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**A SUSTAINABLE CSR INSTRUMENT FOR THE BRAZILIAN
MINING SECTOR**

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A SUSTAINABLE CSR INSTRUMENT FOR THE BRAZILIAN MINING SECTOR ¹

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Abstract

We develop a double proposal: a shift in the COP* efforts and output coupled with a deeper and more effective incorporation of the sustainability dimension in CSR. The mining sector in Brazil is the testing field for this endeavour, through specially designed corporate codes of conduct for the sector. The shift amounts to giving room to bottom-up agreements in which the Conference would exert a co-ordinating role, the measures being meaningless without the full engagement of the related actors. The codes of conduct follow a flexible and customised structure for answering sustainability demands. The methodology can be applied to a variety of significant groups of actors and situations; it can also be a factor for enlarging the scope of CSR instruments, bringing, at the side of traditional dimensions like labour and concerns for the communities involved, an explicit sustainability dimension. The approach can be spread to other countries and partners, enlarging its positive externalities and providing grounds for improvements and complements.

* Conference of the Parties to the United Nations Framework Convention on Climate Change.

Keywords: COP21, bottom up measures, Brazil, mining sector, sustainability, corporate social responsibility, corporate codes of conduct.

1. Introduction.

This Chapter introduces the sustainability issue in Corporate Social Responsibility (CSR) instruments. Though something that in principle makes sense for every country, Brazil is particularly suited to this combination. From one side, it stands, if not exactly a model, as a member of the top tier in environmental and sustainability endeavours; from the other, though offering interesting examples of CSR efforts, these need to be expanded to incorporate novel demands or existing gaps in the present systems.

The mining sector appears as especially adequate for a proposal in this line, and it is the focus of the present text. The recent tragic landslide in the Rio Doce Valley³ clearly shows that, beyond several other measures, more is needed from the side of the sector itself.

Indeed, the linkage advocated here inserts itself into a broader framework of effectively engaging the productive sector in the solution set for the climate change riddle; a point we have been supporting in different fora⁴.

In the light of this challenge, the structure of the Chapter is as follows. Section 2 briefly discusses the methodologies and solutions proposed by the annual COPs⁵. This is important, because we fight for a more intensive use of bottom-up initiatives, something that may revert failures and speed up other results related to the present approaches adopted in the COPs, as we try to highlight in the section.

Then, in section 3, discussion moves to the CSR instrument proposed, Corporate Codes of Conduct (CCC), which are reviewed in a way suitable to our objectives. This extends to the next section, where points akin to the sector at stake are highlighted.

³ On November 5, 2015, a massive landslide from a collapsed dam from the mining company Samarco provoked devastating floods in the Rio Doce Valley, in Brazil. The accident is considered the biggest environmental catastrophe in the history of the country. Other chapters in this book also address this issue.

⁴ Since, at least, the ‘Partnerships for Financing Equitable & Effective Climate Action’ seminar, Paris, July 15-16, 2015, jointly organised by ORF/India and FGV/Brazil, under the sponsorship of the *Ministère des Affaires Étrangères et du Développement International/République Française*, and GIZ/Deutschland.

⁵ COP is the (annual) Conference of the Parties to the United Nations Framework Convention on Climate Change.

These three sections set the background for section 5, the core of the Chapter, where the proposal for the Brazilian case is described and its basic feasibility discussed.

Section 6 concludes, placing back the proposal in both the domestic and international perspective, together with its enlarged significance in the realm of concrete strategies for sustainable development.

2. The problems with the COP.

2.1. The COP21, merely a diplomatic victory?

In spite of a certain number of initiatives, several specific groups of agents have been systematically if not excluded at least set aside from the high-level climate negotiations, when they come to their decisive moments.

This may be argued to be nobody's fault, but merely inherent to the essence of the COPs. As in any international meeting, the different delegations, oftentimes led by the head of state, put proposals and positions on the table supposed to represent the varied segments and voices of each nation, but eventually negotiated with one view on the problems themselves, and another on the political *Zeitgeist* of the whole meeting.

The clever and encompassing preparatory efforts by the French government notwithstanding, this is what once again took place at the COP21, December 2015 Conference, recently held in Paris.

The results, considered by many a relative success, clearly show the limits of this high and insufficient, if necessary, level of decision-making. It is hard to see them as something more than a diplomatic victory of the French Foreign Office (*Quai d'Orsay*); a victory much needed since the depressing failure at Copenhagen, in 2009, on the occasion of COP15 (see, among others, Rajamani (2014), Vieira (2015) and Veiga (2013)).

The final Paris Agreement, with its 29 articles, states, in Article 2, the bold desire of “*holding the increase in the global average temperature to well below 2° C above pre-*

industrial levels and to pursue efforts to limit the temperature increase to 1.5° C above pre-industrial levels”. A display of sheer volition and wishful statements, with no inkling on a package of measures that would fulfil the tall order commanded by the Article. A tall order, by the way, originated in 2009 in Copenhagen, and again confirmed in the COP16 in Cancun, in December 2010 ... A victory of diplomacy and face-saving, no wonder; a very modest one for the climate debate.

