

FROM 7 DWARFS TO 4 LOST BOYS:
10-YEAR FOLLOW-UP STUDY OF THE LARGEST OIL COMPANIES'
ENVIRONMENTAL POLICIES

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ABSTRACT

A decade ago the environmental policies of the Seven Sisters were dwarfish. None of them dared to use entrepreneurial environmental strategies or threatening environmental moves. This paper compares those findings to the current environmental policies of the Sisters.

Little has changed. Only the number of Sisters has decreased to four: BP(Amoco), Chevron-Texaco, ExxonMobil and Shell. The goals of their environmental policies are still reactive or anticipatory, not entrepreneurial or creative. Their means to achieve these goals are still co-operative, not threatening. Hence their environmental policies have not kept up with their business environment, which has become discontinuous. The Four Sisters could with their organisational capabilities pull up their policies to match their business environment, but they have chosen to lag behind in order to prolong the fossil fuel age because oil and gas give them huge revenues and power.

The Four Sisters have become lost boys who follow the irresponsible Peter Pan to the horrible world of Neverland resulting from unsustainable economic growth. The Sisters could grow up by reconsidering their economic, social and ecological responsibilities in this world, and by switching over to sustainable renewables.

INTRODUCTION

A decade ago I conducted a comparative study on the environmental policies of the so-called Seven Sisters, i.e., the seven largest oil companies in the world: Shell, Exxon, BP, Mobil, Texaco, Chevron and Amoco. It was called "The Seven Sisters: Snow Whites, Dwarfs or Evil Queens?" and published in *Business Strategy and the Environment* (Ketola, 1993). The main conclusion of that paper was that none of the Sisters wanted to be Evil Queen – or Snow White, for that matter, because posing as Snow White in the public would mean exposing herself to degrading attacks from the other Sisters and maybe ending up with Evil Queen's reputation. The environmental policies of the Sisters were dwarfish. However, I pointed out that the dwarfs

could become giants if they risked using threatening environmental moves and entrepreneurial environmental strategies (Ketola, 1993). In this paper I will present the results of a 10-year follow-up study of this original 1993 research. I will discuss the present results both on their own merit and compared to the results and conclusions drawn a decade ago.

The 1990s can be described as the Environmental Decade. Major changes took place in the environmental views, responsibilities and practices of organisations, their business environments and society at large. By the turn of the millennium many of these changes had been institutionalised (DiMaggio and Powell 1983, Powell and DiMaggio 1991, Scott 1987, 1995) through global interaction, such as Earth Summits on Sustainable Development, international agreements and multinational legislation. The positive side of institutionalisation is that companies take now some of their environmental responsibilities for granted and constantly talk with a wide variety of stakeholders about the division of other environmental responsibilities (Hoffman 1999, Jennings and Zandbergen 1995, Näsi et al 1997). The negative side of institutionalisation is that executives now spend their time in environmental bargaining and lobbying to minimise the environmental responsibilities of their companies instead of turning their companies sustainable.

AIM, FRAMEWORK AND METHODS

On the basis of the results of this 10-year follow-up study, I will argue that, because of institutionalisation, the goals, means and interest group coverage of the Sisters' environmental policies have not changed much during the past decade. The Sisters have allowed institutionalisation to stifle their strategic environmental initiative: it is much more comfortable for them to sit at round tables exercising their power than to work hard to become environmental entrepreneurs. They do not see any advantage to be gained through the development of novel environmental policies and strategies (like in Lessem 2001, Shenhar et al 2001, Starik et al 1996, Stead and Stead 2000). Considering the degraded state of our planet, this is a short-sighted position to take, but when all major oil companies adopt it, they can play the bargaining game and keep their fossil fuel status quo untouched for years, even decades, to come.

In this paper the environmental policies of the Sisters will be analysed in the same way as 10 years ago: by discussing the environmental goals of the policies, their means to achieve these goals and the interest groups mentioned in the policies. As before, from these findings conclusions will be drawn about the level of strategic aggressiveness of the Sisters' environmental policies. In the original study I developed a strategic environmental management instrument (Ketola, 1993; also Ketola, 1995, 1996, 1997ab, 1999) out of Porter's (1980) competitive moves and Ansoff and McDonnell's (1990) strategic posture analysis.

According to Porter (1980), in oligopoly companies often face a dilemma. They can pursue the interests of the industry as a whole or some subgroup, thereby not initiating competitive reac-

tions, or they can look after their self-interest and risk retaliation. Porter mentions three possible competitive moves in this situation: co-operative (or non-threatening), threatening and defensive. This Prisoners' Dilemma prevails also in the environmental issues of oil companies who may utilise co-operative, threatening or defensive environmental moves to combat it.

Ansoff and McDonnell (1990) maintain that the level of a company's strategic aggressiveness should match the level of turbulence in its business environment as well as the level of its organisational capability. This argument is valid also in strategic environmental management where the factors under scrutiny are: the environmental turbulence of business environment, the strategic aggressiveness of environmental policy and the organisation's environmental capability

Table 1 illustrates these three factors, which ideally should be at the same level, forming matching triplets. Table 1 also shows the results of the original study: the levels of each factor for Sisters' 1993 environmental policies.

Table 1. Results of the 1993 study: partial match between the triplets (Ketola, 1993: 29).

Factors:	Levels: 1	2	3	4	5	EN-
VIRONMENTAL TURBULENCE OF BUSINESS ENVIRONMENT:	repetitive repetitive	expanding slow, incremental, forecastable	changing fast, incremental, forecastable	discontinuous discontinuous, predictable	surprising discontinuous partially predictable	
STRATEGIC AGGRESSIVENESS OF ENVIRONMENTAL POLICY:	stable -based on precedents -occasional defensive moves	reactive -based on experience -defensive, some co-ope- rative moves	anticipatory -based on extrapolation -co-operative moves	entrepreneurial -based on new, observable alternatives -threatening, some co-ope- rative moves	creative -novel, based on creativity -threatening moves	
ORGANISATION'S ENVIRONMENTAL CAPABILITY:	custodial rejects change	production- oriented adapts to change	marketing- oriented seeks familiar change	strategic seeks related change	flexible seeks novel change	

In 1993 there was only a partial match between the triplets. The Sisters' business environment, their environmental policies and their organisational capability matched at level 3, but the Sisters' environmental policies did not reach level 4 where the other two factors were heading; instead their environmental policies were still lagging at level 2. The Sisters had the general strategic capabilities to meet the pressures from the discontinuous business environment but they did not want to utilise those capabilities in their environmental policies.

