

Legal Transition to the Green Economy

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In the aftermath of the global financial crisis of 2008, it can be suggested that the current model of economic growth is neither financially nor environmentally sustainable. The need to move towards a greener economy has since gained traction in the international policy arena. As the 2012 United Nations Conference on Sustainable Development (UNCSD) affirmed, a global transition to a different kind of economic growth, one that is environmentally responsible and socially inclusive, is needed. However, debates on how to promote a global green economy have traditionally focused on economics. This article seeks to highlight the potential contributions of the law in enabling and supporting a greener economy, as well as the need for more innovative and integrated approaches to our understanding of international economic law (trade, investment, and finance). It is divided into three parts. First, it provides an explanation of what is meant by a green economy, and the potential contributions of law

to greening economic growth. Second, it examines innovative legal provisions at national, regional and international levels, which expressly seek to green economic policies and practices, based on an international legal research project with the United Nations Environment Programme (UNEP). Third, it focuses on the progress and limitations of international economic law in facilitating or hindering the transition to a global green economy by exploring possible legal and policy remedies. The purpose of this paper is to show how the transition to a green economy is already being promoted by law at all levels, and is receiving growing recognition nationally and internationally. It tracks and examines contemporary developments and trends in innovative legal instruments and provisions at regional, national, and international levels in relation to the green economy; and explores several pathways for international economic law to support the green economy in the context of sustainable development.

Titre francophone : Transition juridique vers l'économie verte

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Dans la foulée de la crise financière mondiale de 2008, il est suggéré que le modèle actuel de croissance économique n'est durable ni sur le plan financier ni sur le plan environnemental. La nécessité de progresser vers une économie plus verte a depuis pris de l'ampleur dans l'arène politique internationale. Comme l'a confirmé la Conférence des Nations Unies sur le développement durable (CNUDD) en 2012, une transition mondiale vers un autre type de croissance économique, qui est responsable de l'environnement et de l'inclusion sociale, est nécessaire. Toutefois, les débats sur la façon de promouvoir une économie verte mondiale ont traditionnellement mis l'accent sur l'économie. Le présent article vise à mettre en évidence les contributions potentielles du droit pour permettre et soutenir la mise en place d'une économie plus verte, ainsi que la nécessité d'adopter des approches plus novatrices et intégrées à la façon dont nous comprenons le droit économique international (commerce, investissement et finance). L'article est divisé en trois parties. Premièrement, il fournit une explication de ce que l'on entend par une économie verte et les contributions potentielles du droit à

l'écologisation de la croissance économique. Deuxièmement, il examine des dispositions juridiques novatrices aux plans national, régional et international, qui visent expressément les politiques et pratiques économiques vertes, fondées sur un projet international de recherche juridique avec le Programme des Nations Unies pour l'environnement (PNUE). Troisièmement, il se concentre sur les progrès et les limites du droit économique international pour faciliter ou entraver la transition vers une économie verte mondiale en explorant les éventuels recours juridiques et politiques. Le présent article a pour but de montrer comment la transition vers une économie verte est déjà promue par le droit à tous les niveaux et reçoit une reconnaissance accrue à l'échelle nationale et internationale. Il suit et examine les développements et les tendances contemporains des instruments et dispositions juridiques novateurs aux niveaux régional, national et international par rapport à l'économie verte et explore plusieurs avenues grâce auxquelles le droit économique international pourrait soutenir l'économie verte dans le contexte du développement durable.

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1. INTRODUCTION

New markets and industries are emerging for clean renewable energy, environmental goods and services, local organic agriculture, biological resources, sustainable transportation, construction infrastructure, and payment for ecosystem services. As envisioned in the 2011 United Nations Environment Programme's (UNEP) report *Towards a Global Green Economy*, the global community has an opportunity and an imperative to shift from the current pattern of unsustainable economic growth—based on cheap and environmentally damaging fossil fuels and resource depletion—to a low-carbon, resource efficient and sustainable form of economic growth that is also socially inclusive. This shift is to be achieved by transitioning into a green economy.¹ The concept of a global green economy, used in the context of international policy, is a product of the 2008 financial crisis and its aftermath that triggered calls for a Global Green New Deal.² With the crisis bringing unprecedented policy responses, such as millions of dollars spent in most countries to rescue old, polluting industries (e.g., resource extraction and conventional car-making) it became important to ensure that these policies would be sustainable. This meant that the policies adopted could not simply resurrect out-dated economic growth models based on resource exploitation and the externalisation of the costs of polluting industries—jeopardizing long-term economic recovery as well as the health of the environment. The commitment to a greener global economy became

¹ See e.g. United Nations Environment Programme, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* (Nairobi: UNEP, 2011) [UNEP, *Towards a Green Economy*].

² See United Nations Environment Programme, *Global Green New Deal: Policy Brief* (2009), online: <www.unep.org/pdf/A_Global_Green_New_Deal_Policy_Brief.pdf>.

the solution: a new post-recession economic model to lead sustainable economic growth.³ What is novel is the consensus that the world not only faces an economic crisis, but that it also faces energy, food, and water crises, to which the world's poor are the most vulnerable.⁴ Contrary to previous crises, the impact on sustainable development became much clearer in this economic crisis, largely due to better information about developments in far-flung corners of the world. These insights also influenced the recent discussions concerning the Sustainable Development Goals (SDGs).⁵ To this end, a green economy strives to eradicate poverty through environmentally-sound and socially-just economic growth in developing countries, while aiming for structural changes in developed countries to facilitate poverty reduction and environmental recovery. As heads of state agreed in the 2012 United Nations Conference on Sustainable Development (UNCSD), also referred to as Rio+20, such objectives form the core of a new economic agenda that all States can promote.

Even though the UNEP emphasised policies and non-binding approaches, increasingly countries are adopting innovative legal practices, in attempts to move towards a global green economy for poverty eradication and sustainable development. While some parts of the labour movement criticised the emphasis on the economy⁶ and many parts of traditional economic sectors still question the transition to greener approaches,⁷ transitioning to a green economy has sound economic and social justifications.⁸ This is because a transition to a greener economy prevents future clean up and burden on the natural environment while not imposing the costs of this transition on the weakest members of society and maintaining economic progress.

Indeed, on all levels, there are fresh efforts by governments and other actors, such as NGOs, economic sectors and even individuals, to achieve necessary economic transformations. There is growing evidence that international rules are being agreed upon to guide governments and send important signals to markets: with continuing agreement of international economic treaties; arbitral and judicial resolution of new international disputes on natural resources, environment and development problems; and adoption of new international instruments like the UN Framework Convention on Climate Change Paris Agreement, the Warsaw REDD+ decisions, or the UN Biodiversity Convention Nagoya Protocol.⁹ In particular, international economic law and policy is evolving rapidly, and holds the potential to foster, rather than frustrate, the transition to a greener economy. Taking into account developments in the World Trade Organization (WTO), Regional Trade Agreements (RTAs) and other international

³ See UNEP, *Towards a Green Economy*, *supra* note 1.

⁴ See *ibid.*

⁵ United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1, 25 September 2015 [UN, *Transforming Our World*].

⁶ Friedrich Ebert Stiftung, "Green Economy - A Sustainable Concept?" (2012), online: <www.fes-sustainability.org/en/discussions/green-economy-sustainable-concept>.

⁷ See generally A Kenis and M Lievens, *The Limits of the Green Economy: From Re-inventing Capitalism to Re-politicising the Present*, (Abingdon: Routledge, 2015) at ch 3.

⁸ See UN, *Transforming Our World*, *supra* note 5 at para 33.

⁹ *Adoption of the Paris Agreement*, UNFCCC, 21st Sess, UN DOC CP/2015/L.9/Rev.1 [*Paris Agreement*]; Secretariat of the Convention on Biological Diversity, *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity* (Nagoya: UNEP, 2010). For a discussion of Warsaw REDD+ see ME Recio, "The Warsaw Framework and the Future of REDD+" (2014) 24 *Yearbook of International Environmental Law* 37.

economic regimes, as interpreted in recent disputes,¹⁰ such rules might even be able to appropriately discipline or encourage domestic measures and the economies they regulate. However, many questions remain about the most appropriate measures by which progress can be made internationally and in different regions of the world.

In this article, it is argued that law can and does already play a crucial role in enabling and supporting a greener economy, especially through innovative legal approaches and provisions in international economic law (i.e., international trade law, international investment law and international finance law) that have the potential to facilitate a global transition to a greener economy. Based on a recent comparative review with the UNEP, this article provides a review of major legal innovations at national, regional and international levels. To illustrate opportunities and challenges in this transition, it focuses on the domain of international economic law. Such a broad frame of analysis—considering legal innovations at national to international levels—is warranted, as international instruments often provide important guidance and standardisation of norms across countries, while rights-based measures are often implemented by legislation and policy frameworks at national or sub-national levels,¹¹ closest to those most affected. Put differently, legal innovations can be detected at various nodes of the terrain, some emerging top-down from international to national or local levels, while others emerge spontaneously at local and national levels. Such bottom-up innovations then serve as examples or inspiration for international accords.

Divided into three parts, this article first examines the contours of various definitions of green economy, its importance despite criticisms, and the relationship between green economy and the law. Second, it discusses recent innovative legal provisions at national, regional and international levels and identifies key limitations, based on a study with the UNEP, which considered over 2000 legal instruments across six regions of the world.¹² Third, it focuses on potential barriers and limitations concerning international economic law and explores possible legal remedies. In doing so, it makes two main contributions to the existing literature by: (1) tracking and examining contemporary developments and trends in innovative legal instruments and provisions at country, region and international level in relation to the green economy; and by (2) exploring several pathways for international economic law to support the green economy in the context of sustainable development. However, discussions of specific legal innovations will be kept brief and, due to constraints of space, an impact analysis of the selected legal measures has not been attempted. For policy and decision makers, such a review and analysis of recent trends can help shape the design and implementation of green economy measures, while for scholars and academics, it helps to identify challenges and opportunities for the law to promote the transition into a global green economy which require deeper examination in the future.

¹⁰ See generally WTO Secretariat, *Harnessing trade for sustainable development and a green economy* (Geneva: WTO Publications, 2012).

¹¹ HH Koh, “Preface” in Marie-Claire Cordonier Segger and CG Weeramantry, eds, *Sustainable Justice: Reconciling Economic, Social and Environmental Law* (Leiden: Martinus Nijhoff, 2004) v at v.

¹² Markus W Gehring & Alexandra Harrington, *UNEP’s Compendium of Innovative Laws promoting Green Economy & Sustainable Development* (Nairobi 2016), online: UNEP <wedocs.unep.org/bitstream/handle/20.500.11822/9947/compendium-innovative-laws-promoting-green-economy.pdf?sequence=1&isAllowed=y> [Gehring & Harrington, *Compendium*].

2. THE GREEN ECONOMY AND THE LAW

2.1. DEFINITIONS OF GREEN ECONOMY

Rather than deciding on a single universal definition of the green economy, heads of states at Rio+20 in *The Future We Want Declaration*, affirmed that “there are different approaches, visions, models and tools available to each country, in accordance with its national circumstances and priorities, to achieve sustainable development in its three dimensions which is our overarching goal.”¹³ Some commentators critiqued the lack of one single definition for the global green economy.¹⁴ This criticism is very similar to the one levelled against sustainable development decades earlier.¹⁵ While this lack of an agreed definition has the result of being a more unifying and perhaps less black and white concept, recent research has shown that sustainable development (and here it is argued also the green economy) is not without legal meaning or consequence.

2.1.1. SUSTAINABLE DEVELOPMENT

Sustainable development, defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs,” is a widely accepted goal of the global community.¹⁶ Its underlying ideas have governed the practices of many cultures for thousands of years.¹⁷ Significantly, from its inclusion in the *Brundtland Report*, those promoting more sustainable development did not focus on limiting economic activity but rather on redirecting it, in order to ensure the potential for long-term, sustained yields from the development process.¹⁸ Sustainable development is closely related to, and may ideally become a core objective of, national and international economic law and policy.

Sustainable development, according to Agenda 21, rests on three interlinked pillars of environmental protection, social inclusion and economic development.¹⁹ These three pillars, also known as dimensions, have been criticised. However, in conjunction with legal analysis

¹³ *The Future We Want*, GA Res 66/288, UNGAOR, 66th Sess, UN Doc A/RES/66/288 (2012) at para 56 [*The Future We Want*].

¹⁴ Elisa Morgera & Annalisa Savaresi, “A Conceptual and Legal Perspective on the Green Economy” (2013) 22:1 RECIEL14.

¹⁵ Vaughan Lowe, “Sustainable Developments and Unsustainable Arguments”, in David Freestone & Alan E Boyle, eds, *International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford: Oxford University Press, 1999) 19 at 20.

¹⁶ World Commission on Environment and Development, *Our Common Future*, UNGA, 42nd Sess, Supp No 25, UN Doc A/42/25 (1987) 1 at 27. See also Marie-Claire Cordonier Segger & Ashfaq Khalfan, eds, *Sustainable Development Law: Principles, Practices, and Prospects* (Oxford: Oxford University Press, 2004) at ix.

¹⁷ CG Weeramantry, “Achieving Sustainable Justice Through International Law” in Cordonier Segger & Weeramantry, *supra* note 11 at 15.

¹⁸ See eg M Stillwell, “Sustainable Development and Trade Law: Overview of Key Issues” in Cordonier Segger & Weeramantry, *supra* note 11 at 87.

