

The current version of the Programme has a strong focus on crosscutting issues, and is divided in four major areas: effectiveness of environmental law; conservation management and sustainable use of natural resources; challenges for environmental law; and relationship with other fields.⁴⁰

The Programme calls for action in fields that, if pursued, could effectively support the realization of the Global Green New Deal. Some of these issues include, for example, action in the field of climate change, including support to legal approaches for mitigation.⁴¹ The alleviation of poverty is also identified as an important challenge for environmental law,⁴² which has a role to play

38. UNEP, *Montevideo Programme for the Development and Periodic Review of Environmental Law*, at 1-2, *Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law*, Montevideo, Uru., Nov. 6, 1981, available at http://www.unep.org/law/PDF/Montevideo_Programme_I.pdf [hereinafter *Montevideo I Report*].

39. *Id.*

40. See UNEP, *Report of the Meeting of Senior Government Officials Expert in Environmental Law to Prepare a Fourth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme IV)*, Annex I, chs. I-IV, U.N. Doc. UNEP/ENV.LAW/MTV4/IG/2/2 [hereinafter *Montevideo IV Report*] (elaborating next steps in the areas of environmental law, conservation management, and sustainable use of natural resources and adopting them in the draft programme).

41. *Id.* Annex I, ch. III.A.

42. See *id.* Annex I, ch. III.B (discussing Montevideo Programme IV’s poverty-related objectives and actions, including further examination of the

in areas such as promoting the equitable supply and sharing of environmental services. The Montevideo Programme IV calls for the promotion of environmentally-sound technologies that support sustainability goals.⁴³ It also identifies, as an area of focus for UNEP and the international law community, the linkages between trade and the environment,⁴⁴ through further encouraging the complementary and mutual supportiveness of measures relating to environmental protection and international trade, investment and finance.

V. INVISIBLE HANDS AND INVISIBLE ELBOWS

We are all familiar with the invisible hand of the market. Al Gore in his 1992 book *Earth in the Balance* referred to the free market capitalist economy as being “partially blind” due to its failure to account for the depreciation of our natural resources and the external costs of economic activity.⁴⁵ He concluded that: “We must correct the shortcomings in the rules and procedures that guide the millions of daily decisions that are the nerves and sinews of Adam Smith’s invisible hand: we must address the deficiencies of our current methods for defining what is progress and what is absurdity.”⁴⁶ Put another way, perhaps we need to be more alert to the impact of the invisible elbow of the market that results in environmental externalities. If market forces cannot be directed in the right way we will not succeed in protecting the sustainability of the planet.

We need an ‘intelligent invisible hand’ one that is guided by smart regulation to ensure the economy works for sustainable development and not against it. This is required both at national and global levels as both the environment and the economy have global dimensions—something we are witnessing in stark reality today through the financial and climate crises to name but two.⁴⁷ The time to “address

relationship between poverty and the environment such as the disproportionate impact of pollution against the poor).

43. *Id.* at Annex I, ch. III.G.

44. *See id.* at Annex I, ch. IV.B (declaring the objective to use of international trade and investment laws to secure environmental protection efforts).

45. *See* AL GORE, *EARTH IN BALANCE: ECOLOGY AND THE HUMAN SPIRIT* 182-83 (1992) (opining that the economy is so focused on what is valued by buyers and seller that it ignores the values of things that are hard to sell, such as natural beauty and fresh air).

46. *Id.* at 195.

47. *See, e.g.,* World Bank, *The Growth Report: Strategies for Sustained*

the deficiencies of our current methods for defining what is progress and what is absurdity” described by Gore⁴⁸ has clearly arrived, and we must seize the opportunity presented by the current crises to make the necessary corrections to our economic systems in the interest of our own survival and sustainability.

VI. THE IMPORTANCE OF INTERNATIONAL LAW

The idea of a green economy is not new,⁴⁹ but it is now gaining momentum and more and more economists are seeing the value in new markets, new jobs, and new technologies that a green economy can bring. However, to a large extent, the critical role that law will play in delivering a green economy has not been underscored enough.

Well-functioning markets depend on well-functioning institutions. If the rules, norms and regulations are not in place, then markets will inevitably malfunction or create externalities which will only profit the few. The global financial crisis is a good example of this. Prior to the financial crisis, the global markets were allowed to work generally unfettered with little regulation of subprime loan markets, interbank borrowing, and reinsurance.⁵⁰ The result is what we see today. There is an important role for global markets in transition of the green economy, but we have to harness its forces to work for sustainable development by getting the institutions right.

Michael Jacobs addressed this issue back in 1991 in his book *The Green Economy*.⁵¹ In his book, Jacobs tackles the need to determine

Growth and Development, 15 LAW & BUS. REV. AM. 259, 266-67 (2009) (describing the challenges hindering growth in developing countries, including climate change, the global economy, and poorly orchestrated responses to these problems).

48. GORE, *supra* note 45, at 195.

49. See, e.g., Bill Bradbury, *Keynote Address: Energy Policy and Oregon's Future*, 24 J. ENVTL. L. & LITIG. 1, 2 (2009) (tying past efforts to engage in organic farming and alternative energy to the efforts underlying the present-day green economy).

