



Better Buildings Residential Network Data & Evaluation Peer Exchange Call Series: *Optional Residential Program Benchmarking*

Call Slides and Discussion Summary

January 23, 2014

Agenda

- Call Logistics and Introductions
- Peer Exchange Call Overview and Announcements
- Featured Speakers
 - Program Experience: Tim Miller and Jessica Hughes, Clean Energy Works Oregon
 - DOE Optional Residential Program Benchmarking Guide Project: Dale Hoffmeyer, U.S. DOE, and Cheryl Jenkins, Vermont Energy Investment Corporation (VEIC)
- Discussion
- Future Call Topics Poll

Call Participants

- Boulder, CO
- Institute for Market Transformation
- Kansas City, MO
- Michigan
- National Resources Defense Council
- New York
- Oregon
- PEI, Eugene, OR
- Southeast Energy Efficiency Alliance
- TRC Energy Services, Clifton Park, NY
- Vermont Energy Investment Corporation
- Washington State University Energy Program

Program Benchmarking Experience:

**Tim Miller and Jessica Hughes
Clean Energy Works Oregon**

CLEAN ENERGY WORKS



Data and Benchmarking Peer Exchange Call



Many sources of data, including

- Platform
- Internal database tools
- Workbook

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- Program performance and reporting
 - Program design
 - Marketing
 - Contractor performance & business guidance
 - Economic development impact

The Platform

EnergySavvy Optix

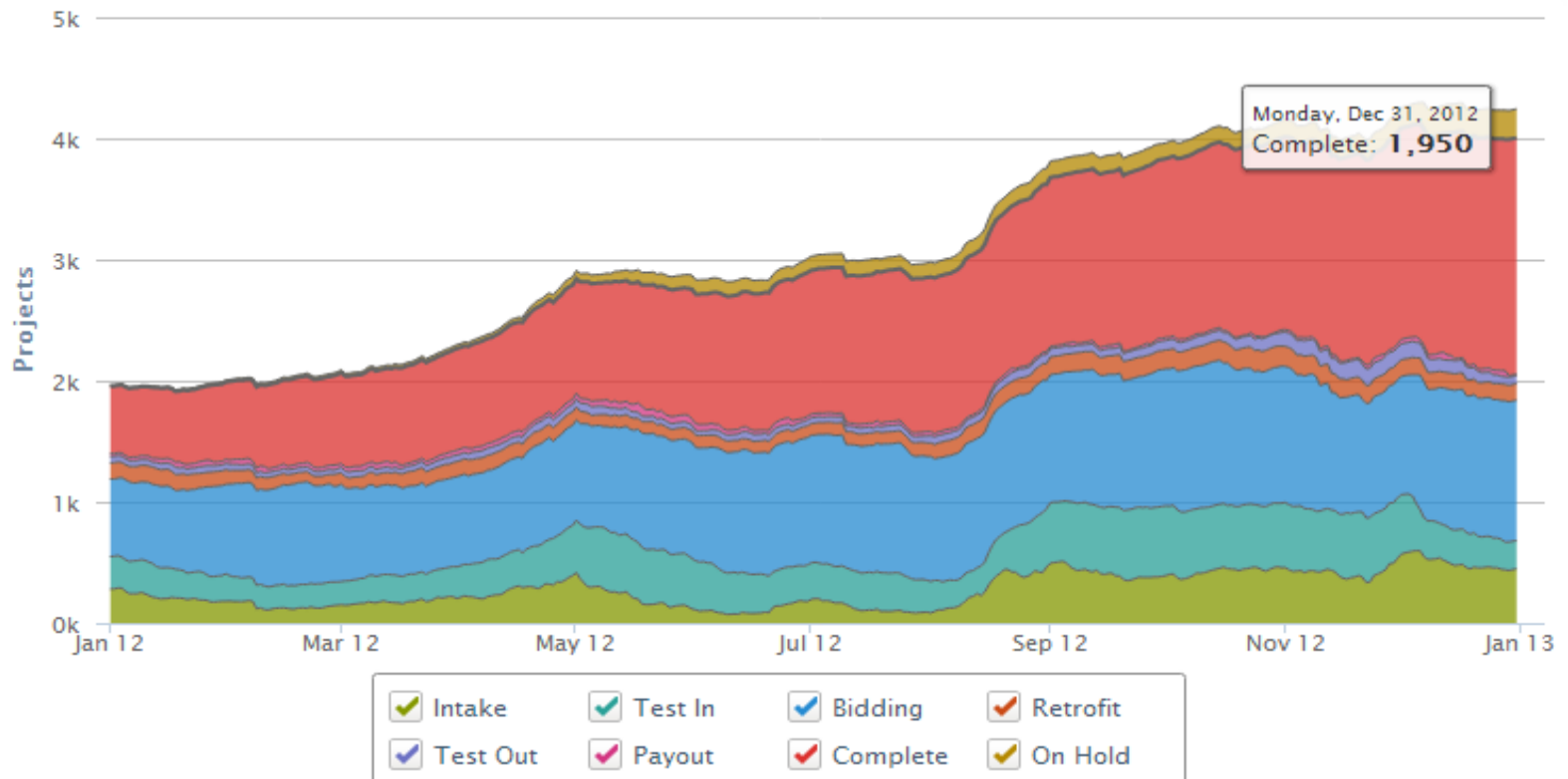
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- Conversion rates
 - Average time in project stage
 - Volume of applicants, projects, etc.
 - Total dollar and economic activity
 - Campaign tracking, codes
 - Custom reports