In this paper the strategic aggressiveness of the Sisters' 2003 environmental policies will be compared to their present organisational capabilities in environmental management and to the current environmental turbulence of their business environments, and conclusions will be drawn on their potential matches to each other. The results will be compared to the results of the 1993 study.

Since the original research in 1993 major changes have taken place in the structures of these oil companies under review. Six of Seven Sisters have got married to each other (obviously company laws are much more liberal than civil laws!). Chevron and Texaco took the egalitarian name of ChevronTexaco in their 2001 merger. Similarly, Exxon and Mobil became ExxonMobil in 1999. BP more traditionally subordinated Amoco in 1998 and their married name is now BP. Only Shell has remained single. It will be very interesting to see how these mergers have influenced the Sisters' environmental policies.

The current environmental policy statements of these four companies can be found in their web pages and in some of their publications (BP, 2001, 2002, 2003ab; ChevronTexaco, 2003b; ExxonMobil, 2001, 2003b; Shell, 2001, 2003a). ExxonMobil and Shell have really only corporate policies that are repeated and observed at any level of business. In addition to the corporate environmental policies, BP(Amoco) and ChevronTexaco have separate policies for each part of business. In this paper, only the corporate policies are analysed.

Something about the importance of the environmental policy to each company can be concluded from its appearance in different strategy documents. For BP(Amoco) its environmental policy seems to be very important: the company presents it at the beginning of its ethical commitment *What We Stand For* (BP, 2002), in its corporate social responsibility (CSR) report *Environmental and Social Review 2002* (BP, 2003a) and in its health, safety and environmental (HSE) management system instructions *Getting HSE Right: a guide for BP managers* (BP, 2001). The merger between Chevron and Texaco took place on 9 October 2001 and ChevronTexaco's environmental policy is still only being formulated at the moment. That is why they have only published an environmental policy draft in their value statement *The ChevronTexaco Way: Vision, Performance, People, Values* (ChevronTexaco, 2003b). ExxonMobil has written its whole environmental policy into its ethical commitment *Standards of Business Conduct* (ExxonMobil, 2003b). Shell has not done that: its *Statement of General Business Principles* (Shell, 1997) does not include the environmental policy but only a very short comment on Shell's commitment to sustainable development and continuous performance improvement. Shell's policy can only be found as a separate statement *Health, Safety and Environmental Commitment and Policy* (Shell, 2001).

In addition to analysing the contents of these policies in the same way as in 1993, I interviewed environmental managers and specialists of these companies who explained the policies

and their roles further (see interview list at the end of the paper). Their views about the importance of the environmental policies differed somewhat from the status the policies have in their companies' publications.

BP UK Oil's Environmental Advisor did not think that the policy papers were that important in real work at BP(Amoco); instead environmental programmes were the basis for action (interview with Peter Coles on 21.11.2003). Esso's Environmental Group Head took exactly the opposite view. He said that he had developed the policy that is now the corporate policy, and in his opinion the policy is the umbrella under which they operate. Furthermore, every year everyone working with ExxonMobil has to sign a statement saying that he has not, to his knowledge, done anything against the ExxonMobil Standards of Business Conduct – which incorporate also the environmental policy (interview with Dave Dando 10.12.2003). Also Shell's HSE Affairs Manager emphasised the importance of the environmental policy (interview with Gilles Vollin on 8.12.2003). Texaco Ltd's HES Manager said that their corporate policy is yet to be properly formulated (interview with David Marston 8.12.2003).

As in the original study, the environmental policies will be analysed and discussed in three parts: (1) their goals, (2) their means to achieve the goals and (3) their interest group coverage.

RESULTS I: GOALS IN THE ENVIRONMENTAL POLICIES

The main purpose of an environmental policy statement is to state a company's environmental goals. The goals mentioned in the environmental policies valid in 2003 of BP(Amoco), ChevronTexaco, ExxonMobil and Shell are listed in table 2. They can be compared to the goals mentioned in their (BP's, Amoco's, Chevron's, Texaco's, Exxon's, Mobil's and Shell's) 1993 environmental policies (see Ketola, 1993).

While in 1993 all seven companies promised to protect the environment, in 2003, of the four companies, three still make this promise. ExxonMobil does not. According to Esso's Environmental Group Head, ExxonMobil's goal is to do no lasting environmental damage and operate within acceptable limits. He adds:

“We are not a green company. We are a company that is green at the edges.” (Interview with Dave Dando 10.12.2003).

All four oil companies promise in their policy to comply with laws and regulations – also BP(Amoco) which did not make such a commitment ten years ago. Compliance has become the prerequisite for business survival, stability, growth and profits. ExxonMobil has kept Exxon's 1993 policy's further promise to apply responsible standards where laws or regulations do not exist. On the other hand, ChevronTexaco has not included the further promise made by Chevron's 1993 policy of complying without regard to the degree of enforcement.

Table 2. Goals mentioned in the environmental policies of the Four Sisters (✓) in 2003 compared to the Seven Sisters (+) in 1993.

