



UNDERSTANDING THE U.S.-CHINA ANNOUNCEMENT ON CLIMATE CHANGE: SEPARATING MYTH FROM REALITY

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In diplomacy, negotiated text and the choice of words matter greatly. Perhaps more important are the words that are absent from any type of declaration or agreement. Last year's U.S.-China Announcement on Climate Change is rich in what it says and does not say. Interestingly, both sides of the U.S. climate policy debate have framed the Announcement as something that it is not – an agreement with commitments related to emissions cuts and limitations. Specifically, many critics argue that the "Agreement" will harm the American economy, while proponents call it an example of U.S. leadership and a "landmark" breakthrough in climate diplomacy. Such a misrepresentation provides climate activists an opportunity to neutralize arguments that proposed U.S. carbon regulation is costly and unilateral with no corresponding environmental benefits. If independent voters, for example, believe that domestic carbon regulation has resulted in convincing China to join international climate efforts – even in an insubstantial way – supporters of EPA climate action will have gained ground that pushing domestic regulation first produces global results.

Scene Setter: A Quick Breakdown of the Numbers

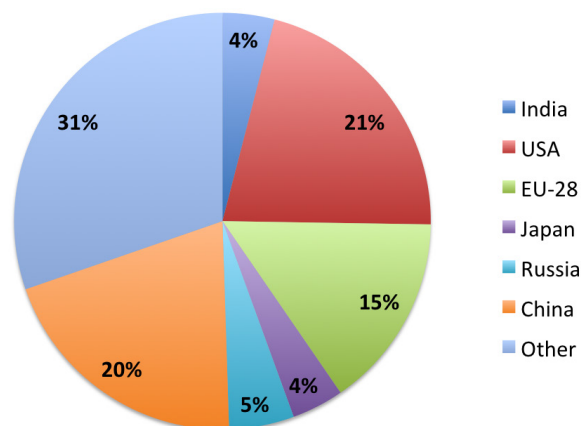
Emissions reductions forecast for the developed world will be overwhelmed not only by the explosion of Chinese emissions over the next 15 years, but by emissions growth in the rest of the developing world. It is almost certain that existing and proposed carbon regulations in the developed world, including the United States, are responsible for a portion of the growth of CO₂ emissions in China and other developing countries (e.g., carbon leakage).

- According to the International Energy Agency (IEA), global carbon dioxide (CO₂) emissions will increase

by 8,797 million metric tons or 32 percent between 2005 and 2030. China's growth in emissions – more than 4,700 million metric tons – is forecast to account for more than 50 percent of that increase.

- At the same time, the IEA expects the total CO₂ emissions of the United States, the European Union, and Japan to decline by over 25 percent in the same time period – a drop of about 2,800 million metric tons. Those countries will see their share of global emissions fall from 40 to 20 percent, while China's share will increase from 20 to 28 percent.

Share of Global Carbon Dioxide Emissions: 2005



Share of Global Carbon Dioxide Emissions: 2030

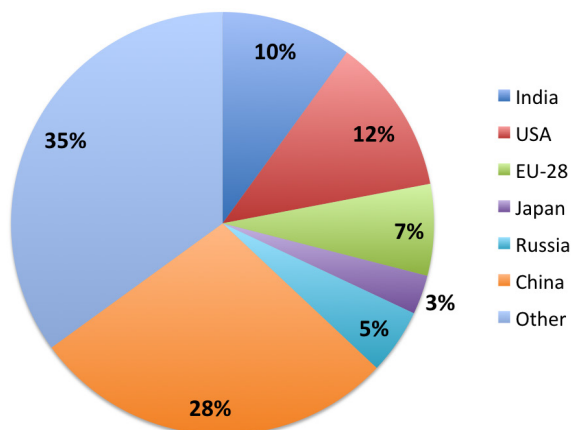


Table 1: Global CO₂ Emissions : 2005 & 2030
(Million Metric Tons)²

	2005	2030	Change
USA	5,774	4,513	(1,261)
EU-28	3,988	2,701	(1,288)
Japan	1,208	915	(293)
Russia	1,512	1,682	170
China	5,444	10,200	4,755
India	1,191	3,454	2,263
Other	8,377	12,827	4,450
World	27,494	36,291	8,797

Announcement Analysis: Key Questions & Answers

Q: In describing their outcome, why did both Governments choose to use the word Announcement instead of the word Agreement?