¹⁹ See *Implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development*, GA Res 64/236 UNGAOR 64th Sess, Supp No 49, UN DOC A/RES/64/236 at 2.

they can serve an important purpose, since in balancing these three priorities in a manner similar to a proportionality analysis, neither priority should be completely ignored.²⁰

The 2012 UNCSD in Rio, building on the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg, refocused global awareness on the need for more environmentally sound and socially equitable economic development. Sustainable development has, in one formulation or another, been enshrined as an explicit objective in more than thirty binding international treaties.²¹ It is central to the mandates of many international organizations,²² and the subject of numerous “soft law” declarations and standards.²³ Sustainable development and its principles guide domestic and international law in many areas of economic, social and environmental policy, particularly where these fields intersect.²⁴ However, in international economic law, sustainable development remains challenging to implement. As noted by governments in the WSSD Johannesburg Plan of Implementation, economic globalization affects the social aspects of sustainable development in both positive and negative terms:

Globalization offers opportunities and challenges for sustainable development. We recognize that globalization and interdependence are offering new opportunities for trade, investment and capital flows and advances in technology, including information technology, for the growth of the world economy, development and the improvement of living standards around the world. At the same time, there remain serious challenges, including serious financial crises, insecurity, poverty, exclusion and inequality within and among societies.²⁵

This highlights the dynamic tension that is part of the concept of sustainable development but also shows that this tension can be accommodated within a single concept. Efforts are still ongoing to ensure that the international and domestic rules which stimulate trade, investment and financing can also provide sufficient policy flexibility and incentives to encourage sustainability. This can be done—in part—by investigating and classifying existing rules and practices, analysing best practice innovations to strengthen and transform (“green”) the emerging rules of global economic law and policy.²⁶

2.1.2. GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT

Broadly, the green economy can be regarded as an approach that addresses aspects of all three pillars of sustainable development by connecting “environment” and “economics” to deliver human well-being and social equity through poverty reduction in accordance with Principle

²⁰ See Cordonier Segger & Khalfan, *supra* note 16 at 103.

²¹ *Ibid* at 32.

²² See e.g. UNEP, *Towards a Green Economy*, *supra* note 1.

²³ Marie-Claire Cordonier Segger, “Sustainable development” in David Armstrong, ed, *Routledge Handbook of International Law* (Abingdon: Routledge, 2008) at 355.

²⁴ See generally Markus Gehring, “Sustainable International Trade, Investment and Competition Law” in Cordonier Segger & Khalfan, *supra* note 16 at 281 [Gehring, “Sustainable International Trade”].

²⁵ *Plan of Implementation of the World Summit on Sustainable Development*, World Summit on Sustainable Development Res 2, UN Doc A/CONF.199/L.1 (2003) 6 at 39 [*Plan of Implementation*].

²⁶ Here defined as “becom[ing] less dependent on liquidating environmental assets and sacrificing environmental quality”; see UNEP, *Green Economy Report* (Nairobi: UNEP, 2011) at 17, online: <www.unep.org/greeneconomy/resources/green-economy-report>.

One of the 1992 Rio Declaration.²⁷ While not using the term in the 2012 Declaration on *The Future We Want*, the broader notion of the green economy is reflected in that declaration. The green economy is designed to contribute to the eradication of poverty, sustain economic growth, enhance social inclusion, improve human welfare, create opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth's ecosystems. In this sense, many sustainable development policies, such as fisheries or forestry policies could be seen as complying with the green economy objective because they enable states to become less dependent on liquidating environmental assets and sacrificing environmental quality while still allowing for economic growth.

In a narrower sense, the green economy constitutes a tool to realize sustainable development. In this sense, the green economy is just one tool to realize sustainable development, while recognizing that further tools could be required to realize sustainable development goals. The UN interagency report states: "although the causes of these crises vary, at a fundamental level they share a common cause: The gross misallocation of capital."²⁸ Thus, the green economy is the means to overcome the global crises by redirecting capital investment in sectors that are favourable to both economic growth and environmental conservation, which subsequently would bring poverty eradication and social development. Similarly, Bosselmann et al view the green economy as an agenda to correct market failures, where important costs and damages of economic development are not internalised.²⁹ For instance, traditional business valuation techniques and accounting practices fail to capture the full cost of pollution and values of ecosystem services and externalize the costs to be carried by the society. The green economy, from this viewpoint, is hence a tool that can internalize the full costs of production through regulatory activities using standards, charges, environmental taxes, permit markets, and budgetary activities such as payment for environmental services. Consequently, it would encourage more capital to flow into greener sectors of the economy.

Having presented two variations, both broader and narrower definitions, this article favours the former definition to cast a wider net in surveying global trend in legal innovation in green economy. Further, as discussed below, the concept of the green economy is not without critics.³⁰

2.2. THE LAW AND GREEN ECONOMY

While the concept is still being debated, lawyers are starting to ask how the law relates to the green economy objective. In his Grotius Lecture, Achim Steiner outlined how "law has a critical role to play in providing the foundation for accelerating the transition towards a green economy" especially as "law can be a conduit for transformative economic change"

²⁷ See United Nations Environment Management Group, *Working towards a Balanced and Inclusive Green Economy: A United Nations System-Wide Perspective* (Geneva: UN, 2011) at 32–33, online: <unemg.org/images/emgdocs/publications/GreenEconomy-Full.pdf>.

²⁸ UNEP, *Towards a Green Economy*, *supra* note 1 at 3.

²⁹ Klaus Bosselmann, Peter G Brown & Brendan Mackey, "Enabling a Flourishing Earth: Challenges for the Green Economy, Opportunities for Global Governance" (2012) 21:1 RECIEL 23 at 23.

³⁰ See e.g. Elisa Morgera & Annalisa Savaresi, "A Conceptual and Legal Perspective on the Green Economy" (2013) 22:1 RECIEL 14.

as evidenced by how the doctrine of freedom of the seas³¹ constituted the foundation for international free trade.³² Further, the relationship between international law and national law is of particular importance in the transition to a green economy as international law functions primarily as an instrument for the global community to agree on common goals and paths of action, while regional/national laws are the mechanisms in which to implement agreed goals in each particular context.³³ Beyond commitment at the normative level, there remain serious implementation challenges, particularly with regards to international environmental objectives.³⁴

From this viewpoint, the law can both enable and incentivize the transition into a green economy. Domestic framework laws, for example, serve as the anchor for policy reforms. They can level the playing field for greener products by phasing out antiquated subsidies, reforming policies and providing new incentives, they can strengthen market infrastructure and market-based mechanisms, and they can redirect public investment and support greener public procurement.³⁵ Such policy reforms in turn can encourage the private sector to seize the opportunities to transition to greener industrial practices across a number of key sectors, and to respond to new price signals through higher levels of financing and investment. As the discussion in Part 4 of this article indicates, international economic law is particularly important for influencing the transition. For instance, tailored trade rules and disciplines can lower barriers and tariffs to promote the flow of environmental goods and services and transfer of eco-technology; international investment agreements can make commitments not to lower environmental standards to attract private sector finance; and financial law has the potential to redirect investments of institutional investors from the traditional brown economy to greener economic sectors by requiring accurate sustainability reporting.

While such a legal transition appears to be desirable, it remains a question whether the policy concept has already been converted into legal rules. In other words, is there evidence that the political aspiration and concept has influenced legal rules? Law and social change remain an iterative process, especially in the context of sustainable development where the dichotomy of conceptualising law as independent or dependent variable in relation to social change is important. The law can be a vehicle to articulate and set the course for social change or a reflection of changes in social norms.³⁶ Growing international awareness of sustainability concerns, coupled with efforts to mainstream sustainable development practices, and the subsequent formation of coalitions to champion sustainable development, including the green

³¹ Freedom of the Seas is a doctrine proposed by Hugo Grotius that became a principle of international law in the 19th century. The principle holds that high seas are open to all nations and should not be subjected to national sovereignty in times of peace.

³² Achim Steiner, "Focusing on the Good or the Bad: What Can International Environmental Law Do to Accelerate the Transition towards a Green Economy?" (2010) 25:5 *Am U Intl L Rev* 843 at 843, 845.

³³ Fabiano de Andrade Correa, "The Role of Law in the Green Economy: Challenges and Opportunities for the Liberalization of Environmental Goods and Services" in Hassane Cissé et al, eds, *The World Bank Legal Review: Fostering Development through Opportunity, Inclusion, and Equity*, vol 5 (Washington: World Bank, 2013) 147 at 160.

³⁴ See generally Pierre-Marie Dupuy and Jorge E Viñuales, *International Environmental Law* (Cambridge: CUP, 2015) at 235ff.

³⁵ See UNEP, *Towards a Green Economy*, *supra* note 1 at 8.

³⁶ See generally Sharyn L Roach Anieue, *Law and Social Change* (London: SAGE Publications, 2000).

economy, has shaped new impetus to use law as a tool to bring evolutionary social changes. As Dror has argued, law can be viewed as an instrument or vehicle for the implementation of social and economic policy.³⁷ Drawing from this insight, it can be concluded that while legal innovations for the green economy are necessary conditions for mainstreaming sustainable development, a coordinated policy framework, especially at the international level, is crucial to bring about significant and lasting social changes. This means that while legal changes are required, clear international policy objectives such as in the recent *Paris Agreement* are an indispensable precondition for lasting change because they provide the policy framework in which future (legal) decisions will be taken.³⁸

2.3. CRITIQUE OF GREEN ECONOMY

Prior to proceeding to review and analysis of legal innovations, it is necessary to recognize that the green economy approach is not without critics.³⁹ Some question the renewed emphasis on an economic bottom line, to the detriment of environmental or social objectives.⁴⁰ This has been summarised by Shawkat and Razzaque:

[T]o many, the green economy is an instrument for the advancement of corporate interests, as it emphasizes markets and businesses as a solution to environmental and economic problems. According to Simons, corporate human rights impunity is deeply embedded within the structures of the international legal system, allowing powerful states to create a globalized legal environment that fosters further corporate impunity. Therefore, enhancing economic interests of Transnational Corporations (TNCs) based in the North at the expense of human rights and environmental sustainability in the global South is a systemic issue, not simply the result of globalization creating governance gaps, as Ruggie argues. Hence, the green economy is not a panacea for global economic, social, and environmental inequity.⁴¹

In other words, the criticism here is that the green economy emphasises economic progress and perhaps environmental progress but might omit the social dimension that is such an integral part to sustainable development.

However, Rio+20 reaffirmed and underlined that sustainable development remains the overall context in which to view the transition to the global green economy. When viewed from a sustainable development perspective, the laws that can support the green economy provide a necessary coherence among economic, environmental and social objectives. This is also why, in the context of sustainable natural resources management, governments highlighted equity and employment, encouraging: “each country to consider the implementation of green economy

³⁷ See *ibid* at 4.

³⁸ See *Paris Agreement, supra* note 9. For a discussion of these frameworks see Jorge Viñuales, “The Paris Climate Agreement: An Initial Examination” (2015) Cambridge Centre for Environment, Energy and Natural Resource Governance Working Paper No 2015-3.

³⁹ See e.g. Jacqueline Madeleine Borel-Saladin & Ivan Nicholas Turok, “The Green Economy: Incremental Change or Transformation?” (2013) 23:4 *Environmental Policy & Governance* 209; Clive L Spash, “Green Economy, Red Herring” (2012) 21:2 *Environmental Values* 95.

⁴⁰ See *ibid*.

⁴¹ Shawkat Alam & Jona Razzaque, “Sustainable Development versus Green Economy: The Way Forward?” in Shawkat Alam et al, eds, *International Environmental Law and the Global South* (New York: Cambridge University Press, 2015) 609 at 611 [footnotes omitted].

policies in the context of sustainable development and poverty eradication, in a manner that endeavours to drive sustained, inclusive and equitable economic growth and job creation, particularly for women, youth and the poor.”⁴²

The absence of guidelines to provide economic and developmental diversity within certain green economy instruments has been highlighted by others who are generally supportive of the overall premises and need for a transition.⁴³ Concerning such issues, Cordonier Segger and Saito, while noting that failure to ensure respect for human rights, social justice, equity and inclusion would undermine development processes for the most vulnerable of international community, suggest that green economic development can be made more inclusive and equitable by drawing on examples from “[s]everal innovative nations [that] are leading the way in implementing green economy initiatives that incorporate the recognition of human rights.”⁴⁴ The authors include Uganda’s 2009 Organic Agriculture Policy, Botswana’s community-based resource management laws and policies, Vietnam’s application of free and prior informed consent as a prerequisite for REDD+ project implementation, and India’s National Rural Employment Guarantee Act in their analysis. They provided a detailed review, and conclude that, interestingly, these green economy laws support poverty eradication and try to address other vulnerabilities while generally strengthening participation. By highlighting such examples, they point out developments at national and sub-national levels to operationalize inclusive and equitable green growth; yet underscore how more work is needed to “develop new regulatory frameworks and implement changes in legal practice on the ground”⁴⁵ and that international assistance and coordination will be required in tailoring legal, regulatory and institutional measures.

3. RECENT LEGAL INNOVATIONS⁴⁶

In a recent investigation, legal researchers in Africa, Latin America and the Caribbean, North America, Europe and the Asia Pacific regions tracked trends across a series of constitutional provisions and their judicial interpretations, as well as innovative national laws and their related regulations, institutions and standards. The study identified a series of general trends across 14 key sectors, highlighting the importance of “increasing human wellbeing and social equity, and reducing environmental risks and ecological scarcities.”⁴⁷ It concluded,

⁴² *The Future We Want*, *supra* note 13 at para 62.