Project Pipeline Analysis

Time Period 01/01/2012 - 12/31/2012

Program Pipeline

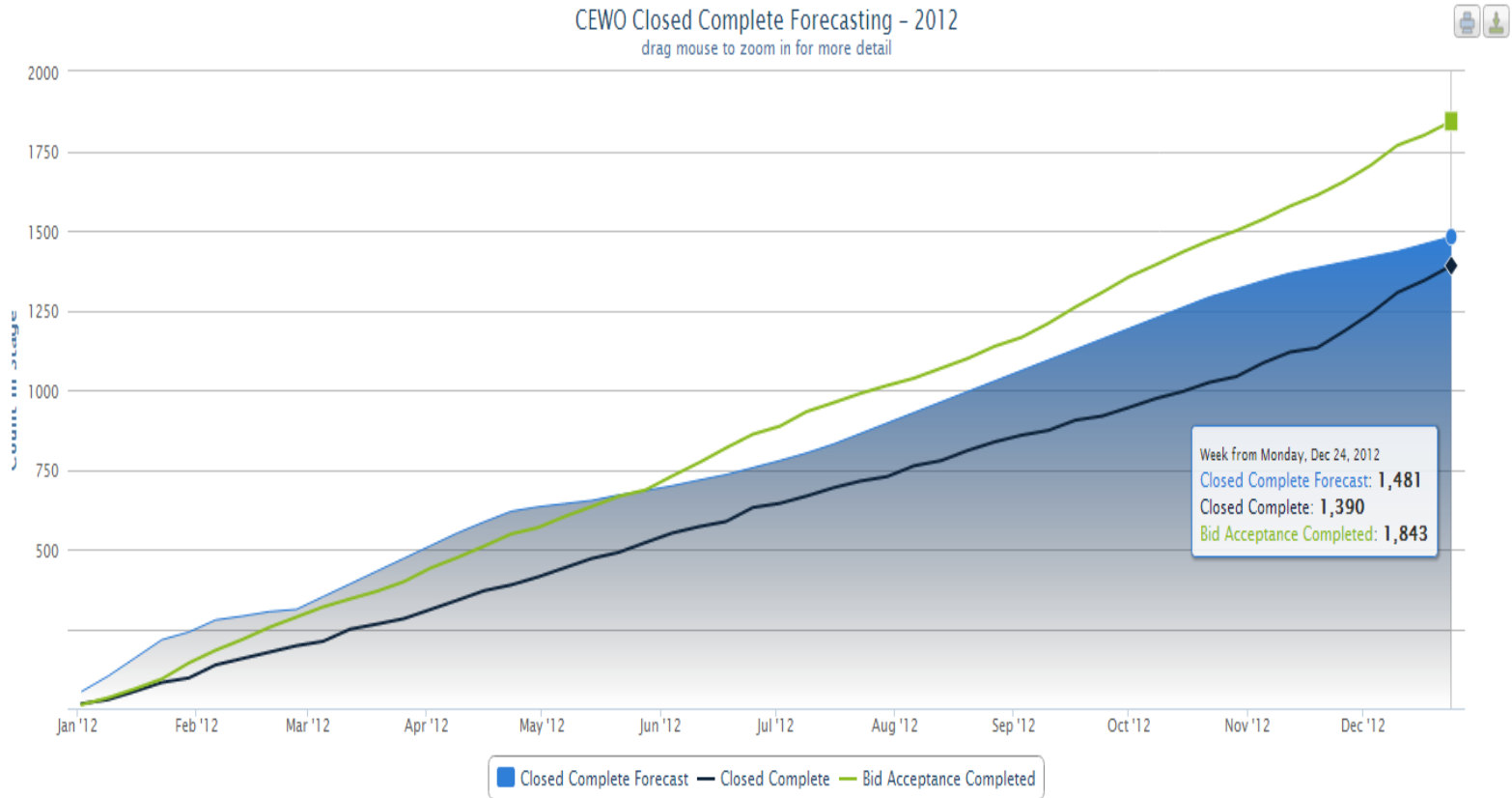


Custom database tools

- Forecast vs. actual—YTD and weekly
- Direct mail success
- Market and affiliation metrics
- Application metrics
- Accounting information
- Workforce Data
- Neighborhood and geographic data
- Conversion rates



Forecast vs. Actual



The Workbook

- Characteristics of the home
- Utility information
- Bid, measure, and savings information
- Test-out data
- EPS



Benchmarking Program Performance: Clean Energy Works Oregon

- Used benchmarking tools to:
 - Report performance to program partners (city, state, DOE)
 - Identify needed tweaks to program design
 - Determine which marketing campaigns are successful
 - Help contractors understand their performance
 - Monitor the economic impact of the program
 - Check forecasted vs. actual performance
- Benefits of using an online tool for benchmarking:
 - Track projects as they move through the upgrade process
 - Monitor conversion rates
 - Generate custom reports and analyses
- Equivalent of 3 FTEs work on data analysis, tracking

DOE Optional Residential Program Benchmarking Guide Project

**Dale Hoffmeyer, DOE Better Buildings Residential
Cheryl Jenkins, Vermont Energy Investment
