Chinese Mineral Sourcing Interests & Greenland's Potential as a Source of 'Conflict-Free Conflict Minerals'

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A growing global market for generic minerals that are used in technical products for the 'green' energy transition and the electronic industry holds interesting potential for the Arctic. This article takes Greenland as an example of an Arctic nation which may offer an alternative sourcing country for minerals otherwise known as 'conflict-minerals'. China's electronic, solar power and wind energy industries need certain generic minerals for production for the global market. Certain conflict-ridden countries are main sources of some of these minerals, which are known as 'conflict minerals' when their trade helps fuel the conflicts. Commitment to fight conflict minerals have led to various guiding normative standards; and the EU and US have introduced requirements on importers and manufacturers to document efforts to avoid conflict-related supply chains. These developments underscore the potential market for deposits elsewhere. China has responded by developing guidelines for minerals supply chains and mining investment. The article explains that these guidelines can apply outside conflict areas and discusses how their connection to other international regulatory instruments for business responsibility for human rights can be deployed by Greenlandic actors to enhance the implementation by Chinese economic entities of Greenlandic policies and national regulation on social sustainability. The article argues that in particular the Chinese guidelines' reference to the concept of riskbased due diligence, a concept that has been introduced by guidelines from the United Nations (UN) and elaborated in guidelines from the Organisation for Economic Collaboration and Development (OECD) as a company approach for identifying and managing its adverse impacts, may be deployed to complement Greenland's own regulation on stakeholder engagement.

Introduction

Preventing adverse social and environmental impact of mining and the trade in minerals is a key issue for affected communities and host governments (Ruggie, 2013; Footer, 2015). Companies causing adverse impacts on society may also suffer economic losses due to the reduction of their 'social licence to operate' (Nelsen, 2006; Henisz et al., 2014). While concern with adverse societal impacts caused by extractive industries has particularly been voiced in regard to countries in Africa and Latin America, the manner in which mining is performed means that the industry as such can be considered a high-risk sector in regard to potential adverse impacts regardless of country or

region. There is a need everywhere for adequate measures to protect communities, employees or the environment against harmful effects of dust, industrial processes, treatment of mined or discarded materials, etc. Local communities often feel strongly about the establishment or extension of mining projects or possess specific knowledge of relevance for identifying and managing potential adverse impacts. Irrespective of location, adequate processes also need to be in place to ensure stakeholder engagement. From health impacts on communities and occupational health and safety of workers to general working conditions and meaningful stakeholder engagement, a range of impacts caused by the industry and relevant processes to identify and manage these have human rights relevance. Indeed, the risks and steps to avoid these have been clarified through efforts to develop normative guidance for governments as well as companies with regard to business impacts on human rights over the past two decades, especially with the United Nations (UN) (Ruggie, 2013) complemented by the Organisation for Economic Collaboration and Development (OECD) (Buhmann, 2015).

Recent years' commitment to fighting climate change through transitions to a 'green' economy has led to an increased economic interest in certain minerals that are required for products like solar power panels, batteries for electric cars, as well as a range of electronic goods, many of which are produced in China and traded to other countries (Huang, 2018; Cao & Groba, 2013; Wang, 2009). International political support for fighting climate change through green transitions took a leap forward with the 2015 Paris Climate Change Accord, as well as the adoption in the same year of the Sustainable Development Goals (SDGs) with SDG 7 aiming to ensure access to affordable, reliable, sustainable and modern energy for all, including renewable and clean energy. In the years preceding this, international concern had been expressed with severe social impacts of the mining and sourcing of some minerals used for products relevant for this transition, in particular the socalled 'conflict minerals' sourced out of the eastern Democratic Republic of Congo (DRC). In the United States and Europe, such concern has led to extensive requirements on companies importing such minerals from the DRC area or deploying them for manufacturing purposes to provide transparency on the sources of the minerals, e.g. through mandatory reporting. For the US and EU markets, manufacturers or importers of products that contain generic minerals that originate or may potentially originate from the DRC area are subject to reporting on their supply chains and risk management processes. The potential reputational risk, as well as the human and economic resources required for the reporting, create a potential market for the relevant types of minerals sourced out of other regions that do not suffer from civil wars and human rights atrocities characterising 'conflict minerals' from the DRC area. For a special issue related to the topic of mutual resource interests between China and the Arctic, this raises interesting economic prospects if Arctic areas can be providers of the relevant types of minerals for China's industry supplying to the global market. This in turn raises questions on how to address potential adverse societal concerns in the Arctic areas where such minerals could be mined, including through strong engagement with communities as stakeholders.

