III. Background: International Legal Framework for Climate Change

A. Green Technology Innovation and Diffusion under International Law

1. Declaration of the UN Conference on the Human Environment (1972)

In 1972, the international community discussed global environmental issues for the first time at the UN Conference on the Human Environment. This conference concluded with the Declaration of the UN Conference on the Human Environment, which contains numerous principles on the preservation and enhancement of the human environment. Among these, Principle 20 states that "environmental technologies should be made available to developing countries on terms which would encourage their wide dissemination without constituting an economic burden on the developing countries."

2. Agenda 21 (1992)

Agenda 21, adopted at the UN Conference on Environment and Development (also known as the Rio Summit) in 1992, affirmed the aforementioned principle. It recognizes a "need for favourable access to and transfer of environmentally sound technologies, in particular to developing countries." In addition, the role of patent protection and IP rights must be considered together with their "impact on the access to and transfer of environmentally sound technology" in order to develop "effective responses to the needs of developing countries in this area."

3. Convention on Biological Diversity (1993)

The access to and transfer of technology commitment under the Convention on Biological Diversity (CBD)⁴⁵ provides guidance for climate change negotiations.

⁴¹ Declaration of the U.N. Conference on the Human Environment, Stockholm, June 16, 1972, U.N. Doc. A/CONF.48/14/Rev. 1 (1972) [hereinafter Stockholm Declaration].

⁴² Id.

⁴³ Supra note 13 at Chapter 34.4.

⁴⁴ *Id.* at Chapter 34.10.

⁴⁵ Convention on Biological Diversity, *open for signature* June 5, 1992, 1760 U.N.T.S. 143, 31 I.L.M. 818 (1972) [hereinafter CBD].

CBD Article 16(1) ensures parties' obligation to provide and facilitate access to and transfer of relevant technologies. According to Article 16(2), this obligation should be fulfilled "under fair and most favourable terms, including on concessional and preferential terms when mutually agreed." Article 16(3) bridges the CBD with TRIPS by stating that parties shall not provide compulsory licenses "under conditions which would contravene the provision of Art. 31 of the TRIPs Agreement." Article 16(5) obliges parties to "cooperate subject to national legislation and international law to ensure that [IP rights] are supportive of and do not run counter to its objective." In addition, the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization were published in 2001 to serve a balanced operation of the CBD framework. The support of the compared to the com

4. UN Framework Convention on Climate Change (1994)

A major achievement of the Rio Summit is the UN Framework Convention on Climate Change. ⁵¹ The goal of the UNFCCC is "the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." ⁵² Since 1995, the parties to the UNFCCC have met regularly in Conferences of the Parties (COP) to assess progress. In 1997, the Kyoto Protocol established binding targets and obligations for reducing greenhouse gas emissions, as further discussed below.

⁴⁶ *Id.* at art. 16(2).

⁴⁷ *Id.* at art. 16(3).

⁴⁸ *Id.* at art. 16(5).

⁴⁹ CBD, THE BONN GUIDELINES ON ACCESS TO GENETIC RESOURCES AND FAIR AND EQUITABLE SHARING OF THE BENEFITS ARISING OUT OF THEIR UTILIZATION (2002) (following CBD Article 15 on the terms and conditions for access to genetic resources and benefit sharing, the Bonn Guidelines (i) set up steps for access and benefit-sharing stressing users' obligation to seek the prior informed consent of providers; (ii) provide for basic requirements for mutually agreed terms and identify the rights and obligations of users and providers; and (iii) contain elements on incentives, accountability, dispute settlement and verification and elements of material transfer agreement with a non-exhaustive list of monetary and non-monetary benefits

⁵⁰ Joseph Straus, *Patents on Biomaterial – A New Colonialism or a Means for Technology Transfer and Benefit-Sharing? in* BIOETHICS IN A SMALL WORLD 45-72 (Felix Thiele and Richard E. Ashcroft eds. 2005).

⁵¹ UN Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S 108, reprinted in 31 I.L.M. 849 (1992) [hereinafter UNFCCC].

⁵² Id. at art. 2.