Goals/Companies	BP(AMOCO)		CHEVRONTXACO		EXXONMOBIL		SHELL	
	B&A 2003	B A 1993	C&T 2003	C T 1993	E&M 2003	E M 1993	S 2003	S 1993
protect health, safety and the environment	✓	+ +	✓	+ +		+ +	✓	+
comply with laws and regulations	✓	+	✓	+ +	✓	+ +	✓	+
conduct operations with high HSE standards	✓	+ +	✓	+ +	✓	+ +	✓	+
be a leader / among leaders in HSE issues		+	✓	+			✓	+
improve HSE aspects of products	✓	+ +	✓	+	✓	+ +	✓	+
-use energy efficiently -help customers to use energy efficiently	✓	+		+		+	✓	+
conserve natural resources			✓	+		+	✓	+
-eliminate emissions, effluents and waste	✓							+
-reduce emissions, effluents and waste	✓	+	✓	+	✓		✓	+
-prevent incidents	✓	+	✓	+	✓	+ +		
-mitigate incidents	✓		✓	+ +		+ +		+

Every one of these oil companies is still aiming at conducting their operations with high environmental standards. ChevronTexaco wants to be recognised and admired worldwide for its safety, health and environmental excellence. In 1993 Chevron announced that it strove to improve its competitive position through its HSE policy. So now, ten years later, they have taken a less aggressive but still demanding approach. BP(Amoco) and Shell also emphasise in their environmental policies the business imperative of HSE performance. BP(Amoco) recognises in the same ways as BP in 1993 that good HSE performance is critical to the success of their business. Shell says that it manages HSE matters as any other critical business activity – which is quite a novel perspective for Shell. These three companies aim at “green growth” which is a sign of modified technocentric values (see Ketola, 1995, 1999). ExxonMobil, on the other hand, wants even in its environmental policy to balance environmental and economic needs. This goal be-

longed to Exxon's environmental policy already in 1993. It reflects the old strong technocentric values in which trade-offs between ecological and economic goals are made (see Ketola, 1995, 1999).

According to their policies, ChevronTexaco and Shell still want to be among leaders in HSE issues, BP(Amoco) does not any more. ExxonMobil has never had such aspirations. ChevronTexaco strives for world-class performance. Shell's policy maintains that the company wants to play a leading role in promoting best practice. However, the HSE Affairs Manager of Shell Europe said that Shell decides issue by issue where it wants to be a leader. At the moment they want to be leaders in safety and CO₂ – but not in environmental management in general (interview with Gilles Vollin 8.12.2003). Nevertheless, this is an improvement compared to the 1993 interpretation of this policy goal: then “being among leaders” was interpreted within Shell companies as being among leaders in environmental debate (see Ketola, 1993).

Wanting to be a leader in reducing carbon dioxide (CO₂) emissions is quite a U-turn for an oil company. The oil companies tried long and hard to deny the adverse effects of CO₂ emissions on Planet Earth. All Sisters were members of the Global Climate Coalition (GCC) which lobbied heavily governments and used advertising campaigns to turn public opinion against concrete action on greenhouse emissions. BP was one of the first oil companies to withdraw from GCC in 1997. Shell followed in 1998 and Texaco and others by early 2000. Only Exxon stayed a member until GCC decided that only trade associations were suitable for membership (Corporate-Watch, 2001). Even today ExxonMobil – followed by the US government – opposes any legislation or international agreement, such as the Kyoto Protocol, on cutting greenhouse gas emissions. All Sisters, however, have nowadays their own voluntary programmes and targets to cut their CO₂ emissions (BP, 2003a; ChevronTexaco, 2003a; ExxonMobil, 2003a; Shell, 2003b).

All these companies wish to improve the environmental aspects of products – even Texaco, which did not have such a goal in 1993. This is easy to understand as the legislation in many countries and regions demands increasingly less polluting oil products, such as lead-free, benzene-free, low-sulphur fossil fuels and fuels with a bio-component (see Ketola, 2004b).

Using energy efficiently belongs to the policy goals of BP(Amoco) and Shell, but ChevronTexaco and ExxonMobil have not written Chevron's and Mobil's earlier energy-efficiency goals in their environmental policies. Yet both of them mention energy-efficiency in their Corporate Social Responsibility (CSR) reports which tell us that ChevronTexaco has an Energy Index (CTEI) and ExxonMobil has a Global Energy Management System (GEMS) (ChevronTexaco, 2003a; ExxonMobil, 2003a). Shell's energy-efficiency system is Energise™ (Shell, 2003b). It is in the companies' own financial interests to save energy as much as possible. However, none of the oil companies help their customers to save energy or use it efficiently as the companies' main business goal is to make the customers buy ever-increasing amounts of the (unrenewable) energy

products they produce. The Sisters do not feel responsible for the environmental damage caused by the exponential energy consumption growth. On the contrary, it is their business goal to satisfy this excessive, extravagant energy demand.

All the four Sisters make annual energy statements in which they forecast that the world's energy demand will double by 2050 and that oil and gas will remain the main energy sources for the next 20–50 years (e.g., BP, 2003c; ChevronTexaco, 2003a; ExxonMobil, 2003a; Shell, 2003b). These are self-serving predictions with which the Sisters promote their main line of business, fossil fuels. BP(Amoco), ChevronTexaco and Shell have engaged themselves slightly in solar and wind power businesses but the renewables' share of these companies' turnovers is so microscopic that it is not even mentioned in the annual reports. Rather than enhancing the development of renewable energy forms, the Sisters' aim seems to be to control the renewables businesses so that they would not threaten their oil and gas businesses. ExxonMobil finds renewables so unworthy that it has not bothered to invest in them at all. ExxonMobil believes that it can dictate the world's energy path by lobbying the US government.

ChevronTexaco has kept in its policy Chevron's earlier promise to conserve natural resources just like Shell, but ExxonMobil has dropped this Mobil's earlier promise out of its policy. BP(Amoco) never made such a promise in their environmental policies. Conservation of natural resources can only be relative in oil companies since their whole business is based on the exploitation of natural resources: oil and gas. In addition, their exploration, production, refining, storage and transportation activities destroy and pollute nature as well as consume vast amounts of water and energy. The companies can decrease these adverse effects by careful planning and modern cleaner technology; and they try to some extent compensate for the loss of nature by helping to conserve it elsewhere – but their net impact on nature remains deeply negative.

