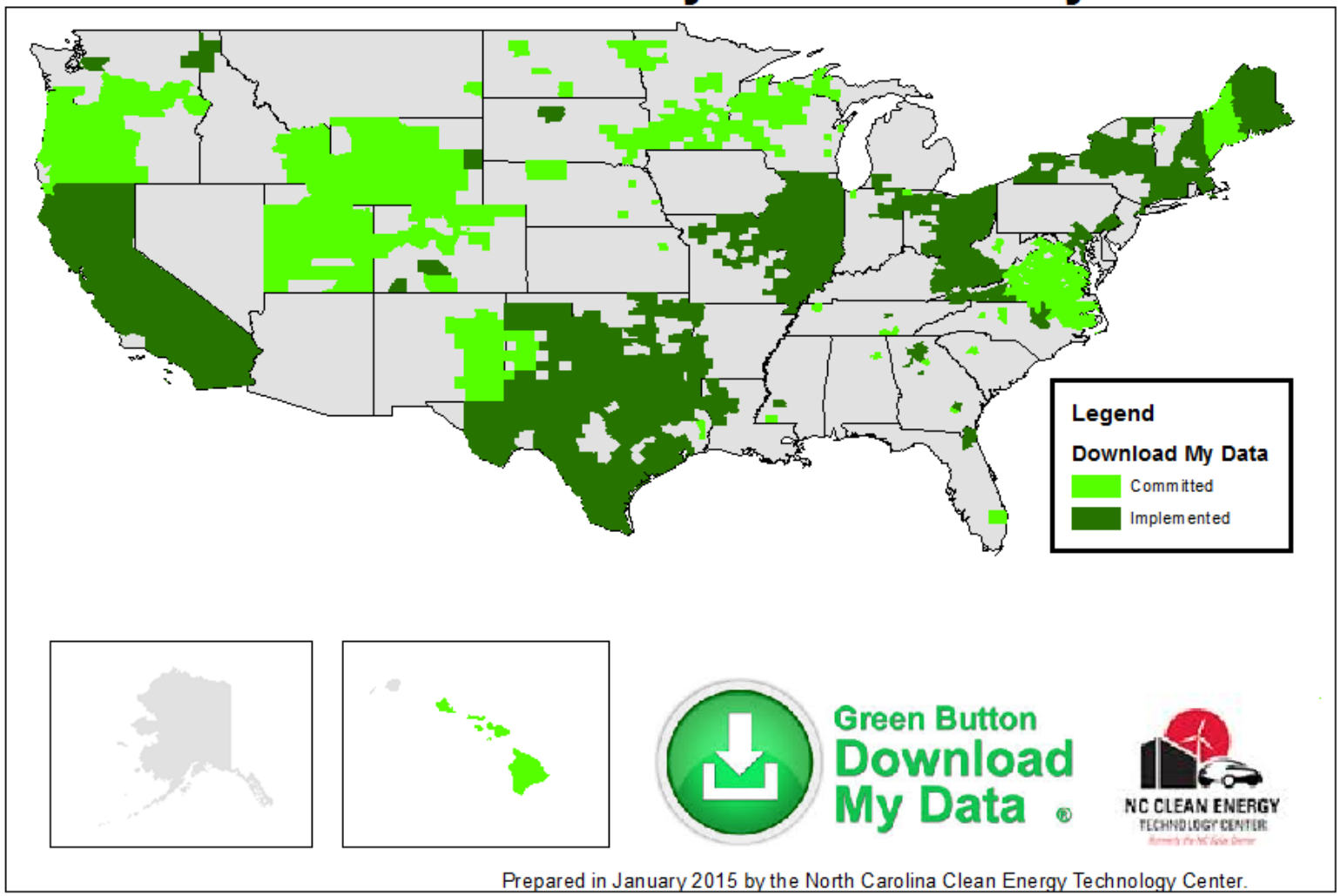
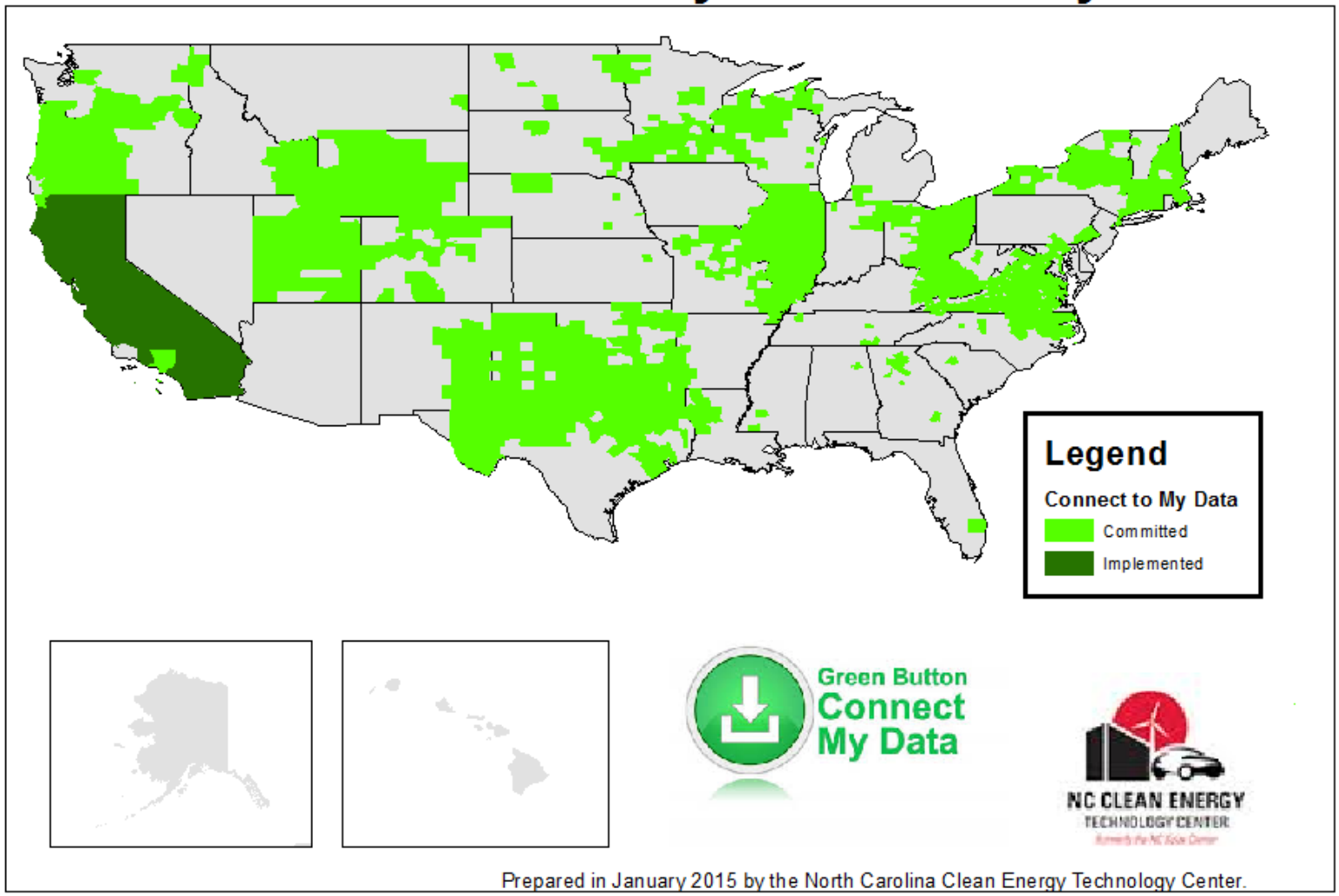
# Green Button Download My Data - January 2015




