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**CORPORATE RESPONSIBILITY AND IMPACT ASSESSMENTS:
THE BOLIVIA-BRAZIL GAS PIPELINE**

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CONTENTS

Introduction: Overview and Thematic Structure	1
Overview	1
The Argument In Outline	1
Thematic Structure	2
Corporate Responsibility	3
A “Social License To Operate”	3
“Stakeholders” Rather Than “Shareholders”	5
A Sustainable Development Approach	5
The Very Specific Nature Of The Oil And Gas Industry	6
Corporate Reports and Impact Assessment	9
Corporate Environmental And Social Reports (CERs AND CSRs)	9
Environmental And Social Impact Assessments (EIAs AND SIAs)	11
Case-Study: The Bolivia-Brazil Gas Pipeline	14
Project Background	14
Environmental Impacts	15
Social Impacts	16
Participation In Decision-Making	17
Compensatory Measures	18
Conclusion: Towards Responsible Companies	19
Bibliography	20
Annex I: Organisational Profile	23
Annex II: List of Acronyms	24
Annex III: Organisational Profile	26
Annex IV: Maps	27
Annex V: Photos	28
Endnotes	30

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INTRODUCTION: OVERVIEW AND THEMATIC STRUCTURE

Overview

The past decades have witnessed not only a growing influence of transnational corporations, but also an increasing number of social actors that came into play. As the world becomes smaller, corporate business is faced with new challenges that include a more proactive role towards the community and the environment within which they work. Profit maximisation is still a rule of thumb, but new management strategies relating to openness and transparency, not to mention safety and environmental concerns, are a good beginning for socially responsible companies.

In that sense, many companies are beginning to differentiate themselves from a "business as usual" approach, and are increasingly disclosing information on other indicators than economics. Corporate reports are still in a transitional phase, or in the "teenage years" to quote the New Economics Foundation (2001). Nonetheless, they represent a great progress in terms of acknowledging a new reality where companies are more accountable and dependent on a multitude of diverse stakeholders. Naturally, corporate statements are only meaningful if corporate actions live up to their promises. That is why sound impact assessments, either social or environmental, are paramount as scrutiny mechanisms to corporate influence.

The case study adopted here, therefore, is a remarkable illustration of "do's" and "don'ts" in terms of corporate responsibility, impact assessments and mitigation measures. The Bolivia-Brazil Gas Pipeline raises diverse issues such as standards for corporate accountability, levels of participation in project design, and mitigation measures, among others. The nature of the oil industry is also peculiar due to the inevitable impact that it might cause, a fact that might also aggregate some extra value to the following analysis.

The Argument In Outline

Within this paper I argue that "corporate responsibility" is an inescapable reality in the modern world, but clear accountability channels still have to be facilitated by corporate business. Companies do recognise that they need a "social license" to operate so that broader business values are to be shaped (Gray, 1996; Leipziger, 1998; Hutchison,

1997). The new management paradigm involves not only a reformulation from within, by redrafting mission statements or disclosing information, but also involves the inclusion of a number of stakeholders that might contribute to both legitimise business activities and achieve a long-run development framework. In particular to the extractive industry, non-renewable materials claim for a specific development strategy. The sector is highly competitive and has considerable implications in terms of economic, environmental and social issues that need to be taken into account (Shell, 2000; BP, 2001). Thus, a long-term strategy can permit these organisations to better cope with inputs and a diverse range of impacts that might occur during business activities. In that sense, the so-called "sustainable development" strategy, nowadays mostly adopted by the oil industry, only makes sense if the same companies provide sound (and verifiable) statements on their social and environmental performance.

Corporate reports come then as a first recognition of corporate responsibility, but caution is necessary. Companies should still be judged by their actions and not by their words. In those documents, not only dividends, shareholder returns, and achievements of industrial activity need to be reported, but also any possible negative impacts on the environment and local communities.

Impact assessments are a basic tool for the extractive sector, and compliance to environmental and social regulation seems fundamental. However, socially responsible companies, as I shall argue, should go beyond minimum requirements and increase the processes of participation and transparency in the implementation of their programmes. Impact studies need to be clear, accessible and open to feedback from the different stakeholders that have any relevance to the project.

As a matter of fact, this was one of the most remarkable difficulties and challenges of the present paper. Added to the excessive complexity of the case study, one of the gaps of the present paper may refer to factual discrepancies presented in the extensive literature. The fact that the research was conducted in London, and has not included a field trip to the site, might also raise some considerations that could expect to be minimised by interviews arranged with the purpose of bridging possible factual and analytical gaps. The lack of interest on the part

of the contractors as the pipeline was already a “fait accompli”, and the consultant’s secrecy policy towards their clients, were restrictions that were not expected originally when the research was first undertaken.

However, the advantage of the case study is to serve as a business case to analyse the different stakes of interest, and put some light on a recent attempt to minimise the massive environmental and social impacts related to the construction works in the direct area of influence. Although the findings suggest that many principles of good business practice were properly carried out, the present study aims to suggest some improvements and also appoint some deficiencies of the management plans for the project. It is argued that if the different companies (Petrobrás, Enron, BHP, etc.) were not pressed by the urgency of the works, they could perhaps effectively stick to their “sustainable development” discourse and then have a project that is better implemented. A truly socially responsible posture, guided by stricter requirements, would mean better legitimisation and a more positive and lasting image of the overall project.

Thematic Structure

The study starts with a revision of concepts and different definitions or understandings of what “corporate responsibility” entails. Thus, the analysis begins in section 2 with a wide range of views and explanations for socially responsible behaviour. The conceptual framework deals with the imperatives of an inclusive approach for corporate responsibility, where different stakeholders are identified and taken into account. Additional considerations are addressed about sustainable development strategies and how they relate to corporate responsibility discourses. Finally, some additional remarks are made in order to put into context the peculiarities of the extractive

sector so we can reach a better understanding of how this industry relates to the concept of “responsible company” and to the case study itself.

Section 3 is about information disclosure and how companies report their social and environmental indicators. First, the reasons and validity of this exercise are questioned whilst addressing the peculiarities of corporate reports. Second, impact assessments are to be discussed as well as their relation to the ‘practice’ of corporate responsibility.

Section 4 addresses the case study and its relevant characteristics to the body of knowledge. In this section, I attempt to translate a social responsible paradigm into a massive energy project and explain how potential impacts could have been mitigated in order to attain a good social and environmental performance. The objective of this particular point is to identify potential failures of implementation, and how a real business case can illustrate the hidden complexities and failures behind the responsibility of large multinationals towards the environment and local communities.

Finally, section 5 brings the discussion to a close and argues that, under the light of the Bolivia-Brazil Gas Pipeline, a sustainable development framework can constitute a good beginning for acting in a more responsible way. Nevertheless, as we know, with responsibility comes commitment. The implications of such a strategy are considerable. As sound impact assessments are time and money consuming, corporate reports and statements can always become meaningless paper work. Consequently, a long-term strategy to be adopted by oil companies risks in being vague if there are any failures of identification, or if adequate resources are not applied for compensatory or mitigation programs.

CORPORATE RESPONSIBILITY

“There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it engages in open and free competition”. Milton Friedman’s dictum (cited in Davies, 1997:57; Beesley, 1978:16; Hutchinson, 1997:20) is explosively controversial. But do modern companies share this perception? Fortunately enough, there is some evidence that the scenario drawn by Friedman may sound less plausible in a fast-changing world where big companies face new challenges and demands from a multiplicity of stakeholders to whom they are accountable.

A “Social License To Operate”

In fact, a clear trend can be traced as far as corporate attitude is concerned. Gradually, “big business” is moving towards a pro-active and responsible mentality regarding the environment and the community where it operates. Although the reasons and the delivery of this new process are still questionable (e.g. “greenwashing”), the fact is that multinational corporations are increasingly aware of the advantages of beholding what has been called a social “license to operate” (BPD, 2000; White, 1999; Leipziger, 1998; Davies, 1997).

The idea of “corporate responsibility” is relatively recent. White reminds us that, prior to the 1930s, disclosure of financial information, not to mention social and environmental performance, was virtually unknown in the US (1999). Indeed, the general perception was that information should be minimally disclosed in order to protect dividends (Clarkham, 1999). The first large corporations and businessmen (J.P. Morgan, John D. Rockefeller, Cornelius Vanderbilt, etc.) were secretive in their behaviour as they were fully covered not only by the establishment, but also by the lack of mandatory policies regarding the disclosure of information.

The situation would remain almost unchanged until the second half of the twentieth century, when environmental concerns began to appear on the political agenda. By the mid-1960s, Peter Drucker was already able to report that America was increasingly disappointed with the level of social concerns exercised by American corporations (cited in Gray, 1996)¹. In the 1970s, continental Europe (notably Germany, the Netherlands and Scandinavia) engaged in a series of environmental debates that would indirectly touch the role of corporate business in a more global scenario (Gray, 1996; White,

1999). The UK would try to come up with the “Corporate Report” (1975), attempting to develop guidelines for corporate accounting relating to wider social issues, and the US would make progress in the issuing of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Gray, 1996).

Unfortunately, only environmental and social catastrophes can break through the inertia of corporate behaviour. The Union Carbide explosion in Bophal (1984), India, would permanently damage the reputation of Carbide and would lead to an intense debate about the responsibility of business towards the communities with whom they operate (Gray, 1996; Hutchinson, 1997; Leipziger, 1998; Moser, 2001)². The Chernobyl nuclear meltdown (1986) would also bring unprecedented global safety concerns and, shortly after, the environmental disaster caused by the Exxon Valdez oil-spill incident in Prince William Sound (1989), Alaska, would immediately become subject to US litigation and pressure from environmental groups. (Gray, 1996; Hutchinson, 1997; Welford, 1999). All large-scale vulnerability to corporate activities would be soon translated into a chronic malaise vis a vis multinationals.

As a natural consequence, as business became more and more global, changing perceptions in the 1990s brought about greater awareness of public concerns on safety and the environment. In other words, the corporate community started to rethink their view of “business as usual”, towards a perception that community relations are a local matter (not solely provided by the headquarters of multinationals), but also the understanding that programmes should involve “relationships, communicating & listening” (Nicholls, 1998). This process of awareness led to the development of environmental standards and obligations (i.e. Toxic Release Inventory in the US and the 1990 Integrated Pollution control in the UK), but also a boom of voluntary corporate environmental reports (CERs) (Aubert, 2001; White, 1999; Hutchinson, 1997). Deborah Doane (Head of the Corporate Accountability Programme, New Economics Foundation) agrees that indeed there is a shift in attitude, but also points out:

If you take acknowledgement of environmental and social problems, yes, we can observe some progress. However there is much more to be done, especially towards mandatory reports. Nowadays, corporate

responsibility is what companies do beyond legislation but, in my opinion, the concept should instead relate to what companies must do for the wellbeing of society³.

