iisd International Institute for Sustainable Development / Institut international du développement durable

November 2014

BRIEFING NOTE

The United States and China's New Climate Change Commitments: Elements, implications and reactions

Daniella Echeverría and Philip Gass

Elements of the New Plans

On November 11, 2014 the United States and China announced a bilateral agreement to cooperate on clean energy development and mitigate greenhouse gas emissions. For the United States, the new target seeks to reduce emissions by 26 to 28 per cent from 2005 levels by 2025, while China committed to peak emissions by 2030 and endeavor to meet its target sooner than that (The White House, 2014). Both targets are a significant step forward for climate negotiations for 2015, as the two highest-emitting countries have made important commitments to address their greenhouse gas emissions and, more importantly, to show a cooperative approach that will seek to build trust and facilitate energy transition globally. U.S. Secretary of State John Kerry noted that "we are encouraging other countries to put forward their own ambitious emissions reduction targets soon and to overcome traditional divisions so we can conclude a strong global climate agreement in 2015" (Kerry, 2014).

The new target for the United States seeks to reduce emissions by 2.3 to 2.8 per cent on average per year between 2020 and 2025 (The White House, 2014). The new plan will be submitted to the United Nations Framework Convention on Climate Change (UNFCCC) as the U.S. "Intended Nationally Determined Contribution" in the first quarter of 2015. While recent mid-term elections indicate increased opposition from the Republican Party, President Obama has stated that this commitment can be made without congressional approval.

Given that the Environmental Protection Agency (EPA) is now leading a regulatory approach to greenhouse gas mitigation as opposed to a congressional legislative approach, and that the U.S. participated in the Copenhagen Accord without congressional approval, this is likely true. Secretary of State John Kerry stated that both targets are based on intensive analysis of cost-effective carbon pollution reductions under existing policy. Current efforts in renewable energy and vehicle emissions are contributing to meeting the Copenhagen target of reducing emissions by 17 per cent below 2005 levels by 2020 (Kerry, 2014).

For China to meet its new target, it will promote non–fossil fuel energy generation to supply 20 per cent of the country's energy needs by 2030. This will require between 800 gigawatts and 1,000 gigawatts of nuclear, wind, solar and other zero-emission power generation by 2030, a significant increase from its current energy generation from coal-fired power plants (The White House, 2014). These measures go hand in hand with China's goal to reduce local air pollution, particularly in Beijing. At what year emissions will peak remains in question, however, particularly without a more detailed mitigation target.

The commitment signals "the end of the coal era" and the rising prominence of other energy generation sources, primarily natural gas and renewables alongside the use of clean, energy-efficient technologies. To this end, the two countries have pledged to strengthen cooperation on climate and clean energy through policy dialogue and technical work on clean energy and low greenhouse gas emissions technologies. The United States and China have agreed to expand joint clean energy research and development; advance major carbon capture, use and storage demonstrations; enhance cooperation on hydrofluorocarbons; launch a climate-smart/low-carbon cities initiative; promote trade in green goods; and demonstrate clean energy on the ground (The White House, 2014).

Impacts on Energy

For the United States to meet its new target, it will require a significant reduction in coal-fuelled energy use, with an estimated reduction of 75 per cent by 2025. Significant changes will also need to come from the transportation sector (Levi, 2014). To support reduced coal use, President Obama is seeking to expedite the switch from coal-fired energy generation to natural gas through the introduction of new regulations from the EPA (The White House, 2014).

For China, although it is not clear what analysis they used for their target, a study conducted by MIT-Tsinghua used a US$38/ton carbon tax with a peaking of 17 per cent above current levels by 2030 (Levi, 2014). This study could have influenced the 2030 peak. Also, another study conducted by the China Academy of Social Sciences concluded that rates of urbanization would peak by 2025–2030 and start to decrease by 2040 (Stanway, 2014). As a mechanism to help meet its target, China will look to launch a national carbon trading market by 2016, following its seven pilot cities' cap and trade. Moreover, China is a global leader in climate and clean energy policy, including clean energy, energy security and green industrial policy (Sawyer, 2014).

Reaction to the Bilateral Agreement

UNFCCC Executive Secretary Christiana Figueres applauded the agreement and noted that in conjunction with the European Union's agreement on cutting emissions by 40 per cent by 2030, the U.S.–China agreement "signals an increasingly positive determination towards addressing the climate change challenge from a growing number of key economies" ("United States and China reach landmark," 2014). She also stated that it can provide a strong push for

climate policy negotiations during the Conference of the Parties in Lima, Peru, taking place in December 2014, and that if other countries follow suit with greenhouse gas commitments in Lima, there will be major progress going into Paris 2015 (McCarthy, 2014). The sentiment was echoed by Martin Schulz, President of the European Union Parliament, and the United Kingdom's Energy and Climate Secretary, Ed Davey. Jake Schmidt from the Natural Resource Defense Council noted that the commitment by two important, and traditionally the most influential, market players for climate negotiations sends powerful signals to the rest of the world (Mattingly and Lynch, 2014). Herman van Rompuy, President of the European Council, welcomed the announcement and noted it is "answering EU leaders' call" to cut greenhouse gas emissions ("United States and China reach landmark," 2014).

