

Energy Conservation

At

NASA

**Marshall Space Flight Center
Huntsville, Alabama**

Overview

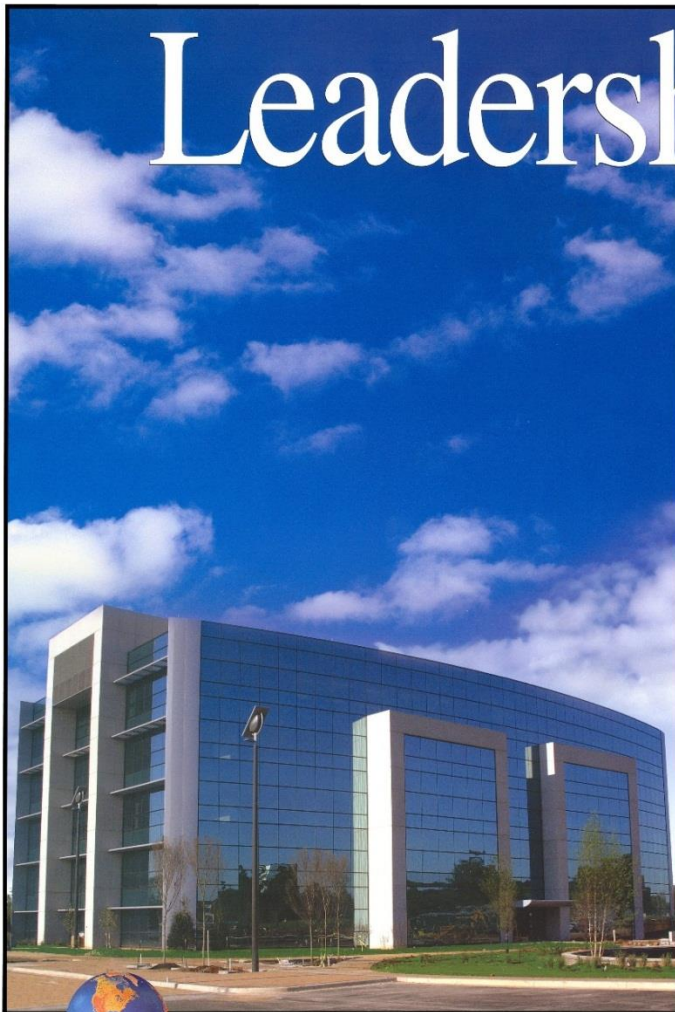


1. **Marshall Space Flight Center has been diligently working energy conservation, as a program, since 1985**
2. **Sustained efforts in utility control and energy conservation began in 1981 when our present utility control – energy data management system was installed**

Energy Initiatives

- Lighting Improvements
- HVAC Systems Improvements and Control
- Summer Steam Program
- Steam Trap Maintenance Program
- Centralized Chilled Water Facility with Thermal Energy Storage
- Non-Chemical Water Treatment Pilot
- Vaporization of Nitrogen using Ambient Air Temperature vs. Steam made with diesel fuel
- One Goal Oriented - *{teamwork, planning, design, energy & water conservation, metering , construction, renovations and O&M incorporated into every task}*

Leadership



Environmentally sensitive construction practices make the 139,000 square-foot NASA Building 4600 at George C. Marshall Space Flight Center a model for sustainable design. The building's east-west orientation and sun shades minimize sun exposure, while an open floor plan allows for an abundance of natural light. Other energy-saving features include light sensors, photovoltaic roof panels, and a white, reflective ENERGY STAR® roof membrane. Waste water from the campus chiller plant is distributed to a retention pond for irrigation, saving 3.5 million gallons of potable water annually. More than 85 percent of construction waste was re-used or recycled, and 20 percent of the building material is made of recycled content. Low-VOC materials, efficient air flow, and greater access to daylight and views provide a healthy and productive interior work environment.

Building 4600
Marshall Space Flight Center
Huntsville, Alabama

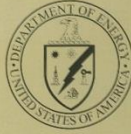


YOU HAVE
the POWER™

National Aeronautics and Space Administration
Federal Energy Management Program

For more information on how you can get involved in the
YOU HAVE the POWER campaign, visit the FEMP Web site at www.eere.energy.gov/femp.





U.S. Department of Energy
Energy Efficiency and Renewable Energy

Federal Energy Saver Showcase

National Aeronautics and Space Administration

Building 4600
George C. Marshall Space Flight Center
Huntsville, Alabama

This facility has been designated a
Federal Energy Saver Showcase.

October 2005

Federal Energy Saver Showcases represent federal facilities operating at their peak efficiency through the resourceful use of energy and water and the application of sustainable design principles, saving taxpayer dollars and preventing pollution.





**Building 4600
(LEED Silver Certified 2006)
Marshall Space Flight Center
Huntsville, Alabama
NASA's First LEED Building**



**Building 4346
Child Development Center
(LEED Certified 2008)
Marshall Space Flight Center
Huntsville, Alabama**



**Building 4601
(LEED Gold Certified 2009)
Marshall Space Flight Center
Huntsville, Alabama**



Building 4602

Laboratory & Office



Building 4203
Constructed 1992
Registered as LEED EBOM 2008
(Existing Building Operations and Maintenance)
Marshall Space Flight Center
Huntsville, Alabama





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Energy Conservation Overview

- Marshall has decreased its energy consumption by over 50% in the past 25 years
- Marshall's number one goal is to **“Do The Right Thing”** relative to energy and water conservation and the environment
- Marshall is working to sustain a positive environmental behavior change throughout the Center
- We believe we can do it!

Contact Information

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