

COPENHAGEN CONSEQUENCES

Analysis of the 2009 Copenhagen U.N. Climate Change Conference

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Ten Things about China and Climate Change

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Many global environmental debates are chiefly about China. In the past, it has been acid rain made in the PRC but falling elsewhere. Eventually, the conversation will shift to water shortages and diversion that have already displaced millions and may eventually threaten conflict with some of China's neighbors. As the international community lurches toward the Copenhagen climate change conference, the main topic is carbon emissions and climate change. Again, the debate will center on the PRC.

The size of the country means conflicting processes exist simultaneously. Critics of Chinese ecologic and economic practice can point to ongoing devastation at the same time defenders point to important remedial programs. China and climate change is a topic broad and substantial enough for several books, but there are vital statistics that must be included in any conversation. These point to the PRC as by far the most powerful force, now and for the indefinite future, driving carbon emissions. The reason is coal.

Numbers Don't Lie

1. While the data can be presented in many different ways, China almost surely leads the world in raw spending on "green energy."¹ The PRC is allocating an

1. Ben Furnas, "We Must Seize the Energy Opportunity or Slip Further Behind: A Primer on Global Competition in Green Technology Investments," Center for American Progress, April 20, 2009, at

impressive amount of resources to cleaning its environment as well as building wind turbines, solar plants, and similar facilities.

2. China also leads in coal production and consumption. In 2000, China's official figure for coal output was 880 million tons and dropping; in 2008, it was 2.62 billion tons and still climbing. The PRC's ecologic footprint is often characterized as a natural result of a large population and a growing economy. In coal, it is more than that:

- China's share of world GDP: over 7 percent and climbing;
- China's share of world population: about 20 percent and declining;
- China's share of world coal use: over 40 percent and climbing.²

3. Diversification from coal has failed and will continue to fail. Coal now provides 70 percent of the PRC's energy and almost 80 percent of its electricity, with both figures *higher* than they were a decade ago. These shares may barely shift for decades to come. For better or for

http://www.americanprogress.org/issues/2009/04/global_competition.html (October 27, 2009).

2. Energy Information Organization, "International Energy Outlook 2009, Chapter 4: Coal," May 27, 2009, at <http://www.eia.doe.gov/oiaf/ieo/coal.html> (November 2, 2009); People's Republic of China, National Bureau of Statistics, *China Monthly Statistics*, Vol. 108 (December 2000) and Vol. 205 (January 2009).



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worse, transportation is not particularly important in Chinese energy use, so oil is far less important than coal. And while the PRC has a much-touted goal of 15 percent of energy from renewables, U.S. government projections have the proportion of Chinese electricity generated by coal remaining at 75 percent in 2030.³

4. The resulting figures are ugly: The PRC's coal-fired power capacity is set to increase from 350 gigawatts at the start of 2006 to 950 gigawatts at the end of 2030. In 2006, coal use in China's electricity sector was 20 percent higher than in America's electricity sector. In 2030, coal use in China's electricity sector is forecast to be 135 percent higher than in America's electricity sector.⁴

5. Even taking into consideration the planned retirement of outdated plants and their replacement with new, somewhat cleaner versions, use of coal will have a predictable effect on greenhouse gases. Prior to the recent financial crisis, the PRC's carbon emissions were almost 15 percent larger than America's and pulling away.

China could cut its 2000–2007 rate of emission expansion in half, thus meeting its stated goal of sharply reducing emissions per unit of GDP, yet still exceed the worst case scenario projected by those preaching Chinese responsibility. A year after the global financial shock, Credit Lyonnaise has forecast that China alone will generate 63 percent of the world's emissions increase over the next decade.⁵

3. Energy Information Organization, "Country Analysis Briefs: China," July 2009 at <http://www.eia.doe.gov/emeu/cabs/China/Background.html> (October 27, 2009). The share of nuclear power in energy requires decades to rise and then by only a few percentage points. China's solar industry is geared almost entirely for export and must expand massively to get to 1 percent of energy use. Wind power capacity is growing impressively, but wind remains trivial in electricity generation. Hydropower capacity well exceeds the true contribution of hydropower due to low water flow.

4. *Ibid.*

5. Energy Information Administration, "Country Energy Profiles: China," September 16, 2009, at http://tonto.eia.doe.gov/country/country_energy_data.cfm?fips=CH (October 27, 2009); Roger Pielke, Jr., "Spontaneous Decarbonization in China's Proposed Emissions Targets," Roger Pielke Jr.'s Blog, August 31, 2009, at <http://rogerpielkejr.blogspot.com/2009/08/autonomous-decarbonization-in-chinas.html> (October 27, 2009); Dinakar Sethuraman, "China Under More Pressure to Cut Emission Than India, CLSA Says," Bloomberg.com, September 2, 2009, at http://www.bloomberg.com/apps/news?pid=conewsstory&tkr=601991%3ACH&sid=adXYWzP_UP8Q (October 27, 2009).

