UNIVERSITY OF BIRMINGHAM

A Strategic Analysis of Eni S.p.A. and Strategic Recommendations for the Future

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Group Coursework Submission - 07 14730 & 07 14731

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Executive Summary

A strategic analysis of Eni SpA was conducted and the main strategic issues facing the company were identified. The issues that were identified were;

1. Security of resources
2. Stagnation and decline of core markets
3. Increase in Power and Influence of Regulators and Commissions
4. Political Instability
5. Volatility of oil and gas prices
6. Unprofitable chemical company

As a solution to these issues, the following strategic recommendations were made;

- Invest in gas exploration and production
- Invest in shale gas exploration and production
- Invest heavily in renewable energy, through investment in research and development of technologies in this area, and through the acquisition of smaller companies that already operate in this area and through a series of strategic alliances
- Sell the refinery assets in Europe, keeping the Italian assets and investing the capital raised in exploration and production and refinery in emerging markets
- Keep key pipeline assets, but sell enough minor and less significant pipeline assets to counter anti-trust charges
- Invest in more price stable renewable fuel sources ahead of the rest of the mainstream market
- Sell the chemical business

These recommendations follow a simple set of summarised action points;

- Invest in upstream oil activates
- Divest downstream oil activities
- Continue growth and vertical integration of gas and power
- Buy into renewable and sustainable energy sources to facilitate a longer term strategy

By implementing the strategic recommendations outlined above and by following the action points summarised above, Eni SpA will be able to focus on their most profitable activities, providing a platform from which to move forward and upwards from in this increasingly competitive market.

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1.0 Introduction

This report aims to first conduct an in-depth strategic analysis of Eni SpA, before moving to look at the immediate and longer term strategic issues facing the company, and then moving explore solutions to these strategic issues.

The report will first look at the turbulent history of the company and how this turbulent start has contributed to the current structure of Eni SpA in 2008.

The report will then move on to analyse the company and its current market position from a number of different perspectives. First looking at the markets in which Eni operates, before exploring the resources of the company and the strategic value that these contribute. Finally, the company will be analysed from an organisational based view.

Once the analysis has been completed, the main strategic issues currently facing the company will be identified, before possible strategic solutions are proposed and recommendations are made for implementation.

This report aims to conduct a concise yet detailed analysis and aims to identify the strategic issues facing the company and provide solutions to these issues to be implemented by the management team at Eni SpA. These solutions should give the business the corporate agility and strength that it needs to compete effectively even as the global economy enters a period of great uncertainty and volatility.

2.0 History of the Company

The history of Eni is a long one which traces its roots back to 1926 when Prime Minister Benito Mussolini established Agip as a state owned oil company. At the conclusion of WW2, former partisan Enrico Mattei was instructed to dismantle Agip, as it was seen as a remnant of the communist past, contrary to instruction he continued the exploration efforts discovering the Po valley gas field in 1949; this led to his appointment as chairman of SNAM and the subsequent merger of these companies to form Eni in 1953. This was a period of prosperity for the company with much international expansion.

Following the death of Mattei in 1962, power shifted to the politicians and, Eni became an instrument of economic, industrial and employment policies. This was a period in which Eni expanded and diversified, with a contract for the exchange of petrochemical and textile products for crude oil being drawn up with Moscow in 1963. 1975 saw tremendous upheaval within the corporation as the chairman lost direct control of the operating companies with their chief executives being appointed by government on a basis of political considerations. During this period which lasted till 1992 Eni continued to expand its interests, however financial performance remained weak.

With the Italian government facing increasing pressure from the EU, to cut public sector spending. Eni was privatized as an integrated energy company, with Franco Bernabe appointed CEO, and commenced trading shares in 1995. Shorn of diversification, with 73 businesses being sold off in the first year; with non-strategic activities outsourced.

With the appointment of Vittorio Mincato as chairman, Eni began to concentrate on growth in the upstream activities and, a customer friendly approach within the energy markets. To enable these changes the chemical businesses were consolidated and separated, retail service stations were halved and a program of downstream rationalization and cost reduction in both refining and distribution was initiated. For the clarity of Eni's strategy and the effectiveness with which it was implemented, Mincato won a series of plaudits in 2005.

2005 saw the ousting of Vittorio Mincato by the Italian government, and the appointment of Paolo Scaroni. Who although ignorant of the industry he had had previous success with Enel, and allayed early fears by announcing that he would not deviate greatly from the strategy put in place by Mincato; going so far as to commit Eni to a ten year strategy to become one of the world's Oil and Gas majors.

3.0 Overview of Current Position

3.1 Analysis of the Market in which Eni Operates

Analysis of the market using the porters five forces model revealed the two major aspects of the market that needed to be considered further. The two aspects were bargaining power of the suppliers and the governments of the supplying countries and threat of substitute products that were renewable resources such as solar, wind, tidal, biofuels and nuclear power.

Figure 3.1 – Porters 5 Forces Analysis Summary

The first aspect to look at is the suppliers bargaining powers within the market. Due to nationalisation of oil suppliers from oil supplying countries so that their governments can gain a larger return on their resources, 90% of the world's reserves of oil and 80% of the world's natural gas reserves is owned by national companies see Figure 3.2 (Eni, 2013). Thus this leads to great power to those companies in terms of their returns if western companies would like to use their

resources therefore leading to those companies having to give these national companies more in return and a lower profit margin themselves. Furthermore it leads to western companies having to work with less politically stable countries which can be a risk to their supply as it may not be always guaranteed as conflicts may occur. This power shift to the suppliers has come about because of the diminishing reserves worldwide that are only expected to last the next 95 years and these reserves becoming increasingly harder to find with exploration becoming particularly remote and complex politically and geographically consequently the costs are rising to do so (Eni, 2013).

