

SGCC Peer Connect WEBINAR SERIES

Green Button One Year Later

March 27, 2014

Today's Presenters



Karen Lefkowitz
Vice President, Business
Transformation
Pepeco Holdings, Inc.



Chris Irwin
SG Standards &
Interoperability Coordinator
DOE Office of Electricity
Delivery and Energy
Reliability

Housekeeping

- You will receive a copy of the slides
 - To the email you used to register
- You can ask questions as we go along
 - Simply type into the question box, as we will explain or raise questions during the Q&A
- We will answer all the questions submitted
 - If we are unable to get to all the questions, they will be answered individually after the presentation

Questions & Audio

- If this is what you see – Click on the orange arrow to expand your dashboard.
- In order to ask questions over the phone, please log in with your **Audio Pin**
- Click on the + sign to open up the questions box.
- Use the Questions box at any time to type questions.
- You can ask questions as we go along.
- Yes, you will receive the slides after the webinar.



The screenshot shows a software interface for a webinar. At the top, there is a menu with 'File', 'View', and 'Help'. Below the menu is a window titled 'Attendee List (2 | Max 1001)'. It has two tabs: 'Attendees (1)' and 'Staff (1)'. Under 'Attendees (1)', there is a dropdown menu set to 'NAMES - ALPHABETICALLY' and a list containing 'Steve Williams (Me)'. Below the list is a search box. The 'Audio' section shows 'Telephone' information: 'Dial: +1 (415) 655-0059', 'Access Code: 455-587-097', and 'Audio PIN: 57'. A pink highlighted box contains the text 'If you're already on the call, press #57# now.' and a link 'Problem dialing?'. The 'Questions' section has a green message: 'Welcome to SGCC's presentation of Smart Grid Home Area Network Standards. The webinar will begin shortly.' Below this is a text input field with the placeholder '[Enter a question for staff]' and a 'Send' button. At the bottom, it says 'SGCC Peer Connect: Smart Grid HAN Standards', 'Webinar ID: 812-622-206', and the 'GoToWebinar' logo.

Agenda

1. Introducing the Green Button
 - Learn More About You
 - SGCC's Consumer Facing Website
2. An Early Adopter Experience
 - Results
 - Commercial Customers
3. Green Button Initiative Update
 - Adoption Advancements
 - What's to Come



**Green Button
Download
My Data** ®

Download My Data


DOWNLOAD YOUR DATA >>>

www.WhatIsSmartGrid.org

- Consumer facing website
- Interactive elements
- Local energy tools: “Download your data”



The screenshot shows the SmartGrid website interface. At the top, there is a navigation bar with the SmartGrid logo, a 'STAY UPDATED. SIGN-UP NOW!' section with an email input field and a 'SUBSCRIBE' button, and links for 'SmartGrid 101', 'E-Learning Center', 'Success Stories', 'Featured Article', and 'Resources & Research'. The main content area is titled 'GREEN BUTTON' and includes a 'Green Button Download My Data' icon. Below this, there is text explaining the Green Button program, a list of tools enabled by Green Button (Energy Star Home Energy Yardstick, EnerVOC, MyEnergyIQ, and Opower Snap It App), and a section for 'Recent news articles' featuring a link to a DOE article. A video player is embedded at the bottom, showing a hand clicking a 'Green Button' on a smart meter. The footer of the website is identical to the top navigation bar.

<i>Name</i>	<i>Background</i>
<p>Karen Lefkowitz</p> 	<p>Vice President, Business Transformation – Pepco Holdings, Inc.</p> <ul style="list-style-type: none">• Leads an enterprise-wide strategic vision for Pepco Holdings to implement business processes and technologies designed to help customers better manage their energy use and costs, improve reliability and customer service and support environmentally friendly programs• Responsible for the mass deployment of advanced metering infrastructure Smart Meters and enabling the Smart Grid throughout the Pepco Holdings service territory• Director of system operations, with responsibility for the daily operation of Pepco Holding’s electric system• B.A. in business administration from George Washington University and a M.B.A. of business administration from Marymount University



