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The E15 Initiative

STRENGTHENING THE GLOBAL TRADE AND INVESTMENT SYSTEM FOR SUSTAINABLE DEVELOPMENT

The Role of PPMs in Extractive Industries

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March 2016

E15 Expert Group on
Trade and Investment in Extractive Industries

Think Piece

Co-convened with

iisd International Institute for Sustainable Development / Institut international du développement durable

ACKNOWLEDGMENTS

Published by

International Centre for Trade and Sustainable Development (ICTSD)
7 Chemin de Balexert, 1219 Geneva, Switzerland
Tel: +41 22 917 8492 – E-mail: ictsd@ictsd.ch – Website: www.ictsd.org
Publisher and Chief Executive: Ricardo Meléndez-Ortiz

World Economic Forum
91-93 route de la Capite, 1223 Cologny/Geneva, Switzerland
Tel: +41 22 869 1212 – E-mail: contact@weforum.org – Website: www.weforum.org
Co-Publisher and Managing Director: Richard Samans

Acknowledgments

This paper has been produced under the E15Initiative (E15). Implemented jointly by the International Centre for Trade and Sustainable Development (ICTSD) and the World Economic Forum, the E15 convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

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The Expert Group on Trade and Investment in Extractive Industries is co-convened with the International Institute for Sustainable Development (IISD). http://www.iisd.org/

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The author is indebted to Sofie H. Flensborg, ICTSD, for very valuable comments and suggestions and to Michelle Schupp for research assistance in preparing the paper.

With the support of:

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Economic Affairs SECO

Canada

And ICTSD's Core and Thematic Donors:

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SWEDEN

Government of the Netherlands

Ministry of Foreign Affairs of Denmark

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Norwegian Ministry of Foreign Affairs

Citation: Cottier, Thomas. *The Role of PPMs in Extractive Industries.* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2016. www.e15initiative.org/

ISSN 2313-3805

ABSTRACT

Extractive industries based on foreign direct investment (FDI) are part of a triangle, consisting of the home state, the host state, and the company concerned.

The responsibility and authority to regulate extractive industries today entirely lies with the host state based on the principle of territoriality and permanent sovereignty over natural resources. Companies engaged in FDI in this area enjoy the benefit of support under diplomatic protection and an ever-increasing number of bilateral investment treaties, while their obligations to protect the environment and human rights and provide transparency still are in the process of being developed. At present, home states are not obliged to intervene if proper performance is not met. However, failures by extractive companies to respect basic human rights and the welfare of populations concerned or to protect against environmental degradation may fall back on the home state, representing a political and reputational liability within the international community and the public at large.

This paper primarily addresses the potential responsibilities of home states and third countries importing extractive industry products. It explores the potential role of trade law and regulation in addressing deficiencies and bringing about a better balance of risks. Linking trade, investment, human rights, and the environment is in its infancy and research gaps loom large. The author seeks to address these gaps by exploring the role of process and production methods (PPMs) in regulating international trade of commodities.

CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

AFP	Analytical Fingerprint
BEPS	Base Erosion and Profit Shifting
BITs	Bilateral investment treaties
COs	Certificates of Origin
CSR	Corporate social responsibility
DTTs	Double taxation treaties
EITI	Extractive Industries Transparency Initiative
EU	European Union
FDI	Foreign direct investment
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GIs	Geographical Indications
LDC	Least-developed country
MFN	Most-favoured nation
NPR-PPMs	Non-product-related process and production methods
OECD	Organisation for Economic Co-Operation and Development
PPMs	Process and production methods
PPP	Public-private partnership
PR-PPMs	Product-related process and production methods
R&D	Research and development
S&D	Special and differential
SCM	Subsidies and Countervailing Measures
US	United States
TBT	Technical Barriers to Trade
TRIPS	Trade-Related Aspects of Intellectual Property Rights
WTO	World Trade Organization

TOWARDS ENHANCED RESPONSIBILITIES OF HOME STATES

The responsibility and authority to regulate extractive industries today entirely lies with the host state based on the principle of territoriality and permanent sovereignty over natural resources. Since the process of decolonization was completed, former metropolitan and colonial powers no longer assume responsibilities for extracting operations in former dominions and colonies. Instead, foreign direct investors enjoy the benefit of support under diplomatic protection and an ever-increasing number of bilateral investment treaties, while obligations of investors to protect the environment and human rights and provide transparency still are in the process of being developed.[1] Likewise, trade and investment rules pertinent to taking into account such responsibilities have not been developed.[2]

Extractive industries operate under government licenses or licensing agreements, which amount to so-called state contracts with the host state, i.e., the state in which the operation of extraction takes place. These agreements define the terms of exploitation basically by referring to domestic law of the host state, but normally include also disciplines based on international law, which the host state is bound to respect. The contracts are signed by governments and are binding on local populations, which are subject to domestic law and often remain without extensive consultation rights in voicing and defending their interests.

While many countries and governments are able to control these operations, evidence shows that others are not in a position to sufficiently regulate extractive industries and to implement existing regulations and contracts. In developing countries, there often has been an imbalance between foreign direct investors and host countries depending on foreign capital. The needs of affected populations are not being taken into account sufficiently, resulting in loss of identities and violations of law. Land rights and the preservation of land have remained a matter for the host state. There has been a lack of disciplines in international law that could rebalance and countervail structural deficiencies and weaknesses of governance witnessed in many countries exposed to minerals and mining activities.[3] The main efforts so far have been aimed at combatting corruption and bringing about greater transparency in taxation. A number of initiatives have been developed, in particular the Extractive Industries Transparency Initiative (EITI). Other efforts relate to tracing the origin of minerals — Analytical Fingerprint (AFP) — and to bring about responsible practices in the artisanal and small-scale mining sector (Baseline Audits) in developing countries.[4]

While contractual relations define the relationship of the host state and the extracting company, no such relations exist with the home states where the headquarters of extracting companies are incorporated or domiciled. Home states may exercise diplomatic protection and support investing companies abroad. But, they are not obliged to intervene if proper performance is not met. The current framework, which leaves home states without legal responsibilities, is not without significant risk to them. They are strongly exposed to potential failures by extractive companies to respect basic human rights and the welfare of populations concerned. Or, they may cause substantial and irreplaceable damage to the environment. Such failures to support sustainable development on the part of the company may fall back on the home state, and its nationality could make the issue a political and reputational liability of the home state within the international community and the public at large.

