

SUSTAINABLE DEVELOPMENT LAW & POLICY



EXPLORING HOW TODAY'S DEVELOPMENT AFFECTS FUTURE GENERATIONS AROUND THE GLOBE

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EDITORS' NOTE

Over the past fifty years, international trade and investment has grown considerably and connected country economies worldwide. So too have the legal frameworks created to coordinate such activity: from the creation of the first bilateral investment treaty in 1959¹ to the more than 2,700 in existence today,² the establishment of the World Trade Organization (“WTO”) in 1995, and over 200 regional trade agreements currently in force.³ While much attention focused on international trade and investment starting in 2008, as the U.S. financial crisis led to a global trade collapse, impacts of international trade and investment outside of the economic realm, in particular on sustainable development, are growing in recognition. Countries are beginning to integrate environmental standards into free trade and international investment agreements, the WTO and United Nations Environment Programme collaborated on a trade and climate change report,⁴ the World Bank Group’s International Finance Corporation released its revised Sustainability Framework for private sector development projects in May 2011, and after the 2007-2008 surge in food prices and resulting private purchases of land in developing countries, concerns of “land grabbing” have been raised.

Articles in this issue on Trade, Investment, and Sustainable Development review some of the deficiencies and imbalances of existing trade and investment agreements while proposing solutions to help counter and mitigate these issues. One author focuses on the issues concerning the health, safety, and environmental measures and whether the non-discrimination standards in investment treaties require consideration of these measures. Another author reviews the issues pertaining to the U.S. trade policy and how it can be used to advance global food security goals as opposed to hindering them. Next, an article analyzes the often highly secretive and confidential foreign investment contracts in the oil and gas sector, with a focus on the environmentally relevant clauses in these contracts. While another article addresses measures being taken to strengthen environmental and social sustainability in China’s overseas investments and considers whether Chinese institutions could learn from other institutions. Lastly, an article reviews the

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feasibility of border tax adjustments designed to reduce global greenhouse gas emissions and how they might conflict with existing WTO multilateral rules.

With the WTO’s Doha Development Round stalled and the world’s economies struggling to resume growth, we must remember that although international trade and investment is an integral part of the global economy, it is a mere subset within the overarching goal of sustainable development. This issue of *Sustainable Development Law & Policy* seeks to contribute to the understanding of important developments in international trade and investment and encourage further integration of sustainable development principles into existing and future frameworks. For only with the proper balance and recognition of both the environment and development, and their connection with trade and investment, can sustainable development be realized.

¹ 50th Anniversary of the First Bilateral Investment Treaty: An Occasion for Celebration or Reflection?, INT’L INST. FOR SUSTAINABLE DEV., (Dec. 3, 2009), <http://www.iisd.org/media/press.aspx?id=13>.

² UNITED NATIONS CONFERENCE ON TRADE & INV., WORLD INVESTMENT REPORT 2010: INVESTING IN A LOW-CARBON ECONOMY 81 (2010), http://www.unctad.org/en/docs/wir2010_en.pdf.

³ *Regional Trade Agreements*, WORLD TRADE ORG., http://www.wto.org/english/tratop_e/region_e/region_e.htm (last visited June 4, 2011).

⁴ UNITED NATIONS ENV’T PROGRAMME & WORLD TRADE ORG., TRADE AND CLIMATE CHANGE (2010), http://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf.



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ABOUT SDLP

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INVESTMENT AGREEMENTS & SUSTAINABLE DEVELOPMENT:

THE NON-DISCRIMINATION STANDARDS

by Marcos Orellana*

INTRODUCTION

The approach of building mutually supportive trade, investment, and environmental regimes finds inspiration in the concept of sustainable development. Indeed, the World Summit on Sustainable Development recognized that trade and investment are necessary tools for achieving the goals of sustainable development.¹ Economic activities may contribute to the progressive realization of human rights and environmental protection by fostering economic development, employment, income generation, and general welfare. This potential contribution is not automatic, however, as non-sustainable investments, or unwarranted interpretations of trade and investment disciplines, may defeat such general welfare goals by exposing the population to health risks, causing environmental harm, or reducing the necessary policy space for sustainable development.

While its exact legal nature and status remain the object of controversy, at a minimum, sustainable development requires the integration of environmental issues in decision-making regarding development and investment projects.² If sustainable development requires the integration of environmental considerations in the planning and implementation of economic activities, it follows that the resolution of economic disputes concerning health, safety, and environmental (“HSE”) measures should also be integrated into the various fields involved. This process of integration in dispute settlement places an emphasis on treaty interpretation and, particularly, an emphasis on the principle of systemic integration codified in the Vienna Convention on the Law of Treaties.³ In this regard, sustainable development calls for a process of normative dialogue, and the interpretive principle of systemic integration guides the conversation.

The interpretation and application of substantive investment disciplines carries intense implications for the policy space available to governments to adopt measures conducive to sustainable development. If compensation by the host government to the investor is required for the adoption of such measures, “even where regulatory action is taken in a fair and equitable manner, the potential cost to the governments may well discourage desirable or necessary environmental regulations.”⁴ This general issue is particularly relevant in disputes concerning the relative non-discrimination standards of most-favored nation (“MFN”) treatment and national treatment (“NT”) because normal regulatory activity hinges on the construct of categories and distinctions that underlie differentiated approaches and rules attaching to particular persons, products, substances, economic sectors, etc.

This paper analyzes key issues concerning the scrutiny of HSE measures under the non-discrimination standards. It first introduces the non-discrimination standards and then examines the thorny questions of discriminatory intent and like circumstances. The paper argues that the construct of relative non-discrimination standards in investment treaties does not incorporate “necessity” requirements to justify HSE measures, in contrast to Article XX of the General Agreement on Tariffs and Trade (“GATT”) of the World Trade Organization (“WTO”). Instead, the relative non-discrimination standards of MFN and NT allow for HSE considerations in their two core operative elements: “in like circumstances” and “less favorable treatment.”

THE NON-DISCRIMINATION STANDARDS

The relative non-discrimination standards proscribe discrimination on the basis of nationality. They require treatment no less favorable than that afforded to other national or foreign investors “in like circumstances.”⁵ The comparison of the treatment afforded to similarly situated investors becomes the master key to the operation of the non-discrimination standards.

Given that the comparison process involves determining which investors are similarly situated, taking into account all relevant circumstances, the operation of the standards is far from a mechanical application of a mathematical formula. Instead, the application of the non-discrimination standards calls for abstract legal reasoning and involves a measure of subjective assessment. Because of this, there is a degree of uncertainty involved in their operation, which may affect the policy space available to States.

Several questions are relevant to the interpretation of non-discrimination standards through a sustainable development lens. For example: what is the meaning of “less favorable treatment,” and is it established by disparate impact alone? Does the meaning of “in like circumstances” allow authorities to differentiate among investors and/or investments on account of the dissimilar HSE threats posed by different substances, production processes, geographical conditions, etc? If so, does like circumstances operate as an element of the non-discrimination stan-

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dards, or as an exception, which would transpose the necessity test of trade law into the investment regime?

This paper addresses the non-discrimination standards of MFN and NT together, since the focus of analysis is their relation to HSE measures. In trade law, by contrast, national treatment rationales are not necessarily relevant to the interpretation of MFN disciplines,⁶ as MFN and “non-discrimination” are not necessarily synonymous.⁷ While differences between MFN and national treatment may be warranted in the trade regime, in the investment arena, both MFN and NT operate within the border with respect to largely similar issues. Both the *Occidental* case and the *Cross Border Trucking* case (examined below) have approached their analysis under the assumption that both the MFN and NT standards are synonymous, in the investment context.

DISCRIMINATORY PURPOSE

Actual proof of discriminatory intent is generally not required as an element of discrimination.⁸ This does not mean that the purpose of an HSE measure is irrelevant, however. Account of purpose allows for proper consideration of the perspectives of both the investor and the State, including the public interest underlying HSE measures, and thus overcomes unidirectional interpretations that consider investment obligations from the sole vantage point of the investor.⁹ Moreover, the purpose of the challenged measure is relevant since less favorable treatment is not established by disparate impact alone. In practice, national treatment claims arguing that any treatment that differentially affects a foreign investor, even if the difference is not attributable to considerations of nationality, have not been successful.¹⁰ If these claims were decided otherwise, the State would find itself unable to regulate in the public interest, with respect to processes or substances in a market dominated by foreign investors, without risking international liability, given that HSE measures would inevitably affect economic operators differently.

But how can tribunals determine the real purpose behind a measure? And, how should tribunals address situations of mixed intent, i.e., situations where a legitimate HSE objective co-exists with an impermissible motive? The difficulties involved in identifying regulatory purpose are compounded in the modern regulatory State, where legislatures and administrations respond to a number of often-competing interests, and where so much economic and social activity is highly regulated. In light of the fact that States are hardly monolithic entities, the determination of protectionist purpose may become a formidable challenge to a discrimination claim or defense. The *Methanex* Tribunal, hearing an arbitration involving groundwater contamination in California, aptly expressed the problem:

In particular, decrees and regulations may be the product of compromises and the balancing of competing interests by a variety of political actors. As a result, it may be difficult to identify a single or predominant purpose underlying a particular measure. Where a single governmental actor is motivated by an improper purpose, it does not necessarily follow that the motive can

be attributed to the entire government. Much if not all will depend on the evidential materials adduced in the particular case.¹¹

Several observations may be warranted in respect to the difficulties involved in identifying and proving intent. First, although in international law States may be said to express but one voice, democracies in practice respond to different, often competing, political interests. This political feature of democracy is not to be condemned, especially when international law recognizes that democracy, human rights, and development are “interdependent and mutually reinforcing.”¹² It may well be that different purposes co-exist and explain why a given measure was adopted.

In such cases, issues of mixed intent will introduce severe tensions between economic and HSE considerations. In this regard, once evidence reveals the existence of HSE risks, the parallel presence of illicit protectionist intent in some governmental organ should not *ipso facto* render a measure illegal. If HSE risks are real, then the HSE protective purpose should in principle prevail over other purposes, given the paramount importance of safeguarding health, safety, and the environment.

Second, HSE measures cannot be presumed to be discriminatory. On the contrary, where national authorities have applied due process and based their findings of risks and determination of the level of protection on the basis of available scientific evidence, the specificity of HSE measures warrants qualified deference. It is for the claimant to prove discriminatory treatment, and not incumbent upon the government to demonstrate its public purpose. That said, the “smell test,” discussed below, the uncertainties as to the location of the threshold involved in making a *prima facie* case, and the dangers of negative inferences should lead cautious governments to be forthcoming in adducing evidence demonstrating the legitimacy of their HSE measures.

With regard to the evidence underlying a HSE measure, the country of origin of the scientific evidence is not necessarily a material reason for either accepting or rejecting it.¹³ The origin of the scientific evidence cannot sustain a presumption of discriminatory intent because if it could, then most governments would risk attracting international responsibility for their efforts in assessing risks. Furthermore, the level of detail or specificity required of the scientific evidence underlying HSE measures needs to take into account real world considerations and the substantial costs involved in producing a science-based analysis of the risks presented by the multiple substances, processes, and activities that interact in society. The burden on developing countries of producing tailored and specific scientific studies, in light of their limited budget for scientific research and more pressing priorities such as sanitation and food security, illustrates the tensions surrounding the role of science in investment law.¹⁴

Third, in facing the challenges involved in determining protectionist intent, especially when considering facially neutral measures, tribunals are often tempted to adopt a “smell-test.”¹⁵ The degree of circumstantial evidence pointing to protectionist intent may acquire a critical role, especially where direct evidence is unavailable. Thus, claimants will be drawn to

statements from different interests groups active in the political arena, figures on the expected benefits accruing to competitors in the marketplace, statements and memos from public officials, and any other piece of evidence that may serve to raise doubts as to the legitimacy of purpose. In *S.D. Myers*, which involved a ban on the export of hazardous PCB waste from Canada to the United States, the “smoking gun” tactic proved effective in convincing the tribunal that at stake was not a legitimate HSE measure, but rather a sham cover for protectionist purposes.¹⁶ In the *Methanex* case, the claimant even hired a private investigator to inspect the garbage of ethanol lobbying firms and to trespass into their offices.¹⁷

Fourth, resort to consistency and necessity could also provide indirect evidence of governmental intent. Such indirect evidence, however, only offers limited assistance because of the specific nature of HSE measures as well as the absence of actual obligations for consistency or necessity. Most often governments regulate in response to public perception of threats as they arise, and as scientific progress reveals what were until then “invisible” risks. Also, sustainable development calls for adaptive management and evolving norms in order to incorporate new scientific insights and lessons learned regarding the operation and effectiveness of legal tools. Thus, requiring overall consistency in levels of protection and attaching liability for failure to achieve consistency would have the law operate in fictitious conditions.

The parallel between Bilateral Investment Treaties (“BITs”) and the Agreement on Sanitary and Phytosanitary Measures (“SPS”)¹⁸ of the WTO illustrates the different roles of harmonization and consistency requirements in the trade and investment regimes. The protection of health in a society via sanitary measures that impede market access for goods that pose SPS risks will normally impose costs on other countries; to address this situation and secure market access to foreign goods, the SPS Agreement pursues harmonization of standards and even presumes conformity when international standards are utilized.¹⁹ Investors and their investments, by contrast, are fully immersed in the diversity of national and local regulatory requirements, and it would have been quite far-reaching indeed if international investment agreements (“IIAs”) pursued harmonization of HSE standards across legal cultures and across differing levels of development.

With respect to necessity requirements, could less-trade restrictive alternatives provide indirect evidence of protectionist intent? In addressing this question, it must first be noted that the prerogative of countries to establish their levels of protection stems from their sovereignty, expressed in constitutional mandates to safeguard fundamental rights and to protect the population, *inter alia*, from HSE risks and that these duties cannot be surrendered or abandoned.²⁰ Second, countries are not obligated to justify their measures on the basis of necessity, absent explicit, conventional commitments to that effect. Third, any inquiry on less-trade restrictive alternatives should consider that reasonably available measures should achieve the same level of protection, involve the same regulatory costs, and restrict trade significantly

less. Fourth, the textual differences between the SPS Agreement, which explicitly refers to necessity,²¹ on the one hand, and non-discrimination disciplines in investment agreements, which do not usually include such requirement, on the other, must be given effect.

Fifth and perhaps decisively, in WTO law the remedy for a measure that offends the less-trade restrictive standard is cessation, i.e., removal of the offending measure and adoption of the reasonably available less-trade restrictive measure.²² By contrast, investment treaties contemplate monetary damages as the remedy of choice, which highlights the need to avoid automatic transposition of trade law into the investment field. Thus, less-trade restrictive criteria as indirect evidence is of limited value and could not by itself render sufficient light on illicit motive.

Therefore, arbitral tribunals inclined to employ less-trade restrictive criteria as indirect evidence should be careful not to transform them into a substantive necessity requirement. In claims involving trade and investment issues, the importation of a necessity test could involve investment arbitration adjudicating trade law claims, in excess of jurisdiction. Further, importing a necessity test into the non-discrimination standards in investment law would intrude much further into the regulatory autonomy of host States and potentially “lead to odd results.”²³

Finally, with respect to “less favorable treatment,” the purpose of a science-based HSE measure should prevail over NT or MFN claims, including *de facto* discrimination. A claimant alleging disguised protectionism in HSE measures will need to submit compelling evidence proving that the science is a sham, that no HSE risk exists, or that the government is operating solely for protectionist purposes. Admittedly, this is a high threshold. Still, the alternative could allow successful challenges to legitimate HSE measures, thereby compromising the abilities of governments to fulfill their environmental and human rights obligations.

LIKE CIRCUMSTANCES AND NON-DISCRIMINATION

As the UN International Law Commission observed, even absent explicit reference to “like circumstances” or “like situations,” such comparative context is implicit in the essence of the MFN clause.²⁴ The operation of “like circumstances” is not an easy task, however, given the elasticity of the terms and, thus, its ability to cast too wide or too narrow a net, depending on the level of abstraction or detail.

The application of non-discrimination standards raises difficulties where, as a result of local environmental conditions or the structure of a specific market, the operator that is treated or affected differently by the HSE measure is also a foreign investor. A hypothetical example presented by the United States Trade Representative in the context of the failed Multilateral Agreement on Investment (“MAI”) clarifies the point:

One concern which was raised was the possibility that measures entirely consistent with MFN and national treatment may provide differing treatment to investors depending on the particular circumstance. For example,

a foreign investor whose investment is situated on a wetland may legitimately be treated differently than another foreign or domestic investor due to the location of the investment, rather than the nationality of the investor. To address this issue, we included language in our proposal that would clarify the MAI's definition of "in like circumstances," in order to ensure that legitimate environmental measures will not be challenged purely on the grounds of such differential treatment.²⁵

The application of the non-discrimination standards to HSE measures raise at least two intertwined questions concerning the operation of the phrase "in like circumstances." First, whether like circumstances operates as an exception to non-discrimination disciplines or alternatively as an operative element of the MFN and NT standards. Second, whether like circumstances refer only to operators in the same economic sector or whether it includes other differentiating criteria. In addition to these two questions, it remains open to question whether like circumstances could otherwise safeguard HSE measures that by design differentiate between investors on the basis of nationality.

LIKE CIRCUMSTANCES: AN OPERATIVE ELEMENT OR AN EXCEPTION?

Investment jurisprudence is divided as to whether "like circumstances" constitutes an operative element of the non-discrimination standards or an exception that could justify differential treatment on policy grounds. Analysis of the *Cross-Border Trucking* case, concerning U.S. restrictions on cross-border trucking services as well as restrictions on Mexican investment in the U.S. trucking industry, is useful in approaching this issue. The NT and MFN issues before the *Cross-Border Trucking* NAFTA Chapter 20 Arbitral Panel turned on the meaning and scope of the phrase "in like circumstances."²⁶ The Arbitral Panel sought guidance from other agreements that use similar language, such as the Canada-U.S. FTA. As the Panel noted, this agreement contains an exception to NT in services trade,²⁷ where "the difference in treatment is no greater than that necessary for prudential, fiduciary, health and safety, or consumer protection reasons," and explicitly imposes the burden of satisfying the exception on the party according different treatment.²⁸ The Panel then observed that the phrase "like circumstances" may properly include differential treatment, under the conditions specified in the Canada-U.S. FTA.²⁹

Upon this reading of "like circumstances" and under the light of NAFTA's trade liberalization objectives,³⁰ the Panel reached the conclusion that the "in like circumstances" language constitutes an exception to the non-discrimination disciplines and should thus be interpreted narrowly.³¹ The Panel explained that "differential treatment should be no greater than necessary for legitimate regulatory reasons such as safety, and that such different treatment be equivalent to the treatment accorded to domestic service providers."³²

The *Cross-Border Trucking* Panel's analysis highlights the difficulties involved in the operation of non-discrimination disciplines. In particular, the Panel's reading of "like circumstances"

as an *exception* to differential treatment could serve to avoid unreasonable results, considering that NAFTA's investment chapter does not explicitly contain prudential exceptions for the protection of health, safety, and the environment that could *justify* departure from its substantive obligations, unlike trade in goods and services.³³

Other NAFTA arbitral tribunals have confronted similar issues and adopted a similar rationale in the context of national treatment. The *S.D. Myers* Tribunal, for example, noted that the "assessment of like circumstances must also take into account circumstances that would *justify* governmental regulation that treat them differently in order to protect the public interest."³⁴

In a similar jurisprudential vein, the *Parking* Tribunal considered environmental criteria in its application of the non-discrimination standards.³⁵ This case involved parking works and operations within the old city of Vilnius, Lithuania, which was protected by the UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage.³⁶ The investor claimed that other parking works and operations had been treated differently.³⁷ The *Parking* Tribunal applied a binary construct to the non-discrimination standard: it compared certain economic operators, on the one hand, and it examined the policy underlying the differential treatment, on the other.³⁸ In this reading, the non-discrimination standard implicitly incorporates an exception for measures justified by legitimate governmental policies.

It would appear at first sight that this formula could avoid excessive outcomes by taking into account HSE considerations to justify differential treatment. However, the practical effect of such reading reduces the policy space available to governments, as the meaning of "like circumstances" is narrowed down by the IIA's economic objectives. Such a narrow reading of the object and purpose of IIAs risks frustrating mutually supportive trade and environment regimes, as the legitimacy of public policy goals is solely or predominantly evaluated through the lens of the investment liberalization goals. Moreover, by defining the purpose of investment agreements as tools for protecting investors, all doubts and ambiguities are resolved in the investors' favor. To overcome this apparent lack of balance, IIAs should be appreciated as instruments for sustainable development—embracing its three pillars: economic, social, and environment—and properly placed in the broader international law universe.

The reading of "like circumstances" as an exception also suffers from deficiencies relating to scope and the burden of proof. In regards to the burden of proof, the interpretation that treats "like circumstances" as an exception requires the respondent government to justify its regulations, relieving the applicant of establishing relevant, material facts and proving all the elements of its claim.³⁹ Then in regards to scope, the "exceptional" formulation of "in like circumstances" hinges on "necessity" considerations, where arbitral tribunals run the risk of second-guessing government regulators by testing potentially available least trade restrictive measures against investment liberalizing objectives. The deficiencies of such "exceptional" readings are

amplified by the complexity and dynamism of market structures, as well as by evolving scientific knowledge and changing social preferences in the modern regulatory State.

Instead, in the investment context, “like circumstances” should be read in light of its role as the key operative element of the non-discrimination standards, rather than as a *defense*, *exception*, or *justification* against MFN or NT obligations. In such role, “like circumstances” does not involve presumptions, narrow interpretations, or transfers in the burden of proof. Similarly, such reading does not transpose the WTO necessity test into the operation of investment non-discrimination disciplines.

As an operative element of the standard, the “like circumstances” test requires the identification of *all* relevant circumstances that serve to distinguish among foreign investors, including HSE considerations. In that context, as clarified by the Organization for Economic Co-operation and Development (“OECD”), analysis of conditions of competition in specific economic sectors provide a point of departure, but neither exhaust the task of establishing the category of actors that should be compared, nor the policy objectives that can be taken into account to define relevant parameters for comparison.⁴⁰ It appears that the objective relevance of the circumstances for each specific case seems to be the correct standard of reference,⁴¹ including circumstances pertaining to HSE risks. Particular circumstances with respect to HSE issues should constitute a valid basis for distinguishing among otherwise similar investments or investors.⁴²

Reading “like circumstances” as an operative element of the NT and MFN standards would do greater justice to the text and context of IIAs and would have positive systemic effects. This reading would not presume discrimination in the face of differential treatment or effects. Furthermore, this reading would also avoid a mechanical transposition of WTO law and jurisprudence into IIAs, both of which are different treaties with different parties, history, practice, text and context, structure, obligations, and remedies, thereby also avoiding the application of a goods analysis, or a services analysis, to investment matters. Finally, the scope of like circumstances would not be narrowed by the sole consideration of trade and investment objectives, thereby contributing to building mutually supportive environment and investment regimes.

The *GAMI* Tribunal confirmed the role of policy considerations in the determination of “likeness,” and not as an “exception” to non-discrimination disciplines:

The Arbitral Tribunal has not been persuaded that GAM’s circumstances were demonstrably so “like” those of non-expropriated mill owners that it was wrong to treat GAM differently. The Government may have been clumsy in its analysis of the relevant criteria for the cutoff line between candidates and non-candidates for expropriation. Its understanding of corporate finance may have been deficient. But ineffectiveness is not discrimination. The arbitrators are satisfied that a reason exists for the measure which was not itself discriminatory. That measure was plausibly connected with a legitimate goal of policy (ensuring that the sugar

industry was in the hands of solvent enterprises) and was applied neither in a discriminatory manner nor as a disguised barrier to equal opportunity.⁴³

Following the reasoning of the *GAMI* Award, differential treatment based on HSE considerations would not be on the basis of nationality, but on the basis of legitimate regulatory objectives. This rationale applies with particular force with respect to HSE measures of general application. But what about HSE measures that call for differential treatment on the basis of the nationality of the investor?

Governmental measures implementing multilateral environmental agreements (“MEAs”) may well have implications for the NT and MFN standards in IIAs.⁴⁴ For example, an MEA allowing performance requirements to transfer environmentally sound technology might place greater burdens on a foreign as compared to domestic investors, and environmental controls arising out of the Clean Development Mechanism established under the Kyoto Protocol may require countries to discriminate between different categories of investors on the basis of nationality.⁴⁵ In these situations, is the phrase “in like circumstances” broad enough to safeguard nationality-based discrimination based on an MEA?

