Promoting Social Dialogue in the Mining Sector in the State of Pará, Brazil

Columbia University
School of International and Public Affairs
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I. EXECUTIVE SUMMARY

In 2006 Instituto Observatório Social (IOS) and Centro de Estudos das Negociações Internacionais (CAENI) embarked on a research and field project to study the labor situation as well as the environmental impact of five aluminum companies in the north of Brazil. While preliminary findings indicated that companies adhered to labor laws and regulations and invested in technological improvements in order to tackle environmental issues, there remained significant resource inequalities across stakeholders in the aluminum value chain. Nevertheless, both local government and civil society often remained acquiescent to the status quo established by companies. IOS and CAENI identified a need for further research on the impact of mining and corporate social responsibility (CSR) practices on local development and sustainability issues, as well as Brazil’s role in the global aluminum value chain. They invited a team of students from Columbia University’s School of International and Public Affairs (SIPA) to research the feasibility of a multi-stakeholder engagement or social dialogue, by studying and analyzing the aluminum value chain and performing a stakeholder mapping in the affected areas.

The team traveled to Brazil in January, conducting interviews in São Paulo, Belém and Barcarena, with companies, unions, governmental authorities, communities and civil society organizations. Preliminary findings indicated a complex and intricate web of relations, further complicated by political, historical and cultural factors. A second field trip took place in March 2009, to refine the research and fill the existing gaps in the data, going into more depth regarding the involvement of government entities and local or regional NGOs.

The complexity of actors and issues, as well as the observed previous efforts to establish a stakeholder dialogue – which systematically failed to tackle socio-economic issues – demanded that the team move beyond traditional approaches. The team conducted a stakeholder mapping, followed by an analysis based upon relations between stakeholders, looking at challenges and opportunities derived from those relationships.

The team found that companies continued to use paternalistic corporate responsibility models from the 1970s that reinforce a cycle of dependency. This dependency on the companies for the provisions of social services has rendered the local community unorganized, voiceless and weak. The only organizations in the community with a voice are the labor unions, which have settled on solely performing social and financial activities that attack symptoms, not causes of social ills. In favor of the promotion of economic growth through private investments, government at local and state levels have for the most part failed to enforce regulations, conceding implementation of public services to the companies. Licensing and monitoring responsibility is not explicitly distinguished among different levels of government, leading to confusion and lack of accountability. Civil society organizations with a broader scope and resources are integral to providing representation to voiceless communities, liaising with companies and advancing the team’s recommendations for social dialogue.
From this analysis of the power structure, the team understood that no formal dialogue could be undertaken with the current inequalities between actors.

Thus, the team proposed a series of activities aiming at increasing leverage among stakeholders. Three goals have been identified and developed through a series of interventions:

1. Building civil society capacity, to ensure their concerns are considered and reflected in regulations and decisions both at company and government level;
2. Enhancing elected authorities' accountability, to ensure that they effectively protect the rights of communities;
3. Ensuring that companies include socio-economic impacts in their decision-making process by moving past a philanthropic CSR model to engaging in integral and sustainable relations within their direct and indirect spheres of influence.

IOS/CAENI can act as a monitor of a social dialogue across the aluminum value chain in Brazil, and as such, help stakeholders to identify opportunities to maximize positive externalities across the aluminum value chain, while ensuring sustainable development. IOS/CAENI will be essential in bridging the informational gap existing between local and global networks, taking full advantage of the international projection of the aluminum value chain. Finally, the team hopes the different stakeholders will use this report as a strategy for building stakeholder engagement into their own analysis.
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>BSD</td>
<td>Business, Sustainability, Development</td>
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<tr>
<td>CAENI</td>
<td>Center for the Study of International Negotiations</td>
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<td>CAP</td>
<td>Aluminum Company of Pará</td>
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<td>CFEM</td>
<td>Financial Compensation for Exploiting Mineral Resources</td>
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<td>CSO</td>
<td>Civil Society Organization</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>CUT</td>
<td>Central Workers’ Union</td>
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<td>FS</td>
<td>Unionized Force</td>
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<td>IBAMA</td>
<td>Brazilian Environmental Research Institute</td>
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<td>IBGE</td>
<td>Brazilian Institute for Geography and Statistics</td>
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<td>IOS</td>
<td>Social Observatory Institute</td>
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<td>MAB</td>
<td>Movement of Dam Affected Peoples</td>
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<tr>
<td>MNC</td>
<td>Multinational Corporation</td>
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<td>MRN</td>
<td>North River Minerals</td>
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<td>MST</td>
<td>Movement of Landless Rural Workers</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
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<tr>
<td>NUMA</td>
<td>Center for the Environment</td>
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<td>PDF</td>
<td>Pará Suppliers’ Development Program</td>
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<td>PT</td>
<td>Workers’ Party</td>
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<tr>
<td>SEDECT</td>
<td>Secretary of State for Development, Science and Technology</td>
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<td>SEIMA</td>
<td>Secretary of State for the Environment</td>
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<td>SIMEB</td>
<td>Metal Workers’ Union of Barcarena</td>
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<td>SME</td>
<td>Small and Medium Enterprises</td>
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II. BACKGROUND

1. Brazil

Brazil is a federative republic, comprised of the Federal District (Brasília), twenty-six states and 5,564 autonomous municipalities. Since the end of a twenty-year military regime in 1985, a democratic government under a presidential system has been successful in consolidating economic and political stability. Brazil’s current president is Luiz Inácio “Lula” da Silva, of the central-left Partido dos Trabalhadores (PT, or Workers’ Party). While still considered a flawed democracy, Brazil’s democracy index (7.38) is ahead of most of its neighbors in Latin America, including Costa Rica and Chile, both of which rank among the highest in the region.

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1 Volunteer Brazil, n.d.
2 Instituto Brasileiro de Geografia e Estatística (IBGE), 2007.
3 The Economist Intelligence Unit, 2008, p.4.
4 Ibid., p.8
Despite these recent achievements, Brazil suffers from a highly inequitable income distribution, with about one quarter of the population living on one dollar a day. Further, the income share of the richest 20% of the population is 33 times higher than the corresponding share of the poorest 20%, giving Brazil one of the highest levels of income inequality in the world. In comparison, Brazil’s Gini index of 0.57 is similar to that of South Africa (0.58) and Haiti (0.59). Nevertheless, recent statistics do suggest that the improvement in years of schooling, along with a reduction of the informal economy, have lead to an increase in the middle class to 52% of the population and a decreasing pattern in the Gini index (signifying decreasing levels of inequality).

About 12% of income inequality in Brazil is accounted for by skin color, reflected in disadvantages in wages, schooling or both. (Comparatively, the figure for the United States is 2.4%). Inequality also varies widely according to region in Brazil. For example, poverty rates range from 3.1% in metropolitan São Paulo to more than 50% in the rural north and northeast, notably the states of Pará and Maranhão.

Brazil is an upper middle-income country in Latin America with a population of 184 million people and GDP of $1.31 trillion. The south-eastern region, encompassing the states of São Paulo, Rio de Janeiro, Minas Gerais and Espírito Santo, accounts for over one-half of Brazil’s GDP. The country has experienced sustained economic growth, demonstrated by increasing GDP growth rates of 5.4% in 2007, compared to 3.7% in 2006. Until a few months ago the available economic data still indicated Brazil was expecting economic expansion. President Lula also made initial remarks indicating that Brazil could be immune to the global crisis. However, analysts reversed forecasts and are now expecting negative growth of 0.5%. Layoffs have been seen in auto manufacturing, and in both the iron-ore and aluminum value chains.

As a result of the global economic slowdown, extractive and mining companies have been hurt by a steady fall in commodity prices, squeezing their profits and leading to mass layoffs. Aluminum prices have dropped dramatically in the last year, down to

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8 The Economist, 2008.
10 Ibid.
11 Instituto Brasileiro de Geografia e Estatística (IBGE), 2007.
14 Ibid.
15 Ibid., p. 2.
16 Ewing and Luna, 2008.
17 The Economist Intelligence Unit, 2009.
19 Ewing and Luna, 2008.
20 Molica, 2008.
$.60/pound in April 2009 from a high of $1.50/pound in July 2008. In December 2008 the extractive company Rio Tinto announced it would lay-off 14,000 people worldwide. In January 2009 the aluminum company Alcoa announced 13,500 layoffs worldwide (although it also announced that its large aluminum facility in Juruti, Pará would continue on schedule and open in the first half of 2009).

Unions have protested worker dismissals by Brazil's large industrial companies, including Vale. In turn, companies have asked Brazil's government and courts to relax strict labor laws to avoid mass redundancies, by allowing companies to cut workers' hours or enact unpaid work furloughs. This move has been vigorously opposed by labor unions, leading to tensions in labor relations around the country, including organized protests.

Brazil has a highly regulated system of labor relations in the formal sector, begun under President Getulio Vargas in the 1930s, along the "corporative," or government-controlled, structure. At that time, workers were organized into unions at the local level, federations of unions and confederations of federations, funded by taxes on workers' pay. These unions were intended to provide social services to workers, rather than engage in collective bargaining (which was handled by labor courts instead). Major confederations are the Central Única dos Trabalhadores (CUT, or Central Workers' Union), Confederação Geral dos Trabalhadores (CGT, or General Workers' Confederation) and Força Sindical (FS, or Unionized Force).

Not until the mid-1980s did major change sweep organized labor in Brazil, originating in the "ABC region" of the Greater São Paulo area in the 1970s and 80s. The unions of the area pushed for the freedom to strike and engage in collective bargaining. This ongoing struggle culminated in the formation of the CUT union and PT party. CUT's current policies reflect its more progressive and activist roots, while FS's activities reflect the role of labor unions as social service providers rather than activists. Labor unions are quite strong in Brazil, covering not only industrial workers, but some agricultural and white-collar workers as well. However, labor organizers are often harassed and – in the rural areas of some Amazonian states – even killed.

Nevertheless, there continues to be a large, highly unregulated informal-sector, which is found in many third party suppliers to the extractive and mining industry as well as the agricultural sector. Furthermore, although declining overall, use of forced labor has also been found in the mining and extractive industry. For example, small charcoal suppliers to Vale's pig-iron supply-chain were found to be using forced labor. In response, the extractive industry giant Vale launched a successful effort to end these practices in its iron-ore supply chain.

23 Alcoa, 2009.
24 Cardoso, 2008.
25 Rodríguez-Pose, 2001.
27 Instituto Ethos, Jan. 2009.
President Lula has struggled to reconcile his party’s labor and social movement roots with the demands of a globalized market economy. He gained enough momentum to win the presidency partly due to his pledge to maintain a market-friendly attitude and has therefore made good on his promises to abandon some of the party’s more radical positions. The government has chosen to continue the economic and monetary policies of the previous administration to shore up investor confidence, while focusing on improving living standards through expansion and consolidation of anti-poverty programs (like Bolsa Família), raising the minimum wage, and promoting formal-sector job creation. This struggle to balance the demands of social movements and the growing economy has trickled down to many states and municipalities as well.

2. State of Pará and City of Belém

Pará is located in the northern, Amazonian region of Brazil, with a population of 7.13 million. It is one of the largest states in territory (1,247,690 km²), second only to Amazonas state. However, its GDP (R$39.15 million) is only 5% of the state of São Paulo. Although Pará’s population density is much higher than other states in the northern region, its population is concentrated in a handful of cities and towns. The largest city is Pará’s capital, Belém, on the Pará River, with a population of 2.1 million. Belém maintains a relatively high human development index of 0.81 compared to the rest of the state (which has an index of 0.67), and is one of the older colonial centers of the country, and houses distinguished scientific research institutes, strong universities, and important intellectual communities.

Brazil’s Amazon region, with its history of boom and bust cycles of resource exploitation and lack of government power or presence, is often seen as Brazil’s “Wild West.” Various federal development programs attempted to bring industry (cattle ranching, logging, mining and soya farming) and people to the region but-given scarce government resources and lack of implementation ability – these programs often only resulted in conflicts over land and power. Since the collapse of the military regime in the mid 1980s, land struggles in the south of Pará have grown increasingly violent and have left the region open to a myriad of clandestine activities, particularly drug trafficking and illegal extraction and smuggling. Pará offers one of the most graphic illustrations of the absence of effective, accountable local government and the ceaseless contestations of socio-environmental claims – and disregard for their proponents. The state continues to face large social problems surrounding the extractive industry. Unequal land tenure and expropriation, environmental degradation, lack of employment, lack of infrastructure, poor health and safety, lack of equality and power imbalances are key concerns for citizens, industry and government. The government’s lack of coherent, unitary authority combined with a lack of

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29 Instituto Brasileiro de Geografia e Estatística (IBGE), 2007.
30 Ibid.
31 Ibid. (compared to R$727.057 million)
32 Ibid.
34 Ibid, p.147.
resources and capacity to determine public interest and implement policy has exacerbated ongoing socio-economic and environmental conflicts.\(^{35}\)

The mining sector represents 14% of the state’s GDP. Pará exports iron-ore (31.1% of total exports), aluminum (22.2%), wood (13.5%), bauxite ore (8.3%), as well as other ores (7.9%).\(^{36}\) Its territory has one of the largest mining operations in the country, located in the Carajás Mountains, the seat of Vale’s Ferro Carajás Project. The Project’s complex produces 35 million tons of iron-ore a year, exporting the product to the European Union, United States and Japan. Pará is also home to large bauxite mines, extracting over 80% of the country’s bauxite (Brazil is second only to Australia in bauxite extraction world-wide). These large mines are often located in areas enduring ongoing conflicts over land, labor, indigenous rights and the environment. For instance, after fighting to protect a piece of jungle that ranchers wanted to clear for logging and cattle ranching, 73-year old US-born nun Dorothy Stang was murdered in Pará in 2005. Despite international pressure, only recently did a Brazilian court renew trials for her alleged killers.\(^{37}\) The mining operations in these locations are intimately linked with these ongoing conflicts.

