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CEMEX CSR on Environment.

Lila Petersen

Introduction:

I'm going to analyze CEMEX Corporate Social Responsibility (CSR), specifically their environmental programs: How they manage their footprint by minimizing their negatives externalities, local and globally.

I will first give an overview of the company and how it became one of the largest construction materials producers in the World. Then I will describe their CSR program and what negative externality are they trying to solve and who and how are they being monitored.

I will argue that CEMEX has an incentive to implements sustainable actions because it increase its profitability, provides the firm with a good reputation in international markets and are subjects of strict regulations that enforce them to do it, as well as social control. Also they have an incentive to lead the effort, because implementing environmental measure is an increasing tendency.

Corporate Overview: CEMEX

CEMEX is the leader Mexican building material industry that was founded in 1906 in the city of Monterrey in México. Is the largest Cement

producer in México and the third largest in the world. They are the number one worldwide supplier of ready mixed concrete, the third aggregate producer and the 6th cement producer. (CEMEX 2011).

For all 19th century they operated in a close economy with a national inward looking of the government policies (Iturbide 2007). CEMEX started exporting to the USA in the early 70's but at the end of the 80s the International Trade Commission established strong antidumping sanctions. It was the same time where México was building an internationalization process that ended with the sign of NAFTA. (Lessard, 2009).

In 1992 they started to expand abroad when they bought on of the two largest Spanish cement companies: Valencia and Sansón. (Iturbide 2007). In the next two years CEMEX acquired companies in Venezuela, Panamá and Dominican Republic. In the nineties expanded to Colombia, Philippines, Indonesia, Egypt, Chile and Costa Rica, and finally in the last decade they expanded to Southdown US, and its latest biggest acquisition was Rinker an Australian based company which led to be US their most important market, US\$12.8 billion (Lessard, 2009).

In September 2009 CEMEX celebrated its 10-year anniversary as a public company listed in the New York Stock Exchange.

Corporate Social Responsibility CEMEX:

Companies Goals:

“CEMEX’s goal is to build a smart world by creating a successful, competitive company that collaborates with other stakeholders to make an overall positive impact on the world. The approach, which emphasizes innovation, continuous improvement, and collaboration, will enable them to sustain the company’s success and contribute to our planet’s ability to sustain our society for generations to come. This is the heart of their approach to sustainable development.”¹

To achieve this goal CEMEX follows three commitments: 1. Enhance their value of creation and increasing their competitiveness by developing innovative products and services. 2. Manage their footprint by minimizing their negatives externalities, local and globally, and impacts of their operations on people and the world, like as workplace-related fatalities and incidents, air emissions, noise and vibration, and impacts on the land from the extraction of raw materials. 3. Engage their stakeholders with them achieve sustainability (employees; neighbors; business partners such as suppliers, clients, and investors; and society at large).

¹ <http://www.cemex.com/SustainableDevelopment/Framework.aspx>

In order to have an align strategy with the stakeholders “concerns” Cemex has determined 7 priorities that are determined by internal and external sources: 1. Sustainable Construction; 2. Housing and infrastructure; 3. Carbon Strategy; 4. Environment and Biodiversity; 5. Health and Safety; 6. Straightening of local communities and 7. Stakeholders Engagement.

CEMEX has many challenges in its social responsibility, it employs around 57,000 people, I sold in 2008 US\$21.7 billion – 80% of this coming from cement and ready-mix concrete. Its global operation include 64 cement plants, over 2,200 ready-mix concrete plants, 493 aggregate quarries, 253 land-distribution centers and 88 marine terminals.

Therefore there are many CSR problems that CEMEX faces related to labor, social and environmental problems. For this case study I’m going to concentrate the analysis on climate change and the impact in neighbors and laborers because of CEMEX pollution which is how they manage their footprint by minimizing their negatives externalities, local and globally

¿What is the CSR problem?

Climate Change

One of the main concerns this days of the international community is the climate change. The climate change is primarily driven by the CO₂ emissions to the atmosphere, which is an increasing trend given the

economic profitability incentive that firms have. Pollution comes primarily from transportation, industry and electricity generation.

