

# 中石油应对气候变化发展 实践简介

## Introduction of CNPC Climate Change Mitigation Activities

中国石油天然气集团有限公司

China National Petroleum Corporation (CNPC)

2018年12月

# Who We Are?

## 4.09872

Total assets  
trillion RMB



**Assets &  
Profits**

CNPC registered total assets of RMB 4.09872 trillion. We recorded sales revenues of RMB 2.34032 trillion and total profits of RMB 53.34 billion, up 25% and 5.1% respectively year-on-year. Our tax and fees payments totaled RMB 377.36 billion.

## 273.91

Domestic and overseas oil  
and gas equity production  
million tons of oil equivalent



**Oil & Gas  
Production**

Domestic and overseas oil and gas production amounted to 273.91 million tons of oil and gas equivalent. Domestically, we produced a total of 102.54 million tons of crude and 103.27 billion cubic meters of natural gas, accounting for 53.6% and 71.1% of China's total respectively.

## 151.84

Domestic sales volume  
of natural gas  
billion cubic meters



**Oil & Gas  
Supply**

Our domestic marketing volume of refined products was 114.163 million tons, accounting for over 37.2% of the domestic market share; we increased supply of clean energy, and our domestic marketing volume of natural gas was 151.84 billion cubic meters, up 15.5% year-on-year.

## China National Petroleum Corporation (CNPC)

- Ranked **3<sup>rd</sup>** among world's top 50 oil companies and **4<sup>th</sup>** in the Fortune Global 500
- One of the world's major providers of comprehensive oilfield services
- A world renowned engineering construction contractor
- A major petroleum equipment and materials supplier
- Having oil and gas assets and interests in over 30 countries



# What's Our Targets on Climate Change

Plans and initiatives for greenhouse gas emission reduction and control supported and participated in by CNPC

- Paris Agreement
- China's National Program to Address Climate Change
- National Plan on Climate Change (2014-2020)
- China Technology Strategic Alliance for CO<sub>2</sub> Capture, Utilization and Storage Technology Innovation (CTSA-CCUS)
- Oil and Gas Climate Initiative (OGCI)



## Overall objectives

Implement the strategy of low-carbon development, actively develop clean energy, establish carbon emission control mechanism

## Action plan

Develop and utilize clean energy technologies and promote energy conservation, and strengthen the comprehensive utilization of GHG. Participate in the international organizations such as the **Oil and Gas Climate Initiative (OGCI)**

Develop management rules and work plans for control and management system for GHG emissions, increase capital investment, and promote innovation of low-carbon technologies

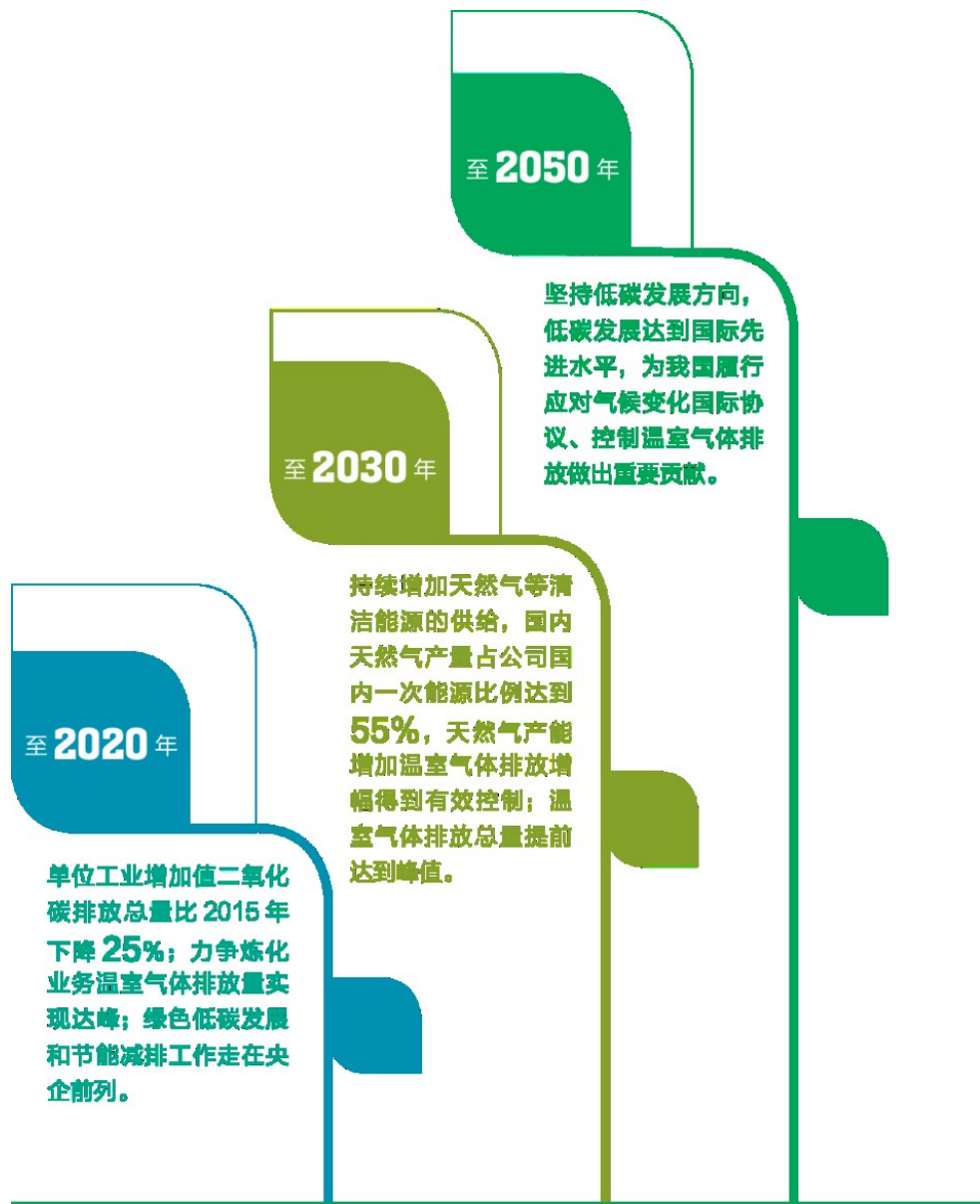
Carry out GHG emission accounting, exercise carbon missions quota control, take measures to control GHG emissions, regulate emissions reporting, and strengthen International cooperation to combat climate change.

