World Resources Institute

Sustainable Enterprise Program
A program of the World Resources Institute

The AES Corporation (B)

The Choice: The Guatemala Reforestation Project

With some trepidation, Sturges approached the 2:00 pm Operating Committee Meeting with her presentation materials. Sturges ran through the implications of the greenhouse gas buildup in the ozone and its potential link to global climate change. Then, she recommended that AES should fund a reforestation project in a tropical developing country to offset the carbon dioxide emissions that may be contributing to that buildup. She defended the project as being the most technically feasible, potentially coming under the 1% of capital costs of Thames, having positive social implications and ensuring AES's position as the least cost supplier of clean coal-fired power plant energy. She paused to let the idea sink in, and was greeted with an exclamation from Dennis Bakke, President and Chief Operating Officer of AES: "Great idea Sheryl!"

The company asked The World Resources Institute(WRI) to advise them on the implementation of a reforestation, or tree-planting, program in a developing country. Over the next six months, WRI convened a panel of foresters and development experts to analyze various proposals from

This case was prepared by Marcy Trent of the Sustainable Enterprise Program and reviewed by James E. Post, Professor of Boston University School of Management; Forest Reinhardt, assistant Professor of Harvard Business School; and Walter D. Scott, Professor of Kellogg School at Northwestern University to stimulate class discussion rather than to document effective or ineffective management strategies.

development agencies in the reforestation program. A project with CARE, an international relief and development organization, was chosen to help 40,000 smallholder farmers in Guatemala plan more than 52 million trees over a ten-year period. A total of 385 square miles of trees would be planted, one megawatt worth of carbon emissions for each two square miles planted. The forty year sequestration would amount to 19 million tons of carbon in the following manner:

35% carbon mitigated by developing managed woodlots
- wood harvested would be used for building materials and firewood
- 15% new growth; 20% protecting existing forest

60% carbon mitigated by agro-forestry planting
- trees help stabilize farm land, add nutrients to the soil
- all 60% of mitigation is from protecting existing forests

3% carbon mitigated by preventing forest fires

2% carbon mitigated by adding carbon to soil

AES was able to leverage its $2 million grant into $15.5 million worth of funding from the following sources:

U.S. Peace Corps (labor value)	$ 7.5 million
U.S. AID (food aid)	$ 1.8 million
Guatemalan Government	$ 1.2 million
CARE	$ 2.0 million
AES	$ 2.0 million
Total	$ 14.5 million

WRI announced the project in a press release on October 11, 1988. Reaction to the carbon offset initiative was mixed. The *New Yorker* ran a cartoon depicting a sooth-sayer absolving a corporation of its pollution sins by telling the corporation how many trees to plant. On the other hand, *Time* ran a short article calling the project "a healthy environmental equation." Two other publications, one an environmental advocacy magazine and the other an academic research journal, described the project in a very positive light and expressed a hope that the project would be emulated by other companies in the future. Because the feedback from the press was overall quite positive for AES, the small independent power producer in the United States gained international recognition, helping their eventual expansion overseas.

Investors in AES were worried and confused over the non-profit project, and the utilities, AES' primary customers, felt threatened that the initiative might force them to invest similarly to offset their carbon dioxide emissions. Some consumer groups where Thames was being built were also disappointed that the reforestation project would not involve their local community.

The company, and in particular Roger Sant, was not interested in the initiative as a public relations tool. Rather, Sant wanted to fulfill his commitment to the AES four corporate values (integrity, fairness, fun, and social responsibility) through the project. The total costs of the Guatemala project contributed approximately one-tenth of one cent per kilowatt to the cost of producing electricity at the Thames plant. AES' share was about one-seventh of that cost. Even in light of increased competition driving down the potential profitability in the independent power industry, the company took the risk and sponsored the project, maintaining its commitment to social and environmental responsibility.

The Sustainability Task Force

During the annual AES strategic planning process, the sustainability of coal-fired power plants, and its long-term viability in comparison with other fuel alternatives, was continually being analyzed. In early 1991, Roger Sant requested that Roger Naill spearhead a Sustainability Task Force that would extensively investigate alternate forms of fuel supply for AES' new power plants. The company had not yet signed an electric contract to develop a new power plant since the Thames project, so the door was wide open to encouraging a realignment of AES basic business strategy of "least cost" through coal-fired power plants.

The charge of the task force was to find an energy fuel that was steady-state and 100% sustainable from an economic and environmental aspect. The task force, not surprisingly, found no fuel that would have both cost stability in the long-run (such as coal) and zero environmental externalities. What they did find is that the best means for AES to approach the sustainability issue would be to "hedge" their portfolio and begin looking into alternative fuels other than coal. In looking at a 50-100 year period, which includes the extended life of a power plant, it made sense to begin development of natural gas projects as well as coal. Incorporating this vision of a "total cost" strategy, the company is in fact now developing natural gas contracts both internationally and in the U.S.