

National Action Plan for Energy Efficiency Sector Collaborative on Energy Efficiency

Barriers to Energy Efficiency

I. Barriers Common to all Sectors

a. Lack of corporate commitment

- i. Typically, energy management is not considered a core business concern, and is not perceived as representing a large enough cost (relative to others) to address in a strategic manner.
- ii. Belief that energy costs are not controllable.
- iii. No “C suite” champion to drive energy efficiency initiatives.
- iv. Diffusion of responsibility among a number of players: separation between those paying the bills, those operating the equipment; and those making investment decisions.
- v. Energy manager has too many responsibilities, not enough time, resources or staffing.

b. Lack of information

- i. Insufficient understanding of the energy efficiency options available in the marketplace.
 1. Lack of subject matter expertise and implementation experience within the organization.
 2. Lack of case studies and other types of information sharing to demonstrate the potential from successful implementation of “best practices.”
- ii. Belief that energy efficiency requires – or can be guaranteed by – significant capital investment and installation of new technologies.
 1. Belief that “our building is already energy efficient” because of recent renovation or installation of new equipment.
 2. Lack of awareness that significant improvements can be achieved through low- and no-cost improvements in operations and maintenance.
 3. Lack of awareness that system design issues, installation issues, and system integration issues can have a significant impact on the actual savings from many efficient technologies.

c. *Lack of comprehensive measurement tools and methodologies*

- i. Lack of a generally-accepted, widely-used, standardized method for benchmarking building energy efficiency results in a lack of awareness of how buildings perform relative to one another and therefore what opportunities they may have to improve.
- ii. Lack of readily available, user-friendly tools that can account for the interaction of complex building systems and technologies; therefore, equipment tends to be addressed in isolation, leading to missed opportunities for efficiency and higher costs.
- iii. Lack of tools and techniques to reflect the secondary (non-energy) benefits of energy efficiency such as reduced climate impact and enhanced corporate reputation.

d. *Financial barriers*

- i. Split incentives (e.g., tenant-landlord relationships and other contractual arrangements that separate the party responsible for funding and/or implementing efficiency improvements and the party that reaps the benefits of efficiency improvements).
- ii. Dominance of “first cost” considerations.
- iii. Short holding periods for investment properties leads to belief that there is not enough time to recoup savings from energy investments.

II. Sector-Specific Barriers

a. *Commercial Real Estate*

- i. Split incentives inherent in the tenant-landlord relationship. If energy costs are paid directly by the tenant (e.g., triple-net leasing), the owner will not be motivated to make energy efficiency investments that cannot be recouped.
- ii. Complex investment/ownership/management structure requires coordination, education, and communication to get all players moving in the same direction.

b. *Retail*

- i. Customer comfort and shopping experience takes precedence over energy performance.

- ii. Tendency towards “overlighting” based on outdated assumptions of what is necessary to make a property and shopping experience “attractive.”

c. Grocers

- i. Thin profit margins lead to strict thresholds for simple payback period.
- ii. Customer comfort and shopping experience takes precedence over energy performance.
- iii. Constraints on refrigerant use and emissions must be considered because of interaction with efficiency.

d. Hospitality

- i. Primary importance placed on guest experience – i.e., comfort and aesthetics. Belief that energy efficiency implies cutting corners and detracting from the amenities that guests have come to expect.
- ii. Complex ownership and contractual structures (involving owners, managers, and franchisees) make it difficult to determine which parties are in the best position to drive energy efficiency initiatives. Also raises the possibility of split or misaligned incentives.
- iii. Capital investment priorities for owners include bringing newly-acquired properties up to brand standards; capital is not always available to address energy efficiency improvements.

e. Cities/Municipalities

- i. Influenced by politics, policy, and other considerations beyond “typical” market forces – especially as they relate to state and local budgets and funding cuts.
- ii. Decisions often subject to consensus and can require more lead time for changes to be implemented.
- iii. Greater difficulty in accessing and obtaining capital compared to other commercial sectors, combined with lack of familiarity with/understanding of creative financing structures and mechanisms such as performance contracting.