



ENVIRONMENTALLY SOUND TECHNOLOGY AND THE RIGHT TO DEVELOPMENT: REALIZING HUMAN RIGHTS FOR SUSTAINABLE DEVELOPMENT

Key Messages



UNITED NATIONS
HUMAN RIGHTS
OFFICE OF THE HIGH COMMISSIONER

ENVIRONMENTALLY SOUND TECHNOLOGY AND THE RIGHT TO DEVELOPMENT: REALIZING HUMAN RIGHTS FOR SUSTAINABLE DEVELOPMENT

Technological development is a foundational driver of global economic and social development. Environmentally Sound Technologies (ESTs), such as solar panels and wind turbines, are technology systems that promote and protect environmental sustainability. ESTs are central to achieving the right to development in a world where climate change is a reality. The importance of ESTs is at the centre of ongoing discussions and debates regarding addressing the technology requirements of decarbonising on a global scale while also addressing structural inequalities and the need for redistribution, reforms in the international financial architecture, employment creation and climate change mitigation and adaptation. OHCHR's Key Messages on "Environmentally Sound Technology and the Right to Development: Realizing Human Rights for Sustainable Development" include policy recommendations addressed to States as primary duty-bearers; international organisations and lenders; the private sector; and international and national civil society actors.



01

Facilitate technology transfer

Technology transfer, by reducing development inequalities within and among countries, communities, groups and individuals, facilitates the realization of all human rights, and in particular the right to development. To promote sustainable development as well as the right to development, it is important to expand the space for technologies in the public domain. This implies scaling up the transfer of publicly funded technologies to developing countries to ensure equitable and affordable access to Environmentally Sound Technologies (ESTs).

The successful transfer of these technologies to developing countries for climate change mitigation and adaptation purposes, occurs within a broad context of policy frameworks relating to the financial, legal, governance, market, infrastructure, social and institutional structures of a State and society. Such frameworks determine to what extent an enabling international and domestic environment to facilitate technology transfer exists. The importance of an enabling environment lies at the core of the Declaration on the Right to Development, which stresses in Article 3.1 that States have the primary responsibility for the creation of national and international conditions favorable to the realization of the right to development.

The intellectual property rights (IPR) model of patents and trade secrets poses a significant policy and legal constraint to the development of ESTs in developing countries. Economic decisions, trade policies, business models choices too often have ignored human rights obligations, but these activities also need to enhance the level of respect for human rights and not undermine them. To ensure equitable and affordable access to the innovation and development of ESTs, in alignment with the objectives of the right to development, the model of patents and trade secrets must be reformed to meet the objective of equitable technology transfer. In the context of the urgency posed by climate change, developed countries may strive to allocate research and development funding for EST innovation to the public domain where IPRs do not pose a barrier for developing countries, especially Least Developed Countries (LDCs), to access ESTs. Another possibility would be to support open innovation and make use of the flexibilities afforded by the Trade Related Intellectual Property Rights (TRIPS) Agreement to enhance access to patented ESTs. In that context, developed countries can allow for the compulsory license of certain ESTs that will be vital to reducing carbon emissions or to creating cleaner industrial processes. Only when ESTs are developed in accord with human rights law, could a patent enforcement apply. In light of the climate crisis, due consideration should be given to exempting ESTs from patent enforcement. Technical assistance to developing countries can be provided by international organizations to facilitate their ability to constructively use those flexibilities and to carry out compulsory licensing. The technology-related skills and knowledge of the private sector should be shared as much as possible with the public sector. Civil society can monitor best practices in IPR flexibilities for ESTs as well as the supply and access to non-patented ESTs.

02

Reform the model of patents and trade secrets and use flexibilities in the Intellectual Property Rights System

03

Maximise the potential of Foreign Direct Investment

Foreign direct investment (FDI) is a key channel for technology transfer. FDI includes licensing agreements which grant permission to use ESTs and, ideally, also provide for the transfer of know-how, joint research and development initiatives between local and foreign partners to create new ESTs. Developed countries can establish manufacturing and service production in developing countries with the explicit aim to facilitate technology and knowledge transfer and to adapt ESTs for local use. Developed countries should encourage transnational corporations (TNCs) based in their jurisdictions to initiate joint ventures with local firms to transfer know-how. Performance requirements are another key set of policy tools to maximise the potential of FDI to support technology transfer and innovation. They are conditions that authorities impose on foreign investors to establish a business in their sovereign territories in order to promote their development needs. Developing countries can incorporate performance requirements in FDI contracts to require technology transfer and joint ventures with local firms, and also compel corporations to act in a manner consistent with the UN Guiding Principles on Business and Human Rights. International organisations can provide technical assistance and financing to developing countries to facilitate their ability to receive and use ESTs from global value chains where TNCs are operating in their territories. Assistance and information on best practices in establishing joint ventures between local firms and TNCs can also be provided. The private sector should prioritise the manufacturing and production processes of ESTs in developing countries and facilitate the inclusion of local firms and producers in their global value chains. Civil society could advocate for constructive forms of FDI that will best deliver ESTs required to combat climate change impacts.

