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Transfer of Clean Technologies from North to South: Legal Barriers and Mitigations

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Key Points

- The transfer of clean technologies from North to South is often impeded by legal and institutional barriers implemented by governments, notably in intellectual property, taxation and customs laws.
- The lack of resources, the absence of the rule of law or poor legal infrastructure systems also constitute non-negligible barriers to clean technology transfers.
- Legal barriers can be mitigated, provided that appropriate measures are chosen to tackle each category of barrier.
- More specifically, meticulous preparation of technology transfer transactions, as well as legal documents such as license and non-disclosure agreements, can help mitigate risks related to existing legal barriers.

The importance of clean and environmentally sound technologies in addressing pressing environmental challenges such as climate change cannot be overemphasized. While much of the attention has been on the obligations of the public sector to provide a suitable environment for clean technology transfer, there are practical legal barriers that also hinder the private sector from deploying clean technologies. In practice, it is not only the public sector that will influence climate change and other environmental challenges, the private sector will equally play a critical role in promoting clean technology transfer. This policy brief examines policy and legal implications of transferring clean technologies from industrialized and technologically advanced states (the “North”) to developing, least-developed and technologically impoverished states (the “South”).

Legal Barriers

From the perspective of legal practitioners in the North serving small and medium-sized companies, there are many ways that law and governance can limit the transfer of clean technologies from North to South. This brief will provide a few examples of government-driven and resource-driven legal barriers that can limit the transfer of clean technologies. Government-driven

¹ The author wishes to thank Rachel Li of Colas, Moreira, Kazandjian and Zikovsky.

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Prior to co-founding CMKZ, Bernard worked at a law firm now called Dentons, at the Organisation for Economic Co-operation and Development in Paris and at the International Federation of Producers of Phonograms and Videograms in London. Bernard has also advised foreign governments, and notably acted as trade law specialist for a Canadian International Development Agency project by assisting Lithuania and Algeria to join the World Trade Organization, and for World Bank projects concerned with liberalizing and privatizing telecommunications and postal services in Togo, Comoros and Mauritania.

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barriers essentially result from governments' voluntary action in implementing laws that have the effect of obstructing clean technology transfer. Unlike government-driven barriers, resource-driven barriers arise when governments, burdened by a lack of resources, are unable to offer a reliable and efficient legal and judicial system for clean technology transfer.

Government-driven Barriers

In the 1970s, a set of proposals for correcting inequalities and redressing injustices created by the economic gap between the North and the South,² namely the New International Economic Order (NIEO), was declared in a resolution of the United Nations General Assembly.³ Efforts to conclude a Code of Conduct on the Transfer of Technology were also made by members of United Nations Commission on Trade and Development (UNCTAD) in order to respond to complaints expressed by developing countries with respect to transfer of technology transactions.⁴ The demands included the possibility of nationalizing or expropriating foreign property and transfer of technology without any strings attached, and to limit restrictive clauses in transfer of technology contracts. Despite the fact that this transnational governance initiative did not significantly achieve its objectives,⁵ a few developing countries are still adopting policies similar to the demands in the NIEO and UNCTAD draft code to acquire technologies developed in other countries and to favour local businesses

2 Smriti Chand, *NIEO: New International Economic Order: Objectives, Programme of Action*, online: <www.yourarticlelibrary.com/trade-2/nieo-new-international-economic-order-objectives-programme-of-action/26271/>. Harry G Johnson, *The New International Economic Order*, online: Graduate School of Business University of Chicago <<https://www.chicagobooth.edu/~media/0ABF9E91CCDB42C4BBA92737DCE91EEA.pdf>>.

3 *Declaration on the Establishment of a New International Economic Order*, GA Res S-6/3201, UNGAOR, UN Doc A/Res/S-6/3201 (1974), online: UN Documents <www.un-documents.net/s6r3201.htm>.

4 Ton J M Zuidwijk, "The UNCTAD Code of Conduct on the Transfer of Technology" (1978) 24 McGill LJ 562.

5 Eric A Engle, "The Failure of the Nation State and the New International Economic Order: Multiple Converging Crises Present Opportunity to Elaborate a New Jus Gentium" (2003) 16 St Thomas L Rev 187.

and economies.⁶ Among government-driven legal barriers that are identifiable, some fail to provide adequate intellectual property protection. Other government-driven legal barriers involve customs duties and taxation as well as non-tariff barriers.