What is at stake is not the basic procedure of the COPs, but the fact that, once gathered together, those very delegations reproduce what usually happens in most high level international meetings: they issue, or try to issue, general and encompassing statements, sometimes conspicuously optimistic, like the one above, weakly engaging the signatories, as in any standard international treaty. Hard, tough measures are skilfully postponed, as a debatably feasible homework, to be accomplished later.

Faithful to this format, implementation, in the Agreement –always in vague terms-, is left to Articles 4, 7 and others; a first global stocktaking planned only for 2023 (Article 14).

Any perceptive, realistic observers of the international scene would arrive to the same conclusion: the system has reached its limits; something perhaps evident even before (Sunstein, (2007).

After 21 meetings, 21 years of discussions, the possibility of moving further and deeper seems rather unlikely⁶.

A major effort must be made with a view *to come back and down*, from the high-level agreement, to those different segments and voices who, in the very end, will be effectively responsible for enduring, applying and implementing the conclusions.

Finance, especially through the channel of fiscal transfers, is the only broad (practical) measure invoked. Usually, as in Article 9 of the Paris Agreement –and as in so many international treaties in several other areas, trade and economic development being perhaps foremost-, by reminding developed countries that they “*shall provide financial resources to assist developing country Parties with respect to both mitigation and*

⁶ What has been once again confirmed in the COP22, in 2016, in Morocco.

adaptation...”. Again, necessary, positive statements, but nearly vapid in the face of the present state of affairs. How many times have we read or heard such hopeful (and unrealistic) principles?

The natural consequence of the above mentioned frustrating picture is the perception of the dire need for a bottom-up approach, with measures, concrete procedures and sets of actions, involving significant groups of society and the economy: they would perform real action, holding to clearly defined and (hopefully) easily controlled practices, adding up to the fulfilment of the desired objectives.

Ideally, from the very COP level, recommendations and conclusions should invite, or even actually engage relevant actors outside the governmental sphere. Governments, together with the COP, would then act as facilitators, conveners, “seducers” and, when needed, skilful constrainers, helping to make the planned outcomes true. Outcomes produced by the actors themselves, who will also aid the United Nations and the COP in the monitoring and follow-up of the common endeavours.

Unfortunately, even with the openness demonstrated by the technical organisers of the Paris Conference, and a number of relevant, broadminded seminars, events and discussions previously held, not much seems to have percolated to the final meeting. The overwhelming dynamics of the diplomatic turf wars, during the few days of intense negotiations, constrained content, language, style and narratives to the standard, good-for-all and so nearly inoffensive, articles of most international treaties.

In lines similar to Keohane et al. (2015), we pledge a simple strategy to closer and more effectively engage the productive sector in the climate debate. It must be emphasised that it is neither the strategy nor the single one available. The background purpose is to establish the ground for changing the emphasis (and confidence) placed on the existing toolbox of measures, recalling that more actors must be involved and more mechanisms designed.

2.2. Mobilising actors instead of resorting to abstract or misleading schemes.

It is interesting to see how two myths of development aid: technology transfer and finance for development have spilled over to the climate debate, in spite of the highly controversial role they have played, and still play, in their original realm.

Here is not the place to elaborate a comprehensive criticism of both, something far from our main purpose. Nor is there intention to fully deny the importance both may hold, in specific contexts and through carefully designed mechanisms, where simplicity and many times solidarity, or rather generosity usually stand as main attributes.

Notwithstanding, there is legitimate concern with the excessive room they have gained in the global and COP contexts; people in developing as well as emerging economies still look at them as the universal panacea that will solve all problems and take them out of their polluting and environmentally destitute realities. This forgets the nowadays nearly classical arguments raised on their actual performance, Ayittei (2005), Easterly (2001, 2006) and Moyo (2009), stressing how elusive and hard to evaluate is the (supposedly) positive impact they played in the development process.

Briefly, a couple of sad truths must be taken more seriously, when giving excessive time and room to elaborate discussions in these two areas.

As regards technology transfer, the reality is that, with very few exceptions, nobody -person, laboratory, firm, enterprise, or nation- transfers technology unless there is a clear perspective of profits -direct or indirect-, material rewards in a multitude of possible ways, or additional power and domination prospects; the last even if under the soft power modality. Let us say that this does not completely jeopardise the idea, exceptions existing, but it surely poses major and very serious constraints on its scope and effectiveness.

The question of financial mechanisms and instruments touches the worrying state of flux in which the financial system is nowadays. To enlarge the discussion to this level is completely outside our aim, but it is important to emphasise that, at present, it is quite unrealistic to expect that the financial sector will be open to significant developments towards channelling more funds to green pursuits. The world itself is in a state of flux, and though money is available, it will run to precisely chosen destinations, incentives for green funding presenting, at best, moderate attraction.

Secondly, governments, particularly those from developed countries, are still expected to provide the large majority of green funds⁷. This has to come from their respective fiscal policies, nowadays under scrutiny by voters, given the manifold aspects of the economic crisis, unemployment to begin with. As governments must be elected, and re-elected, provision of sustainable official green funds ends up as hostage to the vagaries of the economic situation⁸.

Meanwhile, and unfortunately, the Paris Agreement hasn't deviated from this standard approach.

