The Built Environment – Design Intent & Results

- Building use 40% of all primary energy worldwide

- Design has a large impact on efficiency considering the 50-80 life cycle of a building.

- Only 50% of surveyed LEED buildings met design expectations.

- LEED 3V addresses this by emphasizing the importance of M&V
The true measure of a facility's performance is how well it can balance the need for energy conservation with the requirement to maintain a comfortable indoor environment.
Why Measure?

“You can’t manage what you don’t measure!”
The Role of the BAS

Next to salaries, the energy budget can be the largest portion of a facility's annual costs.

The BAS controls your largest energy loads (HVAC & Lighting)

It should be able to maximize system efficiency and measure facility performance

It is important to choose the right BAS for your facility

Information should be timely, intuitive and revealing
Measurement & Verification Tools

WebCTRL

M-Power

ENERGY STAR

Commit - Assess - Reduce - Envision

CARE

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BEST PRACTICES FOR SUSTAINABLE EFFICIENCY

- **Commit** – Must have buy-in from the top.
- **Assess** – Identify the opportunities for savings.
- **Reduce** – Target the low hanging fruit first.
- **Envision** – Evaluate your success and repeat.
  - (Re-commit, Re-assess, Reduce, Re-envision)

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Bringing it all together

- Convince the Owner of the value of an intelligent BAS that provides the features mentioned in this presentation.
- Understand that the costs are far out-weighed by the sustained savings. Don’t fall into the VE trap.
- Write a performance spec that requires the M&V features.
- Understand the impact of design on MEP system efficiency – both positive & negative.
Questions?

Intelligent Building Automation and Effective Energy Savings...

Simplified!

Save Energy  Promote a Better Environment  Achieve a Healthier Bottom Line

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