

Welcoming Remarks

Energy Interdependence in the Western Hemisphere Conference

Hosted by the Global Interdependence Center

Philadelphia, PA

November 5, 2015

Patrick T. Harker

President and CEO
Federal Reserve Bank of Philadelphia



FEDERAL RESERVE BANK
OF PHILADELPHIA

The views expressed today are my own and not necessarily
those of the Federal Reserve System or the FOMC.

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Good morning and welcome to the Federal Reserve Bank of Philadelphia. The Philadelphia Fed staff and colleagues throughout the Federal Reserve System have had a long relationship with the Global Interdependence Center, or the GIC. For nearly 40 years, Fed policymakers have participated in GIC meetings around the world, sharing interests in many of the economic topics that drive the world's economy.

We are glad to have the GIC as good neighbors and as colleagues whose good work serves so many around the world.

We are delighted to provide the venue today for the GIC's conference on Energy Interdependence in the Western Hemisphere. I am particularly pleased to see a combination of engineering and economic perspectives, given my background prior to joining the Philadelphia Fed in July.

My Ph.D. is in civil and urban engineering, with masters' degrees in engineering and economics, so as you can imagine, today's agenda piqued my interest on a number of fronts. Many of the topics you will be discussing today are at the intersection of energy and the economy, and I would have likely found them on my syllabus for courses in either academic discipline.

This topic of energy also is important to me because I am a native son of this region, and I have watched as energy has become so important to economic growth here in the Third District. I have served on the operating committee of Select Greater Philadelphia, the marketing arm of

our Chamber of Commerce, and I know that companies that want to locate here spend time thinking about the energy issues you will be discussing today.

In January 2015, the Philadelphia Fed asked manufacturers what effect lower energy prices had on their businesses. Nearly two-thirds (63 percent) of the firms reported positive effects, while 16 percent reported negative effects. A majority of manufacturers reported that falling energy prices were lowering the costs of production and increasing sales margins.

I believe the Third District has a role to play in the interdependent world of energy in our Western Hemisphere. Energy has influenced the regional economy in recent years, especially with the Marcellus Shale natural gas fields in Pennsylvania. According to a 2014 Bureau of Labor Statistics report, Pennsylvania grew from being the tenth largest state for employment in oil and natural gas in 2007 to being the sixth largest state in 2012. It also has had the second-largest employment increase over that same period, second only to Texas.¹

Yet, we should not oversell its promise. The Philadelphia Fed's regional economic team notes that in our tristate economy, mining has experienced a 6.7 percent annualized job growth rate from December 2007 through December 2014, mostly attributable to the Marcellus Shale boom. But the sector still only represents 0.4 percent — less than one-half of 1 percent — of total employment.

And through meetings and studies within our local areas, the Philadelphia Fed's Community Development Studies & Education Department has highlighted the challenges that Marcellus Shale has had on local economies, including housing shortages during the boom years.²

¹ Bureau of Labor Statistics, *Monthly Labor Review*, February 2014. "The Marcellus Shale gas boom in Pennsylvania: employment and wage trends" available at <http://www.bls.gov/opub/mlr/2014/article/the-marcellus-shale-gas-boom-in-pennsylvania.htm>.

² Kelsey, Timothy W., and Thomas B. Murphy, "Economic Implications of Natural Gas Drilling in the Marcellus Shale Region," article in *Cascade*: No. 77, Spring/Summer 2011, available at https://www.philadelphiafed.org/community-development/publications/cascade/77/01_economic-implications-of-gas-drilling-in-marcellus-shale.

The robust natural gas drilling that carried this region through the worst of the Great Recession has likely plateaued in the past few years. Yet, with the energy currently in the ground, we know it will be a factor for decades to come as we continue to tap known sources and build the infrastructure to bring natural gas to market and eventually find new ways to use this energy to drive our economy.

While at the University of Delaware and before that as dean of the Wharton School of the University of Pennsylvania, I sought opportunities to ensure that these institutions innovated with their communities. At the University of Delaware, we launched several initiatives, including the development of a Science, Technology and Advanced Research (STAR) Campus that has become a center of innovation, focused on research in areas such as health science, cybersecurity, and alternative energy. We also built an Interdisciplinary Science and Engineering Laboratory on campus. The 194,000-square-foot laboratory building, which was the first newly constructed laboratory in nearly 20 years on the campus, brings together students and faculty from various disciplines to teach, learn, and conduct research in a collaborative environment about real-world problems, including alternative energy. The building is also home to the University of Delaware Energy Institute, the Delaware Environmental Institute, and the Catalysis Center for Energy Innovation.

While not every institution can build a laboratory, I believe that organizations such as the GIC and the Philadelphia Fed can play important roles by convening the right expertise to discuss these issues, to be the laboratory of ideas, if you will.

Today's program is just such an opportunity. You will have an exciting mix of speakers, including the Honorable Carlos I. Giralt-Cabrales, Consul of Mexico in Philadelphia, who will speak this afternoon.

This morning, you are scheduled to hear from, among others, Philip Rinaldi, CEO of Philadelphia Energy Solutions and chair of the Greater Philadelphia Energy Action Team; Dean Joseph Hughes from the Drexel Institute for Energy and the Environment; and Mine Yücel, senior vice

president and director of research for the Federal Reserve Bank of Dallas, who has written extensively about energy and the economy.

This is not the first, or the last, energy cycle for the region. Just remember Titusville, PA, where the first oil well was drilled in 1896, or even earlier, the anthracite mines that fueled the railroads, or even more recently, the refineries that operated in my lifetime along the Delaware River here in Philadelphia. The task for every era is to ensure that we all work together to drive innovation by bringing together the right blend of science, technology, business, and community leaders to foster growth and economic development to use the resources wisely.

With that, I will turn the podium over to our colleagues at the GIC and hope you enjoy the discussion that will follow. Thank you.