50. See, e.g., United Nations Conference on Trade and Development [UNCTAD], *The Global Economic Crisis: Systemic Failures and Multilateral Remedies*, at 1, 13-14, 41-54, UNCTAD/GDS/2009/1 [hereinafter UNCTAD Report] (describing the efforts to avoid regulation, failures in the interbank market, and the bad practices of insurance companies).

51. See MICHAEL JACOBS, *THE GREEN ECONOMY: ENVIRONMENT, SUSTAINABLE DEVELOPMENT, AND THE POLITICS OF THE FUTURE* (1991) (arguing

and enforce ecological limits to economic activity head on.⁵² In doing so, he identified four instruments that can be used to hold the economy within the constraints set by sustainability, which according to Jacobs are: voluntary mechanisms, regulations, government expenditure, and financial incentives, which themselves will often need to be built into a regulatory framework.⁵³ In this context he refers to the “single market” which, he says, reinforces the need to adopt common international policies, a reality borne out from the current financial and climate change crises.⁵⁴ And climate change is an area where the role of international environmental law is clear to all. However, the critical importance of the current negotiations⁵⁵ and the contribution that any future agreement will make in setting the right conditions for moving towards a green economy cannot be stressed highly enough.

I now want to talk specifically about some key specific issues of international law. The first is intellectual property rights. The extent to which intellectual property rights (“IPR”) can be held and enforced has traditionally been a matter for national law.⁵⁶ However, the strengthening of the intellectual property rights regime, particularly through the adoption of the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS”) has made

for the integration of the green movement with the discipline of environmental economics).

52. *See id.* at 120 (advancing the notion that setting targets for quantities of key environmental features and for economic activities is paramount to achieving environmental sustainability).

53. *Id.* at 122-23.

54. *Id.* at 130 (also explaining that when there are no regulations to free trade, businesses will relocate to jurisdictions with the lowest environmental standards, thereby hindering environmental protection efforts).

55. *See, e.g.,* UNEP, *President's Summary of the Discussions by Ministers and Heads of Delegation at the Twenty-Fifth Session of the Governing Council/Global Ministerial Environment Forum of the United Nations Environment Programme*, Annex III, 61, in *Proceedings of the Governing Council/Global Ministerial Environment Forum at its Twenty-Fifth Session*, UNEP/GC.25/17 (Feb. 26, 2009) [hereinafter *President's Summary*] (advocating for a full package on international governance for the proposed Rio+20 summit in 2012).

56. *See, e.g.,* KEITH E. MASKUS, *INTELLECTUAL PROPERTY RIGHTS IN THE GLOBAL ECONOMY* 34 (2000) (noting that IPRs are subject to national laws, which vary considerably across nations).

intellectual property one of the most important and fiercely debated aspects of international economic law.⁵⁷

Intellectual property rules fundamentally affect sustainable development, as they determine who controls information and technology.⁵⁸ Despite attempts to achieve a common level of intellectual property protection through the TRIPS agreement, many controversial issues remain. One is the question of how TRIPS will affect national policies relating to natural resources, such as biodiversity, genetically modified organisms, access to genetic resources, and the patenting of life forms. Another is IPRs in technology transfer. The level and scope of intellectual property protection influences the flow of technology between industrialized and developing countries and could affect, for instance, the implementation of environmentally sound technology transfer provisions of Multilateral Environmental Agreements like the Convention on Biological Diversity and the Kyoto Protocol.⁵⁹ For example, as one commentator observed, “[t]he development and widespread dissemination of climate change technologies are a key component in the battle to reduce global greenhouse gas . . . emissions.”⁶⁰

At the same time, the TRIPS Agreement contains several principles and provisions that explicitly promote environmental, public health, and development goals, and give WTO Members some discretion to determine when those goals should override the normal

57. Peter K. Yu, *The Objectives and Principles of the TRIPS Agreement*, 46 Hous. L. Rev. 979, 980 (2009) (also noting the divergent perspectives of developing and developed countries regarding the TRIPS agreement).

58. See G8 SUMMIT 2007: HEILIGENDAMM, GROWTH AND RESPONSIBILITY IN THE WORLD ECONOMY ¶¶ 34-35 (Summit Declaration) (June 7, 2007), available at http://www.unglobalcompact.org/docs/about_the_gc/government_support/G8_Summit_2007_Heiligendamm_Declaration.pdf (recognizing that intellectual property protection is essential for innovation and the sustainability of a global economy).

59. Cf. Cameron Hutchinson, *Does TRIPS Facilitate or Impede Climate Change Technology Transfer into Developing Countries?*, 3 U. OTTAWA L. & TECH. J. 517, 532 (2006) (“[T]he setting of environmental standards can lead to abuses by IPR holders, which may conflict with multilateral environmental agreement provisions that oblige states to transfer [environmentally sound technologies].”).

60. See *id.* at 519 (analyzing the climate change regime and the WTO TRIPS Agreement as it relates to the transfer of technology to developing countries).

TRIPS restrictions.⁶¹ These flexibilities have already been employed to promote affordable essential medicine availability in the developing world.⁶² There may be a role for environmental law in developing similar exemptions or waivers for environmental or 'green' technologies such as climate change-related technologies that limit greenhouse gas emissions, increasing efficiency of production and energy usage, or facilitating the capture and storage of carbon.

