

European Policy Brief

STRADE

Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