Articles 9 –as said- and 10, address financial aid and technology transfer, respectively; the Technology and Finance Mechanisms, previously established by the UN Convention, shall work for making the desired, respective objectives true. A Green Climate Fund had been established by the Cancun Agreement, together with a Technology Executive Committee –to help the identification and diffusion of technology for developing countries- and a Climate Technology Network -to help in capacity building and implementation.

Mobilising sets of actors can eventually be less costly and more effective.

Ideally, as said before, the COPs would define the guidelines and related targets, and the actors themselves, not bureaucrats, ministers or diplomats, would fashion their collective response to each call. The Paris Conference proved, once more, that this was a too far-fetched objective. Initiatives must indeed be genuinely bottom up, coming up from the efforts of enlightened groups, think tanks, and conscious groups of the civil society. Networks of all kinds, and perhaps unexpected ones, like of large multinationals for instance, must get together to implement them.

2.3. Sectoral Codes of Conduct for Foreign Direct Investment: preliminary ideas.⁹

⁷ See Article 9, COP21, mentioned in 2.1 before.

⁸ This point has gained an unfortunate support with the very recent decision by the US to withdraw from the Paris Agreement. As clearly stated by the US President, when announcing the decision to the press, financial burden played a major role in it.

⁹ See also Drummond and Flôres (2014).

Mobilising the actors means leaving to them the responsibility to establish, impose and control the desirable way to conduct their own activities.

Speaking more concretely, the very actors would formulate codes of conduct, normalising how the negative aspects and externalities should be treated and describing the desirable quality levels for their operation. They also, at least partially, would exert control.

Sectoral codes of conduct are no big news, and they exist already for specific, highly polluting activities –like the cement sector- or, for others, as a strong – spontaneous or forced- urge to good practices in their particular business line; examples abound from the manufacturing sector to services activities, like advertising. For each sector, preliminary work usually has to be pursued in order to identify what exists and can be suitably translated, adapted to or adopted by the specific objective at stake. If conforming to the set guidelines, the actual text can have different acceptable formats, the resulting one being close to the actors' views and possibilities.

The great diversity of sectoral characteristics and their corresponding international patterns demand a thorough previous analysis of how to launch the efforts. A sensible suggestion is to start work with a few activities, the most environmentally aggressive ones standing as natural candidates. Cement, mining and extractive industries in general, one or two branches of the petrochemical galaxy make for important cases.

Two other extensions must be addressed.

The first is that the sectoral effort may be combined with a community or a regional –intra- or international- dimension, the code taking into account either specific geographic characteristics that may matter or existing developments or practices at the levels that should be the object of regulation.

Though a relatively costless idea, the coherent and comprehensive establishment of such codes obliges the existence of a secretariat to manage the global work, supervise that by each sectoral group and, together with the member states, to follow up the due and harmonious application of the codes, as a side entity to the sectoral control itself.

One way to establish the due link is to put this secretariat under the COP that, through its own Secretariat, would also set guidelines and conditions each code should satisfy, approving them at the Conference level. Together with the member states, the Conference could help in establishing the representative working groups that would actually write the code.

3. The CSR dimension.

3.1. Combining two purposes.

Codes of conduct started to gain visibility during the 1990s when the phenomenon of transnational corporations became definitely recognised and accepted. Given that these new entities had become an integral part of the world economic landscape, concern about their responsibility increased, and governments as well as society started to demand minimum requirements for their activities. This movement gave birth to the concept of Corporate Social Responsibility – CSR, supported by the major evidence of the manifold interactions between transnationals and any society where they operate. A joint, related outcome was the intensified production of corporate codes of conduct (CCC), notably in the areas of labour and community standards.

The gist of the CSR (and CCC) ideas laid in the self-regulatory mode for business activities; social and environmental impacts, instead of being primarily and uniquely of concern of the governments, became, at least partially, matters of corporate responsibility to be controlled by the companies themselves, or their respective industries. At the same time, transnationals recognised that they needed more pro-active responses to answer new and deeper questionings from states and organised society in the growing globalisation context; not only to create favourable operating conditions for them, but also to reduce the pressure for increasing and ever more encompassing regulation.

Already in the 1970s, corporate codes could be found, mainly because of anti-corruption practices by governments in developed countries, notably the US. According

to Kline (1985), out of 174 codes existing in 1978, more than half addressed questionable payments and financial practices.

Pressure seemed to diminish during the 1980s, but during the 1990s, as mentioned above, the OECD surveyed 246 codes, 60% referring to labour standards, 59% to environmental ones and only 23% referred to bribery and corruption practices (OECD, 2000). It is also during this period that important, internationally conspicuous companies voluntarily publish their own codes. This movement also addressed fears of loss of nation state sovereignty, thanks to the ever-growing activity of the transnationals.

Nowadays, it is estimated that the number of codes of conduct, by individual companies, industries, clusters of industries, producers, associations and NGOs, is superior to 500, Brazil being reasonably integrated in this trend.