Markedly, the *Pope & Talbot* Tribunal presented a “like circumstances” formulation that purports to go beyond discrimination on the basis of nationality: “[a] formulation focusing on the like circumstances question, on the other hand, will require addressing *any* difference in treatment, demanding that it be justified by showing that it bears a reasonable relationship to rational policies not motivated by preference of domestic over foreign owned investments.”⁴⁶ Further, the *Pope & Talbot* Tribunal explicitly noted that differences in treatment will *presumptively* violate the non-discrimination standards, “unless they have a reasonable nexus to rational government policies that (1) do not distinguish, on their face or *de facto*, between foreign owned and domestic companies, and (2) do not otherwise unduly undermine the investment liberalizing objectives of NAFTA.”⁴⁷

According to this reading, “in like circumstances” can safeguard HSE measures expressing rational government policies but not if HSE measures, by design, distinguish between investors on the basis of nationality. Thus, under this construct, MEA-based requirements would fail the non-discrimination test.

This solution may not contribute to mutual supportiveness between investment law and international environmental law because it could frustrate the objectives of MEAs. Three alternative options provide for a solution whereby the MEA-based, nationality requirement can co-exist with the non-discrimination standards. First, “in like circumstances” could consider the fact that the HSE measure is based on an MEA. Second, a conflict of norms analysis could apply to the conflict between the investment norm and the MEA norm, giving priority to the MEA obligation on account of the *lex specialis* principle. Third, general exceptions for HSE measures, where available, could safeguard nationality-based distinctions effected by HSE measures pursuant to MEAs. These three options would not frustrate the objectives of investment law because the nationality-based

distinctions would not be arbitrary or a disguise for an impermissible motive. Further, their rational basis and legitimate policy goals are underscored by the fact that they have been established by the international community in an international treaty—the MEA—seeking solutions to global HSE risks.

IN LIKE CIRCUMSTANCES & THE RELEVANT COMPARATORS

Then on the question of the determination of relevant comparators for the operation of the “like circumstances” test, the *Occidental* case, involving discrimination claims by an oil producer against the application of Ecuadorean tax law, provides a platform for analysis.⁴⁸ The key issue before the tribunal turned on the meaning of “in like situations.”⁴⁹ *Occidental* argued that “in like situations” did not refer to companies in the same sector of activity, such as oil producers, but to companies that were engaged in exports, even if encompassing different sectors.⁵⁰ *Occidental* further argued that a number of companies involved in the export of flowers, mining, seafood products, lumber, bananas, and African palm oil were entitled to receive Value Added Tax (“VAT”) refunds and continuously enjoyed that benefit.⁵¹ Ecuador responded that “in like circumstances” could not extend to sectors other than oil producers because the whole purpose of the VAT refund policy was to ensure that the conditions of competition were not changed.⁵² Ecuador further noted that with respect to VAT refunds, all oil producers were treated alike, including the national State oil company, Petroecuador.⁵³

The *Occidental* Tribunal found in favor of the claimant on the basis of thin reasoning and doubtful propositions, two of which will be noted here. First, the Tribunal noted that “the purpose of national treatment is to protect investors as compared to local producers, and this cannot be done by addressing exclusively the sector in which that particular activity is undertaken.”⁵⁴ Such formulation is problematic, not least because it neglects the essence of non-discrimination principles in securing equal access to opportunity, particularly in respect to the conditions of competition.⁵⁵ Further, the public interest implications of such an unbalanced reading are readily apparent, including with respect to HSE measures, as governments will differentiate among different sectors for entirely legitimate reasons.⁵⁶

A more balanced approach to non-discrimination has been elaborated by the OECD, a forum convening the most heavily regulated States in the world, in the context of the 1976 Declaration on International Investment and Multinational Enterprises.⁵⁷ In its 1993 interpretation of the NT standard included in the 1976 Declaration, the OECD observed that:

As regards the expression “in like situations”, the comparison between foreign-controlled enterprises established in a Member country and domestic enterprises in that Member country is valid only if it is made between firms operating in the same sector. . . . More general considerations, such as the policy objectives of Member countries, could be taken into account to define the circumstances in which comparison between foreign-controlled and domestic enterprises is permis-


sible inasmuch as those objectives are not contrary to the principle of National Treatment.⁵⁸

A second doubtful proposition underlying the *Occidental* Tribunal’s extremely broad reading of “in like situations” relates to the linkages between disparate treatment and protectionism. The *Occidental* Tribunal noted that it was “convinced” that *Occidental*’s less favorable treatment, i.e., the fact that unlike flower exporters it was denied VAT refunds, was not the result of discriminatory intent.⁵⁹ Without more, this statement equates disparate impact with discrimination, and this interpretation dramatically compromises a government’s ability to regulate in the public interest, including by way of differential and incremental policy approaches.⁶⁰ In this regard, it may be useful to recall the attempt by the Chair of the OECD’s Multilateral Agreement on Investment Negotiating Group to put together a package of proposals to address member States’ concerns on the impact on regulatory autonomy of the NT and MFN standards:⁶¹

The fact that a measure applied by a government has a different effect on an investment or investor of another Party would not in itself render the measure inconsistent with national treatment and most favoured nation treatment. The objective of “in like circumstances” is to permit the consideration of all relevant circumstances, including those relating to a foreign investor and its investments, in deciding to which domestic or third country investors and investments they should appropriately be compared.⁶²

This approach is more nuanced and recognizes both the close link between discrimination and equal opportunity. It also recognizes the fact that a government may treat economic operators differently for entirely legitimate policy reasons.

CONCLUSION

The operation of the relative non-discrimination standards can penetrate deeply into the regulatory sphere of the State, since they require the State to adduce a coherent explanation of the relevant categories and distinctions underlying the content and scope of application of an internal measure. Policy rationales for disparate treatment can involve a number of public interest regulations, including with respect to the environment, health, and safety. In this regard, interpreting “in like circumstances” as an operative element of the non-discrimination standards in IIAs that accounts for all relevant circumstances relating to the investment, rather than as a narrow exception that transfers to the State the burden of justifying its policy preferences, contributes to preserving the policy space necessary for the exercise of governmental authority in respect of health, safety, and the environment. Thus, the interpretation of “in like circumstances” as an operative element of the non-discrimination standards ultimately contributes to building channels of dialogue between legal regimes relevant to sustainable development. 

MAKING U.S. TRADE POLICY SERVE GLOBAL FOOD SECURITY GOALS*

by Karen Hansen-Kuhn**

INTRODUCTION

To the people of poor nations, we pledge to work alongside you to make your farms flourish and let clean waters flow; to nourish starved bodies and feed hungry minds. And to those nations like ours that enjoy relative plenty, we say we can no longer afford indifference to suffering outside our borders; nor can we consume the world's resources without regard to effect. For the world has changed, and we must change with it.

—President Barack Obama¹

More than any U.S. president in history, Barack Obama has focused public attention on global hunger and the need to bolster food production by small-scale farmers in developing countries. He championed this cause at the 2009 G-8 meeting in L'Aquila, Italy, where he called on world leaders to commit \$20 billion to address food security, promising \$3.5 billion from the United States.² After a series of consultations among various government agencies and civil society organizations, the Obama Administration launched the Feed the Future initiative in April 2010.³ This program emphasizes the importance of small-scale farmers, especially women, in country-led programs and a multiagency “whole of government” approach to global food security.⁴

Conversely, trade talks are gaining new momentum. After a two-year lull following the collapse of the World Trade Organization (“WTO”) talks in 2008, G-20 leaders have called for a resumption of the negotiations in 2011, with WTO Director General Pascal Lamy calling for completion of draft modality texts by the end of March.⁵ The United States is also promoting its own ambitious agenda of regional and bilateral trade talks. Negotiations for a Trans-Pacific Partnership continue to advance and to expand to even more countries in Southeast Asia.⁶ The U.S. and South Korean governments recently resolved remaining differences over market access for automobiles in the United States-Korea Free Trade Agreement (“FTA”).⁷ That agreement, along with pending bilateral agreements with Panama and Colombia, could be introduced for Congressional approval in 2011.⁸

The food, finance, and climate crises are all evidence of how much the world has changed since the era of free trade accords began, but the U.S. agricultural trade agenda remains essentially the same as the approach first adopted in the 1990s under the North American Free Trade Agreement (“NAFTA”).⁹ Recent

reports of rising food prices and riots in some countries¹⁰ add new urgency to the imperative to get these policies right.

U.S. trade policy must start from our goals rather than our tactics. Ending global hunger, enhancing incomes and employment, and encouraging a transition to climate friendly agriculture should be the goals of U.S. agricultural, economic, and development policy. Trade policy should be a tool to support those goals rather than a loose cannon that shoots them down.

FROM DUMPING TO VOLATILITY: THE LESSONS OF TRADE LIBERALIZATION

Much of the international debate on trade and agriculture over the past decade has focused on U.S. (and EU) agricultural subsidies¹¹ but have not addressed the systemic causes of dumping, i.e., exporting at below the cost of production. Floods of cheap imports, especially during the harvest, can be devastating for developing-country farmers.¹² As of 2003, dumping margins for U.S. commodity crops supported under the Farm Bill included wheat exports at an average price of twenty-eight percent below the cost of production, corn at ten percent, and rice at twenty-six percent below the cost of production.¹³ Today, recurring bouts of rising food prices have decreased the extent of dumping,¹⁴ but deregulated trade continues to present challenges for stable local food markets.

Over the last few decades, U.S. agricultural policy has changed from a system of supply management to one more dependent on free-market forces. This process culminated in the 1996 Farm Bill, which removed the last vestiges of supply management and enacted policies to encourage farmers to increase the volume of production to compensate for lower prices, with a strong focus on creating new markets overseas for U.S. commodities.¹⁵ That system soon resulted in a series of crises in rural

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areas and the enactment of emergency payments, later codified as the current system of agricultural subsidies.¹⁶

Commodity prices skyrocketed during 2007 and 2008, and farmers were better able to cover their costs of production, reducing counter-cyclical payments from the U.S. government to farmers, which rise to compensate farmers when prices are low for those crops.¹⁷ As a result of this increase in commodity prices, U.S. agricultural subsidies dropped from more than twenty-four billion dollars in 2005 to just over twelve billion dollars in 2009.¹⁸ In many countries, locally grown food suddenly became cheaper than imports, but after decades of neglect of agricultural sectors, production levels were too low to be able to fully meet domestic demand.¹⁹ Concerns over dumping have been overtaken by alarm over food-price volatility, as wild swings in prices make planning more and more difficult for farmers around the world.

The precise causes of the 2008 food price crisis and the recent bouts of price swings are still the subject of much debate.²⁰ They include rising demand, extreme weather conditions, and excessive financial institution speculation on commodity markets.²¹ New limits on commodity speculation in the United States and EU are imperative to decrease the wild price swings experienced in recent years.²² However, policymakers in developing countries also need new ways to manage trade flows, so they can rebuild fragile agricultural sectors.

Mexico's experience under NAFTA provides a telling example of the dangers of this approach for food security and rural livelihoods. The agreement eliminated trade barriers for most sectors, with tariffs on corn and beans phased out over fourteen years.²³ In fact, the Mexican government accelerated the tariff reduction schedule, and United States exports of corn to Mexico nearly quadrupled compared to the pre-NAFTA levels.²⁴ Mexican agricultural exports to the United States also increased at an average of ten percent a year,²⁵ but the benefits of those sales did not trickle down to rural communities. Many Mexican farmers were unable to compete with the cheap imports, and more than two million have left the agricultural sector since NAFTA began, a drop of nearly twenty-five percent.²⁶ Since job creation in other sectors of the economy has been weak, rural poverty has increased and many people have been forced to migrate to cities in search of elusive manufacturing sector jobs or to the United States in search of better opportunities.²⁷

There is little evidence that the growth in U.S. exports under NAFTA has helped family farmers in this country either. The number of Americans employed in agriculture has dropped since the agreement began (as has manufacturing employment).²⁸ The relationship between employment and trade is complex, even in the United States, as job creation from export growth can be offset by job losses resulting from imports that compete with domestic production. The kind of production also matters as large-scale agro-industrial production for export generally employs fewer people than smaller-scale, locally oriented production. As smaller-scale producers have been forced to seek off-farm income, larger producers and corporations have increased their share of production. Over the last twenty-five years, there

has been a marked shift in the size of U.S. farms, with very small farms (with annual sales less than ten thousand dollars) and very large farms (sales exceeding one million dollars) increasing by thirty-eight and 243 percent, respectively.²⁹ The number of small, but commercially viable farms (sales between ten and two hundred and fifty thousand dollars) dropped by forty percent, from half of total farms in 1982 to less than a third in 2007.³⁰ The percentage of U.S. agricultural production controlled by the top four firms in a given sector has increased substantially, rising from seventy-two percent of beef packing in 1990, for example, to 83.5 percent in 2005.³¹

Since NAFTA, U.S. agricultural production, both for domestic use and exports, has increased while rural employment and livelihoods have faltered. While a substantial portion of corn production is now directed to domestic ethanol production,³² exports of corn, wheat, and other commodity crops have continued to grow.³³ According to the United States Department of Agriculture ("USDA") estimates, agricultural bulk export volumes increased eight percent in 2010 over 2009 levels, while the bulk export values increased seventeen percent.³⁴

The recent surge in U.S. farm income is instructive. Net farm income increased twenty-six percent in 2010 over the 2000–2009 average, triggered, according to some analysts, by rising exports.³⁵ However, the USDA also notes that,

[a] second feature of the 2000–2009 decade is the high and persistent levels of volatility in agricultural commodity and input (feed, fuel, and fertilizer) markets. The volatility is reflected in the patterns of farm income during the decade. Net farm income increased in 6 of the 10 years, posting an average increase of 26.6 percent in the years with increases in farm income and an average decline of 23.5 percent in the other years (2002, 2005, 2006, and 2009).³⁶

These wild swings in prices and incomes destabilize rural communities and contribute to increasing corporate concentration. Whether in the United States or overseas, agricultural policies that stabilize prices at levels nearer the cost of production could provide consistent signals and incentives to help farmers stay on their land and produce stable food supplies.³⁷

These problems are not unique to the NAFTA partners. In country after country, trade liberalization in agriculture has weakened local production and undermined rural livelihoods.³⁸ Women produce sixty to eighty percent of food in many developing countries.³⁹ They are particularly vulnerable to the risks created by dumping and volatile markets, since their access to productive resources is often already precarious. The emphasis on agricultural exports in the 1990s tended to result in a shift away from food production for household consumption, which tended to be controlled by women, to cash crops, which tended to be controlled by men.⁴⁰ The U.S. Feed the Future initiative recognizes the vital importance of women's contributions to food security and would direct more resources to women farmers.⁴¹ If the point of the U.S. global hunger policy is to improve food security and rural livelihoods for women and men, then

appropriate trade mechanisms also need to be in place to ensure that they can stay on their land.

Haiti is another stark example of how trade policies can undermine food security. As recently as the 1980s, Haiti produced eighty percent of the rice it needed for domestic consumption.⁴² Under structural adjustment programs imposed by the World Bank, International Monetary Fund (“IMF”) and United States Agency for International Development (“USAID”), among others, Haiti lifted import controls and reduced public support to agriculture.⁴³ Today, it imports eighty percent of its rice needs and receives substantial food aid for recurring food shortages.⁴⁴

In March 2010, former President Bill Clinton testified to the Senate Foreign Relations Committee that the push to export rice to Haiti had been a grave mistake, stating:

Since 1981, the United States has followed a policy, until the last year or so when we started rethinking it, that we rich countries that produce a lot of food should sell it to poor countries and relieve them of the burden of producing their own food, so, thank goodness, they can leap directly into the industrial era. It has not worked. It may have been good for some of my farmers in Arkansas, but it has not worked. It was a mistake. It was a mistake that I was a party to. I am not pointing the finger at anybody. I did that. I have to live every day with the consequences of the lost capacity to produce a rice crop in Haiti to feed those people, because of what I did. Nobody else.⁴⁵

Unfortunately, it is not at all clear that the U.S. government has in fact started to rethink this policy. The President’s 2010 Trade Policy Agenda clearly stated the intention to expand U.S. exports, even to developing countries.⁴⁶ While Least Developed Countries (“LDCs”) are not being asked to agree to any new commitments to reduce tariffs under the Doha Round, there is no indication that United States Trade Representative (“USTR”) is reconsidering the wisdom of the previous rounds of tariff reductions.

A better approach would be to explicitly exempt low-income food import-dependent countries from U.S. export promotion goals and to allow flexibility to establish tariff rates adequate to protect their vulnerable agricultural markets. The LDCs, as defined by the United Nations, include some forty-eight least-developed countries, thirty-one of which are also members of the WTO.⁴⁷ It includes such countries as Haiti, Senegal, and Bangladesh, many of which experienced food riots during the 2008 price spike.⁴⁸ The United States does not have free-trade trade agreements with any of these countries, so this would be a relatively simple first step.

A second step would be to more carefully consider poverty and hunger within middle-income countries. USTR has entered into a series of discussions with India, Brazil, South Africa, and China, both to enlist their support to restart the WTO talks, and to press them to liberalize their own markets.⁴⁹ Each of these countries is unique, but they all face challenges in local food production. According to research prepared for the United

Nations Development Programme (“UNDP”) Human Development Report, there are more poor people in India than in the twenty-six African countries combined,⁵⁰ and suicides by farmers who have lost their land are devastating evidence of the fragility of their agricultural system.⁵¹

Developing countries in the G-33 have argued for WTO exemptions for Special Products and for the establishment of a new Special Safeguard Mechanism to protect food security and livelihoods and to advance rural development.⁵² While WTO members (including the United States) committed to the principle of protecting local markets to advance food security at the 2005 Hong Kong Ministerial, in practice this has been a central point of contention in the WTO talks.⁵³ The G-33’s insistence on these mechanisms (as well as United States intransigence on subsidies) was one of the key factors in the collapse of the WTO talks in 2008.⁵⁴ A better approach would be to work with developing countries to consider the best ways to implement these mechanisms and other necessary measures to advance food security goals over export promotion.

THE TRADE RULES NEEDED TO RESPOND TO CLIMATE AND FOOD CRISES

Agriculture has always been subject to unpredictable weather patterns, pests, and diseases. These risks are exacerbated by climate change, which is already causing changes in growing seasons and increases in droughts and flooding.⁵⁵ These effects will become more frequent and more devastating in years to come,⁵⁶ making it even more important to support flexible and innovative new approaches in developing countries. Efforts to strengthen local agricultural production in ways that respond to these challenges and benefit local communities and plans to foster regional cooperation in times of crisis are critical.

National and regional coordination of food reserves is emerging as an important tool to confront volatility in food supplies. The UN Comprehensive Framework for Action on the Global Food Crisis (a multiagency effort to coordinate donor policies) recognizes the importance of reserves.⁵⁷ Reserves and other measures to limit price volatility and supply availability will be at the center of the agenda at the May 2011 G-20 Agriculture Ministers summit and the fall Committee on World Food Security meeting.⁵⁸

Several groupings of countries are already taking action to implement regional reserves systems. “In March 2010, Brazil, Russia, India and China (the BRIC nations) agreed to support the establishment of a system of national grain reserves.”⁵⁹ In October, the Association of Southeast Asian Nations (“ASEAN”) plus Japan, China, and Korea committed to establish a regional emergency rice reserve, building on a pilot program that has been operating for several years.⁶⁰ In December, West African nations meeting in the Club du Sahel explored proposals to coordinate national food reserves systems to assist each other in cases of crop failures or other crises.⁶¹

A system of food reserves does not replace international trade, but it can be an important means to stabilize national and regional food supplies. Food reserves can be supported or

constrained by trade rules that govern public support to agriculture. WTO rules and U.S. trade policy discourage public management of food supplies, but there is some degree of flexibility that would not prevent countries from starting to implement such programs.⁶² Food reserves do require public support to buy and sell stocks. The WTO Agreement on Agriculture limits how much governments can spend to support agriculture.⁶³ While the establishment of a grain reserve in the United States could raise overall support beyond those limits, developing countries would be unlikely to exceed the limits included under current rules.

Price bands could be a bigger issue for U.S. trade policy. Most reserves systems operate so that when prices reach predetermined floors or ceilings the government intervenes.⁶⁴ If it has buffer stocks, it could release those reserves onto the market to reduce high prices or confront local food shortages. It would purchase grains when prices are low, particularly during the harvest. These price bands are often coordinated with trade policy, with tariffs on imports triggered when prices fall, and reduced when they rise. While WTO rules generally limit such measures, in practice, many developing countries have some degree of flexibility in the application of tariff rates.⁶⁵ Since many of them have agreed to bound tariff rates (ceilings) that are higher than the actual applied rates, they could utilize the difference in tariff rates (“water” in WTO lingo) to operate a price band and still comply with WTO rules.⁶⁶ The G-33’s proposals for a Special Safeguard Mechanism would institutionalize price bands as a legitimate tool to combat volatility.⁶⁷ USTR has argued against these measures at the WTO, pressing for reductions in bound tariff rates and opposing the G-33’s proposal for a Special Safeguard Mechanism.⁶⁸ In negotiations for a US-Andean Free Trade Agreement, the United States insisted on the dismantling of the system of price bands established under the Andean Pact.⁶⁹ Those negotiations were later narrowed to a bilateral agreement between the United States and Peru, which liberalized all trade in agricultural goods and eliminated the Peruvian government’s participation in the regional price band.⁷⁰

The conflicts between trade rules and food reserves could emerge in the negotiations for a Trans-Pacific Partnership (“TPP”). The TPP talks currently include Australia, Brunei, Chile, Malaysia, New Zealand, Peru, Singapore, the United States, and Vietnam.⁷¹ The Philippines, Canada, and Japan have also expressed interest in joining the talks.⁷² Brunei, Malaysia, Vietnam and the Philippines are also members of ASEAN and are participating in the Emergency Rice Reserve System, as is South Korea.⁷³ Those talks should balance interests in expanding trade with the measures needed to support food reserves and other elements of food security.

INTEGRATING NUTRITION IN TRADE AND DEVELOPMENT

Improving food security means increasing both the quantity of food available to local consumers and ensuring that its nutritional quality is adequate. The administration’s Feed the Future initiative lists two central objectives: accelerating inclusive agriculture sector growth, and improving nutritional status.⁷⁴ U.S.

trade policy focuses on harmonizing food safety standards (both to generate new market opportunities and to ensure consumer safety),⁷⁵ but it does not consider the nutritional value of the kinds of food systems encouraged by liberalization of trade and investment.

The debate on nutritional quality is already underway within the United States, where concerns about rising obesity rates and food safety have increased demand for organic foods and locally grown fruits and vegetables.⁷⁶ There is a growing public recognition that Farm Bill supports for corn, soy, wheat, and rice have shifted diets towards processed foods and meats rather than healthier alternatives.⁷⁷ U.S. trade policy should also reflect this new thinking in the kinds of food production encouraged by liberalized trade and the innovations needed to improve nutritional outcomes.

Mexico’s experience under NAFTA provides some important lessons. Since the agreement’s inception in 1994, Mexican imports of corn and soy used for animal feed, as well as of processed snack foods, soda and other foods characteristic of unhealthy diets, have skyrocketed.⁷⁸ Liberalization of trade and investment rules has also spurred sharp increases in U.S. investment all along the Mexican supply chain, including food processing, supermarkets and fast food restaurants.⁷⁹ Obesity rates in Mexico have risen to rates similar to those in the United States.⁸⁰ Among OECD countries, Mexico is now tied with the United States for the highest per capita obesity rates in the world.⁸¹ The phenomenon of increasing malnutrition occurring at the same time as over-nutrition is escalating in many countries around the world as people just above the poverty line consume increasing amounts of meats, processed foods and other relatively low-cost, high-calorie foods.⁸²

The United States cannot legislate consumer demand in other countries, but it could assure that its trade policy does not preclude governments from implementing changes in local food systems to improve the quality of food available to consumers. A government might decide, for example, to procure fresh food for anti-poverty programs from local farm cooperatives rather than importing it from a multinational corporation (along the lines of Brazil’s successful Zero Hunger program).⁸³ Depending on how the government has listed the implementing agencies in its trade commitments, these kinds of programs could conflict with procurement rules that aim to prevent discrimination against foreign suppliers.⁸⁴

Some types of food security programs could also be the target of investor lawsuits. Like nearly all U.S. trade agreements and bilateral investment treaties, NAFTA allows foreign investors to sue governments for compensation for regulatory changes or programs that undermine their expected profits.⁸⁵ One section of the investment chapter bans certain “performance requirements” on foreign investors, including the requirement to achieve a given level or percentage of domestic content in production.⁸⁶ Thus, for example, if the Mexican government were to require tortilla manufacturers in Mexico to use a certain percentage of locally grown (and more expensive) corn in their produc-

tion, U.S. companies that own tortilla operations there could sue for compensation.