In light of the above, how could we then define corporate responsibility? The meanings of corporate responsibility are as extensive as management literature can be. Already in the 1970s, Beesley (1978) proposed some definitions of social responsibility, which lie in the perception of a relative shift from the government to companies as the source of social improvement. The perception here is still very much related to social investment and much of the “community involvement” is based on charity or donations that not necessarily reflect the overall activities of a company.

In a quite similar way, Nicholls (1998) suggested corporate social responsibility (or citizenship) as a “deficit model” in which the corporate world “puts something back to society”, although recognising as well that in the UK and in the US there were already more sophisticated ideas based on mutual understanding, rather than paternalism. One could say that while in the UK the concept was much related to “fast dealing” or business malpractice, in the US social responsibility was seen largely as the responsiveness to social concerns and law requirements, and today is still most directly translated into an obligation to the community in which the organisation operates (Gray, 1996; Beesley, 1978).

Alternatively, Leipziger (1998) defines corporate responsibility as a paradigm shift, a “radical evolution” rather than a “radical revolution”. In the new model, corporate responsibility is not about philanthropy per se, but is a post-modern concept and implies citizenship in the heart of strategic planning⁴. Indeed, the concept avoids any comparison to charity or humanitarian reasons. On the contrary, being a socially responsible organisation is in the business’ interest.

Companies now start to realise that social and environmental issues must be addressed for a number of reasons, such as ethics, legislation, consumer pressure, and cost savings. Nonetheless, being seen to be a responsible corporate citizen is still a competitiveness issue. Companies that improve their environmental performance can reduce costs and exploit a dynamic marketplace through the promotion of a “brand” image. The “consumer sovereignty” principle, not surprisingly, plays a key role in imposing new social controls on business

enterprise while market opportunities for globally branded products are enormous (Gray, 1996). As suggested by Leipziger (1998:61):

As businesses have become leaner, tighter organisations with fewer staff, key relationships and brand image are the company’s great assets and their management becomes more important... What do you think of Nike, Virgin, Volvo, Greenpeace, Amnesty International or Coca-Cola? These organisations work hard at promoting ‘brand’ image. Virgin’s image is flexible, exciting, young and based in good service. Volvo is seen as safe and well engineered. Amnesty International is known to be honest, accurate, reliable and committed.

Whether the marketing orientation for social responsibility seems undoubtedly strong (Welford, 1999; Leipziger, 1998; White, 1999), there are also other reasons worth pointing out. Again, social responsibility remains intrinsically attached to a “social license to operate”, a new deal between businesses and a wide range of stakeholders. “Society may accept market capitalism as the dominant form of economic organisation in exchange for broadening the standards of accountability to encompass the environmental, social, and economic dimensions of corporate activity” (White, 1999:13).⁵

The more complex the relationship between company and society, the more are the issues of legitimisation of company actions and the control of them. If a good relationship with the community is consolidated, this can not only make a real contribution to the community, but also will in the process enhance the reputation of the enterprise (Clutterbuck, 1992; Beesley, 1978).

The World Business Council on Sustainable Development (WBCSD), alternatively, evokes an “eco-efficiency” argument and defines social responsibility as “producing goods and services of greater value relative to the burden they impose on the environment” (cited in White, 1999:3, Hutchinson, 1997:7). Complementarily, Gray (1996) not only considers the “eco-efficiency”, but also stresses an “eco-justice” element. However, no matter the definition taken, the sustainable framework, as we shall see in the

following sections, is still more easily accepted by large companies which have incorporated the needs of the enrolment with their own profitable aims (NEF, 2000). The model sounds particularly attractive to large corporations, as it can be measurable by including performance indicators, values and targets previously set.

I argue that, although the “license to operate” is still paramount to understand the new reality, it is now crucial to move beyond issues of legitimisation and thus understand corporate responsibility as a continuum and inclusive process that involves, respectively, a sustainable approach for business and a broader participation of stakeholders. The following sections shall address two key theoretical features of my own argument in defence of the responsible company – the need of a holistic and integrative approach (stakeholder inclusivity), and a long-run environmental and socially friendly business strategy (sustainable development).

“Stakeholders” Rather Than “Shareholders”

A stakeholder perspective for social responsibility is pluralistic in nature (Beesley, 1978; Gray, 1996). It no longer sees the company as a pure “shareholders” entity but, on the contrary, as interactions of different “stakeholders” and interests, which can be sometimes conflictive. “A stakeholder is any human agency that can be influenced by, or can itself influence, the activities of the organisation in question. An organisation is likely, therefore, to have many stakeholders” (Gray, 1996:45).

Clutterbuck (1992) identifies several instances of corporate responsibility. His perception is that the company represents several stakeholders and thus the responsibility (although holistic in nature) has to be desegregated into different responsibilities towards customers, employees, suppliers, investors, the political arena and the broader community. Although slightly different in nature, Gray’s (1996) conception of a pluralistic model is also guided by different layers of stakeholders having in the hardcore an economic sphere, which is constituted by a triangulation of different actors; namely the state, private and public sector entities and, finally, individuals and pressure groups.

A stakeholder model for corporate responsibility is also participatory in nature. The main characteristic, as stressed by Leipziger, is to include a wide range of formal and informal actors into play (1998:206):

Central to the concept of stakeholding is the idea of “inclusivity”. An inclusive company is one that consults, and involves, a wide range of stakeholders in its decision-making. It makes sure that it understands the effects of its decisions on communities and the environment because it is concerned both for its own long-term profitability and for the long-term health and wealth of society

Broadening participation and access to information strengthens the accountability process. But, on the other hand, with broader participation from relevant stakeholders comes responsibility. The attractive feature of such a model is that it permits to share, and to some extent reinforce, responsible attitudes and good business practices with other stakeholders not directly involved with a final product or service. In that sense, it can be seen as a distributive model of responsibility (i.e. as suppliers could be seen as an extension of a company, they can also become subject to the same standards and then automatically fall into an integrated net of social responsibility).⁶

A Sustainable Development Approach

The concept of sustainable development represents a rupture with the “zero growth” concept of the 80s and it is deeply linked to ideas evoking the Brundtland Report (1987) (Welford, 1999, Barrow, 1997; NEF, 2001). In its broader form, it could be seen as a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. In other words, it is a substantial shift from short-term gains to a long-term corporate strategy. “The ultimate aim of corporate environmental management must be to reach a situation where companies are operating in a way which is consistent with the concept of sustainable development. One key idea which lies behind the concept of sustainable development is that there is a trade-off between continuous economic growth and the sustainability of the environment” (Welford, 1999).

By incorporating a sustainable discourse, a key prerogative for corporate business comes to “internalise” externalities by taking into account environmental costs or damages (e.g. Polluter Pay Principle) (Leipziger, 1998; Hutchinson, 1997; Gray,

1996). For Beesley (1978), the “internalisation” (or incorporation) of external concerns, which may also include health and safety regulations, into its decision processes is the key feature of a socially responsible company. Environmental Management Systems (EMS) and Life Cycle Assessments (LCAs) come also into play as a stimulus to internalise environmental concerns and change corporate culture (Welford, 1999; Gray, 1996).⁷

A sustainable development approach for corporate business does imply business values and goals clearly set. In that sense, strategic management (and corporate responsibility) is all about staying ahead of the competition and is largely based on corporate responsiveness (Hutchinson, 1997:109; Welford, 1999:10-11). In order to be effective, a sustainable approach has to be comprehensive, by covering all activities of the organisation; understandable, by being clearly expressed to all people involved, and continuously improved along time.⁸ Miguel Ruiz-Larrea (Shell International and former Co-ordinator of the Cuiabá Pipeline Project) also states an interesting point of view on the issue:⁹

We have to keep in mind that the driven force behind the extractive industry is, of course, still economic. However, from the management point of view, meeting strict environmental standards makes a lot of sense and can assure not only the compliance to regulation but also – more importantly – the longevity of major infra-structure investments and the strengthening of a strategy for sustainable development¹⁰.

Consequently, by embracing a sustainable framework, companies are now obliged to create self-propelling systems for socially responsible policies. This is particularly important, as corporate social responsibilities are natural and constantly changing in the same manner as moral and subjective societal perceptions change overtime. A sustainable development framework, therefore, helps to create a life-learning organisation where a continuous process can assure that inputs are appropriately taken into account for the future (Hutchinson, 1997; Leipziger, 1998).

The Very Specific Nature Of The Oil And Gas Industry

It is well known that the extractive industry is potentially harmful to the environment. Nevertheless, there are always precautionary measures and mitigation processes that apply. As fossil fuels are an inescapable reality, the recognition of their social responsibility, or “social license to operate”, by large multinationals can mitigate potential harmful effects that oil companies can create in their surrounding communities and environment.

The effects of the oil industry are at best ambivalent. Although wealth creation and general economic spin-offs are verifiable in most of the cases, the benefits are most likely not equally distributed. In a recent report prepared for the French National Assembly, the French Green Party recognises the negative social and environmental consequences that may arise from oil activities. Most importantly, the report stresses the unequal balance of power between oil multinationals (notably Shell, BP-Amoco, Exxon-Mobil, and TotalFina-Elf) and the countries where they operate.¹¹

The report commissioned by the French parliamentarians recognises that oil multinationals are now developing their own codes of practice, which are based in international agreements and conventions (Aubert, 2001; Kempf, 1999). However, these exercises are rather “cosmetic” in the sense that they are still endogenous and oil giants are reluctant to have external scrutiny or instances of control.¹² For obvious reasons, the absence of sanctioning powers at the international level also raises additional concerns for pressure groups (Moser, 1999).

Not surprisingly, the oil and gas industry tends to prioritise formal stakeholders to the detriment of others. The specific nature and amount of the investments usually lead to a close relationship with governmental agencies and other boards related to the central government (DFID, 2000; Moser, 2001). Moreover, due to the nature of partnerships with the government, some oil companies are also accused of being implicitly behind despotic regimes and human rights abuses. Other people say that the extractive industry has a “moral responsibility”, and thus should take advantage of their size and power to put pressure on local governments towards democratic regimes and civil rights (Moser, 1999).