By their very nature, the codes affect different sets of stakeholders. Drawing on Jenkins (2001), it is common to classify those into

- a) the large corporations themselves;
- b) smaller producers;
- c) NGO's, with oftentimes different reactions in the North from the South;
- d) trade unions;
- e) shareholders and investors;
- f) consumers;
- g) consultancy firms and verifiers;
- h) producers, exporters and workers in the South;
- i) local communities;
- j) and, finally, governments, with impacts and reactions in the North being usually different from those in the South.

The dynamics within each of these ten categories has been extensively studied and is not exactly the case here to dwell on. What effectively matters is that whenever discussing or formatting a proposal, awareness of all these groups must be duly taken into

account, at the risk of producing a code that is not used, or raises unexpected opposition, for having failed to address the interests of one of the constituencies above. It is easy to agree that this care places the codes as both an essential and symbolic component of CSR endeavours.

The codes can be produced by a sole company, by a group of similar companies, or by the whole trade or sector. They can also involve negotiations among several stakeholders, like NGO's and specific communities, beyond the corporation(s), being then called multi-stakeholder codes. They can also be produced by a sectoral association or representative, usually as guidance for individual members' codes, and are known as model codes.

3.2. Implementation.

It is not enough to produce a code; in order to be meaningful, it must also have clear methods of implementation, followed by procedures that ensure that it is being duly and correctly used. This raises the important issue of monitoring.

Already at the turn of the century, out of the 246 codes analysed by OECD (2000), only just over 10% had due provisions for monitoring. By due provisions we mean that monitoring must be conducted by independent agents not involved in the activities which are the subject of the code and, usually, the corporation itself. That is why group g) above -consultancy firms and verifiers- is impacted by any given code. Without independent monitoring, codes do not differ much from general statements of business principles or so-called good practices, lacking effectiveness and failing to fulfil their expected social role.

Usually the question of implementation is related to what was the main factor responsible for the elaboration of the code. In the cases when a specific group, like consumers of the given product, drove the code, its members will naturally make for a relevant party in the monitoring team, not allowing that statements and duties are left open, or their fulfilment at the discretion of the formulators of the code.

This poses a further alert to our case, as many sustainability codes have been borne out of broad concerns of an industry association, or of the good efforts of an international agency or organism, lacking, thereafter, a continuous and rigorous supervision mechanism for the positive output represented by the signed code.

3.3. Voluntary codes as private law.

A CCC is, in the legal jargon, a promise voluntarily made by a company or sector, making for a public commitment to abide to certain standards and practices all along its activities.

This gives the producer of the code a large degree of flexibility in designing the code, by selecting, for instance, the dimensions and standards through which he desires to be measured and evaluated. However, two points constrain this private law character of the code.

First, in order to be credible -and, actually, effective- the code must minimally meet the expectations of the groups and forces pushing for its existence. A further reason for, in the sustainability context, to well characterise the *demandeurs* of the code.

Second, obligations of the code producer, in spite of the discretionary powers he/she enjoys, are not reduced. It continues to bear the burden of ensuring that the most sceptical drivers of the code believe in the proposed statements and performance claims. What reinforces the crucial importance of including independent monitoring items.

Of course, it is implied that all parties involved have a genuine interest to resolve, or at least advance the issues at stake, within realistic market and financial constraints. Here lies a crucial point in our proposal. Linking to the discussion in section 2, a positive mood of engagement must be created, something that has not been addressed yet by any COP. Actually this lies outside the scope of the Conferences, and illustrates one of the peculiarities of the new realm of measures advocated in this text.

3.4. Pros and cons of the CCC approach.

A first problem is to expect more than a CCC can deliver. Truly, many are just a way to avoid or minimise public criticism, and others have been elaborated with not the best of intentions, carefully managing to include a majority of innocuous clauses. Sometimes, even well intentioned texts may fail in operation, and their ensuing effects may prove nearly disappointing. The main reason for this lies in the fact that the statements that bite usually involve prohibitions, and these, quite often, may either have negative, unintended spill-overs or, due to unaccounted for general equilibrium effects, may turn out less effective than expected. Examples are numerous, be it in the area of labour relations, in environmental practices and whenever several (and varied) agents are involved in the prohibition, making proper monitoring difficult to be achieved.

In addition, CCC do not replace government regulations, though as they usually reduce regulatory and official enforcement measures may lead to this situation, or at least induce it. Identically, they should not limit the space for trade unions or other specific social organisations to act.

Codes and local cultures interact. The same practice may be judged socially responsible and acceptable in one place/society and irresponsible or intolerable in another culture¹⁰. This favours regionalisation and fragmentation of the code, according to different realities, something that weakens its supposedly global reach. A balanced achievement, depending on the activity, is not easy to be reached.

All the above contributes to the view that considers CCC as public, pro-forma statements of soft corporate intents, short on what really matters. The current situation, in many areas, is not encouraging, with public trust on their effectiveness standing quite low.

Moreover, industry-wide and sectoral codes -as proposed here- may be an incentive for collusion among the sector members, against more socially responsive items. The larger the number of corporations in the industry, the higher will be the probability that accepted procedures and standards will be the lowest common

¹⁰ Perceptions on the relative importance of the different components of the ecosystem provide a good example of this.

denominator of all possible options. Adverse selection and free rider problems are also due to be intensified.

