Improving Mid-Term Energy Forecasts for Buildings

NEMS Conference

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www.eia.doe.gov
Energy Information Administration

Speakers

- Robert Latta, Ph.D., Consumption Analysis & Methodology Team Leader, Energy Information Administration
  - Developing Energy Consumption Estimates by End Use for EIA's Buildings Surveys
- Edward Barbour, MBA, Senior Engagement Manager, Navigant Consulting, Inc.
  - Developing Energy Efficiency and Cost Projections of Future Building Technologies for NEMS
- Frank A. Monforte, Ph.D., Vice President of Forecasting, Itron, Inc.
  - Leveraging NEMS to Produce State-Level Commercial End-Use Forecasts

Data Description	Coverage	NEMS Usage	Geography
EIA Supplier Surveys State Energy Data System -- Develops energy consumption estimates based on supplier information.	Universe	Control total for national accounting in NEMS -- "benchmarking" totals	States
EIA End User Surveys Commercial Buildings and Residential Energy Consumption Surveys RECS and CBECS	Statistical Sample	Used for household and building characteristics data (see panel below for survey energy data usage)	Census Divisions
EIA Derived End Use Consumption from End User Survey Statistically estimated or developed with the aid of external estimates as part of RECS and CBECS	Statistically Derived from Sample Data	Used to estimate service demands and intensities for NEMS	Census Divisions

EIA Survey Results

NEMS

Equipment Type Detail by End Use Developed in or for NEMS	Derived using External Sources and Assumptions	Drives the end use detail in the models prior to benchmarking.	Census Divisions

Itron Modeling

State Level Modeling Adapts Energy Consumption Data from NEMS Census Divisions to State Level	Derived using External Sources and Assumptions	Statistical / econometric benchmarking allows application states / service territories.	State Level, Utilities