6. Such data prompted Environmental Protection Agency (EPA) Administrator Lisa Jackson to note that "the central parts of the [EPA] chart are that U.S. action alone will not impact world CO₂ levels."⁶ Actually, U.S. action alone will coincide with much higher world CO₂ levels.

7. It is unreasonable to expect the PRC to follow the U.S. on climate change. China has rejected American leadership on security issues in Iran and North Korea and on human rights matters in Sudan and Burma. In economics, the PRC's existing and anticipated coal dependence dwarfs America's, making a serious adjustment far more difficult.

Moreover, China does not compete in most goods and services with the U.S. but with other suppliers to the American market, such as Mexico. These nations'—not American—climate change restrictions are more pertinent to Beijing's decision making.⁷ And the PRC has steadfastly avoided the Western European cap-and-trade experiment (wisely so, as the EU has failed to cut emissions while harming its economy). That China will follow an American lead in cutting greenhouse gases flies in the face of all available evidence.

8. Water shortage and pollution are more important to the PRC, and most of the world, than greenhouse gases. Nearly two-thirds of Chinese cities, plus over 200 million rural residents, face water shortages. At the end of 2008, close to half of key river and waterway sections were classified as being so polluted that they were unsuitable for human contact and, in some cases, even irrigation.

In the absence of unprecedented efforts, the outlook on water is grim—and such efforts will claim a sizable fraction of resources devoted to environmental projects.⁸ Attempting to reduce carbon emissions would

6. Press release, "Jackson Confirms EPA Chart Showing No Effect on Climate Without China, India," U.S. Senate Committee on Environment and Public Works, July 7, 2009 at http://epw.senate.gov/public/index.cfm?FuseAction=Minority.PressReleases&ContentRecord_id=564ed42f-802a-23ad-4570-3399477b1393 (October 27, 2009).

7. Derek Scissors, "China Will Follow the U.S.: A Climate Change Fable," Heritage Foundation *WebMemo* No. 2327, March 5, 2009, at <http://www.heritage.org/Research/AsiaandthePacific/wm2327.cfm>.

8. Xinhua, "China to Strengthen Water Control in Light of Shortage," China Daily, February 15, 2009, at http://www.chinadaily.com.cn/china/2009-02/15/content_7477677.htm (October 27, 2009); Reuters, "Q+A-China's Pressing Pollution Problem," August 24, 2009, at

require a costly diversion from more pressing ecologic concerns.

9. When troublesome for the Communist Party, Chinese statistics are altered or censored. Political statistics are censored (e.g., the size and nature of Tibetan riots), economic statistics are altered (e.g., Chinese provinces claim every year to grow faster than the national “average”), and environmental statistics are censored (e.g., suppression of foreign reports in favor of official accounts).⁹ Any environmental agreement that permits the PRC to report its own progress is not worth the tree chopped down to print it.

10. The topic of China makes it clear that some who demand strong U.S. action do not believe their own words concerning climate change. Those who say no action can be meaningful unless the PRC agrees to internationally monitored and enforced, painfully tight emissions caps are serious. Those mumbling about historical obligations, “special responsibilities” of developed countries, and the like may be serious about something, but it is not the curtailing of greenhouse gases.

Implications

Absent a technological breakthrough, the only way to contain greenhouse gases is to drastically alter Chinese

http://www.reuters.com/article/latestCrisis/idUSPEK169088 (October 27, 2009); Xinhua, “China to Invest Billions to Deal with Water Pollution,” *China Daily*, January 15, 2008, at *http://www.chinadaily.com.cn/bizchina/2008-01/15/content_6395700.htm* (October 27, 2009).

9. *Spiegel Online*, “Deaths, What Deaths?: China ‘Forced World Bank’ to Doctor Pollution Report,” July 7, 2007, at *http://www.spiegel.de/international/world/0,1518,492353,00.html* (October 27, 2009).

coal use. The inexorable numbers make it clear that all else is merely a distraction. This has direct implications for American policy, in particular with respect to current global negotiations.

- Unilateral American action to contain the level of greenhouse gases is essentially useless. Even if the U.S. is willing to pay the economic costs, unilateral American action will not work.
- Because greenhouse gases cannot be contained without restrictions on China that Beijing will find very difficult to fulfill, any agreement must feature international monitoring and a meaningful enforcement mechanism.
- If any proposal along these lines turns out to be diplomatically feasible, it should then be evaluated for effects on American economy and sovereignty.
- If greenhouse gas emissions are to be treated as a serious threat, research must be concentrated almost exclusively on carbon capture and technology aimed to cut emissions from coal, not turned into a green energy boondoggle.
- If greenhouse gas emissions continue to be downgraded as a priority, the U.S. should still work to increase cooperation with the PRC on a range of environmental and energy issues, such as improving water-saving and water-treatment technology.

With Copenhagen looming, the U.S. must be realistic about carbon emissions and China.

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