The controversial debate on access and benefits sharing is another example of how important it can be to get international law right. For the many years now the parties to the Convention on Biological Diversity have been negotiating an international regime on access and benefits sharing of genetic resources.⁶³ Much of world's genetic resources lie undiscovered in the rich biodiversity reserves of developing countries and their potential value is poorly known,⁶⁴ but indications from successful commercialization of pharmaceuticals and health and beauty products have generated enormous speculation.⁶⁵

Creating a balance between accessing these resources in a sustainable manner—allowing innovation to add value to the resource while ensuring the benefits are equitably distributed—is

61. *See id.* at 525 (arguing that according to Articles 7 and 8 of the TRIPS Agreement, WTO Members may qualify the obligation to protect intellectual property rights with competing public values, provided that the measures are consistent with the TRIPS Agreement).

62. *See* The General Council, *Implementation of Paragraph 6 of the Doha Declaration on The TRIPS Agreement and Public Health*, ¶ 2, WT/L/540 (Sept 2, 2003) (indicating that Members exporting pharmaceuticals to eligible Members have reduced obligations under TRIPS's compulsory license regime).

63. *See* UNEP, Secretariat of the Convention on Biological Diversity, *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization*, 1 (2002), available at <http://www.cbd.int/doc/publications/cbd-bonn-gdls-en.pdf> (proposing voluntary guidelines for developing laws covering access or benefits-sharing regarding Genetic Resources).

64. *See id.* at iii (indicating that one of the objectives of the 1992 Convention on Biological Diversity is to legally commit its parties to equitably share the benefits from the use of genetic resources, a particularly important objective of developing nations).

65. *See id.* (observing that developing countries face disincentives to conserve their genetic resources because they "do not obtain a fair share" from high-yield products such as pharmaceuticals and cosmetics).

something that markets cannot do alone.⁶⁶ It is a challenge for lawyers to work with policy makers to strike this balance to find the right mix between equity and profit, and often this requires global cooperation that transcends the closely protected mandates of global organizations.

As our understanding of the benefits of ecosystem services improves, we are starting to better appreciate the high economic value of these services that we once took for granted. Moreover, there is a growing recognition of a fundamental link between ecosystem services and human rights. We accept that there are some basic constituents of human well-being: security, basic material for a good life, health, and social cohesion.⁶⁷ Each of the constituents is provided through direct links to ecosystems.⁶⁸ If we are serious about environmental justice, equality, intergenerational equity, and optimal human well-being, these constituents may need to become the foundation for the most fundamental of human rights. No matter how technologically advanced we become, some natural resources cannot be substituted without enormous cost in terms of future levels of human well-being. Regulation of “ecosystem services,” like climate control and protection from harmful UV radiation, are typical examples of this. Human health is directly linked to ecosystem services and the very cultural identity and diversity is linked to natural symbols folklore and tradition.⁶⁹ When ecosystem services are understood in this context and mapped to key human rights, it is also evident that these rights are not simply the rights of this generation but of generations to come.

66. See, e.g., JACOBS, *supra* note 51, at 26 (arguing that unconstrained economic growth, not growth *per se*, is one of the causes of the current environmental crisis).

67. See MILLENNIUM ECOSYSTEM ASSESSMENT, ECOSYSTEMS AND HUMAN WELL-BEING: A FRAMEWORK FOR ASSESSMENT 71, 74 (2003) (listing the key components of a “good life,” including secure and adequate livelihoods, income and assets, enough food at all times, shelter, furniture, clothing, and access to goods,” and noting the close relationship between those components and ecosystems).

68. *Id.*; see WORLD HEALTH ORG. [WHO], MILLENNIUM ECOSYSTEM ASSESSMENT, ECOSYSTEM AND HUMAN WELL-BEING: HEALTH SYNTHESIS 1-2 (2005) [hereinafter HEALTH SYNTHESIS] (mapping out the relationship between human health and ecosystems).

69. HEALTH SYNTHESIS, *supra* note 68, at 5 (discussing the cultural, recreational, and spiritual human practices that are linked to ecosystem services).

The last example I wish to explore today where I think international law has a major role to play is in reforming energy subsidies. A central element of the shift to a green economy is the removal of fossil-fuel subsidies and other distorting incentives, and diverting the resources used for these subsidies to financing low-carbon policies and activities.⁷⁰

Our analysis at UNEP has shown that a significant amount of financial resources is spent on energy subsidies globally (around US\$300 billion annually, or 0.7% of world GDP).⁷¹ These subsidies not only promote the use of fuels that contribute to climate change, but also divert important financial resources from green technology and energy sources, which could bring about innovative ways to address the energy needs of growing economies and revert the dangerous path of fossil fuel dependency.⁷² Therefore, eliminating these subsidies would yield positive results in the fight against climate change and, more generally, facilitate the shift to a greener economy and generate decent new green jobs.

