The case of Corporate Social Responsibility (CSR) has become one of the most widespread business topics in the academic community. Various issues like environmental pollution, economic crisis, corruption, poverty are of major importance these days and besides governments and politicians’ responsibility it is obvious that corporations are also part of these problems. The concept of CSR is about the commitment of business to an ethical behavior which will contribute to the economic development, the improvement of the quality of life of the local communities and the society. In this paper we will present how Greek companies adapt CSR practices to their business strategy and the outcome of these activities. The companies and their CSR practices which are going to be analyzed in this paper belong to the energy production sector.

1. INTRODUCTION

In a society which is, day by day, becoming more demanding in issues that concern the environment, the economy and the quality of life, it is necessary to determine the possible actors that affect this system. Governments and the public may be considered as the key players but equally important actors are enterprises. The enterprises are a part of this system in a more active way than the public since in some cases they form or affect the public opinion. The relationship between governments and enterprises as well as consumers and
enterprises is interactive. Either enterprises would demand a clean environment to operate in or the local authorities would expect from enterprises not to pollute, but to operate in an ethical manner.

The complexities that arise from what society demands from enterprises and what enterprises demand from society are discussed among the academic community, NGOs, media, enterprises, politicians. The tool to accomplish a harmonic coexistence between local community, enterprises and the public is Corporate Social Responsibility. The meaning of CSR encompasses various principles like sustainable development, human rights, poverty, ethics etc.

These thoughts on the CSR started to make businesspeople realize that companies had a responsibility to society that went beyond or worked in parallel with their efforts to make profit (Falck, 2007). In a global and competitive field, corporations had to manage the balance between profit and ethics towards society. Even though Milton Friedman would claim that “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits” (Friedman, 1970) others would argue the opposite and would propose ways to develop effectively CSR (Caroll, 1991, Husted et al. 2007; Salzmann et al 2005) or would try to explain how CSR actually pays off to companies and societies (Holmes, 1976; Vyakarnam 1992).

The full definition of what CSR is or how well it is described is still vague due to the fact that several academics, businesspeople, politicians or other actors from NGOs explain it in a different way CSR and in their terms of expertise. According to Dahlsrud, the definitions he examined are predominantly congruent and the challenge for business is not so much to define CSR, as it is to understand how CSR is socially constructed in a specific context and how to take this into account when business strategies are developed (Dahlsrud, 2008).

However, even though CSR can be translated in different perspectives, all of these experts agree that CSR encompasses three basic elements which are economic, environmental and social responsibility and the three elements concern mainly the activities of the business sector.

From several definitions on CSR one of the most accurate is that of Blowfield and Fynas’s who define it as an umbrella term for a variety of theories and practices all of which recognize the following:(a) that companies have a responsibility for their impact on society and the natural environment, sometimes beyond legal compliance and the liability of individuals; (b) that companies have a responsibility for the behavior of others with whom they do
business (e.g. within supply chains); and that (c) business needs to manage its relationship with wider society, whether for reasons of commercial viability, or to add value to society.

The World Business Council for Sustainable Development defines CSR as “the continuing commitment by business to behave ethically and contribute to the economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.” A different definition is given by Kori Udovički (2007), Director of the Regional Bureau of the United Nations Development Programme for Europe and Commonwealth of Independent States, who describes CSR as a powerful tool for modern societies. When corporations apply this tool, it leads to social cohesion, economic growth and sustainable development in a voluntary way.

An enlightened guide on CSR is the famous pyramid of CSR by Caroll which is constituted by economic, legal, ethical and philanthropic components (Caroll, 1991). These components are what communities demand from corporations. Caroll considers philanthropy to be a prerequisite and not something obligatory that communities and the public expect from enterprises and uses a metaphor by characterizing philanthropy as icing on the cake (Caroll, 1991). Earlier, Tilson and Vance pointed out that philanthropy for some managers is an integral part of a well-managed company (Tilson & Vance, 1985).