Additionally, broader participation and consultation are still in their infancy as far as extractive operations are concerned. The excessive emphasis on formal agreements,

which has already been exposed before, only reinforces the fact that a tri-sectoral dialogue (government, corporate sector and civil society) is absolutely necessary (DFID, 2000; BPD, 2000). One clear recommendation is that partnerships should include indigenous business rather than focusing solely on international business interests (DFID, 2000).

Increasingly aware of their new role in society, oil multinationals are now beginning to incorporate a more “inclusive” perspective of business. British Petroleum (now BP-Amoco) has expressed a concern with “external relations” (Nicholls, 1998; Clutterbuck, 1992). The first clear social statement from BP (International Community Report) appeared in 1995, but was merely a compilation of programmes from around the world. Gradually, the company developed and refined its own concept of social responsibility. By 1998 BP came out with its first “social report” in which reference was made to BP’s impacts, “both positive, such as wealth creation; and negative, the cultural and social consequences of BP’s presence” (Nicholls, 1998:2). The business life cycle of BP then entailed a continuum processed in the formula “clarify – implement – assure – share – learn”, which is again encapsulated in the “Environmental and Social Review” for the year 2000 (BP, 2000:3):

Companies are part of society. They reflect human concerns and potential and also embody an inherent belief in progress and positive change. They have to move forward to survive in an intensely competitive, fast-changing business context. In the modern era, companies that want to operate successfully on a long-term basis cannot isolate themselves from society. A wider role is expected of large companies by governments, non-governmental organisations, employees, the media, shareholders and customers.

Shell is also a frequently referred to example of a socially responsible company that learnt from previous experiences. In the mid-1990s, Shell was heavily criticised for environmental and human rights mistakes in the North Sea (Brent Spar Oil Rig) and in its Nigerian subsidiary (Howarth, 1997; White, 1999; Leipziger, 1998; HRW, 1999; Hutchinson, 1997; Clutterbuck, 1992). Nevertheless, in order to protect its market share and satisfy all stakeholders, the

Shell Group soon reformulated its strategic priorities and made considerable effort to attain to its new business principles. (Leipziger, 1998).

Shell’s general business principles points out “society” as one of the five groups (the others are shareholders, customers, employees, and those whom they do business with) to which the company owe a responsibility (Shell, 2000). In its own words, Shell “takes a constructive interest in societal matters which may not be directly related to business” (cited in HRW, 1999:98). According to Titus Moser (Shell International, Sustainable Development Group)¹³:

Shell is now pursuing a more integrated policy for social investment, which means that social investments will now have to be more and more integrated within our portfolio of projects, so we could avoid parallel investments that had little or nothing to do with our extractive activities. Moreover, under our sustainable development strategy, new trends could be seen as Environmental and Social Reports at the local level (country based), reports for specific projects or business cases, and the development of key indicators to assess social performance.

Hence, the new paradigm for the oil industry seems to be very much driven towards a sustainable approach. Indeed, the idea of being sustainable is now so intrinsic to the extractive sector that this particular industry now defines itself as “energy providers”, a subtle but significant change in order to sooner encompass new sources of energies other than hydrocarbon¹⁴. Extractive companies are then gradually incorporating sustainability instead of environmental reporting, so concerns on non-renewable resources can be clearly expressed (White, 1999; Moser, 2001).

Alternatively, if we apply a model suggested by Welford (1999), in the long-run, sustainable extractive companies might progress to become what has been defined “transcendent organisations” (ROAST model). This stage, however, would not be automatic and would comprise five natural steps that include a) resistance to change, b) observation and compliance to environmental laws, c) accommodation to voluntary behaviour, d) size of environmental concerns, and finally e)

transcendence, which would mean the final incorporation of environmental values into the corporate ideology¹⁵.

The deserved attention to social and environmental issues is far from being a cost to corporate business. On the contrary, it can sustain long-term goals and be translated into more legitimatisation. Moser (2001), after studying the effects of the oil industry in Colombia and Peru, perceives sustainable development as a quite plausible approach as it can tackle different objectives (economic, environmental and social) at the same time.

Under this argument, the presence of oil multinationals in developing countries is not per se a burden to the environment. The oil industry still has an irrefutable multiplier effect, which can positively be converted into infrastructure, employment and technology. However, as I shall stress in the forthcoming case study (The Bolivia-Brazil Gas Pipeline), clear countermeasures need to be put in practice to refrain excessive corporate power. Transparency, accountability and regulation are still to be properly addressed by the extractive industry discourse.

CORPORATE REPORTS AND IMPACT ASSESSMENTS

“Social accountability” only arises if the organisation has a minimum of “social responsibility”. Indeed, the disclosure of information related to business practices is a key characteristic for a responsible company. Impact assessments and social reporting are intrinsically linked to some degree of accountability and transparency; in other words, these instruments permit a flow of comprehensive information on ethical, financial, social and environmental affairs (Clarkham, 1999; Leipziger, 1998; Gray, 1996, Beesley, 1978; Hutchinson, 1997). However, the methods and the levels of openness can vary considerably, as we shall discuss in the next sections of this paper.

Corporate Environmental And Social Reports (CERs AND CSRs)

The disclosure of information regarding business activities can be either mandatory (employment data, employment of the disabled, charitable donations, etc.) or voluntary (energy saving, value-added statement, consumer protection, etc.)¹⁶. For obvious reasons, companies prefer to comply with information disclosure requirements at a minimum level (Gray, 1996).

There are several reasons why companies voluntarily disclose information on their social performance. Social and environmental statements can permit investors to ensure environmentally superior business practices, invite stakeholders to better understand the dynamics of a specific organisation, but also help to illuminate weaknesses and opportunities (CERES, 2001). Social reporting can be then seen as an instrument of corporate improvement and “social auditing”, much more than a mere “box-ticking” exercise (NEF, 2001).

White (1996) argues that one of the reasons that Corporate Environmental and Social Reports (CERs and CSRs) have become a standard practice in the modern corporate world is precisely related to the dynamics of corporate behaviour. According to him, as in any innovative process the first comers and innovators such as Polaroid, Monsanto or Skandia would set a standard of disclosure against which other companies would be judged. This argument seems quite reasonable, especially when we consider the fact that, in a monopolistic competitive scenario, the key point is still differentiation of the product. Thus, as pointed out by one

Managing Director of the Shell Group, “there is a good dollar justification behind the drive to achieve long-term growth in an environmentally and socially responsible fashion” (Veer, 1999:3).

In addition, as society becomes environmentally driven, negative publicity will always involve the loss of millions of customers. The weight of public opinion influencing corporate decisions is now decisive (White, 1999). Under this light, corporate responsibility relates to information disclosure and impact assessments, as long as they can prevent multinationals from incurring any potential risk or legal measures. Corporate responsibility is then intimately related to risk avoidance (Leipziger, 1998, SustainAbility, 2000; Hutchinson, 1997). Costly legal processes have extended personal liability to directors, senior members and other corporate executives. Further, if a company has a questionable social or environmental history, the menace of costly litigation can make a project turn out to be a bad investment (Clutterbuck, 1992; Hutchinson, 1997).

Nevertheless, companies, as pointed out by Welford (1992), are still not obliged to issue CERs. However, this idea seems more and more attractive to large multinationals for a number of reasons. The modern company sees environmental and social reporting as a way to improve its corporate image, to avoid pressure from environmental groups or shareholders or, most frequently, in anticipation of environmental measures that will soon become mandatory.

The New Economics Foundation (NEF) (2001) admits that social reporting is still too voluntary but, in the absence of a strong regulatory framework, voluntary measures of accountability are better than no measures at all. However, the discrepancies between “what they say” and “what they do” are still considerable. Naturally, the role of the government is still crucial and should never be minimised as governments can (and should) establish institutional and legal framework for corporate governance (OECD, 1999). Deborah Doane (Head of the Corporate Accountability Programme, New Economics Foundation) highlights the pivotal role of national governments:

The role of the Government is crucial to ensure corporate reporting. Corporate reporting should be more than a feedback of activities to the company board. NEF is in favour of mandatory reports and we

believe that national governments have to increase their responsibility towards the enforcement of transparency and regulation.¹⁷

As noted, CERs and CSRs have not yet reached maturity. In an interesting analogy, NEF (2001) compares the modern attempts of social reporting as a “stereo-typical teenager”. In other words, corporate reports (either social or environmental) are easily “influenced”, as social reporting is still captured by marketing departments; “lazy”, as social reporting still needs stronger rules; and “manipulative”, as most of the reports do ignore important stakeholders.¹⁸

While most of the corporate reports fulfil only legal responsibilities to investors, most of them follow the same structures (see appendices). As put by Clutterbuck (1992), usually a CER begins with a statement from the chairman, followed by a statement of the trading figures for the year, which is signed by an independent auditor. A “mission statement” is also paramount and crucial for any CSR or CER. In a nutshell, a mission statement is a commitment to a long-term strategy and should clearly express what the organisation wants to achieve and who it wants to be (Hutchinson, 1997). Not surprisingly, the mission statement and the code of conduct tend to be as broad as possible in order to cover a substantial spectrum of stakeholder interests (Clutterbuck, 1992).

In the same light, Gray (1996) argues that a CSR should start with a “policy statement”, itemising the laws, codes and additional issues which govern the organisation. This is then followed by a “compliance-with-standards” report that is complemented by other remaining accountability issues (environment, labour, etc.). Most importantly, however, is the recommendation that all environmental, social, and employee information should come within the conventional company “Annual Report”.¹⁹

Complementarily, Leipziger (1998) stresses five imperatives to be followed. First, the company is to be accountable and transparent in its activities. Second, there is a need to think interdependently or, in other words, to integrate different instances of responsibility. Third, a CSR should express its business principles. Fourth, any corporate report is to be open to change and greater complexity. And finally, a company is supposed to be educated and knowledgeable, by investing in its human resources capacity.

The Organisation for Economic Co-operation and Development (OECD) (1999) has also come out with a set of principles for corporate governance. The guidelines state that good governance is an important factor for investment decisions and that employees and other stakeholders play an important role in contributing to long-term success and performance. In the OECD principles for corporate governance, a key emphasis is put on disclosure and transparency of information. According to the report, it is the company’s responsibility to provide adequate disclosure which must state the company objectives and all material foreseeable risk factors (including social and environmental).

Taking into account what has been said above on voluntary reporting, it can be considered that more and more multinationals are now developing eco-auditing practices and frameworks. Although this can be misleading, as companies can only report examples of “good practice”, the advantage of this type of corporate involvement is such that these organisations can promote a more uniform and universal approach where there is no clear “blueprint” for CERs and CSRs (Barrow, 1997).