Most trade agreements include recourse to state-to-state dispute resolution.⁸⁷ The investor-state provision allows companies to bypass that mechanism, as well as local court systems, to sue governments directly.⁸⁸ Most environmental, labor, and other public-interest groups have argued against this provision in most bilateral trade agreement the United States has negotiated since NAFTA.⁸⁹

These concerns are not just theoretical. The U.S.-based Metlclad corporation was awarded \$15.6 million in compensation when it sued the Mexican government over a local community's refusal to reopen a toxic waste facility.⁹⁰ A subsidiary of the U.S.-based Bechtel corporation sued the Bolivian government when it cancelled the privatization of a water distribution system in the wake of widespread public protests over excessive user fees.⁹¹ In 2010, Phillip Morris filed an investor-state suit against the Uruguayan government over rules on health warnings on cigarette packages.⁹² Even when such suits are unsuccessful, they have a chilling effect on local efforts to balance public interests with private profits.

Some trade agreements and bilateral investment treaties include tentative first steps that could start to address that imbalance. The United States-Peru FTA, for example, establishes some general exceptions for measures designed to protect public health, safety and the environment, but these exceptions do not apply to the chapter on investment.⁹³ This kind of exception should be applied more broadly to specifically exempt public interest laws from challenges.⁹⁴

Unfortunately, current U.S. trade policy seems to be headed in the opposite direction, affirming the Bush era approach. News reports indicate that the United States is pressing Australia, which refused to include the investor-state provision in its FTA with the United States, to reconsider that position in the talks for a Trans-Pacific Partnership.⁹⁵ The recently signed US-Korea FTA resorts to the old approach as well, with only limited exceptions to protect the public good.⁹⁶

RECOMMENDATIONS

Ultimately, the U.S. government should take a comprehensive set of acts that will alleviate these problems. It should review provisions in existing trade agreements that undermine food security and launch a process to reform them.⁹⁷ The administration should explicitly exempt Least Developed Countries from U.S. export-promotion goals, and work with developing countries to establish trade rules that support price bands and other mechanisms to promote stable food supplies. On an inter-governmental level, it should support proposals at the WTO and in the negotiations for a Trans-Pacific Partnership for Special Products and Special Safeguard Mechanisms to advance food security and rural livelihoods in developing countries. Lastly, the United States could establish exceptions to investment and procurement provisions in the Trans-Pacific Partnership and other ongoing bilateral trade negotiations to protect public health and food security.


CONCLUSION

Rather than continuing with the same tired approaches used in recent decades, it is time for a truly twenty-first century approach to trade policy, one that starts with a clear commitment to strengthening food systems and rural livelihoods in the South and North. It is not enough to consider changes in trade balances or growth in exports in particular sectors. We must examine how those changes affect our societies and environments, both in the North and South.

The 2008 food price crisis led to a reexamination of agricultural development policies and the conclusion that decades of neglect of public investment in the sector had been a mistake.⁹⁸ President Obama took a leadership role in the 2009 G-8 meeting, committing to scale up food security spending and calling on other countries to do the same.⁹⁹ The Feed the Future initiative and increases in U.S. government spending on food security are evidence of a commitment to redress that mistake and chart a new course to decrease global hunger.

Sadly, that effort will likely collide with the administration's push to double U.S. exports and negotiate new trade agreements along the same lines as the past. Spending to increase production by smallholder farmers will be undercut by floods of U.S. exports. Efforts to establish food reserves could be undercut by trade rules that restrict governments' abilities to manage supplies.¹⁰⁰ Programs to encourage consumption of healthy, locally grown foods could collide with investor protections that fail to balance public and private interests.¹⁰¹ Decades of expansion of agricultural exports have not helped U.S. farmers either. Farm incomes have been on a rollercoaster ride that has thrown farmers overboard, increasing corporate concentration.¹⁰² There is no reason to expect that expanding the same failed policies of the past will have better outcomes now.

Instead, trade and food security policy should focus on rebuilding local food systems in the North and South. This does not mean abandoning trade or closing markets, but considering ways to ensure that trade complements, rather than substitutes for, local food production. The U.S. government should work with developing countries to determine the best ways to structure price bands and other trade protections to achieve food security and development goals, rather than blocking progress on these new approaches.

Added to the evidence of the past is the challenge of the future. Climate change and the end of cheap oil is a dispositive factor in determining food security and trade policy.¹⁰³ Innovative new approaches that build on local knowledge to reduce reliance on agrochemicals and imported inputs are not just exciting, they are imperative.¹⁰⁴ Trade and development policies must create the necessary policy space for these innovations rather than insisting on the extension of twentieth century models of industrial agriculture and dependence on imports. 

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THE LURKING COSTS OF GREEN TECHNOLOGY METALS IN A GLOBAL MARKET

by Winfield J. Wilson*

As the global market faces the challenge of responding to climate change, including how to convert to a green economy that uses renewable resources, it is critical to examine domestic and international legal frameworks implicated at various points in the life cycle of metallic ore resources employed in “clean” or “green” technology.¹ Although the products themselves may or may not be environmentally-sound because of their source production or their transformation into waste at the end of their life, consumer demand for the green labeling will continue to drive the production of such technology.² International law and policy frameworks must take into account the consequences of environmental “solutions” by negotiating protective measures against the pollution created at various stages of the life cycle of these metals and creating incentives to induce responsible trade practices to prevent a “race to the bottom” by governments willing to mine, process, and ultimately dispose of spent materials.

Lithium and a suite of metals in the lowest rows of the periodic table, called rare Earth elements, are valuable in a wide range of industrial and commercial applications, including emerging green technologies.³ In nearly all stages in the life cycle production of these metals there are energy intensive and polluting processes used, from mining and smelting to recycling and waste management.⁴ Furthermore, global climate change concerns drive how various metals are supplied, used, and ultimately regulated.⁵ Trade in the raw materials used in green technology is, for better or worse, spurred by and responding to technological solutions that are perceived as tools to mitigate greenhouse gas emissions.


Against a global backdrop of increasing trade in particular metallic resources,⁶ at the domestic level, the United States Environmental Protection Agency (“EPA”) regulates hazardous air pollutants under various mandates found in the Clean Air Act (“CAA”).⁷ The EPA’s use of the CAA has come under increasing scrutiny and attention in regard to the authority to regulate carbon dioxide,⁸ but the CAA has long served as the vehicle for regulating other pollutants with transboundary effects, including some metals, and current proposed rulemaking demonstrates this commitment.⁹

At the international level, various treaties address the long-range air pollutants related to particular industrial sources.¹⁰ The United Nations Environment Programme (“UNEP”) treaty negotiations on mercury and the United Nations Economic Commission for Europe (“UNECE”) Convention on Long-range Transboundary Air Pollution (“LRTAP”) offer frameworks to

address energy production and specific industrial processes, but are not universally-recognized, nor does either framework address the market for the metals used in green technology.¹¹

While U.S. and international regulations address some of the issues presented by trade in the metals demanded by green technology, none are adequate. Investment and development in extracting and marketing the rare Earth elements are growing, predominantly in Asia, where industrialization and the availability of many of these commodities allow for this rapid expansion.¹² China dominates as the world leader in rare Earth supply, processing, and export, but competition is springing up in other countries, including Malaysia¹³ and the United States.¹⁴

The global trade in metals, including the rare Earth elements, requires further international and multilateral negotiation to promote the development of this industry in a socially and environmentally responsible manner. A bilateral agreement may be particularly appropriate to address the issue between the United States and China. China is both the largest producer and consumer of rare Earth metals; the United States is the next largest direct consumer, as well as the primary indirect consumer through imports of products made with the metals from China.¹⁵ In other words, U.S. demand for electronic technologies produced by China plays a crucial role in the global market for these metals. Therefore, it is only appropriate that the United States play an equivalent role in mitigating the environmental effects for which it is directly and indirectly responsible.¹⁶

On a broader and more comprehensive “cradle to grave” approach for rare Earth metals, a multilateral agreement may be appropriate and timely.¹⁷ A multilateral approach will allow for the integration and harmonization of international oversight and regulation of the global market’s supply and demand of these metals, keeping their environmental footprint in step with other multilateral environmental agreements. It is time for the international negotiations on climate change, hazardous and radioactive waste management, and long-range air pollution to be reconciled with the global markets’ response to them, particularly in regard to the suite of useful but potentially damaging metals used in green technology. 

Endnotes: The Lurking Costs of Green Technology Metals in a Global Market *on page 38*

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FOREIGN INVESTMENT CONTRACTS IN THE OIL & GAS SECTOR:

A SURVEY OF ENVIRONMENTALLY RELEVANT CLAUSES*

by Kyla Tienhaara**

INTRODUCTION

The Deepwater Horizon tragedy in the Gulf of Mexico in 2010, which resulted in the largest ever accidental marine oil spill,¹ was a stark reminder of the environmental risks posed by the oil and gas industry. Although disasters on this scale are fortunately rare, the average oil and gas operation has many other commonplace, yet significant, environmental impacts throughout its lifespan. Environmental issues begin with exploration activities—seismic tests, used to locate petroleum, often disturb local wildlife—and carry on to the end of the production phase when facilities must be dismantled and disposed of.² The everyday operation of many offshore petroleum installations involves the discharge of oil-contaminated “produced water,” drill cuttings and mud, and production chemicals.³ Onshore, land clearing for base camps, helipads, roads, pipelines, waste disposal sites, and other facilities has a considerable ecological impact.⁴ Furthermore, the industry is a significant contributor to air pollution and a major emitter of greenhouse gases. In 2008, thirty-two companies in the International Association of Oil and Gas Producers (“OGP”) reported emissions of 296 million tonnes (metric tons) of carbon dioxide, 2.1 million tonnes of methane, 1.1 million tonnes of non-methane volatile organic compounds, 366 thousand tonnes of sulfur dioxide, and 827 thousand tonnes of nitrous oxides.⁵

The industry faces increasingly strict environmental standards in developed countries such as the United States and the United Kingdom.⁶ However, the majority of the world’s proven oil reserves are in developing countries and economies in transition, which often lack sophisticated regimes for environmental protection.⁷ Even when legislative frameworks are well developed, there are often deficiencies in capacity and an unwillingness to monitor and enforce environmental regulation.⁸ There is, furthermore, no comprehensive global convention on the environmental impacts of petroleum exploration and production.⁹ Although a number of multilateral and regional agreements cover certain aspects of the industry, they require adoption into domestic legislation to have a direct effect on international oil companies (“IOCs”).¹⁰

Apart from domestic and international law, one could also look at conditions attached to loans and investment insurance, as well as voluntary corporate social responsibility codes as sources of environmental standards for the petroleum industry.¹¹ However, the intent of this article is to shine a light on a much less studied and poorly understood domain of environmental

regulation: the foreign investment contracts signed between IOCs (or consortiums of IOCs) and host states, which allocate rights to explore for and exploit hydrocarbons within an area of land (or an offshore block) over a fixed period of time.

In a 1994 monograph, Zhiguo Gao noted that environmental issues had “not received enough attention” in the oil and gas contracts he had reviewed.¹² His conclusion raises the question of whether environmental issues have received greater attention in more recent oil and gas contracts (i.e. those negotiated and signed in the last fifteen years). This question is difficult to answer, not least because foreign investment contracts generally are not disclosed to the public.¹³ Many governments’ model agreements are publicly available,¹⁴ but it should be noted that these models may be substantially altered or ignored altogether in the negotiation of actual contracts.¹⁵

In this article, sample clauses from forty-one upstream oil and gas contracts (both onshore and offshore) covering thirty-five countries and the period 1994-2008 were reviewed. Fourteen of the contracts were models.¹⁶ An effort was made to find the most up-to-date model contracts, as governments periodically revise them. However, it should be noted that some of the models were undated. The twenty-seven signed contracts reviewed were from twenty-six different countries¹⁷ and had an average signature date of 1999. Some of contracts in the sample are available on the Internet, either because governments have chosen to release them or because they have been leaked to non-governmental organizations (“NGOs”) that have subsequently published them. Others are available in company filings to the U.S. Securities and Exchange Commission.

Given the small number of contracts that were reviewed, and the great variety of clauses that were encountered, nothing can be extrapolated from this preliminary survey about the frequency with which any particular type of clause is likely to appear in oil and gas contracts. Furthermore, in any given situation, a contract should be considered within the broader context of a country’s petroleum law, environmental law, and other domestic legislation. The purpose of the article is not to provide a full picture of environmental regulation of petroleum operations in individual

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countries, but instead to draw attention to how contracts can either bolster or undermine environmental protection efforts.

TYPES OF FOREIGN INVESTMENT CONTRACTS

There are three main types of foreign investment contracts in the upstream oil and gas sector: (1) concessions or licenses; (2) production sharing contracts (or agreements) (“PSCs” or “PSAs”); and (3) risk-service contracts. In addition, all three may be subject to association or joint-venture agreements.¹⁸ Under concession contracts and licenses, IOCs are often given exclusive rights to explore for and produce hydrocarbons and in return are required to pay royalties, taxes, and fees to the government.¹⁹ In a PSC, the IOC has similar rights, but obtains only “cost oil” and a share of any “profit oil” produced, with the state recouping the remainder in lieu of, or sometimes in addition to, collecting royalties.²⁰ The IOC also pays taxes and fees.²¹ Under a risk-service contract the IOC explores for and produces petroleum on behalf the government and is paid a fee for its services, with a possible right to buy a portion of the production.²² Association or joint venture agreements involve IOCs partnering with host governments or state-owned enterprises and, as in a PSC, sharing petroleum production.²³

In practice, these forms and labels tend to be much less important than the specific content of a contract.²⁴ However, one relevant difference is that unlike a typical concession, an IOC’s costs are generally recoverable under a PSC in the form of “cost oil.”²⁵ If costs associated with remediating and compensating for environmental harm are “cost recoverable,” then the host government, not the IOC, would assume the risk of such costs.²⁶ A similar issue may arise with risk-service contracts and even with concessions that have royalty rates that are somehow indexed to costs.

ENVIRONMENTAL STANDARDS CLAUSES

Most, though not all, of the oil and gas contracts reviewed contained a section on the environmental standards to be applied to the project. In this regard, there are five general forms that contracts appear to follow:

- (i) reference to domestic environmental law only;
- (ii) reference to international industry standards only;
- (iii) reference to both domestic law and international industry standards;
- (iv) reference to domestic law and/or industry standards and international environmental agreements; or
- (v) development of project-specific environmental standards.

Some reference to domestic environmental legislation is clearly desirable from a public policy perspective. Domestic standards have been developed (in most cases) under a democratic system of rule, have often been designed with local environmental conditions in mind, are familiar to the agencies that are tasked with monitoring and enforcement, and are in the public domain. However, as noted previously, in many developing countries environmental regulation of the oil and gas sector is

still in its infancy and it may be inadequate in some situations.²⁷ As such, reference in contracts to domestic legislation alone may be undesirable. In any event, it would appear that parties rarely adopt this form. A contract from Peru²⁸ and one from Algeria²⁹ were the only contracts in the sample that referred solely to domestic environmental legislation.

In several of the contracts in the sample, the parties instead included a reference to international industry standards and failed to mention the application of domestic environmental law.³⁰ The advantage from an environmental perspective of referring to international industry standards is that in some cases, they may be higher than, or cover specific issues not addressed in, domestic legislation. Furthermore, reference to international standards allows some scope for change and evolution of the environmental management regime of an investment over time, thus providing a way around a contractual requirement for stability, as will be discussed below. However, there are serious problems with referring *only* to industry standards, given their inherent ambiguity. The terminology “good oilfield practices”³¹ or “good production practices”³² is frequently employed in environmental standards clauses, as well as in other types of provisions discussed further below, but these phrases are seldom defined.³³ A 2002 Cambodian contract provides a rare example of a definition:

Good Petroleum Industry Practices means the standards and practices, and exercise of that degree of skill, prudence and foresight that would reasonably be expected of persons carrying out international petroleum operations, and adherence to generally accepted standards of the international petroleum industry, including sound environmental provisions.³⁴

It is not at all clear where exactly one should look for “generally accepted standards” as there are a multitude of potential sources. For example, members of the American Petroleum Institute (“API”) “pledge” to manage their businesses according to a set of eleven environmental principles.³⁵ However, the majority of these principles are imprecise, such as the commitment “to reduce overall emission and waste generation.”³⁶ The API also has guidelines for environmental protection in both onshore and offshore oil and gas operations, although they are not freely available to the public.³⁷ Other potential sources include guidelines produced by the previously mentioned OGP,³⁸ the Australian Petroleum Production & Exploration Association,³⁹ as well as bodies such as the International Organization for Standardization (“ISO”).⁴⁰ As Wawryk notes, the existence of so many guidelines in the petroleum industry makes it impossible to point to one that can definitively be considered “good” practice and furthermore the “actual practices of international oil companies . . . vary from company to company and, for one company, across jurisdictions . . . making it difficult to identify the best practices actually in use.”⁴¹

The majority of contracts reviewed for this article contained reference to both domestic environmental law and international industry standards. In most cases, there was no mention of how these two sources of standards would be reconciled in the event

of a conflict. However, in some contracts a form of hierarchy was established. For example, Article 21.1 of Brazil's 2001 Model Concession Contract indicates that industry standards are only intended to act as a supplement to domestic legislation:

The Concessionaire shall adopt, at its own cost and risk, all the necessary measures for the conservation of reservoirs and other natural resources and for the protection of the air, soil and water in the surface or in the subsurface, subject to Brazilian legislation and rules about environment and, in their absence or lack, adopting Oil Industry Best Practice in this regard.⁴²

In contrast, the clause below, from a 1994 Azerbaijani contract, has evidently been adopted to ensure that domestic environmental regulation is *not more stringent* than international industry standards:

Contractor shall comply with present and future Azerbaijani laws or regulations of general applicability with respect to public health, safety and protection and restoration of the environment, to the extent that such laws and regulations are no more stringent than the then current international Petroleum industry standards and practices being at the date of execution of this Contract those shown in Appendix IX, with which Contractor shall comply.⁴³

In addition to domestic law and industry standards, some oil and gas contracts refer to international environmental agreements, although this does not seem to be a common practice. One example is Article 6.5 of Liberia's Model PSC, which states that: "The Contractor further undertakes to carry out all petroleum operations in accordance with the Environmental Protection and Management Laws of Liberia and all international environmental practice."⁴⁴ It is questionable whether such a sweeping reference to international environmental law will have anything more than symbolic value. Provisions in multilateral environmental agreements are not only typically "soft" in nature; they also generally require adoption in domestic legislation before they can have any impact on private actors.⁴⁵ Furthermore, few environmental agreements tackle specific issues concerning the management of petroleum exploration and production. However, there are some treaties covering marine pollution that are relevant to offshore operations.⁴⁶ In this respect, Mauritania's 1994 Model PSC is less ambiguous in its reference to international environmental law, noting in Article 6.6 that:

The Contractor shall take all [sic] necessary precautions to prevent pollution of the marine area of the Exploration Perimeter and observe, inter alia, the provisions of the International Convention on the prevention of petroleum pollution of sea waters signed in London on May 12, 1954 and the amendments and texts enacted for the implementation thereof.⁴⁷

The final form of standards clause observed in the sample, although only in one contract, is the development of a project-specific environmental regime. A 1996 contract between Azerbaijan and a consortium of investors stipulates that the contractor, the state-owned oil company, and the State Committee

on Ecology and Control over the Use of Natural Resources will jointly agree on a set of safety and environmental standards based on "(i) international petroleum industry standards and experience with their implementation in exploration and production operations in other parts of the world and (ii) existing Azerbaijan safety and environmental legislation."⁴⁸ Once developed, this set of standards can only be altered through a written agreement and if any standards that have not been agreed upon are applied to the project, the investor can invoke the contract's stabilization clause.

STABILIZATION CLAUSES

According to a 2008 study, the use of "stabilization clauses" in host-government contracts "is widespread across industries and regions of the world."⁴⁹ Stabilization clauses come in various forms.⁵⁰ In their most basic form, they "freeze" the law that applies to the investment at the time the contract is signed.⁵¹ A more nuanced version is often referred to as an "economic equilibrium" clause, which requires the government to restore the balance of risks and rewards established in a contract when it is upset by a new regulation or tax.⁵² A stabilization clause can be strictly circumscribed to only cover very specific issues, or the parties to the contract can explicitly "carve out" areas such as environmental protection from its application. For example, in a 1997 contract from Kazakhstan, the stabilization clause contains the caveat:

provided, however, that no amendment to this Agreement shall be required hereunder as the result of (i) changes to Laws concerning health, safety or environmental protection that cause such Laws to be consistent with international standards for health, safety or environmental legislation and are applied on a non-discriminatory basis⁵³

As Lorenzo Cotula notes, this provision is weakened by its ambiguous reference to "international standards,"⁵⁴ but it is still far preferable to the stabilization clauses found in many contracts and even in model agreements that are worded in such a broad manner that they can stifle any future regulation that might be perceived to undermine the profitability of an investment, including efforts to address corruption, to safeguard human rights (including labor rights), and to protect the environment.⁵⁵

ENVIRONMENTAL IMPACT ASSESSMENT CLAUSES

Environmental Impact Assessments ("EIAs") and corresponding management plans have become a staple requirement for investment projects in many sectors.⁵⁶ Unfortunately, a recent survey of environmental governance in petroleum producing countries commissioned by the World Bank found that "much of the emphasis of the EIA process appears directed towards the approval of oil and gas projects, rather than to a life cycle approach for minimizing environmental and social impact."⁵⁷

An EIA is typically mandated to be completed after a contract with the state has been signed⁵⁸ and most of the contracts reviewed for this article contained some reference to the need for an EIA. However, the form of the EIA clauses varied widely

across the sample from a simple note of the existence of a requirement,⁵⁹ to detailed specifications of what the EIA should cover, who should prepare it, when it should be submitted, and so forth.⁶⁰

CLAUSES ON ACCESS TO PROTECTED AREAS

Petroleum operations are particularly contentious when they are located, even partially, within wildlife reserves, parks, or areas of cultural or biological significance.⁶¹ NGOs have long argued that such areas should be off limits to the extractive industries,⁶² but most governments are not ready to forgo the potential economic opportunities that the exploitation of these areas offer. This is evident in several of the contracts in the sample. For example, Article 37.6 of Madagascar's 2006 Model Offshore PSC states:

In the event that a portion of the Contract Area is located within a natural reserve area, the Operator shall deploy the necessary efforts in order to minimize the negative impacts on these natural reserves, in accordance with generally accepted environmental practices in the international petroleum industry.⁶³

This is an incredibly weak provision. A 2004 PSC from Uganda is similarly permissive, but it also contains a bizarre caveat:

In the event of protest from responsible concerned third parties within or outside Uganda regarding the conduct of Petroleum Operations in any National Park or Game Reserve and the consequent effects upon the environment or wildlife, the Government and Licensee shall meet to determine what if any action should be taken.⁶⁴

Given that this clause provides nothing more than an obligation for the investor and the government to meet, it is questionable why the parties bothered to include it at all.

CLAUSES ON ACCESS TO WATER & OTHER NATURAL RESOURCES

Petroleum operations require natural materials in their construction phase, and significant amounts of water and electricity throughout their operation. While many operations are self-sufficient in terms of energy supply, other natural resources may need to be obtained from within or outside the contract area.