Shell still has a goal of doing no harm to people, but it has given up its earlier ultimate goal of doing no harm to the environment, i.e., eliminating emissions effluents and waste. Instead it aims only at reducing them any more. BP(Amoco) has now adopted this very ambitious goal of elimination. The company says:

“Our goals are simply stated: no accidents, no harm to people, and no damage to the environment.”
(BP, 2002, 2003ab)

However, BP(Amoco) admits that this is a utopian goal, and therefore it has also a goal of continuing to drive down its environmental impact by reducing waste, emissions and discharges. The other oil companies have been satisfied with this moderate goal, which they all by common consent call continuous improvement. ChevronTexaco has goals of minimising pollution and waste. Exxon Mobil has a goal of controlling emissions and wastes to below harmful levels.

BP(Amoco) promises to identify the hazards and assess the risks beforehand as well as prevent or reduce the impact of potential accidents or incidents, which is more than BP and Amoco promised in 1993. ChevronTexaco still has goals of prevention, preparedness and mitigation of

incidents. Exxon Mobil has a goal of preventing incidents and a goal of responding quickly to incidents like before but not the mitigation goal both Exxon and Mobil had in 1993. Only Shell does not mention incidents at all in its current environmental policy. Yet it does have emergency procedures for incidents in place like the other oil companies. Shell Europe's HSE Affairs Manager said that he gives presentations to insurance companies on how Shell manages emergency issues (interview with Gilles Vollin on 8.12.2003). Is the company so confident with its incident procedures or do they have such a low profile that they do not deserve attention in an HSE policy?

All in all, BP(Amoco) and ChevronTexaco both mention 9 out of 11 useful goals in their environmental policies, Shell 8 and ExxonMobil only 5. In this sense BP(Amoco) and ChevronTexaco have more comprehensive environmental policies than Shell and particularly ExxonMobil. Ten years ago in 1993 Chevron (10) and Shell (10) were leaders in environmental policy comprehensiveness, Mobil (8), BP (7) and Exxon (6) belonged to the middle caste, and Amoco (4) and Texaco (4) lagged behind all others.

According to these figures, BP(Amoco) has taken a leap in its environmental policy goal numbers. It reflects the more serious and comprehensive approach to environmental management BP(Amoco) has adopted during the past few years. Otherwise nothing much has changed during the last ten years – expect that mergers have eliminated the worst environmental goal producers Amoco and Texaco.

The dominant parties of mergers – BP, Chevron and Exxon – have had much greater influence on the goal contents of environmental policies of BP(Amoco), ChevronTexaco and ExxonMobil than the weaker parties Amoco, Texaco and Mobil. In BP(Amoco)'s and ChevronTexaco's cases it has been a positive influence as the goals have stayed in the dominant party's high numbers. In ExxonMobil's case the result is negative: the number of goals has stayed at the dominant party's lower level. ExxonMobil's current environmental policy is almost a copy of Exxon's 1993 policy, which is quite disheartening. Esso's Environmental Group Head claims that he drafted Exxon's first environmental policy in 1974 and that that policy has evolved into the current ExxonMobil policy, which is changed if the world changes (interview with Dave Dando 10.12.2003). ExxonMobil seems to believe that the world has not changed much since 1974.

We shall soon see whether mergers influence positively or negatively also other aspects of an environmental policy. Let us now look at the means these oil companies use to achieve their environmental policy goals.

RESULTS II: MEANS IN THE ENVIRONMENTAL POLICIES

In order to be able to deliver the environmental goal they promise, oil companies need to use a variety of means, many of which they state in their environmental policies. The means to achieve the environmental goals mentioned in the 2003 environmental policies of BP(Amoco), Chevron-Texaco, ExxonMobil and Shell are listed in table 3. They can be compared to the means mentioned in BP's, Amoco's, Chevron's, Texaco's, Exxon's, Mobil's and Shell's 1993 environmental policies (see Ketola, 1993).

Table 3. Means for achieving goals mentioned in the environmental policies of the Four Sisters (✓) in 2003 compared to the Seven Sisters (+) in 1993.

Means/ Companies	BP(AMOCO) B&A 2003 B A 1993		CHEVRONTEXACO C&T 2003 C T 1993		EXXONMOBIL E&M 2003 E M 1993		SHELL S 2003 S 1993	
strategies/objectives	✓	+	✓		✓		✓	+
action plans/targets	✓	+	✓	+	✓		✓	+
EIAs			✓	+				+
audits	✓	+	✓	+	✓	+	✓	
education/training	✓	+		+	✓	+		+
communication with interest groups	✓	+	✓	+	✓	+	✓	+
work with governments	✓	+	✓	+	✓	+	✓	+
know-how transfer/sharing					✓	+		+
conduct / support research				+	✓	+		+

The strategic and operational environmental planning of companies in general has taken huge steps during the last decade. This is apparent in the environmental policies of the four case oil companies. All of them have nowadays well-structured environmental management systems (EMSs) with strategies, objectives, targets and action plans included – and they mention them in their policies. In 1993 only BP and Shell stated in their environmental policies that they had some environmental strategies or objectives, and only BP, Shell and Chevron claimed to have environmental targets or action plans. In 2003 BP(Amoco) has an Operations Integrity Assurance System (OIAS), ChevronTexaco an Operational Excellence Management System (OEMS), ExxonMobil an Operations Integrity Management System (OIMS) and Shell the Minimum Environmental Standards (BP, 2001, 2003b; ChevronTexaco, 2003a; ExxonMobil, 2003a; Shell, 2003a).

Shell Europe's HSE Affairs Manager pointed out that Shell is the only oil company that has set minimum environmental standards for its operating companies (interview with Gilles Vollin on 8.12.2003). Yet in a way Shell has adopted a "negative think globally, act locally" approach: it has a global environmental policy, which sets minimum standards, but its companies follow different environmental standards in different countries:

"...our environmental policy applies globally. This does not mean that we operate in exactly the same way everywhere, but we do have minimum standards for our major risk areas (Shell, 2001, 2003a).

In this way Shell gains local competitive advantage, which is an Opportunistic Leader environmental option Shell created in the early 1990s. The other alternative – which Shell rejected in the early 1990s – would be a Standard Bearer option in which key environmental markers would be applied uniformly and globally (see Ketola, 1998).

Environmental impact assessments (EIAs) do not seem to be considered important enough to be mentioned in environmental policies. In 1993 Chevron and Shell mentioned them, in 2003 only Chevron did so any more. In most countries EIAs are nowadays required by law for large investments.