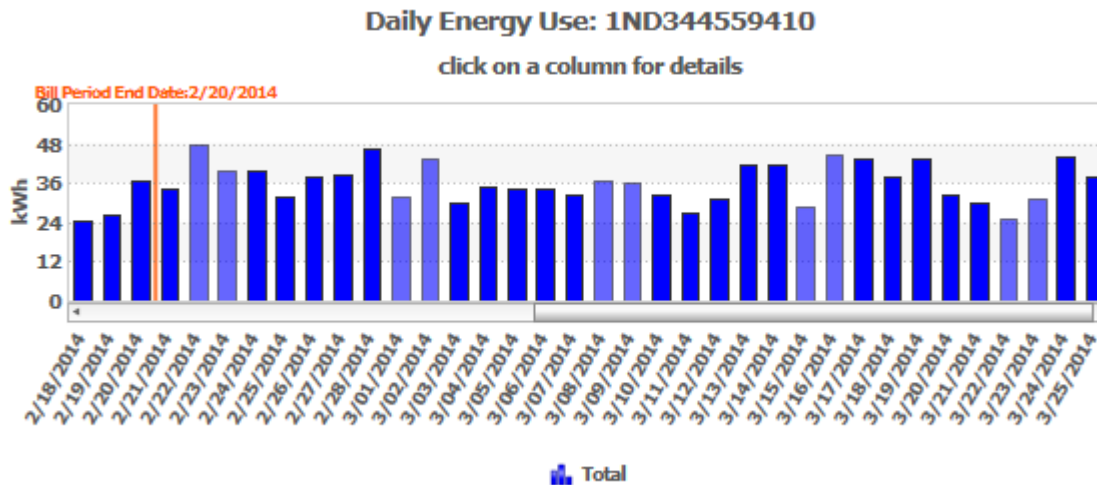
Green Button – One Year Later



Presented by: Karen Lefkowitz

The Start of the Journey

- Established 'Take Control' for Residential Customers
- Committed to using the Green Button
- Value Add for the Customer
 - Ease of Use
 - Offers customer choice
- Promotes creative solutions



My Energy Use

- My Bill to Date
- Bill Highlights
- My Hourly Use Data

Peak Energy Savings Credit

- My Bill Credit Amount
- Program Information
- Update My Preferences

No Peak Savings Day is currently scheduled.

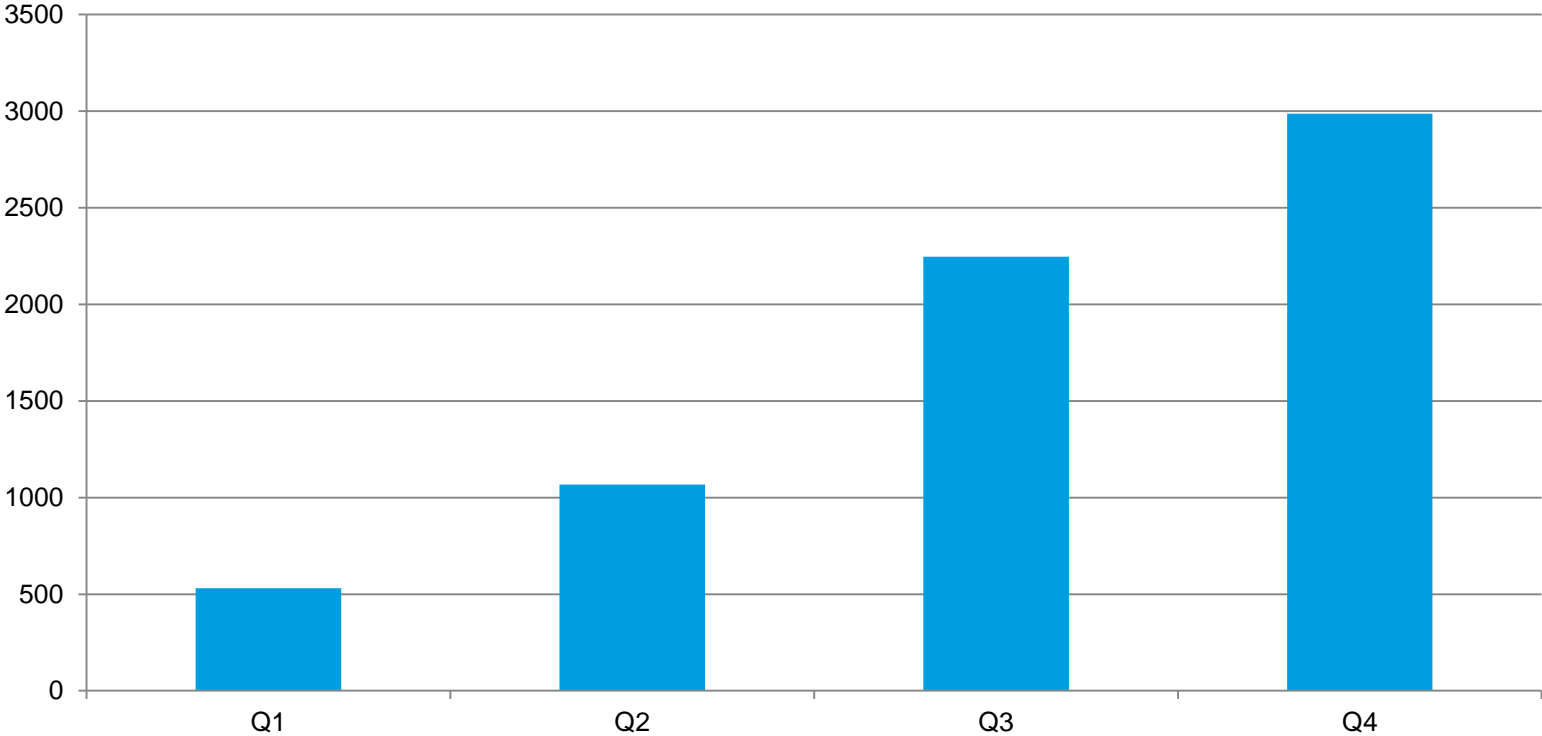
Your baseline will appear here when a Peak Savings Day is pending.