From an environmental and community rights perspective, as well as from an economic-development perspective, it is disturbing that many governments appear to focus solely on the potential revenue that they can obtain from petroleum production and are willing to simply give away other valuable natural resources under the terms of oil and gas contracts. For example, Article 27.8 of Mozambique's 2007 Model concession contract provides for the right of the investor "to drill for and have the free use of water and impound surface waters."⁶⁵ A contract from the Kurdistan Regional Government of Iraq is even broader, giving the contractor the right to "freely use sand, water, electricity, and any other natural resources located inside or outside the Contract Area for the Petroleum Operations."⁶⁶

Some of the contracts in the sample were completely silent on the issue of access to natural resources, and a small number had more nuanced provisions than those quoted above. For example, a 1994 contract from Ethiopia states that the contractor shall "have the right, subject to the approval of the Minister, to use water in the Contract Area for operational purposes, but the Contractor shall not deprive any land, domestic settlement or livestock watering place of the water supply to which they are accustomed."⁶⁷ A 2008 Model PSC from Bangladesh goes a step further by requiring that the contractor pay for the natural resources, such as water, that it utilizes.⁶⁸

CLAUSES ON GAS FLARING

The World Bank estimated in 2004 that the volume of associated gas being flared and vented globally every year was about 110 billion cubic meters—enough fuel to provide the combined annual natural gas consumption of Germany and France.⁶⁹ Although some short-term flaring during testing or in cases of emergencies is accepted as standard practice in the industry, the flaring of more substantial amounts of gas is only practiced in poor countries with limited infrastructure and weak regulatory institutions.⁷⁰ Aside from being incredibly wasteful, flaring has a significant impact on local air quality and also makes an appreciable contribution to climate change.⁷¹ At the World Summit on Sustainable Development in Johannesburg in 2002, the World Bank launched a Global Gas Flaring Reduction initiative to tackle the problem.⁷² Despite this development, and widespread condemnation of the practice, flaring continues in many states. In 2008, thirty-two companies in the OGP admitted to flaring 18.6 tonnes of gas for every thousand tonnes of hydrocarbon that they produced.⁷³

Many oil and gas contracts, even recent models, appear to be lenient on the issue of flaring. For example, the Bangladesh 2008 Model PSC notes in Article 15.3 that:

Any Associated Natural Gas as is not used under Article 15.1 or Article 15.2 and which Contractor does not consider possible to recover economically shall be offered to Petrobangla without any payment to Contractor but at Petrobangla's cost at the well-head or field facilities in the Production Area. To the extent that Petrobangla does not so take any of such Associated Natural Gas, Contractor may flare such Associated Natural Gas provided that such flaring is included in the Development Plan submitted under Article 8.10.⁷⁴

Although this clause gives priority to utilization of the resource, there is no requirement for the gas to be reinjected into the ground if it is not taken by the state-owned enterprise, and economic concerns clearly trump environmental ones.⁷⁵ A 1997 contract from Indonesia also reflects this position in the statement that gas "may be flared if processing and utilization thereof is not economical."⁷⁶ Other contracts, such as a 2000 contract from Belize⁷⁷ and a 1998 contract from Angola,⁷⁸ allow for flaring only if it is authorized by the government. A Ugandan contract from 2004 also follows this model, but includes the caveat that the government's consent "shall not be unreasonably

withheld or delayed.”⁷⁹ The most stringent clauses, found in only a few contracts in the sample, restricted flaring to cases of an emergency or for safety reasons.⁸⁰

CLAUSES ON RESPONDING TO EMERGENCIES AND ACCIDENTS

In 2008, thirty-two companies in the OGP reported 2,978 spills greater than one barrel in size, resulting in the release of 18,266 tonnes of oil into terrestrial and marine environments.⁸¹ In many of the oil and gas contracts in the sample, the parties have recognized that spills and other accidents and emergencies have the potential to occur and should be planned for. As such, as a part or separate from an EIA, an emergency response plan is often required from the contractor.⁸²

Some oil and gas contracts also cover three additional elements in respect of emergencies: notification, response, and consequences for failure to respond. In the oil and gas contracts reviewed, notification was limited to the contractor apprising the government of the situation, but not the local community or the broader public.⁸³ In terms of response, the requirements were often vague (e.g., “take prudent steps”) or simply provided reference to good oilfield practices.⁸⁴ However, some of the contracts in the sample did additionally stipulate that in the event that the contractor did not act promptly to respond to an emergency or accident, the government had the right to mount its own response and charge the contractor for expenses that it incurred in doing so. An example is found in a PSC from Ghana:

If Contractor does not act promptly so as to control, clean up or repair any pollution or damage, GNPC [Ghana National Petroleum Corporation] may, after giving Contractor reasonable notice in the circumstances, take any actions which are necessary, in accordance with accepted Petroleum industry practice and the reasonable costs and expenses of such actions shall be borne by Contractor and shall, subject to Article 17.5 be included as Petroleum Costs.⁸⁵

CLAUSES ON LIABILITY, INDEMNITY, & INSURANCE

Liability for environmental damage is an increasingly important issue for the oil industry. The dispute between Chevron and the residents of the Ecuadorian Amazon concerning the company’s liability for oil pollution is a prime example of why most modern contracts have express provisions on liability that cover environmental damage.⁸⁶

Issues of liability for environmental damage can be complex, especially when multiple parties, including state-owned enterprises, are involved in petroleum production. Contracts, therefore, should have provisions that are explicit about *who* is to be liable for *what* and to *whom*. The issue of “who” depends somewhat on the form of contract, but generally it is the contractor or concessionaire (the IOC) who will be liable, except in cases where fault can be directly attributed to the state or state-owned enterprise.⁸⁷ If there is more than one contractor involved in the project, then there will likely be a clause that stipulates that they are jointly and severally liable.⁸⁸

The issue of “what” concerns the types of harms (e.g., only death or injury or also “damage to the environment”), the period in which the harms were caused (i.e. no liability for prior environmental damage established in a baseline assessment), and the legal form of the liability (fault, strict, or absolute).⁸⁹ Finally, on the issue of to “whom” the contractor is liable, there are typically two separate issues covered in contracts: liability to the state and liability to third parties.⁹⁰ In the latter case, the issue is not directly one of liability—contracts cannot affect the rights of third parties under national law—but rather one of indemnity.⁹¹ Through indemnity clauses, IOCs commit to compensate states for any costs incurred resulting from a third-party liability suit.⁹²

Most contracts in the sample made specific mention of “pollution” or “environmental damage” in liability/indemnity clauses and adopted a strict liability approach.⁹³ However, a 2002 Cambodian⁹⁴ contract provided only for fault liability. The most developed liability/indemnity clause in the sample was from a contract signed by Belize in 2000, which required that the contractor contribute one tenth of one percent of the value of the gross annual production to a fund managed by the government “for the sole purpose of indemnification against any or all environmental damages cause during the petroleum operations.”⁹⁵

An additional issue closely related to liability and indemnity is the requirement for contractors to have insurance coverage. These clauses often specify that insurance should cover “pollution” or “environmental damage.”⁹⁶ One potential problem with both liability/indemnity and insurance clauses is that the term “pollution” is quite narrow and does not cover all of the various environmental impacts from oil and gas operations.⁹⁷ Even references to “environmental damage” could be subject to interpretation if not defined in the contract.

CLAUSES ON DECOMMISSIONING & REMEDIATION

When an oil operation reaches the end of production, a number of costly activities must be undertaken. Onshore wells need to be plugged and structures dismantled, with materials removed and ultimately recycled or disposed of. Remediation of the local environment (e.g., decontamination and revegetation) may also be required. Offshore installations present particularly complex issues in terms of decommissioning, although it is also in this area that international law has its most direct and significant impact on the oil and gas industry.⁹⁸

The extent to which decommissioning is dealt with in contracts depends somewhat on the contractual relationship between the parties and the expected life of the project. Under some arrangements, states retain ownership over production facilities and may continue operations after the termination of the contract. However, even in such instances, there may be contractual provisions covering decommissioning of installations that are not destined to be taken over by the state.

Clauses on decommissioning and remediation found in contracts in the sample were generally lacking in detail. For example, a 1997 PSC from Benin states:

At the end of the Contract, in any other situation than the abandonment case, the Contractor must take the

measures according to the Good Practices of the Oil Industry to restore the environment and the sites where the Petroleum Operations have been performed to their original state on the Effective Date of the Contract, taking into account the rules of the abandonment procedure.⁹⁹

Although this provision appears quite strict, as it suggests that sites should be restored to their “original state,” it is weakened by the generic reference to good oilfield practices.¹⁰⁰ According to a recent World Bank report, the absence of guidelines for what should be included in a decommissioning plan is a pervasive problem in petroleum producing countries.¹⁰¹

In addition to an absence of guidelines, there are obviously strong incentives for some companies to “cut and run” or to conduct only superficial remediation to minimize costs. One method for ensuring that decommissioning and remediation are carried out to plan is to use a financial mechanism such as a performance bond or reserve fund. Tanzania is an example of a country that has set up such a regime in its 2008 Model PSC.¹⁰²

CONCLUSION

Since Gao’s study was published in 1994,¹⁰³ there have been significant changes in the content of upstream oil and gas

contracts vis-à-vis environmental protection. The small sample of contracts reviewed in this article indicates that a significant number of clauses covering a variety of issues—from baseline environmental assessments all the way through to environmental remediation—can be found in modern contracts. Given the monumental increase in environmental awareness and the intense scrutiny that the industry has come under in the two decades, this is unsurprising. What is remarkable is that a handful of contracts still resemble those that Gao criticized for having only a token mention of environmental protection, and that references to ambiguous terms such as “good oilfield practices” remain so pervasive.

Further research will be required to build an understanding of why there are such wide disparities in contracting practice between countries. For example, it would be interesting to explore whether the environmental provisions in oil and gas contracts reflect domestic attention to these issues or if the capacity of the government to negotiate with IOCs is a more relevant factor. Additionally, empirical work is required to determine the extent to which contract clauses on environmental issues are actually implemented by IOCs and monitored and enforced by governments.



Endnotes: Foreign Investment Contracts in the Oil & Gas Sector

¹ Ronen Perry, *The Deepwater Horizon Oil Spill and the Limits of Civil Liability*, 86 WASH. L. REV. 1, 3 (2011).

² Zhiguo Gao, *Environmental Regulation of Oil and Gas in the Twentieth Century and Beyond: An Introduction and Overview*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 3, 4-7 (Zhiguo Gao ed., 1998).

³ Sergei V. Vingradov & Jay Paul Wagner, *International Legal Regime for the Protection of the Marine Environment Against Operational Pollution from Off-shore Petroleum*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 93, 96 (Zhiguo Gao ed., 1998).

⁴ Amy B. Rosenfeld, Debra L. Gordon & Marianne Guerin-McManus, *Approaches to Minimizing the Environmental and Social Impacts of Oil Development*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 279, 294 (Zhiguo Gao ed., 1998).

⁵ INT’L ASS’N OIL & GAS PRODUCERS, ENVIRONMENTAL PERFORMANCE IN THE E&P INDUSTRY 2008 DATA 6 (Nov. 2009), <http://www.ogp.org.uk/pubs/429.pdf>.

⁶ See Gao, *supra* note 2, at 32-35.

⁷ *Id.* at 35-37.

⁸ Kit Armstrong, *Managing Environmental Legal Risks in Oil & Gas Exploration & Production Activities*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 359, 374-75 (Zhiguo Gao ed., 1998).

⁹ See Ayesha Dias, *The Oil and Gas Industry in the Tangled Web of Environmental Regulation: Spider or Fly?*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 59, 63-72 (Zhiguo Gao ed., 1998).

¹⁰ See Lawrence L.C. Lee, *Basle Accords as Soft Law: Strengthening International Banking Supervision*, 39 VA. J. INT’L L. 1, 3-4 (1998) (noting that international soft law must be adopted into domestic law to be legally binding).

¹¹ See Jędrzej George Frynas, *Corporate Social Responsibility in the Oil and Gas Sector*, 2 J. WORLD ENERGY L. & BUS. 178 (2009); Peter Utting & Kate Ives, *The Politics of Corporate Responsibility and the Oil Industry*, 2 ST. ANTONY’S INT’L REV. 11 (2006).

¹² ZHIGUO GAO, INTERNATIONAL PETROLEUM CONTRACTS: CURRENT TRENDS AND NEW DIRECTIONS 213 (1994).

¹³ See PETER ROSENBLUM & SUSAN MAPLES, REVENUE WATCH INST., CONTRACTS CONFIDENTIAL: ENDING SECRET DEALS IN THE EXTRACTIVE INDUSTRIES 11-14 (2009), <http://www.revenuewatch.org/files/RWI-Contracts-Confidential.pdf>.

¹⁴ *Id.* at 38.

¹⁵ *Id.* at 12.

¹⁶ From the following countries: Angola, Bangladesh, Brazil, Egypt, Equatorial Guinea, India, Liberia, Madagascar, Mozambique, Pakistan, Tanzania, Timor-Leste, Trinidad & Tobago, and Vietnam.

¹⁷ Algeria, Angola, Azerbaijan, Bangladesh, Belize, Benin, Cambodia, Cameroon, China, Equatorial Guinea, Ethiopia, Georgia, Ghana, Guinea, India, Indonesia, Kazakhstan, The Kurdistan Region of Iraq, Mongolia, Peru, Russia, Senegal, Sudan, Timor-Leste, Uganda, and Venezuela.

¹⁸ King & Spalding LLP, *An Introduction to Upstream Government Petroleum Contracts: Their Evolution and Current Use*, OIL GAS & ENERGY LAW, Mar. 2005, at 3, <http://www.ogel.org/article.asp?key=1730>.

¹⁹ See generally Michel Kerf, *Concessions for Infrastructure 7* (World Bank, Working Paper No. 399, 1998), http://tru.worldbank.org/Documents/Toolkits/concessions_fulltoolkit.pdf.

²⁰ See BERNARD TAVERNE, AN INTRODUCTION TO THE REGULATION OF THE PETROLEUM INDUSTRY: LAWS, CONTRACTS AND CONVENTIONS 24, 28 (1994); Thomas W. Waelde, *International Energy Investment*, 17 ENERGY L.J. 191, 200, 202 n.53 (1996).

²¹ TAVERNE, *supra* note 20, at 27.

²² *Id.* at 20-21.

²³ *Id.* at 133-35.

²⁴ Waelde, *supra* note 20, at 200.

²⁵ *Id.* at 202, n. 53.

²⁶ TAVERNE, *supra* note 20, at 24-25.

²⁷ Gao, *supra* note 2, at 35-37.

²⁸ CONTRACT FOR HYDROCARBON EXPLORATION & EXPLOITATION IN THE UCAYALI BASIN BETWEEN PERUPETRO S.A. & CHEVRON OVERSEAS PETROLEUM (PERU) LTD. (BLOCK 52) (Nov. 8, 1995) (Peru) (on file with the author).

²⁹ CONTRACT FOR THE EXPLORATION AND EXPLOITATION OF HYDROCARBONS BETWEEN BHP PETROLEUM (EXPLORATION) INC. AND SONATRACH (BOUKHECHBA AREA) (May 31, 1997) (Alg.) (on file with the author).

GLOBAL TRADE:

THE IMPACT OF MASSACHUSETTS' ENERGY POLICY ON COLUMBIA'S MINING INDUSTRY

by Cynthia Wildfire*

The United States relies heavily on the assertion that domestic coal reserves supply the nation's electricity with a continuing secure energy source. The oft-cited figure that a 150 year supply of domestic coal is available often underlies the energy policy debate.¹ While energy plan proposals suggest reducing dependence on foreign oil, "clean coal" technology remains the focus for electricity generation.² However, a closer look at the types of coal available displays flaws in this simplistic view of total reserves. Massachusetts already imports over eighty percent of the coal used to produce the state's electricity from other countries, primarily Columbia.³ The results of Massachusetts' air quality regulations reveal how shifts in environmental regulations can make domestic coal too expensive to compete in the market, even without serious regulation of greenhouse gases.⁴ Meanwhile, importing coal adds to the environmental and social problems of the countries that produce it. Environmental regulations need to catch up to the globalization of markets and trade, or the air quality regulations designed to reduce power plant emissions and acid rain in Massachusetts may translate to polluted water and damaged land in Colombia, rather than a net global environmental improvement.⁵

Coal in the United States comes primarily from Western states, with Wyoming in the lead, and from Appalachia, the historic coal mining region.⁶ Because of the long history of coal mining in Appalachia, the best and most accessible coal is gone, making mining more expensive and the region unlikely to regain its former market share.⁷ Much of the coal from the West is closer to the surface and cheaper to mine, but has relatively low energy content.⁸ It takes about fifty percent more Western coal to produce the same amount of electricity as Appalachian coal.⁹ One of the benefits, however, of Western coal is that it is low in sulfur, a key pollutant targeted by Clean Air Act regulations.¹⁰ Meanwhile, Columbia's coal has high energy content and is low in sulfur and ash, making it ideal for power generation under U.S. regulations.¹¹ Ground shipping between Wyoming and New England is expensive, particularly given that more coal is needed to provide the same energy output, while cheaper, high quality coal from Colombia can be shipped on barges to New England at lower total cost.¹²

Massachusetts has enacted clean air regulations for power plants that are stricter in some ways than the Clean Air Act regulations in place nationally.¹³ Power plants have the option of retrofitting, switching to renewable or other cleaner energy sources, or using cleaner inputs.¹⁴ Simply switching to lower sulfur coal that produces fewer emissions is less expensive

than either updating emissions controls or switching to a clean energy source.¹⁵ Power plants must submit compliance plans to the Massachusetts Department of Environmental Protection ("DEP"), and most have chosen to comply through substitution of cleaner coals.¹⁶ In a more globalized coal market, the United States, and particularly Massachusetts, rely more heavily on coal imports to obtain the best quality coal at lower prices and to continue to avoid building power plants with better emissions reduction technology.

Colombian coal has a competitive advantage in part because shipping costs from Wyoming are so high and the Colombian coal industry is relatively new, allowing companies to mine the "easy" coal that has been mined out in Appalachia, but largely because regulation in Colombia is lax compared to that in the United States.¹⁷ In Columbia, workers have few rights and are paid substantially less, approximately one-seventh the pay of U.S. coal miners.¹⁸ The environmental impact of Colombian mines, particularly degraded water quality, ensures that the increased exports fail to improve the standard of living in coal communities.¹⁹ Colombia boasts the world's largest open pit coal mine, the scale of which increases the environmental and social problems attendant with mining.²⁰

If Massachusetts, or any other state, truly wants to lower emissions and improve the environment, regulations need to mandate genuinely clean energy sources and not merely transfer the environmental costs across the globe or across sectors. Rather than allowing utilities to meet the requirements by switching to low-sulfur coal from South America, Massachusetts should take a longer view approach by investing in renewable energy sources. As long as coal continues to be used, regulations should ensure that power plants are equipped to burn it cleanly rather than sourcing low-sulfur coal from developing countries. While domestic coal reserves ensure that dependence on foreign coal will not carry the same risks and foreign policy implications as dependence on foreign oil, states should combine their environmental policies with local energy rather than searching farther afield to remain dependent on coal and resistant to a more meaningful shift in energy policy.



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LEADING WHILE CATCHING UP?:

EMERGING STANDARDS FOR CHINA'S OVERSEAS INVESTMENTS

by Kirk Herbertson*

INTRODUCTION

In February 2011, activists marched across Nairobi, Kenya to the Chinese embassy waving banners and chanting “haki yetu!” (our right!).¹ They demanded that the Chinese government end Chinese companies’ involvement in construction of the Gibe 3 dam, Ethiopia’s largest ever public infrastructure project.² The activists had previously petitioned the Chinese government, Chinese companies, the Kenyan government, and Ethiopian government, but received no response.³ The march symbolized people’s frustration in being unable to communicate with the Chinese companies involved in the project.⁴

The Gibe 3 dam will span across the Omo River in Ethiopia, which flows into Lake Turkana on the southern border with Kenya.⁵ When completed in 2012, the dam will reduce the Omo River’s flow by thirty percent, affecting the 500,000 local people who depend on the lake and river for their livelihoods.⁶ The Lake Turkana region is already a landscape in crisis. According to several independent studies, the reduced water flow could lead to food insecurity, intensify pre-existing tribal conflicts in the area, and potentially destabilize the region near the Ethiopian, Kenyan, and Sudanese borders.⁷ The Gibe 3 dam is one of five large hydropower projects underway in Ethiopia.⁸ More dams are planned as the Ethiopian government has decided to export electricity to neighboring countries (although agreements have not yet been reached with these countries).⁹ When the dam’s reservoir is filled, over 100,000 people will need to relocate to grow crops.¹⁰ Hundreds of thousands of others may lose their livelihoods from herding, fishing, and trading.¹¹

Many foreign investors declined to finance the project. In 2008, JPMorgan Chase decided not to underwrite the project, and by 2010 the World Bank, African Development Bank, and European Investment Bank also withdrew funding considerations.¹² In July 2010, however, the Industrial and Commercial Bank of China (“ICBC,” the world’s largest bank) agreed to become the project’s largest lender, granting a loan of \$500 million to a Chinese company to provide equipment necessary to construct the dam.¹³

The Gibe 3 dam project is one example of how China’s overseas investments have gained international media attention in recent years. China’s decades-long growth has made it the second largest economy in the world, surpassing Japan in mid-2010 and soon to eclipse the United States.¹⁴ As China’s economy grows, so does its demand for natural resources and new markets.¹⁵ The Chinese government has shaped its foreign policy to keep up with demand for energy and resources by encouraging companies to “go global.”

From a macroeconomic perspective, the results have been impressive. Overseas investments have tapped natural resources ranging from minerals and oil in Africa, to hydropower in South-east Asia.¹⁶ New markets have opened for Chinese goods and services.¹⁷ Many Chinese companies have found particularly lucrative opportunities in impoverished, resource-rich developing countries.¹⁸ In 2010, China became Africa’s largest trading partner.¹⁹ Yet at the same time, many people have expressed concern about the environmental and human rights footprint of these investments.²⁰

This article provides a brief overview of efforts underway to strengthen environmental and social sustainability in China’s overseas investments. In recent years, the Chinese government and several companies have recognized the importance of ensuring that investments are responsible, and have begun to adopt standards that govern overseas investments. The article first provides a brief overview of China’s approach to overseas investments, using examples from Africa. The article then describes how Western and multilateral financial institutions have traditionally played a role in promoting environmentally and socially responsible investments, and considers whether Chinese financial institutions could play a similar role. This article will also examine the environmental and social standards that are emerging for China’s overseas investments.

CHINA’S APPROACH TO OVERSEAS INVESTMENTS

In 2001, China’s tenth Five-Year Plan²¹ directed Chinese companies to “go global,” as a way to gain access to natural resources, stimulate China’s exports, and build China’s markets abroad.²² The Chinese government, in turn, provided support to companies, including access to finance, tax exemptions, and insurance to lower the costs of doing business.²³ As a result of the “go global” Strategy, China’s foreign direct investment flows increased from less than one billion dollars in 2000 to an estimated fifty-five billion dollars in the first half of 2010 alone.²⁴

As early as 1954, Chinese premier Zhou Enlai announced the “Five Principles of Peaceful Coexistence” that continue to set the parameters for China’s approach to international development: (1) mutual respect for sovereignty and territorial integrity; (2) mutual non-aggression; (3) non-interference in each other’s

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internal affairs; (4) equality and mutual benefit; and (5) peaceful coexistence.²⁵

Based on these principles, the Chinese government has branded Chinese overseas investment as a “new type” of strategic partnership for developing countries that differs from Western aid and investment.²⁶ China’s overseas investments are closely linked to its development aid—both are important parts of the loan packages that the Chinese government often negotiates with host governments. The Chinese government encourages “win-win” development, guarantees non-interference in domestic affairs, and promises not to condition the receipt of aid on governance and democratic reforms.²⁷ Often, Chinese aid comes in the form of infrastructure projects that are built by Chinese companies.

NATURAL RESOURCE EXTRACTION IN AFRICA

Like many Western investments, a significant portion of China’s investments in Africa focus on natural resource extraction. Over fifty percent of all foreign direct investment inside Africa goes towards natural resource exploitation.²⁸ Over one quarter of U.S. and Chinese imports come from major African oil exporting countries—Nigeria, Angola, and Algeria for the United States and Angola, Sudan, and Libya for China.²⁹ Since 2000, the number of oil companies operating in Africa (both private and state-owned) has increased from 250 to over 800.³⁰ Competition to exploit Africa’s natural resources is growing.³¹

Chinese oil companies remain relatively small players in Africa, providing only eight percent of the combined commercial value of international oil companies’ investments in Africa.³² Due to intense competition, Chinese companies have often invested in developing countries with weak governance systems, political instability, and high levels of corruption.³³ Many companies—both Western and Chinese—have come under criticism for their environmental and human rights records in Africa.³⁴ In this sense, China’s interest in Africa’s natural resources is not unique but often receives media attention because of its high-risk approach.

CHALLENGES IN PROTECTING THE ENVIRONMENT AND HUMAN RIGHTS

While Chinese companies are not unique in their interest in Africa’s natural resources, their approach often differs from Western counterparts. This poses distinct challenges in upholding environmental and human rights protections.

Chinese aid often takes the form of turn-key projects—financed and built entirely by Chinese companies, and then turned over to the host government with technical assistance. These projects focus overwhelmingly (but not always) on concrete infrastructure projects such as roads and dams.³⁵ After the civil war ended in Angola in 2002, for example, China was one of the first countries to provide development assistance.³⁶ With Chinese support, Angola initiated over one hundred projects in energy, water, health, education, telecommunications, fisheries, and public works.³⁷ Many of these projects involved construction of new infrastructure.