Therefore, extractive industries operating abroad may pose a moral risk to states.[5] This issue needs to be addressed in discussing the appropriate levels of responsibilities home states should assume in deterring and preventing such risk and in supporting companies' compliance with laws and regulations of host states. Prime efforts to date relate to reporting requirements of companies in the United States (US) under the Dodd-Frank Act (The Wall Street Reform and Consumer Protection Act); in the European Union (EU) with the draft directives on transparency of extractive industries — revising the Transparency Directive (2004/109/EC) — as well as most recently in Canada. Other countries,

1 Cf. Ruggie, John G. (2013) *Just Business: Multinational Corporations and Human Rights*, New York / London: W. W. Norton & Co.

2 Collier, Paul and Anthony J. Venables. (2009) "International Rules for Trade in Natural Resources." WTO Staff Working Paper ERSD-2010-06; https://www.wto.org/english/res_e/reser_e/ersd201006_e.pdf (accessed July 29, 2015).

3 See generally Collier, Paul (2010). *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*, Oxford / New York: Oxford University Press; Collier, Paul. (2010) *The Plundered Planet: Why We Must, and How We Can, Manage Nature For Global Prosperity,* Oxford / New York: Oxford University Press; Collier, Paul and Anthony J. Venables (2010) *Natural Resources and State Fragility,* EUI Working Papers 36, Robert Schuman Centre for Advanced Studies . 201; Cottier, Thomas, Katja Gehne, and Maria Schultheiss (2012) "The Protection of Property in International Law: The Missing Pieces," inCoexistence, Cooperation and Solidarity. Eds. Holger P. Hestermeyer,Doris König, et al. Liber Amicorum Rüdiger Wolfrum. Volume I Leiden / Boston , p 367-396.

4 Bundesanstalt für Geowissenschaften und Rohstoffe (BGR). (2012) *Mineral Certification: Certified Trading Chains (CTC) and the Analytical Fingerprint (AFP),* Newsletter 01/2012; http://www.bgr.bund.de/EN/Themen/Min_rohstoffe/CTC/Downloads/newsletter_01_2012.pdf?__blob=publicationFile&v=2 (accessed July 29, 2015).

5 These risks pertaining Switzerland as one of the main home states of extractive industries are extensively discussed in the report of the Swiss Departments of Foreign Affair, Finance and Economics: Background Report, Report of the Interdepartmental Platform on Commodities to the Federal Council, March 27, 2013, http://www.news.admin.ch/NSBSubscriber/message/attachments/30132.pdf, accessed July 29, 2015.

such as Switzerland, hosting headquarters of main extractive companies, have remained without legal obligations so far.[6]

This paper primarily addresses the potential responsibilities of the home state and of third countries importing products exported from the territories where they have been extracted into world markets. The paper explores the potential role of trade law and regulation in addressing deficiencies and bringing about a better balance, avoiding the risks discussed above. Linking trade, investment, human rights, and the environment in the field still is in its infancy and research gaps loom large.[7] We particularly seek to address these gaps by exploring the potential role of process and production methods (PPMs) in regulating international trade of commodities. The paper is limited to minerals and gas. It does not intend to address agricultural commodities, including soil management.

THE TRIANGLE OF HOME STATE, HOST STATE AND COMPANIES IN TRADE AND INVESTMENT LAW

TRADE REGULATION

Extractive industries based on foreign direct investment (FDI) are part of a triangle, consisting of the home state, the host state, and the company concerned. This triangle does not encompass just the host state, the company, and the indigenous population. Rather, it includes the home state and deals with the indigenous population as part of that state. In addition to the triangle, we need to take into account third-country markets importing and using extracted products.

Trade regulation to date does not address and contribute to existing imbalances and risks, except in the case of conflict diamonds (Kimberley waiver).[8] Exports of minerals are subject to export restrictions and import restrictions under the obligation to grant most-favoured nation (MFN) and national treatment to imports. Other restrictions may be invoked, in particular with respect to environmental concerns to the extent that they also affect domestic consumption and not only exported products. No distinctions are made as to where and how minerals were extracted. Like minerals are treated alike under Article III of the General Agreement on Tariffs and Trade (GATT), under which they fully fall.[9]

Engineering services, construction services, and transportation of minerals fall under the disciplines of the General Agreement on Trade in Services (GATS) to the extent that sectors are not excluded (such as shipping) at this stage. Importantly, obligations to grant national treatment to such services only exist to the extent that these services are covered by the schedules of the home state.

Disciplines on intellectual property apply to mining activities, in particular the development of mining technology.

INVESTMENT PROTECTION AND POLICY SPACE

Finally, extractive operations fall under the disciplines of customary international law related to expropriation and regulatory taking of FDI in customary international law and bilateral investment protection agreements.[10] These agreements show varying and not uniform standards of fair and equitable treatment of investors. They define the policy space of home states to regulate the industry and to protect basic human rights in the context of *ordre public*. Today, there is a general trend to increase such policy space in new agreements and treaty interpretation.[11] Host countries today,

6 Eigen, Peter. *Fighting Corruption in a Global Economy: Transparency Initiatives in the Oil and Gas Industry,* Houston Journal of International Law 29 (2), p. 327–54.For a comprehensive review of current measures in place *see* Bürgi, Elisabeth and Judith Wehrli, et al. (2015) *The Commodity Sector and Related Governance Challenges from a sustainable Development Perspective: The Example of Switzerland,* World Trade Institute Working Papers, http://www.wti.org/fileadmin/user_upload/wti.org/7_SECO-WTI_Project/Publications/WP_20Commodities_20150714-2.pdf, accessed July 19, 2015. The paper entails a comprehensive and useful review of the literature.

7 Ibid. p. 40 and p. 50.

8 Nadakavukaren Schefer, Krista (2005). *Stopping Trade in Conflict Diamonds: Exploring the Trade and Human Rights Interface with the WTO Waiver for the Kimberley Process,* in: Cottier, Thomas, Pauwelyn, Joost, Bürgi, Elisabeth (Eds.), Human Rights and International Trade, Oxford, p. 60.

9 See generally Van der Bossche, Peter and Werner Zdoug. (2013). *The Law and Policy of the World Trade Organization,* 3rd ed., Cambridge University Press: Cambridge; Cottier, Thomas and Matthais Oesch. (2005) *International Trade Regulation: Law and Policy in the WTO, the European Union and Switzerland*, Cameron May & Staempfli: Bern / London.

