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?

China National Petroleum Corporation (CNPC)
- Ranked 3rd among world’s top 50 oil companies and 4th 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

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).

Measures

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

Key tasks

- 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.

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 CO₂ Capture, Utilization and Storage Technology Innovation (CTSA-CCUS)
- Oil and Gas Climate Initiative (OGCI)
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.

至2030年

至2050年

单位工业增加值二氧化碳排放总量比2015年下降25%；力争炼化业务温室气体排放量现达到峰值；绿色低碳发展和节能减排工作走在央企前列。

持续增加天然气等清洁能源的供给，国内天然气产量占全国一次能源比例达到55%；天然气产能增加温室气体排放增加得到有效控制；温室气体排放总量提前达到峰值。

坚持低碳发展方向，低碳发展达到国际先进水平，为我国履行应对气候变化国际协议、控制温室气体排放做出重要贡献。
What We Do for Reducing Carbon Emission?

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.

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 operation.

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.

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.
What We Do for Reducing Carbon Emission?

**Year 2009**
1st Carbon Neutral Trading in China with Certificate

**Year 2010**
Complete the 1st CCER of Energy Efficiency

**Year 2011**
Complete 1st Voluntary Carbon Emission Reduction Trading with PAS2060 standard

**Year 2012**
Build up the financing Platform for Energy Efficacy Service Company

**Year 2015**
Complete the biggest CCER trading Deal in China with the Volume of 500 thousand tons

**Year 2016**
Set up the National Carbon Market Capacity Building Center in Tianjin

**2017年**
Ready for the Launch of National Carbon Market
Green & Sustainable Finance Promote Energy Consumption Transformation

In response to the initiative of green finance proposed in China’s "13th 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 CO₂ 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

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