EM&V 2.0
Modern Measurement for Energy Efficiency

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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

ENERGYSAVVY
Energy Efficiency Program Management

Like Cruising Down the Highway without a Speedometer
DSM Measurement - $25B Problem

$8B

Deemed savings

Actual observed, metered savings
Measurement Challenges

- **Data Lag**
  Slows utilities, regulators, and market

- **Cost- and Effort-Intensive**
  EM&V costs can consume 3-5% of program budgets

- **Retroactive**
  Backwards looking analysis doesn’t allow for optimization

- **Contentious**
  Lack of transparency and consistency across jurisdictions

- **Imprecise**
  Sampling, data insufficient for granular analysis
Continuous Savings Measurement: How It Works

Billing analysis for all projects in a program, in an on-going manner, utilizing accepted M&V protocols.
Quantify Demo
What you just saw...

- **Metered Savings**: Measure real-world impact of programs
- **Census Approach**: Assess every project instead of sampling
- **Actionable Insights**: Turn data to useful information & support decisions

Measurement → Program Optimization
How can continuous savings measurement help?

- Customer Engagement
- Constrained Load Pocket Targeting
- Advanced Analytics for Multiple Stakeholders
- Verify Savings for Market
- New Measures & Pilots
- EM&V Support & Streamlining
- Program Optimization
- Real-time Feedback

Driving Impact & Transformation
EM&V 2.0 Emerging Nearby

NY – REV Track 1 Order Pages 307-308, Released February 26, 2015:

“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”
Building a Bridge

Commissions can provide encouragement, freedom and room for innovation
Thank You
**Metered Savings**
2,064 MWh ± 270

- **Realization**: 84% ±11%
- **Premises Analyzed**: 876,373

**Program Progress**
2,845 Projects
$801,270 Spent

**Cost Effectiveness**
- **TRC**: 1.01
- **3.8¢/kWh**
- **Avg Savings**: 724 kWh ± 95
- **Avg Project Cost**: $1,254
**Metered Savings**
- 2,064 MWh ± 270
- 84% Realization ± 11%
- 876,373 premises analyzed

**Program Progress**
- 2,845 Projects
- $801,270 Spent
- TRC 1.01
- 3.8¢/kWh
- Avg Savings: 724kWh ± 95
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**Program Savings**
- Graph showing trends in savings over time.
METERED SAVINGS
2,064 MWh ± 270
84% Realization ± 11%
876,373 PREMISES ANALYZED

PROGRAM PROGRESS
2,845 Projects
$801,270 Spent

COST EFFECTIVENESS
TRC 1.01
3.8¢/kWh
Avg Savings: 724 kWh ± 95
Avg Project Cost: $1,254

Program Savings

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0k 1k 2k 3k 4k 5k 6k

Target Savings

Total Deemed Savings Predicted Deemed Savings Total Metered Savings Predicted Metered Savings
Top Factors of Increased Savings

- Measure: LED LightBulb
- Built before 1970 (455)
- Contractor: EnergyFre
- Location: Fairview
- Contractor: Thermova

Top Factors of Decreased Savings

- Contractor: Ecoblast
- Location: Springfield
- Contractor: Acme Energy
- Built 2000 + (142 Pre)
- Measure: Insulation
REALIZATION RATE

39% ± 43%
Overall: 84% ± 11%

NUMBER OF PREMISES

445 / 2845
16%

METERED SAVINGS

145 MWh ± 160
7% ± 8%