The relationship between China and Angola is complex, but several elements are revealing about the nature of China’s overseas investments:³⁸

- *The Chinese government worked directly with Angola’s president.* In 2006, the president described the relationship as “mutually advantageous,” “pragmatic,” and with “no political preconditions.”³⁹ Cooperation is characterized by frequent bilateral visits of important state officials, and signing of various agreements. In these high-level negotiations, there was little accountability to the public or efforts to respond to public concerns.⁴⁰
- *Bilateral trade increased rapidly in a few years time.* Crude oil was the main Angola export to China, and imports from China also increased—including steel, cement, autos, and batteries.⁴¹ China was a major source of foreign direct investment, especially through the entry of Chinese construction firms.⁴²
- *Although China received the most media attention, it was not the only actor.* Angola also had investment agreements with India, Brazil, South Africa, and others that have increased in volume.⁴³ Over time, other donors have expressed a willingness to extend credit lines to Angola.⁴⁴
- *China’s loans to Angola were backed by oil revenue.* In 2004, China Export Import Bank pledged a two billion dollar oil-backed loan to Angola to fund reconstruction of infrastructure.⁴⁵ For each project, the Chinese government proposed a few Chinese companies.⁴⁶ Repayment began as soon as the project was completed.⁴⁷ Revenue from oil was deposited in an escrow account, from which the amount for servicing the debt was deducted.⁴⁸ The Government of Angola was then free to use the remainder at its own discretion.⁴⁹ Loans were provided at a deeply concessional rate (LIBOR +1.5%).⁵⁰
- *Chinese laborers remained separate from the local population.* Chinese laborers typically stayed in Angola for one or two year contracts, often living in closed compounds near the construction site.⁵¹ There was little contact with Angolans.⁵² At the same time, a growing number of Chinese entrepreneurs entered Angola.⁵³ Communication challenges existed due to cultural differences and language barriers, and most businesses remained separate from local communities.⁵⁴
- *Corporate social responsibility was not part of the business plan.* Chinese companies did not interact with local communities or civil society organizations, and did not discuss environmental and human rights concerns openly.⁵⁵ In general, Chinese companies did not keep local communities informed of operations.⁵⁶

USING FINANCE TO HOLD COMPANIES ACCOUNTABLE FOR OVERSEAS IMPACTS

Civil society activists have long struggled to find ways to hold companies accountable for the environmental and human rights impacts of their overseas operations. Traditionally, the laws of the United States and other major investor countries do not apply overseas.⁵⁷ One important approach, developed over the

past two decades by activists, has been to follow the money—to ensure that companies and governments only receive financing for projects that are environmentally and socially responsible.⁵⁸

Many, but not all companies rely on financing to pursue large-scale overseas investments. When companies seek financing from investors, they often must prove that the investment is likely to generate a return. This includes identifying risks to the project's success and demonstrating that these risks can be mitigated.⁵⁹

Increasingly, companies acknowledge that environmental and human rights risks can harm the success of a development project (see Box 1).⁶⁰ Harm to communities can lead to protests that block or delay construction, and can motivate governments to alter licenses, permits, and oversight of projects. Local and international civil society campaigns can also damage the reputations of companies and financial institutions involved, affecting share prices and the implementation of related projects.⁶¹

Box 1: Environmental and Social Risks⁶²

When investing in developing countries, companies increasingly consider the ways that harm to the environment and local communities can affect a project. The following are examples of risks that can arise out of environmental and human rights harms.

Financing risk – Financial institutions and investors may delay their financing, require more conditions, or decide not to participate.

Construction risk – The proponent may not be able to complete the project on time or on budget.

Operational risk – The proponent may not be able to access necessary inputs, produce sufficient output, or sell at a sufficient price, which can disrupt operations.

Reputational risk – The project may harm the proponent's or financial institutions' brand identity, which can translate into loss of market value.

Corporate risk – Delays or interruptions to a project may reduce the proponent's profitability and asset values, decreasing the proponent's stock value, lowering its credit rating, and raising the cost of borrowing.

Host government risk – The host government may withdraw permits and licenses, commence enforcement actions, impose civil or criminal penalties on the proponent, or tighten requirements.

Host country political risk – Political forces in the host country may threaten the project.

As a result, managing environmental and human rights risks is not just goodwill, but good business. Many studies show how safeguarding against these risks can help to manage the complex impacts of development projects.⁶³ For example, engaging local

communities in the design of a project can help build community support for the project and avoid conflict later in the project cycle.⁶⁴

ENVIRONMENTAL AND SOCIAL STANDARDS OF FINANCIAL INSTITUTIONS

In response to public criticism of its involvement in controversial projects in the 1980s and 1990s—such as the Narmada Dam in India, which displaced over 300,000 people—the World Bank developed “safeguard” policies to help identify, avoid, and minimize harm to people and the environment.⁶⁵ These policies require borrowing governments to follow risk mitigation procedures in order to receive Bank financing.⁶⁶ Examples of these procedures include conducting an environmental and social impact assessment, consulting with local communities, and restoring the livelihoods of displaced people.⁶⁷

Since that time, other financial institutions have adopted similar policies.⁶⁸ The International Finance Corporation (“IFC”)—the private sector financing arm of the World Bank Group—developed a detailed set of environmental and social standards in 2006.⁶⁹ Over sixty private financial institutions have adopted the IFC's standards through the Equator Principles.⁷⁰ These policies are constantly evolving. In 2011, for example, the IFC will adopt an updated version of its standards.⁷¹

Although these standards are far from perfect and have not always successfully prevented harmful investments from going forward,⁷² they have become an important pillar of environmental and human rights protections in overseas investments.

A ROLE FOR CHINESE BANKS IN SUSTAINABLE DEVELOPMENT?

Is there a role for Chinese banks to promote environmentally and socially responsible overseas investments? In the past few years, both the Chinese government and several Chinese financial institutions have recognized the importance of environmental and social standards.⁷³ Efforts are now underway to develop these standards in the Chinese context.⁷⁴

China's financial sector has the potential to play an influential role in strengthening the environmental and social performance of China's overseas investments. Because many Chinese companies do not raise funds in the capital markets, the majority of total capital available to Chinese industry comes from financial institutions.⁷⁵ Over the past five years, in response to concern about the massive pollution that accompanies China's rapid growth, the Chinese government has begun to apply “green credit” policies to domestic lending.⁷⁶ Chinese officials have also worked closely with international financial institutions, particularly the IFC, to build capacity of Chinese financial institutions to manage environmental and social risks.⁷⁷ While still in their early years, China's “green credit” policy has demonstrated measurable success.⁷⁸

GOVERNMENT INFLUENCE OVER OVERSEAS INVESTMENTS

While the Chinese government has encouraged Chinese companies to “go global,” these companies are not merely arms of the central government; many companies are encouraged to act autonomously.⁷⁹ For example, many Chinese national oil companies,

are partially owned and controlled by the government,⁸⁰ but have gained influence due to surging profits, listing on foreign stock exchanges, and relationships with international investors.⁸¹ Significant profits from years of high oil prices have also enabled Chinese oil companies to finance their own investments, rather than relying solely on Chinese financial institutions.

Nevertheless, the government continues to provide financial support to these companies to help them compete against established international oil companies.⁸² In particular, Chinese banks play a prominent role in large acquisitions and investments and in negotiations with host governments.⁸³ As many Chinese companies interact at least to a certain extent with Chinese banks, their influence over environmental and social standards could continue to grow.

KEY BANKS IN CHINA'S OVERSEAS INVESTMENTS

Although China's largest private and state-owned banks often invest overseas, China's state-owned "policy banks" are the leading financial actors behind the "go global" strategy.⁸⁴ The two primary banks that support overseas investments are the Export Import Bank of China ("China ExIm") and the China Development Bank ("CDB").⁸⁵

Most major economies have "export credit agencies" that help to finance companies exporting goods and services abroad.⁸⁶ China ExIm is one of the largest export credit agencies in the world.⁸⁷ In 2009, ExIm and CDB combined approved over one hundred and ten billion dollars in lending.⁸⁸ Founded as a policy bank, and now a semi-private bank, China Development Bank has also been one of the key funders of large infrastructure and industrial projects overseas.⁸⁹

As Deborah Brautigam of American University describes: The importance of policy banks like the ExIm Bank and China Development Bank in China's development model and its international economic relations cannot be emphasized too strongly. China . . . is in many ways a typical East Asian developmental state. It acts to accelerate development through deliberate use of state policies. The central characteristic of a developmental state is its control over finance. This control need not be exclusive – but it must be important at the margin in order to influence the behavior of firms in directions determined by political leaders. In this regard, Beijing is following directly in the footsteps of the earlier Asian successes, Japan, Korean, and Taiwan, who all used development finance to "pick winners" in the globalization race.⁹⁰

In the next five years, we can expect these financial institutions to play an increasingly important role in encouraging Chinese companies towards environmentally and socially responsible investments. In March 2011, the National Peoples' Congress met in Beijing to approve the next Five-Year Plan.⁹¹ At the core of this plan are environmental protection and social equity.⁹²

EMERGING STANDARDS IN CHINA'S OVERSEAS INVESTMENTS

Standards are already emerging that could influence China's overseas investments. These include domestic policies, voluntary corporate standards, and policies designed specifically for overseas investments.

DOMESTIC POLICIES

For several years, Chinese financial institutions have pursued "green credit" policies in their domestic lending.⁹³ In 2003, China adopted a stronger environmental impact assessment law that ensures greater public participation in project decision-making.⁹⁴ In 2007, the State Environmental Protection Agency (now the Ministry of Environment), Peoples' Bank of China, and Central Banking Regulatory Commission issued a green credit policy that requires all commercial banks to conduct environmental screening of loans, and to restrict lending to companies with high energy consumption and pollution.⁹⁵ The policy also established a credit blacklist that prohibits banks from lending to companies that fail to meet environmental standards. The Chinese government followed the Green Credit Policy with a Green Trade Policy (2007), Green Securities Policy (2008), and a Green Insurance Policy (2008).⁹⁶ In 2008, the government took measures to increase public access to environmental information from the government and companies.⁹⁷ These experiences may help to inform future standards for China's overseas investments.

VOLUNTARY CORPORATE STANDARDS

In 2008, President Hu Jintao announced that companies should establish the concept of global responsibility, include social responsibility in their business strategy on their own, abide by the laws in the country where the enterprises operate and international common business practices, improve their management models, and pursue unity of economic returns and social results.⁹⁸

Encouraged by the government, some Chinese banks and companies are taking an interest in corporate social responsibility.⁹⁹ This becomes particularly relevant as Chinese banks and companies increasingly interact on a global scale, enter foreign stock exchanges, and market their products abroad.

In 2007, China Construction Bank was the first state-owned Chinese bank to publish a corporate social responsibility report.¹⁰⁰ In the following year, China Development Bank, ICBC, Agricultural Bank of China, and Bank of China also released their first reports.¹⁰¹ In 2008, Industrial Bank became the first private Chinese bank to adopt the Equator Principles,¹⁰² a global standard for environmentally and socially responsible project finance. Although many banks' voluntary corporate standards focus on their domestic lending activities, this may soon expand to overseas lending.

OVERSEAS LENDING

Traditionally, Chinese banks and companies have addressed environmental and social risks only by complying with host countries' laws and regulations. As companies expand their operations in countries with weak governance and regulatory capacity, and as other multilateral institutions improve their own standards, Chinese companies appear to be moving in a similar direction.

Slowly but steadily, environmental and social standards are emerging for financial institutions' overseas lending (see Emerging Standards for Chinese overseas investment Box 2). All financial institutions now apply the government's Green Credit Policy to domestic lending. In 2004, China Export Import Bank

developed a short set of environmental guidelines for its overseas lending, and publicly disclosed revised, more robust guidelines in 2008.¹⁰³ These guidelines require clients to conduct an environmental and social impact assessment.¹⁰⁴ China ExIm monitors the client's implementation of the assessment.¹⁰⁵

In 2009, the Ministry of Environmental Protection's think tank, the Chinese Academy for Environmental Planning, along with the non-governmental Global Environmental Institute and the University of International Business and Economics, completed draft environmental guidelines for Chinese companies involved in aid and overseas investment.¹⁰⁶ Several Chinese ministries and regulatory bodies are negotiating the guidelines and may approve them in the coming months.¹⁰⁷ The guidelines would require companies operating overseas to conduct environmental impact assessments, develop mitigation measures, compensate people for environmental damage, and adhere to international treaties signed by China and host countries.¹⁰⁸ Chinese companies would be required to follow Chinese environmental standards if they were higher than host countries.¹⁰⁹

Box 2: Emerging Standards for Chinese Overseas Investment	
Date	Description of standards
2004	China Exim Environment Policy ¹¹⁰ Three-paragraph policy developed in 2004 but publicly released only in April 2007.
2006	State Council's Nine Principles on Overseas Investment ¹¹¹ Developed to "encourage and standardize" companies' overseas investment. Requires Chinese companies to comply with local laws, design contract bidding to be transparent, protect labor rights of local employees, protect the environment, and implement corporate responsibilities.
2007	China Export Import Bank's Environmental Guidelines ¹¹² Publicly released in 2008. Governs investments overseas. Requires companies to conduct an environmental impact assessment and to compensate communities for environmental damage.
2007	Guide on Sustainable Overseas Silviculture by Chinese Enterprises ¹¹³ Governs the overseas practices of Chinese logging companies. Requires preservation of high value forests and endangered species, monitoring systems, and consultations with local communities.
2008	SASAC statement on overseas state-owned companies ¹¹⁴ The Director of State-owned Assets Supervision and Administration Commission (which governs state-owned companies) stated that Chinese companies going abroad must comply with international rules and local laws.

2008	State Council regulations on international contracts ¹¹⁵ A State Council regulation allows the government to fine companies up to RMB one million for undertaking contracts without official approval. This regulation improves government supervision, protects the rights of Chinese workers, and enhances compliance with host country laws.
2008	National Audit Office's new department on overseas assets ¹¹⁶ The office announced a new department focusing on state-owned or central-capital controlled companies and overseas national assets. The department will seek to uncover any potential misuse of funds, with special attention to overseas state owned assets.
2009	Draft environmental guidelines for overseas investment ¹¹⁷ The Chinese Academy for Environmental Planning, in cooperation with the Global Environmental Institute and the University of International Business and Economics, completed draft guidelines. The Ministry of Environmental Protection and China Banking Regulatory Commission are negotiating the final guidelines.

CONCLUSION

As Chinese banks and companies continue to expand their overseas footprint, they will undertake more projects in environmentally and socially sensitive areas. The Chinese government's current efforts to develop standards are an important first step, but other changes will need to follow. As Western financial institutions have experienced, policies on paper are meaningless unless they change the behavior of companies abroad.

Numerous challenges remain. The implementation of any guidelines will need buy-in and coordination across the numerous Chinese agencies involved in overseas investment. Financial institutions will also begin to explore ways to enforce and hold companies accountable for their environmental and social performance. Chinese companies have little experience in engaging directly with local communities and civil society organizations, even though direct engagement is the pillar of environmental and human rights risk management.

Chinese banks and companies can learn from foreign companies by engaging in dialogue and trading experiences, but this will not be enough. Ultimately, a uniquely Chinese approach will need to develop to environmental and social risk management that is appropriate for Chinese culture, but also fully respects the environment and human rights of local communities. In this way, the Chinese development model can truly help to bring "mutual benefit" and "win-win" development to other developing countries.



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SMALL WIND TURBINES MAY CHANGE THE FUTURE OF ENERGY IN DEVELOPING COUNTRIES

by Robert Foster*

As alternative energy sources gain prevalence in energy markets worldwide,¹ small wind turbines have emerged as a viable alternative to their larger and more expensive counterparts. While most attention has been drawn to their domestic application in developed countries, and various low cost commercial turbines are available to consumers for several thousand dollars, they also offer great promise in electrification of developing countries.² However, because of the technological nature of small wind turbines, as well as the socio-political characteristics of the regions in which their use is most applicable, special care must be taken while developing policies to encourage investment as well as during implementation of construction plans. If these factors are carefully considered, small wind turbines may prove to be an environmentally conscious option for the electrification of developing countries.

Small wind turbines differ from large turbines in many important ways, demonstrating their greater versatility. While large turbines require mature power grids, small turbines have application both on and off existing power grids, as a result of their size and low energy output.³ Their off grid application avoids the heavy cost of expanding transmission lines to rural regions of developing countries.⁴ Additionally, small turbines operate on lower wind speeds than large turbines, giving them more placement options.⁵ Experts also indicate that small turbines, if placed correctly in suitable locations, generate more energy per dollar than other common alternative energy sources such as photovoltaics.⁶

There are three overlapping phases in which introduction of small wind turbines must be carefully considered: investment, planning, and implementation. To encourage investment, successful policy initiatives in developed countries may offer effective models for developing countries. In developed countries, investment in small wind turbines usually originates at the individual household level.⁷ Here, feed in tariffs ("FITs"), which compensate individuals per kilowatt-hour of electricity generated,⁸ offer an effective method to encourage investment.⁹

While there are numerous FIT models,¹⁰ those of Germany and Spain, where individuals may be compensated at rates as much as four times the rate paid to commercial power sources, have been highly successful in encouraging installation of small-scale renewable energy systems.¹¹ With success and popularity, however, also comes an element of risk. Developing countries must be mindful that if too many individuals opt into FIT programs, operating costs could rise sharply as governmental compensation obligations grow.¹² Notwithstanding this risk, FIT programs are the most promising way to encourage investment in alternative

energy sources in developing countries. Any nation seriously considering widespread implementation of a renewable energy scheme should also consider exemption of import tariffs on equipment.¹³ Such an exemption will lower startup costs and further encourage investment.

Rural regions of developing countries, without established power grids, face additional investment considerations. As absence of electricity often indicates lower levels of affluence, capital will be less available than in regions with established power grids.¹⁴ While FITs may provide some encouragement

for investment, the availability of credit in these regions will be crucial for the viability of any small wind project.¹⁵ Sources of credit include international financial institutions and countries' development agencies, such as that of France (L'Agence Française de Développement), which extends environmental credit lines to local banks in developing African countries.¹⁶ NGO subsidies are also a source of credit; however, their funding must be carefully designed to create conditions under which they will no longer be needed in order to ensure ultimate market sustainability for renewable energy.¹⁷

To break even, small wind projects require approximately ten to twenty years before the initial cost can be recovered.¹⁸ If connection to an outside established grid is likely, and in-place

While FITs may provide some encouragement for investment, the availability of credit in these regions will be crucial for the viability of any small wind project

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FIT payments are not high enough, then a project's economic feasibility could potentially be undermined by a sudden influx of cheaper electricity. Under this scenario, individual, community, and institutional investors would never recover their construction and maintenance costs, as the market rate for electricity would now be too low.¹⁹ For this reason, it is imperative that investment in small wind turbines be incentivized in regions of developing countries where connection to an established grid is not expected during the ten to twenty year cost-recovery period.

Once a developing country has created investment incentives, planning and implementation are the next steps for successful introduction of small wind turbines. According to the Center of Excellence for Renewable Energy, there are six critical factors at this stage of development: management, local training capacity, technical support, viability of the energy source, ownership, and political interference.²⁰ Dealing with these issues firsthand, Practical Action, an international charity based out of the UK whose goal is to combat poverty through the use of technology, has introduced small wind turbines to isolated villages in Sri Lanka and Peru.²¹ Before choosing project locations, Practical Action assessed the demand for electricity, paying close attention to use patterns.²² Ultimately, the distinguishing factor that made wind power in

Sri Lanka more feasible than Peru was the existing demand for electricity.²³ However, to forecast energy demand purely based on current energy demand would be shortsighted; potential demand should be comparably weighted.²⁴ In making such determinations, relevant factors include population size, level of infrastructure, and number of viable financial institutions.²⁵

Investment in human capital is the final and perhaps most critical aspect in implementing any small wind project.²⁶ The construction, operation, and maintenance of small wind turbines require a high degree of technical understanding.²⁷ For implementation to be successful, the local population must have proper training and knowledge.²⁸ Community involvement is pivotal, as without a sense of ownership, local populations will have no sense of commitment to their small wind turbines and these turbines could easily fall into disrepair.²⁹

Community involvement, in addition to investment incentives, comprehensive planning, and adequate technical training, is just one critical factor that determines the ultimate success of any small wind turbine project. If these factors are carefully considered, small wind turbines offer promise towards electrification of developing nations in a way that is both environmentally conscious and sustainable.



Endnotes: Small Wind Turbines May Change the Future of Energy in Developing Countries

¹ See U.S. Energy Consumption by Energy Source, 2005-2009, U.S. ENERGY INFO. ADMIN. (2010), http://www.eia.doe.gov/ceaf/alternate/page/renew_energy_consump/table1.html.

² See Chapter 6: Small Wind Turbines, WIND ENERGY, THE FACTS, <http://www.wind-energy-the-facts.org/en/part-i-technology/chapter-6-small-wind-turbines/> (last visited Mar. 31, 2011).

³ Martin LaMonica, *In Small Wind Versus Solar, It's All About Location*, CNET NEWS (Mar. 22, 2011), http://news.cnet.com/8301-11128_3-20045425-54.html.

⁴ Megan Treacy, *Small Roof-Mounted Wind Turbines Could Power Rural India*, ECOGEEK.ORG (June 7, 2010), <http://www.ecogEEK.org/wind-power/3218-small-roof-mounted-wind-turbines-could-power-rural>.

⁵ See generally *WT6500 Wind Turbine*, WIND TRONICS, <http://www.earthtronics.com/honeywell.aspx> (last visited Mar. 31, 2011).

⁶ See LaMonica, *supra* note 3.

⁷ See generally Amy Westervelt, *Rooftop Pipe-dreams for Pint Sized Wind-mills?*, MSNBC (Feb. 12, 2011), http://www.msnbc.msn.com/id/41554507/ns/us_news-environment/.

⁸ Paul Gipe, *Electricity Feed Laws, Feed-in Laws, Feed-in Tariffs, Advanced Renewable Tariffs, and Renewable Energy Payments*, WIND-WORKS, http://www.wind-works.org/articles/feed_laws.html (last visited Mar. 31, 2011).

⁹ See generally Toby Couture & Yves Gagnon, *An Analysis of Feed-in Tariff Remuneration Models: Implications for Renewable Energy Investment*, ENERGY POLICY 1 (2009), <http://www.e3analytics.ca/documents/fitpolicy.pdf>.

¹⁰ *Id.*

¹¹ Kate Galbraith, *Europe's Way of Encouraging Solar Power Arrives in the U.S.*, N.Y. TIMES (Mar. 12, 2009), <http://www.nytimes.com/2009/03/13/business/energy-environment/13solar.html>.

¹² *Id.* (explaining how FITs are also seen as regressive, as they promote forms of energy that are not as cost efficient, resulting in higher energy prices for the poor).

¹³ Masahiro Miyazaki, *Renewable Energy Issues: Nedo's Experience in South-east Asia*, NEW ENERGY & INDUS. TECH. DEV. ORG., http://www.apo-tokyo.org/gp/manila_conf02/resource_papers/narrative/miyazaki.pdf (last visited Apr. 18, 2011).

¹⁴ See generally *Poverty, Energy and Society*, BAKER INST. ENERGY FORUM, <http://www.rice.edu/energy/research/poverty&energy/index.html> (last visited Mar. 31, 2011).

¹⁵ See V. Ranganathan, *Forecasting of Electricity Demand in Rural Areas*, 46 INDIAN J. OF STATISTICS 333 (1984).

¹⁶ See *France to Finance Kenyan Renewable Energy Investments*, CITIZEN (Apr. 28, 2011), <http://thecitizen.co.tz/business/14-international-business/10405-france-to-finance-kenyan-renewable-energy-investments.html>.

¹⁷ ERIC MARTINOT ET AL., *RENEWABLE ENERGY MARKETS IN DEVELOPING COUNTRIES* 10 (2003), http://www.nrel.gov/analysis/forum/pdfs/eric_martinot.pdf.

¹⁸ Miyazaki, *supra* note 13, at 5.

¹⁹ *Id.*

²⁰ See TEODORO SANCHEZ, ARTHUR WILLIAMS, & NIGEL SMITH, *THE CRITICAL FACTORS FOR SUCCESS OF STAND ALONE ENERGY SCHEMES* 14 (2006), <http://www.udc.edu/cere/docs/Teo%20Conf%20Paper.pdf>.

²¹ See *Small-Scale Wind Power*, PRACTICAL ACTION, http://practicalaction.org/energy/small_scale_wind_power (last visited Mar. 31, 2011).

