Enhancing Developing Countries? transition to a low-carbon electricity sector.

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ABSTRACT

Sustainable Developing Agenda, through initiatives such as Agenda 21 and 2030, provides a series of goals and targets to support decarbonization and improve quality of life conditions. It is essential to assess if the challenges faced by developing countries for the energy transition to a low-carbon electricity sector are being addressed in this agenda. We undertook a systematic bibliographic review of the energy transition in the electricity sector in low- and middle-income countries from 2016 to 2018. This enabled us to identify the main challenges for energy planning and policy making. We then assessed if they were addressed in Agenda 21 and Agenda 2030. The main challenges found are related to the lack of data collection and systematization and political destabilizations that hamper the establishment of coherent long-term energy planning. The challeges were better addressed in Agenda 21 than in the Agenda 2030. Developing countries must keep in mind Agenda 21 statements to improve the capacity of collecting data beyond the Agenda 2030 indicators for the energy transition. In addition, developed countries and international bodies could potentially provide scientific support for the development of tools and methods customized for developing countries as part of the efforts to low-carbon electricity.