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STRADE

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China's approach towards responsible sourcing

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STRADE is an EU-funded research project focusing on the development of dialogue-based, innovative policy recommendations for a European strategy on future raw materials supplies. In a series of policy briefs and reports, the project will offer critical analysis and recommendations on EU raw materials policy.

This policy brief will outline the finding from the STRADE workshop in China in 2017 and gives an overview on the current status and perspective of China's responsible mining and sourcing activities.

1. Introduction

STRADE hosted the stakeholder workshop “Cooperation on sustainable raw materials for China and Europe” in Beijing, in September, 2017. Prior to that, the STRADE team participated in the 2017 China Mining Exhibition and Conference, China's largest conference on mineral extraction. This policy brief outlines the impressions collected from these events and presents an overview on the current status and perspective of China's responsible mining and sourcing activities.

Western perceptions of China have often been one-sided and dominated by topics such as export restrictions, strategic monopoly policy, global power shift and increasing economic competition. The country's latest efforts for environmental protection and sustainable development and its current transformation process are often underestimated. In this context, this policy brief aims to contribute to a deeper understanding of China's perspective. Such an understanding is indispensable for closer cooperation on global challenges in the extractive sector, which demand joint action. As outlined in the following chapters, China has already taken action and initiated multilateral dialogues and is prepared to take responsibility as the largest global player in the raw materials sector.

This policy brief firstly outlines China's environmental paradigm shift in the past decade. This is followed by information on responsible mining issues in China's domestic mining sector. Next, an overview of China's international action in mining and mineral sourcing will be given and discussed, ending with overall conclusions. The policy brief complements the parallel [STRADE policy brief 02/2018](#) titled “One Belt One Road – China's approach to raw materials”.

2. Overview on China's environmental paradigm shift

In October 2017 the 19th National Congress of the Communist Party of China in Beijing set the general political outline for the next five years and elaborated a new guiding ideology as part of the party's constitution. Some of the 14 basic guiding points stress moving towards a more sustainable development of the country, e.g. the improvement of people's livelihoods and various environmental goals. One point, particularly, aims at the harmony between nature and humans, stating that an “*ecological civilization is vital to sustain the Chinese nation's development*” [1]. China is committed to energy conservation, environmental protection and a contribution to global ecological safety and green development [2]. The trend towards sustainable development in China was further underlined by President Xi Jinping's New Year's speech. He stated that one of the people's most pressing concerns was environmental protection [3]. On January 1st,

2018 China introduced an environmental tax replacing the pollutant discharge fee that has been used for 40 years. Enterprises must now pay taxes for producing noise, air and water pollutants and solid waste. The tax revenue is exclusively used for environmental protection [4]. Moreover, China recently stopped the import of plastic waste after increasing environmental problems caused by the low quality of the imported waste [5].

Although the international media repeatedly report on the severe environmental harm and ecological problems in China – e.g., high air pollution – China is rapidly improving its environmental protection measures and is even the global leader in some areas. For example, China has the largest installed capacity of renewable power generation globally today; almost twice the size of the United States, which ranks second [6]. One third of all electric vehicles have been sold in China, representing the largest global stock [7].

The growing environmental protection sector is fuelled by multiple developments. China's societal changes have led to a stronger awareness among the population. A growing mid-income population is pushing towards a higher living standard which includes a clean environment. Additionally, greater urbanisation and related environmental challenges, such as high air-pollution, are further increasing awareness of environmental issues. This process is accelerated by modern communication via the internet. Companies' and government's concerns about their image and reputation also support the transformation process.

The move towards more environmental protection has also impacted the Chinese mineral sector. During the China Mining Conference and Expo in 2017 the topics of green development and responsible mining were centre-stage, both in China's domestic mining activities and in their outbound investments. Challenges and best-practice examples were presented, showing the increasing relevance of the issue amongst the mining community. The number of sessions devoted to "Green Mining Development" underlined the importance being given to the topic [8]. The environmental issues also overlapped with one other major topic at the China Mining Congress - the Belt & Road Initiative. An ambitious program that charts out China's foreign investment strategy for the next decades. This is discussed in the accompanying [STRADE policy brief 02/2018](#).

3. Domestic mining

From the 1980s until the 2000s the Chinese mining industry experienced growth, that went hand-in-hand with the rapid economic ascent of the whole country. Within this period the number of mines increased from 6,000 to more than 230,000. Today more than 100,000 mines are still in operation including coal, construction materials and small mines [9,10]. The environmental impact as well as health and safety issues remain major challenges. For example, the Chinese coal sector has had one of the worst global records for fatalities.

In 2010, the Ministry of Land and Resources launched the "green mines" standard [10]. Domestic pilot mines, which fulfil the environmental and social criteria, can be certified as green mines. In 2014, 661 mines were certified¹ [9]. The standard addresses the implementation of management systems related to health, safety and environment, energy efficiency, waste reduction, investment for environmental production, mine site rehabilitation and engagement in community development [9]. Unfortunately, little information is available in the English language, and only a few scientific papers by Chinese authors summarise the current status of the initiative and its requirements [9,11]. Regarding the success of its implementation, Chinese scholars point out some barriers such as the lack of supporting policy for the initiative, the threat of sanctions in the case of non-compliance and the lack of capacity of small to medium scale mining companies [12].

