



## The Electricity Price Ticker and Electricity Literacy Campaign

Recent analysis by the University of Pennsylvania’s Institute for Urban Research (Penn IUR) found that when surveyed most people are fairly uninformed when it comes to understanding electricity markets and how price is determined. Comparatively, Penn IUR also found that the majority of people they surveyed were at least aware that the price of gasoline at the pump is directly related to the wholesale price of a barrel of oil. In order to better engage consumers in a dialogue about the economics of energy and the impacts of different actions on prices, Penn IUR created the Electricity Price Ticker Partnership to address this knowledge gap. Led by the Penn Institute for Urban Research and PJM Interconnection, the partnership also includes Penn’s Facilities and Real Estate Services and its Green Campus Partnership, the Energy Efficient Buildings Hub, Philadelphia Industrial Development Corporation, Penn State’s DOE-funded GridSTAR Center, and PECO.



The Electricity Price Ticker shows the real time cost of electricity at the wholesale level.

The Price Ticker is the centerpiece of the partnership’s Electricity Price Awareness campaign, presenting visitors to partnership websites – except those of PJM and PECO – with a colorful snapshot of the real time wholesale price of electricity. This price can vary widely throughout the day and by season. The color coding (based on the PJM Localized Marginal Pricing index) helps users instantly identify the relative cost of energy. Clicking the ticker brings users to the partnership’s website- [www.powerisknowledge.com](http://www.powerisknowledge.com), which gives a background of the group’s mission and an explanation of the ticker price.

### Electricity Future

Penn IUR and PJM initiated the Electricity Price Awareness campaign to engage electricity consumers and encourage a deeper understanding of the price of electricity as well as the way our electricity system works. This is not a purely academic exercise, however; but rather one prompted by the current changes taking place in the electricity grid. The mixed challenges of rising electricity demand, a resistance to building new electricity power plants and aging electricity infrastructure require a unique solution. In order to expand the electricity system and incorporate renewable resources while still maintaining reliability and security, the power industry must facilitate the communication and sharing of data at each step of the power supply system, from generation to consumption.

### Smart Grid

As described by PJM, “With the advent of the Smart Grid, the U.S. electrical infrastructure may evolve into a highly automated and interconnected network, much in the fashion of the Internet. In the Smart Grid network, information and knowledge will flow through intelligent systems to serve the entire grid community with two-way communications and control; smart devices will enable the real-time balancing of electricity supply and demand with the highest reliability and the lowest cost; and economic growth will be sustained with a careful stewardship of the environment.”

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### **Campus and Navy Yard Educational Campaign**

The partnership launched its Electricity Price Awareness campaign during the week prior to Earth Day in 2012 with the release of the Electricity Price Ticker and events at the University of Pennsylvania campus and the Philadelphia Navy Yard, home to the EEB Hub and GridSTAR Center. Penn IUR researchers reached out to students and professionals alike to explain the electricity grid and electric pricing, and to discuss the future of the electric grid in our region.

### **Ongoing work**

In the next phase of its work, the partnership will be creating a mobile dashboard to exhibit longer-term trends in electricity pricing, which will help to contextualize the real time pricing. Work is also being planned to utilize this data to illustrate the effects of events such as high temperatures on electricity pricing. The partnership will continue outreach efforts in the fall at the University of Pennsylvania and at the Navy Yard.