

COMMERCIAL PARTNER



Implementation Model:
Facilities Infrastructure Pool

ORGANIZATION TYPE
Hospital/Healthcare Facility

BARRIER
“First-cost” hurdle or insufficient access to capital

SOLUTION
Facilities Infrastructure Pool (FIP)

OUTCOME
The FIP provides capital for energy efficiency improvements and ensures that Ascension’s facility infrastructure is properly maintained

Overview

Ascension Health actively seeks to improve energy efficiency in its hospitals and healthcare facilities as part of its Environmental Stewardship Program. Specifically, Ascension Health has set a goal to achieve a 20% reduction in energy usage (kBtu/square foot) vs. 2008 levels by 2020. With a portfolio of 71 acute care facilities and 35 million square feet across 23 states and the District of Columbia, Ascension Health developed individual energy reduction goals for each hospital and Health Ministry (regional health systems) in recognition of the varied existing conditions across its portfolio.

A common barrier to energy efficiency in hospitals and healthcare facilities is a lack of dedicated capital for energy efficiency improvements, and reluctance to invest in the high first-costs of equipment. By creating the Facilities Infrastructure Pool (FIP), a dedicated capital pool, Ascension Health sought to overcome these financing barriers and increase investment in energy efficiency improvements in its buildings.

The Ascension Health Facility Infrastructure Pool (FIP) capital allocation program, part of the Ascension Health Environmental Stewardship Program, began July 1, 2010 (FY11) to provide funds to address infrastructure needs at hospitals. These needs were historically not prioritized by the Health Ministries (regional health systems) because of competing clinical needs and limited capital dollars, but Ascension Health has been increasingly prioritizing them since 2008. The FIP allows hospitals to present proposals for major needs, including energy-saving projects,

and frees maintenance departments from having to compete with other critical hospital supplies and infrastructure.

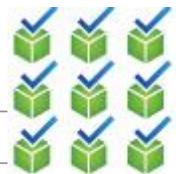
Ascension Health's Playbook



Policies

Energy efficiency is one of nine categories within Ascension Health's Environmental Stewardship Program, established in 2010. The following policies have been implemented at Ascension Health supporting a focus on energy efficiency:

- Capital that Ascension Health spends on facilities is managed at the System level and prioritized with consideration for energy efficiency and reduced energy consumption, life-safety risk of failure and equipment at the end of its service life.
- All regional Health Ministries are to formulate an Infrastructure Master Plan for facilities long range planning.
- All infrastructure projects are to be designed to result in energy savings.
- All infrastructure projects are to be undertaken with intent to comply with the Ascension Health Architectural and Engineering Standards, which require meeting the Better Buildings Challenge energy reduction goals and meeting or exceeding an ENERGY STAR® Rating of 75.
- There is no minimum project size. The maximum single project award in one year is \$3 million. Projects may be submitted in phases but each phase must be able to stand alone. Phased projects are given funding priority in subsequent years.



Process

The FIP is overseen by Ascension Health's Facilities Resource Group (FRG) with added engineering expertise provided by Ascension Health's Preferred Engineering Consulting Firms (PECFs). Facilities Infrastructure Pool projects are funded on a yearly cycle for planning purposes. Project proposals are submitted online using the FIP Template. The FRG and its Preferred Engineering Consulting Firms evaluate each request to the FIP and identify opportunities to adjust or reconfigure existing systems to improve energy efficiency. The consultants evaluate the whole system, not just the equipment being replaced, and make decisions based on lifecycle costs with priority given to projects with a simple payback less than four years. Proposals are reviewed by FRG and the consultants according to a scoring matrix. Selected projects are tracked and managed by the individual regional Health Ministry, FRG, and consultants. In addition, all of Ascension Health's facilities are being commissioned and retro-commissioned by its Preferred Engineering Firms.

Tools:

- [Facilities Infrastructure Pool Template](#) Project proposals are to include detailed cost breakdowns and anticipated energy cost savings, approximate annual value and simple payback calculations.
- [FIP Evaluation Criteria Worksheet](#)



Outreach

A yearly email is sent to all Facility Managers with the current FIP template and guidance for project development.



Measuring Success

All Ascension Health facilities are benchmarked and tracked in ENERGY STAR Portfolio Manager for electricity, gas, water and sewer use and cost. Monthly Measurement & Verification (M&V) scorecards are used to demonstrate energy and cost savings. Success is demonstrated by improved reliability, durability and resiliency of Ascension Health facilities and infrastructure.



Outcomes

The primary measure of success for the FIP program will be to accomplish a System-wide energy reduction goal of 20 percent reduction from 2008 levels by 2020. So far, Ascension Health has recognized its first goal of achieving a System-wide 7.1 percent energy use reduction (\$18.8 million in savings) from July 1, 2008 through June 30, 2012, due in part to the ability to implement energy efficiency projects using dedicated capital funds.

Saint Thomas Hospital in Nashville, Tennessee is implementing the same program established at Baptist Hospital and is achieving similar results, as outlined in the Showcase Project. By demonstrating that the successful energy efficiency measures taken at Baptist Hospital also work at Saint Thomas Hospital, Ascension is establishing a model that can be used by other health care organizations. The initial results are promising: energy usage at Saint Thomas Hospital has been reduced by 6.3% to 277.8 kBtu/sq. ft., increasing its ENERGY STAR rating from 18 to 28 in just nine months.

In FY11, \$33 million was allocated to the FIP, increased to \$50 million in FY12. Some specific, System-wide energy-saving efforts funded by the FIP include:

- Installing variable-speed drives on electrical motors for fans and air-conditioning chillers.
- Baptist Hospital replaced all T12 fluorescent bulbs with the more efficient T8 bulbs. A \$3 million investment throughout Ascension Health Alliance in T8 bulbs was projected to net about \$2 million in annual savings.