

**Dear Excellencies, Policymakers and Esteemed Colleagues and Friends from the United Nations, Civil Society and Beyond,**

This presentation is based on a paper produced for OHCHR on “**The Transfer of Environmentally Sound Technology, or EST, in the context of the Right to Development, the Sustainable Development Goals and Climate Change.**” It focuses on the centrality of ESTs to achieve the right to development in a world where climate change is an indisputable reality. ESTs are defined as technology systems that promote and protect environmental sustainability. Greater adoption of ESTs within industrial processes and increased resource efficiency is highlighted in SDG target 9.4, under the goal for inclusive and sustainable industrialisation and infrastructure development.

The central argument of the paper is that technology transfer is urgently required to make ESTs equitable, accessible, and affordable in developing countries for implementation toward the right to development in the context of climate change. The underpinning context of this argument is that technological development is a foundational driver of economic and social development in modern world history. Technology transfer is defined by the Intergovernmental Panel on Climate Change as a set of processes for the knowledge, experience and equipment for mitigating and adapting to climate change among various stakeholders such as governments, private sector, financial institutions, non-governmental organizations and research and educational institutions. The key SDG target on ESTs is target 17.7, under the means of implementation goal, which promotes “the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.”

Technological development is a foundational driver of global economic and social development in modern history. Since 1820, the degree of technology diffusion, adoption and development accounts for 80 per cent of income divergence between rich and poor countries. Based on a sample of 112 countries between 1970 to 2000, one study finds that while financial capital is the main source of growth, technological innovation is the key source of the gap in income per capita between countries. However, it is not simply technology and its increasingly sophisticated innovation that reinforces economic divergence between nations, it is specifically that technology is being constrained from transfer and diffusion from industrialized to developing countries.

In the context of climate change, global warming and natural disasters, the development, use and transfer of EST is of indispensable to the goal of limiting global warming to 1.5

degrees Celsius. The role of ESTs is therefore critical at two specific levels. First, ESTs are required for the deployment of zero carbon emissions processes and technologies in economic production and exchange. Second, ESTs are imperative to economic, industrial, and social development in developing countries in various different levels of development, in alignment to the realization of the Right to Development through creating enabling international and national conditions, international and bilateral cooperation between states and the provision of appropriate means and facilities.

A significant policy and legal constraint to the development of ESTs in developing countries identified by the paper is the IPR model of patents. The degree to which IPRs constitute a barrier to the transfer of ESTs depends on several factors, such as whether or not the particular technology is patented, whether there are viable and cost-effective substitutes or alternatives, the degree of competition, the prices at which it is sold, and the degree of reasonableness of terms for licensing, among other factors. To promote sustainable development through the right to development, it is critical to expand the space for technologies in the public domain, which implies scaling up the transfer of publicly-funded technologies developing countries.

From a development perspective, the World Trade Organization's Trade Related Intellectual Property Rights (or TRIPS) Agreement states in its Article 66.2 that developed countries should "promote and encourage technology transfer to least developed country members in order to enable them to create a sound and viable technological base." From the RTD perspective, technology transfer reduces development inequalities and inequities among countries as well as individuals and groups. Article 31 of TRIPs permits compulsory licensing, which can be harnessed to facilitate greater access of patented ESTs to many developing countries, particularly LDCs. 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. Article 31 essentially stipulates that patents can be replicated without authorization by the patent holder in the "case of national emergency" or for "public non-commercial use."

A key challenge is that compulsory license issuance for ESTs is unlikely to be considered "public non-commercial use," due to the reality that most technology is attached to some type of commercial enterprise. However, a human rights - oriented case can be made that the threats to livelihoods, ecological preservation and survival at large posed by climate change constitutes a "national emergency," particularly in developing countries that lack access to patented ESTs and where a large majority of the human toll of climate change induced natural disasters and industrial pollution takes place. On this basis, ESTs

should be exempt from patent enforcement on the grounds of public interest to combat climate change by allowing for free access to ESTs in developing countries.

Examining the linkage between FDI and the development and diffusion of ESTs highlights the need to maximise the potential of FDI to support technology transfer and innovation of ESTs. A key set of policy tools for this purpose is that of performance requirements, which are stipulations that authorities design for foreign investors to meet in order to establish or operate a business in their sovereign territory which help the development needs of that country. In line with DRTD Article 10, policy actions that “ensure the full exercise and progressive enhancement of the right to development” should be undertaken.

Governments and industries in developed countries play an important role in funding research and development programmes, many of which are implemented by the private sector and are responsible for developing ESTs. A progressive multilateralism should commit developed countries to the public provision of the scientific benefits of both public and private sector Research and Development programmes.

A democratic and equitable process for a global just transition to decarbonised economies and societies must pay respect to the principle of common but differentiated responsibility that integrates the historical and current responsibility of the North in the overwhelming majority of global carbon emissions through both industry and consumption patterns. A just transition must also address structural inequalities and the need for redistribution, reforms in the international financial architecture, employment creation and climate change mitigation and adaptation.

At the same time, achieving the economic, social and environmental Sustainable Development Goals by 2030 is at dire risk of becoming a dream deferred in as the multidimensional crises of the current moment, from pandemic, debt, inflation, war and intensifying climate change. In this vein, the equitable development and transfer of ESTs is indispensable for economic, social and climate equity at the heart of the Right to Development.