

FROM SUSTAINABILITY TO HUMAN RIGHTS: A CASE STUDY ON ENDESA/ENDESA BRASIL

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Human rights issues addressed

- Right to an Adequate Standard of Living
- Right to a Healthy Environment
- Sustainability and Environmental Responsibility

Human rights standards, tools and initiatives mentioned

- Endesa Sustainability Policy
- Endesa Seven Commitments to Sustainable Development

Abstract

This case study describes how Endesa developed and implemented a profitable business model in one of the poorest regions of Brazil. Endesa is a Spanish utility company that provides electricity to the state of Ceará, a state that has one of the largest concentrations of rural poor in Brazil. In responding to the basic demands of their clients, Endesa adopted a waste management project usually led by governments and turned it into a profitable business venture. The Ecoelce program introduced by Endesa allows rural Brazilians to trade recycled waste for credits toward their electricity bill. Reflecting Global Compact Principles 7 and 8, the program demonstrates Endesa's support for a precautionary approach to environmental challenges and its dedication to greater environmental responsibility. In addition, the program actualizes important human rights enshrined in the Universal Declaration, namely the realization of economic rights and the right to an adequate standard of living. This case study will consider the process Endesa undertook to ensure complete integration of human rights principles into its business practices.

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1. Company Profile

Established in 1944 and headquartered in Spain, Endesa is one of the largest electricity companies in the world. Operating in ten different countries, over 50% of the electricity Endesa produces is generated outside of Spain, and the company has been publicly traded on the New York Stock Exchange since 1988. Endesa expanded its operations to Latin America in 1996. With a controlling interest in Latin America's largest private electricity group, Endesa operates in Chile, Argentina, Colombia, Peru, and Brazil.

This case study focuses on Endesa's activities in Brazil. Incorporated in 2005, Endesa Brasil is engaged in the distribution, generation, transition, and commercialization of energy. Importantly, 25% of Endesa's consolidated assets are located in Brazil. Endesa Brasil provides service to 5.1 million clients and operates in four Brazilian states: Rio de Janeiro, Ceará, Goiás and Rio Grande do Sul. Through these activities, Endesa Brasil creates 18,000 direct and indirect jobs and has an installed potency of 1004.6 megawatts.

Endesa Brasil's business lines are conducted through five entities: Ampla, Coelce, Endesa Cachoeira, Endesa Fortaleza and Endesa Cien. Together, Ampla and Coelce distribute electricity to over 240 cities in an area covering approximately 95,000 square kilometers. Endesa Cachoeira and Endesa Fortaleza operate a hydroelectric plant and thermoelectric plan, respectively, and are responsible for energy generation. Endesa Cien operates a converter and facilitates the import and export of energy between Argentina and Brazil.

2. Case Study

(a) *From Sustainability to Human Rights: Endesa's Core Commitments*

Endesa's first step toward incorporating human rights into its business practice was to establish a broad commitment to sustainability. Recognizing that its long-run profitability depended on responsible growth, Endesa's Executive Management Committee established the company's Sustainability Policy, through Seven Commitments to Sustainable Development, which serve as a guide for Endesa's business operations worldwide.

This case study focuses on one of those Seven Commitments -- the commitment to the development of the communities in which Endesa operates. In the utilities industry, there is often significant community opposition to the building of infrastructure related to electricity generation because of its large scale and significant impact on social and natural environments. Sometimes the complaint is that to build the necessary infrastructure; there is too much displacement of local populations.

Recognizing the need for greater community buy-in, Endesa in recent years stepped up its commitment to developing local ties. After analyzing stakeholder expectations, the company determined that in order to be a sustainable and profitable business it needed to become an even more integrated player in the local community.

The ethos extends to Endesa's individual subsidiaries and its employees. Each and every Endesa subsidiary has joined, separately and on its own behalf, in support of the Seven Commitments. As such, each Endesa entity has developed their own strategic plans carefully crafted to local conditions. All of the plans are subject to an external audit system which assesses their viability as an environmental management program. In Latin America, for example, each subsidiary is audited through annual sustainability reports, which are publicly available on the internet.