See your hourly use data

Green Button
Download
My Data

Steady Growth Over the Year

Total Green Button Downloads



Next Step – Commercial Customer

- Clean and Affordable Energy Act of 2008
 - DC Benchmarking Law
- Requires Building Owners to Provide Comparable Building Data
 - Encourages:
 - Investments to improve energy efficiency
 - Participation in demand response programs
 - Peak load management



Goal – Leverage Green Button for Commercial Customers

- Partnered with Schneider Electric - EPO
- Using AMI Interval Data
 - Translate raw data into actionable information
 - Information on a single building or entire building portfolio
 - Current and historical usage reporting
 - Interactive facility location maps
 - Set facility corporate sustainability goals and track progress
- Green Button Download from EPO web site
- Green Button Connect Web Service

Project Status Update


- Green Button web service – testing is in-progress
 - DC Public Schools
 - General Services Administration
- Launch to large commercial customers is planned for April

The screenshot displays the Green Button web service interface. At the top left is the pepco logo, and at the top right is a link to "Return to pepco". Below the logo is a blue "Export" button with a dropdown arrow. The main navigation bar includes "Dashboard", "EPO Basic", and "Reports". The user is identified as "Chief Energy Officer Online". A left-hand menu lists various options: Date Ranges/Accounts, Summary Statistics, Average Demand Profiles, Load Duration Curve, Daily Energy Profiles, Usage History, Emission Report, Map, Export, and Preferences. The "Export" option is highlighted. The "Export Options" panel is open, showing "Select File Type" with radio buttons for CSV, CMEP, Green Button (selected), Vertical, and PRN. There is also a checkbox for "Convert to Demand" and a green download icon next to "Green Button". Below this, "Select Interval Length" has radio buttons for "Metered Interval Length" (selected) and "Convert to Hourly Intervals". A "Continue" button is at the bottom right of the options panel. The selected date range is "Saturday, February 01, 2014 Through Monday, March 24, 2014". At the bottom, it says "© 2014 Schneider Electric" and "Weather data provided by: WEATHERBANK, INC." with the server name "EPOTPRODWEB2".

Collaboration with External Entities

- Vendors
 - Aclara
 - Schneider Electric
- Government Agencies
 - US Department of Energy
 - National Institute of Standards and Technology
 - US General Services Administration
 - First Fuel
 - DC Public Schools
 - New City Energy
- Institute for Market Transformation

Speaker #2

Name	Background
<p data-bbox="233 515 446 554">Chris Irwin</p> 	<p data-bbox="587 511 1754 596">Smart Grid Standards & Interoperability Coordinator – DOE Office of Electricity Delivery and Energy Reliability</p> <ul data-bbox="587 625 1792 1258" style="list-style-type: none"><li data-bbox="587 625 1715 762">• Leads DOE's Smart Grid standards and interoperability efforts, working alongside NIST, FERC and others in the Smart Grid Interoperability Panel<li data-bbox="587 791 1792 928">• Founded DOE's participation in the Green Button Data Access Initiative to empower customers with improved access to their own energy data<li data-bbox="587 956 1779 1093">• Spent over 20 years in a diverse spectrum of high technology fields from HVAC to semiconductor manufacturing, communication networks for advanced metering, and Smart Grid infrastructure.<li data-bbox="587 1122 1779 1258">• B.S. in Mechanical Engineering from the University of Maryland, College Park, and an M.B.A. from the W.P. Carey School of Business at Arizona State University

U.S. DEPARTMENT OF
ENERGY

Office of Electricity Delivery
and Energy Reliability

**U. S. Department of Energy
Office of Electricity Delivery and Energy Reliability**

The Green Button Initiative

What is Green Button?

