GLOBAL ECONOMIC GOVERNANCE

$1 B NORTH AMERICA
$42.8 B LATIN AMERICA
$50 B EUROPE/CENTRAL ASIA
$23.4 B AFRICA
$48.2 B ASIA
Total Global $165.4 B

China Global Energy Finance: A New Interactive Database

Kevin P. Gallagher *is Professor of Global Development Policy at Boston University's Pardee School of Global Studies, where he co-directs the Global Economic Governance Initiative (GEGI). His latest books are The China Triangle: Latin America's China Boom and the Fate of the Washington Consensus (Oxford University Press, 2016) and Ruling Capital: Emerging Markets and the Reregulation of Cross-Border Finance (Cornell University Press, 2015). Follow him on twitter @ KevinPGallagher*

KEVIN P. GALLAGHER

China's two global policy banks—the China Development Bank and the Export-Import Bank of China—are becoming the largest sources of energy finance for governments around the world. In 2016, these banks provided upwards of $43.2 billion in energy financing—close to triple the average annual energy lending of the World Bank and all the Western-backed multi-lateral development banks combined.

Since 2000, China's global development banks have provided roughly $160 billion across the globe. These estimates stem from a new interactive database—the China Global Energy Finance database—created and published by the Global Economic Governance Initiative (GEGI) at Boston University.

The China Development Bank (CDB) and the Export-Import Bank of China (Ex-Im) do not uniformly publish data. Since 2011, GEGI and other university-based research groups have been attempting to estimate the scope and charateristics of Chinese development finance in Africa and Latin America. To our knowledge this is the first attempt to estimate of China's global energy finance. Drawing on the early work of Brautigam (2009), the China-Africa Research Institute (CARI) at the Paul Nitze School of Advanced International Studies maintains and publishes a database on China-Africa Finance (SAIS-CARI, 2016). GEGI, along with the Inter-American Dialogue, deployed the Brautigam methodology to estimate and publishes an inter-active China-Latin America Finance database (Brautigam and Gallagher, 2014; Gallagher and Myers, 2016).

The China Energy Finance database allows those interested to search and display the overseas lending of the CDB and Ex-Im over time, across regions, within countries, and by type of energy source for the period 2000 to 2016. Roughly 60 percent of the $160 billion in energy finance provided

by these banks over the period was concentrated across the Asian continent, with Latin America (25 percent) and Africa (14 percent) receiving the bulk of the rest. While some of the financing is earmarked for the extraction of various energy sources and power transmission, 80 percent of all the finance is for power plants. Ninety three percent of the power plant financing is in the coal (66) and hydroelectric (27) sectors.

Complementarity & Risk

China's expansion is motivated by a number of factors, not the least of which is an excess of national savings and trillions of USD-denominated reserves that China seeks to diversify across the globe. Through development financing abroad, China is able to diversify its savings globally in a strategic manner that steers finance toward building competitive Chinese firms, gaining access to global markets, building global alliances, and internationalizing the nation's currency. Not only did Chinese finance increase the total amount of finance, but Chinese banks are financing energy projects all over the world and expanding the set of countries that receive energy financing as well. In other words, Chinese energy finance does not compete with the set of countries and energy sectors that are currently being financed by Western-backed MDBs, but rather complements them.

"China's two global policy banks—the China Development Bank and the Export-Import Bank of China—are becoming the largest sources of energy finance for governments around the world."

Such a massive increase in global development finance arrives just in time, as the world faces major infrastructure and energy gaps and has just committed to increasing finance for sustainable development on a global scale through the Sustainable Development Goals and at the G-20 (New Climate Economy, 2016). That said, China's portfolio of overseas energy finance is heavily concentrated in fossil fuel operations that accentuate climate change, especially in coal. However, China's development finance model is such that Chinese development financial institutions could make a swifter and more decisive shift toward cleaner energy finance for all. China's model currently matches excess savings and reserves with national oil, gas and coal firms. It could easily use the same model to globalize its world class solar and wind industries.