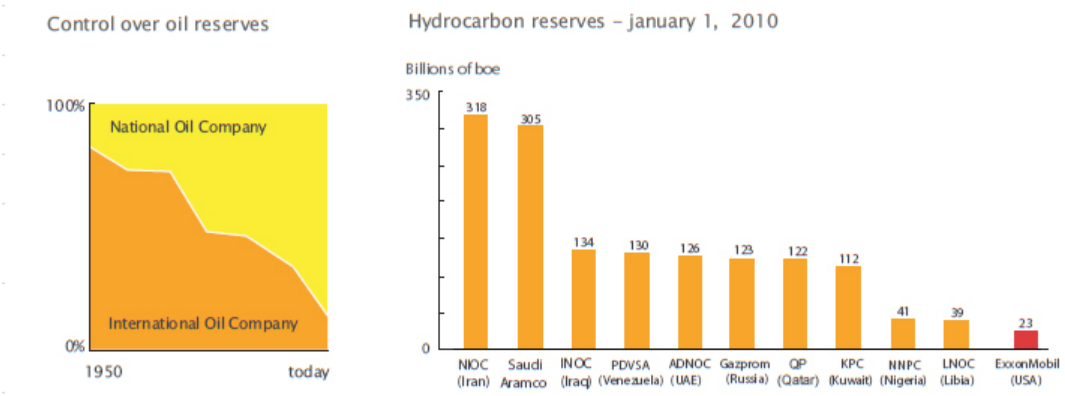


Figure 3.2 – Control Over Oil Reserves (Left) and Total Hydrocarbon Reserves (Right)

The threat of substitute products within the industry is fairly low as there cannot be much product differentiation within hydrocarbons. Coal is seen as a substitute but due to the diminishing quantities of coal available and the emissions produced from the use of coal, coal is unfavourable. However due to the scarcity and limited non-renewable resources available as well as the increasingly costs and difficulty of exploration of finding resources, there is a slow growth in renewable energy such as wind, tidal, biofuels and nuclear power. The downside to these renewable energy sources of energy is the high productions costs and slow pay-back times along with the political and environmental issues involved making fossil fuels more attractive for the energy industry for the time being. However renewables is the long terms solution to the worlds power demand, the market is stable and is likely to be more attractive due to the low risks involved and it would be advisable to invest in the renewable market to gain a decent market share and gain lead time on Eni Spa's competitors.

3.2 Analysis of the Resources of Eni and their Strategic Value

Eni in recent times has consolidated its structure into three business units. These are Exploration and Production, Gas and Power and Refining and Marketing. This saw a shift in the company's structure from being a holding company with a number of subsidiaries to being a multidivisional corporation. This allowed Eni to streamline their focus more onto these three units rather than having

distractions such as chemical production arms etc. This also led them to implement a strong HR strategy and to invest in their employees.

Eni's business units can be further consolidated into two categories; upstream (Exploration and Production), and downstream (Refining and Marketing); Gas and Power is split across the two as will be seen later on.

Firstly when considering the oil aspect of the business; it is clear to see that in recent times, Eni has moved to focus more on the upstream aspects of oil rather than the downstream aspects. This is because the upstream activities in oil generate far greater returns than the downstream activates. To substantiate this, one can consider Eni's return on assets (ROA) for Exploration and Production (20.99%) and for Refining and Marketing (4.15%) between 2006-2008 (Table 15.5 – Case Study, Grant, 2005). This low profitability in the downstream oil activities has seen Eni move to consolidate their operations in this part of the market. As such, they have sold off downstream businesses in Spain and Portugal, they have downsized their refining capacity from 664 kbbl/d in 1999 to 544 kbbl/d in 2008 (Appendix 2 – Case Study, Grant, 2005). To add to this downsizing, they have also reduced the number of retail outlets from 12,489 in 1999 to 5956 in 2008 (Appendix 2 – Case Study, Grant, 2005).

In stark contrast however, a vast amount of investment and effort has been put into expanding and growing the upstream oil business through Exploration and Production. This can be seen when one considers that two thirds of the capital expenditure between 2005 and 2008 was spent on Exploration and Production (across oil and gas) (Table 15.8 – Case Study, Grant, 2005). In addition to vast investments in Russia, assets in Congo, Gulf of Mexico, Turkmenistan and Algeria have all been purchased in recent years; these should be viewed as a key resource of the company to drive it forward in the future. One of Eni's core capabilities is the ability to create strong working relationships with countries that are typically viewed as being difficult to do business with; for example Russia and Venezuela. This ability allows Eni to position itself as a partner in the relationship, giving them access to oil and gas fields that they otherwise would not be able to explore, and provides a competitive advantage whilst some other oil majors are still sceptical about investing heavily there. This theme of strong relationships continues into Eni's relationship with the Libyan government and the Kazakhstani government. Whilst Eni's relationship with the Kazakhstani government in recent years has been a little turbulent, they still own many assets there. With regards to Libya and the Libyan government, this is a particularly strong relationship whereby the Libyan government own a 10% equity share in Eni; cementing its position as their longest partner in oil production and largest buyer of Libyan oil for a further 25 years.

When considering the Gas and Power unit of Eni, it is clear to see that this is where they are focusing their attention for the future. With the acquisition of many gas related assets, such as gas distributors in Spain, Germany and Portugal, and downstream assets in Hungary, Greece and Croatia, it is clear that Eni see gas as a large source of income in the future. Further to this, Eni were also involved in the construction of the Bluestream, Greenstream, and Southstream gas pipelines, travelling from Russia to Turkey, Libya to Italy, and Central Asia to Europe respectively. Eni also have ongoing liquefied natural gas projects in Egypt, Algeria, Nigeria, Angola and Indonesia amongst others.

This vast array of new projects coupled with Eni's wide portfolio of gas sourcing, extensive infrastructure, and strong marketing position in Italy and Europe, provides them with a strong upstream position in the natural gas market.

Eni focus very heavily on vertical integration when it comes to natural gas. With oil, the scene is quite different, because the oil market is so saturated, there are third parties at every step of the value chain to outsource aspects to, whilst Eni focus their efforts on the most profitable areas, such as Exploration and Production. With gas however, because of Eni's extensive infrastructure and broad range of gas related assets, it makes commercial sense for them to manage the whole value chain and integrate every aspect of the process into one fluid process managed by them. This vertical integration provides 4 main advantages;

1. Having 10 different countries that supply gas provides considerable diversity and security of supply.
2. Favourable contractual structures and terms.
3. Access to a wide range of transportation and storage across Europe.
4. Flexibility in production and supply; Eni can stipulate the quantities of gas to be produced or drawn on a daily basis.

The benefits of this are then magnified when electricity production is added to the equation. For example in Congo, Eni negotiated an agreement that lets them conduct a number of Exploration and Production activities and in return, Eni are building two power stations in Congo, which will provide 80% of the power used in Congo. These power plants will use gas from Eni's M'Boundi oil field in Congo itself.

Some more resources and capabilities present in the gas section of the business are;

- Good access to every key gas consuming or producing country in Europe.

- Broad range of strategic partners and relationships that can be leveraged.
- Deep industry knowledge as the have operated in all parts of the industry.
- Unrivalled scale and asset backed flexibility leading to optimisation of processes.