Corporation**

If at first you don't succeed...

Success is what you define as the goal and objective of your program. But, if you can't measure it, how will you know if you reached it?



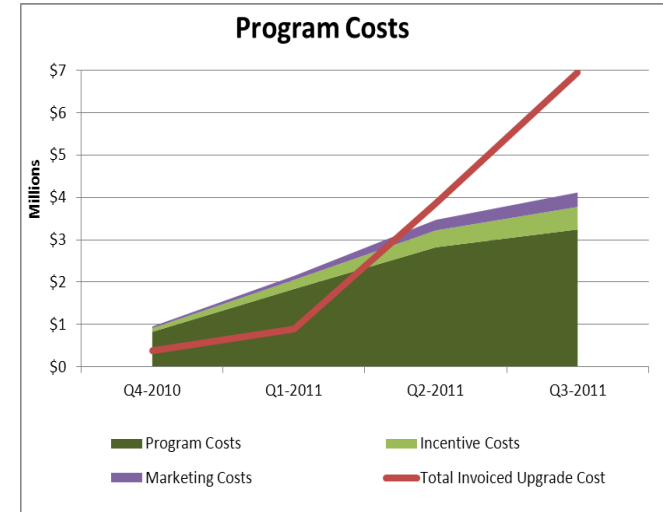
Program Benchmarking

Definition:

Tracking your program's performance over time, or comparing to achievements of other programs.

Value:

- 1) Communicate progress
 - Policy goals are being achieved (energy savings, jobs, etc.)
 - Spending of public funds is effective
- 2) Assess when and where to make program design changes
 - Updating programs is informed by experience and performance
- 3) Justify continued or additional investment



Benchmarking Guide

- Better Buildings Residential Network (BBRN) plans to develop a Guide for optional Residential Program Progress Benchmarking
- The Guide will include:
 - Information on the value and uses of benchmarking, and how it fits into your broader program planning
 - Action steps and templates for developing and implementing a Benchmarking Plan
 - Information on useful outcome metrics
 - Definitions and protocols for measuring
 - Uses and value of each metric
 - Challenges of collecting data
 - Examples of benchmarks from current programs
- Members will be engaged in the Guide's development



