EmailSharePrint

back button Back to FT Energy Source homepage

China's carbon intensity targets explained

November 30, 2009 8:39am

by Kate Mackenzie

President Obama's announcement last week that he would both attend Copenhagen (albeit during the less important early days of the meeting) and, more importantly, bring an emissions reduction number to the table put the ball back in China's court, in terms of making commitments. Although China's CO2 emissions profile and the outcomes it is seeking from the Copenhagen process are vastly different to those of the US, the two biggest emitters have both been similarly reluctant to come up with firm numbers ahead of the December meeting.

Until now, that is. First came Obama's 17 per cent statement, and then China - which will absolutely not agree to an emissions cut, but has only given fairly complicated commitments on how it will instead *curb* emissions growth - said it would reduce its CO2 emissions per unit of GDP by 40 - 45 per cent by 2020, from 2005 levels.

Almost halving its carbon intensity at first glance sounds like a pretty big deal. But China's carbon intensity is notoriously high - in 2006 it emitted 2.85 tonnes of CO2 for every $1,000 of GDP, compared to 0.54 tonnes for the US, with some European countries achieving far lower rates.

In fact only a small number of countries have higher emissions per unit of GDP than China, and most of those are either very small and isolated, or suffering from extreme poverty or conflict. Some notable exceptions are Russia (4.54), Iran (4.83), and Ukraine (6.77). (More data from the EIA here in an Excel spreadsheet.)

Fortunately Charles McElwee is back blogging on such subjects, and he points out that China's 40 - 45 per cent carbon intensity goal has been bandied around since 2007. More importantly, intensity is only a factor (though an important one) in total output levels.

McElwee writes:

The McKinsey study China's Green Revolution estimates that if China continues to grow at an annual GDP growth rate of 7.8%,
AND continues to meet its aggressive energy intensity reduction goals,
AND installs all the renewable energy called for its current medium- & long-term renewable energy plan,
AND otherwise achieves a 4.8% annual growth rate in carbon efficiency, (which is significantly higher than the annualized amount of the target China just announced),
then **it will more than double its 2005 carbon emissions by 2030**. That doesn't sound good.

Indeed. And more to the point, China does not want these targets to be legally binding. Of course, this could be room to move on all of this, and as McElwee writes, it certainly doesn't worsen the outlook for a Copenhagen deal (although an actual deal is all but given up on, for this meeting at least). And at least China, unlike President Obama, is not relying on a (currently) somewhat unpopular climate change bill to pass Congress in order to actually ratify its commitment.

Related links:
Q&A on China's carbon intensity target (Reuters Alertnet, 25/09/09)
Obama goes to Copenhagen and offers an emissions cut (FT Energy Source, 25/11/09)

November 30, 2009 8:39am in Emissions, Politics | Comment

EmailSharePrint

You need to be signed in to comment. Please sign in or open a free account with FT.com now.

Comments

RSS feed

Sort by oldest first | Sort by newest first

E
En
Dai
the
Em
Sig
RS
Fol
Abo
E
NY
De
ICE
De
RB
NY
NY
De
NY
De
C
Cor
Em
Gas
Mar
Min
Nuc
Oil
Pol
Pow
Ren
The
Unc