In fact, it has been estimated that canceling these subsidies would directly reduce greenhouse gas emissions globally by about 6%.⁷³ At the same time, it would also add 0.1% to world GDP which could be redirected to investments in clean energy.⁷⁴ These resources could also be used to finance activities that, while promoting cleaner technologies and energy sources, will also benefit the poor (e.g., by creating jobs and by making electricity widely available).

70. See, e.g., Mario Amano, Deputy Sec'y-Gen. of the Org. for Econ. Co-Operation & Development [OECD], Keynote Address UNESCO's Future Forum, *Mitigating climate Change- Building a Global Green Society* (Oct. 26, 2009) available at http://portal.unesco.org/en/ev.php-URL_ID=46786&URL_DO=DO_TOPIC&URL_SECTION=201.html (encouraging the removal of fossil fuel subsidies, which will increase economic efficiency and reduce greenhouse gas emissions).

71. See UNEP, DIV. OF TECH., INDUS. & ECON., REFORMING ENERGY SUBSIDIES 11 (2008) [hereinafter REFORMING ENERGY SUBSIDIES] (estimating that the magnitude of energy subsidies could be as much as \$300 billion per year, around 0.7 percent of world GDP).

72. See *id.* at 12 (suggesting that the costs of subsidies may outweigh any proposed social benefits).

73. *Id.* at 16 (referencing a 2000 OECD study).

74. *Id.*

The UNEP study also found out that, although many of the energy subsidies that are used in developing countries are intended to improve poor households living conditions (e.g., subsidizing electricity may help reduce indoor pollution and the time women and children have to spend to collect firewood), in reality they seldom benefit the poor, but rather the energy companies, equipment suppliers, and the middle-income households, especially in cities.⁷⁵ While the cost of the subsidies is borne by all of society, often the poor are not able to afford even the subsidized energy and do not share in the economic benefits.⁷⁶

To tackle this problem of subsidies, one of the challenges for the international community is to review existing trade agreements and shape future ones in a way that supports the elimination of energy subsidies distorting incentives in general. It also requires a very clear regulatory framework that can provide the basis for action on energy, like the climate change international regime.⁷⁷

Echoing the words of Pascal Lamy, the Director General of WTO at a meeting at the Bali COP on climate change and trade, WTO rules can only offer a partial answer to climate change:⁷⁸

It is not [within] the WTO that a deal on climate change can be struck, but rather in an environmental forum [like] the United Nations Framework Convention on Climate Change. Such an agreement must then send the WTO an appropriate

75. *Id.* at 14 (arguing that the these subsidies “can, paradoxically, leave the poor worse off, since the costs are shared by the entire population including the poor”).

76. *Id.* (explaining that even if the subsidies make energy more affordable, the poor may not see the economic benefits of these subsidies for many reasons, including lack of access to required energy-delivery infrastructure, modest consumption relative to industrial and high-income consumers, and arbitrary rationing).

77. See World Trade Organization [WTO], Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/1, 41 I.L.M. 746 (2002) (stressing that the aims of upholding a multilateral trading system, protecting the environment, and promoting sustainable development “can and must be mutually supportive”); *cf.* REFORMING ENERGY SUBSIDIES, *supra* note 71, at 22-26 (recommending that international organizations take an active role in helping emerging economies to develop such reforms).

78. Pascal Lamy, Dir.-Gen., WTO, Speech at the Informal Trade Ministers’ Dialogue on Climate Change (Dec. 9, 2007), available at http://www.wto.org/english/news_e/sppl_e/sppl83_e.htm.

signal on how its rules may best be put to the service of sustainable development [and fighting climate change in particular].⁷⁹

I believe that this is a very important message: while looking at the role that international trade accords have in promoting the right mix of energy sources and green technologies, we also need to build a strong framework for achieving global environmental objectives. This will mean, in the case of climate change, investing heavily in the post-2012 accords.

International efforts need to be matched by national efforts to reduce carbon dependency and remove subsidies and other perverse incentives. This will require appropriate policy and legal tools that establish the right incentives and remove the wrong ones. The role of the legislators and policy makers here is fundamental. This also comes with: a need for increased communication among trade, tax, and environmental experts, especially lawyers; a need for enhanced capacity for national legislators and policy makers to understand the role of trade and fiscal policies for fostering renewable energies; and a need for enhanced capacity to influence international negotiations, both in the trade arena and in other forums, with this new approach.

Reforms in the area of energy subsidies can be very problematic, due to the political significance of any action taken in this area. So even when it is clear that the costs of these subsidies are higher than the benefits, a decision to eliminate them can be extremely unpopular with those segments of the society that benefit from the subsidies.⁸⁰ This is where policy makers and legislators need to be particularly skilled in pursuing the right approach, including the need to address readjustment issues.

These are global objectives that will require leadership and reform of international law but there is an important spillover effect that will

79. *Id.*

80. *Cf.* REFORMING ENERGY SUBSIDIES, *supra* note 71, at 26.

The majority of the population, who bear[s] the net cost of the subsidy and lose in net terms . . . since the cost is likely to be much smaller in per capita terms than the benefit to the recipients. Furthermore, politicians might have problems to reveal the economic costs of a subsidy to the public in a comprehensible way.