Additionally, each subsidiary has established Sustainable Development committees alongside local partnering organizations to ensure the company meets its global commitments. Amplifying these benefits is the fact that the standards required by the Commitments are also applied to Endesa's third party contractors and suppliers.

Importantly, this worldwide commitment to building local ties has led Endesa to effectively translate its original pledge of sustainable development to a deeper pledge in support of human rights and the Global Compact. Endesa's core business is to provide electricity, an essential component of the basic human right to an adequate standard of living. By including in its business plan the concerns of local communities, Endesa identifies both the business advantage of expanding its market reach to people of all income levels and its role in ensuring a fundamental human right.

With respect to human rights, the importance of electricity in societal development is clear. Many civil and business structures require a safe and continuous supply of electricity. On a community level, electricity enables the development of essential infrastructure such as hospitals, schools, and public lighting, and, on an individual level, electricity allows people to refrigerate foods as well as develop tasks such as reading and studying for school at night.

Therefore, it is Endesa's original commitment to sustainable business growth that evolved into a more targeted commitment to local communities and, eventually, recognition of the company's role in supporting the basic human right to an adequate standard of living. The result is that the company's long-term strategic plan of sustainability and building local ties mutually reinforces its pledge to support human rights and the Global Compact. And Endesa is soundly committed to the Global Compact Ten Principles, with each and every subsidiary, separately and on its own behalf, also committed with the Global Compact.

(b) Specific Projects: Endesa Brasil's Ecoelce Program

Endesa Brasil signed on to the Global Compact on 30 March 2005. Additionally, it supports the Millennium Development Goals (MDGs),¹ which seek to move beyond ideas to a results-oriented approach to sustainable development. Endesa Brasil's Ecoelce program embodies these goals by expanding access to electricity as much as possible while pursuing innovative business strategies.

Endesa Brasil distributes electricity to 2.5 million clients in the state of Ceará. Located in the Northeast region, Ceará is home to one of the largest concentrations of rural poor in Brazil and is often the target of development projects. In 2001, for example, the World Bank granted the Brazilian government a \$37.5 million loan in support of rural poverty reduction projects in Ceará.²

Endesa Brasil recognized an equally important role for the private sector in combating rural poverty and implemented the Ecoelce program in Ceará. Based on research carried out in 184 communities, Endesa Brasil observed systematic yet independent problems for both the corporation and the community:

1. From the company's perspective, the rural population was most likely to be insolvent and most likely to engage in theft of electric energy.
2. From the community's perspective, the rural population suffered from high incidences of disease which was related to inadequate waste collection systems.

Faced with this reality, Endesa Brasil developed the Ecoelce program. Under the Ecoelce program, clients with reduced purchasing power are allowed to recycle their trash in exchange for discounts on electricity. The objective is to provide the population with an alternative way of generating income and reducing the population's reliance on clandestine (and inefficient) sources of electricity.

Ecoelce operates by means of a management system where each low-income client need only present a bill to receive an electronic Ecoelce Card with their identification data. The client gathers waste and brings it to either a fixed or mobile collection point. Each point is managed in collaboration with or in partnership with local community associations. Fixed points generally function Monday through Saturday at easy access locations and mobile points generally function weekly or biweekly. Later, a private company that specializes in recyclables arrives at the collection points and transports the materials to its processing facilities.

For the clients, each class of waste is weighed and valued depending on the prevailing price for each material. Each client is responsible for separating the materials. Underpinning the program is a series of information sessions meant to guide participants on recycling and environmental awareness. Generally, a kilo of bottles is worth more than a kilo of plastic containers which are worth more than a kilo of cardboard. The value is immediately recorded on the client's card and the discounts are transmitted to Endesa Brasil's billing system for incorporation into the client's bill. The equivalence in terms of energy saved or carbon emissions avoided is also internally calculated based on accepted scientific standards by Endesa Brasil for inclusion in its annual sustainability report.

The computer program supporting this billing system was built in partnership with the University of Fortaleza, **Knowledge Networks and Business Solutions**, and the waste collection company Goncales. Additionally, all of the information – the location of collection points, the individually-registered customers and the total amount of credits obtained per client, are accessible via the internet.