In a broader study based on data from the China Energy Finance database GEGI and colleagues also find that Chinese energy finance is exposed to significant risks (Gallagher et al, 2016). Chief among those risks are country and macroeconomic risk. In contrast with the Western-backed development banks around the world, the Chinese policy banks are engaged with countries with higher country risk ratings and in commodity-backed loans that are at risk of stress given the fall in commodity prices and associated macroeconomic downturns in the developing world.

Moreover, the Chinese policy banks are heavily exposed to climate and social risk. China's energy loans are highly concentrated in fossil fuel extraction and power generation, especially coal. Indeed, Chinese banks have provided upwards of $40 billion in financing for global coal projects—projects that accentuate climate change and social risks. Investing in coal poses risks to Chinese financial institutions and to society. In terms of China's bottom line, there is a growing consensus that many coal plants will be decommissioned over the next few decades due to climate change and air pollution regulations. What is more, coal plants are increasingly controversial at the community level, and community conflicts can lead to plant closings as well. There is therefore an increasing likelihood that some Chinese coal assets will become stranded assets.

Coal also poses significant health and climate risks in terms of localized air pollution from sulfur emissions and global climate change from carbon emissions from coal power plants. Using conservative estimates of the climate and local health costs of coal plant emissions, our broader study estimates that the yearly social cost of Chinese overseas coal-fired power plants amounts to $29.7 billion.

The aforementioned realities thus raise the stakes for, and importance of, China's new interest in green finance. China has made bold national commitments in terms of reducing financing and incentives for coal and fossil fuels on the mainland under the US-China climate agreement and is poised to globalize those national policies.

As commodity prices fall and the macroeconomic outlook for many of China's borrowers declines, China will need to diversify its global energy portfolio. To meet these goals Chinese overseas development finance will need to make a significant change in the composition of its lending portfolio. Such a shift will not only help China's banks mitigate the significant risks associated with the current portfolio of its policy banks, it will also enable China to meet its broader global commitments.

China is Poised to Lead

Through the newly minted Sustainable Development Goals (SDGs) and again at the Paris Climate Summit of 2015 world leaders—China included— have committed to steer public finance toward energy and infrastructure in a manner that is environmentally sustainable and socially inclusive. Also in 2015, the governments of the United States and China committed to "controlling public investment flowing in projects with high pollution and carbon emissions both domestically and internationally (US-China, 2015)." In 2016, the G-20 made 'green finance' a global commitment with the establishment of G-20 study groups in both green finance and in climate finance (Zhou, 2016).

> *"If China chose to use the CDB and Ex-Im as tools for meeting the SDGs China would quickly become the global leader in sustainable development finance.*

To strengthen complimentarity with Chinese financing and new governance initiatives, Western-backed MDBs will need to coordinate across a variety of banks, as well as climate and development cooperation funds, in a number of countries and international institutions. This will enable the 'blending' of financial instruments to make climate friendly investments more financially viable. This is difficult as it is, and it is an open question whether the new administration in the U.S. will continue to support such efforts at all. In contrast, China's banks have the advantages of being able to combine non-concessional, concessional, and grant financing under one 'roof' at their policy banks, and thus blend financial instruments more efficiently. They do not face many of the institutional and political constraints that the Western-backed institutions do. What is more, China now has world class solar and wind industries.

If China chose to use the CDB and Ex-Im as tools for meeting the SDGs China would quickly become the global leader in sustainable development finance. For the foreseeable future, GEGI will continue to track and share comparative analyses of the trends in Chinese Energy Finance in order to gain a more empirical-based understanding of global development finance in the energy sector.

REFERENCES:

Brautigam, Deborah and Kevin P. Gallagher (2014), Bartering Globalization: China's Commodity-backed Finance in Africa and Latin America, Global Policy, Volume 5, Number 3, 346-357.

Brautigam, Deborah (2009), The Dragon's Gift: The Real Story of China in Africa, New York, Oxford University Press.