The dimensions of CSR are divided into internal and external and the reason for defining whether CSR is internal or external is to separate the impact of the CSR activities. If an activity focuses on the staff of the enterprise then it is referred to as an internal dimension of the CSR because it concerns the inner environment of the enterprise. If, on the other hand, an activity is a regeneration project in the local community then it effects the environment outside the enterprise so it is an external dimension of the CSR. The areas that gain the attention and define whether CSR is internal or external are the workplace, marketplace, community and the environment. To be more specific, the internal dimension focuses on human resources, health and safety, adapting to change and management of natural resources and the environment while external dimension refers to human rights, global environmental problems, the supply chain and the local communities. These detailed areas of external and internal are defined by the Green paper, published by the European Commission in 2001 (COM, 2001, 366).
The structure of this case study contains: a brief introduction about Corporate Social Responsibility and how several academics argue about the concept of the CSR; a description of the CSR strategy of the three companies; a comparative analysis of the three case studies and finally a discussion on the perspectives of CSR in Greek companies. These companies were selected because they are among the main energy providers in Greece, so it was interesting to examine how ethical their behavior towards the Greek society is. The added value of this article is to present how Greek companies from the energy sector approach the CSR value and to what extent their CSR activities can be characterized as a successful CSR strategy.

These companies were chosen, in order to investigate whether they apply any CSR strategy since their operation has an enormous impact on the environment and the society. An extended research companies’ websites and their reports leads to a comparative analysis of the companies’ CSR activities.

2. CSR IN GREECE

Greece is a country that has been facing difficulties in its political and social system in the last two decades, by the governments of the two dominant political parties. Each political party’s goal was to enable Greece to get out of its economic, social and environmental crisis and finally be a competitive country like the rest of the European countries. In this time of the economic crisis, enterprises address some of the major problems like unemployment, poverty, environmental pollution. The tool to help deal with some of these problems is Corporate Social Responsibility. It should be noted that in Greece several barriers made it difficult for the CSR to emerge earlier. Some of these problems still exist, but owing to the persistent efforts of the business sector, some of these problems were approached and CSR activities were established as a part of their business strategy.

Corruption is one of the main obstacles in the adoption of the CSR. According to the Transparency International (2004), Greece is ranked 50th out of 133 countries in the Corruption Perceptions Index. According to the Social Economic Committee of Greece (SEC) which issued an “Opinion on the CSR” (2003), some of the obstacles to a successful CSR strategy are: the difficulty of complying with the law, the size of Greek companies (which are usually family-owned and do not have the necessary business culture), or the state not undertaking initiatives to help companies realize the advantages of CSR principles. The SEC (2003) gives guidance on how to develop CSR and points
out the importance of the existence of a partnership between stakeholders (i.e. the state) and the companies to accomplish their goal.

Beyond the abovementioned difficulties, CSR in Greece is only emerging and there are encouraging efforts aimed at developing responsible behavior by the companies along with the help of NGOs. A characteristic example is that of the Hellenic Network for CSR which is a business-driven membership non-profit organization. Its mission is to promote the meaning of Corporate Social Responsibility to both the business community and the social environment, with the overall objective being a balance between profitability and sustainable development (the Hellenic Network for CSR). A survey on Corporate Social Responsibility (CSR) in Small and Medium-sized Enterprises was conducted by the University of Athens, during the summer of 2006, and initiated by the Hellenic Network for CSR. This survey was part of "Hermes", a program aiming on broader awareness of CSR among Small and Medium-sized Enterprises, funded by the European Commission. The axes of the HERMES program were based on the knowledge transfer or the adoption of best practices on CSR and establishing correct structures in order to effectively implement CSR practices.

The results of this survey showed that a large percentage (34%) of CSR activities undertaken by SMEs in Greece was aimed exclusively at intra-company issues, and specifically at Human Resources. A 60% of the companies associated the development of CSR activities with the growth of their turnover and the indirect benefits proving that CSR was still connected to “marketing” rather than the entire network of their business activities (Hellenic Network for CSR, 2006).

Some actions from the EU countries have been undertaken to promote CSR in the energy sector. The Finnish Energy Industries Federation (FINERGY) was inspired by EU Green Paper on CSR and published the business guide “Corporate Social Responsibility of the energy industry”. The guide discussed the importance of the corporate social responsibility, the CSR reporting and management to energy companies as well as the importance of interaction with stakeholders. The guide is structured according to the principles of the triple bottom line for sustainable development (economic, environmental and social). The text emphasized the importance of a good reputation as a tool to attract customers, the best employees, as well as investors. While the guide underlined the crucial role of energy companies in creating social welfare, it also drew attention to the fact that better acceptability of the energy industry should be enhanced by regular interaction with the stakeholders (FINERGY, 2002).
The publication of a study on corporate social responsibility (CSR) in the electricity sector by the ECOTEC Research and Consulting revealed that although it was proved that it was complex to measure the direct impact of socially responsible corporate practices, those involved in the delivery of successful policies believed that CSR had a positive effect on their business in a range of ways. The characteristics of the electricity sector and the market demand that CSR practice is taken seriously and the new GRI sectoral indicators show the importance and value of CSR in the sector (ECOTEC, 2007).