Common-sense idea that **electricity customers should be able to download and transmit their own energy usage information** in a standard consumer- and computer-friendly format

Notable successes:

- 2011 NIST, NAESB and SGIP deliver a consensus standard
- Sept 2011 White House call to action
- Jan 2012 Launch of Download My Data
- Feb 2012 6 utilities, 7M customers
- Oct 2012 Launch of Connect My Data
- Feb 2013 14 utilities, 16M customers
- Dec 2013 48 utilities, 42M customers



Two ways to implement Green Button



Green Button Download My Data

A customer visits their utility web portal, they can simply login and download their Green Button Data as an XML-formatted file



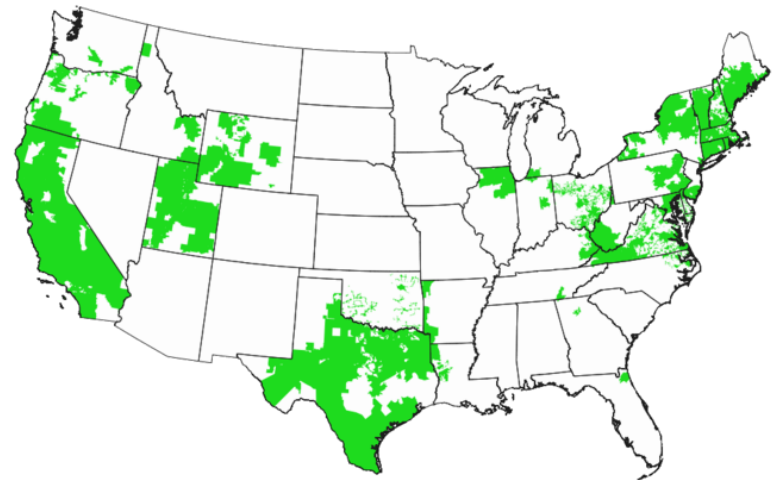
Green Button Connect My Data

This powerful model allows a consumer to authorize a third-party service provider to receive direct access to their Green Button Data - no need to repeatedly login to their utility and download files. These authorizations are valid for an agreed upon time and can be revoked at anytime by the consumer

Utilities and electricity suppliers in **32 states and DC** across various regulatory regimes have committed to provide **59 million US homes and businesses** with Green Button data, over **42 million** of which already have access...

Green Button commitments

- American Electric Power
 - Austin Energy
 - Baltimore Gas & Electric
 - Bangor Hydro Electric
 - CenterPoint Energy
 - Central Maine Power
 - Chattanooga EPB
 - Commonwealth Edison
 - Consolidated Edison NY
 - Glendale Water and Power
 - JEA
 - Kootenai Electric Cooperative
 - National Grid
 - Northeast Utilities:
 - Connecticut Light and Power
 - Western Mass. Electric Co.
 - New Hampshire Public Service Co.
 - NSTAR
 - Oncor
 - Pacific Power
 - Pacific Gas and Electric
 - PECO
 - PEPCO Holdings
 - Portland General Electric
 - PPL Electric Utilities
 - Reliant
 - Rocky Mountain Power
 - Sawnee Electric Membership Corp.
 - SDG&E
 - Southern California Edison
 - Texas New Mexico Power
 - TXU Energy
 - The United Illuminating Company
 - Efficiency Vermont*
- *Service Provider



The Best Thing Obama's Done This Month

His executive order to open government data is a really big deal.

By Alexander B. Howard



President Obama

"To promote continued job growth, Government efficiency, and the social good that can be gained from opening Government data to the public, the default state of new and modernized Government information resources shall be open and machine readable."

