(UNOFFICIAL TRANSLATION)

ENHANCED ACTIONS ON CLIMATE CHANGE: CHINA' S INTENDED NATIONALLY DETERMINED CONTRIBUTIONS[1]

Climate change is today's common challenge faced by all humanity. Human activities since the Industrial Revolution, especially the accumulated carbon dioxide emissions from the intensive fossil fuels consumption of developed countries, have resulted in significantly increasing the atmospheric concentration of greenhouse gases, exacerbated climate change primarily characterized by global warming. Climate change has significant impacts on global natural ecosystems, causing temperature increase and sea level rise as well as more frequent extreme climate events, all of which pose a huge challenge to the survival and development of the human race.

Climate change is a global issue that requires the collaboration of the international community. For years, in accordance with the principles of equity and common but differentiated responsibilities and respective capabilities, the Parties to *the United Nations Framework Convention on Climate Change* (hereinafter referred to as the Convention) have been working to enhance cooperation and achieved positive progress in the implementation of the Convention. To further enhance the full, effective and sustained implementation of the Convention, negotiations and consultations are now under way on enhanced actions beyond 2020, so as to reach an agreement at the Conference of the Parties to the Convention in Paris at the end

[1] This is an unofficial translation. In case of any divergence, the official text in the Chinese language shall prevail.

of 2015. This will open up a new prospect for green and low-carbon development across the globe and promote sustainable development worldwide.

As a developing country with a population of more than 1.3 billion, China is among those countries that are most severely affected by the adverse impacts of climate change. China is currently in the process of rapid industrialization and urbanization, confronting with multiple challenges including economic development, poverty eradication, improvement of living standards, environmental protection and combating climate change. To act on climate change in terms of mitigating greenhouse gas emissions and enhancing climate resilience, is not only driven by China's domestic needs for sustainable development in ensuring its economic security, energy security, ecological security, food security as well as the safety of people's life and property and to achieve sustainable development, but also driven by its sense of responsibility to fully engage in global governance, to forge a community of shared destiny for humankind and to promote common development for all human beings.

In accordance with relevant decisions of the Conference of the Parties to the Convention, China hereby presents its enhanced actions and measures on climate change as its nationally determined contributions towards achieving the objective set out in Article 2 of the Convention, which represent its utmost efforts in addressing climate change, and contributes its views on the 2015 agreement negotiations with a view to making the Paris Conference a great success.

I. ENHANCED ACTIONS ON CLIMATE CHANGE

China attaches great importance to addressing climate change since long, making it a significant national strategy for its social and economic development and promoting green and low-carbon development as important component of the

ecological civilization process. It has already taken a series of climate actions which represent a significant contribution to combating the global climate change. In 2009, China announced internationally that by 2020 it will lower carbon dioxide emissions per unit of GDP by 40% to 45% from the 2005 level, increase the share of non-fossil fuels in primary energy consumption to about 15% and increase the forested area by 40 million hectares and the forest stock volume by 1.3 billion cubic meters compared to the 2005 levels. In this connection, China has enacted and implemented *the National Program on Climate Change*, *the Work Plan for Controlling Greenhouse Gas Emissions during the 12th Five-Year Plan Period*, *the Comprehensive Work Plan for Energy Conservation and Emission Reduction for the 12th Five Year Plan Period*, *the 12th Five Year Plan for Energy Conservation and Emission Reduction*, *the 2014-2015 Action Plan for Energy Conservation, Emission Reduction and Low-Carbon Development*, and *the National Plan on Climate Change (2014-2020)*. China has accelerated the adjustment of its industry and energy structures and invested great efforts in improving energy efficiency, lowering carbon emissions and enhancing the ecosystem. China has initiated carbon emission trading pilots in 7 provinces and cities and low-carbon development pilots in 42 provinces and cities to explore a new mode of low-carbon development consistent with its prevailing national circumstances. By 2014 the following has been achieved:

- Carbon dioxide emissions per unit of GDP is 33.8% lower than the 2005 level;
- The share of non-fossil fuels in primary energy consumption is 11.2%;
- The forested area and forest stock volume are increased respectively by 21.6 million hectares and 2.188 billion cubic meters compared to the 2005 levels;
- The installed capacity of hydro power is 300 gigawatts (2.57 times of that for 2005);
- The installed capacity of on-grid wind power is 95.81 gigawatts (90 times of that for 2005);

- The installed capacity of solar power is 28.05 gigawatts (400 times of that for 2005); and
- The installed capacity of nuclear power is 19.88 gigawatts (2.9 times of that for 2005).