Eni currently hold 32.3% of their assets in Gas and Power (Table 15.5 – Case Study, Grant, 2005); this is a higher percentage than any other of the major suppliers and puts them in a great strategic position from which to launch their activities to a wider audience.

From a financial point of view, Eni have;

- High growth in cash flow from 2002 to 2008 – ($11.1bn to $32.1bn) (Appendix 1 – Case Study, Grant, 2005)
- High growth in assets from 2002 to 2008 – ($69bn to $171bn) (Appendix 1 – Case Study, Grant, 2005)
- High growth in gas sales and electricity sales (Appendix 1 – Case Study, Grant, 2005)
- Reductions in the size of;
    - R&M business unit in general
    - Refinery capacity
    - Retail sales (Appendix 2 – Case Study, Grant, 2005)
    - Number of service stations (Appendix 2 – Case Study, Grant, 2005)
- Strong growth in the financial performances of E&P, G&P and Engineering and Construction (Appendix 2 – Case Study, Grant, 2005)

3.3 Analysis using an Organisational Based View

An organisation based view analysis can be used to assess various stakeholders' level of interests and power. This is useful to understand areas of conflict that need to be strategically managed. As a company that has such strong national coupling, dealing with politics comes before business. Additionally, consumers are undeniably developing more environmentally aware tendencies and not only switching to renewable energy but speaking up against oil and gas. A stakeholder power/ interest matrix has been produced.

3.3.1 Stakeholder Analysis

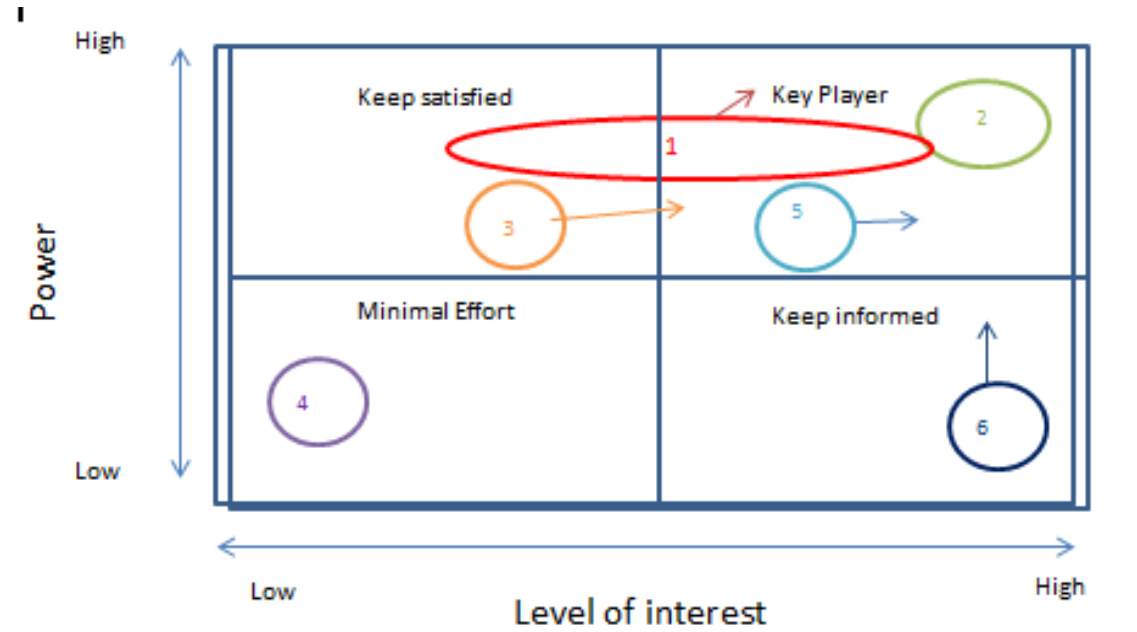
National Oil Companies (NOCs) and oil and gas producing countries are a large stakeholder segment indicated by the large elliptical shape. The group wield a lot of power and ultimately are responsible for making the decisions to let Eni exploit the countries natural resources. The host government's however show a different level of interest towards the organisation; Venezuela and Kazakhstan have forced Eni into some major concessions by outwardly expressing their discontent (Grant, 2005).

Similarly unstable NOC leaderships present the possibility of disruption to production. ENI must therefore be aware of the power that these groups have over them and aim not just to satisfy these stakeholders but incorporate their wants and needs into the organisations strategies and objectives.

Regulators such as the European Commission have shown an increasing level of interest in recent years (shown by the arrow in Figure 3.3) and do have significant power. This has been demonstrated recently as Eni were forced to separate their domestic pipeline and gas storage assets into a different company Snam Rete Gas. It is important that methods for negotiation and political strategies exist so that this stakeholder group can be satisfied.

Customers are becoming increasing aware of the environmental footprint of organisations and demand increased Corporate Social Responsibility (CSR). The matter of an increasing number of consumers switching to solar and wind energy must be taken into strategic plans.

The other stakeholder groups such as the media, client and NGO's have limited power although the interest for NGO's may be high and their power increasing. Largely though ENI can use their size and resources to minimise the impact of these groups.



1	NOC's and Oil and Gas producing countries	2	Shareholders	3	European regulators such as competition commission
4	Media	5	Clients and consumers	6	Non-Governmental Organisations (NGO's)

Figure 3.3 – Power/Interest Matrix

4.0 Strategic Issues Facing Eni

A number of strategic issues that currently (2008) face Eni have been identified. Below, each of these issues is explained and explored in more detail with solutions to each being offered along with suggestions for implementation.

The issues that have been identified are;

1. Security of resources
2. Stagnation and decline of core markets
3. Increase in Power and Influence of Regulators and Commissions
4. Political Instability
5. Volatility of oil and gas prices
6. Unprofitable chemical company

4.1 Security of Resources

4.1.1 Strategic Issue

Eni S.p.A hydrocarbon production and the reserves on which these are secured are fundamental to Eni's revenue, growth prospects and the organisation as a whole. An analysis of Eni's hydrocarbon production over the last 11 years can be used to clearly represent the dynamic nature under which hydrocarbons are produced.

