

UNDP contribution to paragraph 273 of the outcome document

“We recognize the importance of strengthened national, scientific and technological capacities for sustainable development. This can help countries, especially developing countries, to develop their own innovative solutions, scientific research and new, environmentally sound technologies, with the support of the international community. To this end, we support building science and technology capacity, with both women and men as contributors and beneficiaries, including through collaboration among research institutions, universities, the private sector, governments, non-governmental organizations and scientists.” (¶273 of the Rio+20 outcome document)

UNDP was asked to provide input to a SG report on a technology facilitation mechanism, as mentioned in this paragraph.

As such, below are some potential functions, format and working methods of a technology facilitation mechanism.

I. Functions

The technology facilitation mechanism supported by the UN should have as its major function to build the capacity of countries to transform their economies, in an inclusive and equitable manner, towards long term sustainability. This means that the capacity of countries at the national and local levels needs to be built to make informed policy and investment choices that redirect major public and private financing - and thus the economy - towards sustainable production and consumption processes in an inclusive and equitable manner.

Facilitating individual projects is no longer sufficient. Individual projects can serve as examples or to gain political traction, but individual projects alone, without all-encompassing macro-economic and social frameworks, are drops on a hot plate. To address the multiple challenges the world is facing, including the challenges related to the natural environment, a transformation of economies is needed. To achieve this, the UN needs to support countries to develop and implement integrated and holistic development plans that redirect the economic and social processes.

II. Format

Given that the major objective of the technology facilitation mechanism should be an inclusive transformation of economies, the way the UN support this mechanism should be different from before (this is focusing on projects, technology transfer, matching supply and demand, clearing houses etc.). The focus should be on building the capacity of countries to do the technology development, innovations, transfer and implementation themselves, as a mainstream mechanism pertaining to all sectors of society and economy. The paper *‘An Innovative Public-Private Approach for Technology Transfer to Achieve Low-Emission and Climate Resilient Development’* describes a possible spider web structure that could facilitate such an inclusive technology transformation. As illustrated in this paper for UNU and UNDP, many, if not all UN agencies, could and should contribute to this inclusive technology transformation in a mutually supportive manner.

III. Working methods

The working methods of this global network should be different from the current working methods the UN is applying in the field of technology, with each agency pursuing individual projects often in isolation. The focus should be on building the inherent capacity of countries themselves (rather than doing technology transfer for them), building the leaders, the institutions, the enabling legislation and regulation and associated monitoring system. Emphasis should also be placed on building research and innovation capacity, including for indigenous solutions and to promote South-South and South-North cooperation. Extensive use of modern information technology should be made. The UN has not as yet developed such a transformational and integrated method of working, the SG SEFA initiative coming closest to this new working style.

IV. The potential contribution of UNDP

During the past two decades that UNDP has been working in the area of technology transfer. The focus of work has evolved from a project approach to supporting countries to transform economies towards long term sustainability. To this end, UNDP has moved from project implementation-based interventions to focusing on market transformation and creating the enabling environments for strengthening of sustainable markets and governance mechanisms. Lately UNDP has moved in the area of supporting countries to adopt integrated approaches to holistic transformations of economies. With a national level approach UNDP works to remove barriers to widespread adoption of technology and practices which include enabling energy efficiency, renewable energy and sustainable transport.

UNDP support emphasizes: the strengthening the policy and institutional frameworks needed for low-emission, climate-resilient development; mobilizing resources and expanding financing options for energy sector development—especially in terms of providing access to reliable energy services for low-income households; removing barriers to energy markets including for low-income households; scaling up innovations in energy service delivery by combining innovative, sustainable business models with a wide range of energy technologies; aligning the work of the UN system at the national level behind energy programming that integrates the three strands of sustainable development, via the resident coordinator system; and working with a wide variety of partners—at the global and regional levels, at the national level with governments, the private sector and civil society, and at the local level with local governments, businesses, civil society, and local communities.

These initiatives are financed from numerous sources, including government budgets, official development assistance, the [Global Environment Facility](#), foundations, non-traditional donors, micro-finance, as well as via market-based instruments like feed-in tariffs and carbon finance.