China is accelerating the implementation of *the National Strategy for Climate Adaptation*, and improving its capacity to respond to extreme climatic events and making positive progress in key areas of climate change adaptation. Capacity building on combating climate change is further strengthened. Supports in terms of science and technology are further enhanced by implementing *China's Science and Technology Actions on Climate Change*.

Looking into the future, China has defined as its strategic goals to complete the construction of a moderately prosperous society in an all-round way by 2020 and to create a prosperous, strong, democratic, culturally developed and harmonious modern socialist country by the middle of this century. It has identified transforming the economic development pattern, constructing ecological civilization and holding to a green, low-carbon and recycled development path as its policy orientation. New industrialization, urbanization, informatization, agricultural modernization and greenisation will be promoted in a coordinated manner. Resource conservation and environmental protection have become the cardinal national policy, placing mitigation and adaptation on equal footing, promoting innovation in science and technology and putting in place the necessary management and regulatory mechanisms and systems. China will accelerate the transformation of energy production and consumption and continue to restructure its economy, optimize the energy mix, improve energy efficiency and increase its forest carbon sinks, with a view to efficiently mitigating greenhouse gas emissions. China is making efforts to embark on a sustainable development path that is in line with its national circumstances and leads to multiple wins in terms of economic development, social progress and combating climate change.

Based on its national circumstances, development stage, sustainable development strategy and international responsibility, China has nationally determined its actions by 2030 as follows:

- To achieve the peaking of carbon dioxide emissions around 2030 and making best efforts to peak early;
- To lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005 level;
- To increase the share of non-fossil fuels in primary energy consumption to around 20%; and
- To increase the forest stock volume by around 4.5 billion cubic meters on the 2005 level.

Moreover, China will continue to proactively adapt to climate change by enhancing mechanisms and capacities to effectively defend against climate change risks in key areas such as agriculture, forestry and water resources, as well as in cities, coastal and ecologically vulnerable areas and to progressively strengthen early warning and emergency response systems and disaster prevention and reduction mechanisms.

II. POLICIES AND MEASURES TO IMPLEMENT ENHANCED ACTIONS ON CLIMATE CHANGE

A one-thousand-mile journey starts from the first step. To achieve the nationally determined action objectives on climate change by 2030, China needs, building on actions already taken, to make a sustained effort in further implementing enhanced policies and measures in areas such as regime building, production mode and consumption pattern, economic policy, science and technology innovation and international cooperation.

A. Implementing Proactive National Strategies on Climate Change

- To strengthen laws and regulations on climate change;
- To integrate climate-change-related objectives into the national economic and social development plans;
- To formulate China's long-term strategy and roadmap for low-carbon development;
- To implement *the National Program on Climate Change (2014-2020)* and provincial climate programs; and
- To improve the overall administration of climate-change-related work and to make carbon-emission-related indicators play guiding role, by subdividing and implementing climate change targets and tasks, and improving the performance evaluation and accountability system on climate change and low-carbon development targets.

B. Improving Regional Strategies on Climate Change

- To implement regionalized climate change policies to help identify differentiated targets, tasks and approaches of climate change mitigation and adaptation for different development-planning zones;
- To strictly control greenhouse gas emissions in Urbanized Zones for Optimized Development;
- To enhance carbon intensity control in Urbanized Zones for Focused Development and to accelerate green and low-carbon transformation in old industrial bases and resource-based cities;
- To enhance the control of development intensity, to limit large-scale industrialization and urbanization, to strengthen the planning and construction of medium-and-small-sized towns, to encourage moderate concentration of population and to actively push forward the appropriate scale production and industrialization of agriculture in Major Agricultural Production Zones;

- To define ecological red lines, to formulate strict criteria for industrial development and to constrain the development of any new carbon intensive projects in Key Ecological Zones; and
- To introduce a withdrawal mechanism for those industries that do not match with functions of development-planning zones and to develop low-carbon industries in line with local conditions and circumstances.

