

Socially Responsible Geothermal Development in El Salvador

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Keywords: social responsibility, social and environmental impacts, development, ethics, El Salvador

ABSTRACT

LaGeo S.A. de C.V. , a company dedicated to the production and commercialization of electricity generated from geothermal sources, has worked since its creation as a private entity in November 1999 to become an exemplary corporate citizen in the context of National Development. Much experience has been gained in the implementation of projects and management systems related to social responsibility, beyond strictly legal requirements. This experience has helped new geothermal projects be accepted by the communities where they are built.

1. INTRODUCTION

There is a growing global tendency to apply policies of corporate responsibility emanating from the boardrooms, with an emphasis that it is not possible to have long-term entrepreneurial success if a company abdicates its social responsibility. This is expressed clearly in De la Cuesta's affirmation that "for companies to grow in the long term, it is imperative that they hold their products and processes to ethical standards that integrate its procedures, and that they try to respond to the demands of the social agents that they affect, or that affect them" (De la Cuesta et. al., 2002, free translation).

We observe, however, that in the geothermal literature little has been mentioned about this topic, aside from certain company "commercials". Much has been mentioned, on the other hand, about the fact that geothermal energy projects produce few greenhouse gas emissions, in comparison to fossil fuels, and that it is a versatile renewable energy source that is among the cleanest of the commercially viable technologies available today. If we add to this the fact that a geothermal company complies with legal requirements, pays its taxes, and provides employment, we may even have the idea that just about *any* geothermal development can and will surpass ethical standards for social and environmental responsibility. In reality, however, many geothermal projects face strong opposition from politicians, neighbouring communities or environmental pressure groups, which would indicate that either the social and environmental impacts are more significant than is generally accepted, or some concerns of stakeholders have not been properly addressed, or both.

We examine in this paper the standards for social responsibility that LaGeo, a Salvadorean geothermal company, has defined for its own operations, and the impacts that these decisions have had on the company's present and future.

2. DEFINITION OF CORPORATE SOCIAL RESPONSIBILITY

Modern administrative tendencies, such as Donaldson (1982), Drucker (1988), Melendo (1990), and García Echevarría (1994), mention the importance of incorporating objectives in the company's agenda aside from purely economic ones. Termes (1995) defines this as: "creating wealth for all the stakeholders in the Company, and providing a real service to the community (free translation)". In this way, social responsibility can be interpreted as an ethical-social imperative present in each and every one of the Company's transactions with the different social agents it comes in contact with. It is in these interrelations that a series of moral rights and duties exist, that define the scope of the social responsibility.

In LaGeo, five distinct groups of stakeholders were defined: shareholders, clients, employees, suppliers, and neighbouring communities. Note that "the government" is supposed to oversee the company's actions in the marketplace, with its employees, and with the environment, and so was not defined as a separate stakeholder. The scope of responsibility with the stakeholders was taken to go beyond simply legal limits, and was set at a level of active participation in the welfare and life quality of each.(!) This apparently simple statement, together with the definition of corporate values, vision and mission, has positively transformed the perception of all work in and for LaGeo.

The obligations to the stakeholders were defined, briefly, as follows:

- To the shareholders, a return on investment that exceeds the average for the Salvadorean electricity market.
- To the clients, fair and ethical market practices, fair market pricing, never to take advantage of regulatory weaknesses to the detriment of the consumer.
- To the employees, above average compensation, an interesting workplace, and an opportunity to grow to their potential.
- To the suppliers, prompt and fair payment for their products and services.
- To the neighbouring communities, respect for their environment, and active participation in their local development plans.

It should be observed that the interests of the stakeholders are usually not in harmony, so there is a need to balance the interests in accordance to the company's possibilities. This is the job of the Administration. In LaGeo's own

experience, it is possible to fulfill all reasonable expectations for all the stakeholders.

3. REASONS TO IMPLEMENT A SOCIAL RESPONSIBILITY POLICY

Certainly working within an ethical framework will reduce conflict with and among the stakeholders, and thus will reduce tensions and time delays which impact geothermal projects, especially in a region where geothermal developments are much needed. However, it should not be misconstrued that having a social responsibility policy and working consciously to implement it will eliminate all inconveniences, as much opposition to company policies or practices come from external interests, entirely out of the reach of the corporation.

Nonetheless, it is commonly held in LaGeo that the conflicts that have to be managed are considerably less in number and magnitude than if there were a complete absence of social responsibility measures. From this point of view, these are as much good business practice as they are a moral imperative.

In LaGeo, the first driving force behind the idea of social responsibility was the social pressure from communities around Berlín power plant. This power plant was built by the state-owned electric utility company, CEL, then transferred to LaGeo in 1999 as part of the electricity sector deregulation and liberalization. The plant was sited in a rural area, prone to natural disasters, such as landslides and earthquakes, and populated by around 8,000 people, most living in extreme poverty. When the condensing power plant began normal operation, the neighbours complained to the local authorities that their lives were negatively affected by the project, and they wanted the operations to stop.

The locals accused the company (incorrectly, it was proven later) of contaminating groundwater aquifers, polluting the air with hydrogen sulfide, and generally endangering the welfare of the local population. To the company's engineers, who worked with hard scientific data, the accusations were nonsense, but the negative perception was so strong that roads were blocked, and lawsuits were initiated with the support of radical environmental groups.