This article addresses these questions from the perspective of Greenland, an Arctic nation with potential sources of a range of the relevant minerals, and strong policies, a minerals resources law, other regulations and procedures for social sustainability and impact assessment, benefit agreements, and citizen involvement. Previous studies (e.g. Hubbard, 2013), that have addressed Indigenous concerns in particular, have argued that these policies and the implementation of the Greenlandic regulation for socially sustainable mining may benefit from considering the so-called

risk-based due diligence approach that was introduced and elaborated by UN guidance instruments on business responsibilities for human rights. This article expands that line of argument to Greenlandic society in general, in particular local communities that may be affected by mining projects. Adopting a particular focus on the potential Chinese interests in Greenlandic minerals, the article considers how two sets of guidelines developed by the Chinese mining and minerals industry may complement the Greenlandic raw materials regulation for the purpose of avoiding adverse impacts and ensuring stakeholder engagement in line with international guidance on business and human rights. In particular, the article argues that the Chinese guidelines' inspiration from international guidance instruments that take a human rights perspective and encourage the risk-based due diligence process may offer opportunities for Greenlandic actors to deepen community engagement and prevention of adverse impacts of a human rights character (such as, but not limited to, health impacts). Due to space limitations the article does not discuss other Arctic states, however in principle the Chinese guidelines may be applied by governments or communities in other areas from a similar perspective as the one argued in here.

Greenland is a part of the Kingdom of Denmark, and in 2009 was granted self-government, a step up towards full independence from 'home rule' introduced in 1979 and prior colonial status. With Greenlandic aspirations of achieving independence from Denmark, interest has also grown for developing a self-sufficient economy. Greenlandic raw materials play a part as a potential source of income for such an economy (Ilisimatusarfik & University of Copenhagen, 2014). Combined with the prospects that climate change offers for easier access to minerals hitherto covered under ice as well as for making sea or land-based infrastructure to ship mined ore or processed composites more accessible, already existing international interest in exploiting Greenlandic raw-materials grew around 2014 (Merrild-Hansen et al., 2016). While it later cooled off due in part to the global development in prices for relevant minerals, the prospect of Greenland emerging as a supplier of various minerals and other raw-materials remains, in principle, not least due to the economic aspects of independence. The economic interest among foreign companies in exploring these resources is reflected by the fact that a large number of exploration permits are held by international companies (Government of Greenland, 2018).

If supplies can be accessed at competitive prices, Greenland offers potential sources of 'conflict-free minerals'. Such competitiveness depends not only the price of a unit of the material. It is also determined by economic or human resource-demanding steps needed for trading a product in certain markets, for example steps to document that a mineral does not fuel war and human rights atrocities. China has shown an interest in funding the development of a mining infrastructure of minerals in Greenland, and in buying minerals for use in the Chinese manufacturing industry (Zeuthen, 2017; Economist, 2018).

In Greenland the potential adverse as well as positive social impacts of mines have been a major issue in regard to several proposed projects. In addition to health and environmental impacts, particular concern has been raised in regard to Chinese political interests and the impact of a potentially large influx of Chinese workers (Economist, 2018; Nuttall, 2012; Merrild-Hansen et al., 2016). Local tensions and conflicts among citizens and politicians have been observed both in regard to the Isua mine prospect (close to the capital Nuuk) that might have employed a large contingent of Chinese workers (Nuttall, 2012), and in regard to potential mining at Kvanefjeld in Southern Greenland (Bjørst, 2016, 2017; Triscott et al., 2017). The potential health effects of

uranium dust from the mine and the possibility that Chinese employees may form a large proportion of workforce at the Kvanefjeld mine are concerns voiced by parts of the local community (author's interviews August 2018). China's persistent interest in investing in the Greenlandic economy in a broader sense has been documented through Chinese bids on the construction of new airports in Greenland (Matzen & Daly, 2018).