Notably, in addition to individual clients, restaurants and hotels have participated in the initiative. Many times, these commercial entities donate their credits to non-profits. Since 2007, over 125,000 customers have benefited from the program, exchanging 5,700 tons of waste for 750,000 Brazilian reais (approximately \$327,510) in discounts on their electricity bills.

3. Analyses

In discussing the company's commitments to the Global Compact, Endesa's Sustainability Development Manager, Angel Fraile, sometimes refers to a quote by Albert Einstein: "In the middle of difficulty lies opportunity." As the quote suggests, there was significant "difficulty" facing Endesa in its operations in some regions of Brazil. Clients were often unable to pay their electricity bills and, as a result, clients sometimes resorted to illicit means of obtaining electricity. These inefficiencies directly affected Endesa's bottom line. The solution, however, was at the intersection of a larger societal problem – the extremely poor rates of recycling. It was from this confluence of problems that an "opportunity" was created.

For Endesa Brasil, the "opportunity" was the fact that 36% of the trash being discarded in rural communities was recyclable. To address both the corporations need for solvent customers and community need for proper waste collection systems, Endesa Brasil developed the Ecoelce Program. According to its coordinator, Vinicius de Lima Cunha, the Ecoelce program is a simple initiative but it produces significant results. The benefits of the Ecoelce program are threefold.

First, it results in economic benefits for both the company and their low-income clients. For the company, the program's potential long-term rewards dwarf its costs. Endesa Brasil's major expenditure was the one-time cost, approximately €150,000, of developing the software, computer system, and internet databases. The variable cost is minimal and limited to the marketing materials required for the collection points.

The company, however, benefits from both the increased consumption as well as the significant reduction in losses it previously bore from clients siphoning electricity illegally and/or failing to pay their electricity bill. Specifically, the company calculates that there has been a thirty percent reduction on its distribution net losses ratio and a sixty percent reduction on its failure to pay rate. In its first year of operation, and not considering gains from increased consumption due to electricity's greater affordability, the Ecoelce program translated into a benefit of €98,000. After three years, Endesa Brasil received its first returns on the investment rendering the program not only self-sustainable but profitable into the future.

Additionally, as a corollary economic benefit, the Ecoelce program fulfills Endesa Brasil's obligations to the government. Under concession agreements, the Brazilian Electricity Regulatory Agency, ANEEL, requires Endesa to invest 1% of its net operational revenue to Research and Development. While it is considered by the company to be a long-term sustainable project, the Ecoelce program fulfills this requirement in the short-term.

Equally important is the economic benefit to the local population. For the community, the program allows low-income clients to save their money and/or spend their money elsewhere. The president of a neighborhood association in one of the communities, Haroldo Pio de Oliveira, noted some thirty percent of association members who are registered for the program have not paid anything toward their electric bill in months. A cabinetmaker, Pio de Oliveria's own bill decreased from forty to eight Brazilian reais per month. Moreover, Ecoelce contributes to the economic development of the community. By providing a private sector solution to waste management, Ecoelce alleviates the burden on municipalities while also generating 52 direct jobs and 200 indirect jobs related to the recycling industry.

Second, the program benefits the environment. The program encourages intensive recycling by low-income clients and fosters greater environmental awareness. It protects local and global environments respectively by ensuring less garbage is put into landfills and decreasing the need for extracting raw materials. The materials recycled have resulted in over 1,300 tons of iron ore, over 5.5 tons of petroleum, and over 560 tons of new glass, being saved from consumption. Similarly, of the materials recycled, there were 920,000 kilos of paper collected which saved 69,000 trees.

Third, Ecoelce strengthens the company's ties to the community and provides a number of social and health benefits to the company's customers. For the company, the program provides Endesa Brasil with intangible benefits such as increased legitimacy to operate in its concession area and a positive perception by the public. For the community, Endesa ensures a better standard of living for the people in allowing payment via recycled materials. Notably, the numbers of waste-related diseases that occur in each community have declined. Waste is often a breeding ground for dengue fever. There is strong anecdotal evidence that, with the reduction of waste on the streets, the incidences of dengue have likewise declined.

