


Embracing Carbon Principles

GUIDING POWER INVESTMENTS

BY GARY KRELLENSTEIN

 **CONCERNS OVER CLIMATE CHANGE** are driving policy makers to impose new regulations on the energy industry. Although uncertainties remain regarding the causes, impact and magnitude of climate change, it is highly likely that regulations related to greenhouse gas emissions will be imposed on the electric utility industry in the relatively near future. Greenhouse gas emissions from coal-fired electricity generation are 27 percent of emissions from the United States – the largest historical emitter. Yet, demand for electricity in the United States is projected to increase by approximately 25 percent by 2030 and coal remains the most affordable and domestically plentiful fuel source available. In fact, coal-fired generation accounts for just over 50 percent of U.S. electricity production. These are the basic facts that led us to formulate and adopt the Carbon Principles.

The need for these principles is driven by the additional financial risks faced by investors, lenders and utilities in dealing with the regulatory uncertainties associated with likely implementation of a national climate change policy. And that policy is very likely coming. Both presidential candidates support putting a price on greenhouse gas emissions, aka carbon. Democratic leadership in both the Senate and the House is committed to regulating greenhouse gas emissions whether through a cap-and-trade system or some other approach. And there is increasing public pressure from the scientific community and the public to take action.

As this reality became more apparent over the past year, JPMorgan and our partner banks – Bank of America, Citigroup, and Morgan Stanley – realized the necessity of better understanding the risks of assets that emit substantial amounts of greenhouse gases. In light of their large share of emissions, extremely long useful life,

and the fact that there were then about 150 new coal-fired power plants on the drawing board, we realized that coal-fired electricity generation was particularly exposed to the risks of future carbon regulation. We further recognized that any meaningful change to the way coal-fired generation is financed would require the active consultation of the power companies and the environmental community.

Our effort is the first time a group of banks has come together and consulted with power companies and environmental groups to develop a process for understanding carbon risk around power sector investments needed to meet future economic growth and the needs of consumers for reliable and affordable energy. The consortium has developed an Enhanced Diligence framework to help lenders better understand and evaluate the potential carbon risks associated with coal plant investments. The principles recognize the benefits of a portfolio approach to meeting the power needs of consumers, without prescribing how power companies should act to meet these needs. However, if high-carbon-dioxide-emitting technologies are selected by power companies, the adopting banks have agreed to follow the enhanced diligence process and factor these risks and potential mitigants into the final financing decision.

The Carbon Principles' portfolio approach focuses on three areas: energy efficiency, renewable and low carbon technologies, and conventional and advanced power generation. The best way to reduce carbon emissions and manage their risk is not to produce them. Hence, the principles inquire whether and how a borrower is seeking to maximize energy efficiency and reduce or eliminate the need to build new capacity. The next focus, renewable and low-carbon technologies, seeks to understand the extent to which a borrower is maximizing its use of renewable energy sources. Again, renewable energy production may reduce the need to build new conventional power capacity and better manage the financial risk of carbon regulation. Finally, the principles seek to understand the fundamentals driving the decision to build new capacity and whether the borrower is positioning the asset to manage carbon risk through steps like offset purchases or preparation for carbon capture and sequestration installation.

The Carbon Principles have not been without controversy. Some say they mean that we will not finance coal-fired power plants. Others have criticized them for ignoring the threat of climate change and coal-fired electricity's role in it. And still others have said they go too far and jeopardize the ability to build needed new generating capacity. Like Goldilocks, we feel they're just right.

The Carbon Principles:
<http://carbonprinciples.org>

NewsFlash

IRANIAN NUCLEAR SPIES

www.energycentral.com
An Iranian engineer has been convicted of using training software obtained at an Arizona nuclear power plant, the *Associated Press* reported.

He had worked at Palo Verde for 17 years. He returned to Iran with a computer containing the software and designs of the plant. Palo Verde officials said there was no security threat.