As for the positive side, there is significant evidence that they can and have generated positive outcomes to most of the stakeholders and groups outlined in 3.1. It is undeniable that they provide leverage on the unavoidable conflict between corporate behaviour and social and environmental impacts. Transparency and public knowledge of the code put concrete limits on corporate misbehaviour and any unsound excuse to bypass somehow the published code.

Moreover, by their scope, they draw the attention of all stakeholders to the multiple interactions generated by the micro-operation of the company, which usually touches several agents as, for instance, in the case of value chains. If successful, they may outreach their original objectives and display a multiplier effect, in terms of positive impacts.

In the case of sectoral codes, counter-acting the shortcomings previously outlined, they could successfully replace numerous individual codes that would render comparisons and performance evaluations among corporations difficult if not senseless. The sector would also benefit from a united position to more consistently face the public at large and all segments concerned with its activities.

CCC are however no panacea and the extent to which they have been applied up to now is still fairly limited, in spite of their consistent growth. Most are still very general, not offering material for a valuable test of their performance.

4. Mining in Brazil: setting the scene.

4.1. An important sector.

Extractive and mining industries are of major interest in Brazil, as well as in the developed or underdeveloped world. The sector is in principle highly cohesive but, together perhaps with the chemistry industry, is the subject of strong external pressures in

nearly all socio-environmental aspects, being one of the devils of the environmental debate.

The usual consequence is that, initiatives and actors in this area, while they will not risk cheating what has been agreed in the code, will actually struggle for vague and loosely interpreted provisions and standards. Given the extent, size, inherent risk and complexity of their operations, cost is a key factor and will stand as a major driving force in the choice of issues and items that will enter in the code.

More than in other sectors, performance standards must be realistic, taking into account the financial situation of the companies and the competitive environment where they act. The urge to address all sustainability aspects must be balanced against the risk of obliging them to exaggerated promises and implausible commitments. Especially because all proposed measures must eventually be internally implemented by the companies, and must not create a disruptive internal situation.

4.2. The mining industry.

As said, extractive industries play a major role in the world economy and, in the case of developing and some emerging economies; they are simply a vital element of their growth strategy. This is the case of Brazil.

In terms of origin, the industry is heavily concentrated in a few specific countries. Out of the top 40 companies in 2017, China/Hong Kong, UK/Australia and Canada are the three key locations of the bigger companies, followed by the US and Russia, with presences of Brazil, Japan and India, among others (PwC Mine 2015). Mainly through Vale, and its significant supplies to China¹¹, Brazil classifies as an important actor in the world scene.

According to the International Council on Mining and Metals - ICMM, FDI in the mining sector accounts, on average, for 60-90% of total FDI in low- and middle-income resource rich countries; countries where sustainable development problems are more serious, requiring urgent and efficient solutions. Exports, either from domestic or foreign

¹¹ At least 40% of Vale's annual revenues come from its exports to China.

companies, are a main source of revenue for several developing and underdeveloped countries, sometimes surpassing those of food and other raw materials.

Mining activities generate a variety of environmental problems, from erosion and sheer destruction of soils and landscapes, to severe carbon emissions and air pollution, becoming nastily interspersed with health and sanitary problems of many sorts. They usually produce huge negative externalities, related to the associated transportation and local facilities complex, and to the aftermath of their activities. They are catastrophe prone, leading to unexpected, dramatic landslides, floundering and destruction of large tracts of land that may encompass areas outside the mining fields themselves. Moreover, after their lifetime, the usual outcome is a desert, fully destroyed surface.

As if all such problems were not enough, they are also the source of serious social unrest and, not unfrequently, dramatic outcomes.

Taking only Latin America, in early 2016, Mexico, Peru and Chile championed the list of ongoing mining disputes, with, respectively, 37, 36 and 35 ones. Argentina and Brazil, displayed 26 and 20, resp., and Colombia 13¹². The 2015 huge landslide that took place in Brazil, in area of the Rio Doce Valley operated by the Samarco mining company, is a tragic example of an accident with immense social and environmental costs.

The lure of attracting the investment, and the expectation of job creation and the flow of hard currencies to the economy, makes less developed economies to overlook the damages provoked by the activity, being lenient in their control, as regards environmental impacts.

The sector, in spite of the geographic concentration of the companies' origins, is less cohesive than might be expected; lacking a single consistent representative.

The above-mentioned ICMM probably is the largest and soundest, with 23 member companies and 34 national and regional mining associations, through which they claim to reach 1.500 extra companies more. The 23 companies show a predominantly Anglo-Saxon origin, with 15 distributed along UK/Australia, South Africa, Canada and the US. No Chinese company is a member, as well as Vale, from Brazil.

¹² Source: The Observatory of Mining Conflicts in Latin America.

At the side of ICMM, there are powerful national associations, notably in Australia and Canada. The Chinese also have their groupings, notably the China Chamber of Commerce of Metals, Minerals & Chemicals Importers and Exporters – CCCMC.

Of course, codes of conduct –in a more or less explicit form- are discussed and produced by these entities, a few will be discussed in the next subsection.