In respect of this, a number of initiatives have been undertaken to set standards of social reporting and auditing. A lack of expertise, or capacity, in social and environmental reporting can lead to the establishment of partnerships, and which are welcome additions. As stressed by Moser (1999), “multinationals have recognised that they often do not possess the necessary skills and human resources to meet these objectives. For example, multinationals have found that co-operation with local NGOs can be effective for independent environmental monitoring”. Due to the rationale of corporate business, the company is sometimes “insufficiently sensitive” to social or environmental issues and advice from outside can really make a difference (Leipziger, 1998).²⁰

Obviously, there are no universally agreed standards or blueprints for social and environmental reporting. However, the proliferation of thousands of annual corporate reports can impose several problems as well. As noted by the Coalition for Environmentally Responsible Economies (CERES) (2001), “while the quantity of information rapidly expands, it is far from clear that the value of information has kept pace... Each firm utilises its own format, its own indicators, and its own metrics, thereby making comparisons between reports impossible”. In order to increase accountability worldwide, CERES launched in

1997 the Global Reporting Initiative (GRI), which is a set of guidelines for social reporting, and which is also available on the World Wide Web. Nevertheless, there are still as many standards bodies as reports can be, i.e. British Standards Institution (BSI), International Organisation for Standardisation (ISO), Europe-wide Eco-Management and Audit Scheme (EMAS), and others (Welford, 1992; Hutchinson, 1997; Leipziger, 1998; Gray, 1996).

As we have seen, standards of corporate disclosure can vary dramatically, but the lack of standards seems particularly problematic in the oil and gas industry, where there are valid accusations that these companies use different non-monetary performance indicators for rich and poor countries. As noted by Moser (1999), many NGOs argue that oil multinationals behave more responsibly in a developed-country context, where there is greater public scrutiny and clear regulation. An additional problem, related to the scope of global activities of oil multinationals, is the poor social reporting inter-office. Failures in communication or poor corporate reports addressing social and environmental impacts are a common reality in less developed countries (Moser, 2001). This failure of reporting is, most of the time, a responsibility of oil subsidiaries that fail to follow (or are forced by circumstances to ignore) strict codes of business practices from headquarters.

Environmental And Social Impact Assessments (EIAs AND SIAs)

Like social and environmental reports, impact assessments can help ensure that planners and decision-makers are more accountable for their actions but, contrary to corporate reporting, impact assessments have become mandatory in most countries after the gradual development of an environmental regulation (Barrow, 1997; BP, 2001). From the different responsibilities that a corporation might have to the environment and its stakeholders, Environmental and Social Impact Assessments (EIAs and SIAs) might be the more proactive way to avoid disruptive or unacceptable consequences arising from business activities.

Most of the early ex-ante project assessment attempts were guided solely by technical feasibility studies or cost-benefit analysis (CBA) (Wathern, 1988; PADC, 1983). The inclusion of Environmental Impact Assessments (EIAs) was firstly seen as an "add-on" to CBA studies. Gradually, health, environmental and social impacts were seen as being worth considering, along with the pure

economic and political criteria. The EIA would come into play as it could prove to be an effective tool for project planning and design. For many years, EIA has been seen as both "science" and "art" as it can be seen either as a compilation of appraisal techniques, but also as a complex and subjective manner of decision-making (PADC, 1981; Wathern, 1988). Indeed, as put by Koslowsky, "the EIA concept is rooted in the common sense wisdom that it is better to prevent a problem than to cure it" (cited in Barrow, 1997:2). In fact, the greatest contribution of EIA is in reducing adverse impacts before projects go to the authorisation phase (Wathern, 1988).

Hutchinson (1997) sees an EIA as a "systematic gathering of all relevant quantitative and qualitative information by experts in consultation with informed parties in order to enable informed decision-making to occur". This is therefore a crucial process of consultation in order to understand all the implications of expansion or purchase, but also assess the "benefits and drawbacks of any mitigating measures proposed". In that sense, it is preventive in nature as the reasons behind an EIA procedure used to be insurance against environmental litigation or health and safety risks arising from corporate activities; being not only an instrument to investigate potential threats but, moreover, to increase potential benefits (Barrow, 1997; Hutchinson, 1997).²¹

The preventive nature of EIAs is taken into consideration by the International Council on Scientific Unions (ICSU) (1973), which encapsulates EIAs as activities that are "designed to identify and predict the impacts on man's health and wellbeing, of legislative proposals, policies, programs, projects and operational procedures, and to interpret and communicate information about the impacts.

Why then should EIAs be an imperative? One possible justification is that an EIA is per se a continuum process. Under this argument, Wathern (1988) suggests that an EIA is fully integrated into project formulation. According to Wathern (1988) and Barrow (1997), an EIA is a data management process that permits constant amendments and reconsideration in the design phase, but also permit development planners to explore all future alternatives.

In a similar way, the Project Appraisal for Development Control (PADC, University of Aberdeen) identifies different phases in the planning process that are crucial to any EIA. Logically, the first would be a phase of identification of objectives, purposes and alternatives. Then this should be followed by a study of how the environment will be impacted

by the alternatives²². As a natural next step, it is important to identify mitigation measures or possible alternatives. After evaluating the alternatives available, a decision is taken for the most acceptable. The EIA process culminates in the preparation of an Environmental Impact Statement (EIS), which is to be approved or rejected.

As far as the project is concerned, large regional developments should be considered on three time-scales – during construction, upon completion of the development, and over a period of several decades (ICSU, 1973). Aware of this, Slater suggests four key points to be taken into account for an appropriate EIA: a) a description of the development and the local conditions, b) the identification and evaluation of the impacts, c) alternative solutions or mitigation procedures, and d) a communication of the results, developmental consequences and end-product effects (cited in Hutchinson, 1997:143).

However, no matter the definition taken, the crucial phase of any EIA will always be the stakeholder and issues identification. Identifying the public and its involvement in the project has many implications. There might be also a question of multiple objectives, which would then involve different criteria for evaluation. Identifying who the “we” is can maximise benefits for the overall project (Ortolano, 1997; PADC, 1981). Moser (2001) adds that, in projects where the community was previously consulted during the design and implementation phases, community projects were more targeted and genuinely met the needs for which they were designed.

Any EIA should be proactive in nature, independent, participatory and integrated into the planning or legal process (BIC, 2001; Barrow, 1997). Participation and autonomy (or independence) is then another key feature of an appropriate EIA. A good level of independence is crucial, otherwise EIAs become only instruments to obtain project authorisation. For impact assessments to have better regulatory effect, reviewers must ideally be divorced from the developer (Barrow, 1997).

Public involvement should be an integral part of any EIA. Ortolano (1997) identifies multiple goals for public involvement in EIAs. Broader participation can improve decisions, assess public acceptability of a project, add mitigation measures, establish legitimacy of the implementing agency and, more importantly, develop a two-way communication between the developer and the citizens.

On the other hand, problems can always arise. Public participation is usually referred to as time-consuming, costly and, very often, representatives may not be genuinely identified with the community. From the negative side-effects point of view, Barrow (1997) adds that participation can eventually be manipulated by developers to legitimise their decisions, and the public can lack education, current awareness, or other skills that could be necessary for an effective participation.

In parallel to EIAs, Social Impact Assessments (SIAs) are strongly recommended for any major infrastructure project. SIAs are distinct in the sense that they are about “people impacts”. In common with EIA is the anticipatory nature (PADC, 1981). The stages of a SIA are not very distinct as are the ones for an EIA. They involve a scoping phase, where it should be assessed how important a problem really is; then a phase of identification, when the possible causes of a problem are traced; a phase of profiling, which is aimed at defining who is being affected; a phase of assessment; one for mitigation; and a last for monitoring and management (PADC, 1981).²³

EIAs and SIAs can be particularly problematic in developing countries, where the preparation of these studies can be money and time consuming, not to mention the reluctance of politicians to delegate decision-making power to “foreign experts” (PADC, 1981). Wathern (1988) also identifies a set of constraints that are more recurrent in developing countries, such as lack of political will, inadequate regulatory or legislative framework, insufficient or ineffective participation of the public, and insufficient financial resources, among others. Quite often, development goals can turn out to be political or economic imperatives, and here we quote Wathern (1988:28):

Environmental issues, however, rarely form the sole basis for a decision related to the implementation of a particular set of proposals. Politicians may perceive a pressing need for economic development, jobs and revenue generation or for remedying some social ill as an overriding consideration despite consequent environmental degradation. Thus, the case for development often seems overwhelming.

The above is particularly true in the case study that we shall address in the next section. As far as the gas and oil sector is concerned, the EIA implications for gas pipelines are considerable (Law, 1998; Barrow, 1997). These linear features can disrupt the movement of animals and people and, sometimes, the paths opened can encourage more human intrusion in natural eco-systems. The PADC, for instance, sees underground pipelines as the safest method of transporting hazardous materials, but also admits that some elements of concern are to be taken into consideration. These could be the relation between the route taken and the level of population, the standards adopted for construction and pumping stations and, finally, the monitoring system and its regularity (PADC, 1981). Others, such as Human Rights Watch (HRW) clearly emphasise the need for a multidisciplinary approach regarding impact assessments for oil and gas projects (HRW, 1999:22):

When new facilities or investments are planned, carry out a 'human rights impact assessment', identifying in particular problems related to security provision and conflict resolution, in addition to the

legally required 'environmental impact assessment', and develop plans to avoid the problems identified in such assessments. If they cannot be avoided, cancel the project. But also to ensure the widest possible consultation of the people who will be affected by oil installations in their planning, and the greatest possible transparency in what is planned, to ensure that oil operations have the consent of those who will suffer their negative consequences.

As can be observed, the challenges to proper corporate accountability are considerable. In the following section, I shall analytically address how voluntary and mandatory initiatives from the corporate side can relate to a major gas project. It is then the aim to find out if the mission statements, corporate reports and impact assessments have lived up to their expectations, but also to figure out how different stakeholders involved have addressed opportunities or negative impacts that might have occurred.

CASE-STUDY: THE BOLIVIA-BRAZIL GAS PIPELINE

The attractiveness of this case study is not only related to its magnitude, often referred to as one of a few modern cases of “mega-projects” (BIC, 2000; Pató, 2000), but also to the multiplicity of the stakeholders involved; from the private sector to public and multilateral agencies, and from indigenous communities to well-known contractors. The complexities of the project are also translated into corporate responsibility issues and impact studies, as we shall see in the present section.

