

CITIES & CLIMATE CHANGE

IN CHINA

China has embarked on several key national policies and programs on energy and climate change.

CHINA'S CLIMATE CHANGE GOALS IN 2015



China announced its international climate pledge (Intended National Determined Contributions, or INDCs) in June 2015. China's national pledge is to peak CO₂ emissions around 2030, making efforts to peak sooner, to increase non-fossil energy to 20 percent of its energy mix by that same year, and to reduce the carbon intensity of its economy (CO₂ emissions per unit of GDP) by 60 to 65 percent from 2005 to 2030.

PROGRAM FOR LOW-CARBON PILOT CITIES AND PROVINCES

In 2010, China's National Development Reform Commission (NDRC) initiated eight low-carbon pilot cities and five low-carbon pilot provinces. In 2012, NDRC added 28 cities and one province to the low-carbon pilot program.

China's low-carbon pilot cities have prepared climate action plans, conducted energy and GHG inventories, and developed local standards and incentives that go beyond national requirements.

PROGRAM FOR CARBON TRADING IN PILOT CITIES AND PROVINCES

By the end of October 2014, the carbon trading pilots in Beijing, Chongqing, Shanghai, Tianjin, Guangdong Province and Hubei Province had traded 13.75 MtCO₂ with a total transaction volume of over 500 million Yuan.

These pilots will accumulate experience and inform the design of a national carbon trading to be developed during the 13th Five Year Plan period.

Globally, cities are at the forefront of action on climate change and low-carbon economic development



CHINA HAS OVER **100 CITIES** WITH A POPULATION OVER **1 MILLION PEOPLE**



CHINA'S URBAN POPULATION OF **742 MILLION PEOPLE** IS **10% OF THE WORLD**



2015

2050

URBAN POPULATION TO INCREASE BY **305 MILLION**

Urban CO₂ emissions are 58% of national total energy-related CO₂ emissions.



27%

Buildings account for over a quarter of urban primary energy consumption, divided between residential and commercial/public buildings



17%

Urban transport is responsible for 17% of urban primary energy consumption



1.4x

Urban areas emitted 1.4 times as much energy-related CO₂ per-capita as in rural areas



56%

Urban industry accounts for the largest share of urban primary energy consumption

6 Ways for Chinese Cities to Achieve Low-carbon Development



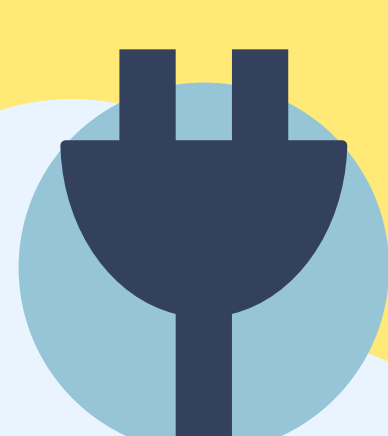
INDUSTRY:

Improve industrial energy efficiency and promote higher-quality construction and better product design to reduce urban industrial demand



BUILDINGS:

Implement stringent building codes and promote low energy, passive design and green buildings



POWER:

Develop distributed renewable energy power generation in cities while aggressively de-carbonizing the power grid



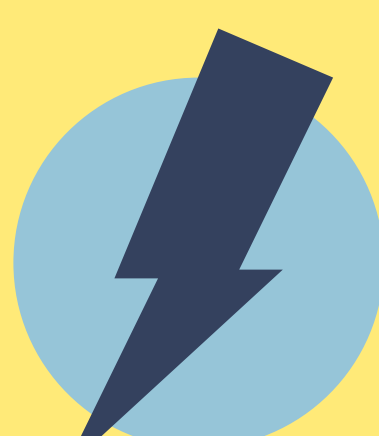
TRANSPORTATION:

Improve urban design to reduce private transport demand and maximize efficiency and electrification of vehicles



FREIGHT:

Optimize freight transport of goods through better logistics, improving load factors and electrification of urban delivery vehicles



APPLIANCES:

Promote procurement and adoption of clean, super-efficient appliances and equipment

Chinese cities have an especially large role to play during rapid urbanization, to quickly choose low-carbon urban design and infrastructure that will have long-lasting effects on the country's GHG emissions.



For more information, please refer to the report:
"The Role of Chinese Cities in Greenhouse Gas Emission Reduction"