Environmental audits, on the other hand, are now mentioned by all four case oil companies, also by Shell who did not do that in 1993. Often the companies mention both internal and external audits in connection with their environmental management system. BP had certified its OIAS to the environmental management system standard ISO 14001 in 96 of its 104 major facilities by the end of 2002. BP Oil UK's Environmental Advisor confirmed that BP(Amoco) finds ISO 14001 a very useful tool (interview with Peter Coles on 21.11.2003). ChevronTexaco has not adopted ISO 14001 globally: by mid-2003 29 facilities or operations had received certification. But Texaco Ltd's HES Manager said that their OEMS and ISO 14001 suit each other well and further certifications will be made (interview with David Marston on 8.12.2003). ExxonMobil has not sought ISO 14001 certifications but has instead chosen an ISO 14001 attestation for its OIMS, which means a less formal third party accreditation. Esso's Environmental Group Head claimed that they do not need ISO 14001; they know that their system is better than that. He also maintained that the top management of Exxon Mobil Corporation made the decision on mere attestation alone and did not explain why (interview with Dave Dando on 10.12.2003). Shell's major installations have been certified to the ISO 14001 standard. According to Shell Europe's HSE Affairs Manager, certification has been compulsory only for the Shell refineries, but all systems have ISO 14001 compliance in case they need to be verified at a later stage (interview with Gilles Vollin on 8.12.2003).

In 1993 environmental education or training was mentioned in the environmental policies by six of the Seven Sisters – only Amoco did not mention it. In 2003 only BP(Amoco) and ExxonMobil mention it any more. BP Oil UK's Environmental Advisor explained that newcomers are

given induction programmes including environmental issues and this knowledge is refreshed every two years (interview with Peter Coles on 21.11.2003). Esso's Environmental Group Head said that newcomers are indoctrinated in safety and environment immediately and from then on there are regular doses of safety and environmental training (interview with Dave Dando on 10.12.2003). Could the others, ChevronTexaco and Shell, think that their staff does not need any further education and training in environmental affairs? No, Texaco Ltd's HES Manager told me that in addition to environmental awareness training there are some mandatory and some voluntary environmental courses depending on the assignment, and many courses need to be refreshed every three years (interview with David Marston on 8.12.2003). Shell Europe's HSE Affairs Manager said the same: e.g. induction to new employees, different programmes for different assignments, an HSE awareness programme and leaders' programme (interview with Gilles Vollin on 8.12.2003).

All four case oil companies state in their current environmental policies that they engage in communications with interest groups. In this statement the merged companies follow the footsteps of their dominant parties, BP, Chevron and Exxon who had realised with Shell the importance of stakeholder communication already in 1993. It must be noted that these statements do not determine the type, quality or quantity of external communications. As we know, they differ a great deal depending on the company and issue in question as well as on the sensitivity of the topic to the company. Esso's Environmental Group Head exclaimed:

"We do not have external stakeholders! We only have people who have an interest in the company: local people and regulators. We want to live in peace and harmony with them." (Interview with Dave Dando on 10.12.2003)

ExxonMobil's restricted approach contradicts with ChevronTexaco's (2003b) open arms approach: it strives to reach out to the community and engage in open dialogue to build trust. While ExxonMobil gives information only to regulators and to local people living e.g., around its oil refinery in Fawley, Southampton, ChevronTexaco embraces also local, regional and global environmental groups. For example ChevronTexaco's oil refinery in Pembroke, Wales, has two liaison groups: one for local councils and community representatives, and another one for environmental NGOs and pressure groups (interview with David Heath, Senior Environmental Specialist, on 24.11.2003).

All these oil companies have always been eager to work with governments to lobby their views on the environmental issues. They all mention this aspiration in their 1993 and 2003 environmental policies. BP(Amoco) puts it nicely: they will work with regulators, competitors and others to raise the standards of the industry. ChevronTexaco says it more directly: they work ethically and constructively to influence proposed laws and regulations and debate on emerging issues. Shell's 1993 policy goal on working with governments resembled ChevronTexaco's 2003 statement, but in 2003 Shell wants to give a more favourable impression by expressing a wish to

earn confidence as well as promote best practice and sustainable development. ExxonMobil returns to its crude trade-off rhetoric: they work with government and industry groups to foster timely development of effective environmental laws and regulations based on sound science and considering risks, costs and benefits and effects on energy and product supply.

In 1993 know-how transfer or sharing was mentioned by Exxon, Mobil and Shell. In 2003 only ExxonMobil says in its environmental policy that it wishes to share its experience with others. This sounds strange considering the fact that ExxonMobil is the very company that almost always deviates from the other oil companies' commonly agreed environmental improvement paths. Esso's Environmental Group Head admitted proudly that ExxonMobil often goes its own way, irrespective of what others think (interview with Dave Dando on 10.12.2003). Perhaps ExxonMobil is now the only one who needs the experience of others in its environmental management.

ExxonMobil is also the only oil company which still mentions in its environmental policy that it conducts and supports environmental research. In 1993 Exxon, Texaco and Shell stated that in their environmental policies. All case oil companies do in practice conduct and support environmental research to back up their points of view.

In summary, the means to achieve the environmental policies of oil companies have increased particularly in the form of comprehensive strategic and operational planning. Shell does not elaborate its environmental means in its current policy the way it did in 1993. The dominant members of the mergers, BP, Chevron and Exxon, have retained their means in the post-merger policies, which has led to an overall improvement in the assortment and quality of the means as the weaker members of the mergers earlier presented very few means to achieve their very few goals. Let us see if this trend is apparent also in the interest group coverage of policies.

RESULTS III: INTEREST GROUPS IN THE ENVIRONMENTAL POLICIES

No company can survive in long run without the support of its most influential interest groups to its operations and activities (Ketola, 1997a). Environmental management is no exception; therefore, it is important also to oil companies to pay attention to the environmental needs of their interest groups. Table 4 illustrates the interest group coverage of the Sisters' environmental policies in 2003 compared to 1993.