Ana Júlia Carepa is the current governor of Pará. Elected in 2006, she is a member of the central-left PT party, however many often perceive that she is aligned with business interests in Pará. Nevertheless, she has led an effort to end the practice of granting extractive companies open-ended contracts, by limiting contracts to fifteen or twenty years.\(^{38}\)\(^*\) State governors like Ms. Carepa have influence in negotiating federal programs and investment contracts because of their power in their state congressional delegations.

Governing elites with significant power often control state offices, using their political authority not for the public good, but for their own gain.\(^{39}\) The famous Paraense journalist, Lúcio Flávio Pinto, has even characterized the Amazon as a “vast, green Sicily.”\(^{40}\) This coincides with our findings that the enforcement of environmental laws has been diffuse since responsibility is often lost within the confusing environmental bureaucracy of the government. Nonetheless, the Ministério Público, a key federal government enforcer of environmental laws, has remained an important figure in bringing public attention to issues at the state level. Also promising is the recent news that the Instituto Brasileiro do Meio Ambiente (IBAMA, or Brazilian Environmental Research Institute) has fined the aluminum company Alunorte in Barcarena, Pará, R$5 million after residue spillage infected the local water supply, killing fish and leaving homes without potable water.\(^{41}\)

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\(^{36}\) Economist Intelligence Unit, 2008, p.65.
\(^{37}\) Barrionuevo, 2009.
\(^{38}\) Abati, March, 2009.
\(^*\) See key findings for further information
\(^{39}\) Ibid.
\(^{41}\) O Globo Amazônia, 2009.
3. Barcarena

Barcarena is a municipality about 40 kilometers away from Belém. Many multi-national corporations (MNCs) operate in Barcarena, including the companies Albras and Alunorte. The city's proximity to large bauxite mines and the major urban center of Belém, along with the availability of land and labor, and the depth of the adjacent Amazon River (allowing the passage of large shipping vessels) make Barcarena a preferential home for such operations. In addition to extractive companies, Barcarena has a significant rural agricultural sector. In fact, Barcarena is classified as a rural municipality according to [???]. The municipality of Barcarena includes, but is not limited to, the towns of Barcarena, Vila dos Cabanos and San Francisco. The growth of these towns was spurred by the construction of Albras and Alunorte in 1978. In order to attract a skilled workforce to the area, Albras and Alunorte provided housing by building the company town of Vila dos Cabanos. Over time the towns have melded together, however the majority of Vila dos Cabanos residents are still company employees and Albras and Alunorte have donated numerous infrastructure projects to Vila dos Cabanos. While the entirety of the Barcarena municipality benefits from taxes paid by the companies, the differences in infrastructure, services and housing stock between Vila dos Cabanos and Barcarena are striking.

Barcarena shows relatively lower levels of human development compared to the rest of the country. The latest IBGE statistics for the area, from 2000, show a human development index of 0.74 (compared to the national index of 0.81). However, these statistics do not disaggregate between the towns of Barcarena, Vila dos Cabanos and San Francisco. Furthermore, surrounding municipalities fare much worse than Barcarena in socio-economic indicators (human development index of 0.66), and are even below averages for the state (human development index of 0.67).42

Figure 2: map of Barcarena and vicinity\textsuperscript{43}

\textsuperscript{43} Albras, 2001.
II. METHODOLOGY

1. Client Agencies

Centro de Estudos das Negociações Internacionais

The Centro de Estudos das Negociações Internacionais (CAENI), linked to the Political Science Department at the University of São Paulo (USP), aims to create a core of high-level research in international relations and negotiations. CAENI forms a network of activists and professionals at USP, other universities and national and international institutions in order to perform research, hold training and research seminars, create publications, and design specific policy analyses.\textsuperscript{44}

Instituto Observatório Social

The Instituto Observatório Social (IOS) is a Brazilian NGO that analyzes and researches the behavior of multinational businesses towards workers’ rights and international social standards. In 1997, following a discussion on adopting social and environmental clauses in international trade agreements, the Central Única dos Trabalhadores (CUT, or Central Workers’ Union), initiated the creation of IOS. In addition, IOS is increasingly working in partnership with similar international research institutions analyzing compliance with international labor and environmental standards by multinational corporations (MNCs). IOS has worked with the International Labor Organization (ILO), the Netherlands Federation of Trade Unions (FNV), the German Confederation of Trade Unions (DGB), and Public Services International (PSI).\textsuperscript{45}

2. Scope

(See appendix 1 for Gantt chart)

Rationale

In 2006, IOS and CAENI embarked on a research and field project to study the labor situation as well as the environmental impact of five aluminum companies (Albras, Alumar, MRN, Alunorte and Juruti-Alcoa) in the north of Brazil. While preliminary findings indicated that companies were compliant with labor rights and invested in technological improvements to tackle environmental issues (particularly Albras), there remained significant resource inequalities across stakeholders in the aluminum value chain. Furthermore the local community at large often held a negative perception of the companies’ direct and indirect impacts. Both local government and civil society often remained acquiescent to the status quo vis-à-vis companies, local development and corporate social responsibility practices.

IOS identified a need for further research on the impact of mining and CSR practices on local development and sustainability issues, as well as Brazil’s role in the global aluminum

\textsuperscript{44} Centro de Estudos Das Negociações Internacionais (CAENI), 2008.

\textsuperscript{45} Instituto Observatorio Social 2005.
value chain. In the fall of 2008, IOS and CAENI invited the SIPA team to conduct this research.

While Brazil has been a relatively hospitable environment for CSR and sustainable development\(^{/6}\) in recent years, the mining industry has been slow to adopt similar practices. As the second largest producer of bauxite in the world, the primary ore mined and transformed into aluminum is of particular importance to Brazil. Further, the overwhelming majority of this production is located within only a few sites in remote areas of the Amazon. Aluminum mining companies operate in some of the most conflicted areas of Brazil – areas of environmental, land, labor, and indigenous rights conflicts – and implementation of existing CSR practices is often questioned by affected communities and stakeholders.

IOS and CAENI are eager to increase their capacity in the implementation of corporate social responsibility and sustainable development strategies. They asked the SIPA team to assist in gathering best practices and case studies as well as to develop a strategic plan for effectively engaging mining companies and stakeholders to improve sustainable development and social dialogue along the aluminum value chain.

**Objectives**

Given the terms of reference, the following four objectives were identified:

1. Research international trends and identify good practices of CSR policies in the mining sector;
2. Outline and analyze the aluminum value chain in the North of Brazil;
3. As part of this analysis, create a matrix of pressure points/leverage of each stakeholder in the context of Barcarena, Pará;
4. Produce a stakeholder analysis of the mining sector in Barcarena, Pará;
5. Draft recommendations for a social dialogue or other stakeholder engagement activities in the mining sector in Barcarena, Pará for IOS.

**Outcomes**

The deliverables included:

1. A detailed work plan (submitted on December 15, 2008);
2. A draft outline of the team’s final report (submitted on March 25, 2009);
3. A draft final report (submitted on April 22, 2009);
4. A presentation of preliminary findings to IOS and CAENI during the SIPA team’s March field trip;
5. A final presentation of the team’s findings and recommendations to SIPA faculty and staff (delivered on April 30, 2009);
6. This final report (submitted on May 8, 2009).

\(^{\text{6}}\) Young, 2004.
3. Research

From a project-planning standpoint, our work seeks to assist our clients in the appraisal or diagnostic phase;\(^{47}\) we are helping IOS/CAENI gain a clearer understanding of the operating environment, stakeholders, institutions, and needs and identify possibilities for intervention or involvement. We recognize that we will not be a part of a project planning or monitoring and evaluation phase, but we hope that our diagnostics will be useful to IOS/CAENI if they choose to undertake an intervention such as a social dialogue.

**Desk Research**

Our literature review and informational interviews with experts and key informants focused on a review of existing CSR practices, case studies, the aluminum value chain, local context and issues of socio-economic and environmental importance in Pará. One important aspect of our literature review was to read and summarize the existing research reports written by IOS/CAENI about the aluminum industry in Pará. The five reports – on MRN, Albras, Alunorte, Alumar and Alcoa-Juruti – focused on the labor, environmental and occupational health and safety issues at each company. These reports suggested that each company met or exceeded Brazil’s legislation on these topics.

In developing a model on which to base our recommendations to IOS/CAENI, we researched and analyzed a number of existing methodologies and CSR models. We used these methodologies and models as lenses for our data analysis. These lenses informed our questions, analysis and recommendations and helped us in formulating our direction of research as well as recommendations.

We established a shared notion of sustainable development and corporate social responsibility in the context of the extractive industry that informed our research and recommendations. Sustainable development in the context of the extractive industry in Pará is normative, multidimensional and equitable, and should be measured by indicators of sustainability. Sustainable development is aimed at increasing long-term investment and growth opportunities. Furthermore sustainable development is often narrowly implemented as a focus on environmental management that misses or ignores socio-economic impacts. Sustainable development can exist along a continuum from “deep ecology” (strict conservation) to “sensible sustainability” (managed extraction).\(^{48}\) The following diagram illustrates a fully inclusive model of sustainable development addressing social, environmental and economic concerns.

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\(^{47}\) Caldwell, 2002.

\(^{48}\) Enriquez, 2007
Key projects and documents on sustainable development include:

- 1987 Brundtland Report *Our Common Future*[^50]
- 1992 Rio Earth Summit and Agenda 21[^51]
- 1998 Global Mining Initiative[^52]
- 2002 Mining, Minerals and Sustainable Development Project Report[^53]
- 10 guiding principles of a sustainable development framework from the International Council on Metals and the Environment[^54]
- 2002 World Summit on Sustainable Development (Johannesburg, South Africa)[^55]
- World Business Council for Sustainable Development case studies[^56]

Corporate social responsibility is linked to corporate governance and corporate philanthropy, but focuses more on the social impacts of business. Our approach to CSR in this project is linked to practices of triple bottom line reporting and social auditing. The triple bottom line is the idea that economic, environmental and social costs must all be taken into account when conducting ethical business; social auditing is the practice of conducting independent third party audits of a company’s labor and or social practices to meet international standards. CSR also exists on a continuum, from pure free market capitalism to full provision of social services. While CSR may be used merely as a public relations or marketing tool by companies, CSR is a way to incorporate international social, labor and environmental norms into strategic business decisions and goals.

