Myanmar electricity

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The electrification rate in Myanmar is one of the lowest in Asia, at 50% in 2019 December.[9] The electrification rate is especially low in rural villages, which are mainly not connected to the power grid. Wood and biomass are used as a primary source of energy in these areas.[10]

The energy sector is considered a strategic industry by the Myanmar government and the petroleum sector is one of the biggest recipients of foreign direct investment.[14]

Hydropower resources are estimated to be about 40 GW at a capacity factor of 0.40, giving a total yearly hydropower generation capacity of about 140 TWh.[13] Installed hydropower capacity as of 2011 was 1.54 GW with a total generation of 3.9 TWh, there is, therefore, a substantial opportunity for further growth of this energy source.[13]

Developing solar energy in Myanmar is viewed as an important climate change mitigation measure for the country that is highly vulnerable to the detrimental impacts of climate change.[15]

On 18 May 2020, the Ministry of Electricity and Energy issued an invitation to submit prequalifying bids for the construction of several solar plants throughout the country, with a combined capacity of 1060 MW. The ministry received more than 150 bids for the tenders and on 9 September 2020 bidders were announced. All but one of the winning bids for the 30 sites involved Chinese companies, with unit price ranging from 3.48 US cents to 5.1 cents per kilowatt hour.[20]

Myanmar"s Department of Renewable Energy and Hydropower Plants is prioritising the development of solar and wind energy.[7] Rakhine State, Tanintharyi and Ayeyarwady regions have been identified as sites with strong wind power potential.[7][21] However, solar energy potential is higher compared to that of wind energy in Myanmar.[18]

Myanmar is developing its first wind power plant in Chaung Thar, Ayeyarwady Region, through a 30 MW wind power project it is undertaking with China"s Three Gorges Corporation.[7][17]

Currently, Burma"s energy sector is struggling to retain foreign investments and maintain its operating environment. Among the ASEAN countries, Burma has the lowest electrification rate, with only half of its population connected to the national grid and 80 percent of the rural people having no access to grid electricity.

In the second year of the coup, the regime changed the structure and leadership positions at the Ministry of Energy and Electricity (MOEE). The military regime government reconstituted the MOEE into two ministries, the Ministry of Energy (MOE) and the Ministry of Electric Power (MOEP), in May 2022.

In addition to the above seven authorized departments, U.S. energy firms should understand the roles of the Ministry of Planning and Finance, the Myanmar Investment Commission (MIC), the Ministry of Natural Resources and Environmental Conservation (MoNREC), and the National Commission for Environmental Affairs (NCEA). To accomplish the National Electrification Plan (NEP),a total investment of $5.4 billion will be required to initiate the electrification rollout, and $40 billion will be required for investment in transmission and distribution.

Under the civilian-led government, the Ministry of Electricity and Energy (MOEE) drafted a renewable energy law with the goal of generating 8 percent of the country"s electricity through renewable sources by 2021, with 12 percent of all electricity generated in Burma to be renewable by 2025. Before the coup, Burma had a total installed capacity of approximately 3,300 MW from renewable energy sources. The country has an abundance of renewable energy resources that, if managed efficiently, could meet its future energy requirements for sustainable development.