

# Profile: La Electricidad de Caracas

*Regularizing the purchase of electricity through the Barrio Eléctrico Initiative*



## Challenge

More than half of the residents of Venezuela's capital, Caracas, live in informal settlements. With neither security of tenure nor legal rights to their dwellings, they often cannot access legal electricity connections. The utility connects unplanned communities only if the municipal authorities commission the installation of power lines. The situation has led to the proliferation of electricity theft by tapping street lamps and an increase in the number of accidents caused by hazardous, non-standardized illegal connections.



A worker in Caracas repairs the grid, helping to ensure reliable service.

## Innovation

AES-EDC ([www.corpoelec.gob.ve/](http://www.corpoelec.gob.ve/)), the electricity company responsible for Caracas, launched the Barrio Eléctrico Initiative in 2003, after concluding that more than a simple inability to pay was responsible for energy theft. It hired social workers to establish a direct and friendly relationship with residents and community leaders and organized “electricity roundtables” to develop a participatory solution to the electrification problem in the slums. The social workers also built awareness about the initiative and persuaded residents of the benefits of legal electricity connection, informing them about potential savings on repairs of home appliances, which often broke down as a result of the poor quality of illegal service obtained by tapping cables. The process also involved relaxing the usual requirements for becoming a customer, given that slum residents did not always have titles to their dwellings.

The improved understanding about local needs, energy usage patterns, and residents' willingness to pay were taken into account in developing better targeted, more cost-effective solutions. A key innovation was the installation of collective meters, which give customers who are unable to afford the price of individual connections access to the grid. Community-based intermediaries were established to collect bills and provide maintenance support to customers. Prepaid meters were installed and local community service areas used to sell prepaid cards. AES also allowed payment delays for the poorest customers with irregular incomes and introduced lifeline tariffs, with a flat rate of USD 1.5 for the first 200 kWh for new, legally connected individual households.

## Impact

In 2006, formal electric service user coverage increased by 110,000 to 460,000 people across 16 communities in Caracas. The company held 176 electricity roundtables; installed 300 prepaid meters, benefiting 1,200 people; put in 233 collective meters, benefiting more than 11,000 people; and authorized 22 commercial agents, who collected about USD 15,000 a month. Introduction of greater flexibility in terms of payment mechanisms and improved quality of service turned many residents who had relied on stolen electricity into paying customers.

Accidents related to the misuse of electrical installations decreased and overall security improved with the installation of street lighting. Illegal connections entailed average annual expense per household of about USD 100 in electrical repairs, and illegal reconnections cost USD 10–20 year. In comparison, a social tariff runs about USD 9 a year.

The newly legalized customers were able to operate businesses that required a reliable and stable supply of electricity. In addition, armed with utility bills, residents could now apply for services such as bank accounts.

### **Scaling Up**

To reach low-income consumers, AES-EDC made changes in its organizational and operational strategy to include illegal consumers as potential customers instead of shunning them. Combining technological upgrades with sociological approaches was the mainstay of the strategy and a key driver that helped revamp the perception of the company and improve acceptability among residents.