The company, instead of responding with force and more legal pressure, decided to work hand-in-hand with certain leaders of the communities, as a good neighbour, to remedy or correct any negative effects they were perceiving, and demonstrate that the geothermal project and its by-products could be used to their benefit. These measures were adopted from the beginning of operations of LaGeo, in November, 1999, parting from the definition of vision and mission, and grew into a general philosophy for the entire company.

4. STEPS TOWARD A SOCIAL RESPONSIBILITY POLICY

The idea of social responsibility was not so much implanted into LaGeo from the outside, as it grew organically from within the organization in response to other policies and needs. The original steps taken were:

(i) definition of company vision and mission that include all the different stakeholders; (ii) definition of corporate values, and the mechanisms to promote them; (iii) definition of an internal Code of Ethics, and formation of an Ethics Committee to ensure compliance; (iv) promotion of teamwork and empowerment of the teams, (v) reduction of the hierarchical levels in the organizational structure.

This created a structure that spontaneously gave birth to several projects and initiatives related to corporate social responsibility, at different levels in the organizational pyramid, such as: (a) implementation of an environmental management system in the Berlín Power Plant, following ISO 14000 guidelines; (b) integrated processes to ensure compliance with environmental, health, and safety standards in every project that is executed, including by subcontractors; (c) creation of a community assistance programme (programa de ayuda comunitaria, PACO) to work with neighbouring communities in their local development plans, especially when these plans coincide with LaGeo's; (d) adoption of improved O&M and accounting practices that benefit the shareholders; and (e) adoption of a compensation scheme whereby the best-paid employee earns, at most, ten times more than the lowest-paid employee.

It should be mentioned that, as one result, Berlín power plant won the National Environmental Award in 2002, and Ahuachapán Total Reinjection project is a contender for the same prize in 2004.

These initiatives, all supported from the boardroom, were at first driven by intrapreneurial "poles" throughout the company, and required changes in the organization that facilitated the creation of a network to interrelate the different poles. The network produced a second generation of spontaneous initiatives that addressed problems more deeply and directly, again following ideas from the employees: direct involvement in the local communities' development plans; a self-financing system to manage lubricants, solid and liquid waste; reforestation campaigns; participation in landslide prevention measures; a human resources administration system based on competencies; a geothermal science and technology diploma course, run by employees for employees; very good relations with suppliers, leading to lower costs for goods and services; new opportunities for growth and expansion; systematization of quality assurance practices and procedures.

All these initiatives were finally joined together under the umbrella of "corporate social responsibility", and the attempt is now being made to generalize these guidelines into standard operating practices.

5. LESSONS LEARNED

Work in social responsibility issues represents a new area of human development, beyond what are normally considered the essential obligations of our jobs. Because the system only works if most people in the organization are imbued in the philosophy, and empowered to take action, much of the success depends on the results of debate and discussion - internally among peers and with outsiders - to build a consensus around the actions to be taken. LaGeo employees are now trained to question their peers and superiors, and to assimilate criticism from others, even where the local culture is one of obedience.

We present some of LaGeo's experience, not as a recipe to follow, but simply as general lines of learning:

1. The systems or projects implemented in one branch of the organization (like a power plant) must be standardized and adapted to the overall company structure. If not, when another group in the company has to interrelate, the different visions or procedures will cause conflict and delays.

2. The internal systems must be communicated to the contractors, and they must be required to comply with the same standards, otherwise the company will simply contract out its “dirty work”.
3. A gradual implementation is both possible and convenient.
4. A cultural change is desirable, necessary, and ultimately indispensable for the system to be sustainable.
5. Day-to-day operations and urgent necessities are incompatible with the long-term systemic vision required to design and implement a standardized quality system, so the different jobs should be carried out by separate, though interrelated, teams.

6. FUTURE PROJECTIONS

As mentioned previously, work is currently being carried out to implement an umbrella Integrated Management System (IMS), that incorporates the concepts of quality assurance, environmental protection, health and safety, and social responsibility. Not surprisingly, this has turned out to be a challenge for the company leadership and even the most methodical analysts. What makes the system possible is that there is currently no time pressure. All major issues have already been dealt with and essentially solved. Implementing the system is now a matter of discussing, standardizing, and documenting procedures that are already being practiced in most of the company. What is required is a good dose of patience and discipline, and the result will be a deeper cultural change than the one already experienced.

7. CONCLUSIONS

Though it is commonly held that because geothermal developments emit far fewer harmful gas emissions than thermal sources of energy, geothermal is necessarily environmentally benign and socially responsible, public opposition to several geothermal projects reveals otherwise. In fact, environmental and social impacts from geothermal

projects can be quite significant, especially to neighboring communities. In order for geothermal developments to be sustainable in the long term plus accepted and supported by society at large, companies must systematically adopt socially responsible practices, including responsible market practices, environmental management, work with the community, and ethical accounting practices. This is a particularly sensitive issue, as a single bad experience affects the reputation of the entire industry. Adoption of these measures will not eliminate conflict among the stakeholders in the project, but it should be substantially reduced.

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