

# A RACE FOR THE PRIZE

Over the next two years, communities across the U.S. will work with local distribution companies to improve energy efficiency as they compete for the Georgetown University Energy Prize. **BY ADAM FOLK**

**F**or many of us, the start of the new year marks the beginning of self-improvement efforts. This year, 50 communities across the nation are following in this tradition through their participation in the Georgetown University Energy Prize—a nationwide contest for small cities to increase their energy efficiency that began on Jan. 1. Over the next two years, these communities will test their resolve to reduce energy consumption as they compete for a \$5 million purse.

The idea for this nationwide competition to increase energy efficiency dates to May 2012, when Francis Slakey, Upjohn lecturer on physics and public policy at Georgetown, hosted a meeting of mayors, city planners, utility companies and environmental experts from across the country for the first of a series of workshops to develop the prize concept.

It became clear early on in these discussions that small cities—constituting 70 percent of the U.S. population—lack the

money and manpower to tackle energy efficiency in an economical way, Slakey said. It's an area where they simply cannot compete with such megapolises as Chicago and New York. To do so, they needed an incentive beyond the long-term savings from upping their energy efficiency. They needed money.

"The ambition is to turn [the Georgetown University Energy Prize] into the Super Bowl of energy efficiency," Slakey said. "It's needed because small and midsized cities don't have anything within their sweet spot. And this is in their sweet spot."

To win, the 50 communities—each with a population between 5,000 and 250,000—will have to forge new alliances between utilities, local governments and private business and industry. They'll need to report their progress in cutting total natural gas and electricity usage per capita, adjusted for the local climate, for a period of two years. Meanwhile, they need to develop a process that may be replicated easily by other small cities, no matter their location.

"That's exactly what we're seeing,"

Slakey said. "Every one of the communities that made it into this round got enthusiastic participation from all three sectors."

### Worldwide Energy Efficiency Starts Here

The Georgetown University Energy Prize is not unlike others—both recent and in years past—that helped bring global change. In the mid-18th century, with European states fighting for supremacy on the seas and opening new trade routes, the greatest seafaring nations of the day offered the equivalent of millions of pounds of today's money to anyone who could solve a problem that had stumped the world's greatest minds for centuries: an accurate way to determine longitude on long sea voyages.

Spain was first to offer a prize in 1567. It was followed by the Netherlands, Portugal, the Venetian Republic and France. But it wasn't until the Sicily naval disaster of 1707 that Britain offered its own prize in the hopes of improving safety for its sailors. Over the next several decades, little-known clockmaker John Harrison would create



## LEADING THE WAY IN ENERGY EFFICIENCY

Communities competing in the semifinal round of the Georgetown University Energy Prize



and refine the chronometer, which won him the prize and solved what was arguably the greatest scientific quandary of the age.

In our age, navigation is not a problem for today's governments. Energy use is. Concerns about domestic production of fossil fuels, OPEC and environmental problems drive the need for people to use less. Today, many people in cities, utilities and at Georgetown believe they can replicate Harrison's success with the problem of energy efficiency.

"Prizes work," said Christofer Nelson, project director for the Georgetown University Energy Prize. "They've worked for hundreds of years. They work specifically for stuck problems like energy efficiency, and, in fact, we're already seeing it."

Like the old empires of Europe, today's nation states are struggling with an issue that is stumping the world's top minds: Worldwide demand for energy is ravenous. Growing nations will increase world energy demand by 37 percent in 2040, according to the latest International Energy Agency annual "World Energy Outlook" report. In a statement, the Paris-based agency said the pressure on the global energy system would be greater if not for recent worldwide energy efficiency efforts. Those efforts, the IEA said, are "becoming an established market segment, with innovative new products and standards helping to overcome risks and bringing stability and confidence to the market."

The agency estimates the global energy efficiency market is worth at least \$310 billion a year, and it continues to grow.

"Energy efficiency is the invisible powerhouse in IEA countries and beyond, working behind the scenes to improve energy security, lower our energy bills and move us closer to reaching our climate goals," IEA Executive Director Maria van der Hoeven said at the summit launching the report.

With all of this in mind, Nelson said he hopes someone in a small American city will be the one to increase the world's efficiency even more. "[The contestants] are going to come into this with fresh eyes and new approaches that haven't been tried before because nobody has asked them to."

### Communities at Work

About 90 miles north of Seattle and 21 miles from the Canadian border lies the city of Bellingham, Washington. For years, Bellingham has worked to be a leader in energy efficiency and green energy with forward-thinking programs and initiatives. For them, the Georgetown University Energy Prize is a way to take their efforts to the next level, according to Mark Gardner, legislative policy analyst for the Bellingham City Council.

"The prize provided an opportunity to fine-tune and strengthen a lot of those programs and also look for ways to update and improve their design," Gardner said.

The city's toughest challenge will be to convince the late adopters, the people who haven't yet worked to decrease their home or business' energy use, that it's both in their interest and easy to do, Gardner said. Part of that work means the Bellingham team is

focused on reaching out to groups such as area college students and low-income residents and getting them to do more.

"I've been very surprised at the amount of energy and support for the project across the board," he said. "Every few days, people come up with new ideas. It really has worked as designed, to raise the level of sophistication of our energy efficiency activities."

Bellingham's outreach efforts started earlier than most when they tipped off Cascade Natural Gas about the prize. Cascade, in turn, helped another Washington city—Walla Walla—become involved. Now Cascade provides energy and advice to four separate contestants. Monica Cowlshaw, the manager of energy efficiency and community outreach for Cascade, has worked closely with each of the communities from the outset. For Cascade, it's a chance to serve the communities and practice what Cowlshaw calls "good environmental stewardship."