- Presidential Open Data Executive Order, May 9, 2013 -



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Expanded "Green Button" Will Reach Federal Agencies and More American Energy Consumers

Subscribe

Posted by Nick Sinai and Matt Theall on December 05, 2013 at 10:31 AM EST

E-Mail Tweet Share +

Today, President Obama issued a [memorandum](#) directing Federal agencies to redouble efforts to use renewable energy and manage their energy usage more efficiently and effectively. In addition to setting an ambitious new target for Federal agencies to increase their consumption of renewable energy to 20% of their total amount of electric energy use by 2020, the memorandum instructs agencies to incorporate the "Green Button" data standard into their energy management practices.

The Green Button Initiative is an industry-led response to a White House call-to-action to provide utility customers with easy and secure access to their own energy usage information in a consumer-friendly and computer-friendly format. Today, 48 utilities and electricity suppliers serving more than 59 million homes and businesses have committed to enable their customers with "Green Button" access to help them save energy and shrink their bills. Of these, over 42 million household and business customers (reaching well over 100 million Americans) already have access to their Green Button energy data.

"The Administration will leverage the 'Green Button' standard – which aggregates energy data in a secure, easy to use format – within federal facilities to increase their ability to manage energy consumption, reduce greenhouse gas emissions, and meet sustainability goals."

- The President's Climate Action Plan, June 25, 2013 -

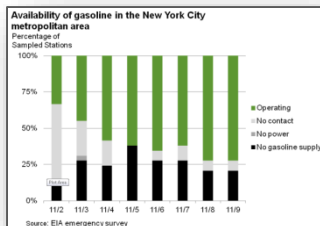


Department of Energy: American Energy Data Challenge

Challenge One

Energy Ideas Contest

Nov 6 - Dec 13 '13



Focus:

- High value data sets
- Killer ideas

Challenge Two

Apps for Energy II

Jan – Mar '14



Focus:

- Best use of specific DOE APIs, best use of customer Green Button data, and best app that uses one of the “killer ideas” identified in Challenge One

Challenge Three

Energy Data by Design Apr –

Jun '14



Focus:

- Improving the clarity and discoverability of energy information

Challenge Four

American Energy Challenge

Jul – Oct '14



Focus:

- Building bold ideas for reimagining America’s energy infrastructure

<http://energychallenge.energy.gov>



WELCOME TO THE AMERICAN ENERGY DATA CHALLENGE

A four-part, year-long Challenge to introduce the public to data and resources offered by the U.S. Department of Energy.

Introducing Contest #2: Apps for Energy

The Department of Energy is awarding \$100,000 in prizes for the best web and mobile applications that use one or more featured APIs, standards or ideas to help solve a problem in a unique way.

Submit an application by March 9, 2014!

SUBMIT AN APP

FOLLOW THE CONTEST

GET THE RULES

FAQS

 <http://energychallenge.energy.gov>





**KEEP
CALM
AND
HACK**

American Energy Data Challenge Apps for Energy II Hackathons

Find a Team at an Upcoming Hackathon

The Department of Energy is working with some great local partners to help put on a series of hackathons in support of the Apps for Energy Contest. If you live nearby, we encourage you to register! You can meet teammates, discuss your ideas with experienced mentors, and begin working on or polishing a submission. Each hackathon will feature prizes for the teams that have the best demo at the end of the event, and teams are encouraged to keep working on their app for submission in the Contest.

- [Jan. 24-25: At 1776 in Washington, D.C.](#)
- [Jan. 31 - Feb. 1: At SDG&E in San Diego, CA](#)
- [Feb. 7-8: PJM Code-athon in Valley Forge, PA \(near Philadelphia\)](#)
- [Feb. 15-16: At hack/reduce in Cambridge, MA](#)

Use the links above to register for the hackathon. Space is limited, so sign up today to ensure a spot!



Ontario, Canada - Adopts Green Button!



ONTARIO'S GREEN BUTTON:
PROVIDING YOU WITH ACCESS
TO YOUR ENERGY DATA

The Green Button allows Ontarians to access and share electricity data in a standardized, secure manner.

Access to smart meter data—and the ability to share that data with innovative applications, products, services, and solutions—can help Ontario households and businesses conserve energy and better manage their electricity bills.

CURRENT STATUS

Currently, the Green Button "Download My Data" standard has been implemented in over 2 million households and small businesses in the province, with larger rollout coming in the next few months. The next phase, "Connect My Data", will be piloting in select utilities in late 2013.



Thank You

Contact:

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Takeaways & Questions



You will receive a copy of the slides to the email address you used to register.

Thank you!



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Links and Resources:

- Green Button Home Page - www.greenbuttondata.org
- Download Your Data, SGCC Consumer Site - www.whatissmartgrid.org/green-button