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[^52]: The International Council on Mining and Metals - ICM, n.d.
[^53]: Mining, Minerals and Sustainable Development, n.d.
[^54]: Mining, Minerals and Sustainable Development, n.d.
[^55]: UN Department on Economic and Social Affairs Division for Sustainable Development, 2004.
Key documents on corporate social responsibility include:
- 2008 Ruggie Framework, Corporate Responsibility to Respect\textsuperscript{57}
- John Ruggie, Business and Human Rights: The Evolving International Agenda\textsuperscript{58}
- Human Rights Translated: A Business Reference Guide\textsuperscript{59}

We identified stakeholder engagement as one of the key elements of sustainable development and corporate social responsibility in Barcarena. From a basic development Rights Based Approach (RBA) to a more formal social license to operate, stakeholder engagement is of critical importance to monitoring, evaluating and incorporating community concerns about business operations. RBA is a normative framework based on international human rights standards intending to promote and protect human rights, while attempting to address the problems in the development process to make it more sustainable, transparent and representative of the people it is supposed to serve.\textsuperscript{60}

Social License to Operate (and license to grow) is the concept that companies, in addition to receiving environmental and other operational licenses from government, must also ensure the free, prior and informed consent of communities\textsuperscript{*} in which they operate and extract resources. A social license represents a risk (reputational, operational, fiduciary) mitigation strategy for corporations, but is based on an emerging international consensus on multi-stakeholder engagement seen in the Millennium Development Goals, Extractive Industry Transparency Initiative (EITI) and the work of the United Nations’ Special Representative on Business and Human Rights, John Ruggie. The Mining, Minerals and Sustainable Development Project also adopted social license methodology. The emerging best practice standard for stakeholder engagement and obtaining a social license to operate is the AA1000 Stakeholder Engagement Standard.\textsuperscript{*}

\textbf{Field Research}

Building upon our prior desk research, we collected information in the field in order to conduct a stakeholder mapping and analysis in Barcarena and Belém. We also focused on influential government and community organizations in Belém, as they relate to local sustainable development and the aluminum industry. Our stakeholder analysis enabled us to tailor our recommendations to IOS/CAENI so that they were strategic, relevant, realistic

\textsuperscript{57} Ruggie, 2008.
\textsuperscript{58} Ruggie, Business and Human Rights: The Evolving International Agenda, 2007.
\textsuperscript{59} OHCHR, IBLF, UN Global Compact & Castan Centre for Human Rights Law at Faculty of Law, Monash University, 2008.
\textsuperscript{60} Uvin, 2007.
\textsuperscript{*} However, reaching clear consensus on the meaning of “free, prior and informed consent” often makes operationalization of such concepts difficult. The devil is in the details, after all.
\textsuperscript{*} AA1000 Stakeholder Engagement Standard (AA1000SES) was developed in 2005 by AccountAbility, a London based NGO. This standard provides guidelines to organizations to create robust, sustainable, continuously improving stakeholder engagement. Groups like BSD Consulting use this standard in designing stakeholder engagement and CSR programs for companies like Petrobras, Samarco Mineracão and Holcim Brazil. In conjunction with UN Environmental Program (UNEP), AccountAbility also developed a Stakeholder Engagement Guidebook and templates for practitioners.
(i.e. enforceable), adequate, sustainable and “do no harm”. Additionally, we hope that IOS/CAENI will work in partnership with other local Barcarena stakeholders and other actively engaged organizations in any future interventions.

Through our desk research, pre-field interviews (with key informants – experts and academics – please see appendix 2 for a list of these key informants) and consultations with our client, we identified companies, unions, government, community organizations and facilitators as the main categories of key stakeholders and began drafting lists of individuals and organizations we wished to interview. While in the field, we relied on the chain (or “snowballing”) sampling method: we asked interviewees for their suggestions and recommendations for additional contacts to interview. In this way, we attempted to interview a sufficient representative sample of our key stakeholders, given our limited time in the field.

Our primary data collection method in the field was the qualitative, semi-structured interview. These interviews were primarily conducted in person, but some follow-up exchanges were conducted via email or phone. Before interviews we drafted questions, based on information from desk research and client consultation that we wished to ask. However, during interviews, we also allowed conversations to flow organically so that interviewees could introduce new topics or facts that they deemed relevant to the discussion. After returning from our January field travel, we began a preliminary stakeholder analysis and were able to conduct a gap-analysis to identify missing information that we wished to gather and stakeholders (ex. Environmental NGOs) that we intended on meeting during the March field travel. However, given the politicized nature of development in Pará and given our limited time in the field, there still remain many gaps in our analysis and data collection. We will be as explicit as possible where we are missing data or cannot draw reliable/valid conclusions/inferences and where we cannot generalize from the data we did collect. These areas we see as opportunities for further research for IOS and CAENI.

Our main area of inquiry grew to surround the topics of challenges/obstacles and incentives to participation in social dialogue/activities among stakeholders of the aluminum value chain in Barcarena.

**January Field Interviews**

Three students traveled to Brazil in January 2009. Initial meetings were conducted in São Paulo with the main client contact, Dr. João Paulo Cândia Veiga, and other staff members at IOS, including Felipe Saboya and Dudu Amarildo Bolito; the majority of the research was conducted in Pará over a period of eight days. Please see appendix 3 for a list of interviews.

**March field interviews**

Two members of the team traveled to Pará in March 2009 with Dr. João Paulo Cândia Veiga. These meetings attempted to focus on the potential stakeholders the January team was unable to meet with, primarily government and local NGOs. Please see appendix 4 for a list of interviews.
**Sampling error**

Our sample may be limited by the fact that we were dependent on interviewees to reply to our phone calls and emails in order to schedule meetings. Additionally, holidays and conferences prevented some stakeholders from meeting with us. A handful of interviews did not happen due to cancellation, or contacts not responding to our interview requests.

**Ethics**

Before each interview, we explained our affiliation and our purpose in conducting the interviews with the informed verbal consent of the contacts. All of our interviewees were adults and we interviewed them in an institutional context – in their offices or place of work. Any recording we made was granted with the informed verbal consent of the individuals.

**Biases**

Observer effect: we identified ourselves as students from Columbia University in New York City working with Professor João Paulo Cândia Veiga, from CAENI at the University of São Paulo. This was important because our client, IOS, is an organization affiliated with a major labor confederation, CUT, and one with which Vale has sometimes had conflictive relations. This could have affected our interviews with stakeholders in all categories, but particularly with companies. For example, if we identified ourselves as affiliated to IOS, and by extension CUT, company representatives may have been more reserved in answering our questions due to labor-management conflicts.

Observer bias: it is possible that our data is biased due to issues surrounding the language barrier (the majority of interviews were conducted in Portuguese, while our team members are native English and Spanish speakers); therefore it is possible we misunderstood the local context and/or politics. It is also possible that we approached the project from a “developed-world” perspective that may not be entirely appropriate for Pará.

4. **Data Analysis**

A. **Challenges and Opportunities Analysis**

In creating our stakeholder map and narrative, we analyzed each key stakeholder’s strengths and weaknesses in relation to their participation in social dialogue, sustainable development and engagement with each other. See our stakeholder map in appendix 5 for our use of this analysis.

B. **Value-chain analysis**

A value-chain analysis scrutinizes the intra-firm or inter-firm structure (in this case a vertically integrated model) to determine at which specific location value is added and how
value could be increased to improve the competitive advantage. We also looked at the value chain so as to identify challenges and opportunities in the various linkages among stakeholders across the value chain. By analyzing their relations – completed by the stakeholder analysis – we were able to identify challenges and gaps to the social dialogue necessary to build the basis of a sustainable development. In conducting a value chain analysis, we relied on a number of sources: IOS research reports, company and industry sustainability reports (Vale, Albras, Alunorte, Abal, Alcan), and NGO reports representing a critical view (Foiling the Aluminum Industry). See our key findings for this analysis.

Additionally, we examined two theoretical models of CSR that are part of a spectrum of practices (see our key findings for the analysis of each company’s CSR programs and impacts):

A. Philanthropic, or paternalistic, mode of CSR

This model is predicated on the assumption that corporations are not responsible for local sustainable development – that it is the responsibility of the government. However, the fact is that the state and local government in Pará often lack the resources and capacity to establish or enforce existing regulations or develop and/or implement holistic development plans. Often, in this type of situation, companies replace the government in the perception of local communities. This may be due to a number of factors – the government’s limited knowledge, capacity and resources relative to corporations, or that local communities often have more direct interaction with a corporation than the government. The result is often that companies, in order to move their operations forward or to simply provide for their employees, must provide social services such as housing, health clinics and local schools. However, while a community might get much needed services, the result is often a cycle of dependency on company philanthropy. Additionally, because these services are not coming from local government, there is a lack of accountability, transparency and community input on what services are provided, how they are provided and what the quality of the services should be. The company is now in a position of deciding what services the community will receive, which is the paternalistic aspect of this model. Lastly, because these types of philanthropic services are often seen as an added cost and are not integral to the company’s core business operations, these services are often at the whim of cost cuts.

The cycle of dependency on company philanthropy is mirrored in the concept of assistencialismo. We heard this word from a number of sources, in reference to the way Vale and its subsidiaries relate to local communities, stakeholders and government. Assistencialismo suggests passive dependency by the community and government on external assistance, without developing solutions to issues. Assistencialismo also suggests that local community and government are welfare clients to the companies, rather than partners in local sustainable development and social dialogue.

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61 Business Dictionary, n.d.
Many companies do pay taxes to local, state and federal government, in return for land use rights or operational licenses. In Barcarena, for example, Albras and Alunorte pay the Financial Compensation for Mineral Exploitation (CFEM) royalty tax. Companies will often claim that these taxes are sufficient contributions to local development. While these taxes may be significant, they are not adequate to ensure sustainable development. (More on this in the key findings) Local governments and local communities must simultaneously participate in designing local development plans and funding. Otherwise, lack of transparency, accountability and corruption may derail local development plans and funds. Local communities may be left dependent on company funds for education or health services, despite the taxes that companies have paid.

The state of Pará, specifically the southern area of Carajás, is the part of the Amazon where land-tenure issues resulting from a history of lack of government resources, corruption, and undue influence from entrenched land owning interests pose potentially explosive environmental and social consequences. The problems of Pará are likely to spread to other sections of the Amazon and therefore demand that companies work with local government and local communities to promote and defend sustainable development.63

B. Integral model of CSR64

This model is based upon the interdependency of local sustainable development and the success of business. The Johannesburg Declaration on Sustainable Development proclaims:

“We recognize the reality that global society has the means and is endowed with the resources to address the challenges of poverty eradication and sustainable development confronting all humanity...We recognize that sustainable development requires a long-term perspective and broad-based participation in policy formulation, decision-making and implementation at all levels. As social partners, we will continue to work for stable partnerships with all major groups, respecting the independent, important roles of each of them.”65

Therefore, in this model, a company’s CSR practices must be in line with sustainable development goals, developed in conjunction with government, local communities and other stakeholders. In this model each stakeholder should play an equal role and bring resources to the table. For example, government can develop policy, legislation and implementation plans; communities can provide local accountability (social license to operate), monitoring and knowledge; civil society can provide expertise, monitoring and partnerships; other groups can provide independent third party monitoring; companies can provide resources, coordination and training.

65 UN Department on Economic and Social Affairs Division for Sustainable Development, 2004; Articles 21 and 26 of the Johannesburg Declaration.
Not only must a company’s CSR practices work toward sustainable development, but in order for these practices to be sustainable within the company, they must also be integral to the company's management and core business operations. Otherwise, CSR will revert to philanthropy at best and an expensive public relations campaign at worst.66

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IV. KEY FINDINGS

1. **Value Chain Analysis**

In order to identify challenges and opportunities across the aluminum value chain, we have conducted a value chain analysis. We have looked at the production process from the extraction of bauxite to the smelting of aluminum, focusing on the companies and the issues raised across this process. Since the majority of aluminum is exported, smelting is the final stage of aluminum processing in Brazil.

**Figure 4: Aluminum value chain in Brazil**

- **Bauxite Mining** (& beneficiation)
  - MRN (Porto Trombetas/Oriximina)
  - Vale
  - BHP (Shell)
  - Rio Tinto Alcan
  - CBA
  - Alcoa
  - Norsk Hydro
  - Abalco (Alcoa)
  - Vale (Paragominas)
  - Alcoa (Juruti)

- **Alumina Refining** ("Bayer" process)
  - Alunorte (Barcarena)
    - Vale
    - Norsk Hydro
  - CAP (Barcarena)
    - Vale
  - Alumar (Sao Luis)
    - Rio Tinto Alcan
    - BHP (Shell)
    - Alcoa

- **Aluminum Smelting** ("Hall Heroult" process)
  - Albras (Barcarena)
    - Vale
    - NAAC
  - Alumar (Sao Luis)
The aluminum value chain is highly vertically integrated worldwide (see figure 4). Vertical integration allows the controlling shareholder to consolidate costs and operations* have a stronger negotiating position vis-à-vis government and unions, and possibly allocate costs and profits among operations in jurisdictions with the most favorable tax and regulatory regimes. In Brazil, the value chain is controlled by a small handful of powerful MNCs, including Vale and Alcoa. As mentioned in the background section, the global economic crisis is affecting the operations of multinational extractive corporations in Brazil. As such, local companies (introduced below) are at the mercy of global market fluctuations which can result in production slowdowns and layoffs.

**Multinational Corporations**

**Vale**

Vale is a Brazil-based extractive multi-national corporation (MNC) and one of the largest of its kind in Brazil. Vale operates vertically integrated businesses in all stages of the aluminum production chain, from research on bauxite to the refining of alumina and production of primary aluminum. Vale was previously the state owned *Companhia Vale do Rio Doce* (CRVD), which was privatized in 1997. Vale’s activities are carried out through industrial units close to both the sources of raw material and to the industrial markets that purchase the final product. Vale companies responsible for aluminum production include: Albras, Valesul, Alunorte, MRN and a bauxite mine in Paragominas, Pará, which is wholly owned by Vale.* While Vale is the majority shareholder (51%+) of its vertically integrated companies, other national and international shareholders effectively diversify Vale’s exposure to market fluctuations by guaranteeing purchasers of products along the value chain. On the other hand, Vale also wholly owns some mines (such as Paragominas) in order to ensure its supply of bauxite. Vale has planned expansions in Pará including a new alumina refining plant, the *Companhia de Alumina do Pará* (CAP), to complement Alunorte. In order to supply this new plant, Vale has planned to finance a new thermoelectric power plant in the state and expand its bauxite mine in Paragominas. Additionally, Vale is active in the iron-ore production chain, with a large mine in the Carajás region of southern Pará. Although this project did not focus on the iron-ore value chain both the aluminum and iron-ore value chains have similar, and serious, environment and socio-economic impacts on their surrounding communities.