10 *See* generally Nadavukaren Schefer, Krista. (2013) *International Investment Law: Text, Cases and Materials*, Edward Elgar Publishing Limited, Cheltenham.

11 Ibid. *See* also on recent developments Gordon, K, , J. Pohl, and M. Bouchard, (2014) Investment Treaty Law, Sustainable Development and Responsible Business Conduct: A Fact Finding Survey, OECD Working Papers on International Investment, 2014/01 Paris. OECD Publishing, online: http://dx.doi.org/10.1787/5jz0xvgx1zlt-en,; for a summary of recent treaty developments see UNCTAD, World Investment Report 2015, New York and Geneva: United Nations p. 110, 121; http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf, all accessed January 13, 2016.

therefore, are in a better position to regulate these industries and to make changes to regulations as problems may occur.

THE POTENTIAL OF PROCESS AND PRODUCTION METHODS (PPMS)

Given the frequent structural weaknesses of host countries, a question arises as to whether import regimes into intermediary or consumer markets could assist the implementation of fair and equitable industry standards according to which the extractive industry should operate. Partly, PPMs could also be employed by the host state in support of such goals. This essentially relates to the question of the extent to which PPMs could be used as a regulatory device to bring about and improve compliance with appropriate standards of protection of humans, local populations, and the environment within a framework for sustainable development.

In the extractive industries, PPMs can include requirements for the protection of labour and human rights, the environment, and the livelihood of people in the neighbourhoods affected. As ways of production normally do not leave any traces in extracted products, it is a matter of addressing so-called non-product related PPMs.

Private standards and regulations

Ideally, standards are adopted and implemented as private standards by mining and extractive companies in the context of corporate social responsibility (CSR) and fully complied with under the supervision of headquarters. These standards may be adopted on a voluntary basis or an industry-wide basis with a view to avoiding distortion of competition.[12]

World Trade Organization (WTO) law, to date, does not restrict companies from adopting private standards. They are not currently regulated by WTO law, albeit there are increasing concerns that private standards operate as non-tariff barriers mainly in the field of agricultural commodities and services. Such problems, it would seem, have not yet arisen in the field of extractive industries. Except for metals, there rather is a lack of standards within the tradition of an industry that shed transparency and publicity until challenged in recent years.

Private standards in WTO law, however, may be subject to non-violation complaints. To the extent that they are encouraged by government and undermine tariff reductions and the removal of non-tariff barriers by conduct and measures, provided that such conduct was not foreseeable at the time market access rights were negotiated and granted. The same disciplines also apply to services.[13]

Responsibilities of home states

The PPM standards may be adopted in the wake of industry regulation by the host state. Governments responsible for operations on their territories should enact the necessary rules and regulations providing for labour standards, safety of operations, and the protection of the environment and habitats. They should protect the rights of affected populations, in particular safeguarding the right to water and access to land. While such rules are implemented and properly enforced under the rule of law in many countries, a majority of countries face difficulties in adopting and implementing appropriate legislation for reasons discussed at the outset. It is here that the question arises on the extent to which the home state of the company operating in the host state can and should assume additional responsibilities.

These responsibilities respond to a number of needs: (i) the protection of human and labour rights and the welfare of the population concerned; and (ii) the reputational risks in case of violations of such rights and degradation of the environment in the process of excessive exploitation approved by and in the host country. While the first point is universal, the second relates to the home country of the company only and establishes a special relationship within the triangle discussed.

The responsibilities relate to the adoption of PPMs by the home state and other importing countries. Import of mining and extracted products is subject to compliance with defined rules in the process of extraction and transportation. Depending on market size, these jurisdictions essentially are able to define conditions of production in host countries. PPMs inherently deploy some sort of extraterritorial effect. They may be in line with provisions in force in the host country and thus supporting them. They may go beyond them thus undermining standards of the host state.

Ideally, PPMs are based on internationally agreed regulations and standards, which are able to avoid problems of extraterritoriality. Often, however, such standards are still lacking and will be brought about only on the basis of unilateral measures imposed by large markets on imported products. The question arises concerning the extent to which such standards defining processes of extraction and distribution are lawful under current WTO law.

12 *See* generally Bernstein, Steven and Erin Hanna. (2008) *Non-state Global Standard Setting and the WTO: Legitimacy and the Need for Regulatory Space,* 11 Journal of International Economic Law 575.

13 Cf. *Japan – Measures affecting Consumer Photographic Film and Paper,* Report of the Panel, WT/DS44/R (March 31, 1998); Cottier, Thomas and Krista Nadavukaren Schefer. (1997) *Non-Violation Complaints in WTO/GATT Dispute Settlement: Past, Present and Future,* in: Petersmann, Ernst-Ulrich (ed.), International Trade Law and the GATT/WTO Dispute Settlement System, Kluwer, The Hague, p. 145.

PRODUCTION AND PROCESS METHODS (PPMS)

Given the MFN and national treatment principles under the GATT 1994, a question arises concerning the extent to which differential treatment may be based on the modes of extraction of natural resources. This question relates to PPMs. These methods define "the way in which products are manufactured or processed and natural resources harvested or extracted."[14] There are two basic types: product-related PPMs (PR-PPMs) and non-product-related PPMs (NPR-PPMs).[15]

Product-related PPMs deploy an impact on the quality of a product.[16] Ways and means of production are induced to secure a particular quality of the product. For example, prescriptions related to the production of foodstuffs seek to secure hygienic standards and thus a safe quality of the product itself. As a consequence, products produced by different processes and methods also show a different physical quality of the final product, at least potentially and in traces. The PPM is closely related to the product itself. It, therefore, allows us to distinguish products produced by different means and to treat them differently in law under the like-product analysis. NPR-PPMs do not show any trace in the quality of the product itself.[17] Whether or not a particular method is used, is without consequence and any bearing on the final quality of the product. No traces of the processes and methods employed can be found.[18] PPMs can mainly be found in methods of extracting living resources, in particular fishing or hunting or the treatment of the workforce and the requirements related to machinery employed. Most of the linkages of trade and environment, trade and human rights or labour standards are defined in terms of NPR-PPMs. Whether or not a football is produced by child or adult labour does not normally show in the quality of the product (albeit it is argued, for example, that this is not true in the case of handmade carpets that depend on children for nimble work).