Since the number of green mines is still very limited, in relation to the large Chinese mining sector, the Ministry of Land and Resources published a comprehensive plan to guide the green development of the mineral sectors from 2016-2020 [13]. The plan gives first priority to the ecological protection of Chinese mines and aims to establish model cases of green mines in at least 50 mining regions. The plan also encourages Chinese mining companies to become more involved in the governance of the internal mining

¹ including 216 in coal, 107 in non-ferrous metals, 96 in ferrous metals, 76 in gold, 62 in chemicals, 59 in non-metals and 13 in oil.

industry, with regards to international norms, policies and standards for cooperation and investment in the global mining industry.

To provide more practical guidance for green mining development the Ministry of Land and Resources, together with another five ministerial departments, jointly announced (May 2017) a Guidance to Facilitate Development of Green Mines [14]. The new guidelines call for more support, in particular financial support, from different levels of governments for green mining development. The guidelines require all newly built mines to comply with the national standard for green mines, pushes technical upgrading of existing mines, and facilitates to build a more effective/powerful system to support green mining development.

Presentations at the China Mining Conference in 2017 and scientific papers [12] indicated a major challenge for the Chinese domestic mining sector is the large number of small to medium scale mines². These lack the technical and financial capacity to improve their performance, often struggling with high production costs. It is difficult to increase the often low resource efficiency of the small mines by installing more sophisticated technology. If higher resource efficiency could be achieved, it would not only improve the environmental performance but also raise the domestic supply.

In addition to the initiatives pushed by the Chinese government, there was also a new initiative launched by the industry in December 2017, in Beijing. The “Strategic Alliance for Development of Green Mining” was jointly founded by 61 organisations, including the China Mining Association, Chinese mining and exploration companies, research institutes and third-party service organisations. The objective of the alliance is to take more practical actions towards the green development of the Chinese mining industry. The alliance aims to communicate and implement China’s green mining standards, share best practices, seek financial support and provide training. At its very start, the alliance published a Guideline for Development of Green Mines with Solid Minerals [16], which was jointly prepared by the China Mining Association and Chinese Academy of Land and Resource Economics. The guide sets up an industry standard for mines producing solid minerals, covering the full life cycle of a mine, e.g., planning and design of the mine, mine site construction, mining operation and closure of the mine.

Little information is available for the artisanal and small scale mining (ASM) sector in China. Assessments in the early 2000s estimated near 4.3 million employees in the ASM sector, representing almost 55% of the total workforce in mining [17]. In terms of volume, Chinese ASM miners have been mainly extracting coal, and ASM has been contributing significant shares of total production for a variety of metals, e.g. iron ore, gold and tin around 20 years ago [17]. ASM production of heavy rare earth using in-situ leaching technology was also reported a few years ago [18]. As in other parts of the world, ASM shows a higher risk for causing environmental damage and is associated with weaker work safety, particularly for gold mining using mercury for the ore treatment [19].

To date, the Chinese government is pursuing a rigorous environmental policy in order to meet the goals set out during the 19th National Congress, to combat the high air-pollution in urban regions. Many industrial plants have been closed; for example a large number of aluminium smelters and steel mills were suspended until they adapted to the stricter environmental regulations [20]. Also the primary sector is scrutinised much more rigorously. Up to one-third of all iron ore mines could have their licenses revoked if their production processes are not modernised [21]. In general, mainly small mines, particularly coal mines, are affected.

In addition, the Chinese government has been rigorously pursuing the closure of illegal mining, in the past few years [18]. One factor that significantly favours this development is the slowdown in China’s GDP growth that has been accompanied by the availability of raw materials in global markets, at stable prices. This allows for the rehabilitation of the domestic mining sector without endangering the raw material supply to China’s manufacturing industry.

The international exchange in environmental and social domestic mining issues seems to be very limited. The fact that little information on the domestic mining sector is available in English underlines the assumption that China regards the development of the domestic mining sector as its own affair and keeps this sector – with its high strategic relevance for industrial policy – sealed off.

² In 2008, 37% of the total output was mined by small scale enterprises [15].

4. China's international action in mining and responsible sourcing

4.1. China's outbound investment and related challenges

Although China is a major producer of a number of raw materials, it is still dependent on securing supplies from abroad. Chinese companies have increasingly invested in mining assets in developing countries as well as in other mining countries like Canada and Australia [22].

Generally, Chinese outbound mining investments have been negatively associated with environmental impacts and have often been perceived to be non-beneficial for local communities [22]. However, similar to 'Western' mining companies' performance, there are both negative and positive examples of Chinese engagement in developing countries. It should be acknowledged that there is a large difference between the performance of small scale Chinese mining companies in places like DRC and Ghana, and that of large companies like CITIC Pacific in Western Australia and MMG in Peru. Ray et al. [23] in their 2014 study on China in Latin America reported that many Chinese extractive companies exceed local standards and outperform their Western peers. Ellis also states, that Chinese companies "*do not inherently behave worse than their Western counterparts*" [24].

A 2017 working paper of the German Institute of Global and Area Studies attempted to examine the claims against Chinese mining companies with operations in Africa [25]. Summarizing their negative findings, they concluded that Chinese mining operations often do not generate job opportunities for the local population and that individuals living close to a Chinese-operated mine have a more negative image of China compared to respondents living in the vicinity of non-Chinese mining operations. On the positive side, the study reports evidence that China's presence in Africa might contribute to local development by enhancing infrastructure networks. Another aspect of this debate is the conclusion of the International Study Group of the UN Economic Commission for Africa that the Chinese offer an alternative to traditional 'Western' investors and hence at least give developing countries the possibility to choose between these two competing approaches [26].