On that backdrop, this brief article explores and discusses the implications of Chinese guidelines for responsible minerals supply chains and mining investment. It does so with a particular emphasis on Chinese companies in the sector in Greenland. This is based on an analysis of the Chinese guidelines based on the legal method of document analysis, combined with a pragmatic socio-legal approach of placing the documents into the broader normative, political and economic contexts. A pragmatic socio-legal approach (Tamanaha, 1997) emphasises the role and potential of normative standards to govern conduct. By contrast to a doctrinal legal approach, which often has regard only to hard (binding) law and legal enforcement in courts, the pragmatic approach recognises the relevance of guiding normative instruments as well. As the societal impacts of transnational economic activity is generally not subject to hard regulation and legal enforcement across borders, the pragmatic approach to the role of guiding instruments is relevant for the topic of this article. As will be explained, the principles informing risk-based due diligence makes the Chinese guidelines a potentially relevant source of socially responsible action beyond the conflict areas from which 'conflict minerals' derive.

The Generic Minerals that May Be 'Conflict Minerals', and Their International Market Potential

The term 'conflict minerals' is generally associated with minerals sourced out of areas suffering from particularly severe internal conflict that result in atrocities. The trade in minerals has been found to generate funds for war-lords responsible for the atrocities. The term 'conflict minerals' in principle refers to any such mineral mined in an area of armed conflict and traded illicitly to finance the fighting (Oxford Dictionaries online). Gold, tin, tungsten, tantalum, certain other rare earth elements (REE) and cobalt are typically considered 'conflict minerals'. While certain areas suffering from conflicts and human rights atrocities have rich deposits of these minerals, the generic minerals are also found elsewhere. The ores of tin (which is produced from cassiterite), tungsten (produced from coltan), tantalum (produced from wolframite), and supplies of rare earth minerals like cobalt are found in all regions, but bigger reserves are found in parts of Eastern and Central Africa, and China, Myanmar, Vietnam, and parts of Latin America and Canada, depending on the mineral in question (USGS website; Stensgaard et al., 2016). Besides Canada, supplies also exist in other Arctic nations, including Greenland.

The role of trade in 'conflict minerals' fuelling war and human rights atrocities have been known for years, but the international society stepped up action against trade practices in such minerals following the humanitarian crisis in the Eastern DRC and adjoining areas in other countries in the early 2000s. The concern prompted by the DRC crisis has been represented at the popular level in movies, e.g., 'Blood Diamond' (2016). In 2010 it led the UN Security Council to adopt a Resolution calling for the introduction of due diligence in minerals supply chains to fight the minerals trade that allowed rebel groups in the DRC area to function (UN, 2010). The OECD in 2013 issued a guidance for responsible minerals supply, spelling the general normative directives of OECD's

Guidelines for Multinational Enterprises (OECD, 2011) into detail for the sector. In 2014 and 2015 the China Chamber of Commerce of Metals, Minerals & Chemicals (CCCMC), an organisation connected to the Chinese Ministry of Commerce, issued guidelines for Chinese companies investing or trading in minerals. The Chinese guidelines are explicitly aligned with the OECD guidance, despite China not being a member of the OECD. Adopting mandatory rules applicable within their territories, the United States (US) and the European Union (EU) have introduced requirements on traders in certain minerals to exercise due diligence, and disclose these practices or their sources of certain 'conflict'-type minerals from conflict-affected areas (especially the DRC) or areas that are at risk of such conflicts (EU, 2017, US Congress, 2010).

The minerals targeted by the regulatory instruments noted above are typically used in computers, tablets, mobile-phones, in re-chargeable batteries for electric cars, or in solar-power panels (Enough Project, 2009; Amnesty International, 2017). In other words, they play a major role in the modern economy, both in regard to electronic communication as core parts in the devices for such communication, and in the transition for 'green' energy. Some of the raw materials for these manufactured products can be considered 'critical', meaning that they are at the same time (i) important to society's needs, (ii) subject to a significant supply risk, and (iii) there is a lack of (viable) substitutes (Stensgaard et al., 2016). What is considered critical is both scale dependent, dynamic, and varies from country to country, depending on the resource endowment and the structure of the raw material consuming industries (ibid.).

The introduction of the US and EU requirements on companies to document supply chains and sourcing practices are important elements in the global fight against conflict minerals. However, from the company perspective the requirements translate into administrative and resource expenses and therefore costs, for themselves, suppliers and/or buyers. Like other mandatory requirements on documenting particular practices in a trade or production process, they complicate the access of economic actors to minerals used in the products that they manufacture or sell. As a result, supplies of the same generic minerals from conflict-free areas are of interest, and countries that have supplies of such minerals may have economic incentives in making them available. Even disregarding potential costs of administrative requirements, the market for minerals used in electronics and some other products has risen dramatically in recent years (King, n.d.). Moreover, increased access to the same generic materials from other areas can decrease the market for minerals that are at risk of funding conflicts in countries like the DRC. This might in itself inform efforts by governments and the industry to explore the potential of sources for such minerals. From the Greenlandic perspective, the expected supplies of such minerals at locations other than where potential mines that themselves spur significant adversarial voices in the local society (such as the Kvanefjeld project) are located would fit that potential, as indicated in the following paragraph.

