EM&V 2.0
Savings Measurement Software

Jake Oster, Charlie Ellis
& Tim Guiterman

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ENERGYSAVVY

EnergySavvy at a glance

Cloud software company bringing DSM into the 21st century

optix ENGAGE

CUSTOMER ENGAGEMENT

optix MANAGE

PROGRAM AUTOMATION & PORTFOLIO TRACKING

optix QUANTIFY

MEASURE ACTUAL SAVINGS

EM&V Challenges

Data Lag
Slows utilities, implementers, and regulators

Effort-Intensive and Paper-based
EM&V costs can consume 5% of program budgets

After the Fact
Backwards looking analysis doesn't allow for optimization

Estimates
DSM programs are primarily built on deemed savings

EM&V 2.0 – Defined by SEE Action

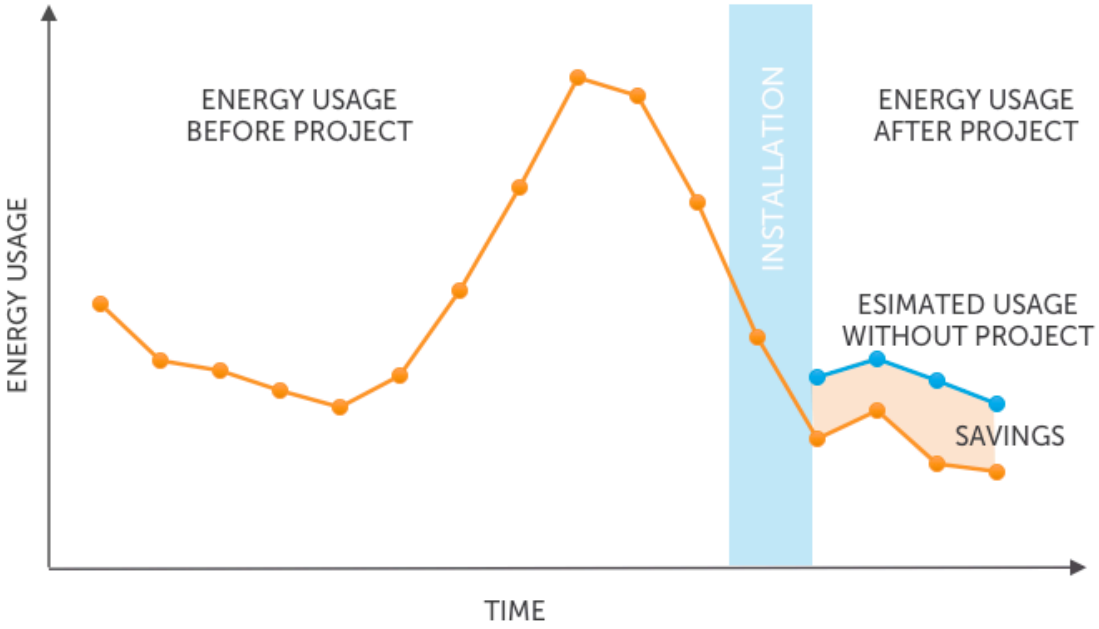
February, 2014 - Tom Eckman and Mark Sylvia, outline the traits and benefits of EM&V 2.0

Data analytics play a role in EM&V 2.0, which can "…replace other [EM&V] methods that are more labor-intensive and intrusive to customers."

EM&V 2.0 can"…reduce the cost of EM&V but also provide the program implementer and administrator near instantaneous feedback on program performance. This will help the implementer make improvements to the program sooner and increase it's effectiveness."

Optix Quantify

Billing analysis for all projects in a program, in an on-going manner, with comparison groups



Utilizes accepted M&V protocols

Key outcomes

- More timely insight
- More granular insight
- Complements traditional evaluation
- Measurement of program and factor influence

What it is not

- Replacement for formal EM&V
- Right solution for all program types

Quantify Demo

What you saw:
EM&V 2.0 is real today

Metered Savings ▶ Use real-world impact of programs to measure

Census Approach ▶ Measure every project instead of sampling

Actionable Insights ▶ Turn data into useful information & support decisions

Program Optimization	Streamlined EM&V process & costs	Greater transparency & reliability for EE	More reliable EE value for markets
Targeted marketing	Customer engagement	EE for constrained load pockets	Greater value for EE as a resource

Greater Attention on New Approaches to EM&V Nation-Wide

Regulatory process to support EM&V 2.0

Pilot or research into using EM&V 2.0

Production use of EM&V 2.0

Example: New York's REV Track 1 Order

"As REV recognizes the pace of technology and its ability to redefine our electric system, so too can advances in technology be used to challenge and enhance our traditional approach to EM&V"

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Ways that SEE Action can help Savings Measurement Software

- Continued leadership in the conversation
- Define a framework for utility adoption of savings measurement software
  - Guidelines for software readiness
  - Practices for adoption
  - "Bridge" from EM&V 1.0 to EM&V 2.0 to avoid putting utility goals at risk
- **Today**: Help refine and articulate principles for utility adoption of savings measurement software

Savings Measurement Software - Principles for Utility DSM Programs

- **Accurate and clear about precision** – avoid bias, state precision, avoid false precision
- **Reliable** – stable, robust estimates over time
- **Transparent** – methods must be subject to scrutiny, and results must be explicable
- **Standards-compliant**
- **Built upon best practices in EM&V** – must draw upon the status quo without being limited by it
- **Appropriate to program (and application)**
- **Ensure security and privacy**

Jake Oster
Sr. Director, Regulatory Affairs
(802) 598-1175
jake@energysavvy.com

Tim Guiterman
Director, EM&V Solutions
(802) 557-4755
tim@energysavvy.com

Charlie Ellis
Sr. Product Director
(206) 229-5649
charlie@energysavvy.com

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