

DEVELOPING COUNTRY PROJECT — CHINA

OVERVIEW

The Center for Clean Air Policy (CCAP) *Developing Country Project* works with developing countries to identify specific “win-win” opportunities where they can reap substantial economic and other development-related benefits through cost-effective actions that will also reduce greenhouse gas (GHG). CCAP also works with these countries to strengthen their capacity to prepare for and participate in negotiations on future actions under the United Nations Framework Convention on Climate Change (UNFCCC).

In China, CCAP is working closely with the Ministry of Science and Technology, the National Development and Reform Commission and the Institute for Environmental Systems Analysis at Tsinghua University to strengthen China’s ability to reduce its GHG emissions.

CLEARING UP MISCONCEPTIONS AND MISINFORMATION

Recent analysis by CCAP on China’s greenhouse gas (GHG) emissions and reduction efforts concluded that the current perception in the United States about China is inaccurate. **In China, recently implemented policies in key economic sectors are already lowering GHG emissions and are expected to cut these emissions to 7 percent below projected levels in 2020.**

CCAP’s research demonstrates that developing countries such as China are not only taking steps that reduce emissions but, in some instances, are doing more to reduce emissions than developed nations. For example, China has focused an important portion of its efficiency-improvement efforts in internationally competitive industries, including iron and steel, cement, and pulp and paper. These data chip away at the argument that industries facing international competition will shift production to China.

CCAP ANALYSIS KEY FINDINGS

An analysis conducted by CCAP identified three major findings for China:

- Greenhouse gas emissions are projected to grow through 2020;
- Recent policies and programs will slow this growth;
- Further reductions are available; and
- Policy implementation is critical.

CCAP analyzed China’s GHG emissions growth between 2000 and 2030 by examining:

- China’s projected GHG emissions **without** policies and programs adopted between 2000 and the end of 2005;
- China’s projected GHG emissions **with** policies and programs adopted between 2000 and the end of 2005; and
- China’s projected GHG emissions **with additional** policies and programs.

CCAP research and analysis found that, for a group of energy-intensive sectors (electricity, cement, iron and steel, pulp and paper and transportation):

- Without any new policies adopted since 2000, emissions were projected to increase by 132 percent between 2000 and 2020;
- With new policies adopted between 2000-2005, emissions are projected to fall by 7 percent below projected levels in the year 2020; and
- With additional policies and programs costing \$10 per metric ton or less, emissions would **fall a total of 10 percent** in the year 2020.

CCAP’S ANALYSIS BY SECTOR

CCAP research delved into how recent Chinese policies and programs are reducing emissions in their highest energy-consuming and carbon-emitting sectors.

In the electricity sector, CCAP found a 5 percent reduction in GHG emissions in 2020. The reduction is produced by policies and programs that:

- Set a target of 16 percent of primary energy generated from renewable sources in 2020, including large hydroelectric facilities;

- Develop tariff-based renewable energy incentives; and
- Shut down small coal-fired plants (less than 50 MW) and require that new plants be greater than 300 MW.

In the industrial sectors, CCAP found GHG emissions will be reduced in 2020 by:

- 15 percent in cement;
- 9 percent in iron and steel; and
- 21 percent in pulp and paper industries.

In the transportation sector, CCAP identified a 5 percent reduction in GHG emissions in 2020. The most significant of China's policies to support this reduction is:

- Maximum limits of fuel consumption (L/100km) for passenger cars — fuel-efficiency standards that are **expected to result in one of the most fuel-efficient passenger vehicle fleets in the world** (estimated fleet averages of 34 MPG in 2005 and 37 MPG in 2008).

ADDITIONAL STEPS CHINA IS TAKING

In 2006, China implemented additional policies and programs that are not included in CCAP's analysis. For example, China has set a goal to reduce economy-wide energy use per unit of gross domestic product (GDP) by 20 percent between 2005 and 2010. This goal is no small undertaking given that energy intensity already improved by 77 percent between 1990 and 2003.

Some other recent policies and programs that were not included in CCAP's analysis are:

- **Vehicle excise taxes**, which are now based on the vehicle engine size and range from 1-20 percent of the vehicle purchase price; this **quadrupled the taxes on some SUVs** from 5 percent to 20 percent (to about \$8,000 per vehicle);
- The *"1,000 Highest Energy-Consuming Enterprises"* program, which aims to attain a **20 percent efficiency improvement** by 2010 in the 1,000 facilities accounting for the greatest energy use, such as cement and iron and steel plants;
- Restructuring of the cement industry to **reduce energy intensity**; and
- A plan to develop 10 percent of energy from renewable sources by 2010 and 15 percent by 2020. The renewable energy plan estimates that by 2010 China will emit 600 million tonnes less carbon dioxide (CO₂) a year. By 2020, the annual reduction in CO₂ will reach 1.2 billion tonnes. In addition, China has installed the fourth-largest amount of new wind capacity in the world.

For more information on China's GHG reduction efforts, please contact Jake Schmidt, manager of International Programs, at jschmidt@ccap.org.

Since 1985, CCAP has been a recognized world leader in climate and air quality policy and is the only independent, nonprofit think-tank working exclusively on those issues at the local, national and international levels. Headquartered in Washington, D.C., CCAP helps policy-makers around the world to develop, promote and implement innovative, market-based solutions to major climate, air quality and energy problems that balance both environmental and economic interests. More information about CCAP can be found at www.ccap.org.