3. THE CASE OF PUBLIC POWER CORPORATION S.A.

PPC is the largest public power generation and power trading company in Greece and is the 15th largest electricity company in Europe with regard to the volume of electricity sales. It was founded in 1950 in order to implement the national energy policy, which would electrify Greece through efficient use of domestic resources. PPC transmits electricity to about 7.2 million customers and it owns the national transmission and distribution system.

The company has in its possession 98 power plants with a total number of 524 power units. The electricity is transmitted via 11,600 km of high voltage transmission lines (66, 150, 400kV) in order to be distributed to Greek consumers through a medium (20kV) and low voltage (220V) network measuring approximately 210,000 km. Company’s lignite-fired power plants are located in Ptolemais and Megalopolis. The company also installed a 1,600 km-long optical fiber network in the existing transmission lines, as well as an underground network measuring 170 km in urban areas.

The company entered the wider market of southeast Europe in 2001 as a Société Anonyme, and the same year it was listed on the Athens and London Stock Exchanges. The business plan of the company for 2009-2014 focuses on:

- establishing a portfolio of efficient, reliable, competitive and environmentally friendly power plants,
- improving distribution and transmission services for its customers through higher reliability and efficiency of networks and
- reaching a 20% market share for its subsidiary, PPC RENEWABLES S.A.

As far as its responsibility toward the society, activities that concern the environment, the society and its employees are on their agenda. The publication of “The social image of PPC SA” for 2007 reflects the CSR strategy the
company follows in the sectors of society, the environment and human resources. The company’s contributions to the society consist of the following:

- creating jobs,
- contributing to the development of the national economy,
- exploiting our country's water resources through 15 large-scale and 9 small-scale hydroelectric power plants,
- offering district heating possibilities,
- sponsoring social and cultural activities,
- dealing with special events (earthquake in Athens, the Athens 2004 Olympic Games, construction of electrical networks, electrification of the island of Gavdos),
- supporting universities and institutes, organizations and associations that organize conferences or one-day seminars on energy issues,
- improving customer services.

In 2007, the company helped the areas in the Peloponnesus by restoring the damage after the wildfire that caused the blackout and offering economic support to the residents.

One of the principles of the company’s strategy is environmental protection. The "Environmental Sensitivity OICOPOLIS 2006" award was given to the company for environmental investments aimed at electricity generation.

The main principles set forth for the success of the environmental management policy implemented by the Mines Division are the following:

- knowledge of the area's environmental conditions,
- selection of the appropriate methods and techniques of land rehabilitation,
- land planning of the areas to be restored (land use maps),
- regular implementation of environmental protection and restoration programs in accordance with the approved environmental terms (joint ministerial decrees) and
- monitoring and evaluation of the results of environmental restoration by means of modern geographical information systems (GIS).

The environmental policy in electricity generation focuses on the strict application of European and national environmental legislation, monitoring and coping with climate change, on application of the best available techniques in compliance with the Directive on Integrated Pollution Prevention and Control (IPPC). It also participates in the development of scientific knowledge and
expertise via participation in European Union Environmental research projects. An evaluation of environment-related performance is included in the environmental aspect of the company along with development of programs in order to inform the public and the personnel about the environmental issues.

The implementation of the Environmental Management Systems ISO 14001:2004 is included in the company’s environmental policy. In order to minimize the environmental impact of the company several measures have been taken like painting the transmission lines so as to reduce their visual impact on the environment, avoiding their installation on crests and areas where there is an unobstructed view of the horizon, planting trees or creating green spaces so as to contribute to the development and upgrade of the area.

The location of the power plants in islands requires several measures to protect the environment. Some of these measures are the Environmental Impact Assessment Studies which have been carried out for all the power plants, air quality measurement stations, noise reduction projects, harmonious integration of the buildings into the landscape, tree-planting operations near power plants, certification of all power plants with regard to CO$_2$ emissions.

The waste management control is a priority for the company achieved by training the personnel in the detection and management of all hazardous and non-hazardous waste, through manuals, training videos, seminars etc. Following the waste management policy, the company proceeded to the design, planning and environmental licensing of an adequate Industrial Waste Management Site situated at the deposition areas of the Kardia exhausted mine, in the region of Kozani.