**Alcoa**

US-based Alcoa is among the world’s top producers of alumina and aluminum. Accounting for approximately one-fifth of Brazil’s primary aluminum and alumina production in 2004, Alcoa’s vertically integrated operations include bauxite mining, alumina refining and aluminum smelting. Alcoa established its operations in Brazil in 1965, with its first plant opening in 1970 at Poços de Caldas (in the state of Minas Gerais). Today, it has eight operating locations that include one of the largest aluminum smelters and alumina

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* For example, Vale recently merged the human resources departments of Albras and Alunorte.
* The team did not conduct any research on anti-trust or anti-monopoly regulations in Brazil.
68 Alcoa, n.d.
refineries in all of South America (Alumar, based in the capital of Maranhão, São Luis). Until 2008, Alcoa bought its bauxite from MRN. However, Alcoa’s development of a mine in Juruti, Pará and a dam in Barra Grande, Minas Gerais will provide the company with greater autonomy in both its input and energy supply.

**Bauxite extraction**

The first link in the aluminum value chain is the extraction of bauxite, a mineral found abundantly in tropical regions. Brazil is second only to Australia in volume of bauxite ore produced. In Brazil bauxite is most prevalent in the Amazon region, primarily in Pará in the Trombetas River, Paragominas and Juruti areas. The Trombetas River area accounts for 80% of Brazil’s bauxite production; 69 Brazil produces 100 million tons of bauxite each year. The material is mainly extracted by open-cast, or surface, mining, which has a variable and highly site-specific effect on the local environment. 70 After being extracted from the soil, washed and dried,* bauxite is transported to refining facilities for the next step in the value chain. The majority of bauxite used in the production of aluminum in Barcarena comes from a large open-cast mine on the Trombetas River (located on the northern side of the Amazon River, its confluence with the Amazon is just south of the municipality of Oriximiná, Pará) owned by Mineração Rio do Norte (MRN) and the Paragominas mine (located in eastern Pará near the Pará-Maranhão border) which is wholly owned by Vale.

Although we have not looked extensively into the social, economic and environmental issues surrounding the extraction of bauxite, there are some salient problems that originate at the source, generating a negative perception of the aluminum companies across their direct and indirect spheres of influence.

The conservation of rain forests is a key concern with regard to bauxite mining, since about 6% of the world’s bauxite mining is conducted in rain forest regions, affecting a total area of around 1.5 km² per year. 71 Open-cast mining precludes all other uses of land; moreover the environmental impact on the availability of resources alters local dynamics of production, including agriculture and fishing.* This makes future land use difficult for reforestation, agriculture, or ranching. Displacement of local populations for extractive projects often exacerbates existing inequalities in land tenure. Ex-post-facto compensations were not always carried out as promised

Adverse socioeconomic effects depend largely on the proximity of the mines to established communities. Effects can include the breakup of cultural traditions and lifestyles; substantive changes in agriculture resulting from weather and soil disruptions; and a

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70 Ibid, p. 21-22.
71 The European Aluminum Association, n.d.
* The state of Pará has traditionally been an important area for the Brazil nut (Castanha do Pará) industry. Small family owned businesses relied heavily on this industry to ensure their livelihoods. Exploitation of mineral and other natural resources have led to a relative depletion of Brazil nuts and consequent loss of income for those families. As a result, many families have been forced to migrate to urban areas.
resulting lack of infrastructure, alternative employment opportunities, housing, and educational and recreational facilities for local populations, workers and migrants.\textsuperscript{72}

\textit{Mineração Rio do Norte (MRN)}\textsuperscript{73}

MRN extracts, processes, and sells bauxite ore. The company also transports the product by rail (using its own railway and trains) to the Porto Trombetas Bauxite Terminal for river transport. Founded in 1974, MRN operates three mines in Brazil’s Amazon region. MRN produces more than 17 million tons of bauxite annually, making it one of the largest bauxite mining operations in the world. The company houses its employees and their families in Porto Trombetas, a residential village complete with 1,000 houses and barracks, a school, hospital, airport, clubs, and a movie theater. Its shareholders include Vale (40\%), BHP Billiton Metals (14.8\%), Rio Tinto Alcan (12\%), CBA-Votorantim (10\%), Alcoa (8.58\%), Alcoa World Alumina (5\%), Norsk Hydro (5\%) and Abalco (4.62\%). Participating companies receive an equivalent supply of bauxite based upon their number of shares.

Transport of bauxite from the Porto Trombetas mine to the main alumina plant in Barcarena (Alunorte) is via river transport. Transportation from the Paragominas mine to Barcarena is via the \textit{mineroduto}, a surface pipeline that transports pulverized bauxite and water almost 300 km.\textsuperscript{74}

\textit{Alumina refining}

Finely ground bauxite is dissolved in a solution of sodium hydroxide to produce crystals, which are further processed to produce alumina, a fine white powder.\textsuperscript{*} \textit{Alumina do Norte do Brasil} (Alunorte or Alumina of Northern Brazil) is currently the only company responsible for refining bauxite into alumina in the state of Pará. However Alunorte will soon reach its maximum producing capacity, after several prior expansions, and Vale has therefore planned the construction of a second refining plant, the \textit{Companhia de Alumina do Pará} (CAP, or Alumina Company of Pará).\textsuperscript{75} The completion of the CAP project will position Vale as the largest bauxite refining company in the world. This project will not be operational until 2011 and work may be slowing as a result of the global economic downturn.\textsuperscript{76}

\textit{Alumina do Norte do Brasil S.A. (Alunorte)}\textsuperscript{77}

In 1978 an agreement between the governments of Brazil and Japan – with the participation of Vale – created the company Alunorte. Currently, Alunorte has a production capacity of 4.4 million tons of alumina per year and directly employs approximately 1,600 people. After its third expansion scheduled to be completed by the end of 2008, an R$2.2

\begin{itemize}
\item \textsuperscript{72} Acero, 1998.
\item \textsuperscript{73} MRN, n.d.
\item \textsuperscript{74} Povos Indígenas no Brasil, 2004: A19.
\item \textsuperscript{*} Alumina dust is an environmental hazard for workers and local communities.
\item \textsuperscript{75} Campos, 2009. Rolim, 2009.
\item \textsuperscript{76} Campos, 2009.
\item \textsuperscript{77}"Alunorte, n.d." 
\end{itemize}
billion investment, Alunorte will increase production capacity to 6.3 million tons of alumina per year. Alunorte’s shareholders include Vale (57%), Norsk Hydro (34%) and a number of Japanese companies, including Mitsubishi and Nippon Amazon Aluminum Company (NAAC).

The transformation of bauxite to alumina creates significant environment impacts. Two to three tons of bauxite are needed to produce every ton of alumina. Waste from this process is known as red mud (or *lama vermelha*) and can affect groundwater stores if not properly managed. Only recently have companies been forced to follow stricter environmental regulations to minimize the impact of their operations, which in this phase relates essentially to waste management and rehabilitation of affected sites. Populations affected by this environmental degradation have advocated and pressured the companies to increase their obedience to the environmental regulations at federal and state levels, which have been enforced by IBAMA and SEMA.* Despite some observed overlapping among these agencies, environmental protection seems to be effectively tackled both by government and corporations. (Although, there are concerns about the sustainability of soil rehabilitation through the burying of the red mud, for there seems to be longer-term effects of groundwater and soil degradation that seriously affect future productivity of soil as well as water quality.)*

Please read our key findings on government actors for more details on environmental monitoring and regulation

**Aluminum smelting**

The smelting process of alumina is extremely energy-intensive; energy accounts for some 35% of input. The smelting company in Barcarena, *Alumínio Brasileiro* (Albras, or Brazilian Aluminum), consumes enough energy to illuminate two cities the size of Brasília.* In Pará, Albras is currently the only company that smelts alumina into aluminum. It is owned and operated by Vale, the majority shareholder. Vale also operates the Vila do Conde Port in Barcarena so that both Albras and Alunorte can export their products to the global marketplace.

**Alumínio Brasileiro (Albras)**

Albras was created in 1978 as a joint venture between Vale and Nippon Amazon Aluminum Company, or NAAC (a trust of 32 Japanese corporations, banks and aluminum producers, with the Japan International Cooperation Bank being the largest shareholder). Albras has made considerable efforts to comply with international environmental and management

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79 Switkes, 2005.
* Brazilian Environmental Research Institute (IBAMA) and Secretary of State for the Environment (SEMA)
81 Monteiro, 2009.
82 Manacas, 2009.
* Another important input is flouride, which produces noxious gases, an environmental hazard for workers and communities.
83 Instituto Observatorio Social, 2007.
84 Albras, n.d.
quality standards; for instance, Albras is certified SA8000* and ISO14000.* Albras’ shareholders are Vale (51%) and NAAC (49%). Albras directly employs 1,300 people.

Vale and its subsidiaries conditioned the opening of their operations on receiving favorable electricity tariffs from public authorities. Since the first opening of their operations in 1978, Albras and Alunorte have benefitted from heavily subsidized electricity, creating social tensions with neighbouring communities who face electricity tariffs up to 6 times higher.85 These tariffs were negotiated with the Federal Government and, depending on their relative energy use, can oscillate between R$12 to R$18 per GWh. The current government of President Lula has changed the structure of these negotiations, conducted until recently on bilateral terms. A system of auctions has been established where state owned electricity companies compete along with privately owned companies to provide the best electricity tariffs on a market basis. Contracts were nevertheless signed in 2008 between the Federal Government - that subsidizes the tariffs through the state owned company Eletronorte- and the mining companies, mainly Vale, that lock in today’s subsidy levels for another 20 years.

The need to have a stable and affordable supply of energy has led Albras and Alunorte to participate in public investments for large infrastructure projects, particularly dams and hydroelectric plants, ensuring a direct and consistent energy supply. For example, the construction of the large Tucurui dam was instigated by Vale on behalf of Albras. As such, 50% of the energy generated by these plants is directly supplied to the companies without passing through the national grid and thus exempted from the inter-state agreement mandating the balanced distribution of energy to all energy producing and non-producing states in the Northeast. This has led to rising tensions with neighbouring populations, who organize themselves around social movements such as the Movimento dos Atingidos por Barragens (MAB, or Movement of Dam-Affected Peoples). MAB is currently linked in its struggle to the Movimento dos Trabalhadores Rurais Sem Terra (MST, or Landless Workers’ Movement) and thus highly criticized by both media and corporations.86 The struggle of these populations refers both to the environment and socio-economic impact of those large infrastructure projects, as well as to what they understand to be an unbalanced and unfair distribution of resources. The use of subsidies (public funds) to lower the companies' energy bill is also the object of controversy among those populations.87

* SA8000 is a global social accountability standard for decent working conditions, developed and overseen by Social Accountability International (SAI).
* ISO14000 is an environmental management standard developed to help organizations minimize their negative environmental externalities.
85 Manacas, 2009.
86 Ibid.
87 Ney, 2009.
2. Stakeholder Mapping and Analysis

During our field research in January and March, we interviewed the following stakeholders. Information collected during these interviews make-up our following stakeholder mapping and analysis. This includes an explanation of each stakeholder, challenges and opportunities in participating in social dialogue and an examination of the relationships between stakeholders. For the team’s complete stakeholder map please see appendix 5.

<table>
<thead>
<tr>
<th>A. Companies</th>
<th>Albras, Alunorte, Vale</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Unions</td>
<td><em>SindQuímicos</em>, SIMEB, CUT, <em>Força Sindical</em>, Rural Workers Union</td>
</tr>
<tr>
<td>C. Government</td>
<td>Municipality of Barcarena, Ana Júlia Carepa, MTE, IBAMA, Eletronorte, SEDECT, SEMA, NUMA</td>
</tr>
<tr>
<td>D. Community</td>
<td>Residents of Barcarena Proper, Residents of Vila dos Cabanos, Fishermen of Caipiri, Tourism businesses in Caipiri, Quilombolas, Cooperativas</td>
</tr>
</tbody>
</table>

A. Companies

By continuing to use the paternalistic corporate responsibility model of the 1970s, the companies reinforce a cycle of dependency.

The extractive industry was initially drawn to Pará’s relaxed regulatory climate and abundance of resources (80% of Brazil’s bauxite is mined in Pará along with significant amounts of iron-ore and gold). Barcarena offered a location close to mines and the urban center of Belém along with the availability of land, labor and shipping access. Established in the late 1970s, Albras and Alunorte continue to reflect the corporate responsibility, development and stakeholder engagement models of that era, that were illustrated by the old-fashioned model of company towns. We have categorized these older models as philanthropic and paternalistic rather than integrative and sustainable. Furthermore, this paternalistic relationship between companies and communities, coupled with a lack of government resources to plan and implement sustainable development has created a culture of *assistencialismo* and a cycle of dependency on companies.

