

## **Turning Waste to Cash – July 15, 2015**

1. Introductions
  - a. Mandy - SEO
  - b. Kathy Heady - WEDC
    - i. State Reward programs to help companies to do more IEE projects with such a recognition program in WI
  - c. Clint Fandrich - SEO
  - d. Gary Radloff - WEI
    - i. Policy and Energy systems work
    - ii. 50-50 research and public outreach
  - e. Janet Lynch-Eisenhut - WECC
  - f. Thank you Rohlof – DATCP
    - i. Helping folks connect with AD resources
  - g. John Nicol - Leidos
    - i. Overseeing the industrial program, particularly SEM
  - h. David Baker – Midwest CHPTAP
    - i. Provide tech assistance across the Midwest for promotion of CHP
    - ii. Involved for years with energy policy in Illinois Energy Department
  - i. Jim Armstrong – Lockheed Martin
    - i. Have run CHP programs, particularly out in the Eastern US
  - j. Amanda Bilek – GPI
    - i. Policy issues with CHP and IEE
    - ii. Lengthy background in biogas policy
2. Breakouts into subcommittee groups – Think about a policy solution keeping in mind the barriers. The goal is to get enough information together to produce several documents for each issue area.

DOE is also looking for an Implementation Model (IM) with their grantee programs. Clint and Mandy will take care of this IM. Should be completing TWTC by December, so that IM can be completed by the end of January.

Kathy and John will tackle the IEE subcommittee, Janet and Amanda B will take on the IEE/CHP subcommittee, and Ty, David, and Jim will take the CHP issue.
3. IEE – SEM subcommittee with Kathy and John
  - a. Possible solution along with the other lists is SEM or a similar program for large and small industrial customers.
  - b. Developing a different primary problem than what is stated. The barriers and solutions doc is too broad for the discussion today.
  - c. The customers have little time to add energy management to their acumen. They also have a lack of tools and information to make good decisions for energy in their operations.
  - d. If we think SEM is a good thing to do, how do we get it out into the marketplace? Some consultants are out giving similar advice that is covered by SEM, but there is a need for a neutral tool or information set to impact energy management.

- e. For many industrialists, energy is an important part of producing products. We have to simplify the way that energy is managed. Perhaps there is a need for forming an energy team in an industrial business organization.
- f. Developing a tool of technical best practices has been produced and may be in need of updates. May or may not be worth a mammoth updating effort. Some repackaging and refreshing might be needed, however.
- g. FAB might be an opportunity, with new packaging for SEM or other energy-related programs, to refresh customers' energy efforts. ALSO, it would be important to include water and waste issues into the energy plan.
- h. The solution would include best practices, and the delivery channel. Is there a way to co-opt the sense of competition between customers or with active customers' supply chains to push businesses toward energy-related issues. Providing good information and tools, such as software that industrial customers can plug-in their characteristics and it spits out an action plan. It is good for smaller customers to know what is technically necessary for an upgrade (energy audit).
- i. Some auditors may or may not have a great deal of specific process-related potential energy savings that has nothing to do with lighting and HVAC. The industrial business would have the greatest amount of knowledge about the process-related energy savings potential. For the smaller outfits, how can we have them organize themselves with other similar businesses to discuss process-related energy discussions. BUT this all has to be something quick and easy and easily compatible with their current organizational setup.
- j. What does the 'sustainable' part of our conversation? Do we want to put some small funds into a training program that kind of takes on a life of its own for IEE issues? Or is it about putting money into IEE to reduce the need for energy production and halt new power plant construction? ...
  - i. A prog will be sustainable as long as the tools and resources are in place to be a self-sufficient effort.
  - ii. A side goal will not only be to make it sustainable, but also to grow to larger degrees and effect.
- k. The problem has changed but the goal is more or less the same...
  - i. Is FOE the only conduit for SEM-like programs? MEPs may be an opportunity for SEM as well (since they are focused on medium-sized customers).
  - ii. There are plenty of organizations in place to push these efforts.
  - iii. Many customers want to push sustainability beyond just energy issues.
  - iv. Sustain Dane may also be another organization that wants to be involved in energy issues at industrial outfits.
  - v. MWERC (roadmaps), MEPs, Sustain Dane, WEDC and their efforts, PSI 50001,
  - vi. Who are we expecting to benefit from this document/effort? Target audience in other words.
- l. Paper outline – Who is the audience? (policy makers, industrial customers, etc.?) FOE, PSC, etc.

