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Data & Evaluation: Cost-Effectiveness Tests and Measuring Like a Utility

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Neighbor Energy Challenge (N2N)

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CT Neighbor to Neighbor Energy Challenge

- 14 towns Across Connecticut
- \$4.2m pilot funded by DOE to:
 1. Prove that community-based strategies are a cost-effective way to drive demand for residential upgrades
 2. Demonstrate that Home Energy Solutions could be marketed as a first step to deeper improvements (historical upgrade rate <10%)
 3. Prove that investing in state-of-the-art data tracking systems improve community-based program results



*CT. Gov. Malloy
announces N2N*



Data and Performance Metrics

- Track & report effectiveness of customer engagement, including:
 - Communication touch points,
 - Outreach strategies,
 - Motivational messages (A/B message testing)
- Track & encourage the customer through their journey
- Compare cost-effectiveness & set thresholds for performance
- Prepare internal program reports & dashboards using real-time performance data
- Complete qualitative and quantitative analysis projects

Tracking Database

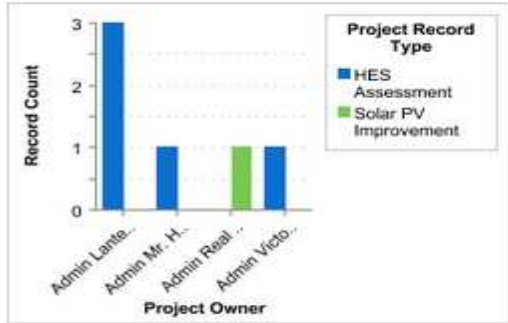
Next Two Slides:

1. Example Contractor Performance Dashboard
2. Example Cost-Effectiveness and Scenario Planning Model

Weekly Contractor Review Dashboard

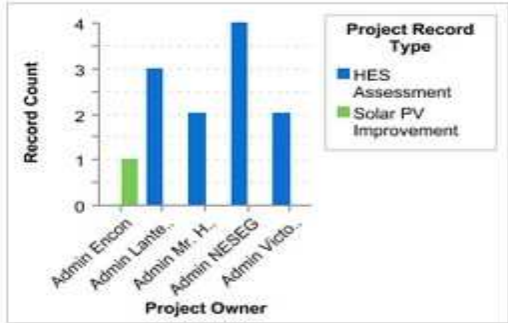
Find a dashboard... Edit Clone Refresh As of Yesterday at 7:14 PM

Leads Assigned Last Week



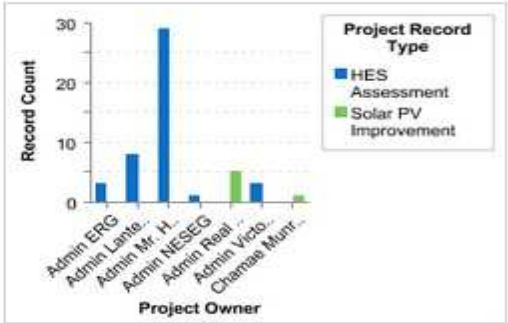
Project Owner	HES Assessment	Solar PV Improvement
Admin Lanta...	3	0
Admin Mr. H...	1	0
Admin Real...	0	1
Admin Victo...	1	0

Leads Completed Last Week



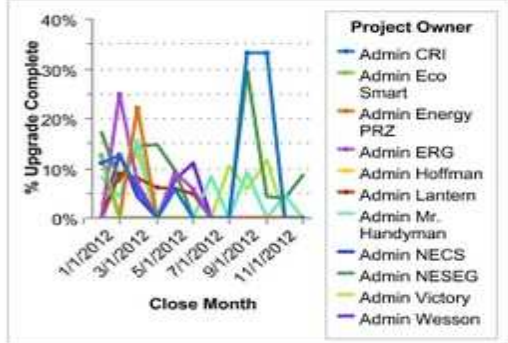
Project Owner	HES Assessment	Solar PV Improvement
Admin Entcon	0	1
Admin Lanta...	3	0
Admin Mr. H...	2	0
Admin NESEGE	4	0
Admin Victo...	2	0

Leads Lost Last Week



Project Owner	HES Assessment	Solar PV Improvement
Admin ERG	4	0
Admin Lanta...	8	0
Admin Mr. H...	29	0
Admin NESEGE	1	0
Admin Real...	0	5
Admin Victo...	3	0
Chamae Munn...	0	1

Upgrade Conversion Rate by Contractor



Hot Leads - HES Completed in Past 60 Days

Project Owner	Record Count	Sum of HES Upgrade Bid
Admin Lantern	8	5
Admin Mr. Handyman	6	0
Admin NESEGE	4	0
Admin Victory	4	0