C. Building Low-Carbon Energy System

- To control total coal consumption;
- To enhance the clean use of coal;
- To increase the share of concentrated and highly-efficient electricity generation from coal;
- To lower coal consumption of electricity generation of newly built coal-fired power plants to around 300 grams coal equivalent per kilowatt-hour;
- To expand the use of natural gas: by 2020, achieving more than 10% share of natural gas consumption in the primary energy consumption and making efforts to reach 30 billion cubic meters of coal-bed methane production;
- To proactively promote the development of hydro power, on the premise of ecological and environmental protection and inhabitant resettlement;
- To develop nuclear power in a safe and efficient manner;
- To scale up the development of wind power;
- To accelerate the development of solar power;
- To proactively develop geothermal energy, bio-energy and maritime energy;
- To achieve the installed capacity of wind power reaching 200 gigawatts, the installed capacity of solar power reaching around 100 gigawatts and the utilization of thermal energy reaching 50 million tons coal equivalent by 2020;
- To enhance the recovery and utilization of vent gas and oilfield-associated gas; and
- To scale up distributed energy and strengthen the construction of smart grid.

D. Building Energy Efficient and Low-Carbon Industrial System

- To embark on a new path of industrialization, developing a circular economy, optimizing the industrial structure, revising the guidance catalogue of the adjustment of industrial structure, strictly controlling the total expansion of industries with extensive energy consumption and emissions, accelerating the elimination of outdated production capacity and promoting the development of service industry and strategic emerging industries;
- To promote the share of value added from strategic emerging industries reaching 15% of the total GDP by 2020;
- To promote low-carbon development of industrial sectors, implementing *Action Plan of Industries Addressing Climate Change (2012-2020)* and formulating carbon emission control target and action plans in key industries;
- To research and formulate greenhouse gas emission standards for key industries;
- To effectively control emissions from key sectors including power, iron and steel, nonferrous metal, building materials and chemical industries through energy conservation and efficiency improvement;
- To strengthen the management of carbon emissions for new projects and to actively control greenhouse gas emissions originating from the industrial production process;
- To construct a recycling-based industrial system, promoting recycling restructure in industrial parks, increasing the recycling and utilization of renewable resources and improving the production rate of resource;
- To phase down the production and consumption of HCFC-22 for controlled uses, with its production to be reduced by 35% from the 2010 level by 2020, and by 67.5% by 2025 and to achieve effective control on emissions of HFC-23 by 2020;

- To promote the low-carbon development in agriculture, making efforts to achieve zero growth of fertilizer and pesticide utilization by 2020;
- To control methane emissions from rice fields and nitrous oxide emissions from farmland;
- To construct a recyclable agriculture system, promoting comprehensive utilization of straw, reutilization of agricultural and forestry wastes and comprehensive utilization of animal waste; and
- To promote low-carbon development of service industry, actively developing low-carbon business, tourism and foodservice and vigorously promoting service industries to conserve energy and reduce carbon emissions.

E. Controlling Emissions from Building and Transportation Sectors

- To embark on a new pattern of urbanization, optimizing the urban system and space layout, integrating the low-carbon development concept in the entire process of urban planning, construction and management and promoting the urban form that integrates industries into cities;
- To enhance low-carbonized urbanization, improving energy efficiency of building and the quality of building construction, extending buildings' life spans, intensifying energy conservation transformation for existing buildings, building energy-saving and low-carbon infrastructures, promoting the reutilization of building wastes and intensifying the recovery and utilization of methane from landfills;
- To accelerate the construction of low-carbon communities in both urban and rural areas, promoting the construction of green buildings and the application of renewable energy in buildings, improving low-carbon supporting facilities for equipping communities and exploring modes of low-carbon community operation and management;
- To promote the share of green buildings in newly built buildings of cities and towns reaching 50% by 2020;

- To develop a green and low-carbon transportation system, optimizing means of transportation, properly allocating public transport resources in cities, giving priority to the development of public transportation and encouraging the development and use of low-carbon and environment-friendly means of transport, such as new energy vehicle and vessel;
- To improve the quality of gasoline and to promote new types of alternative fuels;
- To promote the share of public transport in motorized travel in big-and-medium-sized cities reaching 30% by 2020;
- To promote the development of dedicated transport system for pedestrians and bicycles in cities and to advocate green travel; and
- To accelerate the development of smart transport and green freight transport.