⁴³ See Alam & Razzaque, *supra* note 42 at 615.

⁴⁴ Marie-Claire Cordonier Segger & Yolanda Saito, “Innovative Legal Measures for Climate Change Response in Green Economy: Integrating Opportunity, Inclusion, and Equity” in Hassane Cissé et al, *supra* note 33, 293 at 302.

⁴⁵ *Ibid* at 305.

⁴⁶ This section is based on a recent research study with the United Nations Environment Programme that surveyed and analyzed over 2000 innovative legal instruments and provisions to facilitate the transition to a greener economy at the national, regional and international levels. See Gehring & Harrington, *Compendium*, *supra* note 12. For regional studies, see also Markus Gehring & Avidan Kent, *Innovative Regulatory Frameworks Promoting Green Economy for Sustainable Development and Poverty Eradication in Europe* (2013) [unpublished, archived on SSRN], online: <ssrn.com/abstract=2603713>.

⁴⁷ *Ibid* at 14 The 14 key sectors are: Agriculture, Forests, Biodiversity, Fisheries, Marine/Coastal, Water regulation, Sustainable tourism, Energy, Climate change, Transportation, Buildings and construction, Manufacturing, Mining and Waste management/waste minimization (*ibid* at 4).

“across many of these sectors [...] greening the economy can generate consistent and positive outcomes for increased wealth, growth in economic output, decent employment and reduced poverty.”⁴⁸

The objective of the report was to compile important national and sub-national laws and regulatory instruments from around the world, documenting and highlighting innovative provisions which promote resource efficiency and sustainable consumption and production towards a transition to green economy on the pathway to sustainable development and poverty eradication.

As a general matter, the report reviewed the trends within legal systems as well as global trends in the green economy and underlying legal principles that can be discerned. The report discussed key findings of the surveys at a global scale, while also highlighting specific regional and state practices that are particularly innovative or important for the creation of the green economy. The selection criteria for each example was simple yet challenging—each was an innovative law that significantly deviated from a “business as usual” scenario. In other words, the report does not deny that laws are highly context specific, but also recognizes in all specific contexts, lawmakers can adopt conventional laws that echo the same old forms as have been attempted with scant success for the last twenty years, or they can truly innovate, driving regulatory agendas forward with new policy approaches, regulatory methods, and legislative provisions.

The UN resolution *The Future We Want* also acknowledges that sustainable development requires, at both the national and international level: the rule of law, governance, and institutions.⁴⁹ Laws and regulatory frameworks which focus exclusively, explicitly and specifically on the green economy *per se* are still very few around the world. However, there are many existing and innovative national laws and regulatory frameworks that aim to promote sustainable development, and therefore support the transition to the green economy.⁵⁰

3.1. NATIONAL

At the national level, three aspects of legal provisions were found to be particularly notable: incorporation of aspects of sustainable development in constitutions, creation of new framework laws, and reflection of principles of sustainable development in court decisions in 14 key sectors.⁵¹

An explicit link between environmental protection and economic concerns on the part of the state can be seen time and again in national constitutions across the globe. This is not simply a trend that is found among developed countries. For instance, the *Constitution of Brazil* contains frequent references to the relationship between the economy and environmental protection.⁵² Given the country’s large rural expanses, rural property receives

⁴⁸ *Ibid* at 14.

⁴⁹ *The Future We Want*, *supra* note 13 at para 10.

⁵⁰ See Gehring & Harrington, *Compendium*, *supra* note 12 at 17.

⁵¹ *Ibid*.

⁵² See e.g. *Constitution of the Federative Republic of Brazil*, arts 170, 174, online: <english.tse.jus.br/arquivos/federal-constitution>. See also José Afonso Da Silva, *Direito Ambiental Constitucional* (Sao Paulo: Malheiros Editores, 2009); Ingo Sarlet & Tiago Fensterseifer, *Direito Constitucional Ambiental*:

special constitutional consideration. It is seen as a social function, one which is met when the use of land is rational and suitable, when available natural resources are used properly and the environment is conserved.⁵³ Other notable examples can be found in the constitutions of East Timor,⁵⁴ Bhutan,⁵⁵ and the Maldives.⁵⁶ Certain states, such as Belgium, also explicitly link economic, environmental and societal development considerations in their constitutions, providing guidance towards more coherent government policies. There are also instances where the state's economy is recognized as being dependent on a healthy environment, and this need for protection has been enshrined in the Constitution.⁵⁷

Framework laws have also been developed to specifically promote the greening of the economy. Notable examples include France and the Republic of Korea. In France, *Loi Grenelle 1* of 2009 and *Loi Grenelle 2* of 2010 were adopted in order to provide a general framework for policy making, including more specific guidelines for sensitive sectors (building, planning, transport, energy, biodiversity, water, agriculture, research, risk/health and environment, waste, and governance) to ensure sustainable growth.⁵⁸ In the Republic of Korea, the *Framework Act on Low Carbon Green Growth* was adopted by the National Assembly. This led to the enforcement of the *National Strategy for Low Carbon, Green Growth*,⁵⁹ which stipulated the country's targets and policy prescriptions needed to achieve a paradigm shift towards greater environmentally sustainable economic growth. Importantly, the *Framework Act* requires the government to operate a system for greenhouse gas emissions trading, and the *Enforcement Decree of Allocation and Trading of Greenhouse Gas Emissions Allowances Act* (the ETS Act) was passed in the Cabinet on 13 November 2012.⁶⁰ The mandatory, nationwide Emissions Trading Scheme (ETS) began on January 1st, 2015.

Estudos sobre a Constituição, os Direitos Fundamentais e a Proteção do Ambiente (Sao Paulo: Editora Dos Triibunais, 2011).

⁵³ Antonio Herman de Vasconcellos e Benjamin, "Meio ambiente e constituição: uma primera abordagem," (Paper delivered at International Conference on Environmental Law, 6 June 2002) [unpublished, archived at BDJur], online: <bdjur.stj.jus.br/jspui/handle/2011/8702>.

⁵⁴ *Constitution of the Democratic Republic of Timor-Leste* (2002), s 61, online: <timor-leste.gov.tl/wp-content/uploads/2010/03/Constitution_RDTL_ENG.pdf>.

⁵⁵ *The Constitution of the Kingdom of Bhutan* (2008) art 5, <www.nationalcouncil.bt/assets/uploads/files/Constitution%20of%20Bhutan%20English.pdf>.

⁵⁶ *Constitution of the Republic of the Maldives* (2008) s 22, online: <www.majlis.gov.mv/en/wp-content/uploads/Constitution-english.pdf>.

⁵⁷ For example, article 7*bis* of Belgium's constitution prescribes that: "In the exercise of their respective competences, the Federal State, the Communities and the Regions follow the objectives of lasting development in its social, economic and environmental aspects, taking into account the solidarity between the generations" (*The Belgian Constitution* (1994), online: <www.dekamer.be/kvvc/pdf_sections/publications/constitution/GrondwetUK.pdf>.

⁵⁸ *Loi n° 2009-967 du 3 août 2009 de programmation relative à la mise en œuvre du Grenelle de l'environnement*, JO, 3 August 2009, 13031 [*Loi Grenelle 1*]; *Loi n° 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement*, JO, 12 July 2010, 12905 [*Loi Grenelle 2*].

⁵⁹ Korea, *Framework Act on Low Carbon, Green Growth* (no 9931, 2010) art 9 [*Framework Act*].

⁶⁰ Bloomberg Finance, "South Korea's Emissions Trading Scheme" (10 May 2013) at 4, online: <about.bnef.com/white-papers/south-koreas-emissions-trading-scheme/>.

At a sub-national level, efforts have also been made to lead the transition to a green economy. For instance, in its *Energy and Green Economy Act*, the legislature of the Canadian Province of Ontario made it clear that it “is committed to fostering the growth of renewable energy projects, which use cleaner sources of energy, and to removing barriers to and promoting opportunities for renewable energy projects and to promoting a green economy,” and that it is dedicated to ensuring energy efficiency in both the public and private sectors.⁶¹ Likewise, the US state of Massachusetts created the *Climate Protection and Green Economy Act* to provide guidance for state and industry authorities on these issues.⁶²

Judicial decisions influence the application of such constitutional provisions. For instance, the decisions of the German Constitutional Court have provided guiding interpretations for Art 20a of the *Grundgesetz* which defines the “[p]rotection of the natural foundations of life and animals” as an objective of the State.⁶³ The provision further states: “*Mindful also of its responsibility toward future generations, the state shall protect the natural foundations of life and animals by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order.*”⁶⁴ Recent key decisions of the German Constitutional Court have provided further content and clarification of this objective in relation to transitioning into a green economy. In *BVerfG*, the Court decided, with respect to the taxation of biofuels, that the state has a large margin of discretion as to how to protect the environment, and that economic disadvantages for the German biofuels industry were irrelevant in this respect.⁶⁵

In general, there are marked links between the environment—and environmental protection and conservation—and economic development within constitutional law, framework laws, regulatory tools, judicial decisions and many industry-specific laws.⁶⁶ In addition to this general recognition, states have increasingly come to recognize that their citizens enjoy the right to a healthy environment and also have come to incorporate specific environmental rights into constitutional and legal parameters.⁶⁷ While there are still issues of justiciability of these rights, their mere presence and recognition is a significant innovation.⁶⁸

The protection of natural resources—be they below the ground, in forests or indeed the water itself—is another area of emerging trends. This protection seeks to balance the protection of the particular resources from pollution and overuse with the needs of the local and national

⁶¹ *Green Energy and Green Economy Act*, SO 2009, c 12, Preamble, paras 2–3.

⁶² *Climate Protection and Green Economy Act*, 1 Mass Gen Laws, tit 2, ch 21N (2015).

⁶³ *Basic Law for the Federal Republic of Germany*, in the revised version published in the Federal Law Gazette Part III, classification number 100-1, as last amended by the Act of 21 July 2010 (Federal Law Gazette I at 944), translated by Christian Tomuschat & David P Currie, online: <www.gesetze-im-internet.de/englisch_gg/englisch_gg.html#p0112>.

⁶⁴ *Ibid.*

⁶⁵ BVerfG (Federal Constitutional Court), 1 BvR 1031/07 at para 53, Rn (1-68, Germany).

⁶⁶ Gehring & Harrington, *Compendium*, *supra* note 12 at 167.

⁶⁷ *Ibid.*

⁶⁸ See James R May, *Principles of Constitutional Environmental Law* (Chicago: American Bar Association, 2011).

economies, seeking to use state funds and financial incentives to assist those impacted by the regimes while also providing for significant regulatory systems.⁶⁹

The recognition of indigenous community rights and interests in natural resource use is also another area of innovation that is becoming a global trend across the global North and South. This leads to a general understanding that concepts of social justice have become incorporated in law and society across the globe.⁷⁰ While serious challenges in the implementation of these rules remain, the mere introduction into the domestic legal frameworks challenges the status quo and changes the rules of the debate.

Another global trend is the incorporation of local governments in environmental and green economy related decision-making and policy due to the recognition of their special relationship with environmental concerns in an area.⁷¹ Indeed, this is essential in areas such as the United States and Canada, where state/provincial units have been far more proactive in environmental laws and laws related to the green economy than their national governments.

The growth of administrative bodies and functions in order to implement laws essential to the green economy is a global trend that is seen in general and industry-specific requirements.⁷² A good example of this is the People's Republic of China's *Circular Economy Promotion Law*. The *Circular Economy Promotion law* requires the general Chinese administration to develop the circular economy under the State Council and to formulate the national circular economy development plan and implement the plan upon approval of the State Council. The administrative departments of circular economy development under the people's governments at or above the level of county city shall do the same. The circular economy development plan has to include objectives, applicable scopes, main contents, major tasks and safeguard measures, as well as indicators for resource output rates, waste reuse and recycling.⁷³ China's *Law on Promotion of Clean Production of 2002* (last amended in 2012) has similar provisions.⁷⁴

While these bodies have different names and characters, they tend to serve the same functions, particularly in terms of providing and overseeing licenses and permits for restricted activities, reviewing environmental impact assessments/surveys and other studies for proposed

⁶⁹ See e.g. *Mining Code*, No 007/2002, art 204 (DR Congo) (specifying the need for an Environmental Impact Study, a Management and Reporting Plan and an Environmental Monitoring and Performance Plan).

⁷⁰ For example, Nicaragua's *General Environmental Law* states that in the case of indigenous people and ethnic communities contributing genetic resources, the state shall ensure that the use of these resources shall be granted under certain conditions determined in consultation with them; *Ley General del Medio Ambiente y los Recursos Naturales* (ley 217, 2009) art 55.

⁷¹ South Korea is one such country attempting to incorporate local government in environmental and green economy related decision-making. See *Framework Act*, *supra* note 58, arts 10–11.

⁷² See e.g. EU Forest Law Enforcement, Governance and Trade (FLEGT) Facility, "Home", online: <www.euflegt.efi.int/home>; German Emissions Trading Authority (DEHSt), "Home", online: <www.dehst.de/EN/home/home_node.html>; US, AB, 32, *Global Warming Solutions Act*, 2005-2006, Reg Sess, Cal, 2006 (enacted).

⁷³ *Circular Economy Promotion Law of the People's Republic of China* (2008), CLI.1.107971, Standing Committee of the National People's Congress, Order no 4, art 12.