Albras and Alunorte strive to abide by Brazil’s existing environmental and labor laws and regulations, which are both quite extensive. Albras and Alunorte respectively employ 1,300 and 1,600 workers\(^{88}\) directly, plus up to three times as many indirectly in their local supply chain (non-bauxite).\(^{89}\) Furthermore, both companies pay income taxes as well as extractive royalties in the form of the Financial Compensation for Exploiting Mineral Resources (CFEM) tax to municipal, state and federal governments. The CFEM tax is

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89 Bolito, 2009.
stipulated in the 1988 constitution and by law is to be no more than 3% of net revenues of mineral sales.\textsuperscript{90} The tax paid is allocated as a percentage of the whole to the municipal (65%), state (23%) and federal (12%) levels of government. In 2000, the federal government passed a law sharing its 12% CFEM revenue with Department of National Mineral Production (DNPM) (9.8%), \textit{Fondo Nacional de Desarrollo Cientifico y Tecnologico} (FNDCT) (2%) and IBAMA (.2%). In 2006 Pará received 26\% of total CFEM revenues collected nation-wide, coming primarily from Parauapuebas and Oriximiná municipalities, where Vale’s Carajás iron-ore operations and MRN’s bauxite mine are located, respectively. Aluminum accounted for 8.9\% of total CFEM revenues in 2006.\textsuperscript{91}

Although CFEM taxes flow primarily to affected municipalities, in reality there is very little accountability or transparency in local government on how this money is allocated or spent.\textsuperscript{92} Additionally, people we spoke with felt that the taxes did not adequately compensate residents and communities for resource extraction, nor did the taxes “repay” the municipality or state for water or electricity subsidies and low cost infrastructure financing from the government development bank, BNDES.

Initially Albras and Alunorte followed the traditional top-down model of creating “company towns” around their facilities, providing housing, education and health services for workers and their families. In addition, the companies made public infrastructure investments in roads, lighting, water and sanitation while downplaying negative externalities resulting from their operations. This resulted in striking disparities between company towns like Vila dos Cabanos and neighboring municipalities like Barcarena, where little or no company investment is made and public investment is clearly insufficient despite increased income from CFEM royalties.\textsuperscript{93} However, following a general trend to move away from paternalistic behaviors, Albras transferred the provision of these services to the local authorities.\textsuperscript{94} The transfer, expected to cancel out inequalities with neighboring towns, has actually worsened inequalities due to the obligation of local authorities to continue ensuring a minimum investment in the company towns, to the detriment of neighboring underserviced towns. The original structure of public services delivery by companies has led to a cycle of dependency both from communities\textsuperscript{95} and local government,\textsuperscript{96} who consider that each company’s infrastructure and service donations are fair retribution for the exploitation of local natural resources.\textsuperscript{97}

The relation between government and companies is thus based on a philanthropic relationship, deprived of any accountability or other democratic control mechanisms and little room for citizen input. Yet, companies still rely on local and regional government for operating licenses and regulatory approval so it is in the companies’ interest to placate

\textsuperscript{90} Gurumendi, (USGS, 2006).
\textsuperscript{91} Ibid, 2006.
\textsuperscript{92} Confederation of Extractive Industry Workers, 2009.
\textsuperscript{93} Campos, Jan 2009.
\textsuperscript{94} Claudio, Jan 2009.
\textsuperscript{95} Ibid, 2009.
\textsuperscript{96} Macias, Jan, 2009.
\textsuperscript{97} Ibid, 2009
government with continued investment. Conversely, local government is often dependent on company infrastructure investment for continued public support and votes. While the relationship between companies and government should not be too easily simplified, there remains a lack of transparency and accountability to citizens and the general public that fuels paternalistic behavior from companies.

Furthermore, mining and extractive activities and impacts are not limited to municipal borders. Water management, deforestation, transportation and land use all impact municipalities surrounding Barcarena, yet these areas receive far less investment from companies. For example, the mineroduto transporting crushed bauxite from the Paragominas mine to Barcarena travels almost 300km across Pará.* A representative from the Movimento dos Trabalhadores Rurais Sem Terra (MST, or Landless Workers’ Movement) stated that the companies did very little to mitigate negative externalities from the mineroduto construction and operation. Furthermore, migration from other regions of Pará and even other states (Maranhão, for example) has significantly increased during the construction of new facilities. Migrants who are not hired by companies may fall back on already scarce social services in Barcarena and surrounding municipalities. Very little planning or resources are allocated to cope with influx of immigrants for large-scale operations.

Albras and Alunorte are not involved in sustainable development or development planning outside of Barcarena. They have a narrow view of social responsibility and sustainability including only their employees and immediate surroundings. However, their suppliers (ex. Eletronorte) and impacts (ex. mineroduto) are felt far beyond Barcarena. For example, Vale’s regional office in Belém is well placed to work with the state government and regional and state planning offices. Yet, the Programa De Desenvolvimento Fornecedores do Pará (PDF, or Suppliers’ Development Program in Pará)* that intends to build capacity in small and medium enterprises was little known by those company representatives with whom we spoke.

Albras and Alunorte, led by Vale, published their first sustainability reports in 2007, using Global Reporting Initiative G3 guidelines. In this report both companies note their very high management, labor and environmental standards, including independent third party SA8000,* ISO14001* and ISO9000* certifications, and their commitment to sustainable development and the environment. While Brazilian environmental and labor laws are adequate, enforcement mechanisms are often weak and lack resources (especially in licensing and public hearings—more on this in government key findings). Despite this, Albras and Alunorte have met higher than legal minimum standards to demonstrate their

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*This mineroduto is owned and operated by MRN and therefore the parent company, Vale.
* The PDF was developed by Vale, the state government and Federação das Indústrias do Estado do Pará (FIEPA, or Federation of Industries of Pará State)
* SA8000 is a global social accountability standard for decent working conditions, developed and overseen by Social Accountability International (SAI).
* ISO14000 is an environmental management standard developed to help organizations minimize their negative environmental externalities.
* ISO 9000 is a group of international standards of quality management practices.
commitment to sustainable environmental and labor practices. Minority shareholders, such as Norsk Hydro (34% of Albras, 2% of MRN), have often driven the implementation of higher standards, perhaps to meet their home country norms for environmental and labor standards.\textsuperscript{98} For example, Norsk Hydro (a 2% shareholder in MRN) was instrumental in holding MRN accountable for cleaning up of bauxite tailings dumped in Lake Batata, near MRN's mines. The Lake Batata incident also brought the importance of quality environmental management and licensing to the state government.\textsuperscript{99}

However, one Brazilian study suggests that these certifications do little to improve local sustainable development. They also suggest that mining companies' focus on sustainable development often translates into merely taking-up environmental and health and safety concerns, which fails to address social issues and other basic human rights questions.\textsuperscript{100}

If these companies were to leave Barcarena in the near future, the local economy would suffer dearly (if not collapse). While there is little danger of this happening (although layoffs and curtailed expansion plans due to the global economic slowdown and drop in commodity prices is a more valid concern), this illustrates the lack of sustainable development investment made by either company. Furthermore, local government and community have been unable or unwilling to effectively engage Albras and Alunorte in sustainable development and planning. Lastly, local government and communities themselves have been unable or unwilling to hold each other accountable for sustainable development planning and implementation.

Albras and Alunorte’s parent company Vale stated that it is planning to move away from a paternalistic philanthropy to an integrative, sustainable CSR model.\textsuperscript{101} As such Vale has begun cutting local budgets for philanthropic projects, including subsidizing unions' recreation activities. However, this message is only slowly being passed down the value chain and only minimally internalized at Albras and Alunorte (assuming Vale is serious about reforming its CSR practices). Company representatives spoke dismissively of local community groups, or did not see the potential to engage with these groups, particularly if these groups are poorly or not organized.

In 2006, under Vale’s guidance, Albras and Alunorte jointly convened a semiannual Social Responsibility Committee (CRS). However, this committee is only comprised of each company’s CEOs, executive officers and administrative managers. No union, government or community/CSO representatives are part of this committee, let alone have decision-making power. Annual Social Action Plans and biannual Survey of Social Aspects and Impacts guide the Social Responsibility Committee\textsuperscript{102} rather than direct participation by local government and communities affected by Albras and Alunorte’s operations and practices. Overall, we see a lack of strategic planning involving local and regional government.

\textsuperscript{98} Flanagan and Whiteman, 2005.
\textsuperscript{99} Switkes, p.6
\textsuperscript{100} Enriquez, 2007.
\textsuperscript{101} Campos, Jan. 2009
The Social Responsibility Committee is responsible for guiding planning and implementation of Albras and Alunorte’s CSR programs. These programs include third party supplier cooperatives, computer literacy programs, sports programs and support of local small-scale agriculture. While these programs are enjoyed by their participants and beneficiaries, the Social Responsibility Committee does not integrate these programs with broader community needs and local sustainable development planning.

Both companies have been involved in setting up a number of supplier cooperatives; however these cooperatives are dependent on the company for training, materials and new strategies for business development. The cooperative COOPSAI was organized by former employees of Albras and Alunorte to engage workers as service providers for the companies—gardening, recycling, dry cleaning, and janitorial work among others. COOPSAI’s “Our Waste Has a Future” program uses left over materials from company operations to produce small goods like shoes and toys, while also recycling and composting municipal and company waste. The cooperatives are perhaps the most striking case of the assistencialismo model at work. Because the cooperatives are dependent on the companies for growth, they have few independent resources, channels, experience or capacity to engage local government and/or other companies. Furthermore, when the cooperatives do establish external business projects including with local government, the local government often fails to hold up its end of the agreement, leaving Albras or Alunorte to keep projects afloat.

Albras and Alunorte are well established and the new alumina refining plant, the Companhia de Alumina do Pará (CAP) has already received the necessary extractive and environmental licenses needed to proceed with construction and operation. However, given the gaps between existing company practices and community needs, Vale and its subsidiaries have an opportunity work with local government and community to create a stronger license to grow (beyond just a license to operate), since it is clear that Vale is expanding operations in the area.

About 1000 km up the Amazon River from Barcarena, in western Pará, Alcoa is in the process of bringing online a new bauxite mine and alumina processing facility in Juruti. While we did not visit this site and only spoke briefly on the phone with Alcoa representatives, we did read Alcoa’s Sustainable Juruti: proposed model for local development report. Although we did not visit this site, we did read Alcoa’s Sustainable Juruti: proposed model for local development report. Alcoa in Juruti funds and coordinates a regularly convened, tripartite stakeholder council (government, unions, and civil society) and working groups focusing on key issues. While this process is still in its early stages, it is an important new project to monitor in order to understand how a more integral model of CSR can work and if it will be successful. Alcoa wants to sustainably approach this new project to establish itself as a leader in sustainable development in Brazil and the world.* A staff member of Instituto

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103 Center for Sustainability Studies of the Getulio Vargas Foundation, ALCOA, Brazilian Biodiversity Fund, 2008.
* Different internal drivers and communication channels between Alcoa and Vale is an area for further research.
Ethos suggested that Vale could also be a leader in sustainable development in Pará’s aluminum value chain if it were to adopt international norms on multi-stakeholder engagement and sustainable development.

B. Unions

Local unions promote assistencialismo, existing solely to perform social and financial activities that attack symptoms, not causes of social ills.

Union membership in Barcarena is dominated by two labor unions affiliated with the local aluminum companies. Sindicato dos Químicos do Barcarena (SindQuímicos) is the chemical workers’ union for employees of Alunorte while Sindicato dos Metalúrgicos do Barcarena (SIMEB) is the metal workers’ union for employees of Albras. Labor unions in Brazil are organized both geographically and by sector, preventing effective cross sectoral solidarity and bargaining. So, while Vale controls both Alunorte and Albras, unions at both companies rarely cooperate. Currently the two unions are very assistencialista. Elections in May 2007 brought into power the current leadership that is more pro-company, after too many union members saw the previous representation as too radical. For example, they provide only basic services to their members (such as access to the internet, fields for recreation and social activities), on top of negotiating for their members’ contracts, instead of tackling issues that arise in the workplace. The extent of their negotiations with the companies has been limited to increasing the value of lunch vouchers and better integrating people with disabilities – who represent only 5% of the workforce. Moreover, they do not provide capacity building on union, political or social issues.

These unions have inverted their primary relationship, shifting from worker representatives to company representatives, delivering corporate messages to the workers and communities in relation to issues that were susceptible to tension or conflict. For example, in the episode of Caipiri Beach Albras had been accused of dumping toxic waste in the river. Albras commissioned the union (SIMEB) to enquire as to what the real cause had been. SIMEB alleged that the communities rather than companies were responsible for dumping toxic substances in the river, which caused the death of the fish and subsequent loss of business for beach restaurants. Other local companies like Imerys (kaolin processing) are also thought by some to be responsible for polluting the river. More recently at the end of April 2009, IBAMA fined Alunorte R$5 million, with daily fines of R$50,000 until the leak of their tailing pond was fixed, for polluting the river. It is still unclear if these fines were related to the Caipiri Beach episode. However the fines show that there are still unresolved large environmental and community issues.

