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# Introducing Green Button

Association for Demand Response and Smart Grid webinar  
January 20, 2012

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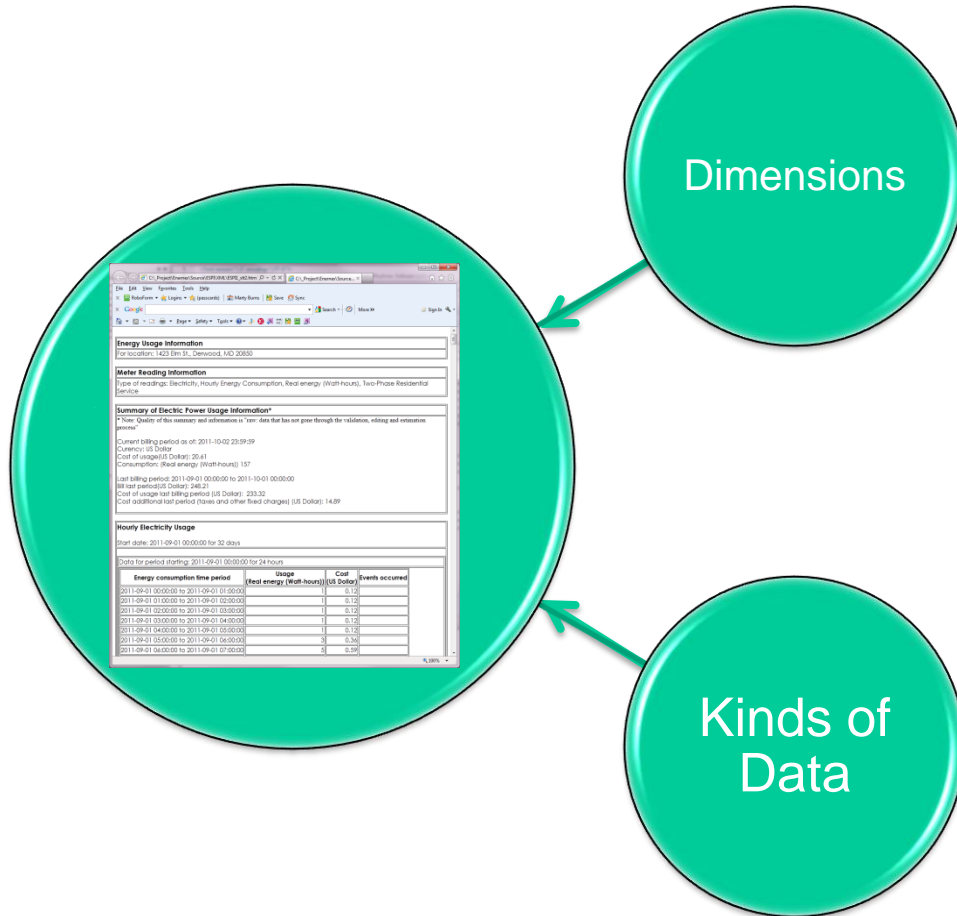
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# Energy Usage Information Basics



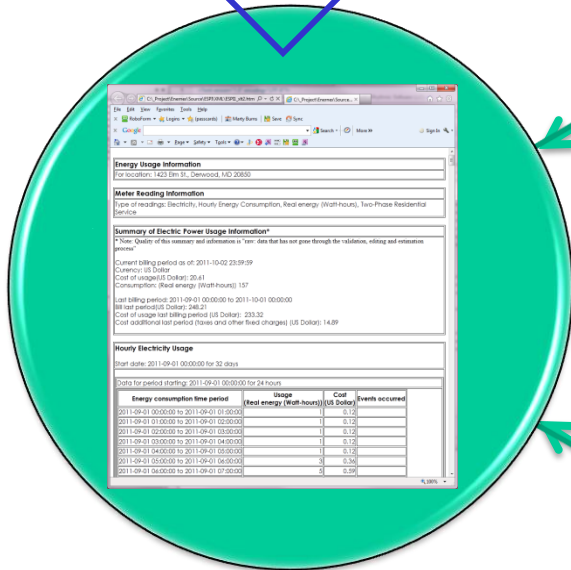
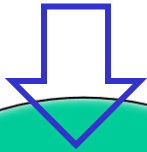
- Measurements of power, energy, gas, water, ...
- Quality: Raw, validated, estimated, ...
- Source: Meter near real-time, utility back end, third party
- Economics: Consumers need to know the cost of their consumed power (but we did not construct a pricing model)
- Identification: by customer, device, location

- Readings
- Interval data
- Summary Information
- Power Quality Metrics

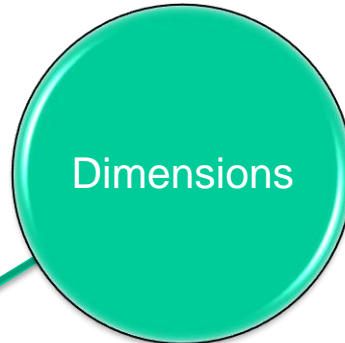
# Energy Usage Information Basics



Green Button  
Download  
My Data



Standardized file format  
consumer and machine-to-  
machine readable



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# *Standardization behind the Green Button*

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- SGIP Priority Action Plan 10 resulted in North American Energy Standards Board (NAESB) REQ18/WEQ19 PAP10 EUI standard in December 2010
- Further standardization produced NAESB REQ21 Energy Services Provider Interface
  - Based on UCAlug OpenADE and NAESB PAP10 standards
  - Ratified in October 2011
- Together these define a flexible file format basis for Green Button, with initial implementations using a subset of ESPI and EUI

# *Next Steps in SGIP*

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- A new SGIP Priority Action Plan is being prepared
  - Deliverables:
    - Profiles/standards revisions
    - Interoperability testing to be addressed
    - Privacy issues to be addressed
    - Support additional implementations nation-wide
- Green Button Implementation workshop
  - Hosted at EnerNex, NIST's SGIP administrator in Knoxville, February 29, 2012, concurrent with OpenSG meeting
- Websites:
  - [www.greenbuttondata.org](http://www.greenbuttondata.org)
  - <http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/GreenButtonInitiative>

# *DOE FOA Overview*

## *(Application due March 1, 2012)*

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**Empower residential consumers to better manage their electricity consumption by allowing them and authorized third parties access to their electricity usage information on demand through a standardized data access architecture**

### **Phase I**

- **Demonstrate** third-party consumer-oriented information tool that creates a value-added service for a minimum of 1,000 residential consumers
- Estimated Number of Awards: 12
- Anticipated Maximum DOE Award Size for Individual Award: \$500,000 (plus 50% cost share)
- Period of Performance: 15 months

### **Phase II**

- **Adopt** the data access tool demonstrated in Phase I across an entire service territory, region or community
- Estimated Number of Awards: 1 (to be downselected from Phase-I awards)
- Anticipated Maximum DOE Award Size : \$2,000,000 (plus 50% cost share)
- Period of Performance: 9 months