Project Background

The idea of natural gas trade between the countries of Bolivia and Brazil has been around since the 1930s, but only in 1993 did the two sign a natural Gas Sale Agreement (GSA) (World Bank, 1997). After an intense, but relatively short period of fundraising, construction began in 1997 to set up a major gas pipeline linking Bolivia to the industrial centres of south-east and southern Brazil (Law, 1998). A “take and ship” contract was then signed by the two state-owned oil companies, Yacimientos Petrolíferos Fiscales Bolivianos (YPFB), representing the Bolivian side, and Petróleo Brasileiro S.A. (Petrobrás), being the counterpart for Brazil (Pató, 2000).²⁴

Regarding the institutional structure behind such a project, two main consortia were organised. The Brazilian transport company was named Transportadora Brasileira Gasoduto Bolívia-Brasil S.A. (TBG) and was then formed by Petrobrás, British Gas, El Paso Energy and Broken Hill Proprietary. On the other side, the Bolivian consortium created a similar multitask company, Gas Transboliviano S.A. (GTB), which was joint ventured by Enron, Shell and Bolivian pension funds (see appendices) (Law, 1998).

The pipeline amounts to over US\$ 2.1 billion, is laid over more than 3,000 kilometres and in full capacity can operate 30MMcm/d. This main pipeline stretches from a point near to Santa Cruz (Bolivia) to Porto Alegre (Brazil), bypassing major urban centres (Campinas, Curitiba, São Paulo, etc.). This qualifies the pipeline as the largest single private investment in South America (Gacitua-Mario, 1998; BIC, 2001; Amazon Watch, 2000; Law, 1998; Pató, 2000; Dames & Moore, 1997; YPFB, 1997).

The justifications for such an investment are at least controversial. Some authors believe that there was no need for such project as most of the Brazilian power still

comes from hydroelectric suppliers (95% of overall capacity), thus being a case of “overestimated demand” (Pató, 2000; Amazon Watch, 2001). In the last few months, however, the energy crisis faced by Brazil would change the more sceptical views. As the country is still highly dependent on hydroelectric dams, the ability to produce electricity would be drastically cut due to the recent droughts. Moreover, the consumption of energy has dramatically increased with no substantial public investment in the sector. As a predictable consequence, energy alternatives have been reconsidered, not to mention the indirect benefits of increasing the presence of gas, a relatively “cleaner” source of energy for polluted cities like São Paulo or Rio de Janeiro, in a market dominated by fuel oil (Correio Braziliense, 2001; Law, 1998).

Most of the benefits from the project were thus seen under an economic prism. Liquefied Natural Gas (LNG) was seen as a cheap fuel, which could also avoid costs with storage, but which was also viable and effective in power generation (World Bank, 1997). Indeed, much emphasis has been put on a still questionable and immeasurable spin-off, the “improvement in air quality in Brazil’s industrial and metropolitan areas” (YPFB, 1997:108). Although the project is not aimed directly at poverty-reduction, some indirect effects were observed, i.e. employment generation for 25,000 workers (Petrobrás, 2001; World Bank, 1997).

However, one could still say that the rationale for the project is much related to a “putting the prices right” strategy. Since the early 1990s, the hydrocarbon sector in Brazil has been heavily subsidised and prices regulated (Law, 1998). Following its clear “opened economy” philosophy, the World Bank (1997:5) characterised the project as a major sectoral development project, which is aimed at “reforming the hydrocarbon sector by introducing increased competition and private participation; reduce energy waste through efficient supply and use of energy; and diversify its (Brazilian) hydrocarbon fuel sources by encouraging the use of environmentally friendly fuels”.

Indeed, from the Bank requirements, one condition of borrowing was that TBG should be initially 49% owned by the private sector and have then increased its participation to become a majority owner (Law, 1998; World Bank, 1997:7). Taken as a whole, the project is supposed to be 57% privately owned from both sides (World Bank, 1997).

Environmental Impacts

As Petrobrás and the other contractors were well-known large companies with lots of luggage in terms of engineering and construction projects, the risks of delays and cost overruns were considered small by the multilateral bank's officials (World Bank, 1997). Nevertheless, prior to any approval, the World Bank appraisal still considered some alternative routes. The "do nothing alternative" was rejected since it was perceived that Brazil was increasing its consumption of natural gas. The other alternatives were a pipeline via Paraguay, a pipeline to Curitiba (South Brazil), an importation of gas via seaports, power generation in Bolivia to be exported to Brazil and, finally, a gas pipeline from Argentina to south Brazil. All these possibilities were then rejected due to the many complexities and costs involved (World Bank, 1997; Law, 1998).

The "no project" alternative was also refused because it was reasonably argued that beneficial impacts would never have happened otherwise, i.e. investment in infrastructure, increased employment opportunities, generation of public revenues through taxes, etc. (YPFB, 1997). After studying the many possibilities involved, the World Bank would finally approve in December 1997 a direct loan of US\$130 million to be given to TBG, which would be immediately followed by other loans from multilateral banks (IDB, EIB, CAF, JEXIM, etc), which would then total US\$380 million (Law, 1998).

The World Bank assigned the project a category "A" designation, which means that an EIA was mandatory and a prerequisite for any direct loan²⁵. In addition, due to the presence of several local indigenous communities, the World Bank clearly expressed the requirement for an Indigenous People's Development Plan (IPDP) (CIEP, 2001; Pató, 2000; BIC, 2001). According to the Bank, the need for an EIA in a project of this magnitude was in order to make it "environmentally sound and sustainable, but also to improve decision-making" (cited in BIC, 2001). Most importantly, the Bank also requires the borrower to disclose information and have a timely report on the progress of the EIA (Gacitua-Mario, 1998).²⁶

In Bolivia the most sensitive area to be potentially affected was the Gran Chaco National Park, while in Brazil there were three primary areas of environmental sensitivity – the Pantanal complex, Mata Atlantica and the Park of Aparados da Serra²⁷. It has been constantly argued that, towards the preparation process, the local contractors pressed by the urgency of getting loans did not consult or inform the local communities about the impacts of the

construction. It has also been reported that, contrary to what has been stated in the Environmental Management Plan (EMP) ("temporary facilities will not be constructed in areas that have not been previously cleared"), some works were systematically being carried out, i.e. airstrips (Amazon Watch, 2001). In some sites it has been even documented that construction was carried out without any formal agreement from local authorities (FoE, 2001; Amazon Watch, 2000; BIC, 2001).

As far as the nature of the works is concerned, several points are also questionable. The main criticisms were that the pipeline endangered rich ecosystems, as it required the clearing of large areas of forest. Besides, the works involved displacements of entire communities and the arrival of thousands of workers caused severe disruption in the routine of the local communities. Added to this, unplanned roads, erosion problems, gradual degradation of roads due to heavy traffic, not to mention the inexorable environmental damage, would constitute red flags for the project.

As it could be perfectly expected, the most harmful procedure was undoubtedly to open and clean the path along the route of the pipeline. It not only involved a complex process of land expropriation, known in the oil industry as "land take", but had also huge implications for relatively inhabited ecosystems which were deforested in order to build a "right-of-way" (ROW) for the pipeline complex. The pipeline ROW refers to a maximum area of 30 meters in Bolivia and 20 meters in Brazil, but having an area of direct influence defined as 1,000 meters on each side of the pipeline alignment (see appendices). The ROW affects, only in Brazil, 122 municipalities and crosses fragile habitats (i.e. Pantanal swamplands) as well as urban centres (i.e. Cuiabá) (Gacitua-Mario, 1998; One World, 2001; YPFB, 1997).²⁸

Not only the works are disruptive but, as stressed by Pató, "it is alarming the increased access to previously untouched areas caused by opening a right-of-way and by the creation of illegal tracks and paths" (2000). In addition, air and noise pollution have substantially increased in the proximity of the ROW. The impact on soil was also considerable with increased erosion processes where the soil was exposed to vegetation removal. There were also concerns that the ROW opened for the pipeline could create wind corridors that could be catastrophic in case of fire (Amazon Watch, 2000). The critique seems particularly valid as no emergency plan or monitoring programme has seriously included this risk.

Very often, official documents minimised the effects of the overall project by stating that the region has already been the object of human influence, thus it is no longer qualified as a primary forest (Pató, 2000, Dames & Moore, 1997, PRIME, 1997). As stated in the YPFB Executive Summary (1997:107), "the majority of the pipeline route in Bolivia is in an area of low environmental sensitivity, and the probability of significant adverse environmental impacts is expected to be minimal. In Brazil 85% of the area has already been impacted by human activity. Additional impacts are then expected to be minimal, and most negative impacts will be mitigated"²⁹.

Nevertheless, the project proposal included an Environmental Management Plan (EMP) to monitor and follow-up the environmental impact studies (Gacitua-Mario, 1998; YPFB, 1997). The EMP would serve as a master planning and management tool for the project, and would be jointly drafted by the sponsors and contractors, having Dames & Moore as the commissioned firm especially responsible for the Bolivian side.

The EIA for the Bolivian portion of the lateral gas pipeline, entitled the Cuiabá Pipeline Project, was entirely separate from the principal 32-inches pipeline and was carried out by Dames and Moore. The Cuiabá Integrated Energy Project (CIEP) meant the construction of a lateral pipeline of 626 kilometres, which stretches from San José (Bolivia) to Cuiabá (Brazil) and, due to the sensitiveness of the region, was precisely one of the components of the overall project that had been the subject of most of the critiques (CIEP, 2001; Pató, 2000).³⁰

The objective of the EIA for the Cuiabá Energy Project was then "to identify and evaluate the positive and negative environmental impacts, especially those impacts which may affect the environment during the project's construction, operation, and abandonment stages" (CIEP, 2001).³¹ As already stressed in section 3, the EIA for the Cuiabá Project also followed a series of stages. First, impacts of greater significance were given priority for mitigative measures. Then, those impacts that persisted (residual impacts) would be the object of attention to assess whether they can or cannot be solved (CIEP, 2001). The Environmental Impact Statement (EIS) drafted by Dames & Moore (1997:1) was aimed at "maximising the benefits in the area of influence, while preventing, minimising and mitigating its potential effects"; and it must be said here that it included very positive aspects, such as a

very clear set of job descriptions for the environmental monitoring component.

Nonetheless, according to the Bank Information Centre (BIC) (2001), the EMP failed because, first, it was published too late and, second, the senior management of the World Bank failed to induce the Bolivian government to address the impacts of the works. The lack of co-operation and institutional capacity from the Bolivian side is also a frequent criticism in the literature. Indeed, from a proposed budget of US\$13 million for monitoring and prevention, the Bolivian government has finally committed a mere US\$1 million.

