



Main Barriers to Small-Scale Renewable Energy Projects in Kazakhstan Part I



Kazakhstan has announced a program to achieve carbon neutrality by 2050. Due to the enormous potential of solar, wind, geothermal energy and bioenergy in Kazakhstan, particularly, small-scale renewable projects may contribute to achieving these targets.

Small-scale RE projects are implemented on the basis of the general state policy for all RE projects and do not have separate regulatory and incentive mechanisms – with the exceptions as presented below



Direct support

According to the current legislation, when installing a small-scale RES facility an investor can count on direct subsidies and a self-consumption scheme. Direct subsidies are provided for autonomous renewables installations with a capacity of up to 5 kW. The mechanism covers up to 50% of the investment costs, assuming that the equipment was manufactured in Kazakhstan.

CHALLENGE

The equipment manufacturing industry in Kazakhstan is in its infancy and the purchase of local equipment (if available) may be unprofitable due to the high cost. Despite the presence of direct support, there is a number of bureaucratic obstacles due to the fact that support is paid as compensation only after the plant has been installed. Lastly, the power limit of up to 5 kW means that the mechanism is intended for investment only by households or very small enterprises.



Self-consumption through net metering

The self-consumption scheme through net metering in Kazakhstan is available to all consumers connected to the grid, with renewable installations up to 100 kW. According to this scheme, the asset owner receives the retail price of electricity for excess electricity supplied to the grid, paid off by the supplier.

CHALLENGE

The main problem of the net metering scheme is its practical application, namely, in practice, taking into account network wear, delays on the part of the operator or connection failure are common. In this part, distribution network operators argue that local overload problems deprive interested small-scale developers of network access.