Prepared in January 2015 by the North Carolina Clean Energy Technology Center.

# Green Button Connect to My Data - January 2015



# An Overview of the Green Button Initiative

**What is Green Button All About?**

**Making metered data available to consumers.**

All electric users have meters that are used to measure how much energy they use. This metered data has been used by the energy service provider to calculate how much that energy will cost you, the consumer. Green Button is all about making that data available to you - for planning - for analysis - for your benefit!

**Green Button data contains no Personal Identifiable Information (PII)**

Your privacy is ensured when you are using Green Button! There is no PII contained within the standard Green Button data, it contains only measured interval usage information. The data representation has been fully reviewed by the cyber-security teams at the National Institute of Standards and Technology from this perspective. You should ensure your service provider (Data Custodian) is a certified Green Button provider.

**Interoperable Standards**

Green Button data is represented in standard formats so that many stakeholders may use the data without the burden of proprietary data conversion technologies. Green Button Data Formats Are Based Upon International Standards.

**Energy Service Providers Interface Standard**

The North American Energy Standards Board (NAESB) REQ 21 standard provides the basis for the Green Button representation. It uses a defined set of resources, along with an industry and internet standard representation to allow implementers to build applications that cooperate to provide services to consumers.

**Validation of Data Format**

Early implementations of the Green Button standard were not necessarily common in their application of the standard to their specific deployment. That resulted in the clear identification of the need for validation of these implementations. So all Green Button files are not necessarily interoperable. The Green Button Testing and Certification authority is currently being stood up to address this problem and lead to a higher level of consumer confidence.

# An Overview of the Green Button Initiative

**Green Button Download My Data (DMD)**

DMD is the simple starting point.

Many service providers (or utilities) have provided access to your usage data through their consumer portals. Generally, these portals provide a way to view historical usage data and to, in some cases, download that data for further analysis. Generally, the format used when the download capability was provided, was a comma separated value (CSC) format that was different for each provider. DMD provides more general format to represent the same data, and does so in structure that is standardized for all services providers.

**Green Button Connect My Data (CMD)**

CMD is all about machines talking to machines!

The consumer is involved in approving access to the data, but is not (necessarily) involved in the movement of the data from the Data Custodian, or holder of the data, to a third party service provider.

**Using standard authorization processes**

All access to Green Button data is fully controlled by the consumer! Green Button Connect My Data uses authorization standards defined by the Internet Engineering Task force (IETF) to ensure the participants in the Green Button initiative are aligned with the mainstream of internet evolution.

For More Information, Visit: http://www.greenbuttondata.org/