4.3. Codes of conduct in the mining industry.

There are five main examples, which display different approaches to the question, as regards the mining industry. Two are specific proposals, which suffer from a somewhat limited scope, though being, in principle, broad based in their original intention: one is actually more focussed on the activities linked to the precious stones and jewellery sector, and the other is still restricted to Canadian agents. Then, there are the Australian and ICMM attempts, to conclude with an ambitious recent proposal by the CCCMC, elaborated with the help of the German Development Agency, GIZ.

To give a flavour of them, we discuss the two first ones and then concentrate on the Chinese one, more important to our purposes, as it will be seen later.

IRMA – Initiative for Responsible Mining Assurance

The initiative aims at establishing an allegedly multi-stakeholder and independently verifiable responsible mining assurance system, dedicated to improving social and environmental standards. It is not clear how much support it has captured so far. A first draft was released in 2014, open to comments; according to information in their website, more than 1400 comments were received, submitted by more than 70 individuals and organisations. A second draft was supposed to appear by mid-2015, and the whole system launched by the end of the same year. Both did not happen, but were expected to come true in 2016¹³. The Steering Committee pools together downstream users (mostly big jewellers), trade unions, mining companies, affected communities and non-governmental organisations.

¹³ At the time of this paper (mid 2017), not much had happened in this line.

The full text and additional material can be found at www.responsiblemining.net. It is an interesting example of a multi-stakeholders code and, as such, risks ending up as rather vague.

TSM – Towards Sustainable Mining

An initiative of the Mining Association of Canada (MAC), launched in 2004. It proposes guidelines to members' performance in specific areas such as tailings management, external outreach, crisis management and energy use, and assures that actions follow the guidelines. TSM is mandatory for MAC members in their Canadian operations, but it is not clear whether in their FDI activities; the Finnish Network for Sustainable Mining is implementing it in Finland. Notable members include Anglo American Metallurgical Coal Canada, ArcelorMittal Mines Canada, BHP Billiton Canada Inc., Rio Tinto Canada, Shell Canada Ltd. and Vale; what testifies to its rather local scope. It remains, until now nationally based and under the supervision of the Association.

The (Chinese) Guidelines for Social Responsibility in Outbound Mining Investments

The Guidelines have been recently issued by the China Chamber of Commerce of Metals, Minerals & Chemicals Importers and Exporters – CCCMC, and can be found at www.cccmc.org.cn/docs.

It is an ambitious document, which involved several institutions and associations, notably eight agencies of the Chinese Government. It also had the support of twelve international organisations and NGOs, in particular, GIZ, from Germany, the WWF, the ILO and the International Trade Centre, in Geneva, and the United Nations Development Programme – UNDP; eight large Chinese enterprises also support it.

They depart from seven standard, well-recognised principles –like adherence to ethical business practices and transparency- and address eight topics in a rather comprehensive way: organizational governance; fair operating practices; value chain management; human rights; labour issues; occupational health and safety; environment and community involvement and engagement.

Each clause in the Guidelines is the result of careful cross-examination of 28 main standard codes notably from ICMM, ILO, OECD and UN, among other established

attempts. A useful table, in Annex 1 of the document, shows the nature of the interrelationship between the Guidelines clauses and those in the 28 codes.

Unfortunately, the clauses cannot however go much beyond their name and the very nature of their effort. In spite of the insertion of sub clauses that “suggest approaches, measures and pathways for implementing the main clauses” (Foreword to the Guidelines), most statements are very general or too broad; no standards are set as well as no operationally credible verification and monitoring mechanisms. Indeed, these are left to the responsibilities of the companies themselves; a well-known shortcoming widely denounced by several critics, the majority of NGOs included.

Given the scope and relevance of Chinese extractive industries, especially in outbound activities throughout the world, the Guidelines, beyond welcome, have a near necessary dimension. Notwithstanding, they continue to qualify as part of a solution, failing to exploit to the full the benefits of a code of conduct. Ironically, one of the reasons for this may have been the great number of institutions involved, while stakeholders were, mostly, implicitly represented either by them or by the numerous codes and regulations carefully taken into account.

5. Outline of the Proposal.

5.1. Introduction: the Code as a needed CSR instrument for the Brazilian mining sector.

In spite of the existence of good practices regulations and codes in a competitive multinational like Vale, it is clear that a social responsibility void exists in the Brazilian mining sector, exactly as regards a serious and comprehensive sustainability approach, in the lines discussed above. The Samarco accident pays due evidence of this need¹⁴.

That is why the gist of the present proposal is an initiative towards building up a code of conduct on sustainable operational procedures, to be endorsed by the whole sector in Brazil and enforced on all foreign direct investments. The ‘whole sector’ may

¹⁴ Vale and BHP Billinton jointly own Samarco.

stand as an over-extension, as idiosyncratic activities, like artisanal gold mining, Sousa et al. (2011)), are for sure outside this debate, while very localised ones, like the dimension stone industry, Macedo et al. (2017), may perhaps be better off with more specific solutions.