Energy Savings by Contractor

Project Owner	Average Overall Net Annual Energy Savings (%)
Admin CRI	8
Admin Eco Smart	8
Admin Energy PRZ	8
Admin ERG	11
Admin Hoffman	13
Admin Lantern	10
Admin Mr. Handyman	14
Admin Victory	10

Completed HES Assessment Projects

Project Owner	Record Count
Admin NESEGE	771

Completed HES Improvement Projects

Project Owner	Record Count
Admin NESEGE	77



Cost-Effectiveness/Scenario Planning Model

Cost Effectiveness by Strategy (\$/HES visit)			2011 ACTUALS				2012		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3
Festival	High		\$ 257.21	\$ 116.92	\$ 110.23	\$ 128.61	\$ 330.70	\$ 214.35	\$ 190.79
Business organization	Medium			\$ 108.82	\$ -		\$ 136.03	\$ 12.09	
Coalition partner meetings	Medium		\$ 466.38	\$ 151.14	\$ 187.96	\$ 151.14	\$ 197.49	\$ 116.59	\$ 81.62
Web sign-ups	Passive		\$ 3.46	\$ 0.40	\$ 0.25	\$ 0.20	\$ 0.11	\$ 0.22	\$ 0.49
Workshops	High		\$ 362.74	\$ 122.77	\$ 72.55	\$ 68.01	\$ 101.57	\$ 31.09	\$ 79.64
Other	Medium			\$ -			\$ 59.36		\$ -
Election	High		\$ -	\$ 161.11		\$ 84.39	\$ 12.74	\$ 38.89	\$ 55.12
Call-in sign ups	Passive		\$ 17.81	\$ 5.94	\$ 1.27	\$ 0.89	\$ 1.98	\$ 1.37	\$ 2.97
Call nights	Medium						\$ 34.63		
Tabling	High		\$ 395.71	\$ 257.55	\$ 286.31	\$ 121.61	\$ 113.55	\$ 209.82	\$ 104.64
Mail-in	Passive			\$ 2.47	\$ 4.95	\$ 1.24	\$ 2.47	\$ 4.95	
Presentation to Other Non-Coalition Partner	Medium				\$ 326.46		\$ 399.01	\$ 204.04	\$ 108.82
Distro	High			\$ 128.61	\$ 192.91		\$ 51.44	\$ 64.30	
Canvassing	High			\$ 267.11	\$ 296.79		\$ 890.36	\$ 254.97	\$ 133.55
Mailing/Flyer	Passive			\$ 42.54			\$ 5.80	\$ 6.00	\$ -
General Coalition Outreach	Medium		\$ 22.39	\$ 6.81	\$ 9.72	\$ 15.41	\$ 14.35	\$ 24.62	\$ 88.27
Participant Referral	Passive		\$ 1.98	\$ 0.15	\$ 0.25	\$ 0.40	\$ 0.09	\$ 0.14	\$ 0.66
Permanent Display	Passive			\$ 29.68	\$ 13.19		\$ 49.46	\$ 24.73	\$ 19.79
Home	Passive		\$ 217.64	\$ 108.82	\$ 435.29	\$ 435.29	\$ 957.63	\$ 48.37	\$ -
Task Force meeting	Medium			\$ 408.08	\$ 489.70	\$ 1,741.15	\$ 1,958.79		
Contractor generated	Passive		\$ 0.68	\$ 0.62	\$ 0.91	\$ 0.40	\$ 0.34	\$ 0.38	\$ 1.15
Hours per Upgrade Complete Sign Up— by Strategy (Pull through)			2011 ACTUALS				2012		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3
Festival	High				30.87	30.87	92.60		
Coalition partner meetings	Medium		65.29	217.64		54.41		65.29	
Web sign-ups	Passive			0.28	0.18	0.09	0.08	0.11	0.55
Workshops	High		43.53	191.53	34.82	21.76	30.47	8.71	21.24
Election	High			90.22			30.07	11.28	15.43
Call-in sign ups	Passive					0.24	0.47	0.24	
Tabling	High		142.46	607.82		49.86	208.94	120.30	108.82