⁷⁴ *Cleaner Production Promotion Law of the People's Republic of China* (2002), CLI.1.168382, Standing Committee of the National People's Congress, Order no 54, art 8.

projects that would have environmental effects and issuing decisions based on these reports, and assisting business and industry in complying with the terms of applicable regulations.⁷⁵ For example, both the EU Forest Law Enforcement, Governance and Trade (FLEGT) Facility Office and the German Emission Trading Authority include in their mandate assistance for industry in complying with these new rules as well as informing enforcement agencies and interaction with other public authorities. In order to offset some of the burdens of these laws and regulations on business and industry, particularly small businesses, sector specific laws often provide for financial and tax incentives.⁷⁶ These incentives include tax relief/exemptions, value-added tax (VAT) exemptions for applicable items needed for research and development, subsidies, feed-in-tariffs, and credit sinks. This is an important trend in that it recognizes the importance of ensuring that domestic businesses are able to function economically while also functioning as responsible environmental actors. It is notable that this trend is as important in developed states as it is in developing states.⁷⁷ Nearly all energy and climate change related laws set targets for energy and/or emissions reductions, including target dates. While the success or failure of these target dates has yet to be seen, it is notable that this trend exists, meaning that there is some sense of cohesion between states as to ways in which to achieve reductions in energy use and emissions rates. This trend was confirmed by the many nationally determined contributions (NDCs) in the *Paris Agreement*, in which several countries committed to dates to reach carbon neutrality.⁷⁸

Safety, liability and security have come to figure prominently in laws relating to environmental policy across the globe. A good example for this is the EU's *Directive 2004/35/EC* on environmental liability which incorporates the polluter-pays principle and clarifies guidelines in order to establish environmental liability for private actors when determining prevention or remedying of environmental damage.⁷⁹ Typically, these concerns are most pressing in the areas of agriculture—where food safety and security are well-established issues for states in the global North and South⁸⁰—as well as energy production and climate change

⁷⁵ Gehring & Harrington, *Compendium*, *supra* note 12 at 25.

⁷⁶ *Ley General del Ambiente* (no 28611, 2011) (Peru). Art 77 mandates that in Peru [translation] “the national, sectorial, regional, and local authorities promote, through normative action, tax incentives, outreach, counseling and training, clean production in the development of investment projects and business activities in general, understanding that clean production constitutes the continuous application of an integrated preventive environmental strategy for processes, products, and services, with the objective of increasing efficiency, the rational management of resources and reduction of risks on human population and the environment, to achieve sustainable development.”

⁷⁷ Interestingly, one of the more innovative pieces of legislation regarding the green economy and agriculture can be found in the US unincorporated territory of Puerto Rico, which enacted an extremely comprehensive set of green energy laws, see e.g. Puerto Rico, 13 LPRA (2012), s 10422ff. These laws include an overall Green Energy Fund and also a set of tax incentives aimed at promoting green agriculture endeavours on the island.

⁷⁸ See Carbon Brief, “Paris 2015: Tracking Country Climate Pledges” (24 December 2015) online: <www.carbonbrief.org/paris-2015-tracking-country-climate-pledges>.

⁷⁹ EC, *Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage*, [2004] OJ, L 143/56 at 56, 59 [*Directive 2004/35/EC*].

⁸⁰ See generally Dario Bevilacqua, *Introduction to Global Food-Safety Law and Regulation* (Groningen: Europa Law Publishing, 2015).

related issues.⁸¹ Within the multitude of laws and rules, another key area of innovation for the green economy is the use of voluntary codes and good governance measurements.⁸² While there is no legal force to such measures, they have been adopted by many states and many industries and are increasingly necessary in order to assure savvy consumers—business consumers and lay consumers alike—that the products they are buying are responsibly and ethically produced. This is an interesting trend in that it embraces an idea that has been used among industry groups themselves and gives it a sense of growing legitimacy in law as well as within an industry.⁸³

It could be argued that legal innovation trends exist only if the majority of jurisdictions follow a particular trend. The position here is more nuanced. The emphasis here is on innovation, i.e. deviation from a business as usual scenario. So while in many of these fields there might be a significant number of countries which are not innovating their legal frameworks, the transition to a greener economy at the national level starts with a certain number of innovating countries.

3.2. REGIONAL: THE CASE OF THE EU

Innovative policy frameworks to support greener economic growth have been identified in different regions of the world.⁸⁴ Europe provides an interesting case study because it has been advancing greener regulation for a number of years. Through the EU treaties, states have undertaken new commitments that seek to facilitate the transition to a global green economy.

⁸¹ In India, the Supreme Court applied the principle in conjunction with strict liability. In one of India's landmark cases, *Indian Council for Enviro-Legal Action v Union of India*, 1996 AIR 1446, 1996 SCC (3) 212 (SC India), the Court stated that the financial cost of preventing and remedying damages lied with those who caused the pollution and that the person carrying on a hazardous or inherently dangerous activity was strictly and absolutely liable to compensate for loss caused to any other person; *ibid* at para 22. See also UNEP, *Compendium of Summaries of Judicial Decisions in Environment-Related Cases*, 2nd ed (Nairobi: UNEP, 2015) at 119–121, online: <staging.unep.org/delc/Portals/119/publications/Compendium_summaries_judicial_decisions_revised_second_edition.pdf>; Geetanjoy Sahu, “Implications of Indian Supreme Court’s Innovations for Environmental Jurisprudence” (2008) 4:1 L Environment & Development J 1 at 10.

⁸² Gehring & Harrington, *Compendium*, *supra* note 12 at 63.

⁸³ *Ibid.*

⁸⁴ In Africa, recently adopted green economy provisions are found in ECOWAS, *Regional Bioenergy Strategy Framework* (2012) online: <www.unep.org/bioenergy/Portals/48107/publications/Strategy%20Framework.pdf>; ECOWAS, *ECOWAS Humanitarian Policy* (2012) online: <ecowasmigration.ug.edu.gh/wp-content/uploads/2015/03/ECOWAS-2012-ECOWAS-Humanitarian-Policy.pdf>; ECOWAP, *Regional Agricultural Policy for West Africa*, at 9 & 12, online: <www.diplomatie.gouv.fr/fr/IMG/pdf/01_ANG-ComCEDEAO.pdf>; and ECOWAS, *Policy for Disaster Reduction* (UNISDR, 2006) online: <www.unisdr.org/files/4037_ECOWASpolicyDRR.pdf>. Additionally, there are several regional initiatives that should be highlighted, see ECOWAS, *West African Power Sector Regional Regulation Project* (2006) online: <www.erera.arrec.org/getattachment/5ff86aa0-8aa2-455f-967e-9c6a30f5fda4/Documents/List/English/POWER-SECTOR-REGIONAL-REGULATION-MECHANISMS.aspx>; ECOWAS, *Roadmap of the ECOWAS Solar Energy Initiative* (2006) online: <www.ecreee.org/sites/default/files/event-att/ecowas_summary_solar_roadmap_english.pdf>; ECOWAS, *Energy Protocol* (2003) online: <www.jus.uio.no/english/services/library/treaties/09/9-02/ecowas_energy_protocol.xml>; ECOWAS, *Environmental Policy* (Abuja, ECOWAS Commission, 2008) online: <www.ecowrex.org/system/files/repository/2008_ecowas_environmental_policy_-_ecowas.pdf>.

These provisions are being clarified and interpreted within the constitutional structure of Europe, by its courts. The Court of Justice of the European Union (CJEU), for example, recently clarified interpretation of Article 11 TFEU in its recent decision in *Concordia Bus Finland v Helsingin Kaupunki*:

In the light (...) of the wording of (...) Article [11 TFEU], which lays down that environmental protection requirements must be integrated into the definition and implementation of Community policies and activities, it must be concluded that Article 36(1)(a) of Directive 92/50 does not exclude the possibility for the contracting authority of using criteria relating to the preservation of the environment when assessing the economically most advantageous tender.⁸⁵

This shows that predominantly economic rules, such as government procurement, have received a “green” interpretation in the EU courts.

European support for a greener economy, in accordance with sustainable development goals, is evidenced by various policy measures. The EU Parliament has adopted *Directive 2009/28/EC* on the promotion of the use of energy from renewable sources.⁸⁶ This *Renewable Energy Directive* provides a plan to achieve the goals of 20% share of energy from renewable sources in the EU’s overall energy consumption by 2020, and a mandatory 10% minimum target to be achieved in the transport sector by all Member States by 2020. The *Renewable Energy Directive* sets mandatory national targets for the overall share of energy from renewable sources, as well as for the share of energy from renewable sources in transport. It also prescribes that the EU’s Member States shall prepare action plans in order to achieve the Directive’s targets. The *Renewable Energy Directive* lays down guiding rules concerning issues such as cooperation between Member States (e.g. joint projects), guarantees of origin, administrative procedures, information and training, and access and operation of electricity grids. The *Renewable Energy Directive* further establishes sustainability criteria for biofuels and bioliquids. All EU Member States and the EEA states of Norway and Iceland have now established these action plans with some countries, such as Sweden, setting very ambitious targets of over 50% renewable energy of total energy use by 2020.⁸⁷

Even more specific guidance on the role of European institutions in promoting a greener economy was provided by the Court of Justice in *Air Transport Association of America and Others v Secretary of State for Energy and Climate Change*.⁸⁸ This decision involves the EU’s

⁸⁵ ECJ *Concordia Bus Finland v Helsingin Kaupunki*, C-513/99, [2002] ECR I-7213 at I-7276. See a review of the application of provisions related to sustainable development by the ECJ in a presentation made by Marc Pallemarts, “Sustainable Development Principles before the Court of Justice of the European Union” (Presentation delivered at the International Legal Experts Seminar, International Development Law Organization, 16 June 2011) [unpublished], online: IDLO <www.idlo.org/DOCNews/SDEventJune2011/Marc%20Pallemarts%20-%20EUSDECJ.pdf>.

⁸⁶ EC, *Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the Promotion of the Use of Energy from Renewable Sources*, [2009] OJ, L 140/16 [*Renewable Energy Directive*].

⁸⁷ See EC, “National Action Plans”, online: EC <ec.europa.eu/energy/node/71>; See also “The Swedish National Action Plan for the promotion of the use of renewable energy in accordance with Directive 2009/28/EC and the Commission Decision of 30.06.2009”, Annex to Government Decision 2010-06-23, 127, *Doc No 2010/742/E* (Sweden) at 3.

⁸⁸ ECJ *Air Transport Association of America and Others v Secretary of State for Energy and Climate Change*, 366/10 [2011] ECR I-13833 [*ATAA Decision*].

Emissions Trading Scheme, which was established by the *Renewable Energy Directive*. An ETS sets a “cap”, or limit, on the total harmful greenhouse gases that can be emitted by “sources” (factories, power plants, etc). Companies receive emission allowances they can buy or sell as needed, with the cap creating a value or market for them. The aim is to internalize social and environmental costs, so low-carbon goods and services can compete. This type of regulatory scheme was pioneered by the UK’s 2002 ETS, as the first multi-industry carbon trading scheme in the world.⁸⁹ Annually, each source must surrender allowances covering all its emissions to avoid steep fines. Companies which reduce emissions can keep their spare allowances for future needs or sell to others found short. Trading secures efficiencies, so that emissions are cut where it costs least to do so. Total allowances are reduced over time so that emission levels fall. If no revisions are made, Europe’s allowable emissions in 2020 should be 21% lower than the 2005 level. The *Renewable Energy Directive* established a scheme for greenhouse gas emission allowance trading within the Union.⁹⁰ EU Directive 2008/101/EC included emissions from aviation within the scope of the ETS.⁹¹ Flights were now classed as a source, and each airline must surrender allowances equal to the total greenhouse gas (GHG) emissions of their EU bound flights.

In the *ATAA Decision*, European governments and scholars were given a glimpse of the role of law in promoting a greener economy for the region. The Air Transport Association of America (ATAA) and others challenged the UK’s implementation of Directive 2008/101/EC. ATAA alleged that expansion of the ETS to aviation is extra-territorial, as the total allowances that airlines must surrender per flight are calculated on the basis of entire flights, not just EU air space.⁹² ATAA also alleged that the ETS amounts to an illegal charge on fuel and landings, contravening the *1944 Chicago Convention on International Aviation*.⁹³ The High Court requested a preliminary reference ruling on these questions.⁹⁴ As interveners, the Council of the EU, Parliament and the Commission, together with 11 EU Member States including the UK, as well as Iceland and Norway, defended the legality of the measure.⁹⁵ The court affirmed the measure, holding that the EU has jurisdiction, as only flights starting or landing in the EU are affected.⁹⁶ The EU has the right to regulate matters, especially environmental problems that affect EU Member States, even when the problems are partially created outside the EU. In subsequent decisions the court also found that the ETS does not amount to an illegal

⁸⁹ Environmental Defence Fund & International Emissions Trading Association, “United Kingdom” in *The World’s Carbon Markets: A Case Study Guide to Emissions Trading* (May, 2013) at 1 online: <www.edf.org/sites/default/files/EDF_IETA_United_Kingdom_Case_Study_May_2013.pdf>.

⁹⁰ EC, *Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 Establishing a Scheme for Greenhouse Gas Emission Allowance Trading within the Community and Amending Council Directive 96/61/EC*, [2003] OJ, L 275.

⁹¹ EC, *Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community*, [2008] OJ, L 8.

⁹² *ATAA Decision*, *supra* note 90 at I-13869.

⁹³ *Ibid.*

⁹⁴ *Ibid* at I-13867.