However, others note that the announcement is as significant for its "political and diplomatic symbolism" as for any practical effect on achieving reduction of greenhouse gas emissions, highlighting that the announcement has no new binding limits on greenhouse gasses, as it follows existing policies and efforts in both countries and reinforces China's message of reducing emissions in its own way and at its own pace. In particular, Tao Wang from the Carnegie-Tsinghua Center for Global Policy in Beijing noted that the move to boost non–fossil fuel energy sources takes China little further than "business as usual" (Stanway, 2014). Still, the fact that these two countries have not only committed to targets, but have done so in a collaborative manner, is a seismic shift in international climate policy dynamics.

Implications for Canada

Although the announcement is a major international step in addressing climate change, it does not have a direct impact on Canada, at least at first glance. At a closer look, the announcement will place pressure on Canada to "do its part" and commit to deeper targets for its intended nationally determined contributions in 2015. This will be difficult for Canada given that its current trajectory is far off in meeting its greenhouse gas reduction target of 17 per cent below 2005 levels by 2020. In addition, Canada's political and policy framework has followed U.S. greenhouse gas policies. The new targets from the United States will make it more difficult and complex for Canada to "catch up," particularly with its highest-emitting sector, oil and gas, which continues to run unregulated at the federal level.

Given the major push from leading economies (the United States, China and the European Union) to reduce emissions, Canada will face constraints in approximately 85 per cent of its carbon export markets. Furthermore, Canada's carbon exports will be under the spotlight, particularly if there are no significant commitments from Ottawa in reducing emissions from its oil and gas sector (Sawyer, 2014). Therefore, with its current approach of harmonizing with the United States, Canada is in a delicate position as it decides whether to follow the United States and commit to more ambitious post-2020 targets before Paris 2015, or to showcase to the world that it is in pursuit of its own greenhouse gas policy direction.

Conclusion

The newly announced U.S.–China bilateral agreement has taken international climate policy to the next level alongside the European Union's new 2030 targets. Together, the two countries contribute 40 per cent of the world's emissions and are also key market players with major influence on international climate negotiations. With Lima just around the corner, these new greenhouse gas commitments have been applauded by the international community but have also been received with some criticism. The agreement raises many important points: first, a new chapter has begun, where

the United States and China are working together to reduce global greenhouse gas emissions; second, it creates greater momentum at the international level for other countries to also commit to post-2020 targets; and third, it marks the end of the coal era, as the two superpowers are moving away from coal-fired energy generation and shifting to natural gas and renewables, pushing forward a greater need for research and development in clean energy and technology.

Although Canada has already introduced regulations on coal, particularly banning new coal plants, the pressure is on to make a decision to either continue its policy of harmonizing with the U.S. approach and make more rigorous post-2020 commitments, or take a new direction on its greenhouse gas policy. However, with its carbon exports facing restrictions from its major markets, Canada will increasingly face pressure to regulate its oil and gas sector at the federal level.

References

Kerry, J. (2014, November 11). China, America and our warming planet [Op-ed]. The New York Times. Retrieved from http://mobile.nytimes.com/2014/11/12/opinion/john-kerry-our-historic-agreement-with-china-on-climate-change.html?referrer

Levi, M. (2014, November 12). What the Big U.S.-China climate announcement means. Council on Foreign Relations. Retrieved from http://blogs.cfr.org/levi/2014/11/12/what-the-big-u-s-china-climate-announcement-means/

Mattingly, P. and Lynch, D.J. (2014, November 12). U.S., China agree to new cuts to combat climate change. Bloomberg. Retrieved from http://www.bloomberg.com/news/2014-11-12/u-s-china-agree-to-new-cuts-to-combat-climate-change.html

McCarthy, S. (2014, November 12). U.S.-China climate deal presents challenges for Harper. The Globe and Mail. Retrieved from http://www.theglobeandmail.com/report-on-business/international-business/us-china-climate-deal-presents-challenges-for-harper/article21553685/

Sawyer, D. (2014, November 12). Canada can't hide any longer after U.S.-China climate deal. The Globe and Mail. Retrieved from http://www.theglobeandmail.com/globe-debate/canada-cant-hide-any-longer-after-us-china-climate-deal/article21553164/

Stanway, D. (2014, November 12). China, US agree limits on emissions, but experts see little new. Reuters. Retrieved from http://www.reuters.com/article/2014/11/12/us-china-usa-climatechange-idUSKCN0IW07Z20141112

The White House, Office of the Press Secretary. (2014, November 11). Fact sheet: U.S.-China joint announcement on climate change and clean energy cooperation [Press release]. Retrieved from http://www.whitehouse.gov/the-press-office/2014/11/11/fact-sheet-us-china-joint-announcement-climate-change-and-clean-energy-c

United States and China reach landmark carbon emissions deal - as it happened. (2014, November 12). The Guardian. Retrieved from http://www.theguardian.com/environment/live/2014/nov/12/united-states-and-china-reach-landmark-carbon-emissions-deal-live#block-54634765e4b0c6f7ffe34baa

.

International Institute for Sustainable Development / Institut international du développement durable

Published by the International Institute for Sustainable Development.

International Institute for Sustainable Development
Head Office
161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4
Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Web site: www.iisd.org

About IISD

The International Institute for Sustainable Development (IISD) contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, and management of natural and social capital, as well as the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC), from the Danish Ministry of Foreign Affairs and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.