Id.

be key to accelerating the shift to a green economy for all economies willing to engage—this is the investment effect. The more we can instigate and drive these measures globally, the more confidence and certainty we will inspire for investment in green industries nationally.⁸¹ We are not talking about small-scale interventions, but rather of trillions of dollars in environmental industries—renewables, waste management, pollution control, energy efficient products and so on—which are forecasted to grow by 45% over the next decade.⁸²

VII. MATCHING INTERNATIONAL LAW AND NATIONAL LAW TO MAKE THE TRANSITION

International law and national are deeply interconnected. Han Kelsen, one of the greatest and most respected thinkers of international law of the last century, wrote that “[i]f national and international law are disconnected, the various national legal orders, therefore, must also be disconnected.”⁸³ His words resonate even more so today. To achieve a Global New Deal, it is critical that we match international law with efforts at the national level. As already mentioned, areas which will be important are tax reform, incentives for renewable energy, energy efficiency, investment in new forms of public transport, and development of markets for ecosystem services. The role of law is integrating these goals with existing laws. For example, the U.K. Planning Bill has been adapted to work with the goal of creating a low-carbon economy by setting a balance between enabling wind farms, and its Marine Bill has been developed to work together with the Energy Bill to respond to major new investment in energy from wave and tidal sources of energy.⁸⁴

81. See Gordon Brown, U.K. Prime Minister, Remarks to the Low Carbon Industrial Strategy Summit (March 6, 2009), available at <http://www.number10.gov.uk/Page18530> (supporting international initiatives that channel investment towards a green economy).

82. See Jonathan Selwyn, *A Study of Emerging Markets in the Environmental Sector 2006*, in THE EIC GUIDE TO THE UK ENVIRONMENTAL INDUSTRY 2006, at 39 (2007) (noting that the global environmental goods and services sector is estimated to grow by 45% by 2015).

83. HANS KELSEN, GENERAL THEORY OF LAW AND STATE 380 (Anders Wedberg trans., Lawbook Exchange 1999) (1945). Kelsen continues on to say that, “[a] theorist adhering to [this] view thus would have to pronounce one national legal order—for instance that of his own State—as the only valid legal order.” *Id.*

84. Cf. Gordon Brown, U.K. Prime Minister, Speech on Climate Change (Nov. 19, 2007), available at <http://www.number10.gov.uk/page13791> (indicating that

A lot is already being done at national level in response to the financial crisis. Governments have agreed on stimulus packages that emphasize improving infrastructure.⁸⁵ As UNEP observes:

A number of countries, including China, Germany, Japan, the Republic of Korea, the United Kingdom . . . and the United States of America, in addition to the European Union, have taken the opportunity to green their economies, mainly through investing in greener infrastructure and reducing carbon emissions. [For example,] China has allocated 12 per cent of its \$586 billion stimulus package for direct energy efficiency and environmental improvements, has doubled investment in rail transport (a lower-carbon alternative to road and air transport) and has added \$70 billion for new electricity grid infrastructure.⁸⁶

Germany has increased the funds available for retrofitting buildings to convert them to green buildings by \$3.78 billion.⁸⁷ Stimulus funds will also be used to “accelerate investment in transport and subsidize the expansion of rail and waterways; [to] increase the tax-deductible amount for housing repairs and modernization; and [to] grant tax breaks on new and low emission cars until the end of December 2010.”⁸⁸

UNEP also takes note of other government responses to the financial crisis and green-economy initiatives:

The Republic of Korea has unveiled what it calls the “Green New Deal” under which the Government will invest \$38 billion over the next four years into “green growth plans”,

the Energy Bill, the Planning Bill, and the Climate Change Bill are vital to increasing the renewable energy sources).

85. *See, e.g., id.* (indicating that the British government has provided £370 million to a domestic environmental transformation fund to bring wave and tidal stream energy to the domestic marketplace, creating businesses and jobs); Press Release, The White House, President Obama, Vice President Biden to Announce \$8 Billion for High-Speed Rail Projects Across the Country (Jan. 28, 2010), available at <http://www.whitehouse.gov/the-press-office/president-obama-vice-president-biden-announce-8-billion-high-speed-rail-projects-ac> (awarding \$8 billion in funding from the American Recovery and Reinvestment Act toward construction of high-speed rail projects in order to create jobs and decrease environmental impact).

86. *Global Crises: National Chaos?*, *supra* note 7, ¶ 42.

87. *Id.* ¶ 43.

88. *Id.*

comprising “36 major projects” which will include: the clean-up of four major rivers, the creation of a network of bicycle tracks, an increase in the number of environmentally-friendly vehicles to 68,000, and the conversion of 20 per cent of public lights to light-emitting diode (“LED”) lights.⁸⁹

Most recently, the Government announced the establishment of a presidential green growth commission comprised of business, social and government leaders.⁹⁰ Turning to other major economies, the UNEP reports,

Japan, which has already launched a multi-billion green stimulus package for its economy, has just announced a \$5 billion loan fund for developing economies seeking to boost their renewable energy sector.

....

In the United States, where the new government is planning to spend close to \$900 billion stimulating the economy, a large portion of these funds will be focused on greening the economy, including plans to cut energy demand by one fifth from all federal buildings at an estimated cost of \$9.4 billion.