The International Covenant on Economic, Social and Cultural Rights states that everyone has the right to enjoy the benefits of science and its applications (art. 15). States should actively support the development, dissemination and transfer of new climate mitigation and adaptation technologies, including technologies for sustainable production and consumption. Environmentally clean and sound technologies should be accessibly priced, the cost of their development should be equitably shared and their benefits should be fairly distributed among and within countries. Technology transfers between States should ensure a just, comprehensive and effective international response to climate change. States should also take steps to ensure that global intellectual property regimes do not obstruct the dissemination and transfer of mitigation and adaptation technologies, while at the same time ensuring that these regimes create appropriate incentives to help meet sustainable development objectives. The right of indigenous peoples to participate in decision-making related to and benefit from the use of their knowledge, innovations and practices should be protected. Finally, governments in developed countries should continue to support research and development programmes, many of which are implemented by the private sector and are responsible for developing ESTs. For example, joint ventures should be created between educational institutions across developed and developing countries, in particular between research institutes within universities.

04

Guarantee that everyone enjoys the benefits of science and its applications

05

Promote international cooperation and global partnership in order to further the fair sharing of the benefits of development

States have the duty to cooperate and promote international cooperation in order to ensure the fair sharing of the benefits of development. In particular, developed countries should provide financial support to facilitate the achievement of the SDGs in developing countries by 2030, in line with SDG 17 on global partnership and with the Addis Ababa Action Agenda. This includes the creation of initiatives to facilitate the movement and training of researchers, technologists and entrepreneurs, particularly from LDCs, in order to improve technology transfer for technologies that are important for public services and the development of infrastructures such as health, sustainable energy and agriculture, or governance. To strengthen endogenous R&D processes, local universities and in particular the science, technology, and innovation programs in research institutions and academic centres can receive funding boosts from both the public and private sectors. All countries should also strive to enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism. All stakeholders should work to fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries and enhance the use of enabling technology, in particular information and communications technology.

Capacity-building is central to the creation of an enabling environment for the transfer of ESTs, particularly with regard to strengthening local ability to use ESTs and the technical skills of the domestic labour force. From a right to development perspective, this will expand people's opportunities to contribute to, participate in and enjoy economic development. ESTs are not merely individual technologies, but rather complex systems, which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures. This implies that when discussing the transfer of technologies, the human resource development and local capacity-building aspects of technology choices need to be addressed. Strengthening and securing the capacity of people and institutions in developing countries enables them to produce technologies which can be used directly in their domestic economies. Developing countries should boost their national capacities including productive capacities not only to receive and use ESTs but also to innovate and develop them through endogenous production and technological knowledge. International organisations can direct financial and technical assistance towards strengthening education and training opportunities, particularly in Least Developed Countries (LDCs) where there are significant barriers to access higher learning in universities. The private sector, in particular transnational corporations (TNCs), can prioritise the transfer of know-how and technology-related education, training and skills in their foreign direct investment activities. Civil society may direct advocacy efforts with governments, international organisations and the private sector toward meeting the need for programmes that enhance capacity-building and the strengthening of technology-related skills in developing countries.

06

Develop capabilities to facilitate technology transfer

07

Provide finance for Environmentally Sound Technologies

Taking into account the principle of common but differentiated responsibilities, States should cooperate to address the global effects of climate change on the enjoyment of human rights around the world with a view to advancing climate justice and equity for all. For climate actions and sustainable development to achieve their objectives, they must be informed by human rights, including the rights of present and future generations to a healthy environment. Financial assistance greatly facilitates climate change mitigation and adaptation in developing countries. In the case of public domain Environmentally Sound Technologies (ESTs), the main barrier to technology transfer may be the lack of financial resources, especially in Least Developing Countries (LDCs). International funds should be mobilised to enable countries in need to access such technologies. The obligation to provide climate finance is interlinked with an international commitment to finance the 2030 Agenda for Sustainable Development, which seeks to achieve a global development paradigm based on the three dimensions of universal sustainable development – the economic, social and environmental priorities. Climate finance incorporates the key areas of finance, technology and knowledge, which together contribute to successful climate action. Therefore, States, international organisations and civil society organisations should support and promote multilateral investment and lending policies, technology transfer, and technical assistance that serve the development and growth of environmentally sound technology globally, as well as the necessary infrastructure to this end.