



WRITTEN TESTIMONY

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VICE PRESIDENT  
PROTOTYPE AND NEW FORMAT DEVELOPMENT  
WAL-MART STORES, INC.  
BENTONVILLE, ARKANSAS

ENERGY EFFICIENCY

BEFORE THE UNITED STATES SENATE  
COMMITTEE ON ENERGY & NATURAL RESOURCES  
SUBCOMMITTEE ON ENERGY

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"Efficiency"

February 12, 2007

Chairman Dorgan, Ranking Member Murkowski and distinguished Members of the Committee:

Wal-Mart Stores, Inc., thanks the Subcommittee for its work on this important issue and for holding this hearing today. Wal-Mart appreciates the opportunity to participate in this critical discussion.

BACKGROUND

Wal-Mart is based in Bentonville, Arkansas. Our company employs approximately 1.3 million Associates from all 50 states and approximately 1.8 million Associates worldwide. Each week over 176 million customers worldwide choose to shop at Wal-Mart, which we feel reflects the success of our dedication to providing Every Day Low Prices to our customers. Wal-Mart does not just operate stores, clubs, and distribution centers in communities; we take a proactive stance in community involvement on a number of issues.

PURPOSE OF HEARING AND WAL-MART'S ROLE

The purpose of this hearing is to receive recommendations on policies and programs to improve the energy efficiency of buildings and to expand the role of electric gas utilities in energy efficiency programs. Wal-Mart is eager to share its information and experiences.

## WAL-MART'S POLICIES AND PROCEDURES

Wal-Mart is pleased to be a part of this process. As part of Wal-Mart's industry-leading sustainability commitment, CEO Lee Scott has set aggressive goals for Wal-Mart to significantly reduce our energy consumption and greenhouse gas emissions. In pursuit of those goals we intend to be the most energy efficient retailer in the world and we are working hard to achieve this commitment.

While there are no firm statistics, it is widely understood that Wal-Mart is the largest "private" purchaser of electricity in the world. In fact, Wal-Mart is widely considered to be the second largest purchaser in total energy, second only to the US government. Energy is also Wal-Mart's second largest operating expense. Therefore, it should be no surprise that Wal-Mart has been focused on energy efficiency practically since it was founded.

As Wal-Mart has continued to expand into other countries, our primary mode of expansion has been to acquire existing stores in those countries. The stores we have built in the US are more efficient on an "energy per square foot basis" than those we have acquired in any other country. This is even true for stores in countries with much more stringent energy regulation than current US regulations and much higher utility rate, such as the UK and Japan.

Nearly one-third of Wal-Mart's energy is consumed in the form of lighting. Recognizing this as an opportunity for responsible business practice, we have developed over the last decade, what we feel, is one of the most efficient lighting systems in the world. Our installed lighting load is more than 40% less than the baseline requirements established in the Energy Policy Act of 2005.

During the day, sales floor lighting, in stores built in the last decade, is off or significantly dimmed. This is possible thanks to a sophisticated daylight harvesting system comprised of hundreds of skylights per store that are connected to state of the art sensors and control technology. This allows our sales floor lighting system to continually modulate the amount of energy needed, based on the natural light available. This system is so dynamic that it gradually ramps up and down as clouds pass over the store. In our non-sales floor areas such as offices, break rooms and restrooms, lighting is controlled by occupancy sensors that turn off the lights when no one is in the space. Beginning in January, even our freezer case lighting has evolved into an amazing display of advanced technology when it became comprised of "motion-activated LEDs". The lights turn themselves on as a customer approaches, and turn themselves off as the customer leaves. The result is a 200,000 square-foot building where virtually all of the lighting is dynamic and only "on" to the degree that conditions warrant.

From an HVAC and refrigeration standpoint, Wal-Mart has always “reclaimed” or “recycled” the waste heat from our refrigeration equipment to generate our domestic hot water. We are beginning to take this a step further in new stores, testing the concept of heating the entire store with the “waste heat” generated by this equipment. Wal-Mart views the “waste heat” as a source of energy and we are expanding the use of this “free” energy source.

Wal-Mart recognizes the influence and implications of responsible energy policy by a large retailer. We strive to continue to decrease our footprint on the environment. As efficient and forward-thinking as our energy policies already are, we have very aggressive goals in our sustainability and energy efficiency efforts for the future.

In October of 2005, we announced plans to reduce energy consumption in our existing energy-efficient buildings by 20% over the next 7 years. We also plan to develop a new store prototype that will increase efficiency 25% - 30% over the next 4 years.

We also plan to retrofit over 400 of our refrigeration systems and HVAC systems this year with technologies that will reduce our energy consumption by 8% and 6% respectively and have a payback of less than two years. Additionally, a proposal is currently being reviewed to retrofit hundreds of stores with new LED lighting technology to reduce energy consumption by 3% and have a payback of 2 years. Wal-Mart plans to continue using energy retrofit efforts to reduce energy consumption; currently over a dozen similar initiatives are in some phase of development or implementation.

In regards to new store prototypes, we opened the first of our newly developed “higher efficiency” prototypes three weeks ago in Kansas City, MO. These stores are predicted to be 20% more efficient than our earlier prototypes. By this time next year we plan to have met our goal and be opening stores that are 27% more efficient. Plans are already in development for stores that approach and possibly exceed 50% efficiency in certain climate zones.

As proud as we are of these accomplishments and innovations, we are more proud to share what we are learning with everyone, even our competitors.

Wal-Mart recently opened a new facility in Savannah, GA, which included the first low-temperature CO<sub>2</sub> secondary loop refrigeration system ever installed in the United States. At the grand opening, we conducted tours of the facility providing detailed descriptions of the systems to Target, Food Lion, Publix, Costco, and many others since.

We have recently shared these details on our initiatives and their related paybacks at the Pentagon, Defense Science Board, Office of Management and Budget and even with our retail competitors, Office Depot and Best Buy. We will also be sharing this information on February 14, 2007, at a Department of Energy sponsored event at the National Building Museum here in Washington, DC, and again on February 15, 2007, at the National Academy of Sciences. Furthermore, the following week we will also be sharing our story of energy efficiency in Mexico City at a meeting of the Commission on Environmental Cooperation. The information we are sharing is not theory; it is real initiatives and real paybacks.

I am often told by others that there needs to be new technologies or there is a need for new legislation before energy efficiency becomes something with mainstream attractiveness. While Wal-Mart is not waiting for legislation to act proactively in the area of energy efficiency, we would encourage Congress to continue to look at new incentives that will help others to act proactively like Wal-Mart.

I'm very proud to work for a company that has committed to invest up to \$500 million dollars per year in innovative, energy saving and climate-friendly technologies, but I am even more proud they encourage me to pro-actively share our innovations with the world.

#### CONCLUSION

Wal-Mart seeks excellence and responsibility in everything we do. We constantly strive to improve our business processes and to enrich the communities in which we are located. We at Wal-Mart applaud Congress in its efforts to communicate the necessity and the benefits of energy efficiency.

Thank you for your time in allowing me to speak on behalf of Wal-Mart on this very important topic. We look forward to working with you to effectively and constructively address these issues.