Likewise, the U.S. government is investing \$6.2 billion to ‘weatherise’ a million homes at an average cost of just over \$1,600 per property.

The brief estimates that \$100 billion invested over four years in improving energy efficiency in buildings and cities across the United States will generate two million jobs.⁹¹

89. *Id.* ¶ 44; see also Associated Press, “Green New Deal” for South Korea: \$38.1 Billion, THE HUFFINGTON POST, Jan. 6, 2009, http://www.huffingtonpost.com/2009/01/06/green-new-deal-for-south_n_155504.html (suggesting that as a trade-dependent country, South Korea used its “Green New Deal” to boost its slowing economy).

90. See *Presidential Green Growth Commission Launched*, KOREA IT TIMES, March 1, 2009, <http://www.koreaitimes.com/story/green-growth-denuclearization-hillary-busy-month-lee> (last visited May 30, 2010) (reporting the official launch of the Commission on February 16, 2009).

91. Press Release, UNEP/GRID-Arendal, Global Green New Deal Policy Brief Launched in Run Up to Crucial G20 Meeting (Mar. 19, 2009).

VIII. GLOBAL MINISTERIAL ENVIRONMENT FORUM

The UNEP Governing Council/Global Ministerial Environment Forum (“GMEF”) is the United Nations high-level environment policy forum and brings the world’s environment ministers together to “review important and emerging policy issues in the field of the environment.”⁹² The GMEF provides broad policy advice and guidance with the aim, among others, of promoting international cooperation in the field of environment.⁹³ In doing so, it invites officials of U.N. agencies and heads of multilateral environmental agreement secretariats “to participate and interact with ministers at meetings” and seeks to “promote the meaningful participation of representatives of major groups and non-governmental organizations including the private sector.”⁹⁴

Within UNEP and its GMEF we have, over the past three years, focused on ‘globalization and the environment’ with a strong focus on the environment and economic nexus. In fact, the UNEP Medium-Term Strategy 2010-2013 completed in February last year notes that: “the current environmental challenges and opportunities will cause the environment to move from often being considered as a marginal issue at the intergovernmental and national levels to the centre of political and economic decision-making.”⁹⁵

In 2009, the GMEF’s focus was on responding to multiple environment and development challenges—the energy, food, finance, freshwater, and climate crises—and in particular on the benefits of making a transition towards a green economy.⁹⁶ Linked to

92. G.A. Res. 53/242, ¶ 6, U.N. Doc. A/RES/53/242 (Aug. 10, 1999).

93. See UNEP, *Decision SS.VII/1 of the UNEP Governing Council Adopted at Its Seventh Special Session in Cartagena, Colombia, on 15 February 2002, International Environmental Governance*, ¶¶ 11(e) (recommending that the GMEF promote participation of major groups and non-governmental organizations).

94. *Id.* ¶¶ 11(e), 11(h)(iii).

95. UNEP, *United Nations Environment Programme Medium-term Strategy 2010-2013: Environment for Development*, at 3, UNEP/GCSS.X/8.

96. See GGND, *supra* note 13, at 2 (listing the various hardships that arose in 2008-09 as a backdrop to the Global Green New Deal). Some messages from the President’s Summary of the 2009 GMEF – Global crises: national chaos?—towards a green economy were that:

The economic crisis puts the State in a position where it is imperative to develop regulation that will cause markets to promote the transition to a green

topic was a discussion on the sort of governance arrangements we will need to facilitate the transition.⁹⁷ International environmental law will play a key role.

IX. HOW DO WE MOVE FORWARD?

How do we make a shift from focusing on what we need to stop happening to what we need to see happening? How do we create the right conditions to encourage the market to move towards sustainable agriculture, energy efficiency, a shift towards renewable energy, innovation through biomimicry, and biosequestration as the best form of carbon capture and storage? These changes will not happen by chance. They will not happen through good will alone or through voluntary measures alone. The legal and governance regimes at national and global levels must steer effort and investment in this direction. For example, International environmental law must influence world trade law—how will international trade work for sustainable development?

Good law needs good science, which in turn needs good economics; that is why UNEP has strongly supported the work on the Economics of Ecosystems and Biodiversity, and has launched the Green Economy Initiative.⁹⁸ This work provides the necessary platform for sound regulatory responses. Another crucial part of UNEP's work is the promotion of environmental law, both at

economy. This will require a strong leadership role for Governments;
 . . . The move toward a green economy raises the possibility of strengthening
 the current international environmental architecture or transforming it to
 respond to multiple challenges and opportunities[;]

.....

Governments must establish the right frameworks and incentives that will
 facilitate the transition to a green economy; [and]

.....

Decisions must be made that contribute to the creation of the right conditions
 for stimulating private sector investment in the green economy in developed
 and developing countries and countries with economies in transition.

See President's Summary, supra note 55, at 58-60.

97. *See id.* at 61 (discussing the modes of governance to promote a Green Economy).

