State of Qatar

Ministry of Environment

Intended Nationally Determined Contributions (INDCs) Report

November 19th, 2015

State of Qatar is pleased to submit its Intended Nationally Determined Contributions to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat in accordance with decisions 1/CP.19 and 1/CP.20 in line with decision 24/CP.18 and the provisions and principles of the convention.

The Qatar National Vision 2030 contains four pillars: Human, Social, Economic and Environmental development. Qatar is trying to guarantee a freedom of economic enterprise on the basis of social justice and balanced cooperation between private and public activity, in order to achieve socio-economic development. It is through the fourth pillar, in particular, that the State of Qatar is seeking to preserve and protect its unique environment. This fourth pillar is of high importance as it seeks to strike a balance between development needs and environmental protection, and supports international efforts to mitigate the effects of climate change. Therefore, the State of Qatar is dealing with the potential impacts of climate change through initiating several contributions and activities.

1. National Circumstances

Qatar is a developing country (peninsula) located in the Arabian Gulf. The nature of this peninsula is very harsh as it suffers from a scarcity in drinkable water and local food supply with an average annual rainfall of only 82mm. State of Qatar depends highly on the desalination of the saline seawater as the main water sources in addition to the ground water.

Qatar is extremely vulnerable to sea level rise as it is liable to inland flooding of 18.2% of its land area, at less than 5m rise in sea level, along with the associated adverse impacts on the population as 96% are living on the coastal areas. Furthermore, climate change would cause the extinction of species such as whales, dolphins and turtles in addition to causing coral bleaching and other several impacts on the migration of some marine species and sea birds.

Although the essential living resources are rare, Qatar is blessed with oil and gas resources that are being used to overcome the living difficulty on this land. Since the exploration of hydrocarbons in Qatar, oil and gas in addition to their associated petrochemical industries have been contributing to the economic and social growth of the state. Qatar's ecological and human systems are vulnerable to the adverse impact of climate change as well as the impact of response measures due to its unique circumstances.

The international climate change measures and policies shall be in line with the provisions of the of the United Nations Framework Convention on Climate Change in particular, Article 3 paragraph 2 and Article 4 paragraph 8(h) and 10 and shall ensure the developing countries' eligibility for finance, technology transfer and capacity building.

2. Economic Diversification with Mitigation Co-benefits

Economic diversification is crucial to Qatar in order to maintain a steady and robust economy. Qatar seeks to enhance the diversification of its economy away from hydrocarbon in consistent with decision 24/CP.18. Qatar has been contributing indirectly to the global efforts to mitigate climate change by exporting Liquefied Natural Gas as a clean energy.

2.1. Energy Efficiency

According to Qatar National Vision 2030, the energy industry is taking into consideration the impacts of its development and growth on the environment. Many programs and projects in the country are pursuing energy efficiency and process optimization. Although the existing capacity and technology is not enough to support improvement and upgrade, Qatar is in process of employing available resources to achieve energy efficiency.

2.2. Clean Energy and Renewables

Despite the abundance of gas which is clean energy, Qatar is heavily investing in other natural resources. Attempts have been made to utilize clean energy and renewable sources such as solar and wind power. Efforts have been made into solar energy generation with a view to becoming a regional supplier of solar-generated electricity. However, based on the harsh environment and weather conditions, utilizing such renewables as reliable power sources is very challenging due to the lack of access to high technology, which is necessary for using these sources effectively and efficiently. Yet, some national entities started considering solar and wind sources to generate electricity for small buildings aiming to open a new market, in the hope of strengthening the economic diversification. Utilizing clean energy and renewables is an adaptive precaution to climate change impacts that would open a window to diversify the economy and reduce emissions to the atmosphere from the fuel combustion. Some of clean energy and renewable sources are available, however, they cannot be utilized without the needed support; especially, technology transfer.

2.3. Research and Development

Qatar is highly committed to advancing research and development. Qatar has invested heavily in research and development in various areas including sustainable energy, in line with its National Research Strategy. Many research activities are being carried out in various fields, improving the environment to adapt with climate change impacts, utilizing clean energy and renewables, reducing emissions to the atmosphere and developing technologies that convert emissions into useful products. These research efforts consider economical validation, economic-diversification and efficiency.

2.4. Education

Qatar is investing heavily in education. Great steps have been taken to create a world-class education system that aims to build an environmentally aware society. Universities and research facilities have programs that center around environmental studies, including climate

change. All in all, Qatar's emphasis on education is expected to produce graduates who are specialized in knowledge-based services, healthcare and green technologies. On the same grounds, young Qataris are always motivated to take advantage of the various opportunities for post-secondary education and training. These generations are encouraged to increase their involvement in the private sector by launching business training and capacity building programs. This involvement will, in turn, strengthen the new generation's capabilities and improve their analytical thinking, innovation and entrepreneurship to contribute to climate change efforts and sustainable development.