A: In order to avoid confusion, U.S. and Chinese officials wanted to make clear that they were not creating any form of reasonable expectation on the part of either Government that any

emissions-related goals would be fulfilled or honored. In diplomacy, an Agreement is typically an understanding negotiated between Parties specifying what is expected of each, thus creating a commitment or obligation. It can produce an outcome that is legally binding or politically binding – neither of which was desired by Washington and Beijing.

Q: Why did the United States and China pick mid-November of last year to make the Announcement?

A: The upcoming meeting of the United Nations Framework Convention on Climate Change (UNFCCC) in Lima, Peru during the first few weeks of December and the January Summit between President Obama and Indian Prime Minister Modi provided a major incentive for Washington. The timing of the Announcement, according to the White House release, was designed to “inject momentum into the global climate negotiations” and “inspire other countries to join in coming forward with ambitious actions as soon as possible”.

- In this case, other countries is the major economies that had not yet brought forward their intended climate actions – primarily India, which is viewed by many U.S. and European observers of the negotiations as the most likely spoiler of any global climate change agreement.

² International Energy Agency, CO₂ Emissions From Fuel Combustion Highlights 2014, November 2014 at <http://www.iea.org/publications/freepublications/publication/co2-emissions-from-fuel-combustion-highlights-2014.html> and World Energy Outlook 2014, November 2014 at <http://www.worldenergyoutlook.org/>. World totals include marine and aviation bunkers.

- U.S. officials, in the days leading up to the January meeting with Modi, had pressed India for a similar announcement to slow down the growth of greenhouse gas (GHG) emissions.³ New Delhi rejected that idea, but presented an ambitious and improbable goal of deploying 100 gigawatts of solar power generation capacity by 2022.⁴ According to the IEA, India will become the second-largest coal consumer, second only to China, before 2020.⁵

Though it is unclear as to China's exact motivations for the timing of the Announcement, it is likely that Beijing considered several key factors:

- China is now responsible for the greatest share of cumulative historic GHG emissions since 1990, an indicator that climate activists use to apportion blame for climate impacts.⁶ Even if Chinese officials scoff privately at the claim, Beijing understands that it is in China's best interest to appear to be sensitive to such concerns.
- We can assume that China's preparation for the release of the Energy Development Strategy Action Plan was partly in response to ongoing UNFCCC negotiations. To identify an emissions goal, Beijing first needed to map out specific technology deployment pathways that met its needs for energy diversification. China already was comfortable with the goals identified in the Announcement when it was lobbied by the United States to issue a joint statement in the lead up to the December UNFCCC meeting in Peru.
- China recognized that it would benefit substantially from a U.S. blessing of its unrestricted growth in emissions over the next 15 years – a concession that it could flag to future U.S. Administrations and other Organization for Economic Cooperation and Development (OECD) governments as an argument against any future demands to limit or reduce CO₂ emissions.

- Therefore, given anticipated emissions growth, Beijing may have decided that the political benefits associated with the Announcement were greater than the costs of separating China from its traditional developing country allies, like India (though the degree of separation is more imagined than real).

Q: In his 2015 State of the Union address, President Barack Obama claimed that China “committed” to limiting emissions. Is that factually correct?

A: No. The U.S.-China Announcement was not a diplomatic agreement containing emissions-related commitments. The Announcement simply listed respective post-2020 climate mitigation actions that are determined internally by the United States and China – and outside of external venues and diplomatic channels.

- Washington stated its intention to reduce economy-wide net GHG emissions by 26 to 28 percent by 2025 compared to 2005 levels.
- Beijing declared its objective: (1) to peak CO₂ emissions (at a undefined amount) “around” 2030 and to make best efforts to peak earlier, and (2) to increase its share of non-fossil fuels in primary energy consumption to “around” 20 percent of total demand in 2030.

Despite the extensive use of the word “commitment”, particularly in the press, the word is used only once in the Announcement – to describe continued funding of the U.S.-China Clean Energy Research Center. In contrast, the words actions and intend(s) are used four and five times, respectively, when describing climate mitigation goals and related policy dialogues. Nevertheless, it is expected that the goals in this announcement will form the basis of each country's Intended Nationally Determined Contribution (INDC) that UNFCCC Parties are expected to offer up in the first quarter of 2015.