98. *See* UNEP, Green Economy Initiative, <http://www.unep.org/greeneconomy/> (last visited May 30, 2010) (describing the Green Economy Initiative, which helps governments make their economies more environmentally friendly through technologies such as renewable energy, transportation, and green buildings).

national and international levels. Since 1982, UNEP has set a ten-year international strategy on research, activities and issues called the Montevideo Programme.⁹⁹ The fourth program¹⁰⁰ has recently been adopted and it presents several key opportunities where law will play a critical role in delivering a green economy.

You all here today—the world's best, brightest, and most experienced in the field of international law—also have a key role to play in bridging science and economics with law and crafting the frameworks of the future. I reach out to you as Executive Director to assist us in promoting the transition towards a green economy and ensuring that international law helps rather than hinders such a transition.

X. INTERNATIONAL ENVIRONMENTAL GOVERNANCE (“IEG”) FOR THE TWENTY-FIRST CENTURY

Since well before UNEP was established as the lead environmental entity within the United Nations system following the 1972 U.N. Conference on the Human Environment,¹⁰¹ environmental issues have been built into many programmes within the United Nations system, including its specialized agencies.¹⁰² They have also been addressed through a wide range of multilateral environmental

99. See UNEP, Montevideo Programme, http://www.unep.org/law/About_prog/montevideo_prog.asp (last visited May 30, 2010) (describing the Montevideo Programme strategy to provide guidance to UNEP in the field of environmental law).

100. UNEP, *Report of the Meeting of Senior Government Officials Expert in Environmental Law to Prepare a Fourth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme IV)*, U.N. Doc. UNEP/Env.Law/MTV4/IG/2/2 (Oct. 28, 2008) available at http://www.unep.org/Law/PDF/MontevideoIV/Meeting_Report_Montevideo1V.pdf.

101. U.N. Conf. on the Human Env't, Stockholm, Swed. June 5-16, 1972, *Declaration of the U.N. Conference on the Human Environment*, U.N. Doc. A/CONF.48/14 (June 16, 1972) available at <http://www.unep.org/Documents/Multilingual/Default.asp?DocumentID=97&ArticleID=1503>.

102. See, e.g., International Atomic Energy Agency, Mission Statement, <http://www.iaea.org/About/mission.html> (last visited May 30, 2010) (stating the agency's mission to promote environmentally-safe nuclear technologies between nations); United Nations Industrial Development Organization, UNIDO Mission and Priorities, <http://www.unido.org/index.php?id=7851> (last visited May 30, 2010) (identifying clean industrial development as one of the organization's goals).

agreements, many of which came about as a result of the work of UNEP.¹⁰³

While much has been achieved [since 1972], it is also recognized that the international community has taken an incremental approach to environmental issues, responding to them as they emerge and in isolation from one another.

....

As a result of this fragmentation, some have expressed concern over what they see as a lack of critical mass – in resources, science, capacity, etc. – that has both entrenched and reinforced the sense that there is a lack of coherence. There has also been a deficit in the implementation of what has been agreed to by the international community. Informed opinions differ on how to best respond to such issues.¹⁰⁴

There has also been a “growing debate about established and emerging financial mechanisms for dealing with climate change, both within and outside the United Nations, and how they relate to one another and to multilateral financing for environmental initiatives more generally.”¹⁰⁵ Further,

[t]he lack of coherence in the system is being increasingly felt at the country level. This is leading some to ask whether the current international environmental governance system, including financing mechanisms, helps States to meet the

103. Cf. UNEP, About UNEP, <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=43&ArticleID=3301&l=en> (last visited May 30, 2010) (indicating that UNEP hosts the environmental secretariats of several international conventions, including the Ozone Secretariat and the Montreal Protocol's Multilateral Fund, CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), the Convention on Biological Diversity, the Convention on Migratory Species, the Basel Convention on the Transboundary Movement of Hazardous Wastes, and the Stockholm Convention on Persistent Organic Pollutants).

104. UNEP, Twenty-Fifth Session of the Governing Council/Global Ministerial Environment Forum, Nairobi, Kenya, Feb. 16-20, 2009, *Background Paper for the Ministerial Consultations, Discussion Paper Presented by the Executive Director, Addendum, International Environmental Governance and United Nations Reform, International Environmental Governance: Help or Hindrance?* [sic] – *International Environmental Governance from a Country's Perspective*, ¶¶ 7-8 UNEP/GC.25/16/Add.1, (Dec. 24, 2008).

105. *Id.* ¶ 32.

challenges to achieving sustainable development and the Millennium Development Goals and to capitalizing on the emerging opportunities, or whether it hinders such efforts.¹⁰⁶

This raises the related question of what a future, country-responsive system of international environmental governance would look like. Addressing this question, the UNEP Governing Council observed:

Since well before the establishment of UNEP in 1972, various models have been put forward for strengthening international environmental governance, be it through a world environment organization, a United Nations environment organization, a global environment organization, a new umbrella institution integrating UNEP, GEF and multilateral environmental agreement secretariats (an “umbrella institution”) or the enhancement of UNEP through strengthening the Governing Council/Global Ministerial Environment Forum and the Environment Management Group, developing a medium-term strategy and other measures (UNEP+).

