

Sub-program (Target Priority Area)	2. Environment-friendly and Balanced Economic Development
Component (CP) (Development Issues)	2-2. Sustainable Energy Development and Policy
Expected Research Areas	<ul style="list-style-type: none"> - Electricity Directive/Transmission and Distribution - Energy System - Renewable Energy - New Energy - Environment Assessment - Environment Engineering
Accepting University	<p>Nagoya University (Acceptable number of seat: 2) GS of Environmental Studies/GS of Engineering Studies Nagoya University Global Environmental Leaders Program</p> <ul style="list-style-type: none"> - Master of Environmental Studies (GSEG) - Master of Engineering (GSES and GSE)
Background and Needs	<p>Backed by its abundant coal reserves, Mongolia relies on coal-fired power generation to provide a large portion of its domestic energy supply. Along with the promotion of new industries to break away from excessive economic dependence on mineral resource exports, the country is required to meet the energy demand necessary to promote new economic activities.</p> <p>On the other hand, from the perspective of climate change countermeasures, the introduction of renewable energy, promotion of energy conservation, and improvement of energy efficiency in the energy sector are required, and the current electricity mix, which is centered on coal-fired power generation, has been replaced by a target of 30% renewable energy by 2030, based also on the international drive toward lower and decarbonized. The country has set a target of 30% renewable energy by 2030, taking into account the international drive toward low-carbonization. Efforts toward energy transition, including renewable energy conversion and low-carbon heat supply, are urgently needed.</p> <p>Specifically, the ratio of renewable energies such as wind and solar power should be increased to meet the demand for electricity, which is 80% self-sufficient and 20% imported from Russia and China. At the same time, in order to realize grid operations that can flexibly respond to output fluctuations associated with the introduction of variable renewable energy, the introduction of power storage systems such as pumped storage and storage batteries, and the advancement of grid operation technology are required. In addition, for winter heating demand (heat demand), which exceeds electricity demand, the reality is that the current technology forces the use of coal, and a vision for a low-carbon heat supply is required to achieve carbon neutrality in the future.</p> <p>Mongolia is vulnerable to the effects of climate change, so a co-benefit approach is appropriate for the country. While utilizing technologies in which Japan has an advantage, Mongolia needs to have opportunities to learn about initiatives that contribute to both solving development issues in energy and related fields and combating climate change, leading to the reduction of GHG emissions toward a low-carbon society.</p> <p>Therefore, JDS is expected to contribute to the development of human resources in the fields of policy formulation in areas where there is a high need for future energy infrastructure development, sustainable energy policies and systems, and efforts to combat climate change through energy policy.</p>

Direction of Study (Background of CP)	<p>The Japanese government's "Country Development Cooperation Policy for Mongolia" (December 2017) stipulates "Strengthening governance for creating healthy macro economy" as one of the priority areas, and states that the government will support human resource development that contributes to improving the policy making and implementation capacity of administrative officials in the priority areas in the national strategy of the Mongolian government.</p> <p>Based on this development cooperation policy, JICA supports the human resource development of government officials necessary for the government to formulate and implement effective and efficient policies in a stable manner under the "Developing high quality Infrastructure to support growth" within the "Capacity building of administrative officers" development agenda.</p> <p>Relevant JICA Project (Technical Cooperation) The Project for Ensuring and Improving the Power System Stability for Greater Integration of Renewable Energy</p>
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