Intellectual Property Rights

Even if most countries are members of the World Trade Organization (WTO) and are party to its Agreement on Trade-Related Aspects of Intellectual Property Rights, which provides for the implementation of intellectual property provisions and enforcement mechanisms, the protection for intellectual property rights (IPR) is still perceived by companies to be inadequate in many countries.

Companies that look for patent or trademark protection in other countries have to apply for it in each of the countries or in a regional office of the country where they seek protection. Registering in one country does not entitle protection in another. IPR-related laws differ from one country to the next, and some companies will experience difficulty protecting their IPR abroad. In Brazil, for instance, patent requests are handled by the National Institute for Industrial Property (INPI) and the absence of an effective system has put thousands of patent requests on hold. Currently it takes approximately eight years to get a patent in Brazil and foreign companies must expect additional fees and procedural uncertainties due to the discretionary powers and bureaucracy of the INPI.

In addition, some countries have adopted provisions that limit grant-back clauses and allow compulsory licensing.

Grant-back Clauses and Anti-competition

6 “But in spite of its low impact on international legal structures, the movement for a new international economic order affected the domestic legal regimes of many developing countries. These states used its claims to justify barriers to foreign investment, restrictions on technology transfer, confiscatory approaches to foreign-source intellectual property, and the formation of cartels and domestic monopolies for the primary products they produce, as well as negotiations for forgiveness or rescheduling of their foreign debts. In the absence of international standards, countries generally remain free to erect discriminatory barriers against foreign investment, to target foreigners (and especially foreign owners of capital) for burdensome taxes and to impair or exclude foreign financial services. For the most part, only market and political pressures countervail against these mercantilist tendencies.” Paul B Stephan & Julie A Roin, “International Business and Economics: Law and Policy” (Lexisnexis, 2010).

Grant-back clauses are provisions in a licensing agreement under which a licensor of IPR reserves the right on the licensee’s improvements made in the licensed technology during the licensing period. Some licensors will insist on a grant-back clause to ensure control over an entire process and to avoid competing with their licensees with a superior product.⁷

The validity of grant-backs remains debatable, but some countries have already taken a step further in scrutinizing grant-back clauses and limiting their application.⁸ In China, the Anti-monopoly Law has been enacted to correct the abuses of IPR. Patent holders have been cautioned to include grant-back clauses in license agreements. Different forms of grant-backs can trigger different risks under the Chinese legal regime. For example, if the clauses require the licensee to provide the licensor gratuitously or exclusively with the improved technology, they can be declared void and sanctioned by the National Development and Reform Commission of the People’s Republic of China.

Compulsory Licensing

Compulsory licensing can be broadly defined as a statutorily created license that allows certain people to use or produce a patented product or process without the explicit permission of the patent owner. Some countries, such as Korea, China and India, use compulsory licensing to provide easier access to advanced technologies.

Some countries would also exempt clean technology from patentability on the grounds of “public interest,” to combat climate crisis for instance, which would allow anyone to use in said countries the non-patented technology.

Royalties and Taxation

When a licensee pays royalties to a licensor for the right to use intellectual property owned by the licensor, institutions in some developing countries impede royalties’ remittance and tax deductions, and impose regulatory constraints. In

7 Richard Schmalbeck, *The Validity of Grant-Back Clauses in Patent Licensing Agreements*, online: <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1432&context=faculty_scholarship>.

8 Susan Ning, Ting Gong & Yuanshan Li, “Risks of Grant-back Provisions in Licensing Agreements: A Warning to Patent-heavy Companies” (2016) 1 CPI Antitrust Chronicle.

Brazil, for instance, the registration and approval by the INPI of intellectual property agreements are prerequisites to making any remittances abroad or claiming tax deductions.⁹ Sometimes, bureaucratic licensing processes can lead to delays, additional fees and procedural uncertainties.

Furthermore, royalties generated from transfer of technology and payable to a foreign entity may also be subject to a withholding tax that may reach 25 percent or more, in particular in instances where no tax treaty applies.