- i. SEM definition (look at how FOE is defining SEM [be aware of the language surrounding large-industry and introduce some flexibility or explain how the efforts are to date])
  1. What is the desired outcome of this effort?
  2. Why are we talking about SEM?
    - a. Reference the barriers to IEE projects
- ii. Status of SEM in WI
  1. FOE/SEM program
    - a. FOE SEM fundamentals training (broader audience of industrial and commercial businesses)
    - b. Hospitals and other institutions might be the next step
    - c. Cohorts are the current effort with SEM
      - i. Customer groups discussing energy-related issues
    - d. Energy Teams
      - i. Some utility reps are on 'energy teams'
      - ii. WE Energies metering incentive program (trying to get customers to engage in submetering)?
  2. WMEP/PSI (profitable sustainability initiative) – small- and medium-sized manufacturers
  3. Sustain Dane
  4. UW-Milwaukee
  5. SEO/Energy Independent Communities
  6. WECC
  7. 7<sup>th</sup> Wave
- iii. Barriers to SEM
  1. Differences between Small, medium, and large industrial customers, commercial customers, and institutional customers like hospitals and universities (they have very different competition variables, may affect bringing cohorts together)
    - a. Larger customers, for ex, have more dedicated energy staff, but there may not be a meeting necessary for the smaller customers
  2. Market barriers
    - a. Time constraints
    - b. Consulting firms and other suppliers for SEM (as it is important to being market-driven)
    - c. How do we make money while engaging in SEM?
    - d. Consistency within the SEM approach
    - e. Awareness of the benefits of SEM, outreach about the benefits of SEM, producing examples for similar industrial projects (how much \$ are we saving?!)
  3. Getting SEM in place as a program to address IEE project implementation barriers

- a. Because SEM requires a cross-functional effort within the org, energy use within their core biz/process can be addressed more effectively (especially on the process side) In other words, customers are unaware of certain energy-related opportunities, particularly on the process side. Consultants or suppliers can easily ID issues with lighting and HVAC, but process-specific opportunities are little more elusive. Cohorts could be a way to address finding more process-/site-specific energy opportunities (3<sup>rd</sup> item under unaware of opportunities) (FAB may be an example of a group to speak with about a pilot as to how to go about IDing and implementing IEE projects) (could be a foot in the door for trying SEM and other efforts on small and medium-sized companies – Cate Rahmlow)
    - b. Timing for projects
    - c. Low management priority (SEM keeps this a higher priority, or at least it should)
    - d. High technical risk
    - e. High financial risk
  4. Time constraints and detailed but straightforward ways in which SEM should be implemented
- iv. What are the suggestions for solutions/recommendations
  1. To develop a process to train businesses on SEM
  2. Develop a mentoring program for SEM trainees
  3. Tools to help customers manage the effort (software or other resource for IDing opportunities/monitoring operations)
  4. Establishing a recognition program for successful SEM efforts (motivator, competition, leading by example)
  5. Providing incentives for IEE projects (also for successful completion), help with staff time
  6. Providing incentives to assess energy management information systems (EMIS)
  7. Provide incentives to save energy through operational changes
  8. Provide incentives to put in monitoring/submetering in facilities (behavior management)
  9. Supply chain cohorts (getting the supply chain to emulate your sustainability practices)
  10. More significant engagement from upper management (CEOs and CFOs may have a commitment to energy-related issues, for example)
  11. State-level incentives, tax-credits, mandates for IEE implementation
  12. Develop a model and training for SEM suppliers
  13. Develop a service for an SEM gap analysis to give a sense of where a – customer is for energy related opportunities
- v. Of those solutions, what are the highest priority recommendations?
  1. Who will tasked with the responsibility?

2. How long will this take? 1-3 years?
3. What resources are necessary for this effort? To be brought to bear on what, specifically?

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