⁹⁵ *Ibid* at I-13834–I-13837.

⁹⁶ *Ibid* at I-13893–I-13894.

charge relying on *Braathens Sverige AB v Riksskatteverket* (fuel tax),⁹⁷ and *Arcelor Atlantique and Lorraine and Others* (aluminium and ETS).⁹⁸

The implications of the *ATAA Decision* for European law are clear. Foremost, the court recognized Europe's jurisdiction to address global problems, building on its findings in the 1988 *Ahlstroem* case⁹⁹ (competition) and the 2008 *Commune de Mesquer*¹⁰⁰ case (oil spills), thus opening further regulatory space beyond EU borders for climate change. Further, relating to the green economy, the court provides guidance for future design of economic instruments in EU Law. In the short-term, this decision facilitates inclusion of shipping in the EU ETS. In the longer term, emissions trading may prove useful for EU efforts to internalize environmental and social costs that currently remain external in other economic sectors, particularly given that article 4.2(i) of the *Treaty on the Functioning of the European Union (Lisbon)* extended the EU's competence to energy.¹⁰¹

It should be mentioned that the EU has now suspended the application of the ETS to international aviation due to an International Civil Aviation Organization (ICAO) decision to negotiate the introduction of a market based mechanism for GHG emissions. Such cases, however, together with the myriad green directives in different sectors of the economy, demonstrate certain initial regulatory steps that are being taken to support a transition to the global green economy, and the role that law can contribute, though a great deal remains to be done in the region. The EU has therefore embraced the transition to a greener economy in its legislative framework with the support from the European Courts, for example in cases supporting the ETS in *Arcelor*¹⁰² or national feed-in tariffs such as in *PreussenElektra AG v Schleswag AG*.¹⁰³

Some caveats are in order as legal provisions may also be used to stall the progress towards the transition to a green economy. For instance, renewable energy production is subject to challenge from local residents who remain apprehensive to potentially hazardous effects of carbon capture and storage, unaesthetic appeal of large wind parks or negative impact on local flora and fauna as evidenced in *Taralga*.¹⁰⁴ The EU ETS has also been a source of multiple instances of litigation involving various objects of legal claim, including statutory challenges concerning the legality of particular elements that the Directive regulates,¹⁰⁵ challenges against the implementation of the law,¹⁰⁶ and challenges against the enforcement of the law. In an

⁹⁷ ECJ *Braathens Sverige AB v Riksskatteverket*, C-346/97, [1999] ECR I-03419 [*Braathens*].

⁹⁸ ECJ *Arcelor Atlantique and Lorraine and Others*, C-127/07, [2008] ECR I-09895 [*Arcelor*].

⁹⁹ *Ahlström Osakeyhtiö v Commission of the European Communities*, C-89, 104, 114, 116, 117, 125–129/85, [1988] ECR I-5233.

¹⁰⁰ ECJ *Commune de Mesquer v Total France SA*, C-188/07, [2008] ECR I-04501.

¹⁰¹ EC, *Treaty on European Union and the Treaty on the Functioning of the European Union annexed to the Final Act of the Intergovernmental Conference which adopted the Treaty of Lisbon signed on 13 December 2007*, [2012] OJ, C 326/47 at 5.

¹⁰² *Arcelor*, *supra* note 100.

¹⁰³ ECJ *PreussenElektra AG v Schleswag AG*, C-379/98, [2001] ECR I-02099 [*Schleswag*].

¹⁰⁴ *Taralga Landscape Guardians Inc v Minister for Planning* [2007] NSWLEC 59 [*Taralga*].

¹⁰⁵ See *Arcelor*, *supra* note 100.

¹⁰⁶ See ECJ *European Commission v Latvia*, C-267/11 P, [2013], ECLI:EU:C:2013:624.

another case, Saint Gobain Glass Deutschland tried to use the *Aarhus Convention*, which is often seen as a sustainable development treaty, and its provisions on access to information, public participation in decision making, and access to justice to challenge the European Commission that denied the request to access information on the applicant's installations. The Court of Justice dismissed the company's appeal.¹⁰⁷ Such cases highlight the role of law in being able to both promote but also hinder regulatory measures intended to advance a greener economy.¹⁰⁸

3.3. INTERNATIONAL

At the international level, a multitude of new instruments are not just balancing social, economic and environmental concerns for sustainable development, but increasingly adopting market-based instruments (MBIs) to provide green economy incentives for low-carbon development, for the stewardship of forest ecosystems, for sustainable use of biodiversity. There are three trends that are particularly discernible: more market based instruments, facilitating treaty provisions and courts and tribunals facilitating the transition to a green economy.¹⁰⁹

First, international treaty regimes on environment and sustainable development are increasingly adopting international "market based instruments" to achieve their ends. One example of an international market based mechanism lies at the intersection of climate change and forest management. The new UN Reducing Emissions from Deforestation and Forest Degradation (REDD) system is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.¹¹⁰ As was seen in the Cancun CoP16 agreements on human rights, environmental and other safeguards, and in the Warsaw CoP19 decision on REDD+, which goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.¹¹¹ The mechanism is not without its challenges, especially because attracting private funding still remains difficult. If it can be activated effectively, particularly now that the mechanism has been endorsed by the Paris Agreement, it also offers significant trade and investment opportunities for the green economy.¹¹² It would provide a global market based mechanism which would enhance the protection and sustainable management of forests while providing income for local communities without relying solely on government funds or official development assistance.

¹⁰⁷ ECJ *Saint-Gobain Glass Deutschland v Commission*, C-503/07 P, [2008] ECR I-02217.

¹⁰⁸ See generally Stefan E Weishaar, *Emissions Trading Design: A Critical Overview* (Cheltenham, UK: Edward Elgar Publishing, 2014).

¹⁰⁹ See Charles E Di Leva, "The Conservation of Nature and Natural Resources through Legal and Market-Based Instruments" (2002) 11:1 RECIEL 84.

¹¹⁰ See Ian Fry, "Reducing Emissions from Deforestation and Forest Degradation: Opportunities and Pitfalls in Developing a New Legal Regime" (2008) 17:2 RECIEL 166 at 169–170.

¹¹¹ See generally *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013*, UNFCCC, 19th Sess, Supp No 10, UN Doc GE 14-60152 (2013).

¹¹² See Markus Gehring, Marie-Claire Cordonier Segger & Jarrod Hepburn, "Climate Change and International Trade and Investment Law" in Rosemary Gail Rayfuse & Shirley V Scott, eds, *International Law in the Era of Climate Change* (Cheltenham, UK: Edward Elgar, 2012) at 84, 87.

Concerning the energy sector, the Statute of the International Renewable Energy Agency (IRENA) has the potential to facilitate the use of market-based mechanisms for the transition to the green economy. The objective of IRENA is to:

[P]romote the widespread and increased adoption and the sustainable use of all forms of renewable energy, taking into account: (a) national and domestic priorities and benefits derived from a combined approach of renewable energy and energy efficiency measures; and (b) the contribution of renewable energy to environmental preservation, through limiting pressure on natural resources and reducing deforestation, particularly tropical deforestation, desertification and biodiversity loss; to climate protection; to economic growth and social cohesion including poverty alleviation and sustainable development; to access to and security of energy supply; to regional development and to inter-generational responsibility.¹¹³

IRENA has already analysed most of its Parties' potential for renewable energy and provides model laws to facilitate the transition to that form of energy production—again feed-in tariffs, which are another form of a market-based mechanism.

Second, international economic law, including trade and investment law can help rather than hinder the transition to a greener economy.¹¹⁴ Several pathways for international economic law to support the green economy in the context of sustainable development can be identified.¹¹⁵ These provisions include:

1. Preambular recognition of sustainable development, the environment, and labour or human rights in trade and investment treaties, to inform interpretation of the accords;
2. Use of exceptions to permit flexibility for green economy regulations, where appropriate (including general and specific exceptions, also recognition of permissible trade related environmental measures from multilateral environmental agreements. The use of exceptions can be difficult because liberalisation commitments apply strictly if they fall outside the exception provisions, which in turn can lead to stricter application in areas not covered;
3. Commitments to cooperate, as part of trade and investment agreements, on shared parallel environmental and social work programmes (including control of harmful practices or substances which might increase due to increased trade, and also implementation of other treaties); and
4. The activation of trade and investment law to directly achieve greener economic outcomes, such as through prohibitions on subsidies, especially fisheries where they encourage over-fishing; or liberalisation provisions in RTAs to facilitate trade in environmental goods and services, or to develop markets and trade in

¹¹³ *Statute of the International Renewable Energy Agency*, 26 January 2009, 2700 UNTS I-47934, art II. For further analysis, see generally Andreas Goldthau, ed, *The Handbook of Global Energy Policy* (Amsterdam: Wiley-Blackwell, 2013).

¹¹⁴ See Markus Gehring, "Trade and Investment Measures for the Low-Carbon Economy" in Inge Lorange Backer, Ole Kristian Fauchald & Cristina Voigt, eds, *Liber Amicorum Hans Christian Bugge* (Oslo: Universitetsforlaget, 2012).

¹¹⁵ Gehring, "Sustainable International Trade", *supra* note 24 at 281–282.

renewable energy, organic agriculture, sustainable forest products; or the use of investment law to ensure stability which can support, for instance, establishment of renewable energy.¹¹⁶

Third, new decisions in international courts and tribunals highlight the role of the law in facilitating the transition to the green economy. One of the most important rulings guiding the global green economy was delivered by the Seabed Chamber of the International Tribunal for the Law of the Sea (ITLOS).¹¹⁷ It had received a request for an advisory opinion on the question of liability of sponsoring states in the Area (i.e., the seabed under the high seas and how especially developing countries could fulfil those obligations). This decision is important because questions of liability and assigning liability are elements of a transition to a greener economy.¹¹⁸

Some authors, such as Freestone, marked the case as a historic ruling.¹¹⁹ The opinion argued for “highest standards of protection of the marine environment, the safe development of activities in the Area and protection of the common heritage of mankind.”¹²⁰ They recognized a “responsibility to ensure”, or obligation of due diligence, with regards to the liability¹²¹ of the host state of the operator. This obligation applies equally to developing and developed countries¹²² and as such could become important for the global transition to a green economy. The Court noted that “due diligence” is a variable concept, which “may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge.”¹²³ It highlighted that riskier activities will require higher levels of due diligence.¹²⁴ The Seabed Chamber Advisory

¹¹⁶ See e.g., *AES Solar and others v Spain* (2011, UNCITRAL Arbitration Rules, private decision) [*AES Solar*]; for reporting, see Luke Eric Peterson, “In an Apparent First, Venezuelan Investors use one of that Country’s Investment Treaties to Sue a European Nation; Claim Against Spain is Second Spawned by Financial Crisis” (9 July 2012) *IA Reporter* (Blog), online: < www.iareporter.com/articles/in-an-apparent-first-venezuelan-investors-use-one-of-that-countrys-investment-treaties-to-sue-a-european-nation-claim-against-spain-is-second-spawned-by-financial-crisis/>.

¹¹⁷ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011), Advisory Opinion Case No 17, 50 ILM 458 (ITLOS Seabed Disputes Chamber), [*Responsibilities and Obligations of States*].

¹¹⁸ Duncan French, “Supporting the Principle of Integration in the Furtherance of Sustainable Development: A Sideways Glance” (2006) 18 *Environmental L & Management* 103.

¹¹⁹ David Freestone, “Advisory Opinion of the Seabed Disputes Chamber of International Tribunal for the Law of the Sea on ‘Responsibilities and Obligations of States Sponsoring Persons and Entities With Respect To Activities in the Area’” (2011) 15:7 *ASIL Insights*, online: <www.asil.org/insights/volume/15/issue/7/advisory-opinion-seabed-disputes-chamber-international-tribunal-law-sea->.

¹²⁰ *Responsibilities and Obligations of States*, *supra* note 119 at para 159.

¹²¹ See for the relationship between liability and due diligence, Dupuy and Viñuales, *supra* note 34 at 253.

¹²² *Responsibilities and Obligations of States*, *supra* note 119 at para 163.

¹²³ *Ibid* at para 117.

¹²⁴ It defined “Measures necessary to ensure” as follows: “adoption of appropriate laws, regulations and administrative measures (Pulp Mills & 2001 ILC Harm Articles) “to be kept under review so as to ensure that they meet current standards” (*ibid* at para 222) and “may include the establishment of enforcement mechanisms for active supervision” (*ibid* at para 218) contractual arrangements are alone insufficient. “The liability of the sponsoring State depends upon the damage resulting from the activities or omissions of the sponsored contractor. But [...] this is merely a trigger mechanism. Such damage is not, however,

Opinion managed to strike a balance between economic activities and environmental and social concerns. In the transition to a green economy, liability provisions are important as more economic activity impacts directly on the environment.