The human resources sector is a part of the CSR strategy for PCC. Health and safety are a priority for that sector and various activities related to the safety of employees are conducted. Some of these activities are: providing preventive medical check-ups for the employees or equipping the company with ambulances and nursing staff and implementing safety measures on the production procedure.

Emphasis is given to the training of the employees by the Training Department which gives continuous training to the technicians. Further, the company supports various cultural associations, several festivals and events, such as theater performances, dance festivals, exhibitions, sport events, excursions etc.
All these CSR activities present the social image of the company. The structure of the CSR strategy is formulated on three sectors, i.e. that of society, environment and human resources. An in-depth analysis is given for each sector with reference to specific CSR activities.

4. THE CASE OF DEPA

The Public Gas Corporation (DEPA) is the company that provides natural gas to Greece. DEPA’s share capital amounts to 991.2 million Euro. The Public Gas Corporation (DEPA) lies within the jurisdiction of the Ministry of Environment, Energy and Climate Change. It was founded in September 1988 and its scope was to introduce natural gas into the energy balance of Greece. A group of subsidiaries companies are a part of the DEPA contributing to the energy setting of the Eastern Mediterranean. These companies are: DESFA SA (100% subsidiary of DEPA), EDA SA (100% subsidiary of DEPA), Attica EPA S.A. (51% subsidiary of DEPA/EPA), Thessaloniki EPA S.A. (51% subsidiary of DEPA), Thessaly EPA S.A. (51% subsidiary of DEPA), IGI Poseidon S.A. (51% subsidiary of DEPA), and PFI S.A. (33.15% subsidiary of DEPA).

There are three entry points of natural gas into Greece:
- Sidirokastro (Serres) on the Greek-Bulgarian border, from where natural gas originating from Russia, is transported.
- Kipoi (Evros) on the Greek-Turkish border, where natural gas is imported from Turkey.
- Revythoussa island, in the Pachi-Megara gulf in Attica, where liquefied natural gas (LNG) originating from Algeria or other sources, is received via sea and then fed-into the central pipeline.

The central pipeline extends from the Greek-Bulgarian border to Lavrio, Attica and its length is 512 km. DEPA is a company that gathers and evaluates all information on international trends. It fosters collaboration with other companies which sell natural gas to DEPA. These companies are:
- Russian company Gazprom Export, which delivers at the Greek-Bulgarian border the largest share of the natural gas quantity supplied to DEPA. This quantity reaches today 2.24 billion m$^3$ annually.
- Algerian company Sonatrach, which supplies DEPA with liquefied natural gas delivered to the Terminal Station of Revythoussa. The annual contract quantities fluctuate between 0.6 and 0.8 billion m$^3$ of gas.
• Turkish company BOTAŞ, which, following the completion of the Greece-Turkey pipeline, in November 2007, delivers annually 750 million m³ of natural gas.

In 2008, the company signed contacts with international suppliers in order to assess possible chances for additional gas quantities. An important development was the signing of the Memorandum of Understanding with Gaz de France – Suez Company. The same year, a Declaration of Intent was signed between the competent Ministers of Greece and Bulgaria, regarding the interconnection of the two countries’ natural gas systems.

Due to the financial crisis, DEPA’s priority is to effectively adjust to the possible fluctuations in demand and manage its supply sources. The CSR policy is reflected in the publication of their annual report for the year 2008. The CSR strategy is a part of the company’s annual report. The chapter “Contribution to sustainable development” presents the company’s activity on the sustainable development for the environment, the society and human resources. The main objectives of the company regarding the environment are to reduce the impacts of the company on the landscape, to preserve the natural resources and to improve the residents’ quality of life.

The infrastructure of the company is based upon strict and valid international standards and it is certified by specialized institutes. The operation of the company follows a strict monitoring program with Evaluation and Control systems. The employees are a valuable part of the company. Therefore, the company organizes training programs and creates a climate of understanding and mutual loyalty. The company is committed to initiatives for the local communities, culture and sports, for the youth and the educational system, as well as the strengthening of social stability. The information about specific CSR activities is not available in the chapter on company’s contribution to social development, but there are press releases about their social activity on the company’s website.