As a result, it should be pointed out that a more differentiated debate on the topic is needed. Given the negative media coverage of both Chinese and 'Western' mining companies, the image of the sector needs to improve as a whole, regardless of the company's origins. Therefore, a more collaborative approach relying on dialogue between all parties, sharing positive experiences and exchange of knowledge within international initiatives, is desirable.

More economic issues related to China's outbound mining activities, in particular China's provision of local infrastructure in developing countries, are not discussed here. They are outlined in the STRADE [Policy Brief 02/2018](#) on China's approach to raw materials and the Belt & Road Initiative.

4.2. Responsible mining of Chinese companies outside China

As stated above, many Chinese operations have been facing severe social and environmental problems in their host countries. To address these issues and give companies a guiding standard for their investments, the China Chamber of Commerce of Metals & Minerals (CCCMC) published the "Guidelines for Social Responsibility in Outbound Mining Investments" in 2014 [27,28]. CCCMC is affiliated with the Ministry of Commerce and Trade (MOFCOM) and represents 6,000 companies covering the vast majority of China's mineral industry abroad. The guidelines were jointly developed by the Chinese government, the mining industry in China and Global Witness [29] with support from the German Society for International Cooperation (GIZ) and the UK Department for International Development (DFID).

The guidelines address a wide variety of issues structured along the main topics of organizational governance, fair operating practices, value chain management, human rights, labour issues, occupational health and safety (OHS), environment, community involvement and engagement. They apply to all foreign Chinese investments in the fields of mineral exploration, extraction and processing. Mining-related activities, such as infrastructure development, are included in the scope [27,28]. Beside a minor share of private Chinese companies, the guidelines mainly address Chinese state-owned enterprises [29].

The guidelines encourage companies to develop a human rights-based due diligence process. They address cooperation with local communities and the effective remedy of people affected by adverse human rights impacts. Companies should conduct risk-based supply chain due diligence when dealing with conflict

minerals [29]. In contrast to China's national standards, the guidelines for outbound mining investments incorporate principles of many international standards³. As a result, the guidelines are comparable to international CSR standards⁴ [29].

While the guidelines are legally non-binding, CCCMC pushes the implementation on a voluntary basis with further action. In 2016, CCCMC in cooperation with the GIZ, the DFID and further third parties set up the Sustainable Mining Action Plan (SMAP) [30]. SMAP is still in its initial phase and foresees missions in Africa and Latin America in 2018. The interim goals are to create awareness among overseas mining companies, to inform them about the guidelines and to select a small number for pilot implementation projects. The next step will be the integration of more companies implementing the standard. CCCMC's exchange with international players supports the implementation. For example, CCCMC signed a formal agreement with the ICMM in December 2017 *"to help promote sustainable development in Chinese companies' overseas mining investments"* [31].

A particularly great challenge will be the involvement of small private operators, e.g., in gold mining in Ghana or Cameroon. Their operation is frequently informal and outside of the monitoring of local Chinese embassies or CCCMC.

The successful implementation will depend on the support and/or pressure of the central Chinese government and the local Chinese embassies, the mining site-specific requirements to obtain the Social License to Operate and pressure from NGOs. As yet, it is too early to assess the expected output. Nevertheless, the initiative is a first step and might lead to improvements, provided that political support is strong.

Although the CCCMC's guidelines address a wide variety of actors from different fields, some Chinese activities remain unaffected. For example, illegal gold mining activities of Chinese (artisanal) small scale miners in Ghana have caused severe local conflict and environmental damage [32]. In such cases, Chinese embassies have a key responsibility to cooperate with the authorities of the host country to enforce their citizens' compliance with the local law.

4.3. Responsible sourcing guidelines

While the above topics refer to international Chinese mining operations and therefore mainly to primary extraction, the responsible sourcing of minerals, has become an important requirement for companies. The motivation for the Chinese to practice responsible sourcing is manifold but mainly boils down to two reasons.

- Firstly, China is exporting large volumes of manufactured goods to the US and Europe and has to meet regulatory requirements in these markets, particularly the US Dodd-Frank Act and the European conflict minerals regulation. Chinese companies that potentially export conflict minerals or metals to the US and the EU need to provide evidence that they respect human rights and avoid contributing to conflict through their mineral sourcing practices. The STRADE [Policy Brief 02/2017](#) already outlined the relevance of Chinese manufacturing companies in Europe's supply chain. The EU imports significant volumes of finished and semi-manufactured products from China, which in turn sources considerable shares of the required materials from developing and emerging countries⁵.
- Secondly, companies' concerns about their reputation has been steadily growing. Customers, particularly in Western markets are increasingly aware of manufacturers' potential links to human right issues in developing countries. Moreover, international NGOs like Amnesty International increasingly subject 'Western' and also Chinese companies, at all stages of the supply chain, to act responsibly. As a

³ The guidelines are widely structured along the principles of the ISO 20600 Guidance on Social Responsibility. Also the UN's Global Compact Ten Principles are taken into account. Moreover industry specific frameworks such as ICMM's Sustainable Development Framework as well the Code of Practices from the Responsible Jewelry Council have been considered and included in the development of the guidelines [27]. The UN Guiding Principles on Business and Human Rights are referenced directly, which in turn set ILO's core labor standards as the minimum baseline of human rights for companies.

⁴ E.g., the observation of the UN Guiding Principles on Business and Human Rights during the entire life cycle of mining projects is one of the requirements in the section on human rights [28].