Overall, deposits of minerals of a 'conflict'-type are found in many locations in Greenland (Steensgaard et al., 2016; USGS website), although resources are still mainly being explored rather than exploited (Government of Greenland, 2018). Tungsten, considered a 'critical' mineral according to EU estimates, is available in moderate supplies in Greenland. Tantalum-associated niobium is estimated to be in high supply in Greenland. Resource areas include the Kringlerne mine/mining prospect and some others in Southern Greenland (Stensgaard et al., 2016). Niobium is also considered a critical mineral. Greenland's resources for tin (not a critical mineral but also

economically important) are estimated to be low (Stensgaard et al., 2016). Moreover, both Kringlerne and the nearby Kvanefjeld complexes are considered potential world-class deposits for rare earth elements (ibid.), also used in electronics. Despite such uncertainty of the quantities of these various minerals, the 2018 list of exploration permits confirms that international companies have their eyes tuned to Greenland with a view to potential resources of gold, tantalum/niobium, as well as cobolt and various rare earth elements and several other minerals (Government of Greenland, 2018). Tin and tungsten (or their ores) are found within the same deposit types (Stensgaard et al., 2016).

Greenlandic Regulation of Societal Impacts of Raw-Materials Exploration and Exploitation

Greenlandic policies and regulations on raw-materials pay considerable attention to the involvement of local communities in decision-making on proposed projects (Nuttall, 2012; Merrild-Hansen et al., 2016). The participation affected communities in decision-making on economic projects affecting their land, lives and practices is a human rights issue in itself. Indigenous peoples enjoy special claims under the International Labour Organisation's Convention 169 (ILO, 1989).. UN and OECD guidelines on meaningful stakeholder engagement, in particular with regard to affected communities and individuals, as part of the risk-based due diligence approach, underscores the human rights character of access to information and to participation in decision-making for all. Moreover, industry development in general is an issue imbued with several human rights aspects that may concern adverse impacts as well as potential benefits. These are related to the potential economic benefits of access to employment and building strong occupational health and safety practices in an already (but slowly) growing industry, as well as potential adverse impacts on land, health, cultural and recreational space, known from other mining nations. Greenland has policies and regulation to identify and negotiate beneficial outcomes of mining activities in terms of so-called impact benefit agreements (IBAs). Consultation with communities is also a potential source of insight for benefits that may be of local relevance.

Greenland's legislative regulation of the development of the raw-materials industry contains requirements for social sustainability assessment, social sustainability agreements, and environmental impact assessment (Government of Greenland, 2009; Govmin.gl (n.d.)). Greenland is part of the Kingdom of Denmark but since 2009 the Greenlandic authorities have the power to make policies and legislate on raw materials, as well as their administration and implementation (Government of Denmark, 2009; Alfredsson, 2014). According to Greenland's Act on Raw Materials, which dates from 2009 and has been amended several times since then (Government of Greenland, 2009; Govmin.gl (n.d.)), a social sustainability assessment and environmental impact assessment must be carried out by the entity that applies for a license. Authorities are empowered to set conditions when they grant licenses to explore or exploit minerals in Greenland. Possible conditions include the employment of Greenlandic employees, companies, or considerations of societal sustainability. For this purpose, social sustainability agreements and impact benefit agreements may be concluded between the Greenlandic government, a municipality, and the license holding company. IBAs in Greenland's mining sector aim at ensuring the social commitment from the involved parties through the lifetime of the project (Bureau of Minerals and Petroleum, 2009). The policy and legal recognition of stakeholder consultation is accordance with

academic studies on stakeholder participation as an important aspect of the quality of the process leading to a social or environmental impact assessment (Nenasheva et al., 2015).

International, including Chinese, investment in the raw materials sectors, can leave Greenland vulnerable to decisions by foreign companies to withdraw if investments no longer appear economically viable. This occurred in 2015, causing scholars to argue that investors and other companies in the sector should pay attention to their social responsibility beyond mere legal requirements (Wilson, 2016). Meaningful public participation in decision-making on the sector is also argued to play a role in this regard (ibid.).