5. THE CASE OF HELLENIC PETRELEUM

HELLENIC PETROLEUM Group is the largest industrial and commercial group in Greece. The company has a wide range of activities such as:
• refining of crude oil and fuel supply,
• marketing of oil products, including sales abroad,
• power generation production and trading,
• oil and gas exploration and production,
production and trading of petrochemicals/chemicals,
- participation in the natural gas sector, through DEPA SA,
- participation in transportation of crude oil and oil products (pipeline networks, marine transportations).

In 1998 the Public Petroleum Corporation (DEP) was renamed HELLENIC PETROLEUM S.A. and listed on the Athens and London Stock Exchanges. The composition of the company’s share ownership (holders of more than 5%) is as follows: Greek state 35.5%, Paneuropean Oil & Industrial Holdings S.A. 39.5%, institutional investors 16.5%, and retail investors 8.5%.

It has in its procession and operates three refineries, in Aspropyrgos, Elefsina and Thessaloniki, with nominal annual refining capacity of 7.5 million tons, 5 million tons and 3.4 million tons crude oil respectively. The three refineries combined cover 76% of the country’s total refining capacity.

The company holds the majority shares OKTA AD SKOPJE which operates the only refinery in FYROM via its associated company EL.P.ET. BALKANIKI. HELLENIC PETROLEUM S.A. also holds a 35% stake in Greece's incumbent gas company, DEPA S.A.

The CSR policy of the company for 2009 is presented in a separate report named “Sustainability Report”. The contents of the report analyze the following areas: Contribution to the Society, Our People, Optimization of Operations, Care for the Environment. Before the analysis of each area of the company’s CSR strategy, it is necessary to mention that the business principles are aligned to the following standards, directives and regulations: The Global Reporting Initiative (GRI), GRI Indicators, the 10 principles of the United Nations' Global Compact, the ISO 9001, ISO 14001 and OHSAS 18000 international standards and the Eco Management & Audit Scheme (EMAS).

The chapter “Contribution to the society” addresses issues, such as education, sports, health and culture; also they support vulnerable groups, senior citizens, students and young people. These CSR activities were addressed, mainly, towards the municipalities and communities where the Group operates (5 municipalities in the Thriassion region and 4 municipalities in Thessaloniki). In 2009, some initiatives were:
- Free food provision to destitute families at Thriassion (during the Christmas and Easter periods).
- Supply of free heating oil to schools, bodies, destitute and with many children families at the regions of Thriassion and Thessaloniki.
The program "let's go camping", with the participation of children from the neighboring to our installations municipalities (regions of Thriassion and Thessaloniki).

Free check-ups for the senior citizens from the local communities (regions of Thriassion and Thessaloniki).

Donation of equipment for medical tests to the Eleftherio-Kordelio's Elderly Leisure-Time Center (KAPH) in Thessaloniki.

Sponsoring and organizing events, on carnival and school-end, in the schools of Thriassion.

Financial support and provision of educational material to schools in the regions of Thriassion and Thessaloniki.

Rewarding the first-year students, from the neighboring to our installations municipalities, (273 from Thriassion and 97 from Thessaloniki).

Reforestation at the Gikas high ground, Aspropyrgos Municipality.

Tree planting of regional roads, Aspropyrgos Municipality.

Since the company operates abroad, the subsidiaries develop CSR activities in order to strengthen their social role towards local communities. The main key areas are the protection of the environment (participation in an environmental event organized by UNICEF-Serbia), the support of athletic and cultural events (Donation of a playground to the Kikinda Municipality-Serbia, Sponsorships to bodies and scientific associations for the organization of conferences, exhibitions, cultural and athletic events - FYROM) and the provision of general assistance to people who need it (donation of heating oil and Christmas toys to the St. Panteleimon home for children with special needs - Bulgaria.)

Human resources are a vital part of the company’s business strategy. There were in 2009 numerous social, cultural and athletic events in which the employees and their families participated such as rewarding with prizes employees' children who excelled in their studies during the academic year 2008-2009, organizing excursions for the employees and their families.

The Human Resources Management System ensures that all employees have equal opportunities for personal and professional evolvement with no discrimination while at the same time forming a flexible policy for the personnel management so as to maintain employee job satisfaction as high as possible. Providing the employees with a wide range of training approaches and knowledge tools gives the company a competitive advantage in the energy market. In 2009, 81 inter-departmental seminars were carried out with the participation of 850 employees and a total of 52,000 training hours with topics
like safety, new technologies, labor, commercial and financial subjects, managerial skills and marketing, management of quality, health, safety and environment, learning of foreign languages (English and German). Figure 1 presents the distribution of the investment on training and education in more detail. In 2009, the company spent 1.4 million Euro on education and training of its employees.