Despite what we have characterized as an assistencialismo model, one other informant shared with us that labor rights have been steadily improving during recent years. This resulted in an overall positive balance of advancement of benefits and rights for the workers of Albras. We were unable to discuss with workers (access was neither requested

104 Macias, Jan, 2009.
nor offered), but there seems to be no apparent discontent with this new direction of the unions. Moreover, the union leaders are clearly benefiting from this special relationship (in terms of influential authority as well as financially), even if it is at the detriment of neighboring communities’ interests.

Behind the competition for union leadership in Barcarena are two national union confederations striving for influence. The Central Única dos Trabalhadores (CUT, or Central Workers’ Union) has a regional office in Belém. Although it is very active in the state of Pará and previously maintained a presence in Barcarena, in May 2007 SIMEB and SindQuímicos switched affiliation from CUT to Força Sindical. The competition between labor confederations strengthens the companies’ power over unions.

Força Sindical was created as the “first group to have the courage to change the image of the workers union” in Brazil.107 This change is based on a new tendency of social adjustment that works to improve quality of life through compliance with the companies. Força Sindical also has a regional office in Belém and currently influences the direction of the two local unions in Barcarena. The competitive nature for local representation and the complexities of union politics in the state make the current situation unstable.

The current union leadership is complaisant with Albras and Alunorte’s demands. Nevertheless disagreements that could potentially intensify remain. The companies do not seem to be handling this situation preemptively nor conducting a social dialogue that could voice all opinions on matters of union representation and affiliation. Also, unorganized community groups or union members are not currently represented in any dialogue process conducted by companies.

The Sindicato dos Trabalhadores Rurais (Rural Workers’ Union) in Barcarena consists of many groups, from fisherman to fruit-pickers, who are currently marginalized in the community but are still impacted by the companies’ operations, particularly by environmental pollution. Currently their voices are not heard and they do not have a necessary outlet to discuss differences and maintain a dialogue with all actors.

C. Government

** Licensing responsibility is not explicitly distinguished between the different levels of government, and the enforcement of regulations is ignored for the promotion of economic growth through private investment.**

State and federal government offices involved in licensing and regulating industry, environment and labor are detailed in the following two charts. Government institutions in Pará are divided into local, state and federal institutions. Federal institutions are subordinated to the central executive power located in Brasília. At the state level, the executive power is exercised by the governor and advised by the secretaries of state. Finally, at the local level, the executive power is held by the Mayor (prefeitura) and assisted

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by the Municipal Secretaries. In our field research we were able to interview officials representing all three levels of government.

**Figure 5: Federal Government**

**Figure 6: State Government**

Throughout Pará’s history as a frontier area in Brazil’s Amazon region, the promotion of economic growth and development in the state has often exploited natural resources. State and federal governments have been unwilling or unable to effectively monitor and enforce regulations concerning environmental protection, labor rights and sustainable development. Furthermore, land owners, organized crime, corrupt officials and other powerful vested interests often blocked federal interventions.
The federal government also turned a blind eye to the impacts of resource exploitation, as these companies brought needed infrastructure investment and employment. The lack of energy utilities in the state led to federal encouragement of companies who would finance hydroelectric projects, like the Tucuruí dam (Brazil is known for providing “clean” energy through hydroelectricity). In return, the government offered large electricity subsidies to companies, as well as provided low cost financing for infrastructure investment from the state development bank. However, the resulting energy was often only provided to companies’ host municipalities, leaving rural areas without power. Furthermore, in the rush to promote development, the social and environmental impacts of large projects like dams were not fully considered or addressed.

In order to begin operations, companies must first obtain environmental and extractive licenses from both state and federal agencies:

IBAMA: Instituto Brasileiro de Meio Ambiente e Recursos Naturais (Brazilian Environmental Research Institute) is a federal institution with administrative and financial autonomy but subject to the authority of the Ministry of the Environment. IBAMA grants licenses to operate to companies and industries. However, according to Marcilio de Abreu Monteiro, former Superintendent at IBAMA, most licenses are granted by SEMA since Environmental Impact Assessments (EIA) is evaluated by SEMA.

SEMA: The Secretaria de Estado do Meio Ambiente (Secretary of State for the Environment) is the state licensing institution for activities that affect the environment and community dynamics in the state of Pará. Between SEMA (state) and IBAMA (federal), SEMA is stricter than IBAMA on observing norms and regulations because they have more detailed and complex requirements than IBAMA for granting the business operating licenses.

Both SEMA and IBAMA have concurrent and common actions. Although IBAMA was the agency that recently fined Alunorte for their leaking tail-pond, our research did not fully investigate the relationship between IBAMA and SEMA.* They both have inspection faculties and both institutions grant environmental licenses. Resolution No. 237, enacted by the Conselho Nacional do Meio Ambiente (CONAMA – National Council for the Environment) under IBAMA, classifies investments and grants licensing faculties to either municipalities, the state (SEMA) or the federal government (IBAMA). Unfortunately there is no clear legal definition of these institutions’ responsibilities, due to the fact the Brazilian Constitution has not been explicit. During the team’s first interview trip in January, we obtained information from the Director of Communications at Albras, that IBAMA has no part of the licensing process of Albras. However, during the March field trip the former Superintendent of IBAMA, and the Director of Conservation at SEMA, said licensing was a requirement of both IBAMA and SEMA. We see this discrepancy of statements between a company and a government representative as a result of a lack of accurate information.

According to the Director of Conservation at SEMA in Belém, Pará faces many environmental problems due to the increase in economic migration from Maranhão, Goiás

* An area for further research.
and other states. This migration occurs in response to projects at all stages of the aluminum value chain. The Director of Conservation is convinced that this is the main reason for the destruction of Pará’s forests. However, it is impossible to stop migration because the constitution of Brazil does not allow restriction of movement. We found that a key issue is the fact that environmental regulations are enforced because the entire country is quite opinionated about the situation of the rainforests. However, social issues across the aluminum value chain are perceived as “local” problems. Therefore, social issues are accorded much less importance and enforcement from national government and society. The director also stated that the problem of deforestation in Pará is very acute. Currently 83% of the state’s natural areas are preserved and only 17% are inhabited. He estimated that in the future inhabited areas would rise to 35%, increasing deforestation and environmental degradation.

Since her election as Governor of Pará in 2006, Ana Júlia Carepa – of President Lula’s Workers’ Party (PT) – has attempted to balance continued investment in Pará with growing environmental and social concerns. According to Alexandre Abati, Coordinator for the Promotion of Competitiveness at SEDECT (Secretary of State for Development, Science and Technology), Ana Júlia’s objectives are to achieve a transfer of benefits from the companies to the society through the performance of social projects not necessarily related to their business operations. However, although she is affiliated with the center-left PT she has been criticized by some108 for being too pro-industry by approving projects with a high environment impact, such as the Belo Monte dam, or favoring industry interests over those of the populations (for example, in terms of electricity provision, as well as allocating public resources for company growth).

While both private and public investment is desired the latter is favored by the current PT government. Since Ana Júlia entered office, her government has implemented a new fiscal incentive scheme for the private sector. The government hopes to both encourage continued extractive investment in the state while slowly increasing state tax revenues and address social concerns.

Alexandre Abati, at SEDECT, explained that in the 1980s the state of Pará granted open-ended fiscal incentives to multinational companies with the objective of attracting investment to the region. The federal government enacted the “Kandyr Law” which exempted exporting (including extractive) companies from paying export taxes and fees up to 100% of the total value of exports and for an unlimited period of time. Such exemptions generated fiscal credit for the company that could be applied toward income taxes and other fees (like Value Added Tax). Because companies accumulated such large fiscal credits, many ended up paying no state or federal income tax.

As a counterweight to the federal law, Ana Júlia’s government has developed a scheme based on the federal “Vale Law” of 2000. This state law aims to benefit extractive companies (engaged in distribution and sale of minerals in the state) by deferring payment of the state income tax for only up to 15 years. In this manner, the state’s objective is to

end the open-ended accumulation of fiscal credits by companies and move them toward paying state taxes after fifteen years. This new scheme will only apply to new investments after 2007 in Pará and will not be retroactive. The addition of time limits to fiscal incentives is a key component of Ana Júlia’s scheme and a big break from past policy.

Concurrently with the new incentive scheme SEDECT has established a “naming and shaming” blacklist to keep a record of companies’ compliance with labor and environmental standards. However, non-compliance will only have a reputational risk – companies will not lose state tax incentives if they are blacklisted. SEDECT stressed that the new policies are part of a process rather than an end. The program is still new so the team did not hear the companies’ perspective nor hear about any repercussions.

SEDECT also strengthens the role of local suppliers through the Programa De Desenvolvimento Fornecedores do Pará (PDF). The objective of this program is to build capacity in small and medium enterprises (SMEs) to increase competitiveness at the national and international level. The PDF program is currently being extended to the aluminum chain as SEDECT is now working with a handful of local SMEs; however it is too soon to know the impact of the PDF on adding value to the aluminum value chain in Pará. On the other hand, Albras and Alunorte have also invested resources into developing SMEs through the third party suppliers organized as cooperatives. However these cooperatives are not involved yet with the PDF program.

One of the legal and public interest regulatory bodies over many SMEs, cooperatives and companies is the Núcleo de Meio Ambiente (NUMA, or the Center for the Environment), which is part of the Ministério Público (or Office of the Attorney General). NUMA is considered a “public prosecutor for the environment” and has jurisdiction over the entire state of Pará. Although its most important role consists of public interest actions* and monitoring of the federal government, it does not have sufficient financial and human resources to carry out its duties fully. Raimundo Moraes, the Public Prosecutor for the Environment, believes that if public prosecutors based in the municipalities would focus on environmental issues and in monitoring the mining companies, the crime levels in Barcarena and Belém would likely decrease. He is convinced that increases in crime in Barcarena are due to migration of workers and their families from other states and even from other countries, such as Suriname and Guyana. These crimes include both common crimes, such as illegal land squatting as well as environmental crimes, like illegal logging (often to clear land for agriculture and ranching) and extraction (particularly problematic are garimperos, or informal sector miners).

Companies such as Albras and Alunorte present an Environmental Impact Assessment (EIA) report to the community and the local government. This report shows the

* Public Interest is the set of legal practices and strategies whose aim is to use the law as a mechanism of social transformation. Public interest action has as final goals the protection of the collective welfare, the promotion of human rights and social justice. (Definition taken from Pontificia Universidad Catolica del Peru. Clinica de Acciones de Interes Publico. School of Law., 2009.

environmental feasibility of projects in terms of the impact on the natural environment, protection of water resources, the natural dynamics of the forest, as well as the impact on public policy. According to Raimundo Moraes, the impact of these types of projects in Barcarena is so strong that it alters the dynamics of production in the neighboring communities and could put at risk their public safety and health.110

Public participation by communities in the evaluation of the Environmental Impact Assessment is encouraged by the state and federal governments through public hearings. For companies to obtain their primary operational license from IBAMA and SEMA there must be a mandatory public hearing. However, IBAMA and SEMA only grant operating licenses for the initial project. As a result, companies often only make small-scale initial proposals that may not fully reflect their planned operations. After their original licenses are granted, the same companies present expansion proposals for their operations, when public hearings and new environmental impact assessments are not required.

Local communities do not have enough capacity to discuss public interest issues that affect their environment and their natural resources. Albras and Alunorte require communities to be organized in associations or cooperatives, for them to hire their services for outsourcing activities. According to the Public Prosecutor, there is a lack of local capacity building and development of local civil society organizations. Albras and Alunorte’s local community investment is philanthropic rather than a strategic use of funds to develop sustainable civil society groups and increase employment in Barcarena.

Albras and Alunorte also spend resources on collective bargaining with local unions. In Pará, the state agency for labor relations is the Delegacia Regional do Trabalho (or Regional Labor Delegation), which is the regional representative of the Ministério do Trabalho e Emprego (or Ministry of Labor). While the Pará offices are located in Belém, it does not have offices in Barcarena due to a lack of financial and human resources. According to the head of Labor Relations, the current situation of labor negotiations in Barcarena is sufficient, as workers already receive necessary resources from Albras, Alunorte and other companies in the area. The local workers in Barcarena are similarly not interested in the government’s help, possibly because they prefer to negotiate directly with the companies.