Social Impacts

According to Petrobrás (2001), "the Native Americans were not forgotten". However, most of the legislation regarding indigenous settlements, biological diversity and environmental norms for the oil and gas industry has not been passed yet (YPFB, 1997). Consequently, the impact on local farmers and households is worth mentioning, as most of the final decisions were left entirely to the sponsors' parameters of what was right or wrong.

As far as the indigenous groups affected are concerned, on the Bolivian side the sparse population was concentrated in six main urban settlements with a population of less than 50,000 inhabitants. On the Brazilian side, the indirect area of influence affected approximately seven million people, although 90% of these were already concentrated in major urban centres (YPFB, 1997:15).

The social impact was translated into quite predictable consequences. An immediate increase in population, due to the influx of workers, was perhaps one of the most sensitive social issues noted. In one of the Bolivian cities, Carmen, 1,000 construction workers had to live for several weeks with 2,500 local residents (Amazon Watch, 2001). During this period, the population suffered from several shortages, of water, telephone facilities, etc. Consequently, there was a clear effort to have the camps located away from smaller towns and utilising local labour. There was also a concern to select campsites that could minimise the contact between local communities and foreign workers, so transport was normally arranged in off-peak times (YPFB, 1997; World Bank, 1997; Gacitua-Mario, 1998).

As quoted by one of the World Bank social scientists, in relation to the gas pipeline, "prior experience indicate that some of the most difficult issues to deal with are

prostitution, alcoholism, crime, and fights among others (Gacitua-Mario, 1998). Pató (2000:ii) adds a more negative view and puts that “the negative social effects experienced by the community include increased crime, violence and prostitution, but also the loss of land of the indigenous people, and the destruction of basic infrastructure”.

A workers’ code of conduct was drafted and immediately made compulsory to all workers. A Communication Liaison Officer (CLO) was then assigned to be in charge of any human aspects of the activities (CIEP, 2001). The worker’s code of conduct was aimed at regulating worker’s behaviour in camp, but also while interacting with the local communities (Gacitua-Mario, 1998; CIEP, 2001).

The pipeline also had implications in terms of cultural heritage. Petrobrás argues that archaeological remains were preserved along the way and 617 sites were found during works, and academic researches have been invited to carry out site excavations (77% of them in the Brazilian state of Mato Grosso do Sul) (Petrobrás, 2001). From the point of view of the lateral pipeline (Cuiabá Energy Project), a chief archaeologist (and six in total) was hired to supervise the front work whenever necessary (CIEP, 2001). However, a number of NGOs believe that many archaeological sites vanished due to a strict and imperative construction cronogram (FoE, 2001; Amazon Watch, 2001).

Participation In Decision-Making

From the EIA for the Cuiabá Project, we can extract as a first proposition for sustained development, the ability “to ensure the beneficiaries participate in programme planning, execution and evaluation” (CIEP, 2001). The EIA goes even beyond and assures that “extensive consultation” took place with regard to the project.³² Nevertheless, this was apparently far from ideal, as only two indigenous organisations from Bolivia were in fact included in the official discussions, the Capitania Alto y Bazo Izozog (CABI) and the Confederación de Pueblos Indígenas de Bolivia Unidos y Organizados (CIDOB) (BIC, 2001; YFPB, 1997).

The lack of independent monitoring was raised by Amazon Watch (2001), which accused the contractors (AATA and Dames & Moore) of being “financially tied” to the oil companies involved. Petrobrás did recognise that public opinion could see the project in a negative way and appropriately stressed that an independent auditor would be recommended (PRIME, 1997). However, the

project “ombudsman”; who would be responsible to “facilitate participation in periodic visits and, when necessary, provide logistical support in the field”, is rarely mentioned or factually assessed in any documents (Gacitua-Mario, 1998:5). As it was pointed out shortly after the approval of the World Bank loan, Gacitua-Mario also made clear (1998:5):

There is a potential risk that lack or inadequate participation in the design of the project (particularly of the environmental and social mitigation measures), implementation and monitoring of the environmental management and social compensation plans would: a) result in poor design; b) alienate the affected populations and other stakeholders from the project sponsors; and c) obstruct project implementation.

Last but not least, the levels of public disclosure are also disappointing. Although the World Bank put a high priority on the environmental and social management of the project, it has been reported that the Bank field visits were extremely superficial and would barely identify any failure in monitoring (BIC, 2001). Additionally, among the criticism of the EIA and the IPDP required by the multilateral banks, the most severe is that information on the project and document accessibility was deficient. The reluctance of disclosing key documents and reports are at the very least reprehensible for a project that involves such a volume of investment.

Further, the sponsors placed notices in local newspapers saying that copies of the EIA would be available in Rio de Janeiro and Santa Cruz, which may have caused some difficulties for local representatives to get hold of such key documents. The contractors also failed to provide regular public hearings and many of the documents were not translated into Spanish, that could have imposed additional considerations to the Bolivian representatives (BIC, 2001). The consortia involved also failed in providing information to the local groups, as they had no input into the terms of reference for the IPDP or the EIA. After growing pressure, the contractors and the multilateral banks held consultation meetings, of which the first one, surprisingly, was held in Rio de Janeiro, a remote city for most of the communities affected by the pipeline (One

World, 2001; BIC, 2001; YPFB, 1997). Thus, quoting Amazon Watch (2000):

The initial EIAs were found to be inadequate because they did not consider secondary impacts associated with the pipeline nor did they provide sufficient detail about the compensation and the mitigation measures being planned... As far as we know, there are no plans to consult with groups about the findings of these studies.

Compensatory Measures

The IPDP for the project refers to compensatory measures for potentially affected people. However, the institutional complexity of the great number of stakeholders imposed many problems (Gacitua-Mario, 1998). According to Gacitua-Mario (1998), the IPDP prepared by Dames & Moore, was aimed to; first, assure equitable and commensurate inclusion of the different ethnical groups and, second, to ensure participation, ownership, and sustainability for the activities to be developed. In that sense, social compensatory programmes have to prevent, control and mitigate negative impacts, to provide indemnification to all of the directly or indirectly affected population but, more importantly, to provide a development opportunity. In that sense, social impact assessments, as said in section 3, can turn out to be a development tool.

The IPDP also included a component related to land entitlement. To avoid potential colonisation after the conclusion of works, the sponsors helped the local communities to secure their lands through formal entitlement, which was based on "historical, cultural and legal fundamentals" (Dames & Moore, 1997).³³ The initial figures for this sub-project were US\$500,000, which were then raised to US\$1,500,000 after consultation meetings (Dames & Moore, 1997; Gacitua-Mario, 1998). As far as the works and the ROW were concerned, it seems that all previous landowners were properly compensated (81 landholders in Bolivia and 3,913 in Brazil) (Gacitua-Mario, 1998:8). As noted by YPFB (1997:102), "temporary conversion of land to support pipeline and facility construction may result in the loss of one to two year's use for crops and grazing". This also involved a compensatory scheme, which was complemented by the provision of scholarships and training in new agricultural practices to

some indigenous farmers (One World, 2001).

Another component of the compensatory package was to capacitate and support the municipalities that would be affected (122 in Brazil) (Gacitua-Mario, 1998). Nevertheless, the budget allocated for infrastructure improvement, community development and other activities for this component was far from ideal (US\$900,000 for technical assistance and US\$1,800,000 for community development).

Petrobrás argues that it has invested US\$30 million in ecological and socio-economical compensation programmes, thus calling the pipeline a "great project for the environment". These resources, claim the Brazilian state-owned company, were used in home and school building, health and education projects, street paving, and other public-interest activities (Petrobrás, 2001). Similarly, Gas Oriente S.A. voluntarily contributed with US\$1 million, which was used in a "seed fund" for future contribution to an overall environmental fund (CIEP, 2001). Other project sponsors would make direct contributions to CABI and revenues from this contribution would be earmarked for the management of parks on the Bolivian side (World Bank, 1997; Pató, 2000).

It seems clear, however, that the main problem of the mitigation measures is not only the lack of participation, but also the chronic lack of financial resources. Amazon Watch (2001) claims that one of the failures of the project was related to the insufficient funds disbursed to launch the IPDP and, consequently, the shortage of funds made the plan a short-term initiative. As also pointed out by Pató (2000), the consortia in charge of the IPDP has refused to assume the costs of legal assistance to the programme and has considerably delayed its implementation. As far as the Cuiabá Project is concerned, for instance, the developers have allocated only US\$2 million to alleviate social and environmental impacts (an inexpressive amount if compared to the overall cost of the pipeline complex, US\$2 billion). As was discussed in section 2, the social issues related to the project are still rather seen as a "deficit model" or a corporate responsibility which is still much based on quasi-charity schemes. Other key failures of the IPDP and the EIA were to not provide monetary values or financial mechanisms prior to the approval of the loans. Compensatory measures and mitigation processes were, perhaps not by mistake, extremely vague and open.

CONCLUSION: TOWARDS RESPONSIBLE COMPANIES

A complete assessment of the project (The Bolivia-Brazil Gas Pipeline) has implications that cannot be covered by the present paper. The environmental impacts and the social implications of this project might need additional time to be properly assessed. Environmental impacts of such magnitude can only be adequately measured overtime and, due to the recent nature of a project which was finally implemented in 2000 (Petrobrás, 2000), some additional research should be undertaken over the next years to assess the magnitude of residual impacts.

However, some factual evidence can always be detected as far as the immediate impacts are concerned. The failures of the pipeline project are both quantitative and qualitative. There are some missing points referring to monetary compensations, figures are sometimes not given and some values are barely insignificant when compared to the overall budget for the project. On the other hand, the project could also have been improved by aggregating feedback from local organisations or other non-governmental groups. The community input, as we have seen in section 4, was thus far from ideal.

It seems likely that the companies only complied to clear procedures (EIA or IPDP) when these were explicitly required by law or by the sponsors of the project, i.e. World Bank, CAF, etc. Miguel Ruiz-Larrea (Shell International and former Co-ordinator of the Cuiabá Pipeline Project) admits that for the specific case study, "sponsors have been more reactive than they should have been".³⁴ Petrobrás is also frequently accused of only consulting local NGOs and groups after intense pressure and, when done, this was reported to be a purely mandatory exercise (BIC, 2001). The case study is indirectly very illustrative of how governmental input is crucial for corporate accountability. Indeed, as pointed out by Deborah Doane (NEF), "enforcement by the government is still the best instrument for corporate responsibility".³⁵ In that sense, the governmental input perhaps could have imposed stricter requirements for the implementation stages of the project.