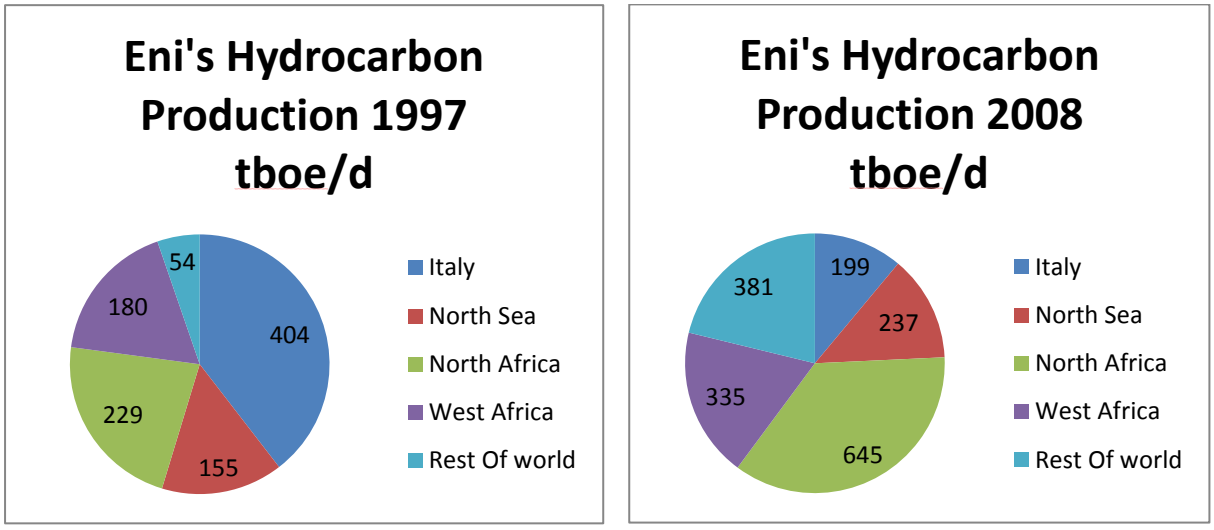


Figure 4.1 – Eni hydrocarbon production by geographical location (Source: case study, Grant, 2005)

Figure 4.1 shows, In just 11 years major production has changed from being Italian centred in 1997 (40% of overall production) to being much more diverse geographically. 36% of production now

comes from North Africa, specifically Libya with notable recent acquisitions being the purchase of upstream assets in Algeria for €700 million in Nov 2008 (Eni, 2008) as well as significantly increased production from the rest of the world and West Africa (now making up 21% and 19% respectively of overall production) catalysed by the major acquisition in the Gulf of Mexico of an Oil field for $4.8 billion in April 2007.

The underlying driver for the production shift has been necessity. A necessity brought about by the inevitable depletion of gas and oil resources. Currently Eni has employed a strategy of spending in exploration and production to mitigate depletion and secure new oil and gas reserves. Current E&P spending is at $33.3 billion and projected to increased (Grant, 2005). 'In a game of cash, [however] we [Eni] are not the richest' (Scaroni, CEO Eni). The organisation faces intense competition, especially over oil fields from competitors, and cannot always compete financially. It is therefore necessary that Eni adopts a strategy to secure future resources that will not be cost intensive, will allow the firm to leverage their competencies and show prospects for continued growth.

4.1.2 Solution and Implementation

As the security of resources is fundamental to Eni, multiple strategic solutions are suggested which allow for the potential for a changing business environment. The suggestions have been proposed based upon the current market environment in which Eni operates, the assets the organisation hold and predictions for the future.

4.1.2.1 Invest in Gas E&P Activities

There are a number of reasons why the strategic decision to focus on Gas exploration and production is an intelligent solution:

- The growing pressure and influence of EU regulators to undermine Eni's dominance in the Italian oil market, means that alternative revenue streams away from oil have to be adopted.
- Investing in Gas will increase the portfolio of reserves increasing the security.
- Gas dependency is increasing and is currently at 80% of that of oil globally. The demand may outstrip that of oil by 2020 (BP,2008).
- Carbon emissions are relatively low compared to other fossil fuels; about 56% that of coal and 71% that of oil (James Todaro, 1999).
- Eni have seen uneven expansion of oil reserves; falling 7.5% from 2006-2007, while recovering 4% in 2007-2008. On the other hand, Gas production and reserves have seen robust growth, offsetting the decline in oil to drive a net rise in hydrocarbon production over

the last 3 year (Grant, 2005). The rise in gas production is largely due to the availability of global untapped resources and the increasing demand from America, China and Europe.

Investments in gas E&P activities should be focused on establishing networks in gas exporting countries. Areas of interest for Eni would be the African countries of Nigeria and Egypt in which the organisation already operates and have proven gas reserves. In Asia, Indonesia and Australia present an opportunity to link the net exporters to the huge market of China. The possibilities for Liquid Natural Gas (LNG) production should also be optimised. A memorandum of understanding has already been signed with Qatar, the world's second largest producer of LNG (Grant, 2005). Equity-accounted entities can ensure capital is invested in transportation and liquefaction infrastructure within Qatar and provide the framework for sustained hydrocarbon production.

4.1.2.2 Vertically Integrated Gas and Power

Eni should advance towards creating a completely vertical integrated gas and power network within their organisation. By supplying gas and power to areas were exploration and production already occur, greater synergies can be facilitated. The strategy also increases revenue security by establishing independent demand away from the volatilities of the oil and gas markets. Furthermore, the gas and power industry is relatively unsaturated meaning the possibility for growth and expansion, within this market, is high. This strategy would seek to compliment recent acquisitions, in 2008, such as the purchase of a 57.2% stake in Belgian company Distrigas and the French company Suez-Gaz de France (Eni, 2008).

To successfully accomplish this objective various management decisions should be made. These are:

- The repurposing of existing marketing assets and personnel to market downstream Gas and Power activities to production markets. This is a better use of the marketing aspect of the organisation that currently sees little return on investment.
- Capital investment in gas fired combined cycle plants for electricity generation. The plants have a lower investment cost, higher efficiency and lower emissions compared to fossil fuel technologies.

Investing in Gas E&P activities as discussed previously. This results in the advantages, such as, benefiting from the increase demand for gas but it also compliments the power generation activities seen as a potent market for Eni in the future.

