Sustainable Case Study: Chevron Corporation

Dean R. Manna, Robert Morris University, USA
Gayle Marco, Robert Morris University, USA
Denise Letterman, Robert Morris University, USA
Jesse Mullen, Robert Morris University, USA

ABSTRACT

The Chevron Corporation is considered to be one of the five largest energy-producing companies in the world and they are trying to become a more sustainable company. To improve sustainability they are investing in local communities through health, education, and small business funds. They are researching and learning how they affect biodiversity, in ecosystems that they are drilling in. They are also finding ways to be more energy efficient and lower their emissions. Although there are many examples of these sustainable activities there are few concrete numbers that can be shown in order to show exactly how sustainable Chevron is.

Keywords: Energy Industry; Sustainability; Mining; Chemicals; Power

CHEVRON CORPORATION’S HISTORY

Chevron’s earliest incarnation was that of the Pacific Coast Oil Co., which was incorporated in San Francisco during 1879. Chevron has gone through many changes since then including name changes, logo changes as well as acquisitions of other energy companies. Although the Pacific Oil Co. started out as just that, an oil company, today Chevron is involved in oil, natural gas, solar, renewable, geothermal, and more.

After much success in the west coast of the country the company expanded with gas stations as well as aviation fuel. They also supported the war effort during the first Great War. With the increased ability to move around the country the Pacific Coast Oil Co. needed a name change. During the 1920s they became the Standard Oil Co.

The company also began to expand their international business in the 1920s and 1930s. In 1932, the Standard Oil Co. was issued the ability to explore the Bahrain area of Saudi Arabia until 1992. The Standard Oil Co. continued to expand internationally by partnering with another large oil company, Texaco. This partnership let Texaco explore in Saudi Arabian area and also let the Standard Oil Co. explore in Africa and Asia.

The company again supported the Allied war effort during World War II. They did this not only by helping to fuel the Allies, but the company also built the two largest tankers that the company every owned. These were used to ship fuel for Allie use in foreign lands. During this time the Standard Oil Company became the third largest oil company in the United States.

After World War II the company started to expand into other areas of production, which included producing industrial plastics, synthetic fabrics, and detergents. They also began to construct and use pipelines to bring oil from the fields to refineries.

1951 marked the first year that the company had reached over $1 billion in revenue. This milestone was reached through the development of new specialized fuels that were marketed as Chevron gasoline. Within ten years the company doubled their revenues to $2 billion. Finally in 1977 the company merged their divisions and merged with six other oil and gas companies including Texaco and became Chevron U.S.A. Inc.
During the 1980s and 1990s, the company reached another milestone with the ability to produce almost 3 million barrels a day and owned more than 50 refineries. In 1984, Chevron merged with the Gulf Oil Corp. Prior to the merger Gulf was a top five petroleum company in the U.S.

“With these strengths came a companywide enthusiasm to fulfill a corporate mission of being "better than the best." To achieve this mission, Chevron stressed operational excellence and environmental responsibility.” (Chevron.com)

During the mid-1980s, Chevron became aware of the need to stress the importance of environmental responsibility. One new addition to their environmental responsibility division was the risk management office. This new idea was put together in order to study the environmental impact that the company’s actions had on the environment and then solve these problems before they became real.

During the 1990s, the company began to get into new industries included lawn care products such as fertilizers. This was mainly due to the oversupply of oil as well as the global recession. The 90s ended with Chevron in talks with their longtime partner Texaco about a merger.

During the 2000s, the merger was approved and Texaco was acquired by Chevron. The company continued its environmental policies and expanded exploration in the Middle East. The company today is one of the largest oil companies in U.S. The company also has expanded into other energy sources besides oil and gas. These new energies include geothermal (which basically is the use of natural steam), solar energy, biofuels (including sugars, starches, plant materials, and other microbes), and fuel cells.

Most recently Chevron acquired the Atlas Energy Co. This acquisition makes Chevron the owner of the largest share of the Marcellus Shale land (New York Times.com).

CHEVRON CORPORATION’S: SUSTAINABILITY MISSION

Chevron devotes much of their website to establishing where they stand on sustainability, although they do not seem to have one single sustainable mission statement.

“Our company's foundation is built on our values, which distinguish us and guide our actions. We conduct our business in a socially responsible and ethical manner. We respect the law, support universal human rights, protect the environment and benefit the communities where we work.” (chevron.com/about/chevronway)

Chevron continues to define their values as integrity, diversity, trust, ingenuity, partnership, high performance, and protecting people and the environment. Chevron states that they hold themselves accountable and responsible for the work that they perform. Chevron also declares respect for diversity of all types, people, ideas, and experiences. The company is also very concerned with their environmental impact. They are conducting many studies on some of their drilling sites in order to better understand the surrounding ecosystems and minimize the company’s footprint.