The analysis needs to distinguish between the GATT and the Technical Barriers to Trade (TBT) Agreement. Both are relevant, but do not show an identical approach. We briefly turn to PR-related PPMs and then to NPR-PPMs. The latter are of prime interest to the E15 Expert Group on Trade and Investment in Extractive Industries.

PRODUCT-RELATED PROCESS AND PRODUCTION METHODS (PR-PPMS)

Under GATT, PR-PPMs essentially follow the characteristics of the product.[19] To the extent that they influence the quality or the perception of the product, they can be taken into account in distinguishing the product on the basis of so-called border tax adjustment criteria.[20] These criteria include the physical properties of the goods, but also different perceptions as to the quality and end use of the product by consumers (consumer tastes and habits).[21] Differential treatment, thus, can be based on different physical properties in analysing likeness, or on different, subjective consumer perceptions, for example, as to the health risk of particular products.

Such differences allow for differential treatment of non-like products within the basic principles of MFN in Article I and national treatment in Article III GATT 1994.[22] The provision details specific rules on taxation and regulation. Article III:2 GATT essentially requires the same taxation of like products and comparable taxes for un-like, but still competing products.[23] Article III:4 GATT essentially relies on the protection of equal conditions of competition for like products, with a view to avoiding economic protection for domestic products.[24]

14 OECD. (1997) *Process and Production and Processing methods (PPMs): Conceptual Framework and Considerations on use of PPM based trade measures* OECD/GD(97) 137, 33. This chapter essentially draws from a parallel paper prepared for E 15 on Energy, Cottier, Thomas. (2015) *Renewable Energy and Process and Production Methods (PPMs),* ICTSD.

15 Conrad, Christiane R. (2011) *Process and Production Methods (PPMs) in WTO Law: Interfacing Trade and Social Goals,* Cambridge University Press, p. 28.

16 Holzer, Kateryna. (2014) *Carbon-related border adjustment and WTO law*, Edward Elgar Publishing Limited, p. 93.

17 Conrad (n 15), p. 12.

18 Conrad (n 15), p. 28.

19 Holzer (n 16), p. 94; Conrad (n 15), p. 27.

20 The criteria for defining permissible internal tax adjustments applicable to like products crossing national borders was initially developed by the Border Tax Adjustment Working Party, *see* Working Party Report, *Border Tax Adjustments*, L/3464, adopted 2 December 1970, BISD 18S/97 [18]. Since then, these criteria have been essential for determining likeness under Article 3 GATT, *see* Cottier, Thomas and Matthias Oesch. (2005) *International Trade Regulation,* Cameron May & Staempfli, Bern / London, p. 390.

21 Working Party Report (n 20) [18].

22 General Agreement on Tariffs and Trade (GATT 1947), 55 UNTS 194.

23 Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted, 1 November, 1996, 25.

24 Appellate Body *Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products,* WT/DS135/AB/R, adopted 5 April 2001 [98].

Under the TBT Agreement,[25] technical regulations are not limited to the quality of the product itself, but also entail PR-PPMs. They are included in the definition of technical regulations and standards:

> "For the purpose of this Agreement, however, the following definitions shall apply:
>
> 1. Technical regulation
>
> Document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.
>
> …
>
> 2. Standard
>
> Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method."

The definitions entail product characteristics or their related PPMs. To the extent that the PPMs are translated into the quality and characteristics of the product, they may be part of the regulation and standard and thus allow for product differentiation.[26] The distinction between the quality of a product, product-related and non-product related PPMs is not always easy to make. It strongly depends on the facts and particular circumstances of the case.

NON-PRODUCT-RELATED PROCESS AND PRODUCTION METHODS (NPR-PPMS)

GATT

NPR-PPMs raise a number of issues for international trade since they can deploy extraterritorial effects.[27] Importing countries essentially define how products in exporting countries need to be processed. It is generally agreed that NPR-PPMs do not allow distinguishing like products on the basis of methods of production and processes under the GATT, as they do not influence the very quality of the product itself.[28] This means that even if like products are produced under grossly different conditions related to labour standards, human rights, and the environment and thus the goals of sustainable development, they will not be able to be subject to differential treatment if the modes of production do not deploy any impact on the quality of the product. A minority view in the literature adopts a more comprehensive approach to the notion of product quality and thus allows for differential treatment.[29] Today, this view may be supported by the controversial finding of the Appellate Body in the context of subsidisation that conventional and renewable energy production does not pertain to the same market.[30] In particular, it may be argued that consumer tastes and habits strongly depend on modes of production and thus give rise to differential treatment.[31] The problem lies in proving the point, which strongly depends on subjective assessment.

Nevertheless, it is safe to say that current GATT law reverts to the law of exceptions under Article XX GATT. According to the Appellate Body, Article XX GATT may cover not only measures to facilitate a domestic policy in the importing country, but also if the measure conditions imports on the existence of certain policies maintained by the exporting countries.[32] Hence, measures related to NPR-PPMs need to comply with the conditions expounded under Article XX GATT. In the context of Article XX GATT, several provisions and motifs are of relevance in the present context. Concerns related to human rights and labour standards can be invoked under the heading of public morals and perhaps *ordre public* under Article XX(a). The Appellate Body upheld import restrictions of seal products, owing to modes of production

25 Agreement on Technical Barriers to Trade (TBT), 1868 U.N.T.S. 120.

26 Appellate Body Reports, *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products (EC-Seal Products),* WT/DS400/AB/R, WT/DS401/AB/R, adopted 18 June 2014, [5.12], Panel Report, *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products (US-Tuna II (Mexico)),* WT/DS381/R, adopted 13 June 2012, as modified by Appellate Body Report WT/DS381/AB/R [7. 370].

27 Moïsé, Edavokia and Ronald Steenblik. (2011) *Trade-Related Measures Based on Processes and Production Methods in the Context of Climate-Change Mitigation OCED*, OECD Trade and Environment Working Papers 2011/04, 6, http://www.oecd-ilibrary.org/trade/trade-related-measures-based-on-processes-and-production methods-in-the-context-of-climate-change-mitigation_5kg6xssz26jg-en?crawler=true, accessed May 27, 2015.

28 Conrad (n 15), p. 13; see Appellate Body Reports *EC Seal Products* (n 25).

29 Regan, Ronald. (2009) "How to think about PPMs (and climate change) in *International Trade Regulation and the Mitigation of Climate Change, Eds. Cottier, Thomas, Olgaand Nartova, and Sadeq Z Bigdeli,* Cambridge University Press; Conrad (n 15), p. 486-490.