CANNON

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+	CATEGORY [1] [2] [3] [4] [5] [6]	Load Factor	<input checked="" type="checkbox"/> EXCEEDS EXPECTATIONS <input type="checkbox"/> MEETS EXPECTATIONS <input type="checkbox"/> UNDER PERFORMS <input type="checkbox"/> SUBSTANDARD
+	CATEGORY [1] [2] [3] [4] [5] [6]	Voltage Regulation	<input checked="" type="checkbox"/> EXCEEDS EXPECTATIONS <input type="checkbox"/> MEETS EXPECTATIONS <input type="checkbox"/> UNDER PERFORMS <input type="checkbox"/> SUBSTANDARD
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+	CATEGORY [1] [2] [3] [4] [5] [6]	Reserve Margin	<input checked="" type="checkbox"/> EXCEEDS EXPECTATIONS <input type="checkbox"/> MEETS EXPECTATIONS <input type="checkbox"/> UNDER PERFORMS <input type="checkbox"/> SUBSTANDARD
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The Carbon Principles do not mean that we will not finance coal-fired generation. They do mean that before agreeing to help in the financing of a new coal-fired plant or the upgrading of an existing unit, we will look hard to determine whether the entity proposing to build the plant has reasonably taken into account the additional costs and risks that expected carbon regulations may impose, and has also looked at other options. In some cases, energy efficiency and alternative energy investments may make the most financial sense. In others, they will not be enough and new coal-fired generation will be required. For some, any new coal-fired assets are unacceptable and, in a perfect world, they might be right. But as someone who believes the potential risks of man-made climate change are too great to ignore and who wants to see the political process address these concerns in an effective manner, I recognize that climate change-related regulations that cause brownouts or blackouts would undermine our political will.

Reducing emissions to combat the risks associated with climate change is an economic and moral imperative. To do so while keeping the lights on is one as well. ☒

Gary Krellenstein is managing director, JPMorgan.

Getting States Efficient

BY MATT KISTLER



WAL-MART AND THE NATIONAL

Governors Association recently announced the Greening State Capitols program, a partnership designed to save states across America money and energy by improving the energy efficiency of their capitol buildings. But why would Wal-Mart be concerned with energy use in public buildings?

Three years ago, Wal-Mart launched its effort to become a more sustainable company. Recognizing that rising energy prices have a dramatic effect on our business operations and the lives of our customers, we developed several initiatives to reduce our energy consumption and drive efficiency throughout our business. For example, earlier this year we opened a store in Las Vegas that is up to 45 percent more energy efficient than our other stores were in 2005. These innovations are helping us become more environmentally responsible while saving our customers and our company money.

Our stores have proved to be successful starting points for making energy-efficiency improvements. We have installed new technologies that use less energy, such as light-emitting diodes, and we have improved existing equipment, such as heating and air conditioning units. We will continue to explore and test new technologies that help move us toward our sustainability goals.

After the success seen in our stores, we offered to share what we learned with suppliers to increase the efficiency of their factories and buildings. Through our Supplier Energy Efficiency Program we have helped companies across the country save between 20 and 50 percent on their monthly energy bills.

But rising energy prices affect everyone, not just businesses. By coordinating with the NGA to evaluate 20 capitol complexes, Wal-Mart is helping these states and commonwealths save energy while setting a great example of responsible energy consumption to constituents. Together, we can show Americans that saving money and reducing our carbon footprint can be as easy as changing a light bulb or resetting a thermostat.

By making small changes, we can build a more energy-efficient nation and prove that we can all do well while doing good.

Matt Kistler is senior vice president, sustainability for Wal-Mart Stores.

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Gatherings »



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AUGUST

3-6	GovEnergy 2008 Phoenix	QL: E18403
6-7	Introduction to Rate Design Minneapolis	QL: E18302
11-12	Western Transmission San Francisco	QL: E18545
19-20	Recognizing and Recovering Energy Theft Chicago	QL: E18548

SEPTEMBER

16-17	Carbon Markets Washington	QL: E18531
16-17	Contract Risk Management Amsterdam, Netherlands	QL: E18393
22-23	Corporate Climate Response Chicago	QL: E18533
23-24	Energy Contracts Calgary, Alberta	QL: E18512
25-26	Energy Regulation Los Angeles	QL: E18517
25-26	Gas & Electric Business Understanding Los Angeles	QL: E18520