Climate change itself is not a harmful phenomenon, and that planet earth has cycles of millions of years and some of these cycles are climate change.

However, in the last century the rapid growth and excessive consumption of resources, ie human-induced changes that generate emissions of greenhouse gases (GHGs), have caused an imbalance in the levels of concentration in atmosphere and oceans that have caused a change in climate which the world can not be docked. This is demonstrated every day and much more today with the release of polar bodies, increased sea levels and global temperatures, drought, rain and other natural disasters and unexpected variations in climate. This change occurs because the soil has been coupled to activity levels and emissions that mankind has caused, and the natural rate of land link to the change in these concentrations is less than the current exchange rate of the same, so there is an imbalance in the atmosphere and the planet in general. The consequences can have climate change on food, water and ecosystems.

CEMEX as part of the industry is contributing to this phenomenon and as a part of the international community has to change its patterns of behavior.

Impact on neighbors and people that work in the fabrics:

There is also a direct impact locally, on the neighbors and people that works in the fabric. One example of the negative externality that CEMEX has generated is the presence of mercury in dust tests performed in the CEMEX Lyons Cement Plant. They also founded other dangerous heavy metals in the dust of neighbors' cars, porches, and in their homes. It included chromium and antimony at levels far above Environmental Protection Agency (EPA) health standards. Some types of chromium can cause cancer, and antimony is linked to heart and respiratory ailments.²

Also the Environmental watchdog groups and the United States EPA have claimed that the company has committed many violations of the clean air act in Colorado. The agency has also filed suit CEMEX in California, 2008, because even if they have spend millions in renovations they have failed to install modern air pollution controls. Another example was in 2007 where EPA filed a complained against CEMEX for violating federal air regulations at its Victoreville CA plant, Santa Barbara and Michigan.³

CEMEX Incentives on CSR:

CEMEX has several incentives to implement actions to contribute to its environment on its CSR program.

1. Since CEMEX became an important international actor it became subject to be accountable to the international community, especially

²Jaime Rall, Program Director, CEMEX Neighbors Find Mercury in their Dust
<http://www.gcmonitor.org/article.php?id=534>

³ · [^ Epa Sues Cemex Over Air Quality Victorville Plant Controls Cited. - Free Online Library](#)

because it entered a more competitive market. Also by having activities in other countries like the USA that has stricter regulations and a higher involvement of its society as observers CEMEX had to increase its standards.

Its competition internationally is: Holcim a Swiss company, Lafarge a French industrial Company and Heidelberg Cement, which is German. The three of them claim to have a really strong CSR program with similar characteristics than CEMEX. The only of them I could find complaints were Lafargue because has as CEMEX operations in the states. The complains were the same related to mercury in the communities where the industry is established.

2. Another incentive for CEMEX to change its operating procedures and standards to more sustainable ones is that sustainable energy implies a decrease on energy costs in the medium term. Investing in energy efficiency and sustainable energy can represent a really high investment but with high returns in the medium term.

3. There is also a tax incentive. In México like many other countries companies can deduce taxes by donating to ngo's and social programs.

4. Also CEMEX has the incentive of avoiding law suits costs and possible fees or even shot downs of their fabrics. By operating in environments where the regulation is really strict, like the USA, and where the

community is used to complain they have to be more careful and invest on better practices.

5. Finally there is an Incentive on public relations and public image. It has become of a great importance in the international community and for the consumers that the companies have a commitment in its environment. It can be predicted that environmental standards will become more and more strict, and it would be in their interest to take advantage by starting to implement the measures before they are enforceable and have a higher cost of implementation.

Implementation and Achievements of its programs: How does CEMEX Assess compliance?

For the analysis of CEMEX compliance of its environmental programs I will separate the climate change efforts from the local ones:

Climate Change:

CEMEX has invested a lot of money on Climate Change. It was the first in Industry to Measure and Disclose Carbon Content of Its Key Products with a Unveils Carbon Footprint Tool⁴;

⁴MExUnveils-Carbon-Footprint-Tool-Industry-Measure:

<http://www.businesswire.com/news/home/20101207007047/en/CEMEX->

They also created a set of indicators on their emissions that some of them are assured by a third party independent firm:

Performance indicators

The indicators marked with were subject to an external limited assurance process by PricewaterhouseCoopers.