Tariff and Non-tariff Barriers

Substantial tariff and non-tariff barriers remain for import of clean technologies from the North to the South. This problem has been identified by many members of the WTO who have taken the initiative to negotiate toward the Environmental Goods Agreement in order to reduce the customs duties applied to the import of environmentally friendly goods. Under the Asia-Pacific Economic Cooperation agreement, tariff cuts should be applied on such goods to improve trade liberalization and access to the technologies to fight climate change. Despite these efforts, there are still many countries that subject the importation of clean technology goods to customs duties.

Several non-tariff barriers, such as imports and certificates approval, testing requirements and issuance of certification, are important issues too. Furthermore, heavily regulated foreign policies can have a direct impact on the transfer of clean technologies from the North to South. Some governments have even begun to supervise contracts and evaluate if they are beneficial for their local industry. For instance, India has stringent laws against overly restrictive trade practices and therefore the enforceability of a non-competition covenant is subject to a case-by-case determination and any particular terms cannot in every case be assumed to be enforceable.¹⁰

9 Gabriel Di Blasi and Mellina Mamede, "IP in Brazil: Breaking Down Barriers", *Life Sciences Intellectual Property Review* (27 November 2014), online: <www.lifesciencesipreview.com/article/ip-in-brazil-breaking-down-barriers>.

10 Sonia Baldia, "Offshoring to India: Are Your Trade Secrets and Confidential Information Adequately Protected?", *Business and Technology Sourcing Review* (12 February 2010), online: <https://www.mayerbrown.com/files/Publication/c4321838-f2ec-4fe5-990d1ea497a7398b/Presentation/PublicationAttachment/5a87579c-8d2b-469d-ad3d-bb95435fe6ff/ART_OFFSHORINGTOINDIA_0308.PDF>.

The risk of expropriation is another non-tariff barrier that can affect businesses' decision to transfer their technology to another country. Expropriation includes forced sale of equity to local partners at lower than economic value, interference by the host government or compulsory licensing. Despite the fact that some countries want to help local companies access new clean technologies, investors regard this behaviour as a risk factor. Certain foreign governments have adopted policies that require companies "to provide trade secret information to a local partner or government agency as a condition of investment or market access."¹¹ Requirements for foreign companies to undergo testing or certification programs and disclosure of confidential information can also be part of the process.

Resource-driven Barriers

The efficacy of foreign legal systems is a factor that many businesses look into when evaluating the transfer of clean technologies to the South. From experience, companies are reluctant to contract with partners from countries that fail to establish a robust legal and judicial system and to implement the rule of law.

In these countries, the enforcement of IPRs may be unreasonably slow, inefficient, burdensome or difficult to follow. The enforcement of contractual obligations will also be greatly affected. For example, non-disclosure agreements are sometimes heavily relied on by businesses to protect themselves against competition. If the recipient country lacks robust legal systems and institutions to suppress unfair competition and breach of confidentiality, foreign companies are reluctant to conduct business in such countries.

Foreigners also run the risk of being systematically discriminated against by countries that lack judicial independence. It should go without saying that corruption also significantly weakens the regulatory and judicial system.

Many other barriers to the transfer of technology could be identified. However, for the purpose of this brief, it is useful to also discuss measures on how to limit their impact.

11 US, *Trade Secrets: Promoting and Protecting American Innovation, Competitiveness and Market Access in Foreign Markets*, 113th Congress (Washington, DC: United States Government Publishing Office, 2014), online: <www.gpo.gov/fdsys/pkg/CHRG-113hrrg88436/html/CHRG-113hrrg88436.htm>.

Potential Mitigations

As illustrated, existing government-driven and resource-driven legal barriers can complicate the transfer of clean technologies from the North to the South. Both legal barriers can be mitigated, provided that appropriate measures are chosen to tackle each category of barriers.

Mitigating Government-driven Barriers

To cope with government-driven legal barriers, a thorough knowledge and comprehension of the legal environment is a necessity for companies that are transferring clean technologies to a foreign country. This comprehension may cover intellectual property, taxation and customs laws as well as certification and other non-tariff barriers.

From experience when there is no adequate protection for IPR in a particular country, technologically advanced companies will be reluctant to sell or license their most advanced technologies. Some companies may, however, be able to use technical means or stringent contractual provisions to avoid disclosure and unauthorized use of their trade secrets and other IPR. In all cases, well-managed companies will require the execution of appropriate non-disclosure agreements prior to disclosing any sensitive information and of contracts that will provide for clear protection of their intellectual property assets.