The Bank Information Centre (BIC) suggested that, generally speaking, the multilateral banks were responsive to environmental issues, but also admits that most of this responsiveness was due to pressure from NGOs and the media (2001). Regarding the management of environmental

and social issues, these questions could be seen from different points of view. If it is true that the environmental compliance could be better implemented, it is also true that the project carried so many complexities, which can be translated in terms of the length of the area impacted, the lack of co-ordination or voluntary representation from the communities affected, and tight deadlines. Taken as a whole, and considering the challenges involved, in many aspects the project can be seen as a model of environmental management. As was stated in section 2, a positive interpretation takes the project as part of the continuing evolution of companies towards more responsible agendas. Thus, whether the project carried some intrinsic operational mistakes, it is also a first step towards sustainable practices; and the acknowledgement of these issues is per se a considerable achievement in terms of corporate responsibility.

Nevertheless, as we have seen in section 3, socially responsible projects do involve a relatively good matching between their initial intentions and their expected impacts. Paradoxes or discrepancies between companies' statements and their environmental practices need to be correctly assessed. Otherwise, corporate reports are just words that cannot be translated into actions. Thus, the meaning of a "sustainable development" discourse also deserves a note of caution. Modern capitalism has an unquestionable capacity of co-optation and can easily incorporate fashionable concepts into business interests. In the case study, we have noted that companies that claim to pursue a "sustainable development" approach have not even included the adequate resources for the continuing maintenance of the institutions and apparatus created, especially those related to the sustainability of the indigenous peoples plan.

Of course, companies are still economic entities and their goal should be increasing shareholder returns. It is not the point here of including the extra burden of global social improvement. This would mean to minimise the role of other actors, such as government and civil society. However, due to the scope of their businesses, transnational companies do have an intrinsic responsibility towards a number of actors. Nobody questions the challenges ahead, but efforts need to be made in order to refine the mechanisms of corporate accountability and, most importantly, strengthen the corporate awareness of non-economic values.

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ANNEX I: ORGANISATIONAL PROFILE

BHP is listed as one of the 500 largest corporations in the world and is the Australian largest company. Its total assets are approximately US\$ 20 billion and BHP operates in over 20 countries.

British Gas has assets over US\$ 40 billion and covers over 18 million consumers in 40 countries. It is the largest natural gas corporation.

El Paso Energy is one of the largest gas companies in the United States, with assets over US\$ 4 billion. It is estimated that the company supplies 1/6 of the natural gas demand in the country.

Enron is one of the largest American corporations. Enron's four business units – Wholesale Services, Energy Services, Broadband Services and Transportation Services – offer a wide range of physical, transportation, financial and technical solutions to thousands of customers around the world.

GTB (Gas Transboliviano S.A.) is a subsidiary of Enron and Bolivian pension funds. The ownership structure includes Petrobrás, BHP, El Paso Energy, British Gas, Enron/Shell Joint Venture, Bolivian Pension Funds, and Bolt JV.

New Economics Foundation was founded in 1986 and is one of the most well known British independent think tanks. NEF is specialised in social auditing and has been a leader in developing methodologies and applying these to both the corporate and non-profit sectors.

Petrobrás is a Brazilian partially state-owned oil company and is the main sponsor and contractor from the Brazilian side.

Shell International is organised into five core businesses – Exploration and Production, Oil Products, Chemicals, Gas and Power, and Renewables. Shell companies operate independently and each core business is headed by a chief executive officer with broad overall responsibility.

Shell Gas is involved in processing, selling and delivering natural gas by long-distance pipelines.

TBG (Transportadora Brasileira Gadosuto Bolívia-Brasil S.A.) is a subsidiary of Petrobrás, which in turn has a 49% private ownership since 1998. YPFB, BHP, El Paso Energy and British Gas are also partners of the consortium.

YPFB (Yacimientos Petrolíferos Fiscales Bolivianos), like Petrobrás, is a state-owned company which operates the extraction of natural gas in the Bolivian border.

ANNEX II: LIST OF ACRONYMS

BG – British Gas
BHP – Broken Hill Proprietary (Australia)
BIC – Bank Information Centre
BNDES – Banco Nacional de Desenvolvimento (Brazil)
CABI – Capitania Alto y Bajo Izozog (Bolivia)
CAF – Corporación Andina de Fomento
CEP – Council on Economic Priorities
CERES – Coalition for Environmentally Responsible Economies
CFCP – Chiquitano Forest Conservation Programme (Bolivia)
CIDOB – Confederación de Pueblos Indígenas de Bolivia Unidos y Organizados
CIEP – Cuiabá Integrated Energy Project
CSR – Corporate Sustainability Reporting
D&M – Dames & Moore Engineering
EIA – Environmental Impact Assessment
EIB – European Investment Bank
EMP – Environmental Management Plan
ESMS – Environmental and Social Management System
FoE – Friends of the Earth
GASBOL – Bolivia-Brazil Gas Pipeline (Brazilian side)
GOB – Gas Oriental Boliviano (Bolivia)
GSA – Gas Sales Agreement
GTB – Gas Transboliviano S.A. (Bolivia)
GRI – Global Reporting Initiative
HSE – Health, Safety and Environment
IDB – Inter-American Development Bank
IPDP – Indigenous People’s Development Plan
JEXIM – Japanese Export-Import Bank

LNG – Liquefied Natural Gas

LPG – Liquefied Petroleum Gas
MMCMD – Million Cubic Meters per Day
NEF – New Economics Foundation (UK)
OPIC – Overseas Private Investment Corporation (U.S.)
PADC – Project Appraisal for Development Control (University of Aberdeen)
Petrobrás – Petróleo Brasileiro S.A. (Brazil)
ROW – “Right-of-Way”
SEA – Supplementary Environmental Assessment
SRI – Socially Responsible Investment
TBG – Transportadora Brasileira Gasoduto Bolivia-Brasil, S.A. (Brazil)

Transredes – Transporte de Hidrocarburos S.A. (Bolivia)

USAID – United States Agency for International Development

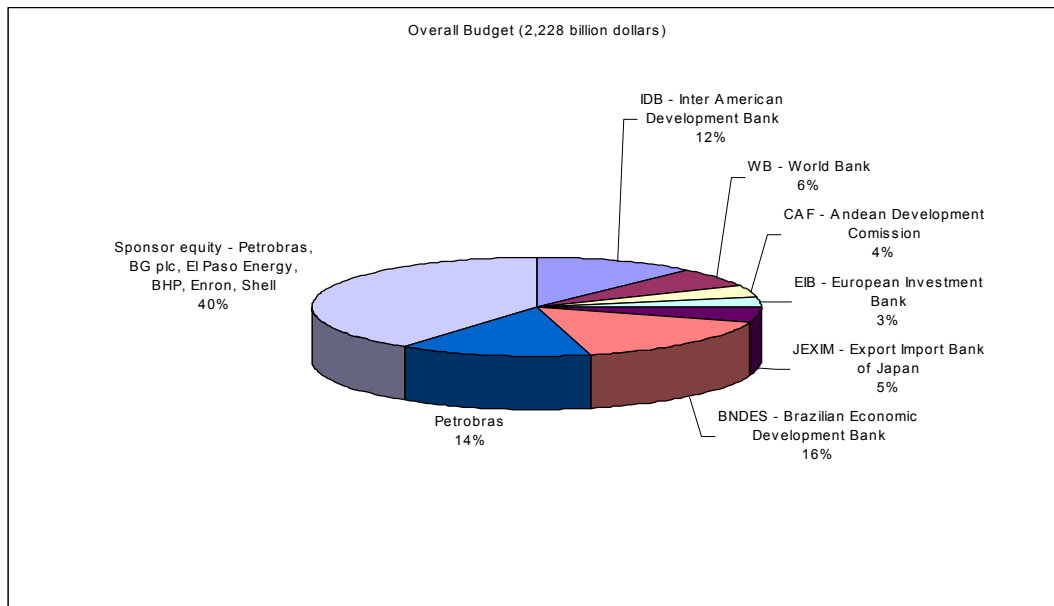
WCS – Wildlife Conservation Society

WWF – World Wildlife Fund

YPFB – Yacimientos Petrolíferos Fiscales Bolivianos (Bolivia)

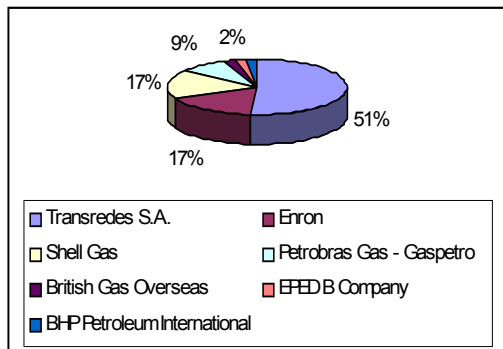
ANNEX III: ORGANISATIONAL PROFILE

Overall Budget



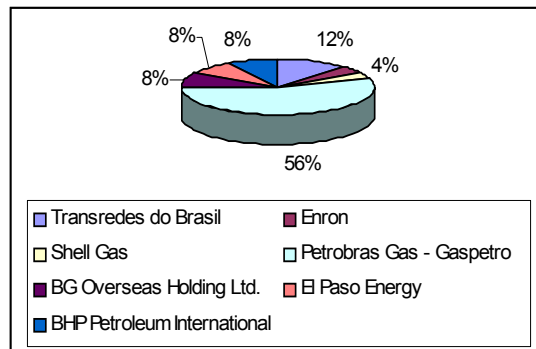
Source: World Bank, 1997

Ownership Structure of GTB (Bolivian)



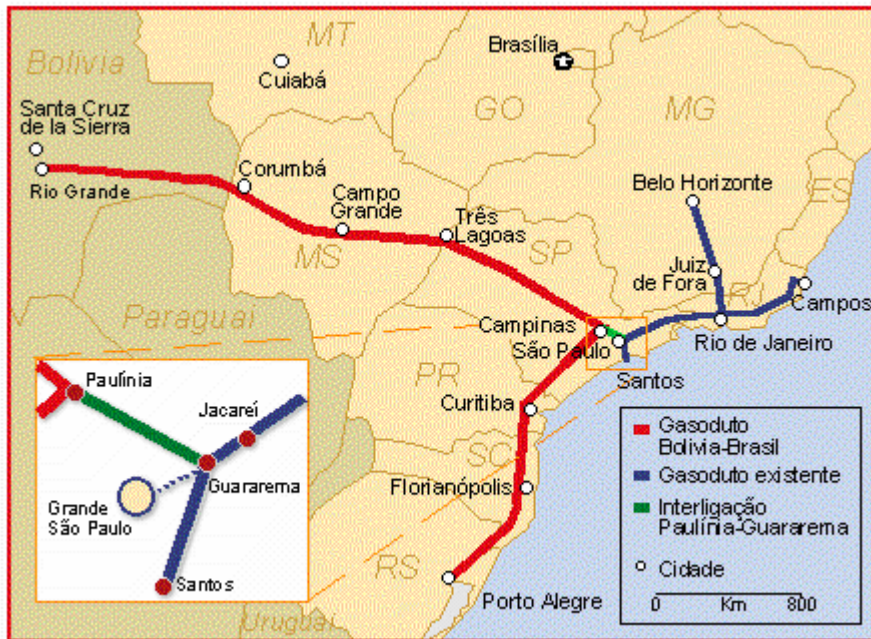
Source: Transredes, 2001

Ownership Structure of TBG (Brazilian)



Source: Transredes, 2001

ANNEX IV: MAPS



Petrobras, 2001



Petrobras, 2001

ANNEX V: PHOTOS

Right of Way (ROW)



Amazon Watch, 2001

Right of Way (ROW)



Amazon Watch, 2001

Right of Way (ROW)



Amazon Watch, 2001

Chiquitano Forest (Bolivia)



Amazon Watch, 2001

Construction Works



Companies are failing to reduce construction impacts in the Pantanal wetlands

Amazon Watch, 2001

Pipeline



The pipeline divides the San Jose de Frontera community in two. The pipeline was placed less than 10 meters from this home.