²² In regions without established power grids, electricity may still be consumed in the form of charged automobile batteries.

²³ See SIMON DUNNETT, PRACTICAL ACTION, *SMALL WIND ENERGY SYSTEMS FOR BATTERY CHARGING* 8, http://practicalaction.org/docs/energy/wind_energy_battery_charging.pdf (last visited Mar. 31, 2011).

²⁴ See generally Ranganathan, *supra* note 15, at 341.

²⁵ *Id.* at 337.

²⁶ Video: *Renewable Energy in Sri Lanka*, PRACTICAL ACTION, http://practicalaction.org/energy/small_scale_wind_power (last visited Mar. 31, 2011).

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²⁸ Video: *Renewable Energy in Sri Lanka*, *supra* note 26.

²⁹ *Id.*

A LEGAL VIEW ON BORDER TAX ADJUSTMENTS AND CLIMATE CHANGE:

A LATIN AMERICAN PERSPECTIVE*

by *Valentina Durán Medina and Rodrigo Polanco Lazo***

INTRODUCTION

The General Agreements on Tariffs and Trade (“GATT”) as amended by the Uruguay Round Amendments, which created the World Trade Organization (“WTO”), contains rules on Border Tax Adjustments (“BTAs”).¹ No single section of this agreement deals exclusively with BTAs; however, rules addressing BTAs can be found throughout, namely in Articles II, III, and XVI.²

According to the Organization for Economic Cooperation and Development (“OECD”) Working Party, BTAs are “any fiscal measures that put into effect the destination principle in whole or in part.”³ In other words, BTAs relieve exported products of some or all of the tax the exporting country charged on similar domestic products in the home market and enables the importing country to charge some or all of the tax on imported products that it charges on similar domestic products. The term “border tax adjustment” is somewhat confusing because it suggests that a fiscal measure is applied at the border, which is not always the case.⁴ Although in many cases imports are taxed on entry, certain countries apply a tax to imports after the goods have crossed the border and have been sold to other merchants or consumers. Moreover, the OECD has noted that certain tax systems do not tax exports at all and make no adjustment at the border.⁵ Considering these varying tax systems, the OECD Working Party has recommended the replacement of the term “border tax adjustments” with “tax adjustments applied to goods entering into international trade.”⁶

The OECD’s careful treatment of BTAs illustrates that they are not a novel concept to international trade. However, BTAs have only recently been considered as an innovative policy option for addressing the challenges of climate change. The concept of climate change BTAs is as follows: carbon-taxing countries would levy import fees on goods that non-carbon-taxing countries manufacture. The motivating factor for these measures is—at least in theory—to internalize the real costs of producing goods and services with respect to international climate change regulation, thereby leveling the playing field between producers of like products from different countries.⁷

A BTA would tax imported goods the equivalent of what the producers would have had to pay to produce them in the home market they are entering. Under this system, domestic producers in countries with carbon taxes will not face costly climate change measures that foreign producers do not face in their home countries. An alternative approach would be to impose

taxes on imported goods that are equivalent to the enforcement of emissions allowance trading.⁸ Therefore, in order to import products from a nation that does not comply with the carbon taxes applied in the importing country, an importer of goods would be required to purchase emission rights in his home country, compensating for the difference.⁹

Some commentators have mentioned that these measures should be called Border Carbon Adjustment (“BCA”), because “requirements to buy into domestic cap-and-trade schemes are more like regulations than taxes.”¹⁰ However, while recognizing BCA as a more precise concept, considering BTAs have usually been proposed to address climate change in the form of taxes, we will continue using the term BTA. This article will first provide a background on climate change and multilateral efforts to resolve the problem. It will then move on to a discussion of the potential treatment of BTAs under WTO law. Finally, we will discuss the implications of this analysis in Latin America with a focus on Chile.

CLIMATE CHANGE BACKGROUND AND MULTILATERAL EFFORTS

Climate change is a widely recognized, global problem caused by humans, and the time for action is now; current trends indicate that we will likely arrive at a point of no return between 2015 and 2020.¹¹ Commentators note that the cost of taking measures now is much less expensive than waiting until 2020 or 2030.¹² Climate change is regulated by a multilateral treaty and protocol in the context of the United Nations Framework Convention on Climate Change (“UNFCCC”).¹³ Even if measures to address climate change are both multilateral and domestic, the

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perspective from Latin America, and especially from Chile, is that environmental issues and global problems should be treated multilaterally.¹⁴

The official position of the Government of Chile's foreign policy, unchanged in recent decades, is "to contribute to the strengthening of multilateralism."¹⁵ In this sense, Chile aims to strengthen the climate regime in the United Nations. The Chilean government officially promotes the joint action of nations on the global agenda in areas such as security threats, natural resources, energy, environment, sustainable development, climate change, international violations, poverty, and governance.¹⁶

In the context of multilateral solutions, Border Tax Adjustments seem to be a unilateral answer to the problem of climate change. BTAs can be politically feasible for the adoption of national regulations in countries like the United States, but they are seen as a threat to the international trading system and could potentially violate international trade law under the WTO.

Resolving this potential conflict between climate change mitigation measures and international trade law is of paramount importance. Since the early nineties, multilateral environmental agreements, soft law instruments, and the OECD have encouraged the use of a broad range of instruments, and especially the use of market-based instruments, to reduce environmental impacts.¹⁷ States are increasingly employing economic instruments, such as taxes and charges, as instruments of environmental policy-making to address inputs and production processes.¹⁸

Even though no Border Tax Adjustments have been implemented yet, the United States and the European Union have considered the possibility of imposing BTAs ever since the Climate Conference held in Copenhagen on December 2009 failed to produce a global deal to reduce greenhouse gas ("GHG") emissions.¹⁹

EUROPEAN UNION

BTAs have been a subject of debate in the European Union since 2006 when the EU's High Level Group ("HLG") on Competitiveness, Energy, and Environment advised the European Commission to analyze the viability of all potential policy measures, including border tax adjustments, that could encourage EU trading partners to decrease GHG emissions, so as to reduce climate change risks and the impact of a carbon premium on European competitiveness.²⁰ However, consensus to implement BTAs has not been reached and European heads of state remain divided on the subject. In December 2006, EU Trade Commissioner Peter Mandelson pointed out that:

[A] specific "climate" tariff on countries that have not ratified Kyoto . . . would be highly problematic under current [WTO] rules, and almost impossible to implement in practice. [D]eveloping countries are not required to make specific emissions cuts under the Kyoto Protocol; also . . . some U.S. states have ambitious climate policies.²¹

John Hontelez, Secretary General of the European Environmental Bureau²² affirmed that:

[BTAs] might be the answer which allows the EU to develop responsible climate policies without having to wait for other countries. They would result in products imported from the US being taxed to compensate for resulting differences in production costs. Thus EU firms would be protected against unfair, carbon-careless competition from outside.²³

In 2006, then French Prime Minister Dominique de Villepin suggested that countries that do not join a post-2012 international treaty on climate change should face extra tariffs on their industrial exports.²⁴ De Villepin argued that "[c]ountries like the U.S. and China . . . should not be allowed to benefit from efforts to reduce climate change without having to shoulder some of the costs or suffer from any related loss in competitiveness."²⁵ Subsequent reports of the HLG do not reach the subject of Border Tax Adjustments and instead called for other measures as international action on climate change.²⁶

UNITED STATES

The relationship between the U.S. and the international climate change regime has been controversial. As the Byrd-Hagel Resolution of 1997 asserts, the United States should not sign or agree to any convention or protocol on any subject matter containing new commitments to limit or reduce GHGs unless it also mandates developing countries to do the same, or that "would result in serious harm to the economy of the United States."²⁷ It has been reported that some sectors of U.S. "industry have lobbied hard for climate legislation to include border measures, citing competitiveness concerns, the need to encourage large developing country emitters to adopt binding emissions targets, and fears of 'carbon leakage'"—the relocation of firms to countries with fewer carbon restrictions, increasing global emissions or leaving them unaffected.²⁸

In this context, in June 2008 the Lieberman-Warner Climate Security Act²⁹ was introduced in the U.S. Congress with the intention of establishing measures to reduce GHGs, including a cap-and-trade program and a measure requiring certain importers to submit special allowances.³⁰ Rather than impose a Border Tax Adjustment, this bill would have required importers of GHG-intensive products from other countries without comparable GHG reduction schemes to buy international credits or other emission certificates from the federal government or from a U.S. regulatory program.³¹

The same year, another bill, The Climate Market Auction Trust and Trade Emissions Reduction System Act of 2008 ("Climate Matters Act of 2008"), included measures to reduce GHGs emissions, including offering developing WTO participant countries "access to the carbon market . . . includ[ing] additional incentives such as the ability to choose the base year or maximum level of allowable greenhouse gas emissions for its emissions trading system, rather than requiring it to match the [U.S.] system."³² This measure targeted the large emerging economies and gave exceptions to: "least developed countries" and "countries that generate less than [five percent] of global emissions."³³ Moreover, the income of the BTA "would be used to offset the

negative effects of climate change in developing countries (e.g., through technology transfer).³⁴

On June 26, 2009, the American Clean Energy and Security Act of 2009 (“ACES”) was approved by the House of Representatives by a narrow 219-212 margin.³⁵ Although the bill never passed the Senate, it aimed to reduce emissions with a graduated schedule through 2050 by calling for extra import charges on goods from countries that do not cap greenhouse gas emissions.³⁶ President Barack Obama considers ACES’s border tax adjustments clauses to be tariffs penalizing goods from countries that are not actively limiting GHG emissions, and criticism has arisen due to concerns of protectionism and because the bill appears to make tariff penalties the rule.³⁷ Obama recognized a legitimate concern that American businesses not be disadvantaged by higher energy costs, but emphasized that various forms of transitional assistance for energy-intensive industries already existed without the need for “a tariff approach.”³⁸

All U.S. legislative proposals have two common features: they exempt goods from border tax adjustments if imported from countries with minimum GHG emissions, and apply BTAs to “primary products” with high GHG emission levels during their production process, such as: iron, steel, aluminum, cement, glass, paper and pulp, chemicals, and industrial ceramics.³⁹ ACES also covers any “manufactured item for consumption” that generates “a substantial quantity of greenhouse gas emissions.”⁴⁰ These policies specifically target developing countries like China, Brazil, and India that are considered large emitters of GHGs because most developed countries already have emissions reduction plans and exports from smaller countries would be excluded by the legislation as they emit less than 0.5% of global emissions.⁴¹ Nevertheless, because of their drafting, these measures could easily affect other developing countries if they increase their GHG emissions, even if overall they contribute minimally in the context of global emissions, as we will explain later.

BORDER TAX ADJUSTMENTS AND THE WTO

As we will see, economists and lawyers in the field of both international trade and environmental law have discussed the legality of BTA measures under WTO law. However, up to now neither BTAs nor climate change policies have been challenged under the WTO dispute settlement system. Commentators have opined that a case regarding a BTA before the WTO would be difficult and controversial for lack of precedent at the WTO and before the international climate regime.⁴² Indeed, even the Kyoto Protocol provides in Article 2.3 that parties included in Annex I “shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, *including the adverse effects of climate change, effects on international trade, and social, environmental, and economic impacts on other Parties, especially developing country Parties.*”⁴³

Articles 2.1 and 2.2 of the Kyoto Protocol list various policies and measures by which industrialized countries can achieve emission limitations, including tax and duty exemptions and subsidies in all greenhouse gas emitting sectors.⁴⁴ Nevertheless,

the protocol lacks specificity because it does not offer concrete steps or targets to achieve those policies and measures. Due to this lack of specificity, it is difficult to claim jurisdiction over such behavior and to authorize a body or mechanism to address it. As a consequence, policies and measures are not included in the UN climate regime’s compliance system and dispute settlement procedure.⁴⁵

It is not clear that the Kyoto Protocol’s permissive rules on policies and measures are in conflict with WTO law, either directly or indirectly, and some commentators believe that properly designed BTAs could meet WTO rules, yet others disagree.⁴⁶ Discussions revolve around the legality of BTAs under the international trade system, the relation between BTAs and subsidies, the difficulty of assessing or calculating BTAs, and the justification of such measures under climate change regime.

BTAs ARE PERMISSIBLE UNDER WTO LAW

BTAs are explicitly allowed by the GATT as long as the tax imposed on imported goods is no greater than the tax established for similar domestic products.⁴⁷ It has been noted that “the GATT does not impose any requirement that nations adopt a tax base that can be administered without double taxation, in fact or in principle. For example, countries can impose a BTA on imports without any corresponding rebate for exports.”⁴⁸

However, it is still uncertain whether BTAs can be used for taxable inputs that are not physically incorporated into the final traded product. For instance, it is not clear if an import tax could vary based on the amount of carbon dioxide emitted during a good’s production—WTO rules would have to be interpreted in a way that considers products not to be “like” each other based on their carbon footprints.⁴⁹

The latter would be true only if this factor could be considered a “relevant comparator.”⁵⁰ To do so would require advancing the argument that any product which emits one ton of carbon is a “like product” akin to any other product which emits one ton of carbon.⁵¹

Some commentators assert that BTAs “raise the costs of imported products based on the amount of greenhouse gases emitted occurring abroad during the manufacturing of each product. In international trade, this type of regulation is a process and production method (“PPM”) measure and cannot be used to distinguish between like products.”⁵² Therefore, the argument goes, “BTAs on environmental taxes embodied in pollution-intensive traded goods are or should be barred when the tax is on emissions or a polluting input rather than the good itself.”⁵³

The non-adopted report of the GATT Tuna-Dolphin Panel was the origin of the process/product distinction:

under the national treatment principle of Article III, contracting parties may apply border tax adjustments with regard to those taxes that are borne by products, but not for domestic taxes not directly levied on products (such as income taxes). . . . The Panel considered that it would be inconsistent to limit the application of this Note to taxes that are born by products while

permitting its application to regulations not applied to the product as such.⁵⁴

However, like the Tuna-Dolphin decision itself, neither the GATT contracting parties nor the WTO have ever adopted the process/product approach. Several scholars “have observed that the process/product distinction itself was rooted in a misunderstanding by the panel of the GATT rules governing BTAs.”⁵⁵ Moreover, from a historical point of view, “it was the intent of the original GATT negotiators that process as well as product charges be border adjustable.”⁵⁶

In addition, further GATT and WTO Dispute Settlement decisions have moved away from the process/product approach and have since considered other methods for determining what “like product” is. Some of those consider the motivation for a government’s product categorization in determining its legitimacy, including the Japan Alcohol Panel Report (1987),⁵⁷ the U.S. Alcohol case,⁵⁸ and the U.S. Taxes on Automobiles Report.⁵⁹ This approach is potentially much more sensitive to environmental policy goals like climate change. We must also keep in mind that according to Article III, Section V of the United Nations Framework Convention on Climate Change (“UNFCCC”), “measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.”⁶⁰

Even if a BTA were permitted and properly assessed, it would still need to overcome other legal trade hurdles. Once found to be covered by GATT Article III, the BTA must also meet the substantive test in that provision, which requires that imported products not be treated less favorably than like domestic products (“national treatment”).⁶¹ In addition, the BTA must avoid discrimination between imports from different countries, as required by the “most-favored nation” obligation of GATT Article I.⁶² For some authors, a unilaterally imposed BTA on imported goods would most likely go against WTO rules, whereas using national treatment and most-favored nation principles⁶³ prevents different treatment of foreign products vis-à-vis domestic like products.⁶⁴

Furthermore, there is uncertainty as to what would happen with a cap-and-trade system and whether “the obligation to hold emission credits or allowances up to one’s actual level of carbon emissions be qualified as an ‘internal tax or other internal charge of any kind’ which, under GATT Article III:2, can be imposed also on imports.”⁶⁵

NOT IMPOSING BTAs IS EQUIVALENT TO A SUBSIDY

One of the most famous scholars to advocate BTAs is Joseph Stiglitz who affirmed that “[n]ot paying the cost of damage to the environment is a subsidy, just as not paying the full costs of workers would be.”⁶⁶ According to Stiglitz, “in most of the developed countries of the world today, corporations are paying the cost of polluting the global environment, in the form of taxes imposed on coal, oil, and gas.”⁶⁷ However, American firms are being massively subsidized because of the relative lack of this taxation in the U.S. He proposes a remedy:

[O]ther countries should prohibit the importation of American goods produced using energy intensive technologies, or, at the very least, impose a high tax on them, to offset the subsidy that those goods currently are receiving . . . [T]he United States itself has recognized this principle. It prohibited the importation of Thai shrimp that caused unnecessary deaths of large numbers of endangered species . . . [and] the WTO sustained the important principle that global environmental concerns trump narrow commercial interests [I]f one can justify restricting importation of shrimp . . . to protect turtles, certainly one can justify restricting importation of goods produced by technologies that unnecessarily pollute our atmosphere.⁶⁸

The EU also considers not applying BTAs as a potential illegal subsidy that causes two major problems:

The first is the competitiveness of energy-intensive industries in the EU vis-à-vis competing industries in jurisdictions without similar environmental restrictions. Normally, a foreign producer that operates at lower costs is simply more competitive and should . . . be able to out-compete its domestic rival. But when lower costs result from the lack of environmental costs, the advantage is artificial The second potential problem is “carbon leakage,” which means that any domestic carbon reduction would be offset in the global environmental commons by an increase in carbon emissions elsewhere.⁶⁹

But what happens if we apply this solution to developing countries? Should we not consider the principle of Common but Differentiated Responsibility? This principle is one of the cornerstones of sustainable development, emerging in the context of the 1992 Rio Earth Summit and underpinning the UNFCCC and the Kyoto Protocol.⁷⁰ However for developing countries,⁷¹ Stiglitz suggests something different: a common (global) environmental tax on emissions that addresses their social cost.⁷²

But, should we consider the absence of emission cuts a subsidy or a carbon tax? It is clearly not a subsidy in a traditional sense, but as some commentators have pointed out:

The problem is not that the Chinese government is paying Chinese producers or is otherwise transferring funds; rather, the problem is that the government fails to act, that is, it fails to impose and collect a carbon tax or to otherwise force Chinese producers to internalize the full cost of carbon emitted in China.⁷³

Thus, even if not imposing a carbon tax or not requiring producers to internalize the cost of carbon could be qualified as a “subsidy” under the WTO Agreement on Subsidies and Countervailing Measures, countervailing duties to offset subsidies by foreign governments can only be levied in the case of a particular subsidy⁷⁴ to “an enterprise or industry or group of enterprises or industries.”⁷⁵

A further question arises if “carbon credits” would be considered a subsidy if they are distributed for free. What would happen if, using the cap-and-trade system, domestic producers

who face competition from competitors who manufacture in countries without GHG laws were given free credits? This proposal would most likely provide a subsidy to the industry in comparison to other domestic industries and could potentially violate trade law, but this conclusion is arguable.

BTAs ARE DIFFICULT TO ASSESS OR CALCULATE

We have seen that BTAs could be used to “level the playing field between taxed domestic manufacturers and untaxed foreign competitors.”⁷⁶ Under GATT Articles II and III, WTO members may impose “internal charges” on imported goods.⁷⁷ Nevertheless, while internal charges can be relatively easy to identify, “it is difficult to assess the quantity of carbon emissions resulting from the production of a particular good. Could carbon taxes or higher energy costs linked to a cap-and-trade system qualify for a similar adjustment?”⁷⁸

Another key question is whether it is even possible to establish a trade appropriate BTA. A true BTA would tax the actual GHG emissions resulting from manufacture, which seems nearly impossible to quantify. Moreover, it is not yet clear whether a BTA could be administered in a way that is truly free trade neutral, or if due to its administrative difficulty it would inevitably be a trade barrier.

Proposed BTAs are generally based on the average additional cost of the GHG law and raise the following pertinent question under WTO law: if a general tax on carbon emissions is imposed based on the local corporation’s actual carbon emissions (so a low emissions factory pays less), and an international company with the same low emissions pays the industry average, would this be legal under WTO rules?

BTAs CAN BE JUSTIFIED TO PREVENT CLIMATE CHANGE

Even if BTAs conflict with international trade law, they might still be legal if justifiable under GATT Article XX,⁷⁹ which specifies the conditions under which State Members can be exempted from WTO general rules. Two of these enumerated exemptions could be relevant in the case of BTAs: if doing so is necessary “to protect human, animal, or plant life or health,”⁸⁰ or “relating to the conservation of exhaustible natural resources.”⁸¹ In addition, we must keep in mind that the introductory paragraph (“Chapeau”) of Article XX allows such measures as long as they “are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”⁸² Such an exemption would most likely “center on whether, under the introductory phrase of GATT Article XX, a [BTA] . . . is applied on a variable scale that takes account of local conditions in foreign countries, including their own efforts to fight global warming and the level of economic development in developing countries.”⁸³ Therefore, a government “would also have to show that the measure is being applied squarely to avoid ‘leakage,’ rather than to offset competitive concerns.”⁸⁴ Additionally, to qualify as an exception under Article XX, the BTA would also have to be the least trade restrictive measure.⁸⁵

A recent article also claims that BTAs “will only survive a WTO challenge if they successfully invoke one of the GATT Article XX environmental exceptions,” which would be difficult because BTAs are designed with the principle intent of maintaining economic competitiveness.⁸⁶ In contrast, if a BTA based on a domestic carbon tax neither discriminates against imports as compared to domestic products nor as compared to other imported goods, it might be permissible without resorting to the exemptions embodied in GATT Article XX.⁸⁷

BORDER TAX ADJUSTMENTS AND DEVELOPING COUNTRIES: LATIN AMERICA’S CASE

Some “targeted” countries of future BTAs have expressed their opposition to these measures, most notably China⁸⁸ and India.⁸⁹ However, for the most part, Latin America has not presented either support or opposition for BTAs. In analyzing why this may be the case, it is first important to examine the contribution of Latin American countries to global GHG production and the exports from Latin America on which BTAs could be applied in the future. Chile is presented as a case study.

In 2004, Chilean emissions were only 0.2% of total global emissions.⁹⁰ However, while the annual per capita emission level of 3.9 tons of CO₂ per inhabitant is very modest compared to developed nations, Chile is second in total GHG emissions in South America only to Venezuela,⁹¹ and has emissions similar to Portugal when it undertook its Kyoto reduction obligations.⁹²

Furthermore, the economy of Chile is becoming more and more dependent on coal. University of Chile studies show that by 2030 electric generation in Chile will be sixty percent dependent on coal. That means that CO₂ emissions may grow from 14.2 to 85 million tons of CO₂ between 2006 and 2030 and that emission per capita may grow from 3.6 tons of CO₂ in 2005 to 13.8 tons by 2030, more than China and OECD countries.⁹³ On March 1, 2011, the Central Castilla coal-fired power plant of the Atacama region,⁹⁴ the largest coal-fired power plant in South America, was approved by the Chilean impact assessment system (“SEIA”). The day after, SEIA approved a project aimed at extracting coal to be sold to coal-power plants. These developments have generated public concern and controversy.⁹⁵

Directly related to BTAs is the question of the carbon footprint of exported products. This was conceptualized as a way to internalize climate costs generated by the production and transportation of products. Studies have shown that Kyoto Protocol Annex I countries are net importers of carbon and that developing countries are carbon exporters.⁹⁶

Chile has begun to measure the carbon footprint of its main products, particularly exported ones. But in the end, the question is how deep the carbon footprint of each of those products and sectors is, and ultimately: are the countries, which receive Chilean exports, going to adopt a BTA that affects Chilean products? Copper mining, which accounts for the largest portion of exports, is energy intensive. Chile has become an OECD member,⁹⁷ and the OECD recommended that Chile increase its application of the polluter pays principle (“PPP”) in the Chilean economy.⁹⁸ The WTO recommends implementing this PPP

through measures such as a carbon tax and tradable permits. International trade rules require Chile to assume the cost of the “carbonization” of its economy or to accept the cost of lost competitiveness.⁹⁹

CONCLUSION

At first glance, BTAs appear to have the potential to reduce global GHG emissions, but there are some important caveats to consider: a) BTAs are unilateral in a world of multilateral climate change regimes;¹⁰⁰ b) BTAs could be used against developing countries, reversing the principle of common but differentiated responsibility; c) the permissibility of BTAs under the GATT depends on the legal interpretation of the relevant international treaties, colored by political and administrative concerns; d) BTAs most likely would not fit under WTO law, because it is unlikely that they would be the least trade restrictive measure; and e) if BTAs are feasible they will most likely be difficult to administer or enforce.