As explained below, the political and regulatory commitment to community engagement and the fact that this can serve as a means to enable public participation in decision-making provide important links to the risk-based due diligence process elaborated in the subsequent section. Conversely, risk-based due diligence may serve to enhance the implementation of Greenland's policies and national regulation on citizen involvement and social responsibility in the mining sector.

Regulatory Instruments on Social Responsibility in the Mining and Minerals Sector: Emergent Convergence on 'Risk-Based Due Diligence'

Transnational trade is typically subject to international binding regulation and enforcement only with regard to economic aspects and commercial rights. By contrast, the societal impacts of commercial activities and trade in raw-materials, including minerals, tends to be unregulated by international law or, at most, subject to non-binding guidance. This creates an imbalance between the economic opportunities and rights of multinational companies, and their responsibilities to avoid harmful impacts and contribute to society (Ruggie, 2013). This imbalance is a result of the way that international law is structured, and of international politics. The state-centrist structure of international law has allowed multinational companies to, simply put, 'fly under the radar' of international regulation. When concerns have emerged with the undesirable societal results of this, political support for international regulation of transnational commercial activity has so far only supported guidance, not legally binding regulation (ibid.; Buhmann, 2017a). For this reason, it is relevant for a discussion of regulatory instruments on social responsibility in the mining and minerals sectors to consider such guidance, regardless of its non-binding character. Such guidelines are simply the best that global society has currently been able or willing to produce for transnational economic activity occurring outside the territory of a particular state and own territorial-based jurisdiction. As argued by Wettstein (2012), the UN's guidance on business and human rights, which has informed the Chinese guidelines as well as OECD's Guidelines, is currently state of the art in regard to transnational governance of business with regard to adverse societal impacts. While not enforceable in courts of law, guidance and non-observance may be sanctioned through reputational damage and reduction of 'social licence to operate' (Nelsen, 2006), resulting in economic loss for a company (Henisz et al., 2014).

In 2008, the UN Human Rights Council agreed on a policy instrument, the *Protect, Respect and Remedy Framework*, that explained the prevention of business-related adverse impact on human rights as comprising duties for states to protect individuals against such harm, responsibilities for companies to respect human rights, and joint responsibilities to provide access to remedy (Ruggie, 2013). As part of this, the document introduced the concept of human rights due diligence as a

process for companies to identify and manage adverse impacts. The focus of this process is on risks caused by the company, rather than risks that others cause to the company. In 2011, the Human Rights Council adopted the so-called UN Guiding Principles (UNGP) on Business and Human Rights, which amongst others spell out detailed steps for the due diligence process. The process includes stakeholder engagement that must be meaningful and pay attention to the situation of affected communities and individuals. As this due diligence process has come to be adopted by other transnational business governance instruments it has come to be known more generally as risk-based due diligence. It has informed several regulatory instruments on responsible mining supply chains, including OECD's Guidelines for Multinational Enterprises, which are a comprehensive guidance instrument for companies operating in or out of OECD states or a number of non-OECD adhering states. In light of the absence of international hard regulation of the societal impact of transnational economic activity, that is a feature worth noting as it provides the Guidelines with an extraterritorial reach. In turn, this makes them highly relevant as a normative instrument for responsible business conduct in value chains. The OECD Guidelines also complement the UNGP in regard to their implementation (Buhmann, 2015).

Prior to the concern with the risk that trade in certain minerals may fuel conflicts, mining and rawmaterials have been addressed in regard to social and environmental risk that these activities cause. To seek to remedy the regulatory gap resulting from the lack of international regulation, a number of private organisations, sometimes in collaboration with governments or intergovernmental organisations, have launched various guidance instruments for the timber, minerals and other sectors. For the minerals and mining sectors, major initiatives of this type include the Extractive Industries Transparency Initiative (EITI), a global standard that aims to promote the open and accountable management of oil, gas and mineral resources through transparency along the value chain (EITI website); and the Kimberley Process, an initiative to remove conflict diamonds from the global supply chain (Kimberley Process website). Several initiatives have been developed to reduce and contain the trade in conflict minerals in and from the Great Lakes Region in Central and Eastern Africa. These include the Regional Initiative against the Illegal Exploitation of Natural Resources launched by the International Conference on the Great Lakes Region (UN, 2013) and industry initiatives addressing smelters, tin supplies and gold from artisanal and small-scale mines. In 2013, the OECD issued a guidance text a detailed sector-oriented guide for implementation) for responsible supply chains of minerals from so-called conflict-affected and high-risk areas (2013). The guidance focuses on risk-based due diligence, spelling out the implications of the OECD Guidelines for Multinational Enterprises into sector-relevant details for companies involved in the supply chains of 'conflict minerals' with a particular emphasis on tin, tungsten, tantalum and gold.