4. Lessons Learned

Given its success, it is even more important to note that there were several difficulties in launching the Ecoelce program. In fact, the original idea was not formed in the rural communities of Ceará. It was originally proposed for implementation in Rio de Janeiro by Ampla, one of Endesa Brazil's other business entities. As the second largest city in Brazil, however, Rio de Janeiro was too large of a city to tackle for a pilot program.

The project idea was left idle until Coelce, Endesa Brazil's entity in Ceará, picked up the reins. Led by the manager Odailton Arruda, an innovation team from Coelce developed the Ecoelce program in Ceará. With the strong support of the communities, especially local associations, the Ecoelce program was finally born.

While it was a relatively straightforward program, it was a challenge to design the pilot in a way that benefited all those involved: the clients, the company, the recycling plants, and the environment. There were several factors important to its success:

First, Endesa Brasil introduced the program in communities where it already had built successful relationships with local associations. Many of the first local associations involved with Ecoelce were in fact Endesa Brasil's partners in other social projects. This allowed Endesa Brasil to build credibility and later attracted other local associations to request similar programs in their communities. In developing new relationships, Endesa Brasil considered the associations' structure, history, and their capacity to mobilize the local community.

The alliances developed were critical in gaining trust in the community. At the beginning of the program, representatives of Endesa Brasil were often seen by the community as distant agents who sought to collect on unpaid electricity bills or increase the cost of electricity. This fear required a number of town-hall meetings with community leaders and associations to explain the Ecoelce program.

Importantly, Endesa Brasil relied on this network of carefully identified partners in both the private and public sectors (as well as academic and institutional actors) in order to implement the project. For example, to establish collection points, Endesa relied on local leaders which facilitated the local population's acceptance and involvement in the initiative. While red tape and limited financial resources sometimes hindered the project's development, joint ventures with local leaders facilitated the process.

Second, Endesa Brasil was meticulous in its partnerships and negotiations with recycling companies. While it reached out to many recycling companies, the challenge was that many companies operate informally. In order to minimize the costs of intermediaries and other risks, Endesa Brasil partnered with recyclers who operated at the final step of the collection chain, were registered with the government and obtained environmental certifications.

Additionally, to ensure the Ecoelce program was economically sound, the company had to negotiate a fair price from its recycling partners. Today, the prices recycling companies pay for waste collected by Ecoelce is the same as any other agent operating in the respective areas. In the end, the support of legalized recycling companies greatly facilitated the installation of collection points throughout Ceará.

Third, the Ecoelce program includes an environmental education component. One of the challenges Endesa Brasil initially faced was the population's limited experience with recycling. As a result, Endesa Brasil dedicated a portion of its community presentations to trainings on the environment. Additionally, the people are educated via informational materials located at collection points and publicity materials for the Ecoelce program on the internet, television and on the radio.

Fourth, Endesa Brasil identified a program with innovative touches to simplify waste management systems:

- **Mobile Collection Points.** The program utilizes mobile collection points. In fact, the Ecoelce program allows clients to request new collection points in their neighborhood.
- **More than Traditional Recycling.** The program accepts more than used packaging. They accept used lead-acid batteries and used cooking oil, which is sold to companies making soap and biodiesel.
- **Flexibility in Billing.** The program allows clients flexibility and control with respect to their electricity bills. In other words, when a client chooses to recycle the client has control over their electricity bill. Additionally, clients can follow his or her account movements online.

Together, these innovations ensure the Ecoelce program is responsive to the rural community's specific-needs.

Fifth, the Ecoelce program started on a small scale. Launched initially on 18 August 2006 as a six-month pilot, the Ecoelce program operated in Pacajus and three other low-income communities in the Metropolitan Region of Fortaleza, the capital of Ceará. The company partnered with Rigesa, Pacajus City Hall and Ultrambiental, and it visited each community on an ad-hoc basis for waste collection purposes. In addition to mobile collection points, there was one fixed collection point in Fortaleza for clients living outside those communities to drop off their waste. It was only after the success of this pilot and the development of a solid business model did the Ecoelce program expand. In 2008, the Ecoelce program was present in 59 communities with 32 fixed collection points and 27 mobile collection points. Each point operates weekly or biweekly either in the Fortaleza metropolitan area or in interior cities. Additionally, Endesa had come full circle. It started EcoAmpla, a similar program through its subsidiary in Rio de Janeiro, and where the idea was originally rejected.