30 Appellate Body Reports, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector /Canada – Measures Relating to the Feed-in Tariff Program* (Canada – Renewable Energy /Canada – Feed-in Tariff Program, WT/DS412/AB/R, WT/DS426/AB/R, adopted 24 May 2013, [5.167]-[5.178].

31 Howse, Robert. (2012) "Regulatory Measures," in *The Oxford Handbook on the World Trade Organization*, Eds. Narlikar, Amrita, Martin Daunton, and Robert M. Stern. Oxford University Press, p. 446.

32 Appellate Body Report, US-Tuna II (Mexico), n (25), [222-223]; *see also* Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products (US-Shrimp Turtle)*,WT/DS58/AB/R, adopted 6 November 1998 [121].

on the grounds of public morality in 2014.[33] Activities relating to extraction of natural resources may furthermore be subject to the protection of human health of workers in Article XX(b). In case of employing prisoners in extracting operations, restrictions can be based on Article XX(e). In relation to environmental concerns, the provision of Article XX(b) protecting plant and animals may apply to restricting imports, while Article XX(g) "relating to the conservation of exhaustible resources if such measures are made effective in conjunction with restrictions on domestic production or consumption" may be suitable in the context of PPM-based measures on the part of the host state. It is conceivable that export restrictions are used to enforce and implement domestic production methods and policies of sustainable extraction.[34] Finally, Article XX(c) allows for restrictions on the importation or exportation of gold and silver. The scope of this expectation is untested and seems historically unrelated to monetary affairs and unrelated to the extraction of minerals as such, but its application on the face cannot be excluded in addressing production methods related to gold and silver, for example for the purpose of enforcing fair trade standards in jewellery and the watch industry.

The main obstacles today lie with the conditions of the chapeau of Article XX GATT, which requires failed efforts at negotiated solutions before unilateral measures may be taken. Also, it imposes equal treatment on all competitors alike and does not allow measures that go beyond what is necessary to achieve the goal. So far, regulations have failed to pass these very tests and have had to go back to drawing board, however without being excluded in principle.[35] The measure adopted, therefore, needs to be tailor-made. In addition, the proliferation of such measures by developed countries needs to take into account the fact that they will painfully affect the exports of developing countries, which will be unlikely to comply with the conditions set out in the regulations due to their limited financial and technical capacity. This fact further increases the danger of indirect protectionism.

In order to overcome this obstacle, such regulations need to be balanced with supporting policies related to the principal of special and differential treatment of developing countries, discussed below. Finally, WTO case law has so far recognised labelling programmes, but has not addressed otherwise differential treatment on the basis of NPR-PPMs.[36]

TBT Agreement

Other than under the GATT, it is controversial whether the disciplines of the TBT Agreement apply to NPR-PPMs.[37] The definitions indicated above can be read to closely relate to the physical properties and the quality of the product itself ("product characteristics or their related processes and production methods") (emphasis added). Such a narrow reading of the term related, however, is not necessarily compelling as the same definition continues to include technical regulations and non-binding standards related to the labelling of products. Labels may relate to the physical property of the product. They may, however, also relate to PPMs, both product related and non-related in a physical sense, such as to the carbon footprint of a product. Labelling schemes related to a wide range of consumer products have existed for some time; mandatory carbon footprint labels have only recently been elaborated and are increasingly used in international trade.[38] Finally, it is difficult to see why the TBT Agreement should exclude NPR-PPMs from its definition, as this would paradoxically remove all disciplines on the subject, and states would be free to adopt any measures, similar to the issue of private product standards, which are generally considered to be outside of the TBT Agreement. Panels and the Appellate Body recognised the relevance of the Agreement for labelling of fisheries on the basis of fishing methods and irrespective of the likeness of the edible product.[39]

NPR-PPMs laid down in mandatory technical regulations are thus subject to the principles of national treatment and necessity in Article 2 TBT Agreement. Taking into account the

33 In this landmark case, the Panel found two NPR-PPMs contained in the so-called 'EC Seal Regime,' Regulation (EC) No. 1007/2009 of the Parliament and of the Council of 16 September on trade in seal Products, L 286/36-39 to be in breach of Articles I and II:4 GATT, but that they could be justified by the exception under Article XX(a) GATT. *See* Panel reports, *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products*, WT/DS400/R, WT/DS401/R and Add.1, (November 25, 2013) [7.639]. The finding was upheld by the Appellate Body, but the application of the test under the chapeau of Article XX GATT was modified by the Appellate Body, *see European Communities – Measures Prohibiting the Importation and Marketing of Seal Products*, WT/DS400/AB/R, WT/DS400/AB/R (May 5, 2014) [5.313], adopted June 18, 2014

34 Cf. China – Measures related to the Exportation of Rare Earth, Tungsten, and Molybdenum, Report of the Appellate Body, WT/DS331/AB/R, WT/DS332/AB/R, WTDS334/AB/R (August 7, 2014) [5.75-5.175].

35 Although such restrictions are not per se excluded, they have so far only once been accepted to qualify as one of the general exceptions numerated under Article XX GATT. In the *US – Shrimp (Article 21.5Malaysia)* case, the Appellate Body upheld the Panel's compliance report, which had found the unilateral trade restrictions taken by the US to conserve natural resources to be justified under Article XX (g) GATT; See Appellate Body Report, Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia,* WT/DS58/AB/RW (November 21, 2001).

36 *See* Appellate Body Report, *US – Tuna II (Mexico)* (n 26).

37 This question so far has not been addressed by the WTO Dispute Settlement Bodies. In the EC-Seals case, the Appellate Body also refrained from completing its legal analysis as to whether the EU Seal Regime prescribes PPMs or not on the grounds that the Panel had made no findings on the issue and not further explored the question. *See* Appellate Body Reports, *EC- Seal products* (n 26) [5.61]-[5.69].

