

Countries Progress in Solar PV in Support of NDC Implementation and Contribution to Achieving SDG7

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EXECUTIVE SUMMARY

This case study examines the progress being made by 12 least developed countries (LDCs) in their effort to achieve Sustainable Development Goal 7 (SDG7) – access to clean and sustainable energy for all. Focusing on solar photovoltaics (PV), the authors look at what can be done to further the spread of renewable energy, and the role various actors have to playing in helping these countries to meet SDG7. Furthermore, with countries on the cusp of submitting their revised contributions under the Paris Agreement, they look at the role solar PV can play in helping LDCs to participate in taking action against climate change. After outlining the current policy landscape, and efforts being made within these countries, they look at the obstacles, opportunities, and the role of solar PV going forward. They also look at the steps that policymakers, both national and international, can take to encourage the rapid uptake of renewable energy in developing nations.

OBJECTIVE

The objective of this study is to examine the role of solar PV in helping Least Developed Countries (LDCs) achieve Sustainable Development Goal 7 (SDG7) – access to clean and sustainable energy for all, while simultaneously keeping up with their climate change contributions under the Paris Agreement. With a recent Renewable Energy Policy Network for the 21st Century (REN21) report (2018) showing that renewables accounted for 70% of global power additions in 2018, and that a further 55% of that was from solar PV (coupled with the massive uptake of PV technology in China), it is clear that solar power is going to play a key role in our shared energy future. We look at the challenges developing countries face when dealing with PV, the policies currently in place, and what decisions we can make going forward to help encourage the uptake of PV in addition to a widening of access to energy.

BACKGROUND TO SOLAR PV PROLIFERATION IN DEVELOPING COUNTRIES

While as much as 85.3% (United Nations Economic and Social Council, 2017) of the world's population had access to electricity in 2014, that still leaves over 1 billion people lacking basic access to energy. This is highly problematic as without reliable access to energy, populations may experience limited economic opportunities, lack of access to quality education, comparatively worse health conditions and medical services, and inability to perform basic everyday tasks such as cooking or purifying water.

With this in mind, the international community devised a range of measures aimed at tackling such pressing issues such as Agenda 2030 and the Sustainable Development Goals, with SDG 7 in particular – access to affordable, reliable, sustainable and modern energy for all – aiming to make this problem a thing of the past.

For developing countries, however, this poses a significant challenge in that while committing to increasing energy access under the Agenda 2030 framework, they have also pledged to make this energy sustainable and modern all the while reducing their GHG emissions and curbing their environmental impact under the Paris Agreement, and simultaneously reducing poverty and hunger.

With the 2020 revision of countries' Nationally Determined Contributions [NDCs] (at their most basic level an outline of the plan each country has devised in order to help it meet its obligations under the Paris Agreement) rapidly approaching, it is more crucial than ever for countries to develop concrete strategies for how they intend to achieve a more sustainable future such as the one put forward under the global agreements listed above.

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