

Montgomery County, Maryland

Resource Conservation Program

In Montgomery County, Maryland a strong engineering focus and awareness within the facilities management arena has led to impressive levels of savings in both new construction and existing County-owned buildings. Key to the County's success has been the insight and wisdom of its energy and engineering staff who understand that buildings must be treated as dynamic systems. First, they must be properly designed and commissioned to take advantage of the synergies between energy-efficient design and technologies. Second, the County has leveraged major dollar savings by plugging the leaks in its 187 existing buildings that constitute fully 3.25 million square feet of space. The facilities include a judicial center, libraries, police and fire stations, community health centers, day care centers, halfway houses, and recreation centers.

Montgomery County's foremost success has been the delivery of deep savings. For new construction, it has met the aggressive goal of saving 40% of the energy used in a typical new facility. Similarly, it is achieving 30-40% savings in retrofits. Remarkably, these major savings have been achieved with limited dollars. The County has also recognized that its facilities' operations must be continually refined. It has been a national leader in the field of commissioning buildings, stemming the erosion of measure savings while assuring dollar savings that can be used for social purposes such as adding staff to the police force and books to local libraries.

The County has also placed considerable emphasis on retrofitting existing facilities, drawing incentives from local utilities where possible. It is a Green Lights Partner and as such has the goal of retrofitting 100% of its facilities by the year 2000. (It has already addressed 56% of its square footage.) And having established an impressive track record, the engineering staff has earned credibility within the County government so that it can get projects approved expeditiously.

The bottom line is that the County's total electricity use has fallen by 5% since 1992. Even as it added 343,000 square feet of new space, its energy bill has remained stable. Cumulative cost savings of \$2.3 million from 1992 to 1995 have resulted from the installation of energy management control systems, roof insulation, lighting upgrades, and design guidelines. Thanks to its investments in efficiency, Montgomery County expects over \$5 million in cumulative energy cost savings by the turn of the century. Furthermore, it has leveraged non-energy related benefits such as improved work environments, promoting environmental responsibility, while setting a powerful example for private sector firms. And in the process, the County has been able to allocate saved energy dollars to more important public programs. These are the result of a facilities staff doing an exceptional job, developing a template for similar County and local government initiatives.

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MONTGOMERY COUNTY, MARYLAND Resource Conservation Program

Sector: County-owned facilities

History: Energy efficiency initiatives prompted by oil crises of 1970s; basic low and no-cost measures installed in early 1980s; aggressive program developed and implemented in the late 1980s

Mechanism: Division of Facility Services implements programs to address facility design and commissioning, plus lighting and HVAC retrofits; coordinates other departmental activities related to energy such as roof and equipment replacements

Measures: Comprehensive lighting retrofits, implementation of energy design guidelines, HVAC upgrades, installation of energy management control systems in largest facilities

1992-1995 CUMULATIVE PROGRAM DATA

Energy savings:	35,578 MWh
Lifecycle energy savings:	420,860 MWh
Cost savings:	\$2.3 million
Nominal Cost:	\$2.1 million

The Results Center produced 126 profiles of the most successful energy efficiency and renewable energy programs in the United States and around the world in the early and mid 1990s. With the support of the John D. and Catherine T. MacArthur Foundation, Ted Flanigan directed a research team at Colorado-based IRT Environment to produce and distribute these exceptional examples. Thanks to strong demand for solid case studies, The Results Center was supported by dozens of major utilities and energy associations worldwide. Today, The Results Center is managed again by Ted Flanigan, now at California-based EcoMotion Incorporated, a firm focused on strategic consulting, information dissemination, program design, outreach services, and aggressive implementation. To nominate highly successful programs, contact: The Results Center, c/o EcoMotion, 15375 Barranca Parkway, F-104, Irvine, CA 92618, (949) 450-7155, or TFlanigan@EcoMotion.us