

City of Saarbrücken, Germany

Comprehensive Municipal Energy Efficiency

Saarbrücken is located in the Saar River Valley along the French border in the heart of Germany's coal country, adding a healthy touch of color and irony to Saarbrücken's extraordinarily progressive energy platform. Despite the fact that the City sits on hundreds of years worth of coal, the City and its utility, Stadtwerke Saarbrücken, view coal as a "transitional fuel" which must be replaced with highly-efficient and non-polluting power supplies (through advanced power plants and district heating), energy efficiency, and renewable energy resources. In each of these areas, Saarbrücken has become a European and international leader.

The basis for Saarbrücken's success with promoting efficiency has been its financing program called The Participation Program. This program provides positive monthly cash flow for participating customers while shifting the burden of the cost of energy efficiency from the utility's balance sheet to consumers. Stadtwerke Saarbrücken works with local banks to aggregate customer loans, then guarantees the loans against default, and by doing so has been able to buy-down loan interest rates for its customers. To date the banks have lent close to \$22 million while the utility's cost of administering the program has been on the order of \$2.2 million.

Bolstered by its successful financing program Stadtwerke Saarbrücken has realigned its rate structures and now offers 14 discrete energy efficiency programs that range from consumer education programs to energy conservation diagnostic services and incentive programs. For instance, more than 15,000 information requests are handled annually by the downtown Info-Center E. The Heat Passport Program provides lower electricity rates for customers that can prove low energy intensities. The utility provides rebates for purchasing energy-efficient appliances and incentives for converting from electric to gas water heating. A pilot program is focused on school lighting and school gymnasium lighting retrofits in particular.

Saarbrücken's efforts with solar energy are also exemplary. In addition to retrofitting each of its community pools Stadtwerke Saarbrücken's Solar Rooftop Program is intended to install photovoltaic arrays on approximately 1,000 homes throughout the City. To date over 130 systems have been installed. The utility has also invested in a future concept home in Ensheim where the entire roof of the home is covered with photovoltaic panels owned by the utility!

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CITY OF SAARBRÜCKEN, GERMANY Comprehensive Municipal Energy Efficiency

Utility: Stadtwerke Saarbrücken

Sector: Residential

Measures: District heating conversions, insulation, windows, appliances, and solar installations

Mechanism: Utility aggregates and guarantees energy efficiency loans and by doing so buys down interest rates on loans provided by local banks to fund efficiency measures. Utility also offers 13 other programs including information and lighting programs, many with utility incentives

History: District heating first installed in 1964, the Saarbrücken Energy Concept was established in 1980, and the Participation Program began in 1988

The Participation Program Cumulative Data

Energy savings: ~ 75 GWh

Total costs: \$24.2 million

Utility Costs: \$2.2 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