Other proposals to emerge have included combining UNEP and UNDP, having all multilateral environmental agreements report to the General Assembly through UNEP. Most recently, the Prime Minister of the United Kingdom of Great Britain and Northern Ireland, Gordon Brown, put forward “a radical proposal to make the World Bank a bank for development and the environment”. Sir Nicholas Stern, in a paper entitled “Key Elements of a Global Deal on Climate Change” published by the London School of Economics and Political Science, has proposed the establishment of an “International Climate Change Organization compatible in terms of impact and authority with the International Monetary Fund, the World Trade Organization and the World Bank”.¹⁰⁷

However, after many decades of what has often been a largely unproductive debate, we are gaining a sense of a new and emerging momentum in addressing IEG—amid concerns over how well-equipped the current system is to provide coherent and timely

106. *Id.* ¶ 19.

107. *Id.* ¶¶ 24-25.

responses to multiple environmental and development challenges and to capitalize on emerging opportunities.

How can international environmental governance work to assist countries to meet their environmental objectives? How can it work to support the transition towards a green economy? At present, one is hard-pressed suggesting it does either. The debate can get bogged down in international politics, but during the GMEF, Ministers acknowledged that “[t]he world is changing and international environmental governance reform must keep up with this changing context.”¹⁰⁸

International lawyers have a key role to play in exploring and analyzing options for moving forward. The politics will always be central—but the politics needs the benefit of sound ideas from which to launch a political discussion. An opportunity for new thinking has been opened up by the decision of the UNEP Governing Council this year to establish a regionally-representative group of ministers (or

108. *President’s Summary*, *supra* note 55, at 64. Some messages from the President’s Summary included:

[(1)] We need a governance system that matches the issues that are emerging and that takes into account the interconnected nature of environmental challenges from ecosystem services to climate change and the interconnectedness of environment and development. . . . [(2)] The time is right. The move toward a green new deal and green economy provides an opportunity to integrate better the existing regimes. . . . [(3)] For the first time in many years there is a chance to make headway on international environmental governance through climate change negotiations. There is an opportunity to build trust in Copenhagen that can be taken forward to a proposed Rio+20 conference. . . . [(4)] The status quo is not acceptable and there is a necessity to demonstrate boldness and to think big on the issue of international environmental governance reform. . . . [(5)] We need to use the next three years before a possible Rio+20 to define a new paradigm for collective action and to ask questions about the desired future and ways of achieving the principles and objectives of international environmental governance. [(6)] The current international environmental governance system either cannot meet – or has problems in meeting – the development challenges that we face today. Reform should be built on broadening the mandate of international environmental governance to include sustainable development at its core; reforms should strengthen the integration of environment into the broader development agenda and the ability of countries to meet both their environment and development objectives. . . . [(7)] All major stakeholders have a role to play and can actively contribute to efforts to strengthen international environmental governance.

Id. at 62-64.

their high level representatives) to develop a set of options for reform for the next Governing Council in February 2010, which will in turn be shared with the General Assembly.¹⁰⁹ We have high hopes for this process in helping to bring fresh and innovative thinking to a decades old debate—one that will find new ways to broker a political solution that orientates our international environmental architecture towards further supporting the transition to a green economy.

CONCLUSION

While we face multiple and serious challenges, the situation also presents real opportunities to make profound changes in our economies. Moving toward a green and low carbon economy will deliver multiple benefits in addressing food, energy, and water security, and in achieving sustainable development and the Millennium Development Goals.

Well-functioning markets depend on well-functioning institutions. If the rules, norms, and regulations are not in place, markets will inevitably malfunction or create externalities. We need an ‘intelligent invisible hand’ one that is guided by smart regulation to ensure the economy works for sustainable development and not against it. To a large extent, the critical role that law will play in delivering a green economy has not been underscored enough. Grotius taught us that law can be a conduit for transformative economic change.

The term “green economy” describes an economic system that recognizes the properties of healthy ecosystems as the backbone of economic and social well-being and as a precondition for poverty reduction. A Global Green New Deal refers to a set of globally coordinated large-scale stimulus packages and policy measures that have the potential to bring about global economic recovery in the short term while laying the foundation for sustained economic growth in the medium and long term.

A lot is already being done at national level in response to the financial crisis. Governments have agreed on stimulus packages that

109. Council of the European Union, General Secretariat, *International Environmental Governance (IEG) – Reform of the System – Informational from the Presidency*, No. 17524/09, Dec. 16, 2009, at 3 (indicating that this group was established because a consensual United Nations General Assembly decision could not be reached).

have a focus on greening the economy, including in the United States. International law has a critical role to play in providing the foundation for accelerating the transition towards a green economy including in relation to; climate change agreements, intellectual property rights; access and benefits sharing; the link between ecosystem services and human rights; and in reforming energy subsidies.

To achieve a Global New Deal, it is critical that we match international law with efforts at the national level—the law and the economy can and must work together at all levels to make use of market incentives to actively promote environmental objectives. The current multiple and serious challenges also presents an opportunity to re-examine the capacity of governance structures at the national and global levels. We are gaining a sense of a new and emerging momentum in addressing international environmental governance amid concerns over how well equipped the current system is address current and emerging issues. International lawyers have a critical role to play in promoting the transition towards a green economy and ensuring that international law helps rather than hinders such a transition.