4.2 Stagnation and Decline of Core Markets

4.2.1 Strategic Issue

One of the core issues facing Eni Spa in 2008 is the increasing pressure to move to new markets and move out of stagnating and declining markets that once provided a large source of income for the group; specifically Refining and Marketing (R&M). The downsizing of the Refinery and Marketing business has already been set in motion over the past 10 years, with the number of retail outlets decreasing from 12,489 in 1999 to only 5956 in 2008 (Appendix 2 – Case Study, Grant, 2005). This decline as also been seen in the refinery capacity of the company, also falling from 664,000 barrels/day in 1999 to 544,000 barrels/day in 2008; a decline of 18% (Appendix 2 – Case Study, Grant, 2005). Further to this, Refinery and Marketing now only accounts for around 11% of Eni's total asset base, with these assets only returning 4.15% from 2006 to 2008 (compared to the assets of E&P at 21%, and G&P at 32%) (Table 15.5 – Case Study, Grant, 2005). When considering this poor financial performance and when also considering that capital investment in Refining and Marketing has been cut to just 6.8% of total investment; it is clear that what is required is a far more fundamental shift in the way that Eni operates within this market (Table 15.8 – Case Study, Grant, 2005).

4.2.2 Solution and Implementation

This shift can be achieved by implementing a number of different strategic changes, and requires action to be taken in both the refining and marketing areas of R&M. The most radical of these changes will need to occur within the refining section of R&M as this is where the majority of the costs are incurred in this area; by reducing the size of the refining part of the business Eni's overall return on assets will increase, making it more attractive to prospective investors, clients and partners.

The downsizing of the refinery business should be implemented in a number of ways. Firstly, the majority of refinery assets held in Europe should be sold. The assets held in Italy however should be held as Eni have a large market share here (around 31%) (Case Study, Grant, 2005) making it a stronghold that would be unwise to let go of. Using the capital raised from the sale of the refinery assets in Europe, some investment should be made in Refinery and Marketing in emerging markets such as Africa, South America and India; where these high growth markets could provide a new source of profit for the group. To accompany this investment, any assets that cannot be sold or are mobile enough to be transported, should be transported to sites in the same emerging markets to reduce the initial costs of establishing refining plants in these areas.

A proportion of this capital should also be used to invest in high return areas of the business such as Exploration and Production. This will not only allow the redistribution of capital from the low return assets of the R&M business to higher return areas, but will also see the company investing in assets which will provide returns over a much longer period of time; such as new oil and gas fields and renewables.

Any capital remaining from the sale of the R&M assets should be used to alleviate some of the long term debt of the business; again making it more attractive to potential investors and also current shareholders.

When considering the marketing part of the R&M business, it has been recommended that rather than selling these assets, they are repurposed, and used to market and sell fuels that are renewable, sustainable and overall more "green".

To accompany the repurposing of these marketing assets, Eni should also move to acquire a company or a number of companies (and their associated patents) that specialise in this type of "green" energy to secure the future of Eni, and protect it against any future shifts towards this type of fuel being more widely used.

4.3 Increase in Power and Influence of Regulators and Commissions

4.3.1 Strategic Issue

In an industry such as the one Eni is in, regulators and policy makers play an increasingly predominant role. They have the potential to put event he largest of companies completely out of commission and it is therefore of utmost importance to deal with any issues that may arise with them as fast as possible.

One such issue are the antitrust charges, which began in Brussels in 2006, reaching their pinnacle in October of 2008. The EU competition commission sanctioned a fine for an alleged cartel in fixing prices and deliberately restricting competition from accessing pipelines. Eni controls a rich pipeline network that delivers from Europe's biggest suppliers, Russia, Algeria, and Norway, yet denies the claims that it refused to sell capacity in pipelines to rivals seeking a route to the EU from Russia and the Netherlands. Although controversial, this behaviour is in fact illegal and regulatory powers in the EU try to impede the formation of monopolies and allow fair competition, the lack of which would otherwise be damaging to the economy.

Eni has also been accused of "strategic underinvestment" to restrict the amount of natural gas flowing through the pipelines. This not only brings forth external pressure and mistrust, but also

causes internal conflicts between stakeholders that may have different motives and ambitions such as shareholders, managers etc.

4.3.2 Solution and Implementation

The fines that can be imposed by the European Commission are no trivial matter; they are in billions and can eat away up to 10% of total annual revenue which in 2008 was just €108/$159 billion. Furthermore Eni can be forced to sell part of their pipeline networks, reducing its influence in the marketplace. This prolific network was attained by the historical "build now, negotiate later" mentality, mentioned earlier, that is difficult to enforce nowadays. Eni's high margins depend on controlling infrastructure yet new pipelines cannot be laid, as demand is low.

However, the EU generally tries to convince governments to rule separation of production and transit/sales, which would open national markets to competition and lowering consumer prices. Although this may seem counter-intuitive and against the interests of Eni at first, a decrease in oil prices will mean more sales and a higher demand which would facilitate expansion and the laying of new pipelines.

Additionally, current investors in Eni recommend similar actions of separating upstream and downstream activities and creating a more isolated gas utility business as this would help consolidate debt and localise risk to investors. Doing so would help maintain an investment-grade credit rating and almost instantly increase the value of Eni.

The most important proceeding is to keep decisive pipelines at all costs. This includes Algerian pipelines as well the TAG pipeline to Russia due to the fact that Eni has supply contracts with Gazprom (Russia) stretching to 2035 as well as access to Russia's energy reserves in exchange for part of the Italian gas market. Eni can then as a result continue to benefit from not having to pay third parties to transport their gas.

It would however be foolish not to sell some subordinate pipelines to alleviate the previously mentioned issues and lift the antitrust charges. Other corporations have acted similarly before, when confronted with the same challenges, including E.On selling part of its electricity grid and RWE selling part of its natural gas network.

Finally, the funds raised can be reinvested in the more cost-intensive strategic recommendations discussed in this case study. If all else fails, an absolute contingency plan would be the separation of upstream and downstream activities to consolidate gas utility debts, though it would not nearly have the same short-term impact.

4.4 Political Instability

4.4.1 Strategic Issue

In recent years we have witnessed crisis and uprisings within the Middle East and Northern Africa. These regions possess immense crude oil reserves. With democracy seeking movements in Tunisia quickly spreading to Egypt, echoes of these uprisings have been felt in other Middle Eastern and Northern African countries, namely Bahrain, Libya and to a smaller degree Iran.

History has shown us that the simple departure of a sovereign can lead to a spike in Crude Oil prices, as seen by the departure of the Shah of Iran over 20 years ago.

The obvious geopolitical unrest combined with the countries' immense energy resources, both underscore the importance of these countries' role in the global security of energy supplies.

This is especially relevant for Eni who is the leading international operator in Libya and Egypt, both of which are seeing signs of upcoming unrest and have already done so recently in 2007.