While green economy cases are still rare in other areas of international law, they are becoming quite common in international trade law and WTO law more specifically. While trade and environment cases have a long history,¹²⁵ mechanisms that countries claim were adopted to transition to a greener economy have recently come under scrutiny by the WTO dispute settlement mechanism, such as in the *China-Rare Earths* dispute.¹²⁶ This case offers important guidance for the sustainable use of natural resources, a key dimension of the global green economy, and different approaches to ensure sustainable resource management have been chosen. In the dispute, China argued that the export restrictions that China imposed on these products are related to the conservation of its exhaustible natural resources, and necessary to reduce pollution caused by mining.¹²⁷ The complainants disagreed, arguing that the restrictions are not designed to conserve the resources because they were lacking corresponding domestic conservation measures.¹²⁸ Essentially, the WTO panel concluded that export duties and export quotas could not be justified by reference to Art. XX of General Agreement on Tariffs and Trade (GATT) 1994.¹²⁹ They objected to the way China had designed the measure, finding that it did not fulfil the requirement of being necessary to protect human health (essentially because these Rare Earth minerals are mined at the same rate but for domestic production) and it was not a measure related to conservation of exhaustible natural resources.¹³⁰ The Panel agreed with China that the term “conservation” in Article XX(g) GATT 1994 means more than simply “preservation” of natural resources, and that every WTO Member can take its own sustainable development needs and objectives into account when designing a conservation policy,¹³¹ in accordance with the general international law principle of sovereignty over natural resources reflected in various UN and other international instruments. The Panel then concluded that the export quota was not designed to conserve natural resources because no restrictions on the domestic level were adopted.¹³² This dispute is important because it demonstrated that a State’s policy commitment to transition to a greener economy should not override other international obligations such as general non-discrimination obligations (i.e., national treatment or most-favourite nation obligations). This is an important insight for the global green economy because

automatically attributable to the sponsoring State” (*ibid* at para 201) The “precautionary approach is also an integral part of the general obligation of due diligence of sponsoring States” (*ibid* at para 131) “in light of the advancement in scientific knowledge, member States of the Authority have become convinced of the need for...“best environmental practices” in general terms so that they may be seen to have become enshrined in the sponsoring States’ obligation of due diligence” (*ibid* at para 136).

¹²⁵ See generally Gehring, “Sustainable International Trade”, *supra* note 24.

¹²⁶ *China – Measures Related to the Exportation of Rare Earths, Tungsten, and Molybdenum* (2014), WTO Doc WT/DS431/R (Panel Report), online: WTO <wto.org/english/tratop_e/dispu_e/431_432_433r_e.pdf>.

¹²⁷ *Ibid* at 92.

¹²⁸ *Ibid* at 102–03.

¹²⁹ *Ibid* at 251–52.

¹³⁰ *Ibid* at 105.

¹³¹ *Ibid* at 98.

¹³² *Ibid*. 105.

to a certain extent, as in the International Court of Justice (ICJ) *Australia v Japan Whaling case*,¹³³ the WTO Panel recommends an international approach to conservation rather than a unilateral one.

In another recent case, the Ontario Feed-in Tariff (FIT) programme came under review due to a complaint by Japan and the EU. This is a particularly relevant WTO case for green economy measures because it concerns the legality of a market-based instrument, here a FIT. In its ruling of December 2012, the panel in *Canada – Renewable Resources and Canada – FIT* provided important guidance as to the design of a feed-in tariff.¹³⁴ The dispute arose in September 2010, when Japan¹³⁵ and later the EU¹³⁶ complained about measures that impose domestic content requirements on Ontario's renewable energy industries.¹³⁷ In brief, the complainants raised two main arguments. First, it was argued that the scheme violates the “national treatment” rule, which requires equal treatment for domestic and imported products, as stipulated in article III(4) of *GATT* 1994 and in article 2.1 of the *Agreement on Trade-Related Investment Measures*.¹³⁸ Second, it was contended that the Ontario FIT program was in violation of article 3.1(b) of the *Agreement on Subsidies and Countervailing Measures*,¹³⁹ according to which subsidies that are contingent on the use of local content are prohibited.

The second question examined by the panel was whether the local content requirement of the Ontario FIT program is a prohibited subsidy, according to the SCM Agreement. This is important for the global green economy because many FIT laws could be captured by this ruling. In order to answer this question, the panel had first to determine whether the Ontario FIT program should be considered as a “subsidy”, according to the definition provided in Article 1.1 of the SCM Agreement¹⁴⁰. The panel rejected the finding as a subsidy because the FIT price could not serve as the appropriate benchmark in the case.¹⁴¹ This was because otherwise, public policy objectives, such as the diversification of energy sources and the reduction of greenhouse gas emissions (mentioned in the report only as “environmental impacts”), could not be achieved.

As an alternative approach, the panel suggested an alternative benchmark for the determination of the “prevailing market conditions”.¹⁴² According to the panel, the factors

¹³³ *Whaling in the Antarctic (Australia v Japan: New Zealand Intervening)*, [2014] ICJ Rep 226.

¹³⁴ *Canada – Certain Measures Affecting the Renewable Energy Sector (Complaint by Japan)* (2012), WTO Doc WT/DS412/R (Panel Report), online: <www.wto.org/english/tratop_e/dispu_e/cases_e/ds412_e.htm> [*Canada – Renewable Energy*]; *Canada – Measures Relating to the Feed-in Tariff Program (Complaint by the EU)* (2013) WTO Doc WT/DS426/R (Report of the Panels), online: <www.wto.org/english/tratop_e/dispu_e/cases_e/ds426_e.htm> [*Canada – FIT*].

¹³⁵ *Canada – Renewable Energy*, *supra* note 136 at sec I.

¹³⁶ *Canada – FIT*, *supra* note 136 at sec I.

¹³⁷ *Canada – Renewable Energy*, *supra* note 136 at sec I; *Canada – FIT*, *supra* note 136 at sec I.

¹³⁸ *Agreement on Trade-Related Investment Measures*, 15 April 1994, 1868 UNTS 186, art 2.1 [*TRIMS Agreement*].

¹³⁹ *Agreement on Subsidies and Countervailing Measures*, 15 April 1994, 1867 UNTS 14, art 3.1(b) [*SCM Agreement*].

¹⁴⁰ *Ibid* at art 1.1.

¹⁴¹ *Canada – FIT*, *supra* note 136 at para 7.320.

¹⁴² *Ibid* at para 7.322.

that must be considered in this respect included Ontario's aspiration to eliminate coal-fired plants, the province's need to replace its energy production facilities, and its commitment to encourage the production of energy from renewable sources.¹⁴³ The panel further added that the correct comparison in this case would have been to compare the rate of return obtained by the FIT generators under the terms and conditions of the FIT and microFIT Contracts with the average cost of capital in Canada for projects having a comparable risk profile in the same period.¹⁴⁴

It is this last ruling (which was opposed by one panel member in a separate opinion) that is of particular interest for the global green economy. In its decision, the panel *de facto* recognised the special circumstances that are unique to investments in renewable energy. The panel acknowledged that such projects cannot currently compete in the general energy market, that they include higher risk, that there are additional benefits for such projects, and that in the already distorted energy markets it could be that governmental support for this sector is in fact necessary.¹⁴⁵ Accordingly, the panel decided to interpret the term "prevailing market conditions" in this case in a very expansive manner: by comparing the FIT rates only with projects that have a comparable risk profile, and by considering broader public considerations (such as environmental policies) as relevant for this legal test. The panel's ruling thus appears to indicate that climate measures, if well designed, do not violate subsidy or other trade rules.

Unfortunately, in Japan's appeal relating to article 1.1(b) of the *SCM Agreement*, the Appellate Body (AB) reversed the panel's finding that Japan failed to establish that the FIT Programme and related FIT and microFIT Contracts confer a benefit within the meaning of article 1.1(b) of the *SCM Agreement*, because the panel erred in defining the relevant market and in its benefit analysis.¹⁴⁶ In the light of these findings, the AB did not find it necessary to address Japan's alternative claim that the Panel acted inconsistently with article 11 of the *Dispute Settlement Understanding* (DSU).¹⁴⁷ The AB was unable to complete the analysis as to whether the challenged measures confer a benefit within the meaning of article 1.1(b) of the *SCM Agreement* and whether Canada acted inconsistently with articles 3.1(b) and 3.2 of the *SCM Agreement*.¹⁴⁸ The AB did not take issue with the analysis of the public policy analysis of the panel but rather criticized the way the panel did not start with an analysis of the relevant market. So in effect, while it might be slightly more onerous to make a green economy argument in subsidies cases, it is not impossible, as the panel's reasoning shows. While it would have been useful for the future "trade-proof" design of green economy measures to have the complete analysis of the AB, both decisions provide a comprehensive framework for the design of feed-in tariff laws. This in turn is useful for future application of this market based

¹⁴³ *Ibid* at para 7.322.

¹⁴⁴ *Ibid* at para 7.323.

¹⁴⁵ *Ibid* at para 7.323–7.324.

¹⁴⁶ *SCM Agreement*, *supra* note 141; *Canada - Certain Measures Affecting the Renewable Energy Generation Sector, Canada - Measures Relating to the Feed-In Tariff Program* (2013) WTO Doc WT/DS412/AB/R, WT/DS426/AB/R at para 5.219 (Appellate Body Report), online: WTO <www.wto.org/english/tratop_e/dispu_e/cases_e/ds426_e.htm> [*Canada Renewable Energy & FIT*].

¹⁴⁷ *Ibid* at para 5.222.

¹⁴⁸ *Ibid* at para 5.246.

instrument globally, as we can now design feed-in tariffs which respect trade obligations while fulfilling their environmental and social purpose.

4. LEGAL TRANSITION TO THE GREEN ECONOMY AND INTERNATIONAL ECONOMIC LAW

International economic law plays a key role in the transition to a greener economy when more capital is allocated and the full costs of production, including environmental costs, are allocated. It is also the area of law within which the transition to a greener economy is having the most direct impact. Some critics on both sides of the equation have highlighted how green economy measures cannot be adopted or implemented due to international economic law and thus have argued for a complete rejection of either economic ideas or environmental ideas.¹⁴⁹ This section explores the evolving contributions of international trade, investment, and finance law towards a greener economy, highlighting important progress and challenges and considering potential legal and policy remedies to address constraints.

4.1. INTERNATIONAL TRADE LAW

4.1.1. TRADE AND THE GREEN ECONOMY

International trade, recognised as the “engine for development and sustained economic growth” at the Rio+20 conference, has a nuanced role in promoting a greener economy.¹⁵⁰ Trade can be essential in the promoting exchange of environmentally friendly goods and services (including environmentally sound technologies), increasing resource efficiency, and generating economic opportunities and employment. The transition to a greener economy holds the potential to create enhanced trade opportunities, for example, in the global market in low-carbon and energy efficient technologies. It is projected to near US\$2.2 trillion by 2020 as the result of opening new export markets, increasing trade, and greening international supply chains.¹⁵¹ In brief, UNEP notes that:

There are positive signs that trade-related practices are moving towards more environmental, social and economic sustainability. These trends have to be encouraged as well as fully informed by the Rio+20 mandate to advance the green economy in the context of sustainable development and poverty eradication.¹⁵²

That said, it remains likely that the new law and policy promoting full internalisation of environmental costs will prove challenging for other international trade and investment rules, including intellectual property, standards and protection of foreign investors.¹⁵³

¹⁴⁹ For references to such critics, see Alam & Razzaque, *supra* note 42.

¹⁵⁰ *The Future We Want*, *supra* note 13 at para 281.

¹⁵¹ UNEP, *Green Economy and Trade – Trends, Challenges and Opportunities* (UNEP, 2013) at 21, online: <web.unep.org/greeneconomy/sites/unep.org/greeneconomy/files/field/image/fullreport.pdf> [UNEP, *Green Economy and Trade*].

¹⁵² *Ibid* at 23.

¹⁵³ Ricardo Meléndez-Ortiz, “Rio+20 Briefing #1: Governance of International Trade for the Green Economy” (2011) 5:1 BIoRES, online: <www.ictsd.org/bridges-news/biores/news/rio20-briefing-1-governance-of-international-trade-for-the-green-economy>.

4.1.2. CHALLENGES

As Meléndez-Ortiz points out, today's trade system will not be easily capable of steering the world into a green economy, mainly due to the lack of progress in the creation of a multilateral legal framework to advance the trade related aspects of a green economy.¹⁵⁴ This is best illustrated by the stalled Doha negotiations that featured the liberalisation of environmental goods and services (EGS). Liberalising EGS is essential as it can create new markets and export opportunities and provide access to "green" goods and technologies at lower costs and with greater efficiency.¹⁵⁵ As such, paragraph 31 (iii) of the Doha Declaration called for "reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services".¹⁵⁶ However, in actual negotiating terms, the ambiguity regarding the definition and coverage of "environmental goods" and divergence of proposed definitions and approaches (e.g. some members proposed "list-based" approaches while ASEAN called for a "common list") have blocked the mandate becoming operational.¹⁵⁷

Yet some progress has been made in the context of regional trade agreements. Notably, in 2011, members of the Asia-Pacific Economic Cooperation (APEC) adopted the Honolulu Declaration, which proposed to develop a list of EGS,¹⁵⁸ followed by an agreement to liberalize tariffs on 54 environmental goods at the APEC meeting in Russia in September 2012.¹⁵⁹ Other notable initiatives include the regional trade agreements of the European Union.¹⁶⁰ Based on the objective of sustainable development, the EU has been advancing trade liberalization of environmental goods and services. For example, the Economic Partnership Agreement (EPA) with the Caribbean Forum in 2008 includes a "trade and sustainable development" chapter; the Free Trade Agreement (FTA) signed with South Korea is notable for "deep level of integration and broad coverage"; the association agreement signed with the Central American countries are among the advanced agreements in terms of references to sustainable development; and the FTA concluded with the Andean countries makes innovative references to climate change and biodiversity.¹⁶¹ While significant on their own, further importance is attributed to these regional agreements as they may become important building blocks for a multilateral framework.