"Our ears perked up," Cowlshaw said. "We were really excited to hear of the prospects of one of our local service territory towns able to win a \$5 million prize, not to mention the two-year process of reducing energy use and increasing community awareness of energy consumption."

Supporting the contestants means staying impartial, but also aiding each by engaging with some of the cities' planning groups and giving feedback on questions about data and natural gas-related upgrades.

"We would love for all four to win, although that's obviously not practical," Cowlshaw said.

One of the people helping to decide

## GEORGETOWN UNIVERSITY ENERGY PRIZE FROM START TO FINISH

Communities must develop a long-term energy efficiency plan and be able to demonstrate its effectiveness and sustainability over a two-year period. They will be judged, in part, on their ability to:

- Spur innovative approaches to decrease their per-capita energy usage.
- Highlight the best practices for communities working with utilities, businesses and their local governments to create and implement plans for sustained energy efficiency.
- Educate the public and engage students in energy efficiency issues.

### PRELAUNCH

2013 – 2014

Letter of Intent



### STAGE ONE

APRIL – JUNE 2014

**Applications:** Communities submitted stock applications that were reviewed by the Energy Prize team. Those selected progressed to Stage Two.



the winner is Cynthia Sandherr, director of community sustainability programs and a consultant for the American Gas Foundation, a prize launch sponsor. Seventy-two communities submitted applications, and of those, 53 moved on to the quarterfinals and 50 to the semifinals. Sandherr personally reviewed 13 of these submissions to see if they met the minimum guidelines for the project, whether AGF and Georgetown could help them in any areas and to see if there were notable new ideas.

“There’s potential all the way through to help make sure the communities succeed,” Sandherr said. And she’s confident the winner’s innovative ideas will capture the world’s imagination.

“Where the competition is really going to succeed is there will be something delivered—whether it’s a process, technology or combination of communication and community engagement—that is really going to be an extraordinary means to deliver energy efficiency.”

For example, some communities are planning to establish “ambassador services”—public places that act like a public help desk for energy efficiency issues. Residents will be able to get information on energy efficiency that’s specifically tailored to their home as well as information on the latest discounts and government rebates. Communities seem to recognize that outreach is a key part of using energy more efficiently, Sandherr said. “Technology isn’t enough. It’s not one size fits all. There needs to be some tailoring.”

Walla Walla is also relying heavily on

outreach, recognizing early in the process the importance of coordinating with local public schools and the area’s three colleges. The Sustainable Living Center, a nonprofit that advocates for conservation efforts in the city, has spearheaded efforts by holding meetings and answering questions about the prize. Its executive director, Erendira Cruz, said working with the educators is the perfect way to increase energy efficiency.

“That’s where you can really make an impact on the future,” Cruz said. “You’re teaching a whole new generation of kids and young adults how to save energy. They’ll be able to internalize it a little better than some of us old fogies.”

If Walla Walla happens to win the prize, Cruz said the money will likely be put into investments for the city. But even if it doesn’t come out on top, Walla Walla will be a winner anyway, she said.

“We just thought that it would be a great way to engage the community around a common goal. There’s basically no downside to trying to save energy.”

### Continuing the Conversation

Early on, launch sponsor American Gas Foundation recognized that the Georgetown University Energy Prize would be a great way to continue the conversation about the benefits of natural gas. The prize offers natural gas utilities all over the nation the opportunity to educate residential and municipal customers about the greater efficiency and reduced emissions that come from using natural gas, said Sandherr.

The direct use of natural gas is more

efficient compared with electricity because very little energy is lost during the transmission and distribution of the gas. Homes that use natural gas appliances for heating, water heating, cooking and clothes drying spend an average of \$693 less per year than homes using electricity, according to the American Gas Association.

Georgetown sought the AGF’s involvement specifically because the university recognized that utilities play a key role in educating consumers about energy use, said Kathryn Clay, vice president of policy strategy for AGA.

“That’s something AGA member companies excel at—helping consumers make informed energy choices,” Clay said. “One important aspect of this competition is that it measures energy efficiency over the full fuel cycle. This creates a tremendous opportunity for natural gas utilities to talk with their customers about the journey their energy makes to reach them and the benefits of choosing natural gas.”

For AGA, the prize also spotlights the more than \$1 billion a year that member companies spend on promoting energy efficiency. And it’s a chance for utilities and cities to cooperate toward a common goal. One key part of that, according to Sandherr, has been making sure cities and AGA member utilities abide by the rules and benchmarks set by the energy project’s founders.

Sandherr said she wants all of the cities, not just the winner, to see a benefit from participating in the contest. “The hope is everybody is going to come away with some improvements in their energy efficiency.” ♦

## STAGE TWO

**AUG. – NOV. 2014**

**Quarterfinals:** Communities submitted detailed plans for their energy-saving program. These are long-term plans, with commitments by governments, residential associations, institutions and businesses.



## STAGE THREE

**JAN. 2015 – DEC. 2016**

**Semifinals:** The selected cities will compete for two years to reduce their energy consumption.

## STAGE FOUR

**JAN. – JUNE 2017**

**Finals:** The finalists will be selected based on their energy-saving performance in Stage Three. A panel of judges will score the final reports in specific, weighted categories and select the winners based on a combination of these scores and the Stage Three energy-saving performance. The highest-ranking community will be awarded first place, with the requirement that the prize purse benefit the community at large. Second and third place will also be awarded. The additional winners will receive special recognition and additional benefits, which may include cash prizes.

✓ = completed