	2007	2008	2009	
Absolute net CO ₂ emissions (million tons) ⁽²⁾	53.9	48.2	39.7	<input checked="" type="radio"/>
Specific net CO ₂ emissions (kg CO ₂ /ton of cementitious product) ^(1,2)	684	654	627	<input checked="" type="radio"/>
Thermal energy efficiency of clinker production (MJ/ton clinker) ^(2,3)	3,770	3,741	3,693	
Specific energy consumption by unit of ready-mix (KWh/cubic meter)	NA	NA	5.6	
Specific energy consumption by unit of aggregates (KWh/ton)	NA	NA	3.0	
Indirect energy consumption (GWh) ^(1,2)	8,568	8,000	6,887	
Alternative fuels rate (%) ^(2,4)	7.6	10.3	16.4	
> Alternative fossil fuels rate (%)	5.8	8.6	13.2	<input checked="" type="radio"/>
> Biomass fuels rate (%)	1.7	1.7	3.2	<input checked="" type="radio"/>
Alternative raw materials rate (%) ⁽²⁾	10.3	12.0	12.2	
Clinker / cement factor(%) ⁽²⁾	78	75	75	

As we can see from the graph above only 3 of the indicators have a limited assurance by a third party: The absolute CO₂ emissions, specific CO₂ emissions, Alternative fossil fuels rate, and biomass fuel rate. The process is certified by PricewaterhouseCoopers, which the largest accounting firm in the world that has the incentive to take care of their reputation and therefore can be considered independent.

One of their big projects for emissions reduction is a project called ERUS that is an Eolic Park in Oaxaca (one of the best places in the world for wind energy) that provides to CEMEX 25% of their energy demand. It works in a legal scheme of self-supply where they generate the energy and sells it to CFE (state own energy company in México that is a Monopoly), then CFE discounts the energy sold to them to their energy bill. As a result of the implementation of this program CEMEX increased the use of alternative fuels by 16.4% exceeding their target for 2015

The energy generation with sustainable sources in México is only business in a medium term. The bet is that when the producer negotiates with CFE a tariff the price in the future will only increase because of inflation and therefore the price will not be affected by the instability of other sources of energy like coal, gases, fuel oil etc. What CEMEX is buying is stability of the price in a long term.

They also created a set of “green grades” contribution for construction and achieved two projects in México City, Terracota Cien and Torre Efizia, to obtain the Platinum Leed certification. In the climate change priority CEMEX compromised to reduce to 15% of their emissions by adopting several measures like: energy efficiency, optimization of processes, and promotion of innovative technologies, among others.

As well CEMEX participates in a voluntary program created by the Ministry of Environment and Natural Resources (SEMARNAT), called:

Voluntary Accounting and Reporting Greenhouse Gas Emissions Program
(Programa Voluntario de Contabilidad y Reporte de Emisiones de Gases
Efecto Invernadero (Programa GED)⁵

Finally CEMEX participated in the 16th edition of Conference of the Parties of the United Nations Framework Convention on Climate Change (COP16). It entered into an agreement with Mexico's Ministry of Environment and Natural Resources (Secretaria de Medio Ambiente y Recursos Naturales, SEMARNAT) to participate as an official COP16 sponsor.

Local negative externalities:

The other set of indicators that CEMEX created are related to the pollution on their plants and local communities.

⁵http://www.patrimoniohoy.com/rs/rs_ma_af.html
<http://www.semarnat.gob.mx/temas/cambioclimatico/Paginas/geimexico.aspx>

Performance indicators

The indicators marked with **○** were subject to an external limited assurance process by PricewaterhouseCoopers.

