

Priorities for the poorest

Progress must be made, locally and internationally, to create an environment where climate action and access to energy are congruent goals in least developed countries

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The adoption of Agenda 2030 and its Sustainable Development Goals (SDGs) marked a new level of political recognition of the important role of energy in achieving sustainable development. The pathway to reaching universal access to modern energy, however, has not been straightforward – especially for least developed countries (LDCs).

For years, the 47 LDCs have pushed for climate technology transfer to support their development priorities at the highest international forums. The UN's 2011 Istanbul Programme of Action and 2015 Addis Ababa Action Agenda both focus on developing productive capacities for LDCs and enabling global frameworks for financing development post-2015. Earlier this year, the Technology Bank for LDCs, modelled on the United Nations University, was established to strengthen the science, technology and innovation capabilities of LDCs.

In 2016, LDCs launched the Renewable Energy and Energy Efficiency Initiative for Sustainable Development. This initiative is owned and driven by LDCs to enable them to more quickly harness renewable energy potential and promote energy efficiency.

In addition to these efforts, all 47 LDCs have submitted national climate action plans to support the objectives of the Paris Agreement. For example:

- Ethiopia's Climate-Resilient Green Economy strategy aims to reach net-zero emissions and lift Ethiopia out of LDC status by 2025.
- Bhutan has committed to remain carbon neutral, which it has been since 2010.

- Tuvalu has pledged to generate all its electricity from renewables by 2025.

While these plans differ considerably across LDCs in terms of detail, ambition and technology choices, they are nonetheless a clear indication of countries' political will to transition towards low-carbon economies. But good intentions will only take you so far.

A recent study by the Technology Executive Committee of the UN Framework Convention on Climate Change (UNFCCC) suggests that while LDCs may be eager to accelerate their development across the full spectrum of the SDGs, they still face tremendous barriers to combat climate change and increase energy access. Challenges include: the quality of technology and performance; limited institutional and organisational capacity; and the struggle to attract investment capital due to low GDP growth, less mature financial markets, and poor infrastructure.

Practical steps

Without doubt, even as advances in clean technologies make low-carbon pathways economically and technically feasible, international collaboration remains vital to enable LDCs to build their capacity and attract the finance to make this transition. So, what practical steps can be taken to create an environment where climate action and access to energy are congruent goals in LDCs?

Our organisation, the Climate Technology Centre and Network (CTCN), the operational arm of the UN Climate Convention's Technology Mechanism, is co-hosted by UN Environment and the UN Industrial Development Organization (UNIDO). It focuses on providing solutions to such questions by matching developing country needs for climate technologies

with funded, tailored, world-class solutions provided by our global network of 450 technology companies and institutions.

Since our inception, we have worked alongside LDCs to help them implement their national climate and energy strategies. We do this through interventions that enable supportive policies, by building local capacity to manage transformative technologies, and by helping LDCs to access international financial mechanisms.

In Nepal, the CTCN supported the development of a policy framework and business model to promote the sustainable use of biomass briquettes. This assistance will ultimately help the country achieve its national development priorities by addressing energy needs from various consumer levels. It will reduce excessive fuel wood consumption for cooking and heating in rural households. It will decrease dependency on forest resources. And it will boost employment in the biomass energy sector.

In Uganda, we facilitated a feasibility study for a national pay-as-you-go policy and mechanism to enhance rural off-grid solar energy access and clean cook stoves. Following the study's recommendations, the country has developed a national framework for mobile banking energy solutions. In Tanzania, the CTCN raised end-user awareness of solar photovoltaic technology, trained solar installers and retailers, and established a reference service as part of our assistance in promoting the sustainable use of this technology.

In Bangladesh, we helped develop a certification course for energy managers and energy auditors. This not only decreased dependence on volatile and rising energy prices, it also increased energy security and self-sufficiency. Through a summer school at Radboud University in the Netherlands,



the CTCN provided tailor-made training to introduce the practice of technology transfer. Students worked in small groups on case studies focused on prioritising sectors and technologies for mitigation within different country contexts, and utilising policies and relevant governance tools. Of the 28 participants in the 2018 course, 14 were from LDCs.

To further assist LDCs to access international financial mechanisms, CTCN has introduced an incubator to support the development of requests for technical assistance in line with country technology roadmaps and support programmes. This allows countries to make better use of country-level finance available through the Green Climate Fund (GCF) readiness support programme.

Tanzania is the most recent LDC beneficiary of the incubator, receiving in-country training designed to enhance the skills of project proponents, ministries and institutions in preparing GCF concept notes. Of the three concept notes developed during the training, one focused on

addressing the barriers of integrating mini-grid connection to the grid system.

Innovative approaches

These programmes certainly provide support to LDCs in acquiring the knowledge, skills and tools to finance and implement clean technologies. Yet findings from a recent paper published by the International Institute for Environment and Development on LDC experiences with the UNFCCC technology mechanism indicate that more outreach is required.

LDC representatives still feel that lack of capacity, awareness or information is their primary barrier to accessing climate finance for technology development and transfer. Others express difficulties related to the complexity of the process, noting the large number of steps involved in applying for and accessing funding. The more difficult the process, the more capacity countries need to navigate it.

In other words, we must work harder to stimulate collaborative international efforts and continue to strive for transformational

▲ Installing panels at one of East Africa's largest solar farms, Rwamagana District, Rwanda. LDCs' drive to increase climate technology transfer is often hampered by limited institutional and organisational capacity

change through innovative approaches. The CTCN continues to adapt its service offering to match not only the lessons learned from pilot projects and programmes but also from its National Designated Entities, report insights, network members and collaborative bodies. All of these are concerned with helping the most vulnerable populations in the world.

In the meantime, LDCs march on with innovative approaches. Bhutan, Cambodia, Ethiopia, Laos, Mozambique and Nepal have developed national low-carbon resilience plans and strategies. As their own action plans reveal, even if LDCs are facing enormous climate and energy-related challenges, the political will exists to take decisive action. We must act on this opportunity to introduce bold methods to reduce the energy access gap faced by LDCs, and simultaneously contribute to climate action. ●