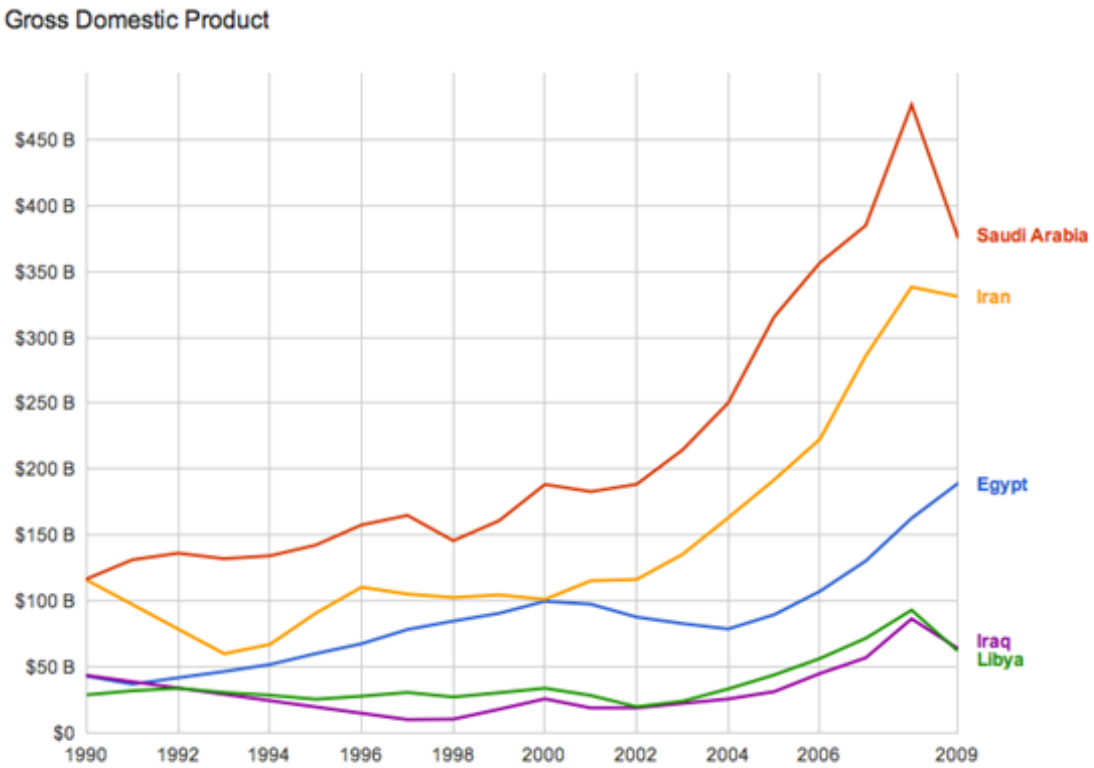


Figure 4.2 – Gross Domestic Product of Respective Countries

Figure 4.2 above shows countries prone to Political and Economic Instability against time we can clearly see for example the effect of the first gulf war in 1991 on these countries GDP.

If this is compared with Crude Oil import prices for Italy; it can be seen that in general as the GDP drops in countries which have large deposits of Oil that supply Eni, the import price of Crude Oil per barrel increases.

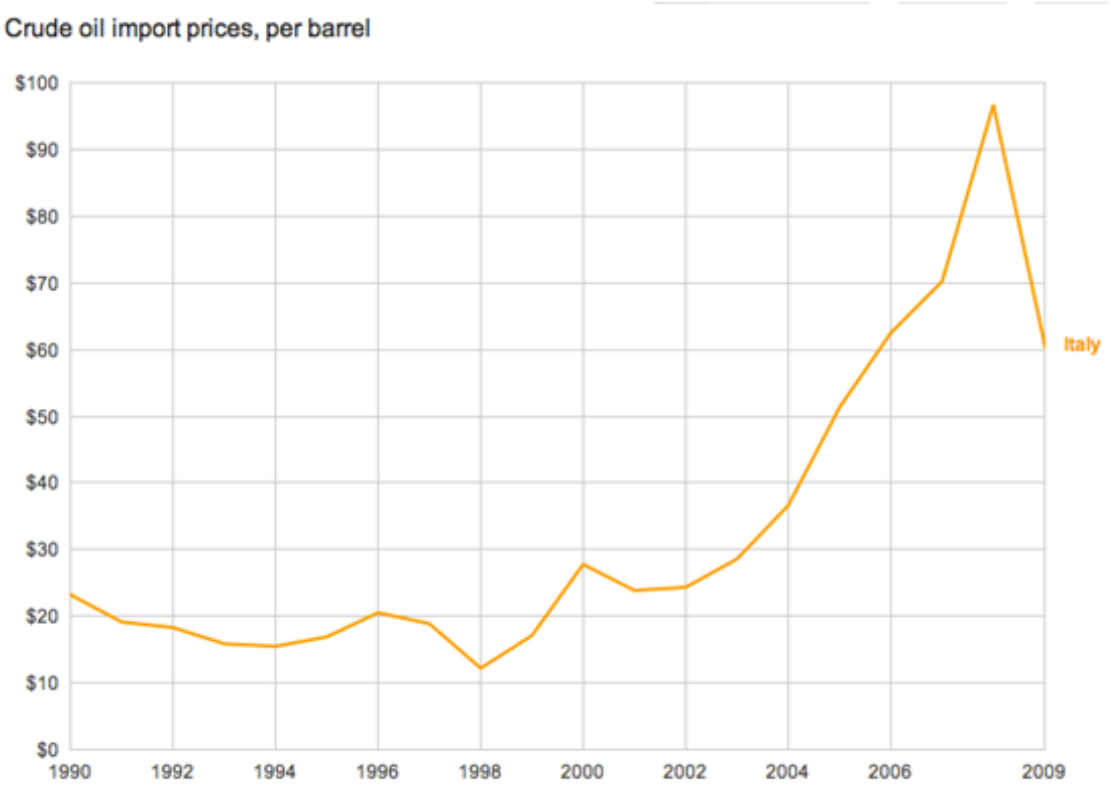


Figure 4.3 – Crude Oil Import Prices, per Barrel

4.4.2 Solution and Implementation

To combat the threat posed by political and economic instability on the security of energy supplies, Eni must diversify. Eni can achieve this by investing in a more diversified gas supply portfolio, which although a large amount of supplied gas is still located in these countries; large quantities can be found in more politically and economically stable countries such as Russia. Another safe guard would be to invest more heavily in exploration activities in more politically stable countries, or in more off-shore exploration efforts; for example in Western Africa and South America.

Within this industry it is almost impossible to completely avoid the issue however investing in production and allowing other companies to accept the risk of exploration can nullify it.