F. Increasing Carbon Sinks

- To vigorously enhance afforestation, promoting voluntary tree planting by all citizens, continuing the implementation of key ecological programs, including protecting natural forests, restoring forest and grassland from farmland, conducting sandification control for areas in vicinity of Beijing and Tianjin, planting shelter belt, controlling rocky desertification, conserving water and soil, strengthening forest tending and management and increasing the forest carbon sink;
- To strengthen forest disaster prevention and forest resource protection and to reduce deforestation-related emissions;
- To strengthen the protection and restoration of wetlands and to increase carbon storage capacity of wetlands; and
- To continue to restore grassland from grazing land, to promote mechanism of maintaining the balance between grass stock and livestock, to prevent grassland degradation, to restore vegetation of grassland, to enhance grassland

disaster prevention and farmland protection and to improve carbon storage of soil.

G. Promoting the Low-Carbon Way of Life

- To enhance education for all citizens on low-carbon way of life and consumption, to advocate green, low-carbon, healthy and civilized way of life and consumption patterns and to promote low-carbon consumption throughout society;
- To encourage public institutes to take the lead to: advocate low-carbon government buildings, campuses, hospitals, stadiums and military camps, advocate moderate consumption, encourage the use of low-carbon products and curb extravagance and waste; and
- To improve waste separation and recycling system.

H. Enhancing Overall Climate Resilience

- To improve safe operation of infrastructure of water conservancy, transport and energy against climate change;
- To properly develop and optimize the allocation of water resources, implementing the strictest water management regulation, building water-saving society in all aspects and intensifying the development and utilization of unconventional water resources, including recycled water, desalinated sea water and rain and flood water;
- To improve the construction of water conservation facilities for farmlands, to vigorously develop water-saving agricultural irrigation and to cultivate heat-resistant and drought-resistant crops;
- To enhance resistance to marine disasters and management of coastal zones and to improve the resilience of coastal areas against climatic disasters;
- To track, monitor and assess the impact of climate change on biodiversity;
- To strengthen the construction of forestry infrastructure;

- To properly lay out functional zones in cities, to make overall arrangements in developing infrastructure and to effectively safeguard city lifeline system;
- To formulate contingency plan for public health under the impacts of climate change and to improve the capacity of public medical services to adapt to climate change;
- To strengthen comprehensive assessment and risk management of climate change and to improve the national monitoring, early warning and communication system on climate change;
- To take full consideration of climate change in the planning, engineering and construction of the distribution of productive forces, infrastructures and major projects;
- To improve the emergency response mechanism for extreme weather and climatic events; and
- To strengthen the development of disaster reduction and relief management system.

I. Innovating Low-Carbon Development Growth Pattern

- To advance low-carbon pilots in provinces and cities;
- To conduct low-carbon cities (towns) pilots as well as low-carbon industrial parks, low-carbon communities, low-carbon business and low-carbon transport pilots;
- To explore diversified patterns of low-carbon growth;
- To research on effective approaches to control carbon emissions in different regions and cities;
- To facilitate the emerging of low-carbon cities with rational space distribution, intensive utilization of resources, low-carbon and efficient production and livable green environment; and

- To research on and establish carbon emission accreditation and low-carbon honor system, to carry out low-carbon certification pilots and promotion of selected products.

J. Enhancing Support in terms of Science and Technology

- To improve the fundamental research into climate change, conducting research on climate change monitoring and forecasting and strengthening research on the mechanisms and assessment methodology of climate change impacts and risks;
- To strengthen research and development (R&D) and commercialization demonstration for low-carbon technologies, such as energy conservation, renewable energy, advanced nuclear power technologies and carbon capture, utilization and storage and to promote the technologies of utilizing carbon dioxide to enhance oil recovery and coal-bed methane recovery;
- To conduct R&D on early warning systems for extreme weather;
- To develop technologies on biological nitrogen fixation, green pest and disease prevention and control and protected agriculture;
- To strengthen R&D on technologies for water saving and desalination of sea water; and
- To improve the technical supporting system for addressing climate change, to establish a mechanism that effectively integrates government, industries and academic and research institutes and to strengthen professional personnel training for addressing climate change.