The below table summarizes key areas of work on technology transfer as identified in three separate papers: i) *'An Innovative Public-Private Approach for Technology Transfer to Achieve Low-Emission and Climate Resilient Development'*, ii) *'Global Call to Action on Technology Transfer'*, and iii) *'UNDP & Environmentally Sound Technology Transfer - Case Studies'*. Furthermore, the same approach detailed in ['Readiness for Climate Finance: A framework for understanding what it means to be ready to use](#)

[climate finance](#)' can be applied more broadly and not focus solely on climate friendly technologies but to all environmentally sound technologies.

TABLE 1: IDENTIFYING KEY AREAS OF WORK: UNDP's role in delivering Tools, Services and Support at the Country Level

Technology needs and Capacity Building	Key Delivery Mechanisms at the Country Level
Policy support and advisory services	<ul style="list-style-type: none"> • Provide Expert policy advisory and technical support teams that can assist country identify technology needs, including as necessary through the use of existing regional centres and knowledge networks. • Roll out and implementation of TNA Handbook and TNA Assess • Building capacities at the country-level to conduct TNAs • Provide requisite policy advisory and support services to implement concrete action on identified technology needs. • Identification of best practices and services for technology related planning and implementation at the country level. • Facilitation and development of policy, planning and implementation networks with a view towards innovative, flexible partnerships.
Capacity Building for Technology Development and Transfer	<ul style="list-style-type: none"> • Enhance training and capacity building in countries based on existing mechanisms and networks (for example by leveraging existing initiatives such as CC: TRAIN) • Build capacity for feed-in tariffs and other innovative financial mechanisms; for integrated and sustainable planning and policies, inclusive business models, MRV, institutional strengthening and technology innovation. • Provide finance options and financial and non-financial risk mitigation and management. • Local and decentralized solutions, renewable solutions and efficiency gains • Improved natural resources management, ecosystem based approaches and biodiversity conservation. • Using existing networks and establishing relevant clearing-house mechanisms that can track and match country needs with existing tools, services and support • Strengthen technical and institutional capacities within countries based on proven methodologies and approaches in order to facilitate the development, adaptation, and implementation of technology related tools, services, policies and best practices
Stakeholder collaboration and action to enhance technology development and transfer	<ul style="list-style-type: none"> • Provide support and assistance as needed to promote relevant for and collaborative platforms for development of public-private partnerships on technology. • Convening forums for research and development and collaboration amongst stakeholders. • Build integrated networks for technology transfer and innovations based on the best available expertise.
Developing appropriate policies, services, tools, and best practices for technology development, diffusion and transfer	<ul style="list-style-type: none"> • Identify appropriate mechanisms and networks that will facilitate the exchange of information on tools, policies, services, methodologies and best practices related to technology development and transfer. • Convene relevant networking opportunities for dialogue and exchange of information for sharing policies, services, tools and best practices. • Provide necessary training at country (sub-regional and regional) level to facilitate the diffusion and adaptation of tools, services and policies. • Conduct the requisite country-driven technical workshops that focused on developing and adapting technology related tools, services, policies and practices.

Furthermore UNDP has been active in providing support to the G20 inclusive green economy toolkit, i.e. the submission to the G20 Development Working Group by the AfDB, the OECD, the UN and the World Bank '[A Toolkit of Policy Options to Support Inclusive Green Growth](#)'. This toolkit provides an existing basis on which to build.

A partial list of major existing UN programmes in the field of inclusive green economy is also available in the EMG publication on green economy.

UNDP as the convener of the RC system, working through UNDG can also assist in ensuring a coordinated and coherent delivery of technology support at the countries level, bringing the best of the whole UN system to bear in developing and implementing the technology facilitation mechanism as referred to in paragraph 273 of the Outcome Document.

V. List of Partner Organisations

The major existing collaborative efforts include:

- The G20 work on inclusive green economy, including the [Global Green Knowledge Platform](#);
- The UNDG and the RC system;
- The work on technology done under the UNFCCC, including Climate Technology Centre and Network to be established under the UNFCCC process; and
- The EMG.