A more stable and long-term approach to avoid energy supplies being dictated by the politics of a region would be to invest heavily in renewable energy resources. Much of these resources are located in westernized countries, which are far more politically stable. Thus the energy supplies are far less prone to fluctuation.

Investment in renewable energy brings with it the added benefit of reduced transportation costs as the highest demand for energy tends to be in such countries of political and economic stability.

4.5 Volatility of Oil and Gas Prices

4.5.1 Strategic Issue

Volatility with pricing of natural gas and oil globally is an issue to Eni Spa and other western companies alike. Gas and Oil prices were relatively stable for around 10 years up until the around 1999 for gas and 2003 for oil as seen in Figure 4.4 and Figure 4.5 (EIA, 2008). The reason for this volatility includes the reasons stated earlier within the porters five forces model of challenges of acquiring oil and gas reserves and that instability has increased in the global economic crisis which led to demand for reserves decreasing and thus the prices fell with the demand. Additionally technological advances has enabled cost reduction as these advancements have allows for a bigger recovery rate of reserves where reserves perhaps were once considered low (Yuri Kosov) plus from 2005, slight stability to natural gas was gained due to technological advances of combined cycle technology and production of natural gas from shale gas formations (EIA, 2012). However combined with unproven oil and gas reserves along with other contributing factors such as political instability of supplying countries in the Middle East and North Africa, which creates unrest and risk to the supply, means the pricing of oil and gas can fluctuate greatly and is near impossible to predict.

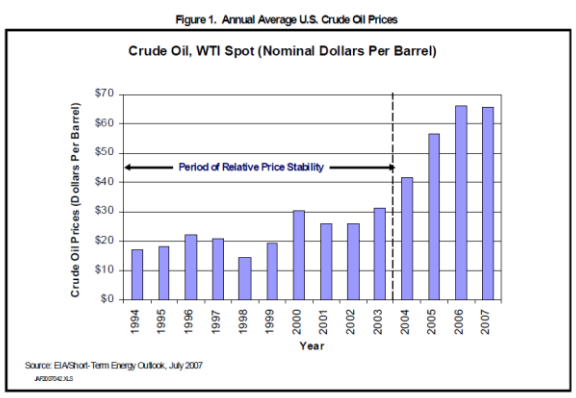


Figure 4.4 – Annual Average US Crude Oil Prices

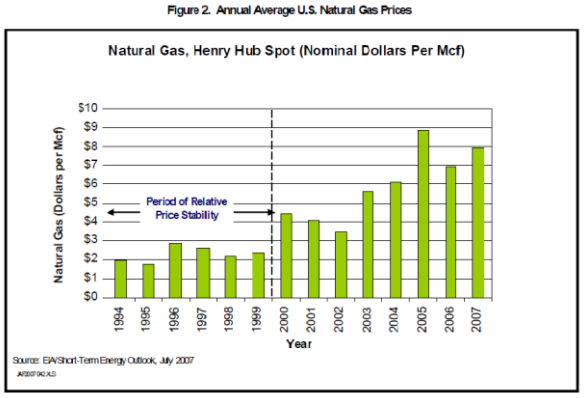


Figure 4.5 – Annual Average US Natural Gas Prices

4.5.2 Solution and Implementation

A long term solution for Eni Spa is to invest in substitute products and investing in sustainable renewable power resources such as biofuels, wind, nuclear, tidal, and solar power which is the long term solution the worlds power demands with diminishing reserves and with the market for renewable being more stable than that of the oil and gas market, it makes the renewable power market more attractive for investors at present and by diversifying into renewable power which has a low correlation in pricing with crude oil prices means that the company has less risk for investors

for investing in Eni Spa (Ting-Huang Chang, 2010). Plus by investing heavily in renewable resources now means that Eni Spa can get lead-time in the market for renewable power plus would likely to be fast tracked with government backing and potential funding as European Governments look to have 20% of the energy demands met by renewable resources by 2020 (Richard Green, 2011).

Eni Spa has already started investing in solar power and biofuels, the recommendation is to carry on investing heavily in research and development of these renewable resources and make strategic alliances with specialists with a good knowledge and understanding of these renewables. Furthermore diversify more into the renewable sectors primarily in wind power as it is expected that growth within this sector and the energy market is set to increase greatly, onshore and offshore as you can see from Figure 4.6 and buying land onshore and offshore from governments for put wind farms on, Eni Spa will be able to gain a lead time on their competitors and a decent market share in this sector whilst designated areas to place wind farms on is still available, however it would be advisable for Eni Spa not to do this alone, again making strategic alliances with specialist firms within this area is crucial for acquiring knowledge and potential intellectual property from the alliance.

Offshore and onshore wind capacities in EU-27.
Source: National Renewable Energy Plans 2010, EWEA—Pure Power: Wind Energy Scenarios up to 2030 (2010).

Country	2008 capacity (GW)		2020 national plan[a] (GW)		2020 EWEA high capacity (GW)		2020 national plan[a] (GW)	
	Onshore	Offshore	Onshore	Offshore	Onshore	Offshore	2008 (%)	2020 high (%)
UK	2.7	0.59	14.9	13.0	14.0	20.0	2	25
Germany	23.9	0.01	35.8	10.0	42.0	10.0	7	17
France	3.4	–	19.0	6.0	20.0	6.0	2	11
Netherlands	2.0	0.25	6.0	5.18	5.4	6.0	4	22
Sweden	0.9	0.13	4.37	1.82	8.0	3.0	2	16
Denmark	2.8	0.41	2.62	1.34	4.0	2.5	20	46
Belgium	0.4	0.03	2.1	1.8	2.5	2.0	1	12
Spain	16.7	–	35.0	3.0	41.0	1.5	12	26
Finland	0.1	0.02	2.5	0.0[b]	2.0	1.0	0	8
Ireland	1.0	0.03	4.1	0.6	6.0	1.0	9	55
Italy	3.7	–	12.0	0.7	17.0	1.0	2	9
Poland	0.5	–	10.0	0.5	12.0	0.5	1	15
Greece	1.0	–	7.2	0.3	8.3	0.2	4	29
Estonia	0.1	–	0.5	0.0	0.5	0.1	2	11
Latvia	0.0	–	0.2	0.0	0.2	0.1	1	9
Lithuania	0.1	–	0.5	0.0	1.0	0.1	1	13
Others	4.3	–	11.3	1.0	26.1	–		
EU-27	63.5	1.47	168.1	45.2	210.0	55.0	4	17

[a] Entries underlined were for the EWEA's low scenario, as National Renewable Energy Plans were not available for these countries.
[b] The National Plan for Finland does not give separate figures for onshore and offshore wind.