³ Gowen, Annie. “On Obama's India visit, climate-change deal unlikely as Modi boosts coal production,” The Washington Post, January 24, 2015 at http://www.washingtonpost.com/world/asia_pacific/heres-why-obama-wont-get-a-climate-deal-with-india-this-trip/2015/01/24/77fb95cc-9ccf-11e4-86a3-1b56f64925f6_story.html

⁴ India currently has about 250 gigawatts of installed power capacity, overwhelmingly dominated by coal-fired generation. For further detail on the U.S.-China understanding, see <http://www.whitehouse.gov/the-press-office/2015/01/25/fact-sheet-us-and-india-climate-and-clean-energy-cooperation>

⁵ IEA. World Energy Outlook 2014, pg. 171 at <http://www.worldenergyoutlook.org/>.

⁶ See <http://www.wri.org/blog/2014/11/6-graphs-explain-world%E2%80%99s-top-10-emitters>. The World Resources Institute uses 2011 data, which shows the United States as the largest contributor (16 percent compared to 15 percent for China). Over the past three years, however, China has overtaken the United States.

Q: Does the Chinese peaking goal represent a political breakthrough and a significant effort to limit emissions of CO₂?

A: No. There is little new in what the Chinese have announced, and Beijing's goals amount to little more than business as usual.

China has agreed previously to peak emissions. In July 2009, China and 16 other governments agreed in a Major Economies Forum leaders declaration that "The peaking of global and national emissions should take place as soon as possible, recognizing that the time frame for peaking will be longer in developing countries . . ." ⁷ Agreeing to peak emissions is therefore nothing new for Chinese officials.

Beijing did commit to a soft target year for peaking—"around" 2030—something it has not done before. The results of many well-regarded energy forecast models run before the joint announcement in November, however, show China's pledge does not deviate significantly from the direction the country was headed in anyway. The central projection of IEA's analysis, for example, estimates that in the 2020s, China's GDP growth will slow appreciably and its industrial output and coal use will flatten, causing its annual carbon dioxide emissions to peak shortly after 2030 at a little over 10 billion metric tons. Citing similar trends, ExxonMobil's latest forecast shows Chinese CO₂ emissions peaking five years earlier in 2025 at 10.8 billion metric tons and declining thereafter. ⁸

China's goal of getting "around" 20 percent of its energy from non-fossil fuel sources in 2030 also is little better than business as usual. IEA's central estimate already has the non-fossil fuel share of China's energy demand climbing to 18 percent in 2030 from 12 percent in 2012. Getting an additional percentage point or two of additional non-fossil energy should not be too difficult.

Q: How does China plan to meet its goal? And will it?

A: About 10 days after the Announcement, China's State Council unveiled the Energy Development Strategy Action Plan (2014-2020) ⁹, a program that is critical to understanding the meaning of the phrase "best efforts". Unquestionably, estimating the peaking of emissions flowed from a bottom-up, internal analysis of Beijing's goal of diversifying its energy mix. Despite many claims by environmental activists, climate mitigation ranks low in China's priorities. *Chinese officials did not set the 2030 emissions goal first and then work backward to define the pathway for implementation.*

Key components of the Energy Development Strategy Action Plan include:

- Limiting China's energy consumption growth rate to 3.5 percent annually until 2020
- Reducing the role of coal in energy consumption from roughly 70 percent today to 62 percent by 2020
- Capping coal consumption at 4.2 Gt/year until 2020, a 16 percent increase compared to 2013
- Increasing the use of non-fossil fuels to 15 percent by 2020 and 20 percent by 2030
- Installing 58 gigawatts (GW) of nuclear capacity by 2020

A slowdown in China's economy—more than what Beijing expects, could result in reduced investment in new power generation, including funding for nuclear and other zero-emissions power, placing at risk a number of the Plan's targets. Relatively sluggish Chinese economic growth would result in lower CO₂ emissions than business as usual, but it would also prolong the time needed for the country to build out its power generation to the level deemed adequate by Beijing to support economic growth objectives—a point in time linked to when the country's emissions are expected to peak. Thus, the Government's target for peaking emissions could be moved well beyond 2030.

