

facilitating the design of LBL's "superwindow" technology. Other uses range from design of more conventional windows by architects and engineers to development of data by manufacturers for product specification sheets.

DHC Development: Kent County, Michigan

District heating systems can save substantial amounts of energy on a community-wide basis. When combined with a waste-to-energy facility, district heating has the added advantage of helping to solve one of the nation's most serious environmental problems -- disposal of municipal solid waste. In 1986, DOE provided Kent County, Michigan with \$50,000 to assess the feasibility of a district cogeneration system. As a result of this study, Kent County is constructing a 625 ton-per-day waste-to-energy cogeneration facility. The facility will serve six communities with a total population of approximately 320,000, including Grand Rapids. The

system will deliver 115,000 pounds of steam per hour to the county-owned district heating loop and generate 19 megawatts of electricity to be sold to a community power company. The project serves as an example of how a local government can develop a community energy system that provides an alternative to the use of oil or gas.

City-Wide Energy Conservation: Phoenix, Arizona

As a result of skyrocketing oil prices throughout the 1970s, the city of Phoenix, Arizona, made a firm commitment to energy conservation. Since 1978, Phoenix has saved over \$20 million through a comprehensive energy conservation program that cost the city only \$2.5 million. A series of annual DOE grants through the Urban Consortium Energy Task Force provided a \$576,000 supplement to the city's investment and have resulted in more than \$2 million in energy savings/cost avoidance since 1981. The projects focused on energy savings in three

Facility	Estimated Energy Savings (KWH)	Energy Use Without Savings (KWH)	Cost Avoidance (Dollars)	Percent Energy Savings
Libraries	3,283,637	7,315,320	295,527	45
Municipal Building	4,627,812	11,499,492	416,503	40
Other Downtown Bldgs	2,877,363	7,440,403	258,963	39
Police Department	4,866,517	14,780,064	437,987	33
Cultural Centers	741,675	4,526,715	66,751	16
Fire Stations (14)	308,151	2,122,029	27,734	15
Human Resources Dept.	358,027	3,922,193	32,222	9
Service Center	78,483	1,269,700	7,063	6

City of Phoenix Energy Conservation Program: Annual savings, 1978-1987, at major municipal facilities.