2.5. Tourism

Qatar has a long-term strategy towards advancing its tourism industry through a series of well-defined plans, programs, and policies developed according to international best practices, and following a nation-wide consultative process. The aim of this strategy is to reduce dependence on hydrocarbon resources by promoting sustainable tourism strategies, as well as to protect the country's economy from market fluctuations that can significantly affect its economic growth.

3. Adaptation actions with Mitigation Co-benefits

3.1. Water Management

According to Qatar National Vision 2030, efforts are initiated to place Qatar's resources management on a sustainable path for future generations. Qatar aims to use upgraded wastewater treatment plants to improve the treated water quality and further support using it for agricultural purposes to reduce the demand on fresh water and accordingly decrease the fuel consumption in water desalination and associated gaseous emissions. In addition, Qatar is undertaking the following key initiatives in relation to water management:

3.1.1 Water Conservation: Qatar will enact a comprehensive National Water Act establishing an integrated system of quality requirements, discharge controls and incentives for conservation.

3.1.2 Desalination: Qatar is moving towards more efficient forms of desalination, and is investing in research and development of new technologies, including the usage of renewable energy to power desalination plants.

These new technologies will minimize the environmental impacts of the desalination projects. Significant research and development activities about developing innovative desalination technologies and utilizing renewable energy for desalination and water treatment have been established at Qatar.

3.2. Infrastructure and Transport

Currently, Qatar's infrastructure is being improved and directed towards an efficient adaption and mitigation measure for reducing climate change impacts. Several projects are serving the goal. Qatar introduced public transportation to reduce the demand on private vehicles and direct the nation towards the use of the public transportation and expressway programs that would enhance the traffic flow and divert it outside the cities. Hence, local roads and drainage program is expected to enhance the network of drinking water, wastewater and treated sewage effluent. In Qatar, Vehicles Inspection Services regulates the emissions of vehicles. Qatar continues to improve the emission standards for new motor vehicles, in accordance with regional and global emission standards.

3.3. Waste Management

Qatar uses state-of-the-art waste treatment technologies which treats most of the collected waste generating significant amount of clean energy. Efforts are focused on adopting a strategy to contain the levels of waste generated by household, commercial sites and industries.

To improve waste management, the government recognizes a hierarchy of actions to alleviate the pressure on the environment and to reduce, reuse or recycle generated waste in addition the reduction of methane emissions. The waste management facilities will have the capability to convert waste to energy. Awareness programs are planned to encourage a sense of shared responsibility towards the environment.

3.4. Awareness

A sustainable environment could be achieved by public involvement. Therefore, awareness programs are being carried out to spread the idea of using less energy consumption devices and energy efficient building structures through thermal insulation systems. These programs are meant to adapt with climate change impacts that would bring down the emissions as a co-benefit, through encouraging the sense of shared responsibility towards the environment, along with the development of positive environmental attitudes and values.

4. Response Measures

Due to Qatar's dependence on the export of oil and gas, there is an uncertainty from the potential impact of the implementation of response measures to climate change that may negatively impact the strength of Qatar's economy and potentially the quality of life of its residents. Therefore, measures have to be assessed in order to avoid potential impacts of the implementation of these measures on Qatar with the necessity of international cooperation in this regard to achieve the objectives of sustainable development in line with the principles and provisions of the convention in particular with article 4.8.

5. Timeframe

The intended voluntary contributions in this report tend to cover the period 2021 to 2030 in line with the national vision.

6. Monitoring and reporting progress

A dedicated department for climate change within the Ministry of Environment has been established to strengthen the governance of climate change on national level and to implement standardized data collection and reporting. This national Monitoring, Reporting and Verification system could be used to track the progress of the actions and projects that may push towards achieving the aim of this INDCs.

7. Fairness and Ambition

This INDC is based on the provisions and principles on the convention and in particular article 3 paragraph 2 and article 4 paragraph 1, paragraph 8(h) and 10.

All national actions and plans described in this INDCs are voluntary and the means of implementation and support will be in accordance with the principles and provisions of the United Nations Framework Convention on Climate Change in particular Articles 4.7, 12.4.

Qatar reserves the right to further elaborate and update this INDCs in line with its special national circumstances and sustainable development imperatives with a view to avoiding adverse effects of the economic and social consequences of response measure.