CHEVRON CORPORATION’S: ENERGY SOURCES

Chevron believes that the future will not only require improved methods to increase efficiency of current fossil fuels but also the addition of some new energy sources. Currently, the Chevron Corporation is involved with traditional fossil fuels such as oil, natural gas and oil sand, and renewable energy resources that include geothermal and solar energy. Chevron is also developing biofuels, gas-to-liquid, and fuel cells. It will take all of these to meet the energy demand of tomorrow. Chevron prides itself on their energy source diversity. Chevron is currently the world’s leading producer of geothermal power (chevron.com). The Department of Energy believes that the global energy demand in 2035 will require 30% sourced from liquid fuels, 22% from natural gas, 28% from coal, 6% from nuclear, and 14% from other sources including renewables.

Oil is Chevron’s main source of energy. In 2010, Chevron produced 2.763 million net oil-equivalent barrels per day from operations around the world (chevron.com). Chevron’s oil operations can be found in Africa, Asia, South America, North America, and Europe.
The cleanest burning of the traditional energy sources, natural gas is also being produced by Chevron. The demand for natural gas is on the rise and Chevron would like to meet the demand. They recently acquired Atlas Energy Co. who was the largest owner of Marcellus Shale land.

Geothermal although not a global solution to green energy, is a proud achievement of Chevron. This energy is created by steam wells far below the earth’s surface and is used to produce energy with almost no greenhouse gas emission. This is one of the most sustainable and reliable energy sources used, the probably lies in the specific conditions that are required to gather and use this source. The conditions are only perfect in very few places in the world.

CHEVRON CORPORATION’S: SUSTAINABLE STRATEGIES

Chevron Corporation’s sustainable strategies include: respecting biodiversity, preserving freshwater, conserving energy, improving energy efficiency, reduce emissions, and reduce flaring. Chevron has many more programs that contribute to their corporate responsibility including social investment.

Chevron has established an Operational Excellence Management System. This system evaluates all aspects of possible energy projects including their environmental impact. Chevron is performing extensive research on the ecosystem on Barrow Island off the coast of Australia. This is helping to better understand and maintain a natural biodiversity. Chevron can then take some of what they learn from this drilling site and use it in other parts of the world in order to better preserve ecosystems. Preservation of freshwater resources is also important to Chevron who developed a global position statement on fresh water.

With respect to fresh water, Chevron strives to:

- Continually improve environmental performance and reduce impact from their operations.
- Integrate freshwater conservation and efficiency drivers into the business decision-making processes and operational management.
- Conserve the use of fresh water in freshwater-constrained areas by reusing, reducing, and/or recycling water.
- Account for the use of fresh water in the operations with appropriate metrics.
- Engage with governments, partners, local communities and other stakeholders on significant freshwater resource issues in areas where they operate.

“Build partnerships and participate in industry initiatives to share and promote best practices, assist with the development of industry standards, and shape and influence relevant freshwater resource policy.” (chevron.com)

Improving energy efficiency has been another goal of Chevron’s. Since the year 2000, Chevron Energy Solutions customers’ have cut their energy usage by 30% on average. Less energy used means less pollution. Chevron is also concerned with climate change. Some of things that they are doing to combat climate change include reducing flaring and venting of oil and gas, as well as improving energy efficiency. Since 1992, Chevron has improved their energy efficiency by 33%. (chevron.com) Chevron has begun to only flare and vent gas and oil when it is necessary, determined by safety standards.

CHEVRON CORPORATION’S: COMPETITION OVERVIEW

There are only three energy companies that are larger than Chevron. They include Exxon, Royal Dutch Shell, and BP. BP is one of the big six oil companies and includes the brands Arco, Castrol, and Wild Bean Café. Exxon is the largest of the big six oil companies. They are involved with the crude oil, natural gas, and petroleum oil energy sources and own the Esso and Mobil brands. Royal Dutch Shell is another of the big six oil companies that is involved with traditional fossil fuels as energy sources.

Compared to Chevron, Exxon seems to make finding their sustainability values harder. Shell and BP both have lengthy pages on their websites that go into detail describing their stances on sustainability. Although none of these energy companies seem to give concrete facts to back up all of their sustainable claims.
CHEVRON CORPORATION: GLOBAL COMMUNITY

The Chevron Corporation believes that as a company they are accountable for advancing humanity. One-way they believe they should contribute to this is by investment in different social areas. Chevron invested over $700 million in communities. This money is used to invest in small businesses in order to help economic development. Chevron also sponsors education in the areas of science, technology, engineering, and mathematics. In countries such as these Chevron helps fund preventive care and treatment to locals.

CHEVRON CORPORATION’S: FUTURE

Chevron is determined to bring energy solutions to the market. They are further developing traditional sources of energy as well as creating new ones. The company is taking into account all aspects of sustainability, including protecting the environment, investing in communities, furthering technology and the economy.

AUTHOR INFORMATION

Dean R. Manna, Ph.D, Robert Morris University, Moon Township, PA 15108. E-mail: Manna@rmu.edu
(Corresponding author)

Gayle Marco, Ph.D, Robert Morris University, Moon Township, PA 15108. E-mail: Marco@rmu.edu

Denise Letterman, M.B.A., Robert Morris University, Moon Township, PA 15108. E-mail: Letterman@rmu.edu

Jesse Mullen, Student, Robert Morris University, Moon Township, PA 15108. E-mail: jemst27@mail.rmu.edu

REFERENCES