With partners from countries that limit grant-back clauses and provide for compulsory licensing, it is advisable to draft clauses to notably limit improvements that licensees are authorized to make in the licensed technology, to use appropriate language to limit the application of laws governing grant-back clauses and to show flexibility with licensees to avoid the application of compulsory licensing.

Tax law will also need to be addressed prior to concluding any transfer of technology transaction. Some entrepreneurs have concluded agreements involving clean technology and related goods and services and realized only upon receipt of their first payment that it was subject to an unanticipated withholding tax of 25 percent. For companies selling environmentally friendly goods and licensing that are aware of such a tax environment, it is not uncommon that they will conclude two

contracts with their licensees: one dealing with the sale of goods and services, and the other one dealing with the licensing of the technology and royalty revenues. This practice is meant to avoid the application of restrictions imposed on technology transfer contracts and of withholding taxes on payments for the purchase of goods and services that should not be subject to such restrictions.

Different approaches are also required to effectively anticipate and mitigate non-tariff barriers, such as product certification, market and ownership restrictions, as well as challenges associated with resource-driven legal barriers.

Mitigating Resource-driven Barriers

Companies that do business with partners in countries that have poor legal and judicial systems are aware of the difficulties they may face to enforce their contracts in case of a dispute. Some may limit such risk by ensuring that they are properly paid in advance and prior to delivery of any goods or services.

Companies may also want to rely on effective contractual dispute-settlement provisions. Since most countries from the South are party to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention),¹² it is advisable to incorporate arbitration clauses into contracts. Such arbitration clauses will ensure that disputes between the contracting parties will be resolved by arbitrators selected by the parties or by a mutually agreed arbitration institution such as the International Chamber of Commerce's International Court of Arbitration or the World Intellectual Property Organization's Arbitration and Mediation Center. Furthermore, arbitral decisions such as these will usually be recognized and enforced by the courts of countries that are party to the New York Convention. Foreign court decisions do not yet receive such recognition. Finally, it is also wise to include mediation clauses and other alternative dispute settlement mechanisms and to seek to resolve disputes at an early stage, to avoid bringing the dispute before an arbitrator or a court.

¹² Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 10 June 1958, 330 UNTS 39, Can TS 1986 No 43 art V(2)(b) (entered into force 7 June 1959).

Conclusion

Companies should not be discouraged by the many barriers that limit the transfer of clean technologies. As illustrated above, there are approaches that may be used to mitigate some of the barriers resulting from government policies and others resulting from poor legal and judicial systems.

Adequate assessment and anticipation is key to appropriate mitigation. Companies that specialize in the fields of environmentally friendly technologies that wish to mitigate legal and governance barriers will need to use sufficient resources ahead of time to properly assess their risks and analyze (among other considerations) intellectual property, taxation and customs laws and practices, as well as certification and other non-tariff barriers. This exercise will also assist these companies and their partners involved in a clean technology transaction to find practical and mutually agreeable solutions and strategies to mitigate the potential risks.

This effort is worthwhile as it contributes to facilitating the transfer of clean technology and to addressing climate change and other environmental challenges.

About the International Law Research Program

The International Law Research Program (ILRP) at CIGI is an integrated multidisciplinary research program that provides leading academics, government and private sector legal experts, as well as students from Canada and abroad, with the opportunity to contribute to advancements in international law.

The ILRP strives to be the world's leading international law research program, with recognized impact on how international law is brought to bear on significant global issues. The program's mission is to connect knowledge, policy and practice to build the international law framework — the globalized rule of law — to support international governance of the future. Its founding belief is that better international governance, including a strengthened international law framework, can improve the lives of people everywhere, increase prosperity, ensure global sustainability, address inequality, safeguard human rights and promote a more secure world.

The ILRP focuses on the areas of international law that are most important to global innovation, prosperity and sustainability: international economic law, international intellectual property law and international environmental law. In its research, the ILRP is attentive to the emerging interactions between international and transnational law, indigenous law and constitutional law.

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Our research programs focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

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Nos programmes de recherche ont trait à la gouvernance dans les domaines suivants : l'économie mondiale, la sécurité et les politiques mondiales, et le droit international, et nous les exécutons avec la collaboration de nombreux partenaires stratégiques et le soutien des gouvernements du Canada et de l'Ontario ainsi que du fondateur du CIGI, Jim Balsillie.

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