

**Electricité de France**

**Operation LBC**

The focus of this profile is the largest compact fluorescent lightbulb leasing effort ever undertaken by a utility, Operation LBC (Lampe Basse Consommation which means low consumption bulb). Implemented jointly by Electricité de France (EDF) and ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie or the French Environment and Energy Management Agency), Operation LBC sought to lower evening peak demand on the Caribbean islands of Guadeloupe and Martinique by cutting the demand for lighting. The programs's success caught both EDF and ADEME by surprise.

In the late 1980s Guadeloupe's oil-fired power plant was nearing maximum capacity due to an increase in tourism. Environmental concerns caused ADEME to consider alternatives to building either a new plant or adding capacity to the existing one. ADEME then analyzed electric usage on the island and determined that a significant share of the evening peak demand was a result of lighting provided by incandescent lamps. A market survey was conducted which showed that compact fluorescent lamps (CFLs) could flatten the peak but that customers knew very little about them. ADEME went to EDF to see if the utility would be interested in raising awareness about the benefits of CFLs and financing a CFL leasing program. They were and planning began. Then in September of 1989, just as the effort was gearing up, Hurricane Hugo hit Guadeloupe leaving 12,000 people homeless and many businesses destroyed, delaying the project as the island concentrated on rebuilding.

In May of 1992 EDF and ADEME launched Operation LBC on Guadeloupe. After an extensive television, radio, and print awareness-building campaign, EDF sent every customer on Guadeloupe a coupon good for up to 10 compact fluorescent lamps at no initial cost. Lease payments were designed to be the same as, or even less than, the projected monthly energy and bill savings, creating a revenue-neutral or even positive cash flow situation for participants. Initially 100,000 lamps were placed in 80 retail stores. The response was so overwhelming that 12,000 households snatched them all up in one and a half days, with an additional 32,000 households placing orders for 250,000 more. Ultimately 34% of all households redeemed their coupons for an average uptake of 7.8 CFLs each.

The success on Guadeloupe prompted EDF and ADEME to implement Operation LBC in 1993 on the island of Martinique where a startling 345,000 compact fluorescents were distributed in just a few months. The programs resulted in 7 MW of peak demand savings on each island, plus 29-33 GWh of annual electricity savings, while providing residents with a powerful means to reduce their bills.

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**ELECTRICITÉ DE FRANCE  
Operation LBC**

**Sector:** *Primarily Residential*

**Measures:** *Lighting: 15-watt compact fluorescent lamps*

**Mechanism:** *Over 700,000 CFLs leased by residential customers of EDF on the French Caribbean islands of Guadeloupe and Martinique*

**History:** *Operation LBC was implemented on Guadeloupe in May 1992 and on Martinique in February 1993; Most recent year data below covers Guadeloupe only*

**MOST RECENT YEAR PROGRAM DATA**

Energy savings:	29,927 MWh
Lifecycle energy savings:	164,599 MWh
Capacity savings:	7 MW
Cost:	\$457,500

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](mailto:TFlanigan@EcoMotion.us)