⁵ E.g., iron ore from Brazil, copper from Peru and Chile, cobalt from Myanmar. See also Figure 2 in [Policy Brief 02/2018](#) which gives an overview on Chinese external dependency for minerals.

result, large brands like Apple, Samsung and BMW try to avoid any connection to human rights infringements or the fuelling of conflict. Furthermore, companies working in the supply chains of the aforementioned brands must also act responsibly if they are to remain part of the supply chain.

In late 2015, CCCMC published the Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains which were developed in close cooperation with the OECD to address these issues. The guidelines provide assistance and a set of minimum standards to companies that “*are engaged at any point in the supply chain of minerals to identify, prevent and mitigate their risks of directly or indirectly contributing to conflict, serious human rights abuses and risks of serious misconduct*” [33]. The guidelines are largely based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals as well as on the UN Guiding Principles on Business and Human Rights and also address conflict financing and the worst forms of human rights abuse, the so-called “type I risks”. In addition to these type I risks, the CCCMC’s guidelines extend the scope to a set of “type II risks” related to indigenous rights, pollution, and biodiversity conservation, among others. The current focus of the guidelines is tin, tungsten, tantalum and gold but can be also applied to other minerals. China’s Due Diligence Guidelines can be seen as more advanced than the OECD Due Diligence Guidance, since risks relating to serious misconduct in environmental, social and ethical issues (type II) are included.

The implementation of the guidelines is still in the initial phase, carried out by CCCMC in cooperation with GIZ and DFID, in parallel to the activities related to the guidelines on outbound mining investment. They are working –in collaboration with the WWF – on the development of an operations manual and indicator system. The manual will offer a user friendly document explaining necessary implementation steps, approaches, and procedures. Companies will then be able to evaluate their performance and subsequently prioritize their policies and objectives to improve in key sectors. [34]. CCCMC also foresees the dissemination and promotion of the guidelines actively assists in the provision of training, workshops and exchanges [27].

Critics argue that the CCCMC guidelines are not legally binding and do not foresee any sanctions in the case of non-compliance and thus are just “paperwork” [35]. They further point out that China does not currently have pressure from Chinese societal groups, and therefore the requirement for responsible supply chains has only been set externally.

However, it is important to appreciate CCCMC’s first step toward responsible sourcing along the supply chain which has the potential to initiate the long-term implementation of due diligence. In Western countries, the debates on responsible sourcing and mining started in the 1990s, and many challenges are still not solved, with only a few companies actually practicing responsible sourcing. The West should appreciate the fast speed of China’s development of the guidelines and should recognise that China will – similar to the West – need time to establish a broad consciousness for responsible sourcing and the need for supply chain management. A recent study for the EC revealed that European small and medium-sized companies (SME) similarly do not practice due diligence and have a lack of knowledge, skills, capacities and incentives to start due diligence procedures [36].

Concluding, although China and Europe have different starting points, they face a common challenge in implementing responsible sourcing. The joint goal must be to improve local livelihoods in mining countries with weak governance. To reach this goal, both China and the ‘West’ are still in the starting phase of developing responsible sourcing schemes that prove to be truly efficient and do not lead to negative side-effects in the mining countries. STRADE proposes a close cooperation of all international countries and stakeholders along the supply chains to ensure that sustainable development in countries like the DRC is supported and not undermined by competition for resources.

4.4. Responsible sourcing of cobalt and battery raw materials

China holds a key position in the international cobalt supply chain; its refineries provided almost 50% of the global supply in 2015 [37]. Chinese refineries source cobalt ore almost exclusively (95%) from the DRC⁶ and supply it to China's processing plants, mainly for battery production. At the downstream end of the supply chain, Europe's battery demand is met to a large extent by imports from China and is thus linked to China's cobalt sourcing from the DRC. 20% of the DRC's cobalt production comes from ASM which is frequently linked to child labour – around 12% of the ASM cobalt miners in DRC are children [38]. At the same time 60% of all the households involved in ASM depend on mining as their major source of income [39]; thus an avoidance of sourcing from ASM to keep the supply chain “clean” would reinforce poverty. Instead, responsible sourcing should efficiently improve local livelihoods.

Chinese Huayou Cobalt Co. is a major Chinese cobalt refining company. In 2016, Amnesty International accused Huayou's subsidiary Congo Dongfang Mining International of human rights violations in their cobalt sourcing practices in its report “This is what we die for” [40] and succeeded in putting child labour in cobalt mining on the international agenda. Huayou reacted to the accusations and started to optimise their due diligence. During the STRADE workshop a representative presented Huayou's actions to improve their practices [41]. While they acknowledge that establishing a transparent and responsible supply chain costs a lot of effort, Huayou made clear that companies must approach the management of human rights risks in their supply chains instead of shifting exclusively to industrial country sources and avoiding sourcing cobalt from the DRC altogether. In its most recent 2017 report Amnesty International acknowledged, that the company had made impressive progress within a short time span, although still some aspects need to be optimised [42].

In 2016, the same year that the first Amnesty report on cobalt in DRC was published, the CCCMC launched the Responsible Cobalt Initiative with strong support from the OECD. The initiative aims at addressing environmental and social risks along the cobalt supply chain with the elimination of child labour as one of its primary goals. Many international companies, from both up- and downstream, are implementing the RCI [43]. In 2017, 24 companies mainly from the downstream sector were engaged in the initiative⁷, including Apple, Samsung, Dell, LG Chem, Sony, BASF, BMW, Volvo and Huayou Cobalt.