Amazon Watch, 2001

Construction Works



Petrobras, 2001

ENDNOTES

¹ Complementarily, Hutchinson (1997) and Clutterbuck (1992) add that already in the 1960s socially conscious investors sought to avoid companies based in South Africa as well as chemical industries producing "Agent Orange" for use in the Vietnam War. This would be then broadly known as Socially Responsible Investment (SRI) in which ethical (and ecological) sound outcomes are seen as non-monetary benefits.

² 2,000 immediate deaths, a further 4,000 deaths and 200,000 people seriously injured was the outcome of one of the most dramatic corporate accidents ever. The nature of the compensatory measures brought more indignation from public opinion and still remains highly controversial (Gray, 1996:85; Leipziger, 1998:70).

³ Interview held at NEF (30/07/2001).

⁴ The concept also carries out diverse concerns (Leipziger, 1998:3): "Corporate citizenship, like individual citizenship, is an idea which has both practical and ethical dimensions. It includes basic business concerns, such as risk avoidance and protecting reputation, insurance for the future, developing increased business competence, and doing the right thing". As far as handing out money is concerned, Leipziger is sharp. "While charity is laudable, the key is how a business is run and how the business contributes through its employees, products and promises to the community, not simply philanthropy" (1998:210).

⁵ Socially speaking, Robert Dahl goes further and takes every large corporation as a social enterprise, which is as "an entity whose existence and decisions can be justified in so far as they serve a public or social purpose" (cited in Beesley, 1978:17). The idea of social "license to operate" is still much present and some authors even compare business operations as a new social contract based on the delivery of socially desirable ends, balanced by the distribution of economic, social and political benefits to groups from which it derives its power (Shocker and Sethi, cited in Beesley, 1978:18).

⁶ As an illustration, companies are gradually making use of pressure mechanisms to improve environmental performance in the supply chain, which not only helps to promote good business practice but also to reduce costs and investigation (Welford, 1999; Clutterbuck, 1992). Marks and Spencer give us an interesting example by providing suppliers with advice and guidance on a wide range of issues, "from the design of washrooms to personnel policies" (Clutterbuck, 1992:106).

⁷ Welford and Gray foresee LCAs as the ultimate tools of analysis, in the sense that they permit to track products or projects from the cradle to the grave. LCAs can involve a series of stages, which include a) inventory, b) impact analysis, c) impact assessment and, finally, d) improvement in the environmental profile of a project or product (Gray, 1996; Welford, 1999).

⁸ The British Standards Institute (BSI) (2001) conceives environmental responsiveness "as the organisational structure, responsibilities, practices, procedures, processes and resources for determining and implementing environmental policy" (cited in Welford, 1999:38). In addition, the International Chamber of Commerce (ICC) puts forward a charter of 16 principles in order to attain sustainable development at the corporate level.

⁹ Interview held at Shell International (30/06/01). Mr. Ruiz-Larrea co-ordinated the Environmental and Social Management System (ESMS) for the lateral Cuiabá Pipeline.

¹⁰ BP (2001:4) also perceives a connection between sustainability and profitability. "If business disregards the environmental and social consequences of its activities eventually this will threaten profitability. Superior social and environmental performance help a company's sustained business performance by reducing costs and, creating new opportunity".

¹¹ The annual Exxon budget for 1998 is illustrative. It surpassed 115 billion US\$, an impressive figure compared to the GDP of Nigeria (108 billion US\$), Cameroon (26,4 billion US\$) and Angola (16,4 billion US\$) in the same year (Aubert, 2001:7).

¹² The Report quotes an interview with the *Directeur Général* of BP-France, Mr. Michel de Fabiani: "BP était favorable au code de conduite en instance d'adoption au Parlement européen sous une réserve: son attachement au contrôle interne. Les engagements de l'entreprise sont contrôlés par des audits au même titre et selon les mêmes procédures que le contrôle financier. Des rapports sont publiés régulièrement.... En revanche, il ne serait pas souhaitable de créer des superstructures extérieures de contrôle" (Aubert, 2001:23).

¹³ Interview held at Shell International (30/06/01).

¹⁴ Other people see these changes as rather cynical. The New Economics Foundation (NEF) (2001:3), for instance, states that "an oil company will always be an oil company; a chemical company won't stop producing chemicals. BP may have changed its logo, and its image as an 'energy company' but the change in image only means that BP now produces more natural gas, rather than oil".

¹⁵ Undoubtedly, The Body Shop is one of the most quoted business-cases of “transcendent” organisation or, as some authors prefer, “enthusiast” company (Welford, 1999; Clutterbuck, 1992, see also appendix). Transcendent companies are those which moved beyond compliance and have incorporated environmental strategy in overall business management. Alternatively, the United Nations Environment Programme (UNEP) classifies companies in three evolutive stages: “reactive”, “in transition”, and “proactive” (cited in Gray, 1996:132).

¹⁶ However, some authors like the United Nations Environment Programme (UNEP) perceive a third typology defined as “involuntary”, being then beyond companies will (media exposés, whistle blowing, etc.) (cited in Gray, 1996:132).

¹⁷ Interview held at NEF (30/07/01).

¹⁸ As recommendations for CERs and CSRs, the NEF (2001:2) includes a five-action set of guidelines: “prove, standardise, democratise, challenge and mandate”.

¹⁹ Social reports also need to reflect one of the most important corporate responsibilities – its responsibility towards employees. Again, there is no blueprint for this reporting, even though much of it is ruled by positive legislation. However, as Clutterbuck (1992) points out, key features such as equal opportunities, employee welfare, developing talent, and the combination of “health, safety and environment” (HSE) must again be present.

²⁰ Leipziger (1998:221) recalls the Shell’s incident in the North Sea (Brent Spar Oil Rig), when UK Chairman, Chris Fay, recognised intrinsic difficulties as the company “tended to communicate at a technical level rather than in ways that people could understand”.

²¹ Very often, with an EIA study comes a Risk Assessment (RA). This is usually a process that involves some relatively accepted phases (hazard identification, exposure assessment, dose-response assessment, and risk characterisation) to protect employees and communities that can be affected by hazardous materials or dangerous operations (Ortolano, 1997). A RA has many parallels to EIA. Although both are concerned with the likely consequences of a project on the local environment, a RA is most used to assess the probability or the likelihood of particular catastrophic events, and this can be especially true for the oil and gas sector (Wathern, 1988).

²² The PADC (1981) makes a distinction between “effects” and “impacts”. “Effects” would consist of the prediction of numerical values. “Impacts” is the interpretation of how the meaning of those numbers relate to biotic, abiotic and social environment.

²³ Some authors even go beyond this and recognise a third subdivision of impact assessment, the “cultural impact assessment” (Barrow, 1997).

²⁴ As Pató (2000) correctly pointed out, the magnitude and importance of the project for Bolivia is such that the country has changed her status from associate country to a potential bidder for a membership at the Southern Common Market (MERCOSUR).

²⁵ In addition to that, the World Bank also requires that sponsors should hold at least two broad consultations every year during the project cycle (BIC, 2001).

²⁶ Brazil is rapidly complying with environmental regulations. As recalls Wathern (1988), the first environmental assessment performed in Brazil was an EIA commissioned for a hydroelectric power plant (1972), which was supervised by the World Bank. However, EIAs are becoming a common practice in most instances of public administration, vis a vis a relatively good institutional framework for environmental issues which has been set-up in the past decades (IBAMA, CONAMA, etc.).

²⁷ The “Pantanal” area is one of the most important ecosystems in the world. It is a complex of landscapes and different types of vegetation in which several endangered species have a habitat.

²⁸ According to Friends of the Earth (FoE) (2001), “entire villages were literally cut into two by the pipeline ROW”.

²⁹ YPFB (1997:14) also suggested that “60% of the Brazilian land to be affected were already pasture fields”

³⁰ There was intense pressure for the Washington-based Overseas Private Investment Corporation (OPIC) to withdraw a US\$200 million loan to Enron and Shell Gas for the Cuiabá Project. “Being a state agency, it is unacceptable to use money of American taxpayers to back this environmentally and socially undesirable development” (Pató, 2000; Amazon Watch, 2000; FoE, 2001).

³¹ The methodology used for the Cuiabá Project’s EIA included “abiotic, flora, fauna, and socio-economic and archaeological resources components” (CIEP, 2001).

³² During construction works, Petrobrás (2000) has operated a toll free number for questions and answers regarding the implications of the project. According to its PR department, questions such as “is the gas poisonous?”, “can the gas affect my crops?”, or “why bring the gas from Bolivia?”, were some of the most common questions made by the public.

³³ According to the EMP (1997:V-3), “La demanda de Tierra de Comunidad de Origen es la solicitud formal de territorio, en la cual se especifica su superficie, ubicación geopolítica y límites. La solicitud es presentada por un pueblo o comunidad indígena, sustentada en fundamentos de orden histórico, cultural y legal”.

³⁴ Interview held at Shell International (30/06/01).

³⁵ Interview held at NEF (30/07/01).