## Measures

## Key tasks



# Our Low Carbon Roadmap



Conduct supply-side structural reform to provide society with low-carbon and clean energy.



Accelerate demand-side structural adjustment to reduce GHG emission in the production process

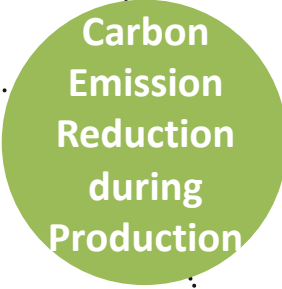
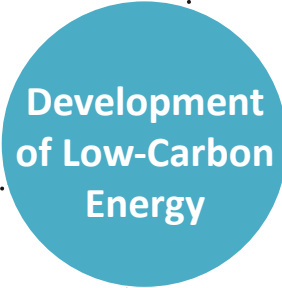


Strive to develop low-carbon energy and boost the capacity for clean production



# What We Do for Reducing Carbon Emission?

Actively develop Natural gas, coal-bed methane, shale gas, biomass energy and other low-carbon energies, and promote the exploitation of geothermal energy, solar energy and other renewable energies



We paid high attention to optimizing the structure of energy consumption by ourselves. We also cared about carbon emissions and carbon footprint during production and operation.

R & D projects in key technologies for low-carbon and clean development, and engaged in technological research on CO2 flooding and storage, aviation bio-fuel production, refining energy system optimization. CCUS project in Jilin province with 1M tons of 10 years operatoin

Actively participated in carbon trading activities to achieve carbon emissions reduction targets through market-based mechanisms. We are the co-founder of the Tianjin Climate Exchange (TCE), the first comprehensive emissions trading institution in China