Finally, the state energy utility, Eletronorte, is another important federal institution contributing to alumina and aluminum production. Eletronorte was created in 1963 to attract investment by supplying energy to large extractive industries in the Amazon – an area previously scarce in energy supply. Concurrently, during the 1970s, the companies that received energy from the federal government were also very influential in expanding investments in energy projects. This led to a mutual dependency between the energy company of Eletronorte and the extractive industries. Lack of government oversight, coupled with lack of government resources, led companies to invest in self-benefiting infrastructure projects concentrated in the small metropolitan area around Belém. Consequently, rural areas did not have access to the power supplied by these energy plants. However, in 2004 Eletronorte began investing in projects to reach these marginalized

110 Moraes, 2009.
areas. During our January field trip the team interviewed Claudio Ney, the coordinator of the *Luz para Todos* program. He explained that the program provided electricity to the poorer population in rural areas. The *Luz para Todos* program represents one of the first efforts by the federal government to provide electricity to those underserved rural areas.¹¹¹

At the local level the government has shown a lack of accountability to its communities by failing to provide basic public services. A new local government, *in office since the end of 2008*, was engaged at the time of our interviews in drafting a development strategy. Previous development plans did not consider areas outside of the immediate municipality and did not include the voice of the community. Public opinion of the current municipal government is high, but this could possibly be a result of the limited time that these new representatives have been in office.

**D. Community**

*Dependency on companies for the provision of social services has rendered the Barcarena community unorganized, voiceless and weak.*

The area surrounding the aluminum plants of Albras and Alunorte, within the municipality of Barcarena, includes but is not limited to the towns of Barcarena, Vila dos Cabanos and San Francisco. The growth of these towns was spurred by the construction of Albras and Alunorte in 1978. In order to attract a skilled workforce to the area Albras and Alunorte provided housing by building the company town of Vila dos Cabanos. Over time the towns melded together, however the majority of residents are still company employees. At the beginning of all new large projects like Albras and Alunorte there is a great influx of migrant workers causing towns to expand without necessary or sufficient infrastructure. These three towns in the Barcarena municipality and surrounding communities grew exponentially. With the new project of CAP possibly coming to the area, further migration issues will arise.

Due to the culture of *assistencialismo* and the history of attracting workers to this area Albras and Alunorte provided the local community with all their basic needs and social services. Initially the local government delegated the responsibility to ensure all public services, including infrastructure, to the companies. This caused the companies to construct most, if not all, of the local infrastructure and services. When infrastructure or services were needed the community and workers approached management of the company to address the situation. Alunorte and Albras even continue to provide social workers to address worker issues and make sure community and individual worker problems are addressed.¹¹² The continual provision of services has built a culture of dependency.

¹¹¹ Ney, Jan. 2009.
¹¹² Madeiro, 2009.
A history of local dependency on the companies’ royalties and assistance has led to a lack of growth of civil action and cohesion. The companies require organizations to be constituted as such before engaging in any collaborative relationship (be it as suppliers, cooperatives, or as partners in implementing development programs), which results in a significant reduction of qualified groups.

This lack of local grassroots organizations caused a weak social infrastructure in these communities. Albras, Alunorte and some of the other companies in the area including Alubar (aluminum products), Pará Pigmentos (kaolin extraction) and Imerys (kaolin processing) have stepped in to fill this gap. As such, very few local civil society organizations have established international partnerships. Although environmental action to fight the depletion of natural resources in the Amazon has received substantial international support, this has not always been oriented towards the sustainable development of the region, but rather merely focused on ending extractive exploitation.

Only two third-party suppliers have been established to provide manufacturing or local services, COOPSAI and the Cooperativa do San Francisco. Both of these cooperatives are projects initiated by the companies to try to establish local infrastructure. Yet these projects are still reliant on the services, material and organization abilities of Albras and Alunorte. Other local grassroots groups such as the fisherman of Caipiri and community residents are poorly organized with little leadership. As such, it was difficult to contact these groups during the team’s field visits.

**E. Organized Civil Society**

*Civil society organizations with broader scope and resources are integral to potentially providing representation to voiceless communities, liaising with companies and advancing the team’s recommendations for social dialogue.*

Due to the weak social fabric of the local community and lack of civil society organizations, regional and national organizations have begun to fill the void in Barcarena and surrounding communities. Many are interested in engaging the local community, but recognize the lack of social tissue as a serious obstacle. Consulting firms, NGOs, CSOs and think tanks at the regional, state and national level have knowledge and expertise of the aluminum industry and how to facilitate change.

*Movimento dos Trabalhadores Rurais Sem Terra* (MST, or Landless Workers’ Movement) works on advancing community and land use rights across Brazil. In the state of Pará, they work closely with the *Movimento dos Atingidos por Barragens* (MAB, or Dam Affected Peoples’ Movement) to ensure that infrastructure projects don’t disrupt local livelihoods. Having supported protest actions against companies (mainly around Vale’s iron-ore operations in the Carajás region), the MST has been publicly criminalized by both media and corporations, as their coordinator in Belém stated. MST wishes to ensure that Vale increases the value added to extracted resources in Pará instead of exporting them minimally processed. This would provide employment opportunities to local communities across Vale’s vertical supply chain. They also ask Vale and other companies to address the social and environmental impacts, both direct and indirect, on neighboring communities.
MST, in agreement with CUT, claims that the government does not voice concern to the companies.

Instituto Peabiru is working on a stakeholder engagement project with Alcoa in the bauxite mining community of Juruti. This community demonstrates many of the same struggles seen in Barcarena and is part of a vertical supply chain controlled by Alcoa rather than Vale. This shows how social tissue and dependency issues are common across Pará and may be pervasive throughout the aluminum value chain. Instituto Peabiru is engaged with the local community but is also funded on a project basis by Alcoa. Therefore, their claim to be an NGO is genuine in commitment but limited. In their work on corporate contracts they first diagnose the situation and then, with company approval and strategic planning, they engage the community to address the problem. Through their work in Juruti, Instituto Peabiru has developed expertise on issues facing communities along aluminum value chains.

In São Paulo there are multiple other consulting firms that do not have specific experience with the aluminum value chain in Pará, but do have experience with other Brazilian extractive industries, such as iron-ore. The consulting firm of Business, Sustainability, Development (BSD) and the NGO Instituto Ethos work with companies in implementing CSR and stakeholder engagement strategies. Instituto Ethos and Instituto Peabiru share a similar methodology of working with companies to address issues rather than outright “shaming and blaming”.

Some of these NGOs or consultants have been established to help companies develop strategic plans in managing their businesses in a socially responsible and sustainable way. Part of the shift towards an integral CSR model is by having an external party do professionalized CSR planning and strategizing. The outside organizations work to determine the best and the most ethical policies and practices to implement on behalf of the company and the communities.

A few individuals, such as the journalist Lúcio Flávio Pinto or Professor Maurilio de Albreu Monteiro – professor at the Universidade Federal do Pará (UFPA, or the Federal University of Pará) and current Secretary of the State for SEDECT – have raised voices against the meager contribution of the aluminum industries to the sustainable development of the state of Pará. We found no connections between these persons and the companies, although the latter were aware of their advocacy work.

Therefore these stakeholders, including IOS/CAENI, will facilitate the advancement of the team’s recommendations to move towards leveling the playing field, reach greater equality in stakeholders’ relations, and establish an ongoing dialogue amongst the stakeholders of Barcarena and other communities along the aluminum value chain.

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V. RECOMMENDATIONS

We have identified, through the stakeholder mapping and analysis, challenges and opportunities that arise both from the inherent nature and goals of the various stakeholders and from the relations among them. Despite the conflictive goals of some stakeholders, we discovered a consensus on the need for dialogue in addressing outstanding issues in order to prevent the rise of future tensions.

There have been several efforts in the past to build a social dialogue, such as the Forúm Carajás and the Forúm Amazônia Sustentável. While Vale, for example, was involved in both of these forums, many of the issues that were addressed still persist. This leads us to conclude that these initiatives have been insufficient in addressing stakeholders’ concerns. There are several factors why this form of social dialogue was ineffective, but the primary reason stems from the unequal leverage of the various actors’ involved due to their different roles and status in society, as well as their capacity to influence decision-making.

Therefore, we see effective dialogue happening not as a formal “around-the-table” forum but rather as a series of activities that will aim at leveling the playing field. These activities range from training and enhancing capacities of local associations and media (social), to increasing local content* across the value chain (business), and advocating for legislative reform and monitoring mechanisms (policy).

We have organized the recommendations section by stakeholder and have subdivided each group into goals and interventions. Nevertheless, implementation should be holistic and coordinated. Failure to do so could result in deepening inequalities. We have included partnerships as a separate section, for the benefit of all stakeholders involved. All recommendations address both national and international actors (such as shareholders and international civil society networks and organizations). Finally, we have highlighted some monitoring and evaluation tools and indicators for the successful implementation of the team’s recommendations.

1. Goals and Interventions

A. To IOS and CAENI:

The goals are:

1. Assume a role in the progression of social dialogue around the aluminum industry that corresponds to the clients’ mission and resources;
2. Develop alliances and networks to further social dialogue around the aluminum industry at domestic and global levels.

To achieve these goals the team suggests the following interventions:

- Build alliances with agents on the ground for implementation: identify actors as local liaisons and provide incentives to these liaisons with linkages to

* Local content refers to local suppliers and human resources
international and national networks; facilitate access to information on available resources as well as resource mobilization techniques;

- Collaborate with unions regardless of political orientation/agenda, providing them either direct assistance (capacity building, facilitating dialogue with other actors) or indirect assistance (information about existing resources);
- Engage with organized CSOs and local authorities to mutually increase capacity;
- Partner with international shareholders (ex: Norsk Hydro) that have capacity to encourage stronger CSR/sustainable development practices;
- Allocate resources for Monitoring & Evaluation in the implementation of these recommendations;
- Broadly disseminate findings and recommendations around the aluminum sector (see partnerships section).

B. To companies:
The goals are:

(1) Move away from a paternalistic CSR and engagement model toward an integral, sustainable model, moving past environment issues and including socio-economic and other impacts;
(2) Increase transparency.

To achieve these goals the team suggests the following interventions:

- View an integral CSR model, including participatory planning and stakeholder engagement, not as an added cost but as a shift of costs from philanthropy, service provision and public relations to empowering local governments and communities to bring more resources to the table when dealing with companies. This view fits in with Vale's stated desire to cut philanthropic costs and move to an integral CSR model;
- Plan CSR with input and decision-making from community, union and local government and involve these stakeholders in the Social Responsibility Committee;
- Identify synergies with state and municipal development plans, to see how their actions are aiding or preventing the success of these plans;
- Collaborate in the development planning process, without leading or influencing it in any way;
- Advocate for obtaining a social license to operate, according to internationally recognized standards, from local and national actors;
- Work with local government and community to create a stronger license to operate and grow (since Vale is clearly expanding operations in the area);
- Increase communication with regional and state government by holding monthly informational meetings during which mutual concerns could be raised and tackled (senior, decision-making management needs to be involved);
- Improve the disclosure of their CFEM (royalty tax) and lead the way for authorities to work in the same direction. Companies should join
international initiatives such as EITI* as well as work for additional international certification, both for auto-regulation purposes and to gain moral authority before communities;

• Make use of human rights standards* that can guide strategic planning and use Rights Based Approach tools in evaluating their social performance. They should ask for technical assistance from qualified national (e.g. Instituto Ethos and Instituto Peabiru) and international (e.g. BSD Consulting) organizations, building leveraged partnerships (not based on grants but on service provision).

C. To unions:
The goals are:

(1) Move away from the provision of social services towards advocating for workers’ rights;
(2) Shift alliances towards community organization, moving away from alliances with companies that create further dependency and impede dialogue.

To achieve these goals the team suggests the following interventions:

• Promote dialogue with CUT and FS in order to benefit from their capacity-building actions for labor rights advocacy;
• Promote dialogue and cooperation between SIMEB and SindQuímicos and across sectors and regions generally;
• Build alliances with community organizations: survey and connect via existing forums, promoting dialogue and the exchange of experiences;
• Build international alliances with foreign unions through CUT/ IOS;
• Increase workers’ affiliation rates by addressing their concerns in regards to the company’s impact on their livelihoods (not related to public or private service provision).

D. To state and local authorities:
The goals are:

(1) Adopt a strategic development planning approach (with regional and participatory dimensions);
(2) Support civil society (organized NGOS and unorganized community groups);
(3) Increase support to SMEs and cooperativas through fiscal policies and cooperation with existing government programs.