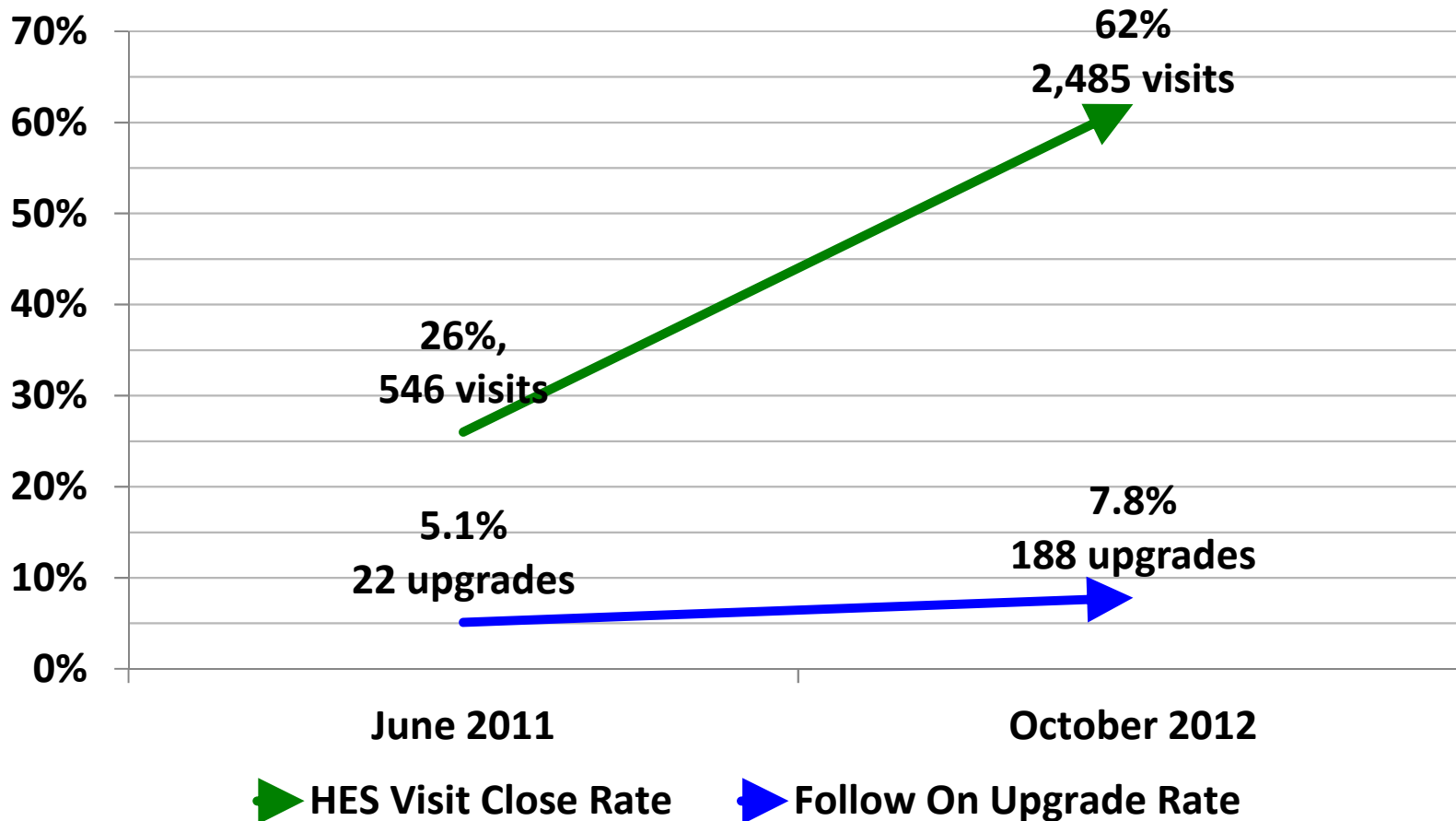
Problem, Diagnosis, Solution: Contractor Close Rates

Problem: Poor Close Rate (26% of leads completed assessment)

Quantitative Diagnosis: **Solution—Course Correction:**

- | | |
|---|---|
| <ul style="list-style-type: none">• Lost leads• Poor contractor follow up• Low bid rates• Low customer upgrade awareness | <ul style="list-style-type: none">• N2N Assign Leads• Contractor Scorecards• N2N Contractor RFQ• Energy Advisors• Customer Sales Training• Lead “swim lanes” |
|---|---|

N2N Course Correction Results





Lessons Learned: Where to Invest

1. Community-based organizing

- Use multi-touch approaches tailored to communities
- Need significant staffing to succeed
- Hire experienced community organizers
 - Community groups and volunteers are critical and require support and training

2. Contractor coordination and support

3. Marketing

- Understand the target audience & energy efficiency marketing
- Rely on Earned media
- Coordinate marketing & brand awareness with outreach and social media