22nd session of the Committee of Experts on Public Administration

Written statement by Northern Citizen Community Board

Agenda item 5: Institutional mechanisms for providing economic, financial, and structural support to address climate change, reduce the use of fossil fuels and protect biodiversity

Introduction

Energy is required for every society with a view to meeting basic needs, so the insecurity of its supply can creep up the work of a nation's economy. In this regard, the transition towards green energy has come to be known as a "premeditated product". Nowadays, two issues regarding energy are drawing the attention of sustainability researchers. One is how to ensure energy supplies in a sustainable manner that has low environmental impacts and low emissions capacity, and the other one is barriers to sustainable energy development and identifying the most efficient way of addressing such barriers.

Transitioning toward Sustainable Green Energy

Global climate change is an alarming problem for attaining sustainable development these days. Although the impact of global climate change is definite on human health and the environment, therefore, it is difficult to predict the change and many people start realizing that unpredictable change in global climate is a key barrier to attaining sustainable development, while more than half of the global climate change is caused by the increasing concentrations of GHG emissions and contributed mainly by the energy sector. Maintaining higher and sustainable development is the prime area for government strategies throughout the world. This activity requires a large amount of substance and energy inputs are essential for attaining sustainability. Nevertheless, the abundant use of such natural resources has induced serious environmental problems and imposed negative consequences on human health as well as on productivity by increasing the concentration of greenhouse gases (GHG) in the air, as they generate huge waste by-products in the process of attaining greater economic activities.[3] Accordingly, these activities also lead to an increase in the sea level, air temperature, global ocean, and melting of snow and ice sheets as well as the exhaustion of different species throughout the world. These are collectively called the effects of global warming and climate change caused by rising the concentration ratio of GHG in the environment. Moreover, it is an undeniable fact that the number of nations sustaining their economic progress is still now extensively reliant on fossil fuels energy sources.

Green Energy in Sustainable Development

Though the term Sustainable Development is difficult to define, as a concept, it is very popular throughout the world in general, it is a key approach to achieving social, economic, and environmental issues simultaneously. To come out of the concept of sustainable development in front of the world, Agenda 21 as a basic framework was suggested by the United Nations World Commission on Environment and Development in 1992 in Rio de Janeiro, and United Nations World Commission was a pivotal driver for the United Nations

Conference on Environment and Development (UNCED). Globally it has been agreed that the practice of Green Energy should be increased at a larger scale for maintaining the energy sector's sustainability and that is true not only for developed countries but also for developing and emerging countries. Few highlighted concerns by experts over the last decade. Three main reasons for practicing green energy as a key tool of sustainable development, and those are the following.

- Compared to conventional energy sources, green energy sources produce a lower ripple effect on the environment.
- By nature, green energy is not exhausted. It can supply cleaner and greener energy indefinitely in a sustainable manner compared to other sources of energy.
- Small-scale equipment and less time are required for the production of green energy. At the local level, those who have less access to energy consumption can be facilitated by green energy sources that provide opportunities for decentralization and local solutions that are more or less free from the national network. Thus, the production of green energy boosts flexibility and economic benefits for the local people by delivering compliance in case of erratic economic growth and unstable energy demand.
- Small-scale equipment and less time are required for the production of green energy. At the local level, those who have less access to energy consumption can be facilitated by green energy sources that provide opportunities for decentralization and local solutions that are more or less free from the national network. Thus, the production of green energy boosts flexibility and economic benefits for the local people by delivering compliance in case of erratic economic growth and unstable energy demand.

Sustainable Socio-Economic Development

The energy sector makes a significant contribution to economic development by fostering a significant correlation between economic growth and energy consumption. Generally, both the Gross Domestic Product and Human Development Index are the most widely used variables for measuring the economic development of a country whereas the employment variable is used to quantify social development, to justify the role of energy in sustainable social and economic. Since the last few years, economic growth has been considered one of the most governing factors behind the expansion of energy consumption. Economic growth which is associated with greater economic activities leads to higher demand for electricity which is called the driver of automation and modernization of production as well as a main contributor to maintaining the continuity of productivity Green energy is a more reliable type of energy to improve the quality of human well-being i.e. education and health quality, gender equality, and socio-economic status of the poor people. In the process of transition towards green energy, job creation is one of the utmost positive outcomes for both developed and developing countries. The majority of the world population has a lack of access to green energy. From the viewpoint of sustainable development, an extension of sustainable green energy is indispensable for those people who lack opportunities to access cleaner and greener energy and who are living in rural areas and have no connections to the grid. Nowadays, countries around the world face the challenges of ensuring a sustainable supply of energy due to the strong correlation between energy consumption and economic growth. Higher energy demand associated with worldwide higher economic growth increasingly puts pressure on the existing energy resources and also expands the gap between energy supply and demand in each sector as well as increases the tension about the inadequacy of energy supply. Another critical

issue regarding higher energy demand is that the dependency on fossil fuel energy increases at an unexpected level. If current energy demand is continuously met by only fossil fuels, the existing fossil fuel reserves will be exhausted more rapidly, and that situation is not very far from now. This growing concern about the potential for scarcity and limited availability of future energy resources of fossil fuels permits nations to transition to a more sustainable green energy system. Green energy, which is extracted from nature, therefore, is more reliable and available and also can yield energy security by way of expanding the options of energy supply and reducing the usage of fossil fuels energy.

Climate Change and Green Energy

Mitigating the impact of climate change and improving the quality of the environment is the crucial factor for the emergence of increasing demand for green energy systems. Recently, policymakers have come to the conclusion that if no action is taken to combat global climate change, the impact of climate change on the environment will be far-reaching and overwhelming, the conserving environment from the devastating effects of climate change is the major issue of sustainable development. Therefore, governments from around the world are requested to submit their set of targets and policy strategies in order to limit global temperature. After reviewing each country's target and policy strategy, it has come out that the deployment of green energy is a key pillar for mitigating the impact of climate change. It has been argued that a green energy strategy can help to meet the global climate goals without any effects on economic growth and welfare. In addition, green energy has a significant impact on reducing air pollution and health hazards. For example, traditional energy seriously affects health and the environment through the discharge of carbon dioxide emissions and other pollution. Long-term exposure to such pollution can contribute to severe health related diseases. In this case, non-combustion-based green energy is able to produce very less amount of pollution compared to fossil fuels as well as conserve the factors that affect sustainable development. It is obvious that the role of Green Energy for sustainable energy in the future is inexorable. The leading component that determines the importance of green energy is energy demand. With the purpose of meeting energy demand, countries around the world have taken initiatives to produce green energy from natural sources like hydraulic, solar power, wind, tidal wave, geothermal, biogas, and biomass, etc. Countries will be able to obtain sustainable development when green energy is abundantly produced. The abundant supply of green energy can help the country by providing more sustainable energy in the future, enhancing energy security for all of its populace, reducing the negative impacts on the earth and human and environment, and lessening conflicts among nations regarding energy reserves. Therefore, for conserving global sustainability.