As the country possesses a significant amount of legislation and verification and certification procedures for the different mining subsectors, it must also be pointed out that -as extensively argued in section 2 before- the proposal is a civil society initiative, respectful to but, to put it in an extreme way, independent of the governmental regulations. Moreover, though it may address technical parameters and processes, in a particular sector, it is broadly a non-technical document, concerned with the sustainability aspects of the activity.

The significant international linkages of the domestic sector make natural channels to expand the proposal beyond Brazilian borders. Canada and China are immediate candidates as likely and solid allies. The latter, in particular, thanks both to its dependency on Brazilian ore and the happy event of the issuing of the Chinese Guidelines, qualifies as a key ally in supporting external visibility and spread of the code. We shall dwell more on this later, a few specific points on the code itself being worth mentioning now.

The analyses and concrete initiatives exposed so far, and quite a few talks with sectoral experts¹⁵, reveal a series of key bullet points for the domestic code -with a universal view- if it aims at effectiveness. All follow from background principles, judged evident from the discussions in the previous sections:

Comprehensiveness weakens the code - the urge to address all dimensions of the mining activity leads to broad statements on all of them, and leaves clear the real target of the code. The Brazilian proposal should aim at *key and crucial* aspects of sustainable development, particularly on the polluting and catastrophe prone sides of the activity, which are those that bear more explicit causal relations with climate change and social damage in general;

¹⁵ To avoid any misunderstanding, the talks, though detailed and comprehensive, were informal. They did not follow a scheme of structured interviews on a preassigned, even if not representative, sample.

Setting clear standards is fundamental - a code general in this aspect, or which delegates it to the individual companies or refers to other ones loses power and credibility, beyond producing a grey area for the evaluation of its efforts.

The code cannot be circumscribed to its text - it must be a full package, comprising a minimal organisation and a few ancillary structures, notably for its dynamic governance as a CSR instrument, and the independent monitoring and verification of its responsibilities.

Start with a small number of parties - if, on one hand, involvement of several institutions and associations give, from the start, visibility and an aura of credibility to the code, on the other hand this inevitably leads to texts which are the minimum common denominator –even if encompassing and erudite- of all parties views and interests. The closer the code sticks to the focus sector and the main stakeholders the better. Vale stands in principle as a natural candidate to be the focal point; support from the National Bank for Social-Economic Development – BNDES could be an interesting help.

These considerations oblige to formulate the Code as a unified package, with the text itself that contains the code as a centrepiece, surrounded by a minimal structure and a few ancillary bodies, supposed to operate on a continual basis. The question of costs is then unavoidable, and must be faced.

5.2. Content.

The first point is focus, which here also means avoiding duplication.

As regards labour standards, for instance, there are already plenty of initiatives, conventions and regulations, a great majority anchored at the International Labour Organisation (ILO) documents and norms, which –if needed- should only be invoked or mentioned in the Code.

In the case of protection of natural communities and environments, much is already well developed –Canadian initiatives being close to a model standard- and numerous international experiences have taught precious lessons that are nowadays almost common knowledge. This dimension includes however a kind of open problem which we

would leave outside the code: it refers to the very location of the extractive investment, including the exploration site itself together with the roads, pipelines and all sorts of transportation networks connected with it.

Brazil has been facing several such conflicts, particularly in the case of its large hydroelectric projects; the Belo Monte dam being an internationally infamous one. As these conflicts show, though being a major problem, this is a public choice issue, which must be equated and solved at the level of the local –municipal, state or federal/national- authorities and not be the subject of a universal, firm-operations focused set of statements. The code, in spite of its CSR aspect, cannot deal with all dimensions of corporate responsibility.

The same also applies to principles of business ethics and fair conduct, particularly as regards corruption -a most hot topic nowadays in the country. Truly, the increase of corruption in transnational business in general, and in large Brazilian construction companies in particular, is far disappointing, in spite of anti-corruption regulations and procedures at the domestic, regional and global levels. Ironically, thanks to its very outrageous enormity, the subject has been acquiring a status of its own, with new, more effective punishments being enforced. We see no need to dwell on it in a specific code.

The above does not imply that these areas should not be mentioned at all, but that mentioning –if made- should refer to and incorporate the existing material on them.

The Code should contemplate a set of minimum standards for the operations that would ensure relatively predictable and moderate impacts. It must also take into account safety aspects of the installations and civil works ancillary to the mining or extraction activities.

Moreover, it has to account for measures, both concomitant to and after the lifecycle of the exploration has ended, that would aid in the re-colonisation of the field. The basic processes and production methods (PPM), Cottier (2015), should be clearly codified, with their environmentally damaging steps identified, as well the respective needed green counter-measures.

Indeed, the core of an effective Code of Conduct as we propose should consist of the environmental clauses, together with safety and risk management procedures and (occupational) health considerations.

Environment clauses should address all activities from the extraction operations, infrastructure works, transportation and logistics activities, spillovers and chemical externalities, impacts on water, soil, air and biota, stocks, and effects and procedures related to cessation and closure of operations. A combined set of standards, with core attention to pollution indicators, should be coupled to the described practices. The same should apply to the health and safety considerations.

The risk management clauses should encompass the main catastrophe prone situations and list a set of averting and mitigating procedures. Additional operating standards must be included, in order to guarantee acceptable risk levels according to a minimum number of scenarios.

