

Enermax Calope Hydroelectric Plant

Shared Value through Sustainable Power in Ecuador

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COMPANY DESCRIPTION

Established in 1949, with annual sales close to US\$2 billion and over 8,000 employees, *Corporación Favorita (CF)* is the largest retail business in Ecuador, running groceries, hardware, home appliances, and department stores.

THE OPPORTUNITY

For decades, Ecuador has faced recurrent blackouts due to lack of public and private investments in electrical power generation, which posed a continuous challenge to local businesses. At the same time, an important portion of the country's electrical power is obtained from traditional thermoelectric plants that burn fuels which are heavily subsidized, contaminating and, for the most part, imported.

In 2004, CF decided to take advantage of Ecuador's extensive hydrologic resources, in order to secure reliable, environmentally sustainable electrical power for its operations.

THE STRATEGY

CF decided to build the "Calope" 16 MW hydroelectric plant, not only to better support its business operations, but also to reduce its overall carbon footprint, reduce the need for imported fuels and government subsidies, and promote an underdeveloped rural community. Therefore, generating business and social value at the same time.

- **Redefining productivity in the Value Chain** by building a state-of-the-art hydroelectric plant at the mouth of the Calope River -located in a mainly agricultural region in the Ecuadorian Andes, CF redefined its value chain by generating its own sustainable and low-cost electrical power for its vast network of retail stores and industrial plants around the country.
- **Enabling Local Cluster Development:** Prior to building the Calope plant, the community near the river lacked adequate infrastructure for transportation, education, and community health. Therefore, in order to promote the development of the local community and to secure a skilled and healthy labor force to support the continuous operation of the Calope plant, CF trained local residents and offered them stable and well-paying jobs. CF also improved local schools, roads and bridges, promoted community engagement through family events, among other initiatives.



RESULTS – VALUE FOR BUSINESS AND SOCIETY

Since the Calope plant opened, CF has benefited from a stable, low-cost electric power supply for its operation. At the same time, the plant has reduced the overall carbon footprint of the business, generated additional income by reselling the plant's excess capacity, and benefited a local underdeveloped community, as we can see from the following data:

Business Results:

- Stable source of energy covering 42.97% of the CF annual power demand
- 8% savings in the KW/hour electrical cost for CF
- \$700,000 of annual additional income derived from the sale of Kyoto Accord carbon certificates (until 2012)
- \$1.6mill annually of additional income derived from excess capacity sold to the state grid during peak generation seasons.
- Calope's business and social success has provided CF with political leverage to develop new hydroelectric projects which are to be completed within the next 2 years

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Social Results:

- 66,185 tons of CO2 emissions avoided annually
- USD16.72 million in imported fuels avoided annually
- USD11.05 million in government fuel subsidies saved annually
- 50 (out of 58) permanent workers are trained and hired from local communities. Approximately 20 more are required during rainy seasons. In the near future, CF expects to hire 54 (out of 58) permanent workers from local communities
- Improved local water usage and environment due to water, flora and fauna management programs

LESSONS LEARNED, CHALLENGES AND OUTLOOK

- CF is currently developing two new hydroelectric plants (50MW each) that will generate enough clean electrical power that will not only cover all of the corporation's needs, but also would be sold to the national electric grid
- Government regulations prevent CF from taking full advantage of the cost savings and incremental income that its own electrical generation may provide
- Current government investments in several major hydroelectric plants will significantly expand local power generation and reduce electrical costs nationwide. This development might reduce the need for private power generation