Independent from considerations of protectionism and transparency, BTAs could be a threat to Latin America through the pressure from foreign markets, in this case pushing towards a low carbon economy. Other such pressure is embodied in the October 2009 *Loi Grenelle 2* in France, which states that after January 2011, food imports will be regulated for carbon footprints, and that for French exports GHG emissions must be reported and included in labeling.¹⁰¹

If a carbon BTA could be perfectly designed and administered, theoretically there would be no effect on the share of exports to the country imposing the BTA. It would still be almost equally as profitable to export to that country, and would just be more expensive to buy the goods within the country (from either domestic or international suppliers). Some demand would shift from the carbon heavy items to cheaper, carbon-light items, but an ideal BTA should not have a large effect on the export economy of the developing country. A perfectly designed system could have neutral pressure on the economy of Chile and other countries. However, the issue is whether or not such an ideal BTA could be unilaterally imposed.

For a BTA to be effective, accurate calculation of carbon footprints would be necessary. Moreover, considering the PPP and the Common but Differentiated Responsibility principle, the main question relates to who must pay the costs of carbon produced by production and transportation: the consumer or producer? In a competitive world economy, if the price of an input is raised uniformly, the end product must rise or else the producing firms would find a better use for their capital and stop making the product. It seems that making a producer pay for the carbon directly is an administratively easier way to differentiate between production methods. These pressures, expressed by unilateral measures that should be avoided to address ecological problems, could mean that mitigation obligations might pass from developed to developing countries, reversing the Common but Differentiated Responsibilities principle.

Noting the passing of mitigation obligations in the unilateral application of BTAs, former Chilean President Lagos, Special UN Commissioner for Climate Change, proposed that, in addition to Chile's conformity with unilateral requirements for exporting to the United States or France, exporters to developing countries should equally consider the transportation costs of their goods, and the transportation of those goods.¹⁰²

However, from an environmental perspective, Chile should support BTAs because without them some high carbon industries might relocate to Chile, increasing the carbon footprint per capita disproportionately faster than would otherwise occur without carbon taxes in the developed countries. In early 2011, the Executive Secretary of the UNFCCC, Christiana Figueres, warned the Americas have become “fossilized,” rather than using renewable energy, and mentioned that Chile has already reached levels of emissions of gases typical of European countries.¹⁰³ Where does the responsibility for the increased carbon footprint in Chile lie? Should it be considered the responsibility of Chile, or that of the countries that induced industries to relocate unnecessarily? As this problem demonstrates, any truly sustainable application of BTAs will require a multilateral approach, taking into consideration the complex interactions between the many participants in the global trading system.



Endnotes: A Legal View on Border Tax Adjustments and Climate Change: A Latin American Perspective

¹ General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187 [hereinafter GATT 1994].

² *Id.* See J.C. Phillips, *Border Tax Adjustments in International Trade*, 9 U. QUEENSLAND L.J. 151, 151 (1975-1976) (noting that “[t]here is no single section in the GATT dealing exclusively with border tax adjustments but GATT rules in this regard are found scattered through several Articles of the agreement, in particular, Article II, Article III, and Article XVI.”).

³ GATT Working Party on Border Tax Adjustments, *Report of the Working Party on Border Tax Adjustments*, L/3464 (Dec. 2, 1970), www.worldtradelaw.net/reports/gattpanels/bordertax.pdf.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ *Borders*, CARBON TAX CTR., <http://www.carbontax.org/issues/border-adjustments/> (last visited Mar. 29, 2011).

⁸ John Whalley, *On the Effectiveness of Carbon-Motivated Border Tax Adjustments 5* (Asia-Pacific Research & Training Network on Trade, Working Paper No. 63, 2009).

⁹ *Id.* at 4-5.8.

¹⁰ AARON COSBEY, INT'L INST. FOR SUSTAINABLE DEV., *BORDER CARBON ADJUSTMENT 1*, n. 3 (2008), http://www.iisd.org/pdf/2008/cph_trade_climate_border_carbon.pdf; Sofia Persson, *Practical Aspects of Border Carbon Adjustment*

- ¹ World Summit on Sustainable Development, 26 Aug. – 4 Sept. 2002, *Plan of Implementation of the World Summit on Sustainable Development*, ¶ 84, *passim*, U.N. Doc. A/CONF.199/20 (Sept. 23, 2002).
- ² Iron Rhine Railway (Belg. v. Neth.), ¶ 59 (Perm. Ct. Arb. 2005) [hereinafter Iron Rhine Railway].
- ³ Vienna Convention on the Law of Treaties, art. 31.3.c, 1155 U.N.T.S. 331, 8 I.L.M. 679 (1969).
- ⁴ David Gantz, *Potential Conflicts Between Investor Rights and Environmental Regulation Under NAFTA's Chapter 11*, 33 GEO. WASH. INT'L L. REV. 651, 656 (2001).
- ⁵ General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT], http://www.wto.org/english/docs_e/legal_e/gatt47_02_e.htm.
- ⁶ Appellate Body Report, *European Communities – Regime for the Importation, Sale, and Distribution of Bananas*, ¶ 231, WT/DS27/AB/R (Sept. 9 1997).
- ⁷ Robert E. Hudec, “Like Product”: *The Differences in Meaning in GATT Articles I and III*, in REGULATORY BARRIERS AND THE PRINCIPLE OF NON-DISCRIMINATION IN WORLD TRADE LAW 101-23 (Thomas Cottier & Petros Mavroidis eds., 2000); Edward Laing, *Equal Access/Non-Discrimination and Legitimate Discrimination in International Economic Law*, 14 WIS. INT'L L.J. 246, 273 (1996).
- ⁸ Barnali Choudhury, *Recapturing Public Power: Is Investment Arbitration's Engagement of the Public Interest Contributing to the Democracy Deficit?*, 41 VAND. J. TRANSNAT'L L. 775, 828 (2008).
- ⁹ *Id.*
- ¹⁰ Andrea Bjorklund, *National Treatment*, in STANDARDS OF INVESTMENT PROTECTION 29, 49 (August Reinisch ed., 2008).
- ¹¹ First Partial Award *Methanex Corp. v. United States*, ¶ 158 (NAFTA Ch. 11 Arb. Trib. Aug. 7, 2002).
- ¹² World Conference on Human Rights, June 14-25, 1993, *Vienna Declaration and Programme of Action*, ¶ 8, U.N. Doc A/CONF.157/23 (July 12, 1993).
- ¹³ See Mitsuo Matsushita, *Some Issues of the SPS Agreement*, in THE ROLE OF THE JUDGE IN INTERNATIONAL TRADE REGULATION 193, 202 (Thomas Cottier & Petros Mavroidis eds., 2003).
- ¹⁴ See generally Marcos Orellana, *The Role of Science in Investment Arbitrations Concerning Public Health in the Environment*, 17 YB. INT'L ENV'L L. 48 (2006).
- ¹⁵ ROBERT E. HUDEC, *ESSAYS ON THE NATURE OF INTERNATIONAL TRADE LAW* 376 (1999).
- ¹⁶ First Partial Award, *S.D. Myers v. Canada*, ¶¶ 130, 137 (NAFTA Ch. 11 Arb. Trib. Nov. 13, 2000).
- ¹⁷ *Methanex Corp. v. United States*, Part II, Chapter I (NAFTA Ch. 11 Arb. Trib. Dec. 5, 2003). Such practice certainly raises questions on standards of evidence, and it was strongly condemned by the *Methanex* Tribunal.
- ¹⁸ Agreement on the Application of Sanitary and Phytosanitary Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493 [hereinafter SPS Agreement].
- ¹⁹ *Id.*
- ²⁰ Kojo Yelpaala, *Fundamentalism in Public Health and Safety in Bilateral Investment Treaties (Part II)*, 3 ASIAN J. WTO & INT'L HEALTH L. & POL'Y 465, 466, 475-79, 492-93 (2008).
- ²¹ SPS Agreement, *supra* note 18.
- ²² *Id.*
- ²³ Nicholas DiMasio & Joost Pauwelyn, *Nondiscrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?*, 102 AM. J. INT'L L. 48, 87-88 (2008).
- ²⁴ See Report of the International Law Commission on the Work of its Thirtieth Session, 33 UN GAOR Supp. (No. 10) at 31, commentary arts. 9-10, ¶ 18, UN Doc. A/33/10 (1978), http://untreaty.un.org/ilc/documentation/english/A_33_10.pdf.
- ²⁵ John Wickham, *Toward a Green Multilateral Investment Framework: NAFTA and the Search for Models*, 12 GEO. INT'L ENVTL. L. REV. 617, 631 (2000) (referring to United States Trade Representative (“USTR”), Briefing Paper for Staff of the U.S. Trade and Environment Policy Advisory Committee, TEPAC at 1, 5 Aug. 1998).
- ²⁶ *Cross-Border Trucking Services (U.S. v. Mex.)*, ¶ 247 (NAFTA Ch. 20 Arb. Trib. Feb. 6, 2001) [hereinafter *Cross-Border Trucking Services*]; see also Wickham, *supra* note 25, ¶ 276.
- ²⁷ The fact that the *Cross Border Trucking Services* case involved issues of services trade and investment may have influenced the panel's reading of the operation of the exception clause in the NAFTA services chapter. See *Cross-Border Trucking Services*, ¶122 (NAFTA Ch. 20 Arb. Trib.).
- ²⁸ *Id.* ¶ 250.
- ²⁹ *Id.* ¶¶ 122, 258. Article 1402 of the U.S.-Canada FTA contains other requirements besides the one quoted above, including prior notification of proposed treatment and that such different treatment is equivalent in effect to the treatment accorded by the Party to its persons for such reasons. See *id.* ¶ 250.
- ³⁰ The Panel also noted that the Preamble reflects a recognition that the Parties intended to “preserve their flexibility to safeguard the public welfare.” See *id.* ¶ 219.
- ³¹ *Id.* ¶ 260.
- ³² *Id.* ¶¶ 258-59 (“With regard to objectives, it seems unlikely to the Panel that the ‘in like circumstances’ language in Articles 1202 and 1203 [NT & MFN in Services] could be expected to permit maintenance of a very significant barrier to NAFTA trade, namely a prohibition on cross-border trucking services. Similarly, the Panel is mindful that a broad interpretation of the ‘in like circumstances’ language could render Articles 1202 and 1203 meaningless”).
- ³³ In this regard, NAFTA Article 1114 on Environmental Measures is rather circular in that it allows what it does not prohibit. But see, NAFTA Article 2103 concerning taxation.
- ³⁴ First Partial Award, *S.D. Myers v. Canada*, ¶ 250 (NAFTA Ch. 11 Arb. Trib. Nov. 13, 2000) (emphasis added).
- ³⁵ *Parkerings-Compagniet AS v. Lithuania*, ICSID Case No. ARB/05/8, ¶¶ 371, 392 (Sept. 11, 2007) (decided by the International Centre for Settlement of Investment Disputes (“ICSID”) based on a treaty between the Government of the Republic of Lithuania and the Government of the Kingdom of Norway).
- ³⁶ *Id.*
- ³⁷ *Id.*
- ³⁸ *Id.*
- ³⁹ See *Avena and Other Mexican Nationals (Mex. v. U.S.)*, 2004 I.C.J. 12, ¶ 55 (Mar. 31); *Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.)*, 1984 I.C.J. 392, ¶ 101 (Nov. 26).
- ⁴⁰ See OECD, NATIONAL TREATMENT FOR FOREIGN-CONTROLLED ENTERPRISES 22 (1993).
- ⁴¹ Giorgio Sacerdoti, *Foreign and Foreign-Owned Corporations in International Economic Law*, in FOREIGN INVESTMENT IN THE PRESENT AND A NEW INTERNATIONAL ECONOMIC ORDER 289, 302 (Detlev Chr. Dicke ed., 1987).
- ⁴² Cf. Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R (Mar. 12, 2001).
- ⁴³ *Gami Inv., Inc. v. United Mexican States*, ¶ 114 (NAFTA Ch. 11 Arb. Trib. Nov. 15, 2004).
- ⁴⁴ PETER MUCHLINSKI, MULTINATIONAL ENTERPRISES AND THE LAW 571 (2d ed. 2007).
- ⁴⁵ *Id.*
- ⁴⁶ Award on the Merits of Phase 2, *Pope & Talbot Inc. v. Canada*, ¶ 79 (NAFTA Ch. 11 Arb. Trib. Apr. 10, 2001), <http://www.appletonlaw.com/cases/P&T-Merits%20Award-April%2010,%202001.pdf> (“A formulation focusing on the like circumstances question, on the other hand, will require addressing any difference in treatment, demanding that it be justified by showing that it bears a reasonable relationship to rational policies not motivated by preference of domestic over foreign owned investments.”).
- ⁴⁷ *Id.* ¶ 78 (stating that differences in treatment will presumptively violate Article 1102(2)).
- ⁴⁸ *Occidental Exploration and Prod. Co. v. Ecuador*, Case No. UN 3467 (London Ct. Int'l. Arb. July 1, 2004) [hereinafter *Occidental Exploration*]. Ultimately, the *Occidental* Tribunal found that Ecuador breached its non-discrimination and fair and equitable obligations and awarded compensation in the amount of US\$71,533,649.00 plus 55% of the arbitration costs (US\$326,724.40).
- ⁴⁹ *Id.* ¶¶ 167-79. The *Occidental* Tribunal addressed both the MFN and NT standards under the same heading, perhaps due to the fact that both standards are included in the same article II(1) of the BIT.
- ⁵⁰ *Id.* ¶ 167-68.
- ⁵¹ *Id.* ¶ 168.
- ⁵² *Id.* ¶ 171.
- ⁵³ *Id.* ¶ 172.
- ⁵⁴ *Id.* ¶ 173.

⁵⁵ See Fabrizio Pagani & Marie-France Houde, *Most-Favored-Nation Treatment in International Investment Law* 16 (OECD, Working Paper No. 2004/2), <http://www.oecd.org/dataoecd/21/37/33773085.pdf>.
⁵⁶ See Jürgen Kurtz, *National Treatment, Foreign Investment and Regulatory Autonomy: The Search for Protectionism or Something More?*, in *NEW ASPECTS OF INTERNATIONAL INVESTMENT LAW* 311 (Philippe Kahn & Thomas Wälde eds., 2007).
⁵⁷ OECD, *1976 Declaration and Decisions on International Investment and Multinational Enterprises*, DAF/IME(2000)20 (Nov. 9, 2000), [http://www.oecd.org/officialdocuments/displaydocumentpdf?cote=daffe/ime\(2000\)20&doclanguage=en](http://www.oecd.org/officialdocuments/displaydocumentpdf?cote=daffe/ime(2000)20&doclanguage=en).

⁵⁸ Pagani & Houde, *supra* note 55.
⁵⁹ Occidental Exploration, *supra* note 48, ¶ 177.
⁶⁰ Aloysius Llamzon, *The Final Award in Occidental v. Ecuador*, in *THE REASONS REQUIREMENT IN INTERNATIONAL INVESTMENT ARBITRATION* 211, 227 (Guillermo Aguilar Alvarez & Michael Reisman eds., 2008).
⁶¹ See Kurtz, *supra* note 56.
⁶² OECD, *Chairman's Note on Environment and Related Matters and on Labour*, at 5 DAF/MAI(98)10 (Mar. 9, 1998), <http://www1.oecd.org/daf/mai/pdf/ng/ng9810e.pdf>.

ENDNOTES: MAKING U.S. TRADE POLICY SERVE GLOBAL FOOD SECURITY GOALS *continued from page 13*

¹ Barack Obama, Inaugural Address (Jan. 20, 2009). The transcript may be accessed at <http://www.whitehouse.gov/blog/inaugural-address/>.

² See Phil Stewart & Daniel Flynn, *G8 Pledges \$20 Billion in Farm Aid to Poor Nations*, REUTERS (July 10, 2009, 1:44 PM), <http://www.reuters.com/article/2009/07/10/us-g8-summit-idUSTRE5662VJ20090710> (noting that the money pledged would assist in addressing the lack of seeds, irrigation, and mechanisms for farmers in Africa to obtain a fair price for their produce).

³ See Press Release, USAID Administrator Dr. Rajiv Shah Announces 20 Feed the Future Initiative Focus Countries, USAID (Apr. 24, 2010), <http://www.usaid.gov/press/releases/2010/pr100424.html> (stating that the focus of Feed the Future would be to target the causes of hunger and reduce poverty, hunger, and undernutrition particularly in twenty focus countries).

⁴ *Strategic Review: Feed the Future*, USAID, 25, 29–30 (Dec. 17, 2010), <http://www.feedthefuture.gov/documents/MaliFTFStrategicReview.pdf>.

⁵ See Pascal Lamy, *The Final Countdown Starts Now*, WTO (Nov. 30, 2010), http://www.wto.org/english/news_e/news10_e/tnc_dg_stat_30nov10_e.htm (calling for an “intensive work programme” to finish the Doha Round by the end of 2011).

⁶ Press Release, USTR Ron Kirk Remarks on Trans-Pacific Partnership Negotiations, Office of the U.S. Trade Representative (Dec. 4, 2009), <http://www.ustr.gov/about-us/press-office/press-releases/2009/december/ustr-ron-kirk-remarks-trans-pacific-partnership-n>.

⁷ See Kelly Olson, *South Korea, US Sign Revisions to Free Trade Deal*, BLOOMBERG (Feb. 11, 2011, 6:18 AM), <http://www.bloomberg.com/news/2011-02-10/south-korea-us-sign-revisions-to-free-trade-deal.html> (noting however, that the issue involving beef was not included in the agreement).

⁸ Doug Palmer, *Lawmaker Eyes Early 2011 Votes on Trade Pacts*, REUTERS (Dec. 7, 2010, 4:08 PM), <http://www.reuters.com/article/2010/12/07/us-usa-trade-agreements-idUSTRE6B64HF20101207>.

⁹ *U.S. Agricultural Trade: Exports*, USDA (Mar. 5, 2010), <http://www.ers.usda.gov/Briefing/AgTrade/exports.htm>.

¹⁰ *E.g., Reports: Egyptian and Tunisian Riots Were Driven in Part by the Spike in Global Food Prices*, CLIMATE PROGRESS (Jan. 30, 2011, 3:16 PM), <http://climateprogress.org/2011/01/30/egyptian-tunisian-riots-food-prices-extreme-weather-and-high-oil-prices/> (noting that Egyptians and Tunisians were unhappy with the dramatic increase in the price of rice, cereals, cooking oil, and sugar); *Reports: Third Person Killed in Algerian Riots; Food Prices Drop*, CNN WORLD (Jan. 9, 2011), http://articles.cnn.com/2011-01-09/world/algeria.tunisia.protests_1_food-prices-government-websites-tunisian?_s=PM:WORLD (reporting that the rising food prices and the housing crisis led to the recent riots in Algeria).

¹¹ See generally ANTONIO LA VINA ET AL., WORLD RESOURCES INST., *AGRICULTURAL SUBSIDIES, POVERTY AND THE ENVIRONMENT: SUPPORTING A DOMESTIC REFORM AGENDA IN DEVELOPING COUNTRIES* (Jan. 2007), http://pdf.wri.org/asp_domestic_reform.pdf (arguing that a reform agenda should accompany a subsidy reform).

¹² See VICTORIA TAULI-COPUZ ET AL., THIRD WORLD NETWORK, *THE IMPACT OF GLOBALISATION AND LIBERALISATION ON AGRICULTURE AND SMALL FARMERS IN DEVELOPING COUNTRIES: THE CASE OF THE PHILIPPINES* 53 (Apr. 2006), http://www.twinside.org.sg/title2/par/vicky_ifad_paper.rev_21_april_2006.doc (“When more cheap, subsidized importation of chicken and chicken parts become the norm, the poultry industry in Alaminos could also be engulfed in a serious crisis.”).

¹³ Calculations based on USDA and OECD data in SOPHIA MURPHY ET AL., INST. FOR AGRIC. & TRADE POL’Y, *WTO AGREEMENT ON AGRICULTURE: A DECADE OF DUMPING* 2 (Feb. 2005), <http://www.iatp.org/iatp/publications.cfm?accountID=451&refID=48532>.

¹⁴ *Id.*

¹⁵ For a comprehensive discussion of this transition, see DARYLL E. RAY ET AL., AGRIC. POL’Y ANALYSIS CTR., *RETHINKING US AGRICULTURAL POLICY: CHANGING COURSE TO SECURE FARMER LIVELIHOODS WORLDWIDE* (Sept. 2003), <http://www.agpolicy.org/blueprint/APACReport8-20-03WITHCOVER.pdf>.

¹⁶ *Id.* at 9 (noting that the U.S. government agricultural subsidies rose from seven to thirteen billion dollars in the 1990s to over twenty billion dollars by 1999).

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¹⁸ *Id.*

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²¹ See, e.g., DEREK HEADEY & SHENGGEN FAN, INT’L FOOD POLICY RESEARCH INST., *REFLECTIONS ON THE GLOBAL FOOD CRISIS. HOW DID IT HAPPEN? HOW HAS IT HURT? AND HOW CAN WE PREVENT THE NEXT ONE?* 40, 50–51 (2010), <http://www.ifpri.org/sites/default/files/publications/tr165.pdf>.

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²³ STEVEN ZAHNISER & ZACHARY CRAGO, U.S. DEP’T OF AGRIC., *NAFTA AT 15: BUILDING ON FREE TRADE* 16 (Mar. 2009), <http://www.ers.usda.gov/Publications/WRS0903/WRS0903.pdf>.

²⁴ *Id.*

²⁵ *Id.* at 27–28.

²⁶ TIMOTHY A. WISE, BOSTON UNIV., *REFORMING NAFTA’S AGRICULTURAL PROVISIONS, THE FUTURE OF NORTH AMERICAN TRADE POLICY: LESSONS FROM NAFTA* 35 (Nov. 2009), <http://www.bu.edu/pardee/files/2009/11/Pardee-Report-NAFTA.pdf>.

²⁷ *Id.* at 36.

²⁸ See William P. Egan, *NAFTA and American Organizational Behavior*, 5 *PUB. ADMIN. & MGMT.* 138, 153 (2000), <http://www.spaef.com/file.php?id=319> (noting that the state of Pennsylvania lost 17,978 jobs according to the NAFTA Transitional Adjustment Assistance unemployment program).

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³⁰ *Id.*

³¹ Mary Hendrickson & William Heffernan, *Concentration of Agricultural Markets* (Apr. 2007), <http://www.foodcircles.missouri.edu/07contable.pdf>.

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³⁶ *Farm Income and Costs: 2011 Farm Sector Income Forecast*, U.S. DEP'T OF AGRIC. ECON. RESEARCH SERV., <http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm> (last visited Jan. 26, 2011).

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³⁹ ZORAIDA GARCIA, FOOD & AGRIC. ORG., AGRICULTURE, TRADE NEGOTIATIONS AND GENDER (2006), <http://www.fao.org/docrep/009/a0493e/a0493e04.htm#bm4> (presenting case studies conducted in countries including Ghana and the Philippines supporting this finding).

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⁴⁴ *Id.* at 10.

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⁴⁹ *Transcript: Press Conference After WTO Ministerial in New Delhi, India*, OFFICE OF THE U.S. TRADE REPRESENTATIVE (2009), <http://www.ustr.gov/press-office/transcript-press-conference-after-wto-mini> (providing the insights of Ambassador Kirk).

⁵⁰ "More Poor" in India than Africa, BBC (July 13, 2010, 1:18 AM), <http://www.bbc.co.uk/news/10609407> (presenting the findings of a study finding the Indian states have 421 million "poor" people).

⁵¹ KAREN HANSEN-KUHN, ACTIONAID INT'L USA, POLICIES AND PRIORITIES: SALVAGING SPECIAL PRODUCTS FROM THE WRECKAGE OF GLOBAL TRADE TALKS 5 (Nov. 2006), http://actionaidusa.org/assets/pdfs/food_rights/policies_priorities_fall2006_bplan.pdf (stating even countries that are not classified as least-developed countries such as Kenya are experiencing high-levels of poverty and a fragile economy as a result of climatic challenges).

⁵² See *id.* at 1 (specifying that "Special Products are agricultural commodities that are particularly important for achieving national development goals," and that Special mechanisms allow qualified countries to "adjust trade protections in the face of import surges").

⁵³ See *Developing Countries*, WORLD TRADE ORG., http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd14_devopcount_e.htm (Dec. 1, 2004) (noting that developing countries wish to identify some products as "special products," to make lower tariff reductions on these products); Aileen Kwa, *Why the SSM Became a Major Issue at the WTO*, SOUTH CENTRE, http://www.southcentre.org/index.php?option=com_content&view=article&id=1285%3Asb46a12&catid=144%3Asouth-bulletin-individual-articles&Itemid=287&lang=en (last visited Mar. 24, 2011) (noting that "[m]ost developing countries want a special safeguard mechanism (SSM) in the WTO to defend small farmers from import surges" but that agricultural exporting countries will counter by arguing that it affects their exports and defining a special safeguard mechanism as an instrument proposed by a number of countries that "would allow countries to impose a safeguard (i.e. an additional duty) if i) agricultural import volumes are increasing rapidly so that they surpass a certain volume trigger level or ii) if

prices of the imported products are on the decline, and go below a certain price level").