RCI members are required to improve their supply chain policies by applying the OECD's Due Diligence Guidelines and the Chinese Due Diligence Guidelines. Moreover, cooperation with the DRC government and affected communities should be actively fostered. To date, little information on the young initiative has been published [43]. The member companies jointly develop due diligence tools for risk assessment and supplier management which are being currently piloted by Huayou Cobalt. The initiative also aims at the reduction of compliance cost for the companies, by harmonising risk assessment tools and sharing audit data of smelters and refiners. A major strength of the RCI is the involvement of actors along the whole supply chain and companies from different regions which could lead to a knowledge transfer. However, it is unclear what actions the initiative takes in cases of non-compliance. Amnesty International [42] suggests the introduction of penalties, if standards are not met. RCI needs more members from the Chinese battery manufacturers, chemical processors, smelters and refiners [42].

Amnesty International [42] has raised concerns that many companies joining initiatives such as RCI to address the strongly growing awareness among consumers, without actually applying the standards. Such initiatives should not be used for hiding behind sustainability labels.

CCCMC is also a member in the recently launched Global Battery Alliance (September 2017). [44]. Downstream and upstream companies from the ICT and the automotive sector, international organisations and NGOs have joined in the initiative. The Global Battery Alliance has many overlaps with the RCI. It

⁶ See UN Comtrade data base

⁷ RCI members companies (in 2017): Apple, BASF SE, Beijing Easpring Material Technology Ltd., BMW Group, Dell Technology Inc, Greatpower Jinchuan Advanced Battery Materials Corp, Guangdong Jiana Energy Technology Co. Ltd., Guizhou Zoomwe, Zhengyuan Advanced Material Co., Ltd., HP Inc., Huawei Device Ltd., Hunan Shanshan Energy Technology Co. Ltd., Lanzhou, Jinchuan Advanced Materials Technology Co. Ltd., L&F, LG Chem, Nanjing Hanrui Cobalt Co. Ltd., Samsung SDI, Shenzhen Zhenhua E-chem Co. Ltd., Sony Corporation, Tianjin B&M Science and Technology Joint-Stock Ltd., Volvo Car Corporation, XTC New Energy Materials (Xiamen) Ltd., Zhejiang Huayou Cobalt Co., Ltd.; see <http://www.pm-review.com/chinese-industry-launches-responsible-cobalt-initiative-action-sustainable-cobalt-supply/>

addresses issues in the battery supply chain including child labor, hazardous working conditions, pollution and environmental damage related to the mining and processing of cobalt, lithium, nickel, graphite and others. With the increase in the demand for electric vehicles, global battery demand is growing – pushing for the increase in mineral demand for these minerals. The Global Battery Alliance seeks to achieve a sustainable development of these required capacities.

4.5. Finance sector

4.5.1. Financial institutions

In the beginning of 2017, the China Banking Regulatory Commission (CBRC) outlined the need for Chinese banks to establish a sustainable financial protection system with controllable risk that services “One Belt One Road” [45]. This includes an ambitious comprehensive overseas operation environmental and social risk management. Amongst others, banking sector financial institutions shall actively make reference to the Equator Principles and other international best practices; ensure that the rights and interests of local people are preserved; supervise companies to maintain the lawful rights and interests of workers, and to increase employment and development opportunities for local people. It also demands the establishment of complaint-response mechanisms with respect to complaints from the local population or NGOs.

In the last decade, the large Chinese finance institutions have been developing their own CSR standards, and many Chinese banks have adopted internal policies for lending to industries associated with high environmental and social risks. Comparing standards of multilateral lenders like World Bank, IFC or International Development Bank to Chinese banks such the Export Import Bank of China or the Chinese Development Bank many similarities can be observed. Figure 2 compares the standards of lenders in 2014.

| | Multilateral lenders | | | Chinese banks and regulators | | | |
|--|----------------------|-----|-----|------------------------------|------|-----|-----------|
| | World Bank | IFC | IDB | MOFCOM | CRBC | CDB | EXIM Bank |
| Ex-ante environmental impact assessments | X | X | X | X | | X | X |
| Project review of environmental impact assessments | X | X | X | | | X | X |
| Industry-specific social and environmental standards | X | X | | | | | |
| Require compliance with host country environmental regulations | X | | X | X | X | X | X |
| Require compliance with int'l environmental regulations | X | | | | X | | |
| Public consultations with affected communities | X | X | X | X | | | X |
| Grievance mechanism | X | X | | | | | |
| Independent monitoring and review | X | | | | | | |
| Establishing covenants linked to compliance | X | X | X | | | | X |
| Ex-post environmental impact assessments | | | | | X | X | |

Figure 1: Comparison of international and Chinese banks’ standards (status in 2014) [23]

Though the Western banks had more procedures in place, the Chinese banks and regulators also provided some basic mechanisms in 2014 and are assumed to have further developed their frameworks. This is in accordance with an overview published by the CBRC in collaboration with PwC and WWF China (data from 2012) which shows that Chinese finance initiatives committed to various international sustainability initiatives [46]. The Asian Infrastructure Investment Bank (AIIB), founded in 2015 under Chinese leadership, already has an Environmental and Social Framework with principles similar to the IFC/World Bank.

4.5.2. Transparency

The expansion of China's extractive sector abroad and the need to build up trustful and lasting relationships with the host countries is an important driver of China's development in transparency issues. Though China is not an EITI member state, it has expressed its support of EITI. A number of Chinese companies already report according to EITI standards [29].