⁷ "Declaration of the Leaders of the Major Economies Forum on Energy and Climate", July 2009 at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCIQFjAA&url=http%3A%2F%2Fwww.whitehouse.gov%2Fthe_press_office%2FDeclaration-of-the-Leaders-the-Major-Economies-Forum-on-Energy-and-Climate%2F&ei=LzPmVNrslHrggTGnlPwBw&usq=AFQjCNFYjQJib2nfAJaF1ioA9V5txl2TYA&sig2=uX2_I7RAUx2nrN0rooko7A&bvm=bv.85970519.d.eXY.

⁸ ExxonMobil. The Outlook for Energy: A View to 2040, December 2014 at <http://corporate.exxonmobil.com/en/energy/energy-outlook>.

⁹ "China unveils energy strategy, targets for 2020," Energy Daily, November 20, 2014 at http://www.energy-daily.com/reports/China_unveils_energy_strategy_targets.

Even if the Plan's targets are achieved, China's energy demand and the build-out of power capacity would likely result in an emissions level greater than the entire inventory of OECD countries by 2020. China is expected to add the equivalent of the current U.S. coal fleet over the next decade, translating into a new 600-megawatt plant every 10 days. According to IEA,¹⁰ Chinese CO₂ emissions from fossil fuels in 2012 had already surpassed the combined total of United States and the European Union.¹¹

Q: How does the United States plan to meet its net GHG goal?

A: The U.S. goal will be extraordinarily difficult to achieve, and there are significant legal and political hurdles that must be cleared. Set in terms of net greenhouse gas emissions, the Administration has not yet made public its analytical basis and proposed pathway for achieving the reductions.

However, the Energy Information Agency's Annual Energy Outlook 2014 reference case does provide a projection of energy-related CO₂ emissions, which account for about four-fifths of total U.S. gross GHG emissions. If one makes some additional assumptions about non-CO₂ gases and sinks, a reasonable baseline estimate of net GHG emissions in 2025 can be obtained (excluding maritime and aviation bunkers).¹²

The resulting reference case estimate suggests that under current policies, U.S. net GHG emissions will be about 6 to 8 percent below the White House's 2005 baseline in 2025. The addition of proposed regulations governing emissions from existing power plants, methane from oil and gas systems, and fuel efficiency for heavy trucks could push 2025 net GHG emissions to between 17 and 18 percent below the 2005 level. The successful implementation of those policies would still create a gap of eight to 11 percentage points of additional required reductions—or at least one

third of the entire goal, increasing the odds of GHG regulation on many other energy-intensive industrial and manufacturing sectors in any potential Democratic Administration post-2016.

Hurdles

Economic, legal, and political factors provide significant headwinds to the Administration's plan.¹³ A NERA Economic Consulting analysis of the Clean Power Plan, the centerpiece of the U.S. pledge, reveals that it would be the most expensive environmental regulation ever imposed on electric utilities.

The legal obstacles are no less daunting. The Supreme Court fired a potential warning shot at EPA last year in its 2014 Utility Air Regulatory Group v EPA decision. The Supreme Court noted that, "When an agency claims to discover in a long-extant statute an unheralded power to regulate 'a significant portion of the American economy,' . . . we typically greet its announcement with a measure of skepticism."¹⁴

- As Harvard law professor Laurence Tribe, a supporter of controls on CO₂, has argued, the EPA proposal is legally vulnerable on a number of fronts. He wrote, "[T]he EPA, like every administrative agency, is constitutionally forbidden to exercise powers Congress never delegated to it in the first place. The brute fact is that the Obama administration failed to get climate legislation through Congress. Yet the EPA is acting as though it has the legislative authority anyway to re-engineer the nation's electric generating system and power grid. It does not."¹⁵
- He is not alone in his concerns. In comments on EPA's proposed rule, 32 U.S. states challenged its legality.¹⁶ Faced with litigation challenges, it is more likely than not that U.S. Courts will reject at least part of the EPA regulatory agenda related to new and existing power plants – placing at risk a significant portion of the U.S. reduction goal.

¹⁰ IEA. CO₂ Emissions From Fuel Combustion Highlights 2014, November 2014 at <http://www.iea.org/publications/freepublications/publication/co2-emissions-from-fuel-combustion-highlights-2014.html>.

¹¹ The EU15 includes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

¹² Data and related analysis provided by Stephen Eule, Vice President for Climate and Technology at U.S. Chamber of Commerce Institute for 21st Century Energy."

