

## **Economic Impact**

1. Reduction target of 30% in energy consumption in the policy should theoretically translate into 30% reduction in energy cost over a "typical" building. For renovation projects this would represent a real savings over current energy use/costs of up to 30%. For new construction it is really just theoretical as you are still adding energy usage when you bring a new building online, just less than a "typical" building.

2. The water saving fixtures required should reduce water use and therefore cost. (again, real savings for renovation projects, theoretical for new construction as you are still increasing water use)

3. Preference for renovation over new construction would theoretically eventually reduce overall construction costs for the State, however; in the near future, due to years of neglect to existing facilities, no immediate reduced costs would be seen (ie: instead of one new building, we would just renovate two with the same money)

4. Other items in the policy conceptually mean less impact on the Earth's resources but would probably be unmeasurable in the real world.

#### 400.11 SUSTAINABILITY POLICY

Sustainable design seeks to reduce negative impacts on the environment and optimize use of non-renewable resources. In order to optimize site potential, conserve water, minimize energy consumption, promote use of local and environmentally preferable products, the Bureau has set forth the following policy for sustainable design for state-funded buildings throughout the state, in accordance with the following 2008 Legislative mandate and in accordance with the Memorandum of Direction from the Department of Finance and Administration to the Bureau to comply.

*Senate Bill 3007, Laws of 2008 (hereinafter referred to as SB3007, L'08): AN ACT TO REQUIRE THE DEPARTMENT OF FINANCE AND ADMINISTRATION TO ADOPT CERTAIN RULES AND REGULATIONS REGARDING ENERGY PERFORMANCE OF STATE-FUNDED BUILDINGS THROUGHOUT THE STATE; TO PROVIDE THAT EACH MAJOR FACILITY CONSTRUCTION PROJECT SHALL BE DESIGNED AND CONSTRUCTED TO EXCEED THE REQUIREMENTS OF THE ENERGY CONSERVATION GUIDES ADOPTED BY THE DEPARTMENT OF FINANCE AND ADMINISTRATION BY AT LEAST 30% UNDER CERTAIN CIRCUMSTANCES; AND FOR RELATED PURPOSES*

##### A. SITE ISSUES

1. Development of inappropriate sites shall be avoided where possible.
2. Repair and renovation of existing facilities and/or expansion/redevelopment of currently developed sites shall be given preference to development of virgin sites.
3. Development of sites shall be executed with the goal of maximizing open and/or vegetative space and minimizing heat islands.
  - (a) Solar Reflectance Index for paving and roofing materials shall be a consideration for product selection.
  - (b) Inclusion of trees in parking lot designs which will provide shade within five (5) years of occupancy shall be a consideration.

##### B. WATER EFFICIENCY

1. Specification of indigenous and/or drought resistant plants shall be considered to reduce dependence on potable water irrigation systems.
2. High efficiency plumbing fixtures shall be specified where feasible. Waterless fixtures are not required or preferred.

##### C. ENERGY PERFORMANCE

1. Each major facility project shall be designed and constructed to exceed the baseline requirements of the Energy Conservation Code [See 400.1] adopted by the Department of Finance and Administration/Bureau of Building, Grounds and Real Property Management by at least thirty percent (30%). [SB3007, L'08] For the purposes of this requirement, a major facility project is defined as:
  - (a) From July 1 through December 31, 2009, any new construction project larger than twenty thousand (20,000) gross square feet
  - (b) From January 1, 2010, through December 31, 2010, any new construction project larger than fifteen thousand (15,000) gross square feet
  - (c) From January 1, 2011, through December 31, 2011, any new construction project larger than ten thousand (10,000) gross square feet
  - (d) From January 1, 2012, and thereafter, any new construction project larger than five thousand (5,000) gross square feet
  - (e) Any repair and renovation project which involves more than fifty percent (50%) of the replacement value of the facility.
2. Exempt from this requirement are any major facility projects which do not have conditioned space as defined by ASHRAE 90.1 [SB3007, L'08]
3. Exempt from this requirement are any major facility projects where compliance is not cost effective. For the purposes of this requirement, cost effectiveness shall mean payback within a seven (7) year time period. Documentation of such exemption, including justification and identification of reduced energy performance goal (if any), shall be recorded in the Minutes of the Governing Board having jurisdiction for the facility (for Bureau projects, documentation shall be via Standard Approval Form).

4. Baseline requirements shall be as defined by the prescriptive compliance path of ASHRAE 90.1.
5. Where performance above baseline is required, Energy Cost Budget Method of ASHRAE 90.1 shall be used to document compliance.
6. All major facility projects shall be commissioned by a Commissioning Authority Professional independent of the Prime Professional for the project to assure that all energy related systems are installed, calibrated and perform according to project requirements and the Contract Documents. The Commissioning Authority Professional (individual and firm) shall be registered to practice engineering in the State of Mississippi and shall be either certified by the Building Commissioning Association as a certified commissioning professional and/or accredited by the University of Wisconsin-Madison as a commissioning process provider.

#### D. PRODUCT SELECTION

1. Where materials, finishes, furnishings, and other products made in or incorporating materials produced in Mississippi meet project requirements, the Professional shall include such products in the specifications. [SB3007, L'08]
  - (a) Where both Mississippi manufactured products and non-Mississippi manufactured products are identified as equals, product origin shall not constitute a bid preference.
  - (b) Where only one Mississippi product meets project requirements, this shall not justify single source exception from bidding requirements. [Mississippi Code 1972, Annotated, Sec.31-7-13-m(viii)]
  - (c) A listing of Mississippi manufacturers is available from the Mississippi Development Authority [www.mississippi.org](http://www.mississippi.org)
2. Where materials, finishes, furnishings, and other products with recycled content are available, are cost-effective and meet project requirements, Professional shall consider specifying these products over comparable products without recycled content.
  - (a) Where both recycled content products and products without recycled content are identified as equals, recycled content shall not constitute a bid preference.
  - (b) Where only one manufacturer meets recycled content goal, this shall not justify single source exception from bidding requirements. [Mississippi Code 1972, Annotated, Sec.31-7-13-m(viii)]
3. Where materials, finishes, furnishings, and other products with low volatile organic compound emissivity are available, are cost-effective and meet project requirements, Professional shall consider specifying these products over comparable products with higher volatile organic compound emissivity.
  - (a) Where both low VOC products and higher VOC products are identified as equals, VOC emissivity shall not constitute a bid preference.
  - (b) Where only one manufacturer meets low VOC goal, this shall not justify single source exception from bidding requirements. [Mississippi Code 1972, Annotated, Sec.31-7-13-m(viii)]
4. Where materials, finishes, furnishings, and other products containing rapidly renewable materials are available, are cost-effective and meet project requirements, Professional shall consider specifying these products over comparable products without rapidly renewable material content.
  - (a) Where both rapidly renewable content products and products without rapidly renewable content are identified as equals, rapidly renewable content shall not constitute a bid preference.
  - (b) Where only one manufacturer meets low rapidly renewable content goal, this shall not justify single source exception from bidding requirements. [Mississippi Code 1972, Annotated, Sec.31-7-13-m(viii)]