In the context of supporting the Belt & Road Initiative, the CBRC demanded in its 2017 'guidance opinion' to strengthen Chinese companies' information disclosures to overseas institutions, to properly perform public relations and to prevent reputational risk. Particularly projects with latent environmental and social risks shall practice in advance the prompt disclosure of key investors and contractors, credit amounts, environmental impact assessments and other key information. Generally, the companies shall actively strengthen communications with affected third parties [45].

5. Summary and Conclusions

China is currently undergoing a deep transformation toward more environmental protection. The country's fight against air-pollution and the push toward renewable energies and electric vehicles are regularly featured in the media. For Western observers, the raw material sector is more in the background, though this sector is also undergoing a significant transformation. In domestic mining, China supports the implementation of "Green Mines" and rigorous restructuring has led to the closure of many mine sites. The challenges related to environment and health and safety are huge, particularly for the numerous small-scale mines with low technology, low resource efficiency and a lack of technical and financial resources. Little information on China's domestic mining sector is published in English. It is to assume, that China keeps this strategic sector intentionally sealed-off. Broad Sino-European cooperation in the domestic mining sector is not on the agenda. Instead, selected project-specific cooperation in business or R&D may focus on technologies for exploration, resource-efficient mining and processing, and mining site rehabilitation.

China's international mining activities have had a bad reputation in the past. However, the sweeping judgement that Chinese mining companies do not care about local social and environmental issues, is no longer valid. There are an increasing number of Chinese foreign mines which are managed similarly or even better than mines by the Western companies. The Chinese government and the China Banking Regulatory Commission (CBRC) do not want China's foreign activities to overshadow the long-term and strategically highly relevant Belt & Road Initiative with bad reputation, which could endanger partner states' acceptance of Chinese outbound activities. Accordingly, China has created guidelines which are still in the introductory phase and must be communicated to Chinese companies. Successful implementation of the guidelines will depend considerably on the support and pressure of the central government and the local Chinese embassies. Implementation might further be accelerated by mining site-specific challenges to obtain the Social License to Operate and pressure from NGOs. Cooperation with EU member states and international institutions in the field of responsible mining guidelines already takes place and should be continued and deepened.

Supply chain management and responsible sourcing implementation are also in their early stages. Within a short time span, China created, in cooperation with the OECD, guidelines which have even a broader scope than the OECD due diligence guidance. An obligation of responsible sourcing is not foreseen in the near future. The next step is to create knowledge and awareness in Chinese companies. Along the supply chains of conflict minerals and cobalt, some Chinese companies have already established supply chain management schemes due to requirements from Western customers and their need to comply with the Dodd-Frank Act or the EU conflict minerals regulation. The current cooperation of China, e.g., with Germany and the UK, needs to be continued. Since the trade streams are globally interconnected, international and multilateral cooperation plays a key role. The launch of the Responsible Cobalt Initiative, initiated by China, and the recently launched Global Battery Alliance are examples for new cooperation

schemes. Both initiatives have international members from the West and East, with members from both downstream and upstream industry.

China has shown its preparedness to take action for responsible supply chain management and has become an important partner in some international dialogues. It is essential to continue this dialogue despite big challenges such as language barriers, different economic and political systems, different transparency approaches, lack of information and cultural differences. This also includes – from the EU's viewpoint - insufficient Chinese commitments for transparency, environmental and social sustainability and co-ownership within the Belt & Road Initiative. Nevertheless, Europe should not underestimate China's high potential for fast transformation. A strong political will provided, Chinese companies can undergo significant changes in a fairly short period of time and put social and environmental topics high on the agenda, as recently shown by Huayou Cobalt's efforts towards responsible cobalt sourcing.

Project Background

The Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE) addresses the long-term security and sustainability of the European raw material supply from European and non-European countries.

Using a dialogue-based approach in a seven-member consortium, the project brings together governments, industry and civil society to deliver policy recommendations for an innovative European strategy on future EU mineral raw-material supplies.

The project holds environmental and social sustainability as its foundation in its approach to augmenting the security of the European Union mineral raw-material supply and enhancing competitiveness of the EU mining industry.

Over a three year period (2016-2018), STRADE shall bring together research, practical experience, legislation, best practice technologies and know-how in the following areas:

1. A European cooperation strategy with resource-rich countries
2. Internationally sustainable raw-material production & supply
3. Strengthening the European raw-materials sector

Project Identity

| | |
|--|--|
| Project Name | Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE) |
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6. References

