

## 1.5 °C warming control demonstration area in China Climate sustainable development carbon finance economic transformation demonstration zone construction project

### 1、 Project background

The United Nations Intergovernmental Panel on climate change (IPCC) released the special report on global 1.5 °C warming. Based on the literature since the fifth assessment report, the report evaluates the facts, impacts and emission reduction paths of global 1.5 °C temperature rise, aiming to provide governments with information on impacts, adaptation and mitigation of 1.5 °C temperature rise, and provide scientific basis for the UN Framework Convention on climate change (UNFCCC) promoting dialogue in 2018 and global inventory under the Paris Agreement.

If the target is adjusted to 1.5 °C, we will be able to avoid a lot of losses and risks caused by climate change.

Limiting global warming to 1.5 °C will require "rapid and far-reaching" transformations in land, energy, industry, construction, transportation and cities, the report said.

As the world's second largest economy, with the further development of China's economy and the continuous improvement of people's living standards, the trend of China's energy consumption and greenhouse gas emissions will continue to increase in the short term. In the future climate change negotiations, China is bound to face great pressure from the international community to reduce or limit the emission of greenhouse gases in China. Therefore, China is facing a "rapid and profound" transformation in land, energy, industry, construction, transportation and cities.

According to the needs of China's economic development, China climate change industry alliance has started to promote the construction project of carbon financial economic transformation demonstration zone for sustainable climate development in 15 provinces and cities in China in December 2016. At present, it has signed 7 demonstration areas and 11 demonstration projects with Chinese local governments and private enterprise groups, with a total emission area of 8737.78 square kilometers.

In September 2010, in response to the call of the United Nations Global Compact, in order to help the Chinese government achieve the goal of 1.5 °C temperature control, and to help the global control of 1.5 °C temperature, the China climate change industry alliance specially assigned these seven demonstration zones of carbon financial economic transformation for sustainable climate development, 11 demonstration projects have been officially identified as the target demonstration area and demonstration project of global temperature control 1.5 °C, and the replicable and sustainable development mode and scheme of China have been officially launched to the world.

### 2、 China plan area to achieve the overall goal

The project of carbon financial economic transformation demonstration zone for climate sustainable development will be built in China's provinces, cities, counties, economic and technological development zones and various industrial parks, so as to promote the transformation and upgrading of the fiscal mode of Chinese provincial, municipal and county governments, and achieve the goal of sustainable development by controlling the temperature rise of 1.5 °C.

The China Programme region will achieve the following objectives:

1. The "green mountains and green waters" will be transformed into the "golden mountains and silver mountains".
2. Green mountains and green water GDP revenue model, fundamentally changing the local government land fiscal revenue model demonstration area.
3. The pilot construction of energy revolution will be carried out in the demonstration area, and renewable energy power generation will account for more than 90% of the total electricity consumption of provinces, cities, counties, economic and technological development zones and various industrial parks in China.
4. Build a zero carbon China, promote the development of China's carbon economy, and realize the transformation of carbon financial economy.
5. To achieve the goal of global temperature increase of 1.5 °C, achieve the goal of sustainable development, improve China's program, and contribute to China's strength.

### **3、 Operation promotion mode and income in project area**

#### **1) . Operation promotion mode**

- i、 Climate sustainable development (climate adaptability and biodiversity) + carbon financial economic transformation + regional industrial carbon financial economic transformation + characteristic town construction, zero carbon community and urban construction.
- ii、 Develop regional carbon economy and promote regional zero carbon economic development model.
- iii、 Climate sustainable development + carbon finance + renewable energy (wind power, photovoltaic, biomass) + fund + bond + asset securitization + (energy contract management).

#### **2) . Revenue**

Industrial income, CCER income, wind power, photovoltaic, biomass power generation income,

fund income, asset securitization income, energy management contract income.

#### 4、 Project area implementation partner team

- 1) . China climate change industry alliance
- 2) . Beijing Dongrun Huanneng Investment Co., Ltd
- 3) . China Coal Aerial Remote Sensing Group Co., Ltd
- 4) . Xi'an operation control information technology Co., Ltd
- 5) . Hangzhou chaoteng Energy Technology Co., Ltd

#### 5、 1.5 °C warming control and drainage area in China

The project emission control areas are distributed in Liaoning Province, Inner Mongolia Autonomous Region, Shandong Province, Shaanxi Province and Xinjiang Autonomous Region.

The total area of 1.5 °C warming control and emission control in the project area: 8737.78 square kilometers.

#### 6、 Signed projects in China

Liaoning Province: it has signed a contract with the local government for the total emission control area of 4502 square kilometers, forestry carbon sequestration project of 4.9 million mu, and land wind power project of 200 MW.

Inner Mongolia: it has signed a contract with private enterprise groups for the construction of large-scale Desert Tourism Climate sustainable development carbon financial economic transformation demonstration area with a total emission control area of 419.48 square kilometers, 3000MW ground photovoltaic power generation project and 126900 Mu desert control biodiversity planting project.

Shandong Province: 543000 Mu forest carbon sequestration project has been signed with local government

Shaanxi Province: it has been planted with 5 million mu of Yulin Ecological Industrial Park, 30000 mu of peony Industrial Park in Qianxian County, Shaanxi Province, and 1500 mu high-yield walnut in Shaanxi Biying ecology.

Xinjiang: it has signed a 150000 Mu forest carbon sequestration project with private enterprise groups.

Liaoning, Shandong, Shaanxi, Inner Mongolia and Xinjiang have signed a total of 8737.78 square kilometers.

## 7、 Global cooperation mode of regional projects in China

China climate change industry alliance has signed a total emission control area of 8737.78 square kilometers. Each project area can provide cooperative emission reduction bases for countries around the world and member enterprises of the United Nations Global Compact organization to offset their carbon emission reduction in the process of economic development.

## 8、 The first batch of demonstration projects

The first demonstration projects of carbon financial economic transformation demonstration zone for sustainable development of climate were listed as follows: 1.5 °C warming and temperature control target of the United Nations Global Compact organization

	location	Contracting party	Scheduled area ( km <sup>2</sup> )	Operating period ( year )
1	Xiuyan County, Liaoning	County government	1235.3	70
1-1	Xiuyan County, Liaoning (wind power)	County government	200MW	30
1-2	Xiuyan County, Liaoning (Forestry carbon sinks)	County government	3266.7	70
2	Single county,shandong	County government	362	70
3	Yulin Ecological Industrial Park,shaanxi	Yulin Ecological Industrial Park	3333.3	70
4	Yanta District,Xi-an	Biying Ecology Company	1	70
5	QianCounty,Shaanxi	County government	20	70
6	Dalate Banner,neimenggu	neimeigu Wanchuang Group	334.88	70
6-1	Dalate Banner,neimenggu (Photovoltaic )	neimeigu Wanchuang Group	3000MW	30
6-2	Dalate Banner,neimenggu (Forestry carbon sinks)	neimeigu Wanchuang Group	84.6	70
7	Kashi,Xinjiang	Xianjiang Shengbang Company	100	70
total			8737.78	