Drawing on the UNGP, the OECD Guidelines (2011) emphasize the importance of 'meaningful stakeholder engagement', especially by companies vis-à-vis those who are or may be affected by the project, in order to learn their views and for the project to take account of those in the course of managing impacts. By adopting the risk-based due diligence approach and its elements and applying them to human rights as well as labor issues, environment and anti-corruption, the OECD Guidelines effectively spread the normative expectation of risk-based due diligence to a large number of companies and their value chains across the globe. In the context of minerals and mining it is worth noting that more than 50% of extractive companies globally and many

companies supplying services to the mining sector are based in Canada, a partially Arctic OECD state (Mining Association of Canada, 2017).

The regulation of transnational economic activity is not only a challenge at the international level. The transnational character of supply chains for minerals derived from conflict-afflicted places, especially in central Africa, to processing countries, e.g., in China, Europe or the US, poses challenges to regulating involved companies and supply chains by national law, because this is conventionally limited by national boundaries. Whereas the US and the EU have introduced mandatory requirements on traders operating within their territories, China has so far not introduced binding regulations. Instead, China has introduced guidelines for actors in the mining and minerals sectors for their operations outside China, in particular targeting supply chains and investment. In 2014 and 2015, the China Chamber of Commerce of Metals, Minerals & Chemicals (CCCMC) issued guidelines for responsible investment in mining (CCCMC, 2014) and responsible minerals supply chains (CCCMC, 2015). Aligned with the OECD guidance on responsible minerals supply chains, the Chinese guidelines are partly motivated by the US and EU requirements on importers and manufacturers: they aim, amongst others, to set out similar normative standards for Chinese companies, so that their products will be able to meet the standards required for entry to the US and EU markets. The Chinese guidelines provide very detailed explanations of steps that companies should take in this regard. As China has not acceded to the OECD Guidelines, the Chinese guidelines for practical purposes function like the OECD Guidelines for Chinese companies in the mining sector.

The Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains (CCCMC, 2015) provide details for companies to identify, prevent and manage their adverse impacts on society, in accordance with the due diligence-approach introduced by the UNGP, the OECD Guidelines for Multinational Enterprises, and OECD's guidance for responsible minerals supply chains (Buhmann, 2017b). CCCMC's guidance instruments are therefore not unique, but follow in the steps of those previous efforts. As the CCCMC Guidelines are aligned with the OECD instruments, host countries can raise similar expectations of or demands on Chinese companies in the minerals and mining sector as they would have of extractive companies based in OECD countries.

The Chinese Guidelines and Their Potential Implications in the Greenlandic Context

Companies operating in Greenland obviously need to observe Greenlandic law, as well as any specific conditions on their operations. For companies in the mining sector, this means they must respect the raw materials legislation, other regulation in the field, and conditions set for their licences.

While Greenlandic raw materials regulation attaches strong emphasis on social and environmental impact assessment and the involvement of citizens, it does not spell this out in the form of a risk-based due diligence process. The risk-based due diligence process established with the UNGP and emergent theory on that process can therefore complement the Greenlandic regulatory approach to stakeholder consultation with regard to enhancing attention to societal risks caused by companies. The same can be said for the involvement of local communities and individuals in processes to identify such risks and understand it from the citizens' perspective, thereby advancing

their implicit and explicit access to the pertinent decision-making processes on whether licences should be granted. This is where the Chinese guidelines come in.

The issuing organisation of the two sets of Chinese guidelines, CCCMC, is closely related to China's Ministry of Commerce (MOFCOM). This provides the guidelines with an official character that can be invoked by host governments negotiating with Chinese companies. As a non-binding regulatory instrument, guidelines are often considered aspirational. Whereas binding instruments apply only to the specific locations for which they are intended (if any), aspirational instruments can be argued to have broader applicability. For the Greenlandic context, this means that actors can reference the Chinese guidelines as aspirations to be implemented locally, even though Greenland does not harbour the types of conflicts that conflict-minerals regulations have regard to.

For companies from OECD countries, Greenlandic actors can explicitly indicate an expectation that such companies observe the OECD Guidelines, including their standards on risk-based due diligence and efforts to engage in meaningful stakeholder engagement.

