

Iowa Department Natural Resources

Iowa Energy Bank

The State of Iowa has proven to be an incubator for good ideas and the Iowa Energy Bank is yet another home-grown concept that deserves recognition and that will likely result in replication. The Energy Bank has been spurred on by several factors not the least of which has been the state's 97% dependence on out-of-state energy supplies. Iowa is not only energy poor, but annual energy purchases have drained its economy to the tune of over \$4 billion per year.

In 1985 the Iowa legislature mandated its Department of Natural Resources to design and implement major energy efficiency initiatives for traditionally difficult market segments: public and non-profit facilities. The resulting Iowa Building Energy Management Program targets state and local government facilities, public school districts and area education agencies, private universities, hospitals, and other non-profit groups. The goal of the program is to install all cost-effective efficiency improvements in these facilities with an aggregate payback period of six years or less by 1998.

The Iowa Energy Bank is a subset of the Building Energy Management Program and was established to facilitate and finance energy improvements in Iowa's 418 school districts, 128 hospitals, 34 private colleges and 15 community colleges, and 967 local governments. (State facilities are addressed under a parallel program called the State of Iowa Facilities Improvement Corporation.) The Department of Natural Resources determined that a combination of audits and engineering analysis followed by lease financing was the most attractive mechanism for the retrofits, allowing public institutions to avoid issuing bonds or calling public referendums to secure the necessary capital. This form of financing also allows the costs of the payments to be less than or equal to the monthly savings from the improvements, providing a win-win situation in this debt-averse state. Participants can also secure financing from alternative sources and the program has recently been enhanced to take advantage of capital loan notes.

Cumulative enrollment in the Energy Bank to date has been very impressive. Already the program has reached 390 participants or 22% of the eligible customers with 265 school districts providing the largest fraction of the savings. Twenty-one hospitals have also undergone retrofits. Of the total participants, 212 have financed improvements through the Energy Bank engaging \$8,927,400 worth of retrofit improvements which have resulted in cumulative savings of nearly 23 GWh and over 105 GWh equivalent of natural gas.

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IOWA DEPARTMENT NATURAL RESOURCES Iowa Energy Bank

Sector: Institutional

Measures: Electric and gas efficiency measures including lighting applications, thermal envelope improvements, and HVAC equipment

Mechanism: Third-party lease financing for improvements to schools, colleges, hospitals, and local government facilities

History: Available to schools since 1986, hospitals since 1988, colleges since 1989, and local government facilities since 1990

1993 Program Data

Annual electricity savings:	1,609 MWh
Annual natural gas savings:	492 mcf
Lifecycle electricity savings:	22,824 MWh
Lifecycle natural gas savings:	6,974 mcf
Cost:	\$2,569,300

Cumulative Data (1988-1993)

Electricity savings:	23,749 MWh
Natural gas savings:	3,478 mcf
Lifecycle electricity savings:	168,427 MWh
Lifecycle natural gas savings:	24,671 mcf
Cost:	\$12,203,600

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