 Carbon Sink

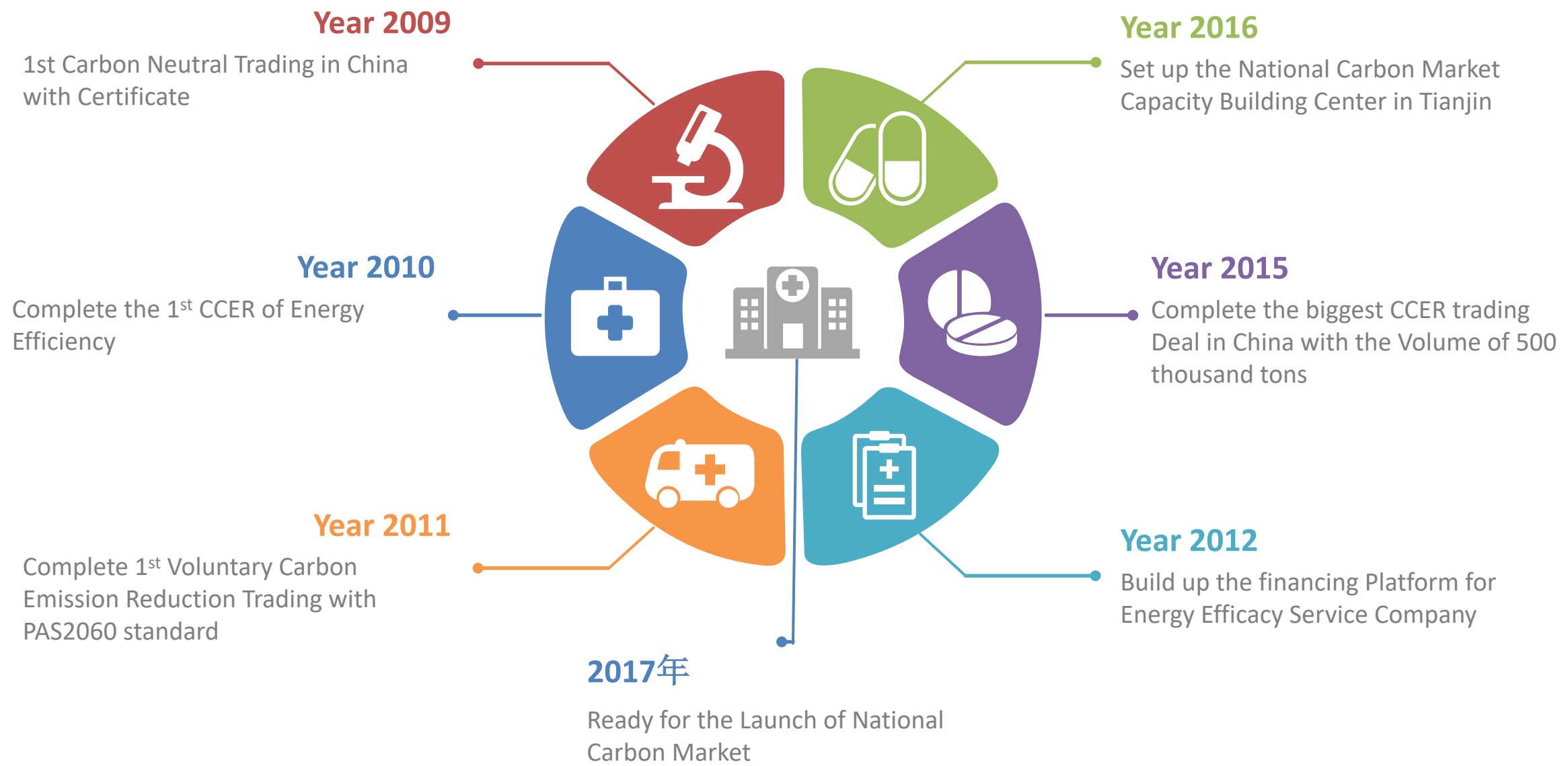
**20,000,000 Hectare**

We established the China Green Carbon Foundation together with the State Forestry Administration, building an accumulative total of over 20 million hectares of carbon sink forests. Meanwhile, we set up the Forestation Committee to ensure continuous forestation in our production areas and living quarters.



# What We Do for Reducing Carbon Emission?

中国石化与天津产权交易中心、芝加哥气候交易所共同出资设立天津排放权交易所



## Green & Sustainable Finance Promote Energy Consumption Transformation

In response to the initiative of green finance proposed in China's "13<sup>th</sup> Five-year Plan", CNPC actively participated in the construction of clean energy and environmental protection projects such as hydropower, wind power, photovoltaic power generation, and waste power generation. We successively invested clean energy projects in cities such as Chongqing, Guiyang, and Zhangpu, reduced the proportion of coal-fired power generation in the consumption mix, and provided the energy guarantee for the building of a new countryside and the development of special tourism. By the end of 2017, the Company had provided financing leasing services for **7 clean energy projects**, aiming to reduce CO<sub>2</sub> emissions by millions of tons per year.



**CNPC Capital Co., Ltd.** is a platform for CNPC's financial business integration, financial equity investment, financial asset supervision, and financial risk management and control. As of the end of 2016, the total assets of CNPC Capital Management was 1.2 trillion yuan, with a total operating income of 28.83 billion yuan and a total profit of 14.51 billion yuan. The company is committed to the combination of green energy finance, energy industry chain and industry and finance, and is determined to become a comprehensive financial holding listed company with core competitiveness and sustainable development.

## What's Our Visions



2011年发布绿色发展行动计划  
2011 Green Development Action Plan

## 我们

既要做社会能源稳定供应的守护者也要  
做清洁能源低碳转型的推动者

To be the **Guardian** of a stable supply of social energy, and to be a **Promoter** of low-carbon transformation of clean energy

## 建设世界一流综合性 国际能源公司

To be a world-leading  
integrated international energy  
company



2017年发布三项行动纲要