- [1] Jinping X. Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era. (19th National Congress of the Communist Party of China). Beijing: [publisher unknown]; 18.10.2017.
- [2] McCahill WC. China's "New Era" and "Xi Jinping Thought" [Internet] [cited 2017 Dec 18]. Available from: http://www.nbr.org/downloads/pdfs/outreach/mccahill_commentary_102417.pdf.
- [3] Xinhua. China Focus: President Xi delivers New Year speech vowing resolute reform in 2018 [Internet] [cited 2018 Jan 3]. Available from: http://www.xinhuanet.com/english/2017-12/31/c_136863468.htm.
- [4] Xinhua. China starts collecting environment tax [Internet] [cited 2018 Jan 3]. Available from: http://www.xinhuanet.com/english/2018-01/01/c_136865068.htm.
- [5] EUWID. China meldet geplante Verbote für Abfallimporte an WTO [Internet] [cited 2018 Jan 3]. Available from: <https://www.euwid-recycling.de/news/wirtschaft/einzelansicht/archive/2017/july/Artikel/china-meldet-geplante-verbote-fuer-abfallimporte-an-wto.html>.
- [6] REN21. Renewables 2017 - Global Renewables Report [Internet] [cited 2017 Dec 18]. Available from: http://www.ren21.net/wp-content/uploads/2017/06/17-8399_GSR_2017_Full_Report_0621_Opt.pdf.
- [7] IEA - International Energy Agency. Global EV Outlook 2017: Two million and counting [Internet]. 2017 [cited 2017 Dec 18]. Available from: <https://www.iea.org/publications/freepublications/publication/GlobalEVO Outlook2017.pdf>.
- [8] China Mining. Program China Mining 2017 [Internet] [cited 2018 Jan 2]. Available from: http://www.chinaminingtj.org/images/chinamining/document/2017/program2017_en.pdf.
- [9] Lei S, Hanxiao K, Jian W, et al. The Status and Achievements of Green Mines and Mining Ethics in China. *Journal of Resources and Ecology*. 2016;7:317–322.
- [10] Wang J, Huang X, Ke Hu, et al. An exploration on corporate-community relationship in mining sector in China – Lessons from Yunnan Phosphate Chemical Group Co., Ltd. *Resources Policy*. 2017:54–64.
- [11] Huang X, Li X, Liu Y, et al. Status and Achievement of the Green Mine in China. 2012 International Conference on Geological and Environmental Sciences. 2012.
- [12] Li X, Jun Jie Y, Hongcai Y, et al. Study on Evaluation Index System of Green mine construction. *IOP Conference Series: Earth and Environmental Science*. 2017.
- [13] Ministry of Land and Resources of the People's Republic of China. plan to development of the mineral sectors during 2016-2020 [Internet] [cited 2018 Mar 5]. Available from: http://www.mlr.gov.cn/zwgk/ghjh/201612/t20161205_1423357.htm.
- [14] Ministry of Land and Resources of the People's Republic of China. Guidance to Facilitate Development of Green Mines [Internet] [cited 2018 Mar 5]. Available from: http://www.mlr.gov.cn/zwgk/zytz/201705/t20170510_1507257.htm.
- [15] Song X, Mu X. The safety regulation of small-scale coal mines in China Analysing the interests and influences of stakeholders. *Energy Policy* 52. 2013:472–481.
- [16] Ministry of Land and Resources of the People's Republic of China. Guidance for Development of Green Mines with Solid Minerals [Internet] [cited 2018 Mar 5]. Available from: http://www.mlr.gov.cn/xwdt/jrxw/201712/t20171225_1710715.htm.
- [17] Lei S, Gunson AJ. The role of artisanal and small-scale mining in China's economy. *Journal of Cleaner Production*. 2006:427–435.
- [18] Packey DJ, Kingsnorth D. The impact of unregulated ionic clay rare earth mining in China. *Resources Policy*. 2016:112–116.

- [19] Xiao R, Wang S, Li R, et al. Soil heavy metal contamination and health risks associated with artisanal gold mining in Tongguan, Shaanxi, China. *Ecotoxicology and Environmental Safety*. 2017:17–24.
- [20] Dzedziczak J. China Mining Industry [Internet] [cited 2018 Jan 15]. Available from: <http://www.satprnews.com/2018/01/10/china-mining-industry/>.
- [21] Glasmachers N. Mögliche Lizenzentziehung für 1000 Eisenerzminen in China [Internet] [cited 2018 Jan 15]. Available from: <http://www.miningscout.de/blog/2017/09/28/moegliche-lizenzentziehung-fuer-1000-eisenerzminen-in-china/>.
- [22] The Climate and Finance Policy Centre. China's Mining Industry at Home and Overseas: Development, Impacts and Regulation [Internet] [cited 2017 Dec 18]. Available from: http://www.ghub.org/cfc_en/wp-content/uploads/sites/2/2014/11/China-Mining-at-Home-and-Overseas_Main-report2_EN.pdf.
- [23] Ray, Rebecca, Gallagher, Kevin P., Lopez, Andres, Sanborn, Cynthia. China in Latin America: Lessons for South-South Cooperation and Sustainable Development [Internet] [cited 2018 Jan 16]. Available from: <https://www.bu.edu/pardeeschool/files/2014/12/Working-Group-Final-Report.pdf>.
- [24] The Guardian. 10 things to know about China, Latin America and the environment [Internet] [cited 2018 Jan 16]. Available from: <https://www.theguardian.com/environment/andes-to-the-amazon/2014/dec/20/10-china-latin-america-environment>.
- [25] Wegenast T, Strüver G, Giesen J, et al. At Africa's Expense? Disaggregating the Social Impact of Chinese Mining Operations: GIGA Working Papers No 308 [Internet]. 2017 [cited 2018 Jan 24]. Available from: https://www.giga-hamburg.de/de/system/files/publications/wp308_wegenast-struever-giesen-krauser.pdf.
- [26] UNECA. Mineral's and Africa's Development [Internet]. [place unknown]; 2011 [cited 2018 Mar 5]. Available from: https://www.uneca.org/sites/default/files/PublicationFiles/mineral_africa_development_report_eng.pdf.
- [27] China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters. Guidelines for Social Responsibility in Outbound Mining Investments. [place unknown]; 2014 [cited 2016 Mar 3].
- [28] Tang-Lee D. Corporate social responsibility (CSR) and public engagement for a Chinese state-backed mining project in Myanmar – Challenges and prospects. *Resources Policy*. 2016;47:28–37.
- [29] Buhmann K. Chinese Human Rights Guidance on Minerals: Building Soft Power. *Journal of Current Chinese Affairs* [Internet]. 2017 [cited 2018 Jan 17];2:135–154. Available from: <https://journals.sub.uni-hamburg.de/giga/jcca/article/download/1070/1077>.
- [30] Emerging Market Multinationals Network for Sustainability. Sustainability in Chinese Outward Mining Investments- Sustainable Mining Action Plan Project (SCOMI-SMAP) Launched in China [Internet] [cited 2018 Jan 24]. Available from: <https://www.emm-network.org/event/scomi-smap-launched-in-beijing/>.
- [31] International Council on Mining & Metals. Chinese mining body aligns with ICMM to promote mining with principles [Internet] [cited 2018 Jan 24]. Available from: <http://www.icmm.com/en-gb/news/2017/icmm-signs-mou-with-cccmc>.
- [32] Crawford G, Botchwey G. Foreign involvement in small-scale gold mining in Ghana and its impact on resource fairness. In: Pichler M, editor *Fairness and Justice in Natural Resource Politics*; 2017.
- [33] China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters. Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains. [place unknown]; 2015.