⁵⁴ See Kwa, *supra* note 53.

⁵⁵ See generally Heikki Lehtonen & Sanna Kujala, AGRIFOOD RESEARCH FINLAND/ECONOMIC RESEARCH, *Climate Change Impacts on Crop Risks and Agricultural Production in Finland*, MTT (2007) <http://ageconsearch.umn.edu/bitstream/9259/1/sp07le01.pdf> (analyzing the changes in agricultural production due to climate change).

⁵⁶ E.g., Christoph Müller et al., *Climate Change Risks for African Agriculture*, PNAS EARLY EDITION, Feb. 8, 2011 (reviewing the impact of climate change on African agriculture and food security).

⁵⁷ See HIGH LEVEL TASK FORCE ON THE GLOBAL FOOD SECURITY CRISIS, COMPREHENSIVE FRAMEWORK FOR ACTION 8-9 (July 2008), <http://www.un.org/issues/food/taskforce/Documentation/CFA%20Web.pdf> (emphasizing the importance of establishing physical or virtual humanitarian food reserves to provide better access to food stocks).

⁵⁸ Rudy Ruitenberg, *Agriculture Ministers Call for G20 Action to End Food Price Manipulation*, BLOOMBERG (Jan. 22, 2011, 4:47 PM), <http://www.bloomberg.com/news/2011-01-22/agriculture-ministers-seek-end-to-price-manipulation-update1-.html>.

⁵⁹ SOPHIA MURPHY, INST. FOR AGRIC. & TRADE POL'Y, GRAIN RESERVES: A SMART CLIMATE ADAPTATION POLICY 2 (Nov. 2010), http://www.iatp.org/climate/files/document/Web_FoodReserves_SM.pdf.

⁶⁰ *Id.*

⁶¹ Sophia Murphy, *Eyes on London for Global Food Aid*, IATP THINK FORWARD BLOG (Mar. 2, 2011), <http://iatp.typepad.com/thinkforward/trade/>.

⁶² *The Agreements*, WTO, http://www.wto.org/english/thewto_e/whatis_e/tif_e/utw_chap2_e.pdf (last visited Mar. 24, 2011) ("Developing countries do not have to cut their subsidies or lower their tariffs as much as developed countries, and they are given extra time to complete their obligations. Least-developed countries don't have to do this at all." Many of them, however, have already implemented substantial tariff cuts under previous negotiating rounds or as a result of structural adjustment programs.).

⁶³ For a fuller discussion of WTO rules and reserves, see SOPHIA MURPHY, INST. FOR AGRIC. & TRADE POL'Y, TRADE AND FOOD RESERVES: WHAT ROLE DOES THE WTO PLAY? (Sept. 2010). <http://www.iatp.org/iatp/publications.cfm?refid=107697>.

⁶⁴ See FOOD & AGRIC. ORG., POLICIES FOR THE EFFECTIVE MANAGEMENT OF FOOD PRICE SWINGS IN AFRICA 6 (2008), http://www.fao.org/docs/up/easypol/825/mng_fd_mrkt_213EN.pdf (noting however, that "in an environment of increasing prices, ceilings are difficult to defend and therefore, targeting a certain price level may not be practical").

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ See ARZE GLIPO, ECOFAIR TRADE DIALOGUE, ACHIEVING FOOD AND LIVELIHOOD SECURITY IN DEVELOPING COUNTRIES: THE NEED FOR A STRONGER GOVERNANCE OF IMPORTS 49 (Dec. 2006), http://www.ecofair-trade.org/pics/en/EcoFair_Trade_Paper_No2_Glipo_new.pdf (stating that price bands can "stabilize internal prices for agricultural commodities [and] can be calculated according to domestic production and transaction costs of peasant production within a region or country").

⁶⁸ *WTO Mini-Ministerial Ends In Collapse*, WBRIDGES DAILY UPDATE, Vol. 10 (Int'l Ctr. for Trade & Sustainable Dev., Geneva, Switz.) July 10, 2008, at 1-2, <http://ictsd.org/downloads/2008/07/daily-update-issue-102.pdf>.

⁶⁹ HANSEN-KUHN, *supra* note 51, at 6.

⁷⁰ See generally ANTOINE BOUËT ET AL., INT'L FOOD POL'Y RESEARCH INST., THE EFFECTS OF ALTERNATIVE FREE TRADE AGREEMENTS ON PERU (Nov. 2008), <http://www.ifpri.org/sites/default/files/publications/ifridp00824.pdf>.

⁷¹ *Malaysia Officially Joins TPP Talks*, TRANS-PACIFIC P'SHIP DIGEST (Oct. 6, 2010), http://www.tppdigest.org/index.php?option=com_content&view=article&id=233:malaysia-officially-joins-tpp-talks&catid=1:latest-news.

⁷² *Trans-Pacific Partnership Agreement*, AUSTL. FAIR TRADE & INV. NETWORK LTD., <http://aftinet.org.au/cms/trans-pacific-partnership-agreement/trans-pacific-partnership-agreement> (last visited Mar. 22, 2011).

⁷³ See *S. Korea to Exclude Rice, Beef Pacts from FTA Talks with U.S.*, BILATERALS.ORG (Feb. 23, 2006), <http://www.bilaterals.org/spip.php?article3922> (noting that the recently signed US-Korea FTA excludes liberalization of trade in rice).

⁷⁴ Ivy Mungcal, *Feed the Future Targets Larger-Scale Projects in Fewer Countries*, DEVEX (May 21, 2010), <http://www.devex.com/en/blogs/development-assistance-under-obama/feed-the-future-targets-larger-scale-projects-in-fewer-countries>.

⁷⁵ See generally Laura Pillsbury, *Global Food Safety Policy: Coordinating Science, Technology and Society across the Government, Industry and Consumer Sectors*, WORLD OF FOOD SCI., <http://www.worldfoodscience.org/cms/?pid=1003865> (last visited Mar. 24, 2011).

⁷⁶ See *Childhood Obesity—2010 Update of Legislative Policy Options*, NAT'L CONFERENCE OF STATE LEGISLATURES (2011), <http://www.ncsl.org/default.aspx?tabid=22156>.

⁷⁷ See Donald Carr, *Corn Subsidies Make Unhealthy Food Choices the Rational Ones*, GRIST (Sept. 21, 2010), <http://www.grist.org/article/food-2010-09-21-op-ed-corn-subsidies-make-unhealthy-food-choices/>.

⁷⁸ Mike Conlon and Dan Plunkett, *NAFTA Gives U.S. Exporters an Edge in Mexican Market*, USDA (Oct. 14, 2004), <http://www.fas.usda.gov/info/agexporter/1997/April%201997/naftamex.html>.

⁷⁹ See generally FOOD & AGRIC. ORG., TRADE REFORMS AND FOOD SECURITY: CONCEPTUALIZING THE LINKAGES 133-40 (2003), <http://www.fao.org/docrep/005/y4671e/y4671e00.htm>.

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⁸¹ Christian Nordqvist, *USA and Mexico are the Fattest Countries in the World*, MEDICAL NEWS TODAY, Sept. 23, 2010, <http://www.medicalnewstoday.com/articles/202313.php>.

⁸² Corinna Hawkes & AnnMarie Thow, *The Implications of the Central American Free Trade Agreement (CAFTA) for the Nutrition Transition in Central America*, 24 PAN AM. J. OF PUB. HEALTH 345 (2008), <http://journal.paho.org/uploads/1228839686.pdf>.

⁸³ See Jen Ross, *Brazil Makes Headway in Bid for 'Zero Hunger'*, CHRISTIAN SCIENCE MONITOR (Sept. 11 2006), <http://www.csmonitor.com/2006/0911/p04s01-woam.html>.

⁸⁴ See generally SCOTT SINCLAIR, CANADIAN CTR. FOR POLICY ALTERNATIVES, NEGOTIATING FROM WEAKNESS (Apr. 2000), <http://www.policyalternatives.ca/sites/default/files/uploads/publications/reports/docs/Negotiating%20From%20Weakness%20EU%20Canada.pdf> (exemplifying the Canada-EU trade treaty as indicative of this proposition).

⁸⁵ See North American Free Trade Agreement, U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 289 (1993) (focusing on Chapter 11 as outlining investor state dispute settlements).

⁸⁶ *Id.*

⁸⁷ See generally Barbara Koremenos, *If Only Half of International Agreements Have Dispute Resolution Provisions, Which Half Needs Explaining?*, J. OF LEGAL STUDIES, Jan. 2007, at 189-93, http://sitemaker.umich.edu/koremenos/files/koremenos_jls2007.pdf.

⁸⁸ See *Investment Rules in Trade Agreements*, INST. FOR POLICY STUDIES (July 21, 2010), www.ips-dc.org/reports/top_10_changes_investment_rules.

⁸⁹ See generally SARAH ANDERSON & SARAH GRUNSKY, FOOD & WATER WATCH, CHALLENGING CORPORATE INVESTOR RULE (Apr. 2007), <http://www.ips-dc.org/reports/070430-challengingcorporateinvestorrule.pdf>.

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⁹⁴ EARTHJUSTICE ET AL., INVESTMENT RULES IN TRADE AGREEMENTS: TOP 10 CHANGES TO BUILD A PRO-LABOR, PRO-COMMUNITY AND PRO-ENVIRONMENT TRANS-PACIFIC TRADE AGREEMENT (Aug. 9, 2010), www.ips-dc.org/files/2352/Investment_Rules_Trade_Agreements.pdf.

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⁹⁹ See Geraldine Ryerson-Cruz, *Obama's Food Security Pledge at G8 a Laudable Step; Now Must Meet Goals, Aid Agency Says*, WORLD VISION (2011), <http://www.worldvision.org/content.nsf/about/20090710-G8-italy-03>.

¹⁰⁰ See R. Dennis Olson et al., *Towards Food Sovereignty: Constructing an Alternative to the World Trade Organization's Agreement on Agriculture 5* (2003), <http://www.tradeobservatory.org/library.cfm?RefID=25961>.

¹⁰¹ *Id.* at 7.

¹⁰² *Id.* at 8.

¹⁰³ See John Ikerd, Professor, Presentation at Utah Bio-engineers Annual Conference, Logan, UT: *Your Food Systems: Are They Secure?* (Oct. 2005), http://web.missouri.edu/~ikerdj/papers/Utah-Bioneers.htm#_ftn2.

¹⁰⁴ The International Assessment of Agricultural Knowledge, Science and Technology for Development ("IAASTD"), a three-year process involving 400 experts from around the world provides comprehensive recommendations on the sustainable agricultural practices and policies needed to meet these challenges.

ENDNOTES: THE LURKING COSTS OF GREEN TECHNOLOGY METALS IN A GLOBAL MARKET *continued from page 14*

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⁴ Karl Russell, *Many Want Rare Earths, but Few are Mining Them*, N.Y. TIMES (Feb. 6, 2011), <http://www.nytimes.com/2011/02/06/business/06metrics.html?ref=global> (documenting the low number of mines relative to demand, in part because of the extensive environmental damage that results from extraction to industrial application).

⁵ The UN Environment Programme ("UNEP") held its second session of the Intergovernmental Negotiating Committee to Prepare a Global Legally Binding Instrument on Mercury ("INC2") in Chiba, Japan, Jan. 24-28, 2011. *Intergovernmental Negotiating Committee*, UN ENV'T PROGRAMME [hereinafter INC2], <http://www.unep.org/hazardoussubstances/Mercury/Negotiations/INC2/tabid/3468/Default.aspx> (last visited Apr. 17, 2011) (addressing global mercury

pollution by prioritizing source emission reductions, discouraging demand, and employing current science and technological controls, driven by mercury's emission from coal-burning, artisanal gold-smelting, and other resource processing).

⁶ See Wald, *supra* note 1.

⁷ These mandates expanded greatly through the 1990 amendments, but the history of broad authority to regulate against endangerment stems from *NRDC v. Train*, 545 F.2d 320 (2d Cir. 1976).

⁸ See, e.g., *Massachusetts v. EPA*, 549 U.S. 497 (2007) (recognizing the possibility of the EPA to make an endangerment finding of carbon dioxide under §202(a)(1) of the Clean Air Act).

⁹ Recent caselaw includes *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008); *Sierra Club v. Sandy Creek Energy Associates*, 2010 WL 4725044 (5th Cir. Nov. 23, 2010), and responsive EPA regulation includes National Emission Standards for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants, 76 Fed. Reg. 13852 (proposed Mar. 14, 2011) (to be codified at 40 C.F.R. pt 63); National Emission Standards for Hazardous Air Pollutants: Primary Lead Smelting, 76 Fed. Reg. 9410 (proposed Feb. 17, 2011) (to be codified at 40 C.F.R. pt 63).

¹⁰ UN Economic Commission for Europe, Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, T.I.A.S. No. 10541, 18 I.L.M. 1442 (1979). Signatories include nearly all of Europe, Russia, the former Soviet states, Canada, and the United States; the status of ratification may be found at *Status of Ratification of The 1979 Geneva Convention on Long-range*

Transboundary Air Pollution as of 01 March 2011, UN ECON. COMM'N FOR EUROPE, http://www.unece.org/env/lrtap/status/lrtap_st.htm (last visited Apr. 15, 2011).

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¹² David Kirby, *Made in China: Our Toxic Imported Air Pollution*, DISCOVER (Mar. 18, 2011), <http://discovermagazine.com/2011/apr/18-made-in-china-our-toxic-imported-air-pollution> (“Even as America tightens emission standards, the fast-growing economies of Asia are filling the air with hazardous components that circumnavigate the globe.”).

¹³ Keith Bradsher, *Taking a Risk for Rare Earths*, N.Y. TIMES, Mar. 8, 2011, at B1 (detailing the Malaysian construction of a rare earth element refinery, to

“break China’s chokehold on the strategic metals crucial to products as diverse as Apple’s iPhone, Toyota’s Prius and Boeing’s smart bombs.”).

¹⁴ Phil Taylor, *Nev. Mining Firm Seeks Place in Emerging Lithium Market*, N.Y. TIMES (June 17, 2010), <http://www.nytimes.com/gwire/2010/06/17/17greenwire-nev-mining-firm-seeks-place-in-emerging-lithium-11460.html?pagewanted=1&sq=lithium&st=cse&scp=10>.

¹⁵ See Russell, *supra* note 4.

¹⁶ Kirby, *supra* note 12.

¹⁷ An example of an international legal framework addressing waste management includes the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Mar. 22, 1989, 1653 U.N.T.S. 57.

ENDNOTES: FOREIGN INVESTMENT CONTRACTS IN THE OIL & GAS SECTOR *continued from page 20*

³⁰ E.g., the 1994 Cairn Energy PRODUCTION SHARING CONTRACT BETWEEN THE GOVERNMENT OF THE PEOPLE’S REPUBLIC OF BANGLADESH & BANGLADESH OIL, GAS & MINERAL CORPORATION, CAIRN ENERGY PLC AND HOLLAND SEA SEARCH BANGLADESH B.V. (BLOCK 16) (1994) (Bangl.) (on file with the author) mentions the applicability of Bangladeshi law to the implementation of the contract generally (art. 28.1), but the article specifically referring to the protection of the environment only mentions “generally accepted standards of the International Petroleum Industry” (art. 10.6). Similarly, the 2000 RSM PRODUCTION SHARING AGREEMENT FOR PETROLEUM EXPLORATION, DEVELOPMENT AND PRODUCTION BETWEEN BELIZE AND RSM PRODUCTION CORPORATION (AREA A) (Apr. 3, 2000) (Belize) (on file with the author) is governed by the laws of Belize (art. 29.1) but the section on environment (art. 23.1) refers only to “standards acceptable to practices of the International Petroleum Industry.”

³¹ Ibibia Lucky Worika, *Environmental Concepts and Terms in Petroleum Legislation & Contracts: A Preliminary Study*, in ENVIRONMENTAL REGULATION OF OIL AND GAS 393, 398-401 (Zhiguo Gao ed., 1998).

³² *Id.* at 401-02.

³³ *Id.* at 402.

³⁴ AGREEMENT BETWEEN THE ROYAL GOVERNMENT OF CAMBODIA, CAMBODIAN NATIONAL PETROLEUM AGENCY, CHEVRON OVERSEAS PETROLEUM (CAMBODIA) LIMITED, MOECO CAMBODIA CO. LTD AND WOODSIDE SOUTH EAST ASIA PTY. LTD., art. 1.2 Definitions (Aug. 15, 2002) (Cambodia) (on file with the author).

³⁵ *Environmental Principles*, AM. PETROLEUM INST., <http://www.api.org/aboutapi/principles/index.cfm> (last updated Mar. 7, 2011).

³⁶ *Id.*

³⁷ E.g., AM. PETROLEUM INST., *Recommended Practice 51R, Environmental Protection for Onshore Oil and Gas Production Operations and Leases* (2009), <http://publications.api.org/Exploration-Production.aspx>.

³⁸ INT’L ASS’N OF OIL & GAS PRODUCERS, PRINCIPLES AND GUIDELINES FOR THE OIL & GAS INDUSTRY, Report No. 6.88/307 (2000), <http://www.ogp.org.uk/pubs/307.pdf>.

³⁹ AUSTRAL. PETROLEUM PROD. & EXPLORATION ASS’N, APPEA CODE OF ENVIRONMENTAL PRACTICE (2008), http://www.appea.com.au/images/stories/Policy_-_Environment/Code_of_Environmental_Practice.pdf.

⁴⁰ See TC 67—*Materials, Equipment and Offshore Structures for Petroleum, Petrochemical and Natural Gas Industries*, INT’L ORG. FOR STANDARDIZATION, http://www.iso.org/iso/standards_development/technical_committees/list_of_iso_technical_committees/iso_technical_committee.htm?commid=49506 (last visited Apr. 2, 2011). The Association of International Petroleum Negotiators also considered adopting model environmental clauses and standards for use in negotiating host-government instruments but ultimately discarded the proposal because it was viewed as too controversial by the Association’s members.

⁴¹ Alexandra S. Wawryk, *Adoption of International Environmental Standards by Transnational Oil Companies: Reducing the Impact of Oil Operations in Emerging Economies*, 20 J. ENERGY & NAT. RESOURCES L. 402, 431 (2002).

⁴² CONCESSION AGREEMENT FOR THE EXPLORATION DEVELOPMENT AND PRODUCTION OF OIL AND NATURAL GAS cl. 21-1 (2001) (Braz.), http://www.anp.gov.br/brnd/round9/geral/contratos/ContratoR3_eng.pdf.

⁴³ AGREEMENT ON THE JOINT DEVELOPMENT AND PRODUCTION SHARING FOR THE AZERI AND CHIRAG FIELDS AND THE DEEP WATER PORTION OF THE GUNASHLI FIELD IN THE AZERBAIJAN SECTOR OF THE CASPIAN SEA, THE STATE OIL COMPANY OF THE AZERBAIJAN REPUBLIC- AMOCO CASPIAN SEA PETROLEUM LIMITED ET AL., art. 26.3 (Sept. 20, 1994) (Azer.), http://www.bp.com/liveassets/bp_internet/bp_caspian/bp_caspian_en/STAGING/local_assets/downloads_pdfs/pq/ACG_PSA.pdf.

⁴⁴ NAT’L OIL CO. OF LIBERIA, MODEL PRODUCTION SHARING CONTRACT, art. 6.5 (2009), <http://www.molme.gov.lr/doc/MODEL%20PRODUCTION%20SHARING%20CONTRACT.pdf>.

⁴⁵ Lee, *supra* note 10.

⁴⁶ See, e.g., Vingradov *supra* note 3, at 98-115.

⁴⁷ MODEL PRODUCTION SHARING CONTRACT (1994) (Mauritania), <http://resources.revenuewatch.org/sites/default/files/MauritaniaContracttypeAngl.pdf>.

⁴⁸ SHAH DENIZ PSA EXCERPT, GAS EXPORT PROJECT STAGE 1 DEVELOPMENT, ENVIRONMENTAL & SOCIO-ECONOMIC IMPACT ASSESSMENT, Appendix I art. 26.1 (Aug. 2002) (Azer.), http://www.bp.com/liveassets/bp_internet/bp_caspian/bp_caspian_en/STAGING/local_assets/downloads_pdfs/o/SD_English_ESIA_Main_ESIA_Content_SD_Appendix_01_xtract_En_.pdf.

⁴⁹ ANDREA SHERBERG, STABILIZATION CLAUSES AND HUMAN RIGHTS, at vii (2008), [http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_StabilizationClausesandHumanRights/\\$FILE/Stabilization+Paper.pdf](http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_StabilizationClausesandHumanRights/$FILE/Stabilization+Paper.pdf).

⁵⁰ See generally PETER D. CAMERON, ASS’N OF INT’L PETROLEUM NEGOTIATORS, STABILISATION IN INVESTMENT CONTRACTS AND CHANGES OF RULES IN HOST COUNTRIES: TOOLS FOR OIL & GAS INVESTORS (2006), http://lba.legis.state.ak.us/sga/doc_log/2006-07-05_aipn_stabilization-cameron_final.pdf; Abdullah Al Faruque, *The Rationale and Instrumentalities for Stability in Long-Term State Contracts: The Context for Petroleum Contracts* (2006) 7 J. WORLD INV. & TRADE 85; A.F.M. Maniruzzaman, *The Pursuit of Stability in International Energy Investment Contracts: A Critical Appraisal of the Emerging Trends* 1 J. WORLD ENERGY L. & BUS. (2008) 121.

⁵¹ SHERBERG, *supra* note 49.

⁵² See *id.* at 17.

⁵³ PRODUCTION SHARING AGREEMENT IN RESPECT OF THE NORTH CASPIAN SEA (KASHAGAN) AMONG AGIP CASPIAN SEA B.V.; BG EXPLORATION LIMITED; BP KAZAKSTAN LIMITED; DEN NORSKE STATS OLJESELSKAP A.S.; MOBIL OIL KAZAKSTAN INC.; SHELL KAZAKSTAN DEVELOPMENT B.V.; TOTAL EXPLORATION PRODUCTION KAZAKSTAN; JSC KAZAKSTANCASPIANSHELF; THE REPUBLIC OF KAZAKSTAN AND JSC NATIONAL OIL AND GAS COMPANY KAZAKOIL, art 40.2 (Nov. 18, 1997) (Kaz.) (on file with the author).

⁵⁴ Lorenzo Cotula, *Reconciling Regulatory Stability and Evolution of Environmental Standards in Investment Contracts: Toward a Rethink of Stabilization Clauses*, 1 J. WORLD ENERGY L. & BUS. 158, 174 (2008).

⁵⁵ See generally *id.*; Kyla Tienhaara, *Unilateral Commitments to Investment Protection: Does the Promise of Stability Restrict Environmental Development?* 17 Y.B. INT’L ENVTL. L. 139 (2008).

⁵⁶ See, e.g., WORLD BANK, ENVIRONMENTAL GOVERNANCE IN OIL-PRODUCING DEVELOPING COUNTRIES 1 (Eleodoro Alba ed., 2010), http://siteresources.worldbank.org/EXTOGMC/Resources/336929-1266963339030/eifd17_environmental_governance.pdf.

⁵⁷ *Id.*

⁵⁸ See generally MALTA ENV’T & PLANNING AUTHORITY, ENVIRONMENTAL IMPACT ASSESSMENTS (1994), <http://www.mepa.org.mt/lpgdocuments/policies/eia.pdf>.

⁵⁹ KASHAGAN PSA *supra* note 53, at art. 5.2b.

⁶⁰ MINISTRY OF PETROLEUM AND NATURAL GAS, MODEL PRODUCTION SHARING CONTRACT (SEVENTH OFFER OF BLOCKS), art. 14.5 (2007) (India), <http://petroleum.nic.in/nelp3.pdf>

⁶¹ See, e.g., *Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis*, U.S. GEOLOGICAL SURVEY, <http://pubs.usgs.gov/fs/fs-0028-01/> (last modified Dec. 14, 2005).

⁶² See generally *Arctic National Wildlife Refuge*, DEFENDERS OF WILDLIFE, http://www.defenders.org/programs_and_policy/habitat_conservation/

federal_lands/national_wildlife_refuges/threats/arctic/index.php (last visited Apr. 2, 2011).

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