	2007	2008	2009	
Active sites with quarry rehabilitation plans (%)	94 ⁽²⁾	46	82 ⁽³⁾	
Active quarries within or adjacent to high biodiversity value areas (#) ⁽⁴⁾	NA	NA	112	
Active sites with high biodiversity value where specific plans are implemented (%) ⁽⁴⁾	NA	NA	29	
Clinker produced with continuous monitoring of major emissions: Dust, NOx and SOx (%) ⁽²⁾	44	44	60	
Specific Dust emissions (g/ton clinker) ⁽²⁾	166	162	106	
Specific NOx emissions (g/ton clinker) ⁽²⁾	1,773	1,742	1,063	
Specific SOx emissions (g/ton clinker) ⁽²⁾	524	484	410	
Operations with water recycling systems (%)	NA	82	79 ⁽³⁾	
Environmental investment (U.S. million) ⁽⁵⁾	\$80	\$62	\$77	
Major environmental incidents (#) ⁽⁶⁾	NA	19 ⁽¹⁾	8	○
Environmental non-compliance cases (#)	NA	67	67	
Associated fines (U.S. million)	NA	\$4.1	\$1.3	
Operations with an Environmental Management System implemented (%)	NA	52 ⁽¹⁾	59	

As we can see from the table above the only indicator ensured is major environment incidents. Dust emissions, NOx emissions among others are not assurance by any independent organization. These are related to the complaints of neighbors and environmental local agencies. This is the weakness of CEMEX environmental program; it does not have an independent organization ensuring its local emission but has complaints all over USA about them.

Given that CEMEX has not be able to decrease their local pollution they implement local programs in their neighborhoods that follow a logic of compensation rather than fixing or changing their production procedures. They execute and invest in local communities from the countries where

they operate throughout various initiatives. They implement Educational, Cultural and Sports Activities and they in local environmental projects related to issues such as environmental awareness, conservation and biodiversity preservation, and reforestation.

Analysis and Conclusions:

CEMEX strategy and implementation of programs regarding climate change have been successful. They have increase the use of renewable energy, reduce energy consumption, use alternative raw materials, implement energy efficiency programs, emitted a CO2 disclosure and optimize transportation methods.

These programs have been successful because even if CEMEX has a huge investment, they also constitute an even bigger reduction of energy costs, which impact the firm's profits. Also CEMEX is tight to international regulations and standards and therefore many of these measures are just following the law. Finally these measures serve them as a tool for public relations that allow them to lobby and take the leadership in this area.

In opposition Cemex has not been successful jet on the pollution generated to the neighbors like the mercury in the dust. There are still complaints from neighbors and local environmental authorities. This complains have been made mostly in the California where environmental standards are higher, citizens are more prone to demand its rights and have institutions to support this claims. Its program locally is more compensatory than

reparatory of the problem.

In overall they have the best CSR climate change program of their industry, they are engaging themselves in the discussion of alternatives and they have an international recognition for doing so. They have been successful as a leader company for climate change initiatives and their CSR program in this area has been recognized by credible international institutions like the World Bank, Asia-Pacific Economic Cooperation (APEC), United Nations, International Chamber of Commerce (ICC), United Nations Development Program (UNDP), among others. These international organizations have praised CEMEX for its success and as well they have received local awards in all countries where they operate. In addition they are assured by the biggest international accounting firm.

They still have to do some work in the local activities and be able to follow the local regulations and improve their operations in order to avoid polluting local communities with harmful emissions. It seems that the programs that they are implementing as compensation of these externalities are not credible in communities that have more information and institutions to support them like in the USA.

Discussion questions CEMEX CSR

Lila Petersen

1. ¿How can CEMEX maintain their leadership on environmental CSR given international competition and expectations?
2. ¿What would CEMEX have to do to get full assurance on all their activities and not only a couple of them?
3. Is CEMEX sufficiently transparent in its reporting practices?
4. Is there a lack of credible information about CEMEX CSR activities? How can this information gap be filled?
5. Given that local pollution is still an issue, ¿is possible that CEMEX change their production process without losing revenues?
6. How can CEMEX change from a compensation scheme of CSR at a local level to a proactive scheme?
7. How can be a lack of organization within neighbors in other countries than the USA been a concern? Does CEMEX have uniform standard within countries?

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Unveils-Carbon-Footprint-Tool-Industry-Measure:

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