K. Increasing Financial and Policy Support

- To further increase budgetary support;
- To actively innovate the application of funds and explore new investment and financing mechanisms for low-carbon development, such as public-private partnerships;

- To implement preferential taxation policies for promoting the development of new energy and to improve mechanisms of pricing, grid access and procurement mechanisms for solar, wind and hydro power;
- To improve green government procurement policy systems including that on procurement of low-carbon and energy-conservation products;
- To advance the reform in the pricing and taxation regime for energy-and-resource-based products;
- To improve the green credit mechanisms, to encourage and guide financial institutions to operate energy-efficiency crediting business and to issue asset-securitized products for green credit assets; and
- To improve disaster insurance policy against climate change.

L. Promoting Carbon Emission Trading Market

- To build on carbon emission trading pilots, steadily implementing a nationwide carbon emission trading system and gradually establishing the carbon emission trading mechanism so as to make the market play the decisive role in resource allocation; and
- To develop mechanisms for the reporting, verifying and certificating of carbon emissions and to improve rules and regulations for carbon emission trading to ensure openness, fairness and justice in the operation of the carbon emission trading market.

M. Improving Statistical and Accounting System for GHG Emissions

- To further strengthen the work on statistics of climate change;
- To improve greenhouse gas emission statistics covering areas including energy activity, industrial process, agriculture, land-use change, forestry and waste treatment;
- To improve the statistical indicator systems for climate change, to strengthen personnel training and to constantly improve the quality of data;

- To strengthen the work on greenhouse gas emission inventory accounting;
- To prepare greenhouse gas inventories at the national and provincial level on a regular basis;
- To establish a greenhouse gas emission reporting mechanism for key enterprises;
- To formulate greenhouse gas emission accounting standards for enterprises in key sectors; and
- To build a fundamental statistics and accounting system for greenhouse gas emissions at national, subnational and enterprise levels.

N. Broad Participation of Stakeholders

- To enhance the responsibility of enterprises for low-carbon development and to encourage them to explore low-carbon development modes that are resource-saving and environment-friendly;
- To strengthen the role of public supervision and participation in low-carbon development;
- To use platforms such as National Low Carbon Day to raise public awareness of low-carbon development throughout society;
- To encourage voluntary actions of the public to combat climate change;
- To let media play the role of supervision and guidance; and
- To enhance related education and training and to fully utilize the function of schools, communities and civil organizations.

O. Promoting International Cooperation on Climate Change

As a responsible developing country, China will stand for the common interests of all humanity and actively engage in international cooperation to build an equitable global climate governance regime that is cooperative and beneficial to all. Together with other Parties, China will promote global green low-carbon transformation and development path innovation. China will adhere to the

principles of equity and common but differentiated responsibilities and respective capabilities and urge developed countries to fulfill their obligations under the Convention to take the lead in substantially reducing their emissions and to provide support of finance, technology and capacity building to developing countries, allowing developing countries more equitable access to sustainable development and more support of finance, technology and capacity building and promoting cooperation between developed and developing countries. China will take on international commitments that match its national circumstances, current development stage and actual capabilities by enhancing mitigation and adaptation actions and further strengthening south-south cooperation on climate change. It will establish the Fund for South-South Cooperation on Climate Change, providing assistance and support, within its means, to other developing countries including the small island developing countries, the least developed countries and African countries to address climate change. China will thereby promote mutual learning, mutual support and mutual benefits as well as win-win cooperation with other developing countries. China will engage in extensive international dialogue and exchanges on addressing climate change, enhance policy coordination and concrete cooperation in related areas, share positive experiences and good practice, promote climate friendly technologies and work together with all Parties to build a beautiful homeland for all human beings.