* The Extractive Industries Transparency Initiative (EITI) supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining.
* For example, companies can use ILO core standards, international standards on sustainable development, etc.
To achieve these goals the team suggests the following interventions:

• Act as the elected representative of civil society by informing the general public on available resources to organize or scale-up existing groups and train existing groups on association building, planning tools and resource mobilization;
• Improve public participation by requiring mandatory hearings for all industry expansions and increase civil society and community input by establishing a pre-determined agenda and equal speaking times;
• Strengthen the suppliers' program, Programa de Desenvolvimento de Fornecedores do Pará (PDF), by expanding both its reach and scope, improve information to potential suppliers and work closely with small and medium enterprises located in the direct sphere of influence of companies in the aluminum value chain; re-establish regular meetings to outline and readjust/improve strategy and to improve periodic assessments of how suppliers are meeting current requirements. This can only be achieved by appointing specific persons to manage the program thus allocating more resources, defining monitoring mechanisms (building accountability) and turning it into a demand-driven program rather than top-down program; cooperatives should be included in the meetings with decision-making power (giving them voice);
• Identify and develop synergies with state programs like PDF and existing national programs like SEBRAE (Support to Small and Medium Enterprises) and SENAI (National Industrial Apprenticeship Program);
• Create local development plans for urban centers of more than twenty thousand people, by law, in line with state development plans and follow the needs identified in participatory sessions with all representatives from society. In order to avoid shopping lists, ask for strategically planned documents from each organization;
• Examine the impact of the aluminum industry in development planning;
• Identify areas that need further legal definition and inform all stakeholders of their new obligations;
• Allocate additional resources for monitoring compliance with existing regulations, establish a transparent and objective system of sanctions, plan for a phase out of tax exemptions, disseminate information on new bidding system for electricity contracts;
• Increase transparency of administrative work with Internet portals and information campaigns.

E. To organized civil society (NGOs, associations, cooperatives)

The goals are:

(1) Build and strengthen networks and alliances (both international and national) to increase capacity;
(2) Mobilize (international and national) resources for network building;
(3) Identify partnerships and move beyond partisanships.
To achieve these goals the team suggests the following **interventions**:

- Build alliances with unions and together form a common front since they both advocate to achieve greater respect for the rights of workers and communities at large;
- Allocate more resources for staff training;
- Strengthen public communication (web sites, conferences, forum);
- Redefine principles realistically, adapting them to the current state of affairs so as to avoid loss of community/grassroots support.

**F. To organized civil society:**

The **goals** are:

1. Gain access to non-organized communities;
2. Assist non-organized communities in gaining visibility/raising voice.

To achieve these goals the team suggests the following **interventions**:

- Promote and defend the concerns raised by the community;
- Organize by geographical area or activity areas (clusters) so as to gain leverage before authorities and companies;
- Elect a spokesperson who will act as a bridge to those organizations and make sure his or her voice is heard;
- Address any standing legal issues to local or international NGOs that can provide free legal support;
- Promote smaller, grass-roots unions like the *Sindicato dos Trabalhadores Rurais* (Rural Workers’ Union);
- Participate in local public hearings in an organized manner by preparing issue briefs beforehand and electing one spokesperson to speak at hearings.

**2. Partnerships**

It is important that IOS/CAENI ensures proper monitoring of the implementation of the interventions and recommendations given in this report. As it is impossible for a single organization to ensure such task, IOS/CAENI will have to extend and deepen its alliances and networks, collaboratively and transparently with other organized civil society actors.

Also, because IOS/CAENI’s area of expertise is labor rights, they should avoid replicating the expertise of others. Instead, IOS/CAENI should partner with organizations such as *Instituto Ethos*, BSD, MST and others in order to create synergies around complementary areas of expertise.

Transparency and open dissemination of information will be crucial to creating successful partnerships and synergies. IOS/CAENI should thus play a role of coordinator, making sure that concerns are addressed across the board and activities of multiple partners do not overlap or have undesired effects.
**Movimento dos Trabalhadores Rurais Sem Terra (MST)**

The *Movimento Sem Terra* (MST) is currently one of the few voices defending the rights of small communities before the practices of extractive industries. Nevertheless, its public image has not allowed it to engage in productive alliances. MST needs to revise those alliances, disengage from the use of force and build on its knowledge of social, political and economic issues. If MST wishes to be a respected player in social dialogue, it should consolidate and enlarge its social base through strategic alliances with more moderate sectors of society.

**Instituto Ethos**

This organization has substantive experience working with extractive industries in stakeholder engagement. As such, it has built good relationships with companies and has insight into how company CSR strategies are defined and implemented.

**Business, Sustainability, Development (BSD)**

They have experience in stakeholder analysis that can further this research. They can mobilize international and national support to continue this work and assist in monitoring the implementation of these recommendations by partnering with IOS/CAENI. Their work on accountability standards monitoring and in developing methodologies for stakeholder engagement could be of service to the implementation agents on the ground.

**Instituto Peabiru**

This NGO can contribute significantly as they have already been working on stakeholder engagement and social dialogue issues in Brazil’s aluminum industry. They have helped to establish Alcoa’s program in Juruti, incorporating stakeholder engagement best practices. Moreover, they have been working with Albras and the cooperative COOPSAI to expand the cooperative in order to increase local community capacity.

**Academia [Núcleo de Altos Estudos Amazônicos (NAEA- Center for Advanced Amazonian Studies), Universidad Federal do Pará (UFP), Instituto de Ciencias Sociais Aplicadas (ICSA – Institute for Applied Social Sciences)]**

These academic institutions have played an essential role in scientific research and knowledge dissemination. We have observed, nevertheless, that they are not widely known nor mentioned outside of Belém. They need to be further internationalized, by building more contacts such as IOS/CAENI and other United States based or European Union based academic institutions. At the local level, they should be participants in any social forum as an objective source of information.

**Media**

Media is incapable of fulfilling its role as society watchdog – reinforcing government accountability through denunciation – mainly due to its financial dependency on corporations with whom the government is more or less aligned. Media needs to move away from that dependency and be autonomous. Mobilization of public resources as well as market-based initiatives should be looked into as possible solutions. Media should reinforce its networking and alliances at the national and international level. Actors such as
shareholders of mining companies, like Norsk Hydro, that have traditionally been more supportive of international social norms could be useful allies in the pursuit of their independence.

3. Tools and Indicators
We have researched existing indicators and tools that will help IOS/CAENI and its partners to evaluate progress and success in implementing the recommendations made in this report.

A. AA1000

AA1000 Stakeholder Engagement Standard (AA1000SES) was developed in 2005 by AccountAbility, a London based NGO. This standard provides guidelines to organizations to create robust, sustainable, continuously improving stakeholder engagement. Groups like BSD Consulting use this standard in designing stakeholder engagement and CSR programs for companies like Petrobras, Samarco Mineracão and Holcim Brazil.114

![AA1000 Materiality diagram](image)

In conjunction with UN Environmental Program (UNEP), AccountAbility also developed a Stakeholder Engagement Guidebook for use in implementing the AA1000 Standard, as well as templates for practitioners.

B. Social Return on Investment (SROI)

“SROI analysis is a process of understanding, measuring and reporting on the social, environmental and economic value that is being created by an organization.” The SROI model our team used was developed by the NEF Foundation and incorporated elements of cost-benefit analysis, social accounting and social auditing. SROI uses elements of cost

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114 Grueninger, Jan. 2009.
benefit analysis to develop financial indicators and proxies by which one can measure financial return on investment of social projects. SROI can be used by public and private sector organizations – any group that creates, invests in or procures social value\textsuperscript{115}. SROI can be used by IOS/CAENI and other stakeholders to measure the impact of their interventions in Barcarena, including conducting a social dialogue and engaging in local stakeholder capacity building. Ideally, an SROI analysis will indicate a positive return on investment of resources (time, money) for participants in a social dialogue and will provide positive incentives for participation.

C. Instituto Ethos Social Responsibility Indicators

*Instituto Ethos* has developed a set of CSR indicators for corporate social auditing. Furthermore, Ethos has also developed industry specific indicators, including those for the extractive industry. In addition, Ethos manages a repository of best practices, social reporting guidelines, indicators for the Global Compact and a helpful guide to integrating the numerous international and national social responsibility indicators and reporting guidelines, including Ethos’ own\textsuperscript{116}. Ethos has worked with both Vale and Alcoa on major projects – including the *Forúm Amazônia Sustentável*. Because of Ethos’ existing working relationships with these companies, it is well placed to partner with Vale in the Barcarena region.

D. IBASE Balanço Social

*Instituto Brasileiro de Análises Sociais e Econômicas* (IBASE, or Brazilian Institute for Social and Economic Analysis) is an NGO that developed its own social audit model in 1997\textsuperscript{117}. IBASE’s model is the most commonly adopted social responsibility audit process in Brazil\textsuperscript{118}.

\begin{footnotesize}
\begin{enumerate}
\item The New Economics Foundation, 2008.
\item Instituto Ethos, n.d.
\item Balanço Social, n.d. IBASE, n.d.
\item Enriquez, 2007.
\end{enumerate}
\end{footnotesize}
VI. BIBLIOGRAPHY


—. Sustainability report. Barcarena, Pará.


—. Sustainability report. Barcarena, Pará.


Campos, Paulo Ivan de Faria, interview by Claire Kells, Tania Ortiz de Zuniga and Brandon Thompson. *Interview with Albras* (Jan 14, 2009).


Claudio, Mr. Luiz, interview by Tania Ortiz de Zuniga and Brandon Thompson. *Interview of Municipal Arvoador* (Jan 9, 2009).


Germano, Vera, interview by Noelia Cornejo and Stacey Roen. *Interview of COOPSAI* Belém, Pará, (March 20, 2009).

Grueninger, Beat, interview by Claire Kells. "Managing Director." *BSD (Business, Sustainability, Development) Consulting, Brazil.* (Jan 8, 2009).


Macias, Lucio, interview by Tania Ortiz de Zuniga and Brandon Thompson. *SIMEB, Metal Workers Union* (Jan 9, 2009).


Manacas, Ulisses, interview by Brandon Thompson, Tania Ortiz de Zuniga and Claire Kells. *Movimiento dos Trabalhadores Rurais Sem Terra.* (January 16, 2009).


Monteiro, Marcilio de Abreu, interview by Noelia Cornejo and Stacey Roen. *Interview of State Secretary for Strategic Projects.* Belém, Pará, (March 18, 2009).


Ney, Claudio, interview by Claire Kells, Tania Ortiz de Zuniga and Brandon Thompson. "Coordinator of the “Luz para Todos” program." *Eletronorte.* (January 14, 2009).


Paulo Itacarambi, Instituto Ethos, Sao Paulo, interview by Claire Kells and Joao Paulo Candia Vega. *Executive Vice President* (Jan 9, 2009).


Salame, Salim de Novais, interview by Tania Ortiz de Zuniga and Brandon Thompson. "President." *SindQuímicos de Barcarena*. (Jan 9, 2009).


Secretary General of the Confederation of Extractive Industry Workers, Interview by Claire Kells, Sao Paulo. (Jan 8, 2009).


### VII. APPENDIX

#### 1. Gantt Chart

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<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
<th>Description</th>
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<td>3/2/2020</td>
<td>2 weeks</td>
<td>First major milestone for project 1</td>
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<td>Final major milestone for project 1</td>
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<td>Task 4</td>
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**Legend:**
- Blue: Project 1
- Green: Project 2
- Red: Project 3

*Note: Dates are arbitrary for illustration purposes.*
## 2. Key Informants

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<tr>
<th>Organization</th>
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<tbody>
<tr>
<td>Margaret Keck</td>
<td>Professor of Political Science</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Glauco Arbix</td>
<td>Visiting Professor</td>
<td>Columbia University</td>
</tr>
<tr>
<td>Thomas Trebat</td>
<td>Professor and Executive Director of the Institute of Latin American Studies</td>
<td>Columbia University</td>
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<tr>
<td>Gutemberg Guerra</td>
<td>Visiting Scholar</td>
<td>Columbia University</td>
</tr>
<tr>
<td>Mark Barenberg</td>
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<tr>
<td>Jenik Radon</td>
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<td>Gay Seidman</td>
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<td>Ingrid Anderson</td>
<td>Program Officer</td>
<td>Revenue Watch Institute</td>
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<tr>
<td>Elena Arengo</td>
<td>Latin America Program Officer</td>
<td>Social Accountability International</td>
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<tr>
<td>Julia Nelson</td>
<td>Manager, Energy &amp; Extractives Practice</td>
<td>Business for Social Responsibility</td>
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<td>Alejandra Martin</td>
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<tr>
<td>Christina Enotiades</td>
<td>Standards Coordinator</td>
<td>AccountAbility</td>
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<tr>
<td>Maria Lucia Vilmar</td>
<td>Researcher</td>
<td>IOS</td>
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<td>Raimunda Rodrigues</td>
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### 3. January Field Interviews

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<td>Museu Paráense</td>
<td>Director, Managing Director, Secretary-General</td>
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<td></td>
<td>Business, Sustainability, Development (BSD) Consulting Confederation of Extractive Industry Workers</td>
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<td><em>Instituto de Ciencias Sociais Aplicadas</em></td>
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<td>3/18/2009</td>
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<td>Ministerio Publico (NUMA-Nucleo de Meio Ambiente)</td>
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<td>3/20/2009</td>
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<td>Director</td>
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<td>DIEESE: Pará chapter</td>
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<td>3/25/2009</td>
<td>Lucio Flavio Pinto <em>(Jornal Pessoal)</em></td>
<td>Journalist</td>
<td>Belém</td>
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5. Stakeholder Map (see attachment)