Monday, 14 April 2008 00:11 UK

China 'now top carbon polluter'

By Roger Harrabin BBC Environment analyst



File photo from August 2007 showing air pollution in Beijing Researchers say China needs to radically change its policies

China has already overtaken the US as the world's "biggest polluter", a report to be published next month says.

The research suggests the country's greenhouse gas emissions have been underestimated, and probably passed those of the US in 2006-2007.

The University of California team will report their work in the Journal of Environment Economics and Management.

They warn that unchecked future growth will dwarf any emissions cuts made by rich nations under the Kyoto Protocol.

The team admit there is some uncertainty over the date when China may have become the biggest emitter of CO2, as their analysis is based on 2004 data.

Until now it has been generally believed that the US remains "Polluter Number One".

Provincial data

Next month's University of California report warns that unless China radically changes its energy policies, its increases in greenhouse gases will be several times larger than the cuts in emissions being made by rich nations under the Kyoto Protocol

The researchers say their figures are based on provincial-level data from the Chinese Environmental Protection Agency.

The only solution is for a massive transfer of technology and wealth from the West

Dr Max Auffhammer, Lead researcher

They say analysis of the 30 data points is more informative about likely future emissions than national figures in wider use because it allows errors to be tracked more closely.

They believe current computer models substantially underestimate future emissions growth in China.

We are awaiting a formal comment from the UK Chinese Embassy, but Dr Max Auffhammer, the lead researcher, said his projections had been presented widely and no-one had raised a serious complaint.

All those concerned about climate change agree that China's emissions are a problem - including China itself.

But China and many other developing countries struggling to tackle poverty are adamant that any negotiated emissions reductions should not be absolute, but relative to a "business-as-usual" scenario of projected growth.

That is why this study is of more than academic interest.

'Truly shocking'

If it becomes widely accepted that China's future emissions are likely to be much higher than previously estimated, that will have to factored into any future global climate agreement if the Chinese are to be persuaded to take part.

In brief, although this study looks bad for China's reputation, it may be good for China's negotiating position.



File photo of a chemical plant in Jilin province, China, December 2007 The new research suggests China's emissions were underestimated

The Chinese - and the UN - insist that rich countries with high per capita levels of pollution must cut emissions first, and help poorer countries to invest in clean technology.

America's per capita emissions are five to six times higher than China's, even though China has become the top manufacturing economy.

US emissions are still growing too, though much more slowly.

Dr Auffhammer told BBC News that his projections had made an assumption that the Chinese government's recent aggressive energy efficiency programme would fail, as the previous one had failed badly.

"Our figures for emissions growth are truly shocking," he said.

"But there is no sense pointing a finger at the Chinese. They are trying to pull people out of poverty and they clearly need help.

"The only solution is for a massive transfer of technology and wealth from the West."

He acknowledged that this eventuality was unlikely.

Those scientists aspiring to stabilise global emissions growth before 2020 to prevent what they believe may be irreversible damage to the climate may be wondering how this can possibly be achieved.