¹³ Potential Energy Impacts of the EPA Proposed Clean Power Plan. See http://www.nera.com/content/dam/nera/publications/2014/NERA_ACCCE_CPP_Final_10.17.2014.pdf.

¹⁴ See <http://www.law.cornell.edu/supct/pdf/12-1146.pdf>.

¹⁵ Tribe, Lawrence. "The Clean Power Plan Is Unconstitutional," The Wall Street Journal, December 22, 2014 at <http://www.wsj.com/articles/laurence-tribe-the-epas-clean-power-plan-is-unconstitutional-1419293203>.

¹⁶ U.S. Chamber of Commerce Institute for 21st Century Energy, In Their Own Words: A Guide to States' Concerns Regarding the Environmental Protection Agency's Proposed Greenhouse Gas Regulations for Existing Power Plants, January 2015 at <http://www.energyxxi.org/eparule-stateanalysis>.

Further, because the Obama Administration has implemented its climate plan through executive action, nothing to which it commits at Paris, including the promise of billions of dollars in financial assistance, will be legally binding on any future Administration. If a Republican wins the White House in 2016, we can be fairly certain of a rejection of the Announcement's objectives and other Obama Administration executive actions on domestic and international climate change initiatives, as well as a softening or repeal of major components of the Clean Power Plan – regardless of U.S. court action.

Q: In the United States, there is much political debate on the human contribution to climate change. Did the United States and China address this issue?

A: Yes. Both countries agreed that “human activity is already changing the world’s climate system.” However, the word “significantly,” often used by climate mitigation proponents to describe human impacts, was absent.

Despite arguments on Capitol Hill that often frame the use of the word “significantly” as distinguishing between climate skepticism and support for mitigation, the word is not typically used in official channels for climate-related negotiations.¹⁷ In fact, President Barack Obama did not use “significantly” to describe human impacts in his June 2013 climate change speech or in the 2015 State of the Union.

- As another point of reference, the text of the UNFCCC – which largely shapes global climate negotiations – does not include “significantly” to describe human impacts. Instead the Convention says that human activities enhance the greenhouse effect.

Q: The White House has pledged \$3 billion to the Green Climate Fund (GCF) to assist developing countries in their mitigation and adaptation efforts. Given Congressional opposition to the GCF’s funding, the United States is not expected to fulfill its pledge in the near term. Could this development have a negative impact on China’s actions under the Announcement?

A: No. Funding for the GCF and China’s actions are not linked, given the presumption that China’s INDC will be based on actions the country is willing to take independent of GCF assistance. Even if there were a relationship, however, the U.S. blessing of Chinese emissions growth would make such a link meaningless. *Of course, there is a strong likelihood that China, acting in “defense” of least developed countries, would use the lack of U.S. funding to apply pressure on the United States to deliver funding or risk blowing up any global agreement.*

Q: What is the true political significance of the Announcement?

A: Though it does not include any commitments for emissions reductions, the bilateral statement could potentially impact the U.S. climate policy debate. It also signals a shift in China’s relations with developing countries in the global climate negotiations. The Announcement may also influence the messaging strategies of other developing major economies.

The Domestic Debate in the United States

The strongest, most potent political argument against EPA carbon regulation is that unilateral U.S. action will result in economic costs that far outweigh any climate mitigation or environmental benefit. EPA senior officials have acknowledged this substantial flaw more than once when pressed by Congressional lawmakers.¹⁸ The Administration’s push to secure the Announcement was unquestionably motivated, at least in part, by the desire to neutralize this argument in the eyes of independent voters and influence the Courts as they review the cost and benefit of U.S. carbon regulation. Intentional and unintentional, consistent misrepresentations by the press, climate activists, and U.S. officials have aided that effort.

- EPA Administrator Gina McCarthy, for example, has publicly used the word “commitment” multiple times to describe China’s goal in the Announcement – a clear misrepresentation of China’s intent to peak its emissions.¹⁹

¹⁷ In regard to the Keystone XL pipeline legislation, the China-U.S. announcement reflects a position on the human contribution to climate change that is closer to the language in the Hoeven Amendment than the Schatz Amendment. <http://blogs.wsj.com/washwire/2015/01/21/keystone-debate-senate-to-vote-on-dueling-climate-change-amendments/>

¹⁸ See <http://www.inhofe.senate.gov/newsroom/article/white-house-regulating-problems-that-dont-exist>.