Examples of Outcome Metrics

Outcome to Measure	Question to Answer
Annual Energy Saved by energy type	Were estimated energy savings realized?
Life-time Energy Saved by energy type	Are more participants or deeper savings per participant needed to achieve energy savings goals?
Percent Energy saved	How much energy was saved compared to the total energy used? Was it a significant change?
Buildings Upgraded	What percentage of the market/available stock was improved?
Buildings Audited, Benchmarked, Scored or Rated	How many homeowners were made aware of their homes' energy efficiency or performance?
Invoiced Project Cost	Did the total investment in building improvements exceed the amount invested to encourage those improvements?
Loan Amount	What is the average or total amount loaned?
Loan Defaults	Do loans have lower risk?
Certified Individuals (assessors, raters, contractors)	Is the professional workforce growing? What is the supply of active workforce?

Next Steps for Benchmarking Guide

- Collect initial feedback on Guide content (this call)
 - Objectives/measures programs want to track with benchmarking
 - Challenges for collecting, tracking, and benchmarking data
 - Other desired content for Benchmarking Guide
- Develop Outline for Guide (Feb-March)
- Develop Draft Guide & Invite Comments (March-May)

Comments or Questions?

Contact us with questions or suggestions:

Dale Hoffmeyer
Department of Energy

Cheryl Jenkins
Vermont Energy Investment Corporation

Discussion Questions

- What ***experience*** has your organization had with benchmarking program performance over time (comparing progress to past performance or to others in the industry)?
 - What key ***program objectives (or measures)*** are you trying to illustrate progress toward?
 - What ***challenges*** has your organization had with collecting, tracking, and benchmarking data? How have you addressed those?
- What other things about your program ***would you like to learn*** through benchmarking if you could (e.g., with more data/tools/time)?
- What would you most like to see in ***DOE's Optional Residential Program Benchmarking Guide***?
- Other questions or issues about residential program benchmarking?

Program Experiences in Benchmarking

- Common performance measures programs track include number of loans, default rates, conversion rates, energy savings, upgrade costs
 - In addition to those, Michigan Saves also tracks interest rates offered in the market (and correlation between those rates and money spent on upgrades)
- Challenges with program benchmarking:
 - Measures can be interpreted differently between programs (e.g., a program may have a high conversion rate compared to another program because customers were pre-screened prior to audits)
 - The amount of publicly available data is limited, so benchmarking against other programs can be difficult
 - Every program tracks different metrics, making comparison difficult

Discussion: DOE Benchmarking Guide

- The guide will help programs share key metrics with each other (e.g., average invoice cost per upgrade)
- It will help programs decide which metrics to track and define common ways of measuring and tracking data
- Program benchmarking information on key metrics could then be aggregated toward a national repository

Discussion: Program Benchmarking Metrics

- Programs track measures differently, so finding an “apples-to-apples” comparison between programs is challenging
 - It is important to strive for as much consistency in metrics as possible
- Useful metrics to capture include:
 - Per-measure savings
 - Basic metrics about projects (e.g. average dollar amount, average energy savings)
 - Conversion rates
 - Post-retrofit energy savings
 - Parameters to characterize program data (e.g., Do programs have incentives? Are conversion rates increasing over time?)
 - Contractor success (profitability, audit cost, gross margins per project)

Discussion: Ideas for a National Repository of Program Data

- A national repository of energy efficiency program data would make benchmarking easier and more systematic
 - A repository could enable programs to see what underlying characteristics are associated with success (e.g., high conversion rates)
 - A repository could help track default patterns to see if there are any predictive patterns for which customers will default, and in tracking whether money spent on upgrades correlates with energy savings

Future Call Topics Poll

- Which of the following topics would interest you for a future Data and Evaluation peer exchange calls?
 - Making Evaluations Work for Your Program: Tips for Success: 89%
 - Developing a Benchmarking Plan: Templates, Tools, and Data: 89%
 - Reducing Admin Costs for Data Collection/Reporting/Tracking: 56%
 - Normalizing Weather Data and Communication Strategies: 44%
 - Other: 11% (Low-income program data and evaluation practices)

Please send other suggested topics to
peerexchange@rossstrategic.com