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Document type

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978-153619533-0, 978-153619373-2

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An assessment on energy policies and challenges to promote solar PV in South América: The Ecuadorian case

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In South American countries, where hydroelectricity accounts for more than 54% of the total installed capacity, Non-Conventional Renewable Energy (NCRE) has emerged as a key factor to address climate change, raise energy security, and diversify the energy matrix. The objective of this article is to assess the status and challenges of solar PV in South American countries and the energy policies that have been used to foster NCREs, with focus on solar PV. Long-term auction, net metering, and feed-in tariff have been the most popular support schemes to promote renewables in the region. Nevertheless, these energy policies are still far of promoting a significant development of solar PV. Currently, NCREs contribute with only 4.5% of the total installed capacity in South America, from which, solar PV energy represents 28.8%. Chile leads solar PV installed capacity, followed by Brazil, Peru and Uruguay. These countries and Argentina are expected to add 20.9 GW of PV installed capacity on the next decade. The paper also presents and discusses the development and challenges to foster solar PV in Ecuador, as a case study. In Ecuador, Feed-in Tariff policies have not promoted adequately the use of NCREs. Thus,

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