Solar energy for businesses transnistria

Moreover, the country is completely reliant on imports for natural gas and all oil products, which fuel the majority of its domestic supply in the form of CHP plants (~330 MW). This includes an almost 100% reliance on gas imports from Russia, although recent efforts have been made to diversify Moldova"s gas supply by interconnecting with Romania in addition to modifications on the gas network of the trans-Balkan Corridor, on which Moldova is a transit country, to allow reverse flows.

Electricity demand in Moldova is characterised by a winter peak demand. The typical load variation in the winter season, based on 2019 operational data is between a minimum base load of 540 MW and a maximum peak load of 950 MW, while in the summer, it varies from a minimum of 480MW and a peak load of 800MW. Therefore, the demand typically almost doubles between peak and off-peak periods in both winter and summer, with a fairly flat demand during the day.

In the winter, the cogeneration units in Chisinau and Balti are operated as must-run due to heating demand, and therefore account for between 200 and 260 MW of generation during these periods. The monthly supply of power in terms of domestic production and imports from MGRES and Ukraine is shown in the figure below and shows a strong seasonal pattern peaking in January and accompanied by an increase in domestic production from CHPs.

According to an analysis of technical potential for RE generation (IRENA, 2019), there is in excess of 27 GW of potential renewable generation capacity in Moldova, including 20.9 GW and 4.6 GW of wind and solar potential respectively, in addition to both biomass and hydro potential.

The pool of eligible producers which currently benefits from the aforementioned support mechanisms, comes from a larger pool of more than 1.2GW of renewable plants which have connection permits to the grid (Moldelectrica, 2021b) . Those plants that do not qualify for support mechanisms do not have priority dispatch but can still implement projects under normal market conditions.

The Republic of Moldova (Moldova), home to 3.6million people with Chisinau as its capital, is situated in Eastern Europe neighbouring the north-eastern Balkans. The country covers 33844square kilometres(km2) and is bordered by Ukraine on the north, east and south, while the Prut River on the west defines the boundary with Romania (). The breakaway region of Transnistria, a strip of land between the Dniester River and the eastern Moldovan border with Ukraine, is recognised by three non-United Nations (UN) states only and is considered by the UN to be part of Moldova as of early 2020.

Moldova"s improved economic performance reduced national poverty from 30% in 2006 to 9.6% in 2015, and extreme poverty from nearly 5% to 0.2% over the same period (https://mei.gov.md/ro/content/analiza-indicatorilor-saraciei).

Because the country lacks energy resources, it is almost wholly dependent on fossil fuel and electricity imports: only 20%1 of its energy demand was met by domestic sources in 2018. Natural gas, which serves most of its energy needs, was entirely imported from Russia via Ukraine up to the end of 2014. In August 2014 the Iasi-Ungheni gas interconnector between Romania and Moldova was commissioned, and became operational in 2015. Once at full capacity in 2020, the pipeline is expected to supply almost all the gas Moldova consumes, but not that of the Transnistria region.

The government also plans to diversify the energy mix with more renewable energy. As expansion requires significant investment in the medium and long term, progress will depend on the country"s ability to attract funds. The development of uncontrollable renewables, such as wind and solar, will be limited by the balancing capabilities of the Moldovan power system.

The Ministry of Economy and Infrastructure is in charge of developing and implementing strategies and policies related to energy, such as Moldova"s Energy Strategy 2030 ().

The Ministry of Agriculture, Regional Development and Environment is responsible for developing environmental and natural resource management policies and strategies, as well as for implementing international environment treaties ().

The Energy Efficiency Agency (EEA) is the implementing agency under the national energy efficiency and renewable energy programmes. It promotes investment in energy saving and renewable energy projects, in accordance with existing government programmes ().