Table 4. Interest groups mentioned in the environmental policies of the Four Sisters (✓) in 2003 compared to the Seven Sisters (+) in 1993.

Interest / Companies groups	BP(AMOCO)		CHEVRONTXACO		EXXONMOBIL		SHELL	
	B&A 2003	B A 1993	C&T 2003	C T 1993	E&M 2003	E M 1993	S 2003	S 1993
-business associations		(+)			✓	+		(+)
-competitors	✓				✓	+ +		+

-contractors	✓	+	✓	+		✓	+
-customers	✓	+	✓	+		✓	+
-distributors	✓			+			
-employees	✓	+	✓	+	✓	+	+
-environmental pressure groups	✓						
-financiers							
-governments	✓	+	✓	+	✓	+	+
-independent experts	✓					✓	
-insurers							
-legislators	✓		✓			✓	
-local authorities					✓		+
-local people	✓	+	✓	+	✓	+	✓
-managers	✓			+			+
-non-governmental organizations	✓						
-partners	✓					✓	
-regional authorities					✓		
-shareholders						✓	+
-suppliers	✓	+					
-the media							
-the public	✓	+	✓	+	✓	+	+

BP(Amoco) mentions many more interest groups (15) in its environmental policy in 2003 than its predecessors BP (8) and Amoco (4) in 1993. BP(Amoco) promises to consult its customers, neighbours (local people) and public interest groups (environmental pressure groups, non-governmental groups and the public); work with partners, distributors, suppliers, competitors, legislators, governments and independent experts; and inform and train its managers, employees and contractors.

ChevronTexaco's 2003 environmental policy covers almost as many interest groups (7) as Chevron's 1993 policy (8) and many more than Texaco's 1993 policy (2). ChevronTexaco promises to assess and manage risks to its employees, contractors, customers and the public; ensure that employees and contractors understand their SHE responsibilities; work constructively with legislators and governments; and engage the local community in open dialogue.

ExxonMobil mentions slightly more interest groups (8) in its 2003 environmental policy than Exxon (7) and Mobil (4) in their 1993 policies. ExxonMobil aims to balance the environmental and economic interests of its local communities; emphasise employees' responsibility and train them; work with the government, local and regional authorities, competitors and industry groups (business associations); and communicate with the public.

Shell's environmental policy covers as many interest groups (10) in 2003 as in 1993. Nowadays Shell's policy promises to use independent experts to verify its HSE data and certify the EMSs of its major locations; promote a culture in which all Shell employees share the HSE commitment; require contractors and joint ventures (partners) to manage HSE in line with

Shell's policy; work with legislators and governments; earn the confidence of its customers, shareholders, society at large (the public); and be a good neighbour (to local people).

Employees are regarded as the most crucial interest group in the environmental policies of all the Sisters. Employees have multiple roles: object, actor and participant. In addition to the above mentioned environmental risk assessment, responsibilities and training, the companies give other clues in their policies about the importance of employees. Shell wants its personnel to be proud of the company's environmental performance. BP(Amoco) and Shell promise in their environmental policies that appraisal of staff includes environmental criteria and that good environmental behaviour is rewarded. ChevronTexaco has also included environmental performance in its bonus system, although it does not mention this in its policy. ExxonMobil, on the contrary, does not have any environmental reward system (interview with Dave Dando, Environmental Group Head, on 10.12.2003) – which is in line with the company's deviant approach to environmental management.

Some reasons can be found for certain interest group being present or absent in most Sisters' 2003 policies. Contractors, customers, employees, governments, legislators, local people and the public are recognised in nearly every policy. The input of employees and contractors is essential for the proper implementation of the companies' EMSs. Customers are main targets for building a good environmental image. Governments and legislators need to be lobbied in order that oil companies can influence environmental regulations to their liking. Local people and the public must be kept happy so that companies can operate in peace in each location and country.

Competitors, independent experts and partners are mentioned in half of the 2003 environmental policies. They are worthwhile but not absolutely necessary co-operators when oil companies wish to show "continuous environmental improvement" which does not burden the companies more than they want.

Business associations, distributors, environmental pressure groups, local authorities, managers, non-governmental organisations, regional authorities, shareholders and suppliers, are mentioned in very few policies while financiers, insurers, the media and trade unions are not mentioned in any policy at all.

Business associations, such as Petroleum Industry Associations in the UK (UKPIA) and Europe (EUROPIA) and the Institute of Petroleum, are obviously considered so self-evident partners looking after oil companies' interests that they do not seem to need any recognition in the Sisters' environmental policies. Close co-operation with local and regional authorities is based on practical emissions consents so that policies do not play any part in them. Distributors and suppliers do not put any environmental pressure on oil companies. Oil companies would like to deny the influence of environmental pressure groups and the media on their operations – maybe that is why these are not mentioned in their environmental policies either. Other non-

governmental organisations seldom have any interest in the environmental policies of oil companies. Oil companies' own managers should have an interest and are really an instrumental group in the implementation of the environmental policies, but perhaps they are included in the employees. Regrettably most shareholders as well as financiers, insurers and trade unions still could not care less about the oil companies' environmental policies.

The overlap between the 1993 and 2003 policy interest groups coverage is almost the same (6–7 interest groups) for each of the Four Sisters. It follows the same pattern as with the goals and means, i.e., the 2003 policy resembles more the 1993 policy of dominant than that of the subordinate partner of the merger.

The results of the analyses of the Sisters' 2003 environmental policy goals, means and interest group coverage can be pulled together by the environmentally-oriented strategic posture analysis just like in the original 1993 study.

RESULTS I+II+III: POSITION IN ENVIRONMENTAL STRATEGIC POSTURE ANALYSIS

In the environmentally-oriented form of Ansoff's and McDonnell's (1990) strategic posture analysis three factors are compared to each other: the environmental turbulence of the business environment, the strategic aggressiveness of environmental policy, and the organisation's environmental capability. The evaluation of these three factors for the Four Sisters in 2003 is illustrated in table 5.