Gallagher, Kevin P; Rohini Kamal, Yongzhong Wang, and Yanning Chen (2016), Fueling Growth and Financing Risk: The benefits and risks of China's development finance in the global energy sector, Boston University Global Economic Governance Initiative, Working Paper 05-16.

Gallagher, Kevin P. and Margaret Myers (2016) "China-Latin America Finance Database," Washington: Inter-American Dialogue.

New Climate Economy (2016), The Sustainable Infrastructure Imperative: Financing for Better Growth and Development. Washington: New Climate Economy.

SAIS-CARI (2016), China-Africa Research Initiative, 'Our Data' China-Africa Research Initiative, Johns Hopkins University. http://www.sais-cari.org/data/ (accessed March 8, 2017).

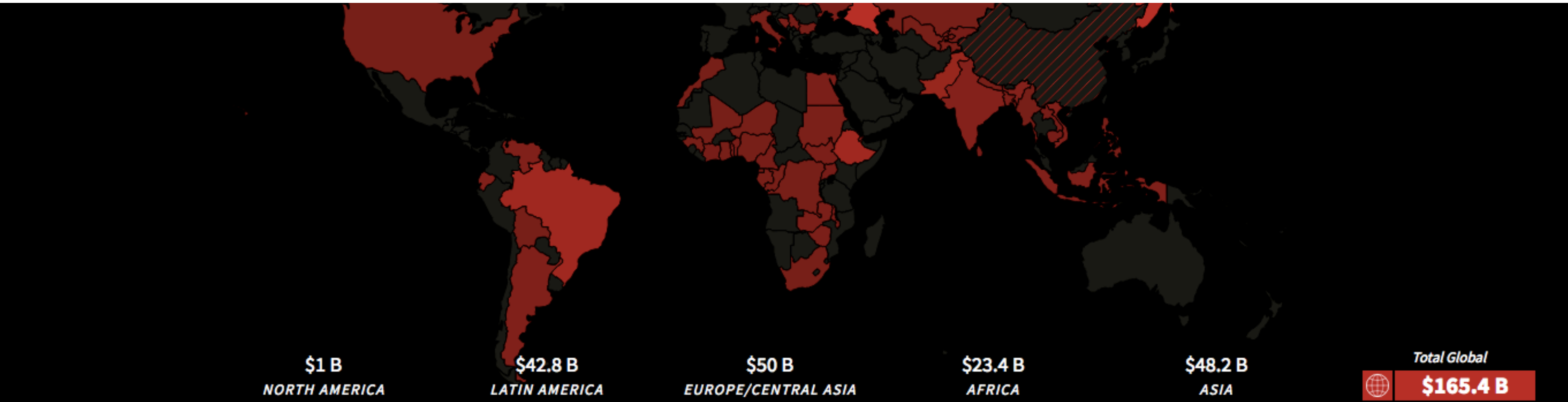
US-China (2015), US-China Joint Presidential Statement on Climate Change, Washington, White House, https://obamawhitehouse.archives.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change (accessed March 8, 2017).

Zhu, Shouqing (2016), "China Champions Green Finance in the G-20," World Resources Institute, http://www.wri.org/blog/2016/09/china-champions-green-finance-g20 (accessed March 8, 2017).

Global Economic Governance Initiative

Boston University
154 Bay State Road
Boston, MA 02215

gegi@bu.edu
www.bu.edu/gegi
www.twitter.com/gegi_bu



The Global Economic Governance Initiative (GEGI) is a research program of the Center for Finance, Law & Policy (CFLP), the Frederick S. Pardee Center for the Study of the Longer-Range Future, and the Frederick S. Pardee School of Global Studies. It was founded in 2008 to advance policy-relevant knowledge about governance for financial stability, human development, and the environment.

www.bu.edu/gegi

The views expressed in this Policy Brief are strictly those of the author(s) and do not represent the position of Boston University, or the BU Global Economic Governance Initiative