As China is not a member of the OECD and has not acceded to the OECD Guidelines, that argument cannot be made for Chinese companies with reference to the OECD Guidelines. However, the Chinese guidelines play a similar role. Since they have been put in place and even enjoy a measure of official endorsement by the Chinese government, Chinese companies can be explicitly expected to observe the detailed steps set out on risk-based due diligence, including meaningful stakeholder engagement. In negotiating agreements and discussing social sustainability assessments and stakeholder engagement, Greenlandic actors such as the national or local governments can therefore make an argument that in fulfilling their obligation in accordance with the raw materials legislation, the companies should have regard to the risk-based due diligence process and its detailed steps.

The CCCMC Mining Investment Guidelines are addressed to Chinese companies and investors in an effort to support them in establishing management systems on social responsibility, disclose information on such issues, and integrate social and environmental factors into investment decisions and operations abroad (CCCMC, 2014). These guidelines set out steps for companies in the sector in regard to, inter alia, impacts on human rights in general, labor practices, and occupational health and safety. The guidelines note that companies should observe the UNGPs during the entire life cycle of the mining project and note that companies should develop a human rights due diligence process to identify, prevent, mitigate and remedy adverse impacts on human rights, and cooperate with the local community to effectively remedy those affected by adverse human rights impacts through legitimate process. The chapter explicitly on human rights observes that companies should conduct risk-based supply-chain due diligence in order to prevent engagement with materials that may have funded or fuelled conflict. The guidelines refer to 'conflict prone' minerals and explain the types of conflicts and human rights conflict-risks associated with these minerals. On the other hand, their application is not limited to such minerals or conflict-affected sourcing areas. They may therefore also be invoked by Greenlandic actors. Indeed, the guidelines are set out to,

apply to *all* mineral exploration, extraction, processing and investment cooperation projects, including related activities such as mining-related infrastructure development *in foreign countries*, in which Chinese companies have invested. Mineral exploration, extraction, processing and

investment cooperation projects mean any activities for which a license, lease, concession or similar legal agreement to operate in the extractive industries sector has been obtained by a legal entity whose beneficial ownership fully or partially rests with a Chinese company. (CCCMC 2014: 28, emphasis added).

The CCCMC guidelines for responsible minerals supply chains provide detailed elaboration on risk-based due diligence, in line with the OECD Guidelines and the UNGP. The text of the guidelines explicitly notes that in addition to supporting companies in complying with the requirements of markets such as the US and EU, the guidelines aim to support implementing companies in meeting expectations of customers and markets on responsible mineral resources. In this regard they aim to help companies enhancing the understanding, data collection and management on a company's mineral resource supply chains and sourcing strategies and thereby enabling more informed and strategic decision-making; improving the reputation of participating companies (as well as of the Chinese minerals supply industry) (CCCMC, 2015: 8-9).

The CCCMC supply chains due diligence guidelines explicitly have global applicability. They state that they apply to

all Chinese companies which are extracting, trading, processing, transporting, and/or otherwise using mineral resources and their related products and are engaged at any point in the supply chain of mineral resources and their related products. This definition targets all Chinese companies which are engaged in both the upstream, i.e. resource exploration, extraction, trading, transporting and storing up to processing, including refining, and/or smelting, and the downstream parts that are engaged in using mineral resources and their related products of the supply chain (for example, electronics, electrical appliances, instruments, jewelry, communications equipment, etc.). "Chinese company" in this regard means legal (for-profit) entities which are registered in China or overseas companies (including subsidiaries) which are wholly- or majority-owned or controlled by a Chinese entity or individual. "Mineral resources" in these Guidelines refers to all mineral resources and their related products (i.e. ores, mineral concentrates, metals, derivatives, and by-products).' (CCCMC, 2015, emphasis added).

Like the OECD Guidelines, the application is mainly targeted at conflict-affected or high-risk areas, which are defined as the presence of armed conflict; the presence of widespread violence, including violence generated by criminal networks; fragile post-conflict areas; areas witnessing weak or non-existent governance and security; areas witnessing widespread and systematic violations of international law, including human rights abuses; areas witnessing systematic discrimination against parts of the population; areas with endemic corruption, or areas witnessing sexual and gender-based violence (CCCMC, 2015: 13). These conditions are not typically found in Arctic areas, including in Greenland. However, that limitation need not restrain the application of the basic premise informing the Guidelines that companies should apply risk-based due diligence in regard to sourced minerals. It would appear odd if Chinese companies sourcing minerals should only exercise risk-based due diligence when they operate in conflict-affected or high-risk areas. There are also risks of causing social or environmental harm in other countries. Those risks can be identified, prevented or mitigated if companies follow the steps for risk-based due diligence set out by the UNGP and the OECD Guidelines. The implications are that host countries in areas that are not conflict-affected or high-risk can refer to the basic due diligence message in their interactions with Chinese companies in the minerals sector. This entails emphasizing the process of meaningful stakeholder engagement, including with actually or potentially affected stakeholders, to identify and address potential adverse impacts. That process, in turn, could also be turned