The environmental turbulence of the Four Sisters' business environment in the early 2000s is at level 4: discontinuous but predictable. It is not any more possible to forecast (at level 3) the environmental aspects of the future of the world in which oil companies operate like a decade ago (see table 1), although the Sisters themselves with their energy forecasts would like to think so. Instead predictions can be made about the short-term environmental trends, and scenarios can be drafted about possible long-term futures.

The strategic aggressiveness of the Four Sisters' 2003 environmental policies is mostly at level 3 but also to some extent only at level 2. The goals are at levels 2 and 3; the means only at level 3. In 1993 the Seven Sisters' environmental policies were at the same levels.

Table 5. Results of the 2003 study: non-match between the triplets.

Factors:	Levels:	1	2	3	4	5	EN-
VIRONMENTAL		repetitive	expanding	changing	discontinuous	surprising	
TURBULENCE		repetitive	slow,	fast,	discontinuous,	discontinuous	
OF BUSINESS			incremental,	incremental,	predictable	partially	
ENVIRONMENT:			forecastable	forecastable		predictable	

STRATEGIC AGGRESSIVENESS OF ENVIRONMENTAL POLICY:	stable -based on precedents -occasional defensive moves	reactive -based on experience -defensive, some co-operative moves	anticipatory -based on extrapolation -co-operative moves	entrepreneurial -based on new, observable alternatives -threatening, some co-operative moves	creative -novel, based on creativity -threatening moves
ORGANISATION'S ENVIRONMENTAL CAPABILITY:	custodial rejects change	production-oriented adapts to change	marketing-oriented seeks familiar change	strategic seeks related change	flexible seeks novel change

The Sisters' 2003 environmental policy goals vary between level 2 reactive goals based on experience – protect the environment, comply with laws and regulations; conduct operations with high environmental standards; reduce emissions, effluents and waste; and mitigate incidents – and level 3 anticipatory goals based on extrapolation – be among leaders in environmental issues; improve environmental aspects of products; use energy efficiently; conserve natural resources; and prevent incidents – as table 2 shows. The Sisters have no level 4 entrepreneurial environmental goals.

In their 2003 policies the Sisters use only level 3 co-operative environmental moves as can be seen from tables 3 and 4. Their environmental strategies, objectives, targets and action plans match their legal responsibilities, not exceeding them so that their competitors would feel threatened. Each operating unit is well aware of the environmental consents of the competitors' similar units, and can prevent authorities from imposing a more stringent consent on it by pleading unfair competitive advantage (interview with David Heath, Senior Environmental Specialist, ChevronTexaco Pembroke Oil Refinery on 24.11.2003). All Sisters use the co-operative moves of environmental assessment, audits, education and training, communication with interest groups, and work with authorities, industry groups and governments.

The Sisters still do not use threatening environmental moves, such as comparing their products or processes favourably to those of their competitors; building a green image at the competitors' expense; alluring employees, managers, shareholders or financiers by this green image; or investing far more in environmental improvements than their competitors. Since none of the Sisters use threatening moves, none of them need to resort to defensive moves either to punish a rank breaker.

The third factor in the environmental strategic posture analysis is an organisation's environmental capability. The Four Sisters have not lost their seven predecessors' environmental capabilities present in 1993 but they have not really taken into active use more or better capabilities by 2003. The Sisters are still at levels 3 and 4 in their environmental capabilities in 2003. They

still use in environmental management some of their marketing-oriented capabilities, which seek familiar change, and their strategic capabilities, which seek related change.

There is not match between the three factors for the Four Sisters in 2003. Although their level 4 strategic organisational capabilities could allow responding to the level 4 discontinuous business environment, the environmental policies of the Sisters do not have level 4 entrepreneurial goals or threatening environmental moves. Hence the situation has gone worse during the last decade. In 1993 there was a partial match at level 3. The Sisters have not kept up with the development of the business environment turbulence from levels 3–4 to level 4.

DISCUSSION AND CONCLUSIONS

There have been surprisingly few changes in the environmental policies of the Sisters – BP(Amoco), ChevronTexaco, ExxonMobil and Shell – during the past 10 years. Tables 2, 3 and 4 show that the stronger party of the merger (the one whose name is first in the new name) has influenced most on the environmental policy of the new company created through merger.

It must be noted that this paper has analysed only the official environmental policies of the oil companies, not their real behaviour. On the one hand, the Sisters may have many more and more stringent environmental requirements for their operating companies than environmental policies reveal. On the other hand, the Sisters may not follow their policies in reality – although all of them promise in their environmental policies that they have assurance processes to guarantee that the environmental policy is followed (see Rhee and Lee 2003 for rhetoric vs. reality).

On the basis of the content analyses of their environmental policies 1993 vs 2003 the Sisters have not realised their environmental potential. Their 1993 policies presented these oil companies as dwarfs who did not wish to stand out and take full responsibility of their environmental actions. Instead they hid behind each others' backs, and after tough negotiations with legislators and authorities did the bare minimum to protect the environment from their operations. A decade later surprisingly little has changed. The remaining four Sisters still do not dare to take a stand in their environmental policies but instead repeat their earlier promises and resemble each other. But instead of merely dwarfing they have turned into lost boys who actively follow the irresponsible technocentric Peter Pan of Unsustainable Economic Growth without any bangs of conscience, although their business environment has become more responsible, accepting its environmental liability and responsibility. Table 6 illustrates the Sisters' positions in 1993 and 2003.

Table 6. The Sisters: from Seven Dwarfs to Four Lost Boys.

Year 1993: Seven Dwarfs		Company					Year 2003: Four Lost Boys	
Happy	<=							
		BP	}	=>			Nibs (gay and debonair)	

Sleepy	<=	Amoco	}	=>	Tootles (misses action, melancholic, humble)
Grumpy	<=	Chevron			
Dopey	<=	Texaco			
Bashful	<=	Exxon	}	=>	Curly (a pickle, always in trouble)
Sneezy	<=	Mobil			
Doc	<=	Shell		=>	Slightly (conceited, plays doctor)

Yet some improvements can also be detected. BP(Amoco) has taken a much more active communicative role in its 2003 environmental policy than BP and particularly Amoco in 1993. BP(Amoco)'s policy coverage of environmental goals, means and interest groups is much broader and elaborate than before. The optimistic, happy tone of BP(Amoco)'s policy is the same as in Happy BP's earlier policy. There is no trace of earlier Sleepy Amoco. Environmentally the new BP(Amoco) resembles Nibs, the gay and debonair lost boy. Like Nibs BP(Amoco) seems to believe that everything will be alright. It does not find its pirate-like fossil fuel path dangerous or threatening.

