# U.S. DEPARTMENT OF

#### Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

# Energy Data Management Guide Take control of your energy data in seven steps!

A growing number of states, local governments, and school districts are using strategic energy management to reduce wasted energy and realize cost savings. On average, research shows that these organizations are achieving sustained energy savings of 2% a year. The step-by-step framework and best practices in the Energy Data Management Guide provide guidance on how to establish a robust and sustainable energy data management program - the foundation for strategic energy management. By following these seven steps, organizations will cut energy waste, save taxpayer dollars, demonstrate leadership, improve the efficiency of operations, and create a culture of accountability and high performance.

### **GUIDE AT A GLANCE**

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### **GENERATE BUY-IN**

**Define the Merits of Tracking Energy Data:** demonstrates that organizations that have established robust energy data tracking systems report benefits in three areas – energy and cost savings, the ability to set realistic energy reduction goals, and improved control of energy budgets.

Align with Organizational Goals: describes the key drivers and benefits of using energy data management across diverse public sector organizations, helping staff align goals with the mission of the organization.

## **BUILD A SOLID FOUNDATION**

**Create a Central Database:** details the four key steps in the creation of a database that links facilities and other infrastructure with energy and water consumption, thereby laying the foundation for an efficient and data-driven energy management program.

**Streamline Access to Data:** describes the range of current and emerging solutions available for streamlining data access with step-by-step guidance and tools for choosing a solution based on existing internal and utility constraints.

Leverage Data Management Tools: outlines the key tools used by public sector organizations to analyze and manage energy use and costs.

### HARDWIRE ENERGY MANAGEMENT

**Optimize the Organizational Structure:** reviews models for integrating energy data management into the existing organizational structure to optimize efficiency and provide a resource to the organization's diverse stakeholders.

**Drive Engagement and Communicate Results:** discusses strategies for engaging diverse stakeholders on energy management initiatives.

#### **About the Guide**

The Energy Data Management Guide was developed from in-depth interviews conducted from 2013-2014 with more than 80 individuals from states, local governments, school districts, and industry experts from the federal government, private sector, and non-governmental organizations. Additional content and resources have been added from more recent reports and initiatives. The results from that research, plus the supplemental tools and resources, provide replicable solutions to help public sector organizations implement or refine a data-driven strategic energy management program and presents those best practices in a step-by-step framework.

The Energy Data Management Guide is designed around three central pillars and each of the seven steps begins with an overview of the step and summary of best practices. Proven strategies, along with flowcharts, tips, templates, tools, and examples that address each step are included throughout. Extended case studies illustrate solutions and achieved results from programs that have been successfully implemented in states and communities across the United States. A glossary of terms is included in the final section of the guide.

#### **Audience**

The audience for the Energy Data Management Guide is public sector officials from states, local governments, and K-12 school districts. In particular, the guide targets staff responsible for managing energy and/or energy using assets in their organizations.



### This Guide Will

- Assist organizations in developing the value proposition they can bring to their executives and leadership to invest in datadriven energy management
- Provide evidence-based solutions for strategic energy management that are broadly replicable and applicable to other public sector organizations
- Help organizations chart a feasible energy data management strategy based on these solutions
- Serve as a how-to guide for implementation of these solutions.

For questions about the Energy Data Management Guide, please contact <u>StateandLocal@ee.doe.gov</u>.

For additional resources related to energy data and hundreds of other resources to support the energy priorities of state and local governments and K-12 school districts, visit the <u>State and Local Solution Center</u>.

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For more information, visit: energy.gov/eere/slsc

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