¹⁹ Gilmour, Jared. “EPA chief Gina McCarthy to GOP Congress: bring it on,” The Christian Science Monitor, November 17, 2014 at <http://www.csmonitor.com/USA/Politics/monitor-breakfast/2014/1117/EPA-chief-Gina-McCarthy-to-GOP-Congress-bring-it-on-video>.

- Ironically, Congressional arguments that the Announcement produces harm to the American economy also feeds the growing narrative that the statement is more than it is and that U.S. climate “leadership” is producing results globally – even if those results are insubstantial.²⁰

newly created multilateral banks that it largely controls, the New Development Bank or the Asian Infrastructure Investment Bank).²²

China’s Shift and the Response of Developing Major Economies

China can no longer hide behind the G77, given its status as the largest absolute and cumulative emitter since 1990. Beijing’s decision to move forward with the bilateral statement suggests that Chinese officials understand this political reality and the need to shift their messaging on the climate agenda, including the desire of establishing an understanding with the United States.

Some developing major economies are likely to use China’s goal as a yardstick for their own Intended Nationally Determined Contributions (INDC), resulting in peaking goals much later than 2030 that are largely meaningless. Developing countries may also choose to adopt targets similar to those in China’s Energy Development Strategy Action Plan (e.g., investments in renewable energy generation) or for energy intensity.²²

- Over the next 15 years, however, we should not expect Beijing to accept any responsibility to reduce emissions or be considered as a developed economy within the context of the UNFCCC discussions. China will continue to embrace the principle of “common but differentiated responsibilities” – meaning absolute cuts for developed economies and not for developing countries, including itself.
- Beijing will also continue to argue for significant financial assistance for developing country mitigation and adaptation efforts.²¹ Though it is unlikely to push seriously for a share of that money, China will be reluctant to contribute any substantial sum directly to a UNFCCC fund, preferring instead to use its own public financing mechanisms to assist poor countries (i.e., bilateral or through the

- Indian Prime Minister Modi, for example, refused to set a goal when pressed on a recent visit by President Obama, noting India’s overriding concern with economic development. In fact, shortly after the president’s visit, India announced that it plans to double its coal output in five years.²⁴
- We can be certain that any international agreement that emerges from the climate negotiations in Paris this December will not produce the level of emissions reductions that climate activists claim is needed. *In this regard, it is important to note that the UNFCCC has never negotiated what a 2-degree Celsius target means in terms of a global emissions trajectory, which insulates China and other developing economies from further obligations.*

Accordingly, despite current, widespread praise from the environmental community, the Announcement may be viewed in the long term as a major setback for global climate mitigation policy because it provided political cover for unrestricted carbon emissions growth in China and other developing major economies.

²⁰ See http://www.blunt.senate.gov/public/_cache/files/08634557-e3ce-4746-9b90-b8a7d4563130/1-21-15%20China%20Amendment.pdf

²¹ Carr, Mathew. “China calls on rich nations to give \$490 billion for climate,” Bloomberg, March 6, 2014 at <http://www.bloomberg.com/news/articles/2014-03-06/china-calls-on-rich-nations-to-give-490-billion-for-climate> and Goodenough, Patrick. “China pledges \$0 to U.N. climate fund, then complains about amount allotted to fund,” CNSNews, December 5, 2014 at <http://cnsnews.com/news/article/patrick-goodenough/china-pledges-0-un-climate-fund-then-complains-about-amount-allotted>.

²² Chinese officials are probably concerned that any acknowledgment that China should make a large contribution to any UNFCCC fund for developing countries would erode Beijing’s defense against calls from developed countries to commit to greater mitigation efforts within the context of the Framework Convention.

²³ Dasgupta, Chandrashekhar. “India and climate change: Need for updated plan,” The Tribune, January 20, 2015 at <http://www.tribuneindia.com/news/comment/india-climate-change-need-for-updatd-plan/32001.html>.

²⁴ Goswami, Urmil. “India’s climate change pledge won’t hinder its coal output plan,” India Times, January 29, 2015 at <http://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/indias-climate-change-pledge-wont-hinder-its-coal-output-plan/articleshow/46049029.cms>.