Climate Change and Renewable Energy Use in Mongolia (Summary)

BATJARGAL Zamba

Dr., Special Envoy for Climate Change, Mongolia

This paper outlines current climate change and future scenarios, highlighting the associated impacts which have occurred and are anticipated. Focus is given to the more sensitive components of natural resources, such as water, forests, grasslands and the associated vulnerable economic sectors, such as animal husbandry and crop production. The estimation shows that due to the possible shift of geographical transition zones, pasture availability and the opportunities for arable farming might change. In this regard it was noted that most agricultural producers need to make substantial investments in order to adapt to climate change. Another concern is related to the risk of emerging competition for water resources in regions with scarce water resources and of water-related impacts on the well-being of local communities.

In a more wide-ranging fashion the paper describes the situation for greenhouse gas (GHG) emissions by sector. Government policy and the respective measures dealing with GHG emission reduction and removal, including regulatory

mechanisms, are highlighted. Special consideration is given to renewable energy development in Mongolia, covering present progress and future challenges. Regarding the concern over grid stability associated with solar and wind-power plants, the grid can be maintained by using hydropower where possible and developing backup systems of various kinds, not necessarily relying on battery-based storage alone. Continued debate on the construction of hydropower plants on rivers can lead to a common understanding if the issue is considered in a more comprehensive manner, including other factors like flood prevention and runoff maintenance, and reducing susceptibility to drought and other unpredictable factors. Electricity and heat production off the national grid, and—as alternatives to fossil fuels and non-renewables—the use of all possible sources of renewable energy within mini-grids and by individual householders with different livelihood needs will significantly contribute to GHG emission reduction efforts and adaptations aiming to combat the adverse impacts of climate change.