38 Moïsé and Steenblik (n 25) 6, p. 26-33.

39 Under the TBT Agreement, differential treatment for products is not based on the criteria of the "likeness of products" under Articles I and III GATT, it is based on whether the differential treatment of the product meets the conditions of a "technical regulation" as set out under Annex 1.1 of the TBT Agreement .In the case *US-Tuna II (Mexico)*, the "dolphin-safe labelling scheme," which consisted of three joint measures and was enacted to prevent the killing of dolphins by prescribing the adequate fishing techniques, qualified as a "technical regulation" within the meaning of Annex 1.1 TBT Agreement, see Appellate Body Report, *US-Tuna II (Mexico)* (n 25) [183] – [199].

case of law panels and the Appellate Body, these principles imply inherent restrictions to likeness and national treatment informed by the exceptions of Article XX GATT.[40] Depending on the legitimacy of its goals, the measure must be properly calibrated, avoiding all unnecessary discrimination. In essence, Panels and the Appellate Body apply a test of proportionality, assessing the need, suitability, and appropriateness of the measure at hand.[41] Moreover, under the GATT, efforts should be made to bring about agreed international standards, and only if that fails, unilateral measures may be adopted in due course in accordance with the requirements of the chapeau.[42]

IMPLEMENTATION AND COMPLIANCE

PPMs related to extractive industries inherently are non-product related. Methods of extraction normally do not show traces in the product. Measures addressing production methods deployed abroad, therefore, need to comply with the requirements of Article XX GATT and the TBT Agreement, respectively.

While PPMs, thus, can lawfully apply to extracting industries and may even be extended to the field of related services, they have hardly been employed in the oil and gas sector. Measures strongly depend on traceability of the origin of the product. Oil and gas essentially are fungible, and the origins of products traded on the world market often are not well-known and cannot be properly traced to their source. Traces may be introduced into oil and gas (chemical additives, including nanoparticles) to allow tracing the origin of products, also as a means to combat illegal trade in the age of terrorism. More research clearly is warranted in this field. Thus, it has been suggested to explore more deeply the possibility of cooperation with the insurance and reinsurance industry, which traces the course of trade in oil and minerals in order to identify the origin and source of mineral products traded.[43] Tracing is more suitable in the field of physical minerals, the Kimberly process on conflict diamonds shows that tracing products is not excluded if accompanied carefully from the very beginning of the extracting process and all along the trade routes of the product. The Fair Trade Foundation traces and documents the origin of gold and silver and grants labels on the basis of defined PPMs, in particular promoting small-scale extraction for gold and silver under fair working conditions.[44]

Measures taking into account traceable PPMs measures can be imposed by all states. Host states may operate production or export restrictions on the basis of PPMs. Home states and importing countries may restrict importations and marketing of extracted products.

MAIN INSTRUMENTS

The implementation and enforcement of PPMs can make recourse to different measures. These instruments so far have hardly been used in the context of enhancing CSR, and more thinking and research is called for in order to assess the extent to which PPMs may be applied to different extractive industries, ranging from oil and gas to minerals.

Quantitative import restrictions

PPMs can be implemented by means of quantitative import restrictions. Importation is contingent on compliance with the measures imposed. PPMs may give raise to ban the importation of certain minerals or minerals with a particular origin. Import restrictions amount to the most drastic and distortive measures and are tools of last resort.

Differential tariffs

PPMs allow members to adopt differential tariffs for the same, but differently produced products.[45] The Harmonised System allows countries to adopt such differentiation in the 7th and 8th digit of a tariff line. Extracted products not complying with the PPM standards could incur higher duties, while those in compliance benefit from lower or even zero rates. Differential tariffs provide incentives to bring about and accelerate structural adjustment towards compliance with PPMs.

40 Appellate Body Report *US-Tuna II (Mexico)* (n 26) [317].

41 Appellate Body Report *US-Tuna II (Mexico)* (n 26) [317].

42 See in particular United States – Import Prohibitions of Certain Shrimp and Shrimp Products, Report of the Appellate Body, WT/DS58/AB/R (October 12, 1998) [166]; United States – Import Prohibitions of Certain Shrimp and Shrimp Products, Recourse to Article 21.5 pf the DSU by Malaysia, WT/DS58/AB/RW (November 21, 2001) [5.43-5.46].

43 Suggestion made orally by Christine Jojarth, Member of the E15 Expert Group on Trade and Investment in Extracting Industries.

44 See Fair Gold Foundation: Welcome to Fairtrade Gold and Precious Metals, a ground-breaking initiative that offers a lifeline to artisanal and small-scale miners and their communities. Our passion is to see transparency, traceability, truth and justice embedded into the livelihoods of the millions of artisanal and small-scale miners across the world. Small-scale miners work in remote, marginalised and harsh conditions, doing back-breaking work to scrap a living. They are consistently exploited by middle men, their access to markets is limited and they rarely receive a fair price for their gold. http://wordpress.p20126.webspaceconfig.de/about-us/ (visited January 8, 2016).

45 Cottier, Thomas, Olga Nartova, and Anirudh Shingal. (2013) "The Potential of Tariff Policy for Climate Change Mitigation: Legal and Economic Analysis," 48 Journal of World Trade 1007.

Labelling

PPMs can be implemented by means of labelling, informing producers and consumers on production methods deployed. Industries may adopt labels on the basis of private standards. Governments may adopt mandatory labels or allow for voluntary labels within legally defined parameters. Labelling requires the possibility to identify the object and makes it more difficult to apply for fungible products. Labels are not suitable to for oil and gas. These resources are highly fungible. They do not reach consumers in a form that allows appropriate consumer choices to be made. Minerals and metals are different, owing to their physical properties. The Kimberley process makes recourse to labelling and as of today seems to amount to the only recourse to labels in the field of minerals. Fair trade labels for gold and silver prove that consumer information can influence patterns of production and extraction on the basis of voluntary or mandatory labelling of minerals.