Figure 4.6 – Offshore and Onshore Wind Capacities in EU-27

4.6 Unprofitable Chemical Company

4.6.1 Strategic Issue

When using the Boston Consulting Group matrix to consider the chemical arm of Eni SpA, it can be said to be a "dog"; a low growth industry in which the company holds a low market share. Only 2.66% of Eni's total assets lie within the chemical business (Table 15.5 – Case Study, Grant, 2005). These assets do not provide the company with any return and in fact have lost money in the past 3 years with a negative return on assets of -1.38% (Table 15.5 – Case Study, Grant, 2005).

Due to this poor financial performance and the fact that the chemicals business makes up such a small part of the overall asset base of the company; it is an area that needs to be addressed as it is one that is losing money for the company and an industry that Eni can no longer compete in effectively.

4.6.2 Solution and Implementation

In order to rid Eni of the financial burden provided by the chemical business, it is recommended that the chemical business is sold as quickly as possible. This will free up capital to re-invest in other areas of the business and will partially fund the other recommendations that have been made thus far in this report.

In order to sell the chemical business, first, a suitable and willing buyer must be identified. By considering Figure 4.7 below, it can be seen that the companies that are investing heavily in the chemical industry are Total Fina Elf, Exxon Mobil and Royal Dutch Shell. The search for a buyer should start with these companies as they are heavily investing in this area.

Company	% of Total Capital Expenditure Spent on Chemical Business (2003-2007)
Total Fina Elf	9.9
Exxon Mobil	4.0
Royal Dutch Shell	3.2

Figure 4.7 – Percentage of Capital Expenditure Spent on Chemical Business (Table 15.8 from case study, Grant, 2005)

Two other companies that could be approached to buy the chemical business from Eni are Chevron Texaco and Repsol. These companies have both shown a high return on chemical business assets in the past two years (10.90% and 10.09% respectively), and so therefore have the potential to be interested in acquiring Eni's chemical business.

The first port of call however should be Exxon Mobil. This is because Exxon Mobil has a 19.47% return on chemical business assets, 8.84% of their total assets held within the chemical business and are currently investing 4% of their total capital expenditure in their chemical business. All of these figures make them the most likely of the majors to want to explore the possibility of an acquisition.

5.0 Overview of Strategic Recommendations and Conclusions

In conclusion, having identified a number of strategic issues facing Eni SpA in 2008, this report recommends that the following strategic moves are made in order to streamline the company, focussing it on the markets in which its strengths lie, and preparing it for the paradigm shifts that are

expected in this industry in the future; i.e. a widespread migration towards renewable energy, once fossil fuel reserves begin to deplete.

Summarised, the recommendations that have resulted from this analysis are;

- Invest in gas exploration and production
- Invest in shale gas exploration and production
- Invest heavily in renewable energy, through investment in research and development of technologies in this area, and through the acquisition of smaller companies that already operate in this area and through a series of strategic alliances
- Sell the refinery assets in Europe, keeping the Italian assets and investing the capital raised in exploration and production and refinery in emerging markets
- Keep key pipeline assets, but sell enough minor and less significant pipeline assets to counter anti-trust charges
- Invest in more price stable renewable fuel sources ahead of the rest of the mainstream market
- Sell the chemical business

These recommendations follow a simple set of summarised action points;

- Invest in upstream oil activities
- Divest downstream oil activities
- Continue growth and vertical integration of gas and power
- Buy into renewable and sustainable energy sources to facilitate a longer term strategy

By implementing the strategic recommendations outlined above and by following the action points summarised above, Eni SpA will be able to focus on their most profitable activities, providing a platform from which to move forwards and upwards from in this increasingly competitive market.

6.0 References

1. Grant, R, M (2005). Contemporary Strategy Analysis. 5th ed. Oxford: Blackwell Publishing. 220-248.
2. Eni Spa. (2013). *Access to Mineral Resouces.* Available: http://www.eni.com/en_IT/innovation-technology/technological-challenges/access-mineral-resources/access-to-mineral-resources.shtml. Last accessed 27th Feb 2013.
3. Richard Green, Nicholas Vasilakos. (2011). Energy Policy. *The economics of offshore wind*. 39 (2), p496-502.
4. Ting-Huan Chang, Hsin-Mei Su. (2010). The substitutive effect of biofuels on fossil fuels in the lower and higher crude oil price periods. *Energy*. 35 (7), p2807–2813.
5. EIA. (2012). *Fuel Competition in Power Generation and Elasticities of Substitution.* Available: http://www.eia.gov/analysis/studies/fuelelasticities/. Last accessed 27th Feb 2013.
6. Vello A. Kuuskraa. (2008). *Investment Decision Making In the Oil and Gas Sectors.* Available: http://www.eia.gov/oiaf/emdworkshop/pdf/oil_gasinvestment.pdf. Last accessed 27th Feb 2013.
7. Kosov, Yuri, and Wim Mallon. "GLOBAL ENERGY AND ENVIRONMENTAL SECURITY IN THE CURRENT GLOBAL ECONOMIC CRISIS."
8. ENI SPA Building an International Energy Measure, (2009), [Online], retrieved from https://mail-attachment.googleusercontent.com/attachment/?ui=2&ik=fed62fb936&view=att&th=13d36bc28a9074f0&attid=0.2&disp=inline&realattid=f_hdvzeuda1&safe=1&zw&saduie=AG9B_P-EcfA_U6ytYwj42Yk2Q4SX&sadet=1362463996192&sads=u6kmkv536FcB9GtQZgLDk_P2GSo&sadssc=1 Accessed on 2013-March-05th
9. Chemical Company, (2009), retrieved from https://mail-attachment.googleusercontent.com/attachment/?ui=2&ik=fed62fb936&view=att&th=13d36bc28a9074f0&attid=0.1&disp=inline&realattid=f_hdvzdhnb0&safe=1&zw&saduie=AG9B_P-EcfA_U6ytYwj42Yk2Q4SX&sadet=1362466848366&sads=eTlkLqy3quNhHBbrY0yesUHGh9k Accessed on 2013-March-05th
10. BP. (June 2008). BP Statistical Review of World Energy. BP Statistical Review. 1 (1), 22-31.
11. ENI (2008). *ENI in 2008.* Milan, Italy.
12. James Todaro. (1999). Natural Gas 1998 Issues and Trends. Energy Information Administration. 98 (2), 68-70.