ChevronTexaco behaves like Tootles, the saddest and gentlest of the lost boys, who always misses the action. Chevron's and Texaco's merger took place in 2001 but ChevronTexaco still by early 2004 has no official environmental policy. Nor has ChevronTexaco managed yet to make any global commitment to ISO 14001. Despite these obvious misses, the company has elaborate plans to show that it wants to do the right thing: its Corporate Responsibility Policy Development is scheduled for years 2002–2004. And although the ChevronTexaco parent company does not push for ISO 14001 certifications, many of its operating companies are heading that way because of forthcoming legislative pressures – like Pembroke Refinery in Wales (interview with David Heath, Senior Environmental Specialist, ChevronTexaco Pembroke Refinery on 24.11.2003). Thus ChevronTexaco has incorporated the old Grumpy Chevron and Dopey Texaco into the melancholic and humble Tootles.

ExxonMobil has kept its controversial, quarrelsome style in environmental issues. In 1993 Exxon felt Bashful because of the ExxonValdez oil disaster in Alaska. In a way the incident resembled the accidental shooting of Wendy, an innocent motherly Snow White figure, which the snow-white Alaska represents with its virgin- and Gaia-like images. Yet Exxon never reacted with regret and sorrow like poor kind Tootles who shot Wendy. Instead Exxon resorted to a massive armour of psychological defence mechanisms in order to deny the significance of its action. This defence behaviour continues even today and has become ExxonMobil's main environmental behaviour pattern: denying, repressing, undoing, devaluing, rationalising and intellectualising its environmental impacts as well as having omnipotent fantasies of its major role in the world (cp Ketola, 2004a). ExxonMobil's conduct mirrors the official line of behaviour towards environmental issues adopted by the US government – or vice versa! From the earlier Sneezy Mobil the new ExxonMobil has adopted the short, abrupt style of its excuses. While its policy

explanations have turned sour, ExxonMobil's 2003 environmental policy itself is a copy of Exxon's 1993 policy, thus denying the discoveries of the past decade concerning the scientific knowledge of the vulnerability of the global, regional and local ecosystem. ExxonMobil has become a pickle, the naughtiest of the lost boys, called Curly, who is always in trouble.

Shell has changed the tone of its environmental rhetoric from plain terms in 1993 to sympathetic murmur in 2003. Of the seven dwarfs Shell used to be Doc who arrogantly claimed to have medicine for every environmental illness. Little has changed during the past decade. In 2003 Shell still believes that it knows panacea for all environmental problems – but now it utilises positive-sounding terms, such as sustainable development and best practice, in its prescriptions. Shell is Slightly, the conceited lost boy, who plays a doctor in order to bring Wendy back to life – although Wendy recovers from the shooting on her own.

All lost boys are still busy taking advantage of Wendy, the Mother Earth. The exploitation of one of her Snow White forms, Alaska, has particularly angered many interest groups. ExxonMobil, BP(Amoco) and Shell are exploring and producing oil and gas in Alaska and would happily invade also Alaska's Arctic National Wildlife Refuge for this purpose. For example Northern Russia has similar climatic conditions, but the Sisters' exploration and production operations there are not frowned upon since Northern Russia does not carry a Snow White image in people's minds.

In summary, the Four Sisters are lost boys, irresponsibly playing around with fossil fuels. They do not have any goals on renewable energy forms in their environmental policies, nor any visions or business goals of switching from unrenewables to renewables – on the contrary, although they (with the exception of ExxonMobil) do renewable energy business on the side. And they do not mention any means in their environmental policies for making renewables the main energy source nor for promoting energy saving among their customers. They do not have any integrated approach towards their interest groups whom the oil companies are actually made of. We are the oil companies. We (all people) can bear our responsibility through our every-day behaviour in all of our roles in every walk of life. Instead of the mission of maximising shareholder profit, a different, more comprehensive mission for companies is needed: how can we serve our society in a sustainable way? If a new mission is not adopted but "business as usual" goes on, the oil companies remain lost boys under the technocentric Peter Pan's command who loves unsustainable economic growth.

A wholehearted adoption of Corporate Social Responsibility (CSR) could help the lost boys to grow up. If the three pillars of CSR – economic, environmental and social responsibilities – are truly embraced by the Sisters, they will have to admit the unsustainability of fossil energy forms. Economic responsibility means that, if the polluter pays principle is really enforced in its widest meaning, fossil fuels will become uneconomical products to produce. Thus the economic

responsibility of companies will act as a financial disincentive. Environmental and social responsibilities will act as legal obstacles. If the malignant ecological, health and safety impacts of fossil fuels are really considered to the full, and companies are held responsible for the environmental and social consequences of their operations, fossil fuel production and refining will be banned as a criminal activity.

The Four Lost Boys could grow up to become responsible adults if they changed their visions of the future energy demand and forms of supply from self-satisfying to society-serving visions. Accordingly, they should also change their mission and business goals as well as the environmental goals, means and interest group coverage of their environmental policies. It needs just one major oil company to start the change by adopting entrepreneurial environmental goals and using threatening environmental moves. It would force other Sisters to follow in order to survive because the current environmentally sophisticated business environment would not allow them to retaliate against the rank breaker with defensive moves.

The fairy-tale had a happy ending. The lost boys grew up to be responsible adults. Tootles became a judge, and Nibs and Curly became civil servants. Slightly married a lady and became a lord (good for the single Shell!). Like the four lost boys, the Four Sisters could find new careers in other areas of life where they could benefit society – and the ecosystem of which society is an inseparable part. There will always emerge Peter Pans every now and then, but we do not have to allow them to rule the world, do we?

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