towards identifying stakeholders' views of needs and benefits to which involved companies could contribute through benefit impact agreements.

Conclusion

With climate change affecting access to minerals in the Arctic, and political commitments to green transitions around the globe enhancing the economic interest in particular minerals, Arctic supplies of minerals for the technical products required for a non-carbon economy are potentially attractive to the global market. The fact that the Arctic, including Greenland, has deposits of minerals otherwise mainly sourced from conflict-ridden areas offers potentially interesting opportunities, in particular with regard to types of minerals that in recent years have become subject to strict supply-chain documentation and transparency requirements if they derive from or close to conflict-affected areas. China is showing an interest in such 'conflict-free minerals'. China has issued guidelines for responsible minerals supply chains and mining investment. These guidelines apply similar approaches to identifying risks of adverse impacts, managing those impacts, and engaging local communities, as do the OECD's Guidelines for Multinational Enterprises, based on the UNGP. It is therefore possible to expect similar standards of conduct in regard to identifying and managing human rights risks and other risks to society of Chinese companies in the mining sectors as of companies based in OECD states such as Canada, the United States, or the United Kingdom.

The CCCMC guidelines aim at guiding companies to consider and address their societal impacts through responsible investment in the minerals sector and risk-based due diligence to ensure socially responsible sourcing of minerals. This article has shown that as the Guidelines create an expectation on companies operating in non-conflict Arctic nations like Greenland, they can be applied to complement the Greenlandic requirements for social sustainability assessment and citizen involvement. From a human rights perspective, the details contained in the Chinese guidelines add a level of detail in regard to risk assessment processes and stakeholder engagement. Connecting to the UNGP, the detailed steps for due diligence can be deployed by concerned citizens or public organisations to underscore the human and social dimension of the impact assessment process from the individual's perspective, including meaningful stakeholder engagement, and influence on the identification of benefits that companies may be asked to provide as part of the licence agreement.

Seen in the normative, political and economic contexts of extractives exploration and exploitation, this means that host societies can explicitly expect Chinese companies to assume an active role in ensuring impact assessments that involve a high degree of public participation in decision-making (a human right) for the identification of potential adverse impacts as well as benefits, including with regard to such human-rights related public policy objectives as local employment and capacity building.

For Chinese companies and the world market, this can result in a larger supply of the generic minerals that are needed for much electronic hardware, including for the green transition. For companies that would otherwise source from the DRC or other conflict or high-risk areas, this would be an important alternative supply that would reduce risks of contributing to armed and humanitarian conflicts and could help reduce the administrative burden of proving that minerals marketed to the US or EU markets are not conflict-minerals.

The overall normative alignment between the Greenlandic raw materials regulation and the Chinese guidelines can be deployed strategically by Greenlandic authorities at central and local level to articulate expectations of companies. This is not limited to the generic minerals that are 'conflict-minerals' if sourced from some other areas. Being aspirational, the guidelines can also be applied to other types of mineral and mines. The CCCMC guidelines and their application of risk-based due diligence can be referenced to further deepen the implementation of Greenland's raw-materials regulation in regard to societal impacts.

In Greenland as elsewhere, proposals on new economic opportunities do not necessarily lead to uniform agreement. They can also spur local disagreement. The debates on projects like the Isua or Kvanefjeld mining projects in Greenland are examples of this. Would a human-rights oriented emphasis on meaningful stakeholder engagement help address such disagreement? This is not certain. Yet the strong human-rights oriented focus of the risk-based due diligence process and the emphasis on the perspective of affected stakeholders may help retain awareness of the rights of individuals and to feed their views and concerns into solutions that balance economic activities and societal impacts. The emphasis on meaningful stakeholder engagement should influence the design of citizen involvement and consultation processes towards enhancing citizens' perceived experience of receiving information to help them make informed decisions; and for their views and concerns to feed into the general decision-making process on whether projects should go ahead.

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