![Figure 1. Distribution of training & education investment](image)

Source: Hellenic Petroleum (2009)

In addition, health and safety constitute an integral part of the company’s CSR strategy: therefore, a framework was set up and all available Greek and European legislation for health, safety and environment was posted on Group's intranet. The list of legislation is regularly updated with simultaneous notifications of all concerned departments, for complete and timely informing and harmonization with the new requirements. A significant number of European standards on health, safety and environment are available to all employees on the intranet.

The chapter “Optimisation of the Operations” covers efficiency in the production and optimizing the operation of the three refineries in Greece. The Solomon Energy Intensity Index (EII) value indexes the energy efficiency of a refinery plant using a technology explicit computer model that determines the "standard" energy efficiency of a plant by computing standard energy consumption for each technology present in the plant and the type of crude charged to these technologies.
The project DIAS was an initiative which helped the company to identify areas for improvement, mainly in the operation and maintenance of the facilities. The Group’s experienced staff, in cooperation with Shell Global Solutions suggested areas for improvements in order to produce higher value products and reduce the operating costs thus increasing the company’s profitability.

The protection of the environment is a part of the CSR strategy aimed at the following areas: reduce the environmental impact of the company by optimizing the operation in terms of energy efficiency and as a result, the fuel consumption and the emissions to air are minimized. The air quality monitoring stations that operate within the boundaries of the domestic refineries depict a satisfactory level of air quality. As far as the wastewater management, the company uses a recycling process e.g. hydrocarbons recovered from the wastewater treatment units are re-refined.

Figure 2 shows the OKTA’s refinery SO\textsubscript{2} emissions, during the period 2005-2009 which means that the company reduced its SO\textsubscript{2} emissions. The results that concern the emissions of the company for NO\textsubscript{x}, were steady for the year of 2009.

The solid waste management uses environmentally friendly treatment technologies. An indicative example is that of spent catalysts that cannot be regenerated and are sent abroad to specialized and licensed waste management companies so that precious metals are recovered or thermal destruction is
carried out. The company tries to develop renewable energy sources such as the use of biodiesel as a mixture component in the diesel, in order to keep in line with the Greek and European legislation.

The commitment of the company to the 10 principles of the UNGC (United Nations Global Compact) is confirmed by applying the sustainable development indices like the The Global Reporting Initiative (GRI) indicators. Those indicators reveal in numbers environmental, social and corporate performance of the company.

According to the CEO of the company, corporate social responsibility is the integration of social and environmental activities in their everyday business. The sustainability report of HELLENIC PETROLEUM is detailed and well-structured since there are references and numbers that concern the CSR strategy that the company follows.

6. COMPARATIVE ANALYSIS OF THE THREE CASE STUDIES

These public companies are the largest in the energy sector and play a key role in the production of energy in Greece. Since their activities are heavily affecting the environment, it is interesting to investigate their attitude towards social welfare. All businesses need to operate in accordance with their consumption and conservation of energy, including the energy companies themselves.

CSR strategy means different things to different companies and this is often revealed in their CSR Reports. Any business should have as a core competency, an ability to create a positive public perception of the organization. This is an imperative, considering that the consumers expect as an increasing priority that companies ‘go green’. Promoting green initiatives intends to build the goodwill, and has the potential to increase the customer base of a business (Babiak, Trendafilova, 2011).

Although it is expected that energy companies will worry mostly about their environmental impact, it seems that social welfare and their employees are equally important to them. In this period of rising energy prices and global concern over energy future, energy companies should put greater emphasis on their approach to CSR. The comparative analysis of the three dominant energy companies in Greek about their CSR activity can be summarized as follows.
PPC and Hellenic Petroleum publish separate CSR reports, while DEPA includes its CSR strategy into the Annual Report. The Hellenic Petroleum is the only company that uses the GRI indicators in order to evaluate their environmental impact.

Each report analyses their CSR strategy in relation with their attitude towards their employees, their social image and their environmental impact. Generally, the three companies follow the same structure in their CSR reporting but the Hellenic Petroleum and PPC are more analytical providing details of specific activities while DEPA gives a brief summary of how it develops the CSR activities. Hellenic Petroleum presents its CSR activities using graphs and tables with numbers about their emissions, their employees while PPC gives numbers in their CSR reports but in a more inclusive way.

