



IEAGHG Information Paper: 2015-IP11; Global Emissions of Carbon Dioxide from the Energy Sector Stalled in 2014 – A brief review of what the media have been saying

The International Energy Agency (IEA) recently published a statement¹ indicating that global emissions of carbon dioxide from the energy sector stalled in 2014, marking the first time in 40 years in which there was a halt or reduction in emissions of the greenhouse gas that was not tied to an economic downturn.

Global emissions of carbon dioxide stood at 32.3 billion tonnes in 2014, unchanged from the preceding year. The preliminary IEA data suggest that efforts to mitigate climate change may be having a more pronounced effect on emissions than had previously been thought.

The IEA has attributed the halt in emissions growth to changing patterns of energy consumption in China and OECD countries. In China, 2014 saw greater generation of electricity from renewable sources, such as hydropower, solar and wind, and less burning of coal. In OECD economies, recent efforts to promote more sustainable growth – including greater energy efficiency and more renewable energy – are producing the desired effect of decoupling economic growth from greenhouse gas emissions².

In the 40 years in which the IEA has been collecting data on carbon dioxide emissions, there have only been three times in which emissions have stood still or fallen compared to the previous year, and all were associated with global economic weakness: the early 1980's; 1992 and 2009. In 2014, however, the global economy expanded by 3%.

The IEA Executive Director, Maria van der Hoeven, said that "The latest data on emissions are indeed encouraging, but this is no time for complacency – and certainly not the time to use this positive news as an excuse to stall further action,"

This is a strong message; this is the first data point of its kind and we must not allow it to distract from the on-going efforts to reduce global emissions of greenhouse gases and arrive at an internationally agreed reduction strategy at COP22 in Paris.

I have looked at the media response to this announcement.

The Guardian³ newspaper in the UK, quotes the UK Energy and Climate Minister who reinforces Maria van der Hoeven's message:

Ed Davey, the UK energy and climate secretary, said: "These figures show that green growth is achievable not just for Britain but for the world. However we cannot be complacent – we need to dramatically cut emissions, not just stop their growth. Getting a new global climate deal is absolutely vital, and the year ahead is going to be of critical importance."

¹ <http://www.iea.org/newsroomandevents/news/2015/march/global-energy-related-emissions-of-carbon-dioxide-stalled-in-2014.html>

² More details on the data and analysis will be included in an IEA special report on energy and climate that will be released on 15 June in London. The report will provide decision-makers with analysis of national climate pledges in the context of the recent downturn in fossil fuel prices, suggest pragmatic policy measures to advance climate goals without blunting economic growth, and assess adaptation needs, including in the power sectors of China and India.

³ <http://www.theguardian.com/environment/2015/mar/13/global-emissions-stall-in-2014-following-slowdown-in-chinas-economy>



The same for Reuters⁴.

The Guardian also links the data to a slowdown in China's economic growth causing this pause, as they call it, in the upward rise in greenhouse gas emissions last year, according to data released on Friday. They also suggest the low price of oil might cause them to rise again quite quickly.

The BBC⁵ in the UK quotes Professor Corinne Le Quere, of the Tyndall Centre for Climate Change Research at the University of East Anglia, who said:

"An important factor could be that China's coal consumption fell in 2014, driven by their efforts to fight pollution, use energy more efficiently and deploy renewables.

"Efforts to reduce emissions elsewhere will have played a role, but there are also more random factors such as the weather and the relative price of oil, coal and gas."

ABC⁶, Australia, reported the key messages quoting Faith Birol and Maria van der Hoeven and pointed to the EU, USA/China emission reduction announcements as progress and noted Australia's promised 5% cut in emissions. The Irish Times follows a similar thread⁷.

The Financial Times⁸ carried a slightly embellished version of the IEA statement, without additional comment.

Forbes⁹ in the USA picks up on the fossil fuel use issue and point to a paper in the journal Fuel¹⁰ that suggests coal production will peak around 2025, plateau out for 10 years, then drop rapidly. The implication being we should see significant coal based emissions reduction after 2035. Gas however is projected to takes much of coals share.

The on-line scientific press like Physics.org, Power Engineering, The Chemical Engineer, H&V, Nature.com, INsideClimate News and many others seem to have limited themselves to just reporting the IEA bulletin.

Live science however quotes two US climate scientists:

"There's so much going on in the climate system that you can't only look at one year, or even one decade," said Thomas Peterson, principal scientist at the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center. There are factors other than CO₂ governing surface temperature and therefore global warming. These include cloud cover, the amount of heat absorbed by the ocean, El Niño events and more, Peterson said. So despite the IEA's promising announcement, members of the climate community aren't resting easy.

"If emissions remain constant, the concentrations [of greenhouse gases] will still increase in the atmosphere for a long time," said Don Wuebbles, a professor of atmospheric science at the University of Illinois at Urbana-Champaign. "The climate response that we're seeing in the atmosphere now is largely due to emissions that happened 20 years ago."

⁴ <http://www.reuters.com/article/2015/03/13/us-climatechange-carbon-idUSKBN0M92KA20150313>

⁵ <http://www.bbc.co.uk/news/science-environment-31872460>

⁶ <http://www.abc.net.au/environment/articles/2015/03/16/4198541.htm>

⁷ <http://www.irishtimes.com/news/environment/growth-of-greenhouse-gas-emissions-stalls-in-2014-iea-says-1.2140279>

⁸ <http://www.ft.com/cms/s/0/1f56f0d2-c8cc-11e4-8617-00144feab7de.html#axzz3Uqeiz59j>

⁹ <http://www.forbes.com/sites/tomzeller/2015/03/13/in-historic-turn-co2-emissions-flatline-in-2014-ewan-as-global-economy-grows/>

¹⁰ <http://www.sciencedirect.com/science/article/pii/S0016236114010254>



PBS news¹¹ carried the story and quotes environmental economist Robert Stavins, of the Harvard Kennedy School, who they say told the Washington Post that an additional reason for the stalled emissions, at least in the U.S., is more efficient cars as well as a natural gas boom due to more fracking, forcing out coal-fired electricity.

New Scientist¹² angle was to focus on the coal demise they quote CoalSwarm's¹³ director Ted Nace; "The slowdown in CO₂ is largely caused by a slowdown in power being generated by coal."

Nace is also quoted as saying "But what's striking is how quickly the business climate has turned against coal since 2012".

Overall it seems the media have accepted the IEA's findings without much contention; a few have added a bit of a slant of their own. But generally, the message is: it's good news but let's carry on as before and search for a global agreement in Paris this year.

John Gale
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¹¹ <http://www.pbs.org/newshour/rundown/co2-emissions-static-despite-economic-growth-for-first-time-in-40>

¹² http://www.newscientist.com/article/dn27179-coal-bust-may-be-behind-stall-in-carbon-emissions.html#.VQr7Q_mPm1Y-years/

¹³ CoalSwarm is a think tank in the USA supported by the Sierra Club and other NGO's