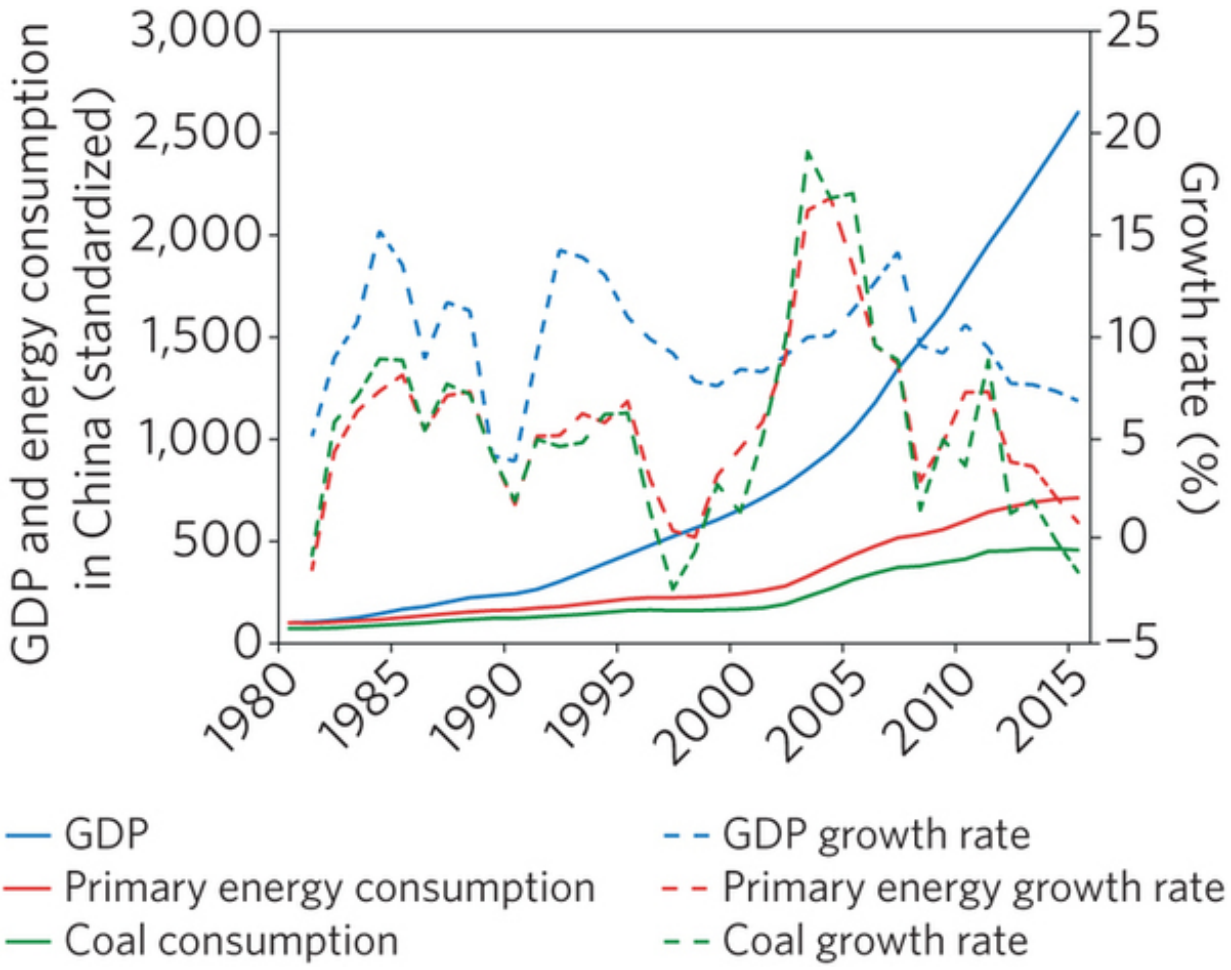
Scholars suggest China may have reached peak consumption of coal in 2013

July 26 2016, by Bob Yirka



China's economy, primary energy and coal consumption (setting 1980 values as 100), and their respective growth rates. Credit: (c) Ye Qi et al. China's post-coal growth, *Nature Geoscience* (2016). DOI: 10.1038/ngeo2777

(Phys.org)—A small team of scholars has published a Commentary piece in the journal *Nature Geoscience* suggesting that China has reached peak coal consumption far earlier than most in the field had suggested. In their paper, Ye Qi, Tong Wu, Ye Qi and Jiaqi Lu, with Tsinghua University in China and Nicholas Stern and Fergus Green with the Grantham Research Institute on Climate Change and the Environment in the U.K., note that the world's largest consumer of coal has seen a decrease in the amount of coal that was burned in that country over the past two years and suggest that the decrease is likely permanent.

The amount of coal burned in China has been of significant interest to people both inside and outside of that country because of the resulting pollution. In addition to hazing cities near manufacturing plants, burning coal pumps greenhouse gases into the atmosphere, causing global warming. China's consumption of coal has dramatically increased over the past decade and a half, growing from 1.36 billion tons consumed in 2000 to 4.24 tons consumed in 2013 as the country has made huge strides in internal development. But the latest Chinese government statistics regarding coal use show that production fell 9.7 percent over the first six months of this year, and 5.8 percent last year—while burning of coal fell 3.7 percent. And now, the authors of this new paper propose that three main factors suggest the recent decline is actually the beginning of a permanent drop: a slowdown in economic growth, a slowdown in coal-intensive industries and government environmental policies.

China's impressive economic growth has been underpinned by use of coal, making up to three-quarters of all energy used at times, but that percentage has been dropping for some time, as petrochemicals and alternative energy sources have become much more widespread. In 2015, just 64.4 percent of energy use came from coal and that share is likely to continue to fall, even as economic activity has continued to grow.

The economic slowdown, the authors note, has had a big impact on coal use—as manufacturing slowed, less energy was used. But they also point out that slowdowns are quite common for developing countries—other countries experienced huge economic expansions during formative years, but eventually saw slowdowns that eventually became the norm. They believe this is the case with China today. But just as important are government policies such as setting goals for pollution reduction in some areas, reduced coal use in others and promoting a reduction in greenhouse gas emissions.

More information: Ye Qi et al. China's post-coal growth, *Nature Geoscience* (2016). DOI: 10.1038/ngeo2777