The responsibility towards the society is described by the three companies in terms of sponsoring cultural and athletic events, philanthropy and urban development. PPC supports the society based on their services and infrastructure which means providing jobs for the local people, providing heating, or exploiting water resources through Hydroelectric Power Plants, but also providing economic support to activities that deal with energy. Their CSR strategy for society is mainly directed by their expertise. Hellenic Petroleum, on the other hand, supports the society through various activities. Company’s activities focus on supporting the elderly, the young and vulnerable groups. The company also supports the local communities where they operate through sponsoring athletic and cultural and educational activities. It is obvious that Hellenic Petroleum follows a CSR strategy more oriented to support the local communities and their people. The only common activities for PPC and Hellenic Petroleum and DEPA are sponsoring of athletic and cultural activities.

Human resources are an internal dimension of CSR and the companies make an extended reference to the attitude they keep towards their employees. Health and safety, lifelong training and special benefits are some of the well-known CSR activities for the employees. All three companies give emphasis on the training of their employees in order to become competitive in the energy market. Along with the education of their employees come health and safety in all three companies with extended reference by the Hellenic Petroleum. The companies are mostly concerned about the employee’s education and their health and safety.

The environmental concerns for the three companies are expressed through activities focusing on reducing their environmental impact by waste
management and operation in terms of energy efficiency. Each company applies standardization systems in their operations, including ISO 14001, ISO 9001, EMAS and OHSAS 18001. Table 1 presents companies applying the standardization systems. For DEPA, there were no available data to confirm that they have been certified for ISO 14001 and OHSAS 18001 like the other two. The environmental management systems ISO 14001, the quality management system ISO 9001:2000 and the occupational health and safety (OH&S) management system OHSAS 18001 are used by PPC and Hellenic Petroleum while the EU Eco-Management and Audit Scheme (EMAS) and the GRI index are used only by Hellenic Petroleum.

Table 1. Application of standardization systems among energy companies in Greece

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<th>PPC</th>
<th>DEPA</th>
<th>HELLENIC PETROLEUM</th>
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<td>ISO 14001</td>
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The waste management in PPC takes place together with the training of employees to control and detect all hazardous and non-hazardous waste, using manuals, training videos, seminars, etc., along with the design, planning and environmental licensing of an adequate Industrial Waste Management Site at the deposition areas of the Kardia exhausted mine, in the Kozani region. The Hellenic Petroleum uses environmentally friendly treatment technologies like that of spent catalysts that cannot be regenerated and are sent abroad to specialized and licensed waste management companies so that precious metals are recovered or thermal destruction is carried out. The approach toward an effective waste management is similar but expressed in a different way.

The CSR reporting for the three companies is similar, as far as the structure of their CSR strategy is concerned. There are no differences in the context of their reports since all three companies share the same visions and goals.

Table 2 presents some notes in order to evaluate and finally to analyze the planning and implementation of CSR activities in energy companies environment. Particularly, the three dimensions are presented combined with relative comments and proposals.
### Table 2. Teaching Notes – Instructions on CSR study in energy companies

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<tr>
<th>Instructional dimension</th>
<th>Student understanding</th>
<th>Discussion or simulation</th>
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<tr>
<td>• Audit and evaluate the different CSR actions that energy companies perform in their environment</td>
<td>• Students should focus on the selection, evaluation and comparison of CSR actions</td>
<td>• Introduce a discussion: is CSR a strategy that any kind of firm can perform? Where do energy companies focus on their CSR policies?</td>
</tr>
<tr>
<td>• Provide lists of energy companies that implemented strategies, and discuss which performed better and how this performance occurred</td>
<td>• Students should understand what the factors on firms’ environment that the CSR effectiveness is based on are</td>
<td>• Introduce a discussion: How did CSR take place in energy companies and what are the main drivers of its success?</td>
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<td>• Evaluate how these CSR strategies are linked with firms’ development objectives, firms’ profits and human resources</td>
<td>• Students should understand that CSR is a part of a firm’s operation and understand how firm’s objectives are linked with CSR policy. They also should audit the value added of CSR on firm’s development and image but also on human resources</td>
<td>• Introduce a discussion: Link CSR policy with energy firms objectives by using specific examples. How is CSR linked with human resources’ satisfaction at work?</td>
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<td>• Evaluate how these strategies are linked with community and territorial environment objectives</td>
<td>• Students should clarify the social dimension of CSR implemented by energy companies and explain how CSR satisfies the community and environment objectives. They should know how CSR is linked with particular aims of a firm’s external environment</td>
<td>• Introduce the use and the evaluation of particular examples based on two levels of analysis: firm’s internal environment and firm’s external environment</td>
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<td>• Provide and analyze the official standards that each energy company should follow in order to implement an efficient CSR policy</td>
<td>• Students should focus on the analysis of the framework, legal, social, ecological and economic that CSR implemented by energy firms. The comparison with other countries will be helpful.</td>
<td>• Introduce a discussion in relation with the analysis of legal framework environment and the obligations or limitations on CSR performance.</td>
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7. OPEN ISSUES AND FURTHER RESEARCH