III. CONTRIBUTIONS TO 2015 AGREEMENT NEGOTIATION

China is committed to the full, effective and sustained implementation of the Convention and to working with other Parties to achieve a comprehensive, balanced and ambitious agreement at the Paris Conference. In this connection, China submits its views regarding the process and outcome of the 2015 agreement negotiation as follows:

A. General View

The negotiation on the 2015 agreement shall be under the Convention and guided by its principles, aiming at enhancing the full, effective and sustained implementation of the Convention in order to achieve the objective of the Convention. The outcomes of negotiation shall be in accordance with the principles of equity and common but differentiated responsibilities and respective capabilities, taking into account differentiated historical responsibilities and distinct national circumstances, development stages and the capabilities of developed and developing countries. It should reflect all elements in a comprehensive and balanced way, including mitigation, adaptation, finance, technology development and transfer, capacity building and transparency of action and support. The negotiation process should be open, transparent, inclusive, Party-driven and consensus-based.

B. Mitigation

The 2015 agreement shall stipulate that the Parties, in accordance with the provisions of the Convention, shall formulate and implement programs and measures to reduce or limit greenhouse gas emissions for the period 2020-2030 and promote international cooperation on mitigation. Developed countries shall, in accordance with their historical responsibilities, undertake ambitious economy-wide absolute quantified emissions reduction targets by 2030. Developing countries shall, in the context of sustainable development and supported and enabled by the provision of finance, technology and capacity building by developed countries, undertake diversifying enhanced mitigation actions.

C. Adaptation

The 2015 agreement shall stipulate that the Parties shall, in accordance with the provisions of the Convention, strengthen international cooperation on adaptation

as well as the implementation of adaptation plans and projects at both regional and national levels. Developed countries shall provide support for developing countries to formulate and implement national adaptation plans as well as other related projects. Developing countries will identify their adaptation needs and challenges in their national adaptation plans and take enhanced actions. A subsidiary body on adaptation to climate change should be established. The linkage between adaptation and finance, technology and capacity building shall be strengthened. The Warsaw International Mechanism on Loss and Damage shall also be strengthened.

D. Finance

The 2015 agreement shall stipulate that developed countries shall, in accordance with the provisions of the Convention, provide new, additional, adequate, predictable and sustained financial support to developing countries for their enhanced actions. It shall provide for quantified financing targets and a roadmap to achieve them. The scale of financing should increase yearly starting from 100 billion U.S. dollars per year from 2020 which shall primarily come from public finance. The role of the Green Climate Fund (GCF) as an important operating entity of the financial mechanism of the Convention shall be strengthened. The GCF shall be under the authority of, guided by and accountable to the Conference of the Parties to the Convention.

E. Technology Development and Transfer

The 2015 agreement shall stipulate that developed countries shall, in accordance with the provisions of the Convention, transfer technologies and provide support for the research, development and application of technologies to developing countries based on their technology needs. The function of the existing technology mechanism shall be strengthened to help address the intellectual property right issue and assess technology transfer performance, and its linkage with the

financial mechanism shall be enhanced, including creating a window for technology development and transfer in the GCF.

F. Capacity Building

The 2015 agreement shall stipulate that developed countries shall, in accordance with the provisions of the Convention, provide support to developing countries in capacity building in all areas. An international mechanism on capacity building shall be established to develop and implement action plans for capacity building and to enhance capacity building for climate change mitigation and adaptation in developing countries.

G. Transparency of Action and Support

The 2015 agreement shall stipulate that the Parties shall, in accordance with the provisions of the Convention and relevant COP decisions, improve the transparency of enhanced actions of all Parties. Developed countries shall, in accordance with the provisions of the Convention as well as relevant provisions of the Kyoto Protocol, enhance the transparency of their actions through existing reporting and review systems. Rules on enhancing the transparency of finance, technology and capacity-building support by developed countries as well as the relevant review shall further be elaborated. Developing countries shall, with support by developed countries in terms of finance, technology and capacity building, enhance the transparency of their enhanced actions through existing arrangements on transparency and in a way that is non-intrusive, non-punitive and respecting national sovereignty.

H. Legal Form

The 2015 agreement shall be a legally binding agreement implementing the Convention. It can take the form of a core agreement plus COP decisions, with mitigation, adaptation, finance, technology development and transfer, capacity

building and transparency of action and support being reflected in a balanced manner in the core agreement and relevant technical details and procedural rules being elaborated in COP decisions. The nationally determined contributions by developed and developing countries can be listed respectively and separately in the Paris outcome.