



TECHNOLOGY TRANSFER



Technology transfer and development activities by the UN system promote the diffusion and uptake of environmentally-friendly and climate-friendly technologies and practices towards achieving objectives of mitigation and adaptation at the country level.

The transfer of technologies to developing countries is central to pursuing meaningful adaptation and mitigation actions, as well as more broadly advancing sustainable development goals and objectives. This issue has been highlighted in discussions on the post-2012 framework for international climate policy, with the Bali Action Plan highlighting the importance of technology transfer. The framework under the UNFCCC has five main themes: technology needs and needs assessments; technology information; enabling environments; capacity building; and mechanisms for technology transfer (decision 4/CP.7). The UN system is supporting enhanced implementation of the Convention through increased collaborative and mutually reinforcing actions within these five themes.



The UN system activities are sensitive to the reality that the support for the development and transfer of technology requires not only “hard” technology, but also support for national capacity and systems to facilitate the transfer, development and deployment of technologies. Future work will need to build on, and then move beyond, national technology needs assessments to in-depth analyses of the actual market and trade barriers that prevent technology transfer and uptake from taking place. Many existing technologies can be deployed more widely in developing countries with local and global benefits, with a prominent example being energy efficiency, particularly in the building sector. At the same time, new global partnerships will be necessary to develop and deploy the next generation of technologies to meet climate and sustainable development goals.

The UN is currently taking action in a number of critical areas to support development and transfer of technologies to address climate change, including: →

Technology needs and needs assessments

Support to countries in preparation of their Technology Needs Assessment (TNA) reports; development of energy indicators for a sustainable development methodology that facilitates identifying options and potential for technology transfer in the energy sector; support to national and local governments to integrate climate change concerns in land use planning, infrastructure standards, building codes and building materials and to address energy use in buildings; development, in cooperation both with governments and the private sector, of an internationally agreed standard methodology to measure the impact of ICTs on climate change.

FAO, GEF, IAEA, ITU, UN-DESA, UNDP, UNEP, UNFCCC Secretariat, UN-HABITAT

Technology information

Databases on climate-related technologies/IPRs in public domain and technology transfer projects and environmentally sound technologies; development of comprehensive national technology plans that provide the basis for the systematic removal of barriers needed to develop markets for prioritised technologies; dissemination of technical knowledge related to climate-friendly tourism through a web-portal and interactive workshops; dissemination of knowledge and transfer of environment-friendly agricultural technologies that address both climate change adaptation and mitigation at the community level.

FAO, IFAD, UNEP, UNIDO, UNFCCC Secretariat, UNWTO, WIPO

Enabling environments

Transforming markets through testing, development and establishment of new technologies; promoting the development of markets for energy efficient technologies and development of International Standards on Energy Management; Green Jobs Initiative to promote opportunity, equity and the transition to a green economy; standardized licensing agreements to facilitate technology transfer and reduce transaction costs; regional programmes on trade and environment capacity building to foster an enabling environment for technology transfer; supporting policy change and institutional development to promote greater private sector investment in technology transfer and development (such as smart wind tariffs, power purchase agreements, and capitalization of pilot financial instruments); transforming markets through testing, development and establishment of new technologies, financial products/structures, and business models, and scaling up of those successful initiatives with the highest potential impact; policy analysis on the ingredients for enabling environments for technology transfer, and policy options for promoting private sector inputs into public policy outcomes.

GEF, ILO, UNCTAD, UNDP, UNEP, UNIDO, UN Regional Commissions, World Bank Group

Capacity building

Handbooks and training on conducting Technology Needs Assessment for climate change, preparing technology transfer projects for financing, and conducting technology transfer negotiations; training in and transfer of decision support tools for countries to select policy options that “climate proof” coastal communities with a focus on Africa; tools, policy support and technical assistance for climate-friendly urban infrastructure investment, at the public and private levels, in the context of rapid urbanization; developing national and local capacity to adapt and widely disseminate clean energy technologies to expand access to modern energy services and expand clean and affordable energy services for rural people; developing capacity of Member States to better leverage Earth observation and remote sensing technologies, both for monitoring climate change itself and for building and deploying early warning systems; high-level dialogue meetings on technology development and transfer; e-Environment scoping study, to provide guidelines for developing countries on how to use ICTs for better management and protection of the environment as a key part of their development process, with particular focus on climate change and building capacity of member states in geospatially-enabled ICT for climate change and disaster mitigation.

FAO, GEF, ITU, UN-DESA, UNDP, UNEP, UNESCO-IOC, UNFCCC Secretariat, UN-HABITAT, UNIDO, UN Regional Commissions (UN-ECA)

Mechanisms for technology transfer

Scaling up financing to contribute to demonstration, deployment, and transfer of low-carbon technologies with a significant potential for long-term greenhouse gas emission savings; networking, joint research and development and the promotion of approaches for cleaner, more efficient industrial production through Technology Centres/Investment and Technology Promotion Centres/Cleaner Production Centres; fostering of agricultural technology innovation through the Consultative Group on International Agricultural Research; public-private partnerships for technology transfer.

FAO, GEF, IFAD, UNDP, UNEP, UNIDO, World Bank