In order to investigate the implementation of CSR by Greek energy companies there are several issues that need to be discussed further. The publication of CSR activities, according to the international normative standards for sustainable development and sustainability reporting, is a way to accomplish credibility for CSR reports by Greek energy companies since there is no specific pattern. In addition, it is crucial that CSR reports include evaluation methods since the environmental impact of energy companies is enormous. Basic questions in this framework seem to be the following:

- what exactly the relationship between energy companies and environmental protection is and what the role of CSR is,
- what the lessons from international practice are,
- to what degree the CSR reports should become more efficient and specified and
- how strongly the CSR in energy sector is related to companies’ competitiveness and achievement of business goals.

We believe that these are the topics that need to be investigated in both academic research, but also in the practical field.

Another issue is the fact that these companies are partially public enterprises and during this period of economic crises it is necessary to become more competitive especially with the entrance of private foreign companies that will try to get a share of the pie. This means that Greek energy companies in terms of CSR need to be more active and organized. Yet, in this difficult economic period, Greek energy companies seem to make an effort to obey the summons by being optimistic and open-minded. Each of the energy companies in Greece proved that whether they are consistent or brief they chose to publish their CSR activities. With the help of European organizations like CSR Europe, Greek energy companies could accomplish more by improving their social responsible attitude.

8. CONCLUSIONS

CSR can play a crucial role for energy sector since the sector can contribute to economic and social development and its simultaneous potential for reducing impacts on the environment and communities. Many energy companies in Europe operate primarily on a national basis, producing energy to cover the needs of their domestic market for electricity, gas and related services. For the last 10 years, energy companies have been increasingly aligning their
CSR policies with International normative standards for sustainable development and sustainability reporting such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the GRI.

In Greece, it seems that the energy sector companies have realized their role in the society and their CSR reports reveal that their social responsibility is an integral part of their business strategy. Activities that concern the companies’ environmental impact are published in their CSR reports but they do not evaluate their methods, except for the Hellenic Petroleum which uses the GRI index for its environmental activities.

In addition, there is no systematic way for publishing their reports since there are no available sustainability reports for each year. For instance, the year of the publication of the CSR Reports for each company is different. DEPA published its report in 2008, while DEI did it in 2007 and the only updated report is that of the HELLENIC PETROLEUM in 2009. Another drawback in the effort of Greek energy companies to publish CSR reports is that their activities are not evaluated internally by the companies themselves or externally by auditors or by the public opinion.

The development of an effective CSR policy among energy companies in Greece is at an early stage and needs to be more intense in order to become a social responsible member of the society.

REFERENCES

DRUŠTVENA ODGOVORNOST PODUZEĆA U GRČKOJ: KOMPARATIVNA ANALIZA TRI VELIKA ENERGETSKA PODUZEĆA

Sažetak

Društvena odgovornost poduzeća (DOP) postala je jedna od najpopularnijih poslovnih tema u akademskoj zajednici. Različiti problemi, kao što su zagađenje, ekonomska kriza, korupcija i siromaštvo su od ključnog značaja. Očito je da je, osim vlada i političara, i korporacije predstavljaju dio ovih problema. Koncept DOP-a odnosi se na predanost poduzeća etičnom ponašanju koje će doprinositi gospodarskom razvoju te kvaliteti života lokalnih zajednica i društva u cjelini. U ovom se radu predstavljaju načini prilagodbe DOP-a strategiji grčkih poduzeća, kao i rezultati navedenih aktivnosti. Analiziraju se poduzeća i praksa DOP-a u sektoru proizvodnje energije.