Certificates of Origin (COS)

PPMs can take recourse to Certificates of Origin (COs). These certificates testify to the origin of the product in terms of country and site of production. They can be limited to provide information on the origin of the product and production methods used. Alternatively, they could be used independently in commodity trading of fungible products. Like in electricity, which does not allow for distinctions of renewable and fossil fuel-based electricity once produced and feed into the grid, COs for clean oil, gas, and fair trade metals traded on their own could be used for the purposes of tax reductions or for compliance within a cap-and-trade system.[46]

Intellectual property rights

Finally, PPMs could be linked to trade mark protection, protection of trade names, and commitments of CSR. To the extent that a company operates under CSR commitments pledging compliance with voluntary and legal standards adopted, products benefit from the exclusive use of trademarks and trade names associated with the extracted products. To the extent that the physical quality of a mineral is particular to a particular region, recourse to Geographical Indications (GIs) would also be available in intellectual property protection. Trade names, trademarks, and GIs would stand for compliance with PPM standards and thus benefit from a particular reputation among the industry and consumers. We add that competitors and consumers may take recourse to disciplines of unfair competition law protected under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Paris Convention for the Protection of Industrial Property when companies do not comply with CSR commitments made.[47]

COOPERATION, INCENTIVES AND TRANSFER OF TECHNOLOGY

Beyond tracing the origin of the product, the application of PPMs to extractive industries faces a number of practical problems. Extracted products form part of global value chains. As indicated, oil and gas do not reach the end consumer in original form but are dealt with by intermediary stages and industries. Extracted products are bulk products. They show no individuality and are fungible. They can be easily mixed with products of different origins and sites of production. These products therefore do not lend themselves to policies of labelling. They are essentially limited in the field to extracted minerals eventually reaching consumers. Even physical tracing may be difficult to operate. Other instruments related to PPMs would need to be employed, calling for international cooperation between home and host states, importing states, and the companies involved.

On-site inspections

The implementation of PPMs requires on-site inspections. The government enacting measures per se does not have jurisdiction to deploy controls on the territory of the host state. These controls need the consent of the later. Thus, they are best undertaken on the basis of international cooperation, either by the host state or by international inspection teams.

To the extent that PPMs implementation can be addressed within a vertically integrated multinational company, the solution of practical problems can be facilitated and the roles of government may be reduced by recourse to self-certification. The home state is able to build on the controlling powers of the mother company, which in return are liable to the home state. However, to the extent that extractive companies are not vertically integrated or nationally controlled by the host state, international cooperation will be essential in addressing the practical problems of implementation mentioned.

Recourse to PPMs in the extracting industries, therefore, depends on international cooperation more than in other areas. The host state will be interested to engage in order to

46 See Cottier, Thomas, Ilaria Espa, and Kateryna Holzer. *Renewable Electricity Tax Exemptions and Trade Remedies under International Law*, Report prepared for the Federal Department of Energy, Berne, http://www.bfe.admin.ch/themen/00526/00527/index.html?lang=en&dossier_id=06296, accessed July 29, 2015.

47 *See* Cottier, Thomas and Gabriela Wermelinger, Gabriela. (2014) "Implementing and Enforcing *Corporate Social Responsibility*: The Potential of Unfair Competition Rules in International Law," in Corporate Social Responsibility. Eds Hilty, Reto M. and Rauke Henning-Bodewig. Verbindliche Standards des Wettbewerbsrechts?, MPI Studies on Intellectual Property and Competition Law 21, Heidelberg/New York/Dordrecht/London, p. 81.

facilitate exports to the country enacting the measures. But, it also will be interested to obtain transfers of technology and know-how, allowing the industries to comply with the measures. While PPMs can be unilaterally imposed, they depend, as a practical matter, on international cooperation entailing technology transfers. Without this element, they will be considered unfair and distortive and face political opposition in international fora and negotiations.

PPMs and transfers of technology

As in other fields, the main task is to combine PPMs and transfers of technology and know-how. There is a need to create incentives for transfers of technology by industries in the legal order of home states and of host states.[48]

Home states may adopt legislation requiring companies engaging in FDI to provide state-of-the-art technology for the exploitation in host countries. In addition, they could provide incentives to do so in order to allow compliance with the PPM standards adopted.

Article 66.2 of the TRIPS Agreement[49] provides a positive obligation for developed countries to provide incentives to their enterprises and institutions for promoting and encouraging technology transfers to least-developed countries (LDCs).[50] The very wording of the article shows where the fundamental problem of technology transfers lies: On the one hand, legal obligations only extend to LDCs, and, on the other hand, it shows that technology transfers lie in the hands of the private sector. The state is essentially confined to the limited, but very important function of creating appropriate incentives for the private sector to engage in transfers of technology. Today, few such incentives exist, and additional options need to be developed.

Tax Breaks

Incentives could be created in the form of tax breaks granted by the home states of companies engaging in transfers of technology to developing countries and LDCs and by supporting public-private partnership in promoting the transfer of modern technology and equipment and business practices to developing countries in return for accepting the operation of NPR-PPMs in extracting industries.

We need to further explore the potential of tax incentives both by home and host states and options within efforts made to avoid Base Erosion and Profit Shifting (BEPS) underway within the Organisation for Economic Co-Operation and Development (OECD).[51]

Tax breaks are an important tool for encouraging investment by the private sector in research and development (R&D) technologies. In order to stimulate investments, bilateral investment treaties (BITs) as well as double taxation treaties (DTTs) for the avoidance of double taxation provide incentives. BITs seek to create favourable conditions for investment and transfers of technology by excluding formal and regulatory taking without expropriation, including excessive taxation and abuse of tax law. Like trade regulation, incentives are created by legally requiring equal conditions of competition by means of fair and equitable treatment of FDI. FDI, often based upon BITs, may eventually benefit from tax rebates granted to new settled companies for a certain period.

Measures are more targeted in the field of avoiding double taxation. There are two principal forms of tax breaks in DTTs that can be used for encouraging technology transfer: the tax exemption method and the credit method. With the tax exemption method, the home state exempts income and capital from taxation, irrespective of whether the tax is levied in the host country where the income is generated (country of source). With the tax credit method, the home state grants relief from its own tax on the income or capital of its resident equal to the tax paid in the host country. The problem with the latter method is that tax payers may be exempted from taxation in host countries due to temporary tax reliefs. Accordingly, the tax is levied by the home states and the incentive offered by the host country in effect denied. To avoid such negative effects, some countries have agreed to integrate "tax-sparing" provisions in treaties with developing countries. Such provisions enable the investor to receive a foreign tax credit, which would not be neutralised by the home state of the company. The tax is not paid and thus "spared." Although tax sparing had been viewed by many countries as part of their foreign aid policy, OECD countries have been reluctant to grant tax sparing in treaties, since they provide a potential for abuse (such as tax avoidance) and often have not been beneficial and supporting of social and economic development of the country. Tax sparing, however, could be linked more closely, and even limited to transfers of technology, which in particular allow host countries to adjust and adopt modern PPMs and thus avoid trade barriers that would result otherwise.