Standards may vary according to the nature and scope of the extraction, and to eco-systemic or even socio-environmental contexts. The Brazilian ecosystems diversity would guarantee a reasonably satisfactory portability of the code to other regions.

A complete guideline, with all standards, how they are measured –context, measuring procedures and devices- and at which frequency, must be an integral part of the code. Measurements must be made under previously established periodic bases and be audited by an independent body every two or three years. Auditing includes analyses of the historical data, of on spot measurements and overall adhesion to the clauses.

Negative or positive, auditing results are informed to authorities, peers and relevant stakeholders. They can be made public, and required correction mechanisms must have their implementation secured¹⁶.

All these considerations outline a simple but incisive framework for the actual writing of a given code. Instead of translating a set of standards that should be followed by every text, we prefer to see them rather as constituting a flexible portfolio of options to be exhausted, or not, adapted and maybe complemented in each given endeavour.

5.3. Ancillary elements.

Whether made by a group of main companies, or a small team led by Vale, for instance, the Code needs a supporting structure that, for lack of a better word, will be

¹⁶ This was one of the main faults responsible for the Samarco catastrophe.

called the Secretariat. It will be responsible for the deposit of the text, as a private law document with the flavour of a proxy of an international public law, the register of the signatures and the overall care of its existence.

In a proposal that sets apart the Code from other attempts, it should later be registered at the COP, opening a new activity of the Conference as a recipient body for private productive agents' initiatives.

Together with the Secretariat, there must be an Independent Verification and Evaluation Body – IVEB, with the clear task of following up the operations under the responsibility of the code signatories, receiving datasets of measurements, conducting the periodic evaluations and compliance checks in general, and writing auditing reports on the status of the different operating sites.

Though the companies will be represented in the IVEB, third parties must conduct actual verification and evaluation procedures. Outsourcing part of these activities may be a solution, beyond an easier way to reach a compromise with opposition from the corporations to such initiative.

The remaining ancillary body would be a small Code Steering Committee – CSC that would be responsible for keeping the text abreast with the developments in the sector and in the sustainability debate, the COP decisions and evolution and changes in stakeholders' composition and expectations. The CSC would establish contact with all code signatories and, if needed, convene a meeting of them in order to update clauses and standards.

The Secretariat would be the link between the two bodies and provide additional administrative help to them. All structures however should keep a minimal size.

It is then evident that some funding, though quite modest, will be required for sustaining this system. Sources can be varied but perhaps the simplest option is to use a very small percentage of the yearly foreign revenues to create a fund for the Code. This could be tried for the three to five initial years (including the one in which work on the Code started), and revised afterwards, both in terms of the individual corporate amounts and periodicity. Some support from international organisations is of course welcome, but, ideally, the whole initiative should be self-contained within the domestic private productive sector.

5.4. Strategies: recommendations.

Broadly, one could now gather the relevant institutions, firms and subgroups – many of which have started efforts in this direction- and put them around the same table, to produce a meaningful and universally accepted first draft.

Notwithstanding, section 4 has shown that the sector counts with relevant –if not perfect- initiatives already, being somewhat senseless to start from scratch. Once a clear will is manifest, one could pick up one existing text as ground material for the Code. By its comprehensive and more up to date character, and the fact of counting with the approval of the important Chinese operators, the CCCMC proposal could be chosen, without losing sight of, at least, the Australian code.

The ground text would be both streamlined and detailed, following the principles and guidelines in the previous subsections. The important issue of the structure surrounding the code would be discussed in detail, in order to arrive at concrete outlines of both the IVEB and the CSC.

Ways to achieve, consolidate and operate a first code naturally involve persistent work towards *all agents* in order to create a consensus on the need of such pursuit, but the Code can be initially launched with a few signatories.

6. Conclusion.

We advocated here a double, ambitious proposal: a shift in the COP efforts and output and the effective and explicit incorporation of the sustainability dimension in CSR.

Brazil is the testing field for this endeavour, and a specially designed corporate code of conduct for its mining sector the instrument that will make the incorporation come true.

Within the present world dynamics, it is high time to search convergences between seemingly unrelated concepts as well as to adapt and transform existing ones.

The shift amounts to giving room to bottom-up agreements in which the Conference would exert a co-ordinating role, the measures being meaningless without the full engagement of the related actors. By *engagement*, it is meant not only their participation and adherence once the measure has been approved, *but also their involvement in the design of the measure itself*.

The methodology can be applied to a variety of significant groups of actors and situations. Used with the productive sector, an area where there is dire need to further incorporate in the climate debate, it could translate into Codes of Conduct designed by the different productive sectors themselves, setting the norms to be minimally followed worldwide in their daily operations. However, it can also be a factor for enlarging the scope of CSR instruments, bringing, at the side of traditional dimensions like labour, education and health concerns for the communities involved in the operations, the crucial sustainability dimension.

It is hard to think of a better trial case than the mining sector in Brazil. Nevertheless, the approach can be easily spread to other countries and partners, enlarging and multiplying its positive externalities. This will inevitably bring forward its limitations, providing grounds for improvements and even the search for complementary directions. In all this, China stands out as a key partner.

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