- [34] Weiju L. Chinese mining companies 'going global' should address environmental and social risks by starting to communicate with stakeholders [Internet] [cited 2018 Jan 18]. Available from: [http://mailchi.mp/57e2ab6729bc/chinese-responsible-investment-overseas-newsletter-responsible-mining-708041?e=\[UNIQID\]&utm_source=Business+%26+human+rights+-+Weekly+Update&utm_campaign=ea06bb6bbc-EMAIL_CAMPAIGN_2018_01_02&utm_medium=email&utm_term=0_3a0b8cd0d0-ea06bb6bbc-182000469#Eng%20version](http://mailchi.mp/57e2ab6729bc/chinese-responsible-investment-overseas-newsletter-responsible-mining-708041?e=[UNIQID]&utm_source=Business+%26+human+rights+-+Weekly+Update&utm_campaign=ea06bb6bbc-EMAIL_CAMPAIGN_2018_01_02&utm_medium=email&utm_term=0_3a0b8cd0d0-ea06bb6bbc-182000469#Eng%20version).
- [35] Gessler S. Industry Guidelines for Chinese Mining Companies Abroad: Paper Tigers? [Internet] [cited 2018 Jan 18]. Available from: http://bellschool.anu.edu.au/sites/default/files/publications/attachments/2017-11/in_brief_2017_26_gessler_final.pdf.
- [36] Levin Sources & RINA Consulting. Study on the Support for SME Supply Chain Due Diligence [Internet] [cited 2018 Mar 13]. Available from: <https://publications.europa.eu/en/publication-detail/-/publication/67a2c448-fb38-11e7-b8f5-01aa75ed71a1/language-en/format-PDF>.
- [37] British Geological Survey. World Mineral Statistics [Internet] [cited 2018 Jan 18]. Available from: <http://www.bgs.ac.uk/mineralsuk/statistics/wms.cfc?method=searchWMS>.
- [38] Hanrui Cobalt. Industry to formally establish Responsible Cobalt Initiative, to take action on sustainable cobalt supply chain [Internet]. Available from: <http://en.hrcobalt.com/downloadRepository/4d8b5449-343e-49c8-89dc-1271dd30d582.pdf>.
- [39] Faber B, Krause B, de la Sierra, Raúl Sánchez. Artisanal Mining, Livelihoods, and Child Labor in the Cobalt Supply Chain of the Democratic Republic of the Congo [Internet] [cited 2018 Jan 8]. Available from: <https://cloudfront.escholarship.org/dist/prd/content/qt17m9g4wm/qt17m9g4wm.pdf>.
- [40] Amnesty International. This is what we die for [Internet] [cited 2018 Jan 8]. Available from: <https://www.amnesty.org/download/Documents/IOR3056702017ENGLISH.PDF>.
- [41] Huayou Cobalt. Due Diligence Practices of Responsible Cobalt Supply Chain & DRC's Community Intervention. 2017 [cited 2018 Jan 24].
- [42] Amnesty International. Time to recharge: Corporate Action and Inaction to Tackle Abuses in the Cobalt Supply Chain [Internet] [cited 2018 Jan 8]. Available from: <https://www.amnestyusa.org/wp-content/uploads/2017/11/Time-to-recharge-online-1411.pdf>.
- [43] CCCMC. Responsible Cobalt Initiative(RCI): Facing challenges, sharing responsibility, joining hands and achieving win-win [Internet] [cited 2017 Jan 8]. Available from: <http://www.cccmc.org.cn/docs/2016-11/20161121141502674021.pdf>.
- [44] World Economic Forum. Major Push to End the Hidden Human Toll and Pollution behind Smartphone and Electric Car Batteries [Internet] [cited 2018 Jan 18]. Available from: <https://www.weforum.org/press/2017/09/major-push-to-end-the-hidden-human-toll-and-pollution-behind-smartphone-and-electric-car-batteries/>.
- [45] China Banking News. CBRC Guidance Opinion [2017] No. 1 [Internet] [cited 2018 Jan 24]. Available from: <http://www.chinabankingnews.com/cbrc-guidance-opinion-2017-no-1/>.
- [46] WWF China. The Sustainable Performance of Chinese Banking and International Financial Institutions Comparative Study [cited 2018 Mar 5].