Other forms of possible tax incentives consist of tax reductions granted contingent on the exportation of technology and know-how and of investment based on such technology. Tax reductions contingent on exported

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48 The following draws from a parallel paper prepared for E 15 on Energy: Cottier, Thomas, *Renewable Energy and Process and Production Methods* (PPMs), ICTSD, July 2015.

49 TRIPS Agreement, Annex 1C to the Marrakesh Agreement (WTO Agreement), https://www.wto.org/english/res_e/booksp_e/analytic_index_e/trips_e.htm

50 Moon, Suerie. (2008) *Does TRIPS Art. 66.2 Encourage Technology Transfer to LDCs? An Analysis of Country Submissions to the TRIPS Council (1999-2007),* UNCTAD – ICSID Policy Brief Number 2. http://www.google.ch/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCIQFjAA&url=http%3A%2F%2Functad.org%2Fen%2Fdocs%2Fiprs_pb20092_en.pdf&ei=wnttVaG2OoOMsAHguY_QAw&usg=AFQjCNEFNl76RwQy73JX-aA8hoYAoDcVKA&bvm=bv.94455598,d.bGg, accessed June 2, 2015.

51 *See* http://www.oecd.org/ctp/beps.htm, accessed January 6, 2016.

goods related to know-how raises the issue of whether this amounts to an export subsidy inconsistent with Article 3 of the WTO Agreement on Subsidies and Countervailing Measures (SCM). The agreement does not apply to services or to products made in host countries subsequent to FDI. The interest to incentivise access to advanced technologies, in the particular in the field of energy, may need to lead to reviewing the suspension of the category of non-actionable subsidies of Article 8 SCM Agreement and to renegotiating the terms of excluding action against measures taken in support of exporting technology supporting advanced PPMs in countries and thus allow for extraction of minerals respecting the principles of sustainable development, balancing economic, social, and ecological concerns. In addition to the traditional methods of tax sparing and tax exemptions, other tax incentives for encouraging the increase in technology transfers exist. There are various types of fiscal incentives that governments can use, such as investor tax incentives, capital expenditure tax incentives, or loan guarantee schemes.[52] Furthermore, the public sector can encourage the financial sector to become involved in the partnering and sponsorship of new financial initiatives.[53] Their relationship to fostering access to, and distribution of state-of-the-art PPMs should be further explored.

Public-private partnerships

Access to, and distribution of, state-of-the-art PPMs in the field of extractive operations and beyond can also be fostered by means of public-private partnerships (PPPs). The potential is widely unexplored in the field of extractive industries; it has mainly focused on the health sector. Typically, the partnership entails the participation of donors, compensating for market failure, producers, and the government. A clear legal framework for PPPs neither evolved in public international law nor in domestic law in the developing world where such schemes are mainly used. These partnerships currently face various challenges, such as a "lack of uniform practice, difficulty of moving from the development of a partnership to its implementation stage, and lack of monitoring or assessment of these initiatives."[54] A case study of Nigeria regarding access to essential medicines gives a good demonstration of the challenges facing the development and implementation of PPPs for enacting public policy goals. The case study also highlights the importance of having well-developed systems to protect and enforce intellectual property rights in order to stimulate technology transfers and attract investment.[55] Further work needs to be undertaken in framing appropriate rules in international trade and investment law with a view to facilitate PPPs in the extractive industries and beyond.

TOWARDS GRADUATION OF PPMS

Finally, WTO law does not yet take into account special and differential (S&D) treatment or graduation with respect to PPMs. Whether or not NPR-PPMs can be applied and used in relation to WTO members, however, should depend on the level of social and economic development. Appropriate factors and indicators should be developed to this effect. The question arises concerning the extent to which this philosophy can also be applied in the present context. PPMs relating to extracting industries primarily seek to support compliance by foreign direct investors, which should be not exempt from obligations owing to lower levels of development of the host state and country. Also, state-owned companies exercising monopoly powers should meet the same requirements. However, when it comes to obligations of states in relation to these industries and investors, levels of development and capacities to regulate effectively these industries may need to be taken into account and complemented by enhanced and corresponding levels of responsibility by home states. The less a host country is developed, the stronger should there be a commitment by the home state to operate appropriate PPMs and to supervise the activities of its nationals in cooperation with the host state. Appropriate policies of complementarity in assuming responsibilities in realising PPMs, fair conditions of extraction and production, and sustainable development should be developed accordingly within the triangle of home state, host state, and the extracting industries and complemented by importing countries.

52 IPCC. *Fiscal Measures and Tax Incentives' (Methodological and Technological Issues in Technology Transfer*, available at http://www.ipcc.ch/ipccreports/sres/tectran/index.php?idp=113, accessed July 10, 2015.

53 IPCC. *Partnering and Sponsorship for New Financial Initiatives: Methodological and Technological Issues in Technology Transfer*, available at http://www.ipcc.ch/ipccreports/sres/tectran/index.php?idp=114, accessed July 10, 2015.

54 Morgera, Elisa and Kati Kulovesi, Kati.(2013) "Public – private partnerships for wider and equitable access to climate technologies" in Abbe E.L. Brown, *Environmental Technologies, Intellectual Property and Climate Change, Accessing, Obtaining and Protecting,* Edward Elgar, p. 139.

55 Pam, Adamu A., *Access to medicines in developing countries and public-private partnerships, the case of Nigeria,* PhD, University of Bern (on file with author, forthcoming 2016).

56 *See* Cottier, Thomas. (2006) "From Progressive Liberalization to Progressive Regulation in WTO Law," 9 *Journal of International Economic Law*, p. 779-821.

CONCLUSION

Research on the role and potential of PPMs in the extractive industries is in its infancy and remains to be explored and developed. PPMs offer the potential to contribute to sustainable resources extraction in line with adopted environmental and human rights standards. Home states and importing countries may unilaterally adopt PPMs relating to these industries. Host states may use them in shaping and enforcing sustainable extraction policies. However, effective PPMs strongly depend on international cooperation at least to the extent that the industry is not vertically integrated. While extracting minerals falls under the rules of the WTO, appropriate and specific disciplines have not been developed. More specific and sectorial trade rules have not emerged. The problems encountered in the field of oil and gas are different from those in the extraction of minerals and metals. Therefore, further work should turn to developing the building blocks for an international agreement on extractive industries. PPMs could form one of the key components of such an agreement.

Implemented jointly by ICTSD and the World Economic Forum, the E15Initiative convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

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