Sixth, Endesa Brasil responded to unforeseen challenges by being sensitive to all stakeholders involved. Many difficulties arose during implementation and required an ad-hoc, if calculated, response by Endesa Brasil. For example, in implementing the Ecoelce program, the company initially overlooked the interests of the homeless population in Ceará, many of whom depended on picking trash as a means of income. The company was unaware of the homeless' frustrations with the program until a representative from the Instituto de Formação Empreendedora e Educação Permanente who worked with the homeless called to schedule a meeting. At the meeting, Endesa Brasil's Institutional Relations Director, head of the Innovation Management Department and representatives from the association of homeless trash pickers, discussed how best to incorporate the involvement of homeless trash pickers into the program's operations. The result was not only the amelioration of stakeholder concerns and up tic in received recyclable materials, but also the creation of jobs for a vulnerable segment of the population.

Seventh, Endesa Brasil is continually improving the Ecoelce program as it recognizes recycling is most effective when done on a large scale. Industrial consumers often prefer virgin raw materials because recycled products cannot be purchased in mass quantities. In response, Endesa Brasil has 1) expanded the program to meet large scale demands and 2) sought new relationships with industry partners in order to increase the variety of recycled materials accepted at collection points. For example, Endesa Brasil is currently working with cosmetics companies in the hope that the Ecoelce program may soon add discarded packaging from cosmetics to its list of accepted materials.

Finally, it is important to note that one of Endesa's priorities is to fully document all of the program's benefits. While Endesa's economic gains to the company are quantifiable, other benefits are not easily captured. For example, there is a perception in the communities that disease has declined due to the program but no hard evidence. The company continually seeks ways of evaluating the improvements gained in these human development indicators.

5. Conclusion

For Endesa, the Ecoelce program is not considered a charitable activity. It is an integral part of the company's business plan. While it supports values enshrined in the Global Compact, the purpose of the program is to strengthen the company's relationship within the communities in which it operates. As such, the Ecoelce program remains directly tied to the company's overall strategic plan.

The expansion of electricity to new markets clearly supports Endesa's long-run business plan. Notably, however, not only do Endesa's returns improve, but so does the quality of life as the community

develops. The program is a model of how to identify opportunities when a company's business interest overlaps with society's interest in ensuring the basic human rights of its population.

The greater consumption associated with more people attending school and relying on basic infrastructure translates into higher profitability for Endesa. Additionally, company managers are quick to point out that this is true even when the community's need changes from mere consumption of electricity to a demand for "efficient" energy. When a country prospers, Endesa is able to develop and sell products and services related to "green" energy.

Understanding, as an electricity company, Endesa's business model is focused on sustainability. As Angel Fraile states, "sustainability is part of our DNA." However, this focus on sustainability should not overshadow an important corollary – the company's commitment to human rights and that commitment's relationship to economic opportunities. Establishing closer connections with the community through social action projects is part of Endesa's strategy of both ensuring customers are aware of this commitment and developing future business lines. Endesa Brasil's Sustainability Manager, Bonança Mouteira, noted the community alliances forged in the creation of Ecoelce have proven to be valuable in developing additional joint ventures between Endesa Brasil and the government. As a result, the Ecoelce program has repeatedly been recognized internationally. In 2008, the Ecoelce program won the World Business and Development Award (WBDA). Organized by the United Nations, the WBDA rewards business-led initiatives to alleviate poverty and further sustainable development.

While not without its challenges, the Ecoelce program clearly demonstrates the value of links between core business practices and the Global Compact, MDGs, and the Universal Declaration on Human Rights. In addressing the problem of insolvent clients and rampant energy theft, Endesa Brasil implemented a program that addresses the company's business needs, fosters environmental sustainability and provides a source of income to low-income clients.

¹ The Millennium Development Goals are as follows: end poverty and hunger, achieve universal education, promote gender equality, reduce child mortality, improve maternal health, fight against HIV/AIDS, ensure environmental sustainability, and develop global partnerships.

² The World Bank, Press Release No. 2001/405/LAC, "Brazil: World Bank Approves \$144 Million for Rural Poverty Reduction" (June 26, 2001).