As has been argued by Centre for International Sustainable Development Law (CISDL) experts in a paper with the International Centre for Trade and Sustainable Development (ICTSD), measures to identify climate-change impacts and other sustainability concerns

¹⁵⁴ *Ibid.*

¹⁵⁵ See Correa, *supra* note 34 at 152.

¹⁵⁶ WTO, *Doha Ministerial Declaration*, WTO Doc WT/MIN(01)/DEC/1, 4th Sess (2001), online: <www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm>.

¹⁵⁷ Jaime De Melo & Mariana Vijil "Watch Negotiations for an Environmental Goods Agreement (EGA)" 29 April 2015, online: ICTSD E15 Blog <www.ictsd.org/opinion/watch-negotiations-for-an-environmental-goods-agreement-ega>.

¹⁵⁸ APEC, *Honolulu Leaders' Declaration of 12 November 2011*, online: <www.apec.org/Meeting-Papers/Leaders-Declarations/2011/2011_aelm/2011_aelm_annexC.aspx>.

¹⁵⁹ APEC, *Vladivostok Ministerial Meeting of 5 September 2012, Annex C*, online: <www.apec.org/Meeting-Papers/Annual-Ministerial Meetings/Annual/2012/2012_amm.aspx>.

¹⁶⁰ See e.g. *Free Trade Agreement Between the European Union and Singapore*, 17 October 2014 at ch 7, online: <trade.ec.europa.eu/doclib/html/151742.htm>.

¹⁶¹ Correa, *supra* note 34 at 156–157.

are now embedded in the preparatory and negotiations processes of some countries.¹⁶² For example, when inter-ministerial coordination is practiced and the environment ministry participates in the preparation of trade negotiations. In particular:

[I]mpact assessments are revealing key tensions between trade and climate change, not just in terms of the need to secure flexibility for regulators to reasonably address new climate threats and opportunities while avoiding disguised protectionism, but also to address the need for new cooperation to implement rather than undermine international and national climate-change objectives and the need to reduce subsidies and other incentives for trade and investment in obsolete goods and services, while enhancing trade and investment in lower-carbon technologies, goods and services that support sustainable development.¹⁶³

In other words, especially in international economic law, there is a strong procedural dimension, which can facilitate the transition to a greener economy. And indeed, most recently, negotiations on environmental goods have been launched as pluri-lateral (i.e. opt-in negotiations).¹⁶⁴

4.1.3. OPPORTUNITIES

While regional or bilateral trade agreements do advance the trade aspect necessary for the transition to a green economy, as Correa emphasizes, the importance of a multilateral framework to ensure coherence of objectives at the international level and effectiveness of implementation via national measures should not be understated.¹⁶⁵ This is especially the case as most of the legal provisions in regional initiatives drafted in “soft” languages and remains open-ended obligations. The importance of international frameworks is echoed by the UNEP’s 2013 report on trade and green economy. It advocates the development of new multilateral rules under the WTO, especially as such international umbrella creates more policy space at the national level.¹⁶⁶

Further, as Melendez-Ortiz suggests, establishing consistent rules for preferential trade arrangements under the umbrella of the WTO, with reviews by a “Global Task Force of Ministers”, may achieve incremental improvements by building on existing subsidy rules to eliminate government handouts that are damaging the environment; and broadening the system by incorporating issue-specific cooperation outside trade-related institutions could amplify the contribution (e.g. OECD could agree to a tax on farm subsidies) by harmonizing

¹⁶² Markus W Gehring et al, *Climate Change and Sustainable Energy Measures in Regional Trade Agreements (RTAs): An Overview* (Geneva: International Centre for Trade and Sustainable Development, 2013) at 1, online: <www.ictsd.org/sites/default/files/research/2013/08/climate-change-and-sustainable-energy-measures-in-regional-trade-agreements-rtas.pdf>.

¹⁶³ *Ibid.*

¹⁶⁴ See Directorate-General for Trade, “The Environmental Goods Agreement (EGA): Liberalising Trade in Environmental Goods and Services”, *European Commission* (8 September 2015), online: <trade.ec.europa.eu/doclib/press/index.cfm?id=11116>.

¹⁶⁵ Correa, *supra* note 34 at 161.

¹⁶⁶ UNEP, *Green Economy and Trade*, *supra* note 153 at 23.

standards or making them interoperable.¹⁶⁷ Greening the entire WTO remains challenging,¹⁶⁸ but the promise of the green economy and liberalising environmental goods and services further than other WTO products and services could enhance mutual benefits between trade and environment.

4.2. INTERNATIONAL INVESTMENT LAW

4.2.1. INVESTMENT AND THE GREEN ECONOMY

In the UNEP's report, *Towards a Green Economy*, it was noted that between 1 to 2.5% of global GDP per year up to 2050 in key sectors is necessary to transition towards a green economy.¹⁶⁹ As such, green investments globally need to be spurred by national and international policy reforms.

4.2.2. CHALLENGES

However, some transitional challenges concerning litigation risks resulting from the application of investment disciplines could occur.¹⁷⁰ Under investment treaties, various rights are granted to foreign investors. Substantive clauses serve to level the “economic playing field” between foreign and domestic market participants (national treatment) or between foreigners from different countries (most favoured nation). This requires a better balancing of environmental and investment concerns.¹⁷¹ Fair and equitable treatment (FET) is a procedural standard requiring proportionality and due process in the implementation of national regulations. Meanwhile, even if a measure is deemed discriminatory, it does not automatically lead to a violation of FET; instead, considerations of proportionality relating to the balance between the relevance of public interest and the impact on the investor is assessed in terms of “reasonableness” of expectations.¹⁷²

Yet, such investment provisions may not always support objectives of green economy that seek to redirect investment to “green” economic sectors. For example, International Investment Agreements (IIAs) may pose significant threats to national policies promoting renewable energy initially—but then IIAs can also serve to protect the renewable energy industry from

¹⁶⁷ Meléndez-Ortiz, *supra* note 155.

¹⁶⁸ See generally Daniel C. Esty, *Greening the GATT: Trade, Environment and the Future* (Washington: MIT Press, 1994).

¹⁶⁹ *Supra* note 1 at 622.

¹⁷⁰ See generally Jorge E. Viñuales, “The Environmental Regulation of Foreign Investment Schemes Under International Law” in Pierre-Marie Dupuy & Jorge E. Viñuales, eds, *Harnessing Foreign Investment to Promote Environmental Protection: Incentives and Safeguards* (Geneva: Cambridge University Press, 2015) 273.

¹⁷¹ See Kate Miles, “Transforming Foreign Investment: Globalisation, the Environment, and a Climate of Controversy” (2007) 7:7 *Macquarie LJ* 81 at 99.

¹⁷² See Kate Miles, “Sustainable Development, National Treatment and Like Circumstances in Investment Law” in Marie-Claire Cordonier Segger, Markus Gehring & Andrew Newcombe, eds, *Sustainable Development in World Investment Law* (Alphen aan den Rijn: Kluwer Law International, 2010) 261 at 274.

arbitrary changes, as was seen in Spain.¹⁷³ The tribunal's decision on "Most-favoured-Nation Treatment" in *Parkerings-Compagniet AS v Republic of Lithuania* is encouraging as it indicated that States may differentiate between investors based on environmental concerns, cultural values and domestic and international obligations, with the Old Town's identification as a UNESCO world heritage site being a decisive factor for the particular decision.¹⁷⁴ While there are progressive examples, such as the Energy Charter Protocol with an emphasis on energy efficiency, Multilateral Energy Agreements to date do not explicitly link renewable energy to climate change mitigation and thus could undermine domestic measures to transition to a greener economy. Another issue regarding substantive standards involves Renewable Portfolio Standards, and whether they are regarded as problematic under NAFTA's national treatment rule, as they "discriminate" against investment projects excluded from the renewable portfolio standards.¹⁷⁵ Renewable energy policies also could only in extreme circumstances constitute indirect expropriation.

4.2.3. OPPORTUNITIES

Notable decisions include *Parkerings-Compagniet*¹⁷⁶ where international law clearly influenced the assessment of likeness, and the *Arcelor* decision where international environmental law was used to justify differential treatment.¹⁷⁷ Also of interest is that the police powers doctrine has been used in *Chemtura Corporation v Canada*¹⁷⁸ to justify a targeted environmental measure, and again in *Pine Valley v Ireland*.¹⁷⁹

Many bilateral investment treaties now contain sustainable development provisions.¹⁸⁰ Regional trade agreements with investment chapters, in particular, are starting to include preambular language on sustainable development, as can be seen in the examples below. Particularly in the WTO context, there has been a rich history of using preambular references to "add colour, texture and shading" to the interpretation of the WTO Agreement and its

¹⁷³ It should be noted that the first arbitration was rejected in January 2016 and Spain won the case largely due to EU rules which did not create any form of unfair treatment according to the tribunal but allowed for variation in the support for renewables, see *AES Solar*, *supra* note 118; Luke Peterson & Zoe Williams, "Spain's Arbitral Winning Streak Comes to a Halt, as ICSID Tribunal Awards 128 Million Euro (Plus Interest) for Changes Made in Solar Sector" (5 May 2017) online: IA Reports <www.iareporter.com/articles/spains-arbitral-winning-streak-comes-to-a-halt-as-icsid-tribunal-awards-128-million-euro-plus-interest-for-changes-made-in-solar-sector/>.

¹⁷⁴ See generally *Parkerings-Compagniet AS v Republic of Lithuania* (2009), ISCD No ARB/05/8 (International Centre for Settlement of Investment Disputes) at paras 392, 396 [*Parkerings-Compagniet*].

¹⁷⁵ See Bradford Gentry & Jennifer Ronk, "International Investment Agreements and Investments in Renewable Energy" in Leslie Parker et al, eds, *From Barriers to Opportunities: Renewable Energy Issues in Law and Policy* (New Haven: Yale School of Forestry & Environmental Studies, 2007) 25 at 67.

¹⁷⁶ *Supra* note 174 at para 207.

¹⁷⁷ *Supra* note 100 at para 29.

¹⁷⁸ *Chemtura Corporation v Canada* (2010), Award (Ad Hoc Arbitration under UNICITRAL Rules), at para 254 online: ITA Law <www.italaw.com/sites/default/files/case-documents/ita0149_0.pdf>.

¹⁷⁹ *Pine Valley v Ireland* (1992) ECHR case 29/11/1991, 14 EHRR 319 para 9, 55–60.

¹⁸⁰ Segger, Gehring & Newcombe, *supra* note 175 at 126.

annexes, including GATT 1994.¹⁸¹ While there are only few cases that make explicit reference to preambular language, it has been used to interpret substantive investment obligations in the past.¹⁸²

*NAFTA*¹⁸³:

- Parties resolve to “promote sustainable development”;¹⁸⁴
- Parties resolve to defer to multilateral environmental agreements in certain circumstances;¹⁸⁵
- Parties resolve not to lower standards to attract investment;¹⁸⁶
- Parallel North American environment & labour cooperation treaties.¹⁸⁷

*Canada-Chile FTA*¹⁸⁸ & *US-Chile FTAs*¹⁸⁹:

- Parties resolve to “promote sustainable development”;¹⁹⁰
- Parties “recognize importance of strengthening capacity to protect the environment and promote sustainable development”;¹⁹¹
- Respective environment & labour chapters and parallel treaties.¹⁹²

¹⁸¹ *United States—Prohibition of Shrimps and Certain Shrimp Products* (1998), WTO Doc WT/DS58/AB/R at para 153 (Appellate Body Report), online: WTO: <www.wto.org/english/tratop_e/dispu_e/cases_e/ds58_e.htm>.

¹⁸² See e.g. *Canadian Cattlemen for Fair Trade v United States* (2008), Award on Jurisdiction (Consolidated Arbitration under UNICITRAL Rules) at para 111, online: ITA Law <www.italaw.com/cases/188> [*Canadian Cattlemen*].

¹⁸³ *North American Free Trade Agreement Between the Government of Canada, the Government of Mexico and the Government of the United States*, 17 December 1992, Can TS 1994 No 2, 32 ILM 289 (entered into force 1 January 1994) [*NAFTA*].

¹⁸⁴ *Ibid*, Preamble.

¹⁸⁵ *Ibid*, arts 103–104.

¹⁸⁶ *Ibid*, art 1114(2).

¹⁸⁷ *North American Agreement on Environmental Co-operation*, 14 September 1993, 32 ILM 1482 (entered into force 1 January 1994); *North American Agreement on Labour Co-operation*, Can TS 1994 No 4 (entered into force 1 January 1994).

¹⁸⁸ *Free Trade Agreement Between Canada and Chile*, 5 December 1996, Can TS 1997 No 50 (entered into force 5 July 1997) [*Canada-Chile FTA*].

¹⁸⁹ *United States - Chile Free Trade Agreement*, 6 June 2003, 42 ILM 1026 (entered into force 1 January 2004) [*US-Chile FTA*].

¹⁹⁰ *Canada-Chile FTA*, *supra* note 188, Preamble; *US-Chile FTA*, *supra* note 189, Preamble.

¹⁹¹ *Ibid*, art 19.5.

¹⁹² *Agreement on Environmental Cooperation between Canada and Chile*, Can TS 1997 No 51; *Agreement on Labour Cooperation between Canada and Chile*, Can TS 1997 No 52; *US-Chile FTA*, *supra* note 189, chapters 18–19; *Agreement between the United States and Chile on Environmental Cooperation*, 17 June 2003, TIAS 04-430.

*US-Australia FTA*¹⁹³:

- Implement “in a manner consistent with their commitment to high labour standards, sustainable development, and environmental protection”;¹⁹⁴
- Chapter 19 environmental provisions prevail over chapter 11 investment provisions.¹⁹⁵

*Mercosur*¹⁹⁶:

- Objective of “sustainable development and environmental protection through the development of economic, social and environmental dimensions.”¹⁹⁷

*India-Singapore CECA*¹⁹⁸:

- “[E]conomic and trade liberalisation should allow for the optimal use of natural resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment.”¹⁹⁹

*US-Uruguay BIT*²⁰⁰:

- Exceptions to performance requirements;²⁰¹
- Not weakening environmental and labour laws;²⁰²
- Appointment of experts on environmental, health safety or other scientific measures.²⁰³

¹⁹³ *United States-Australia Free Trade Agreement*, 18 May 2004, 2005 ATS 1, 43 ILM 1248 (entered into force 1 January 2005).

¹⁹⁴ *Ibid*, Preamble.

¹⁹⁵ *Ibid*, art 11.2.

¹⁹⁶ *Treaty of Asuncion*, 26 March 1991, 30 ILM 1041.

¹⁹⁷ *Framework Agreement on the Environment of Mercosur*, 22 June 2001, 2270 UNTS I-40442, art 4 (entered into force 23 June 2004).

¹⁹⁸ *Comprehensive Economic Cooperation Agreement between the Republic of India and the Republic of Singapore*, 29 June 2005 (entered into force 1 August 2005) [*India-Singapore CECA*].

¹⁹⁹ *Ibid*, Preamble.

²⁰⁰ *Treaty between the United States of America and the Government of the Oriental Republic of Uruguay Concerning the Encouragement and Reciprocal Protection of Investment*, 4 November 2005, TIAS 06-1101 (entered into force 31 October 2006) [*US-Uruguay BIT*].

²⁰¹ *Ibid*, art 7.

²⁰² *Ibid*, arts 12–13.

²⁰³ *Ibid*, art 32.

*Canada-Peru BIT*²⁰⁴ & *Canada-Peru FTA*²⁰⁵:

- “[P]romotion and the protection of investments of investors of one Party in the territory of the other Party will be conducive ... to the promotion of sustainable development”;²⁰⁶
- “Each Party should encourage enterprises operating within its territory or subject to its jurisdiction to voluntarily incorporate internationally recognized standards of corporate social responsibility in their internal policies.”²⁰⁷

*Germany-Trinidad & Tobago BIT*²⁰⁸:

- “[R]ecognizing the important complementary role of foreign investments in the process of economic development, recognizing also the increasing need for measures to protect the environment.”²⁰⁹

While some of these preambular references are still not specifically geared towards a green economy, they highlight that in the interpretation of investment law, sustainable development plays an increasingly important role.

4.3. THE GREEN ECONOMY AND THE INTERNATIONAL FINANCIAL SECTOR

In general, it can be understood that the financial system’s role is to provide the “necessary financing and liquidity for human and economic activity to thrive.”²¹⁰ This sector has a central role for transitioning into green economy. Mending the financial gap and ensuring financial flows in “structural and technological changes in key sectors such as infrastructure, industry, agriculture and transportation”²¹¹ is arguably the most pressing task for the international community to transition into a green economy.

From another angle, the link between “systemic environmental risks” and financial stability has received renewed attention in the aftermath of the 2008 global financial crisis, as it acutely demonstrated how financial institutions and financial markets influence the environment and sustainability. Meanwhile, the financial downturn since 2008 has increased liquidity problems,

²⁰⁴ *Agreement between Canada and Peru for the Promotion and Protection of Investments*, 14 November 2006, Can TS 2007 No 10 (entered into force 20 June 2007, suspended 1 August 2009) [*Canada-Peru BIT*].

²⁰⁵ *Free Trade Agreement between Canada and Peru*, 29 May 2008, Can TS 2009 No 15 (entered into force 1 August 2009) [*Canada-Peru FTA*].

²⁰⁶ *Canada-Peru BIT*, *supra* note 204, Preamble.

²⁰⁷ *Canada-Peru FTA*, *supra* note 205, art 810.

²⁰⁸ *Treaty between the Federal Republic of Germany and the Republic of Trinidad and Tobago concerning the Encouragement and Reciprocal Protection of Investments*, 8 September 2006, UNTS I-47595 (entered into force 17 Apr 2010).

²⁰⁹ *Ibid*, Preamble.

²¹⁰ Cambridge Institute for Sustainability Leadership & United Nations Environmental Programme Finance Initiative, *Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III?* (Cambridge and Geneva: CISL & UNEPFI, 2014) at 7 [CISL & UNEPFI].

²¹¹ UNCSO Secretariat, *Finance for the Transition to a Green Economy in the Context of Sustainable Development and Poverty Eradication*, RIO 2012 Issues Briefs (UNCSO, August 2012), online: <sustainabledevelopment.un.org/content/documents/649brief16.pdf> at 1.

making access to finance harder, especially for corporate and infrastructure projects.²¹² Drawing on the work of Weber, there are at least three ways in which the financial sector can influence the green economy positively: 1) the finance sector can influence the level of environmental responsibility of the activities of their clients (projects, borrowers or investees); 2) environmental regulations (e.g. management of environmental risk in credit risk management) can affect the financial sector; and 3) the “reputational risk” of financial institutions can be influenced by stakeholders demanding sustainable development.²¹³ Above all, the role of the private industry is essential as national and international public sector resources are significantly smaller than those of the global financial market and are projected to remain limited in funds.²¹⁴

In this context, investors have begun to consider sustainable or green investment as important criteria in maximizing their beneficiaries’ long-term interests.²¹⁵ Notable progress at national and international level has been made to widen the range of potential lenders for low-carbon initiatives in the form of green bonds and changes to international regulatory framework for banks to recognize and address systemic environmental risks. While analysis of this sector’s potential contribution is only preliminary, certain progress, challenges, and potential legal and policy solutions can be highlighted.²¹⁶

4.3.1. PROGRESS AND CHALLENGES

Essentially, financing the transition to a green economy requires two components: the flow of capital from developed to developing countries, and the flow of capital into low-carbon and sustainable projects from traditional energy intensive sectors. Regarding the former, there are two key international commitments that developed countries have made to assist developing countries in pursuing economic growth in a sustainable manner. The Monterrey Consensus iterates that 0.7% of donor country’s gross national product should be provided in overseas direct assistance.²¹⁷ The Copenhagen Accord committed countries to provide \$100 Billion USD per annum by 2020 for climate change mitigation and adaptation for developing countries.²¹⁸ These were only non-binding commitments, and few countries have honoured them, but with the Paris Agreement declaring the Green Climate Fund as its main financing mechanism (besides the GEF), there is the prospect of more legally binding pledges

²¹² See Romain Morel & Cecile Bordier, “Financing the Transition to a Green Economy: Their Word is Their (Green) Bond?” (2014) 14 CDC Climate Brief 1 at 1.

²¹³ Olaf Weber, “The Financial Sector’s Impact on Sustainable Development” (2014) 4:1 J Sustainable Finance & Investment 1 at 2.

²¹⁴ The Bank for International Settlement has projected a high debt/GDP ratio for many major economies for the next 20 years; see UNEP, *Towards a Green Economy*, *supra* note 1.

²¹⁵ See Jason Thistlethwaite, “Private governance and sustainable finance” (2014) 4:1 J Sustainable Finance & Investment 61 at 66.

²¹⁶ See generally Mai Farid et al, *After Paris: Fiscal, Macroeconomic, and Financial Implications of Climate Change*, Staff Discussion Note (IMF, January 2016), online: IMF <www.imf.org/external/pubs/ft/sdn/2016/sdn1601.pdf>.

²¹⁷ *Report of the International Conference on Financing for Development*, UNDESA, 2002, UN Doc A/CONF.198/11 at 14.

²¹⁸ *Copenhagen Accord*, COP Dec 2/CP.15, UNFCCC, 15th sess, UN Doc FCCC/CP/2009/11/Add.1 4 at 7.

by donors.²¹⁹ It is an encouraging sign that at the 20th Conference of Parties in Lima, the Green Climate Fund, reached, and in fact exceeded, its goal of USD 10 billion for climate finance for developing countries.²²⁰

Concerning the flow of capital to low-carbon and sustainable development projects, banks play an integral role in such financing. While bank lending for environmentally sustainable activities varies between countries, there has been a notable trend in central banks in emerging economies to increasingly operationalize green lending.²²¹ Changes in the Basel Committee on Banking Supervision, which has adopted a set of non-legally binding measures that aim to strengthen regulation, supervision and risk management of the banking sector, are significant in this regard. After the global financial crisis, the Basel Committee enacted amendments to Basel II.²²² Among changes, such as increased level of regulatory capital, liquidity requirements, and capital charges, Basel II requires banks to assess the impact of environmental risks on the bank's credit and operational risk exposures.²²³ For example, paragraph 510 of Basel II mandates banks to "appropriately monitor the risk of environmental liability arising in respect of the collateral, such as the presence of toxic material on a property."²²⁴ Despite notable limitations in scope and effectiveness of Basel II, this has had important influence on national banks' lending practices in a number of emerging countries. Additionally, two key international financial development institutions, International Finance Corporation and Sustainable Banking Network have been promoting dialogue between environmental practitioners and financial regulators to facilitate better understanding of environmental risks on stability of financial systems.²²⁵

Another fundamental problem and a challenge is that the financial system has become more global since the 1980s, yet international legislation and regulation to balance this development are lacking.²²⁶ The sector rewards "short-termism", which is not conducive to a long-term perspective that is required for a green economy. To remedy such dilemma, various legal remedies have been proposed by scholars. Foremost, it has been suggested that regulatory frameworks or legislation for corporate social responsibility (CSR) and transparency would reduce risks and engage new investor classes to mainstream sustainable investing. Some have suggested removing investment barriers to small-scale sustainable enterprises based on the

²¹⁹ See Laurence Boisson de Chazournes, "Is There Room for Coherence in Climate Financial Assistance?" (2016), [unpublished, archived at SSRN] online: <ssrn.com/abstract=2729141>.

²²⁰ UN, "Green Climate Fund Exceeds Initial Capitalization Target of \$10 Billion", (10 December 2014), online: <www.un.org/climatechange/blog/2014/12/green-climate-fund-surpasses-10-billion-goal/>.

²²¹ CISL & UNEPFI, *supra* note 210 at 17.

²²² Francesco Cannata & Mario Quagliariello, *Basel III and beyond: A Guide to Banking Regulation After the Crisis*, (Risk Books: London, 2011).

²²³ *Ibid* at XXI.

²²⁴ Bank for International Settlements, *Basel II: International Convergence of Capital Measurement and Capital Standards*, (BIS: Basel, Switzerland, 2004) at para 510.

²²⁵ *Ibid* at 9.

²²⁶ See Eva Alfredsson & Anders Wijkman, *The Green, Inclusive Economy: Shaping Society to Serve Sustainability – Minor Adjustments or a Paradigm Shift?* (Global Challenge's Green Economy Working Group, 2014) at 37, online: <www.globalutmaning.se/wp-content/uploads/2014/02/Prestudy-for-Mistra-Green-Economy-Final-draft-vers-20140208.pdf>.

observation that most firms with positive impact on the environment are small and medium sized enterprises.²²⁷ Moreover, Richardson has recommended improving legal, institutional and market context of retail funds; because retail sector offers the most generous legal space for socially responsible investment of any financial sector.²²⁸ Again, signaling to investors and market actors alike that a transition to a greener economy is planned and will be legislated for can send an important market signal, especially if similar developments occur at the global level. For example, the Canada-EU Comprehensive Economic and Trade Agreement specifically references CSR in its preamble, commits to further joint research and activities that will encourage CSR.²²⁹

5. CONCLUSIONS

This article has illustrated the role of law at international, regional and national levels to enable and incentivize the transition into a green economy in the context of sustainable development by examining current legal provisions at national, regional, and international level, identifying limitations, and suggesting further legal innovations, especially in the arena of international economic law involving trade, investment, and finance. Documenting and explaining the conclusions from a broad survey, a heterogeneous mix of legal measures has been highlighted.

To summarize, key insights derived from this article are that new legal frameworks and institutions at the international, European, and domestic levels are being tested, and procedural innovation can help in this upcoming transition. The role and importance of international economic law (trade, investment, and finance) was highlighted. International frameworks and instruments can accelerate the pace of innovation at the national level. Taking into account the reasoning of diverse adjudicatory bodies across different bodies of international law, a clearer vision for the 'green economy' emerges. In particular, international economic law plays a key role for the green economy, but it has shown itself to be less open to green economic ideas thus far. However, rather than seeing economic law as an inherent contradiction to the green economy, this paper highlighted changes so that international economic law could become a driver for a greener global economy. Finally, while laws can, and often do, support a greener economy, legal changes alone will not guarantee such a transition. Participation by all actors and at all levels of government will be required for a comprehensive transition to a global green economy.

²²⁷ See e.g. Andreas Endl, *Sustainable Investment: Options for a Contribution to a More Sustainable Financial Sector* (Vienna: ESDN, 2011) at 16.

²²⁸ Benjamin Richardson, "Fiduciary Responsibility in Retail Funds: Clarifying the Prospects for SRI" (2013) 3:1 J Sustainable Finance & Investment 1 at 1.

²²⁹ See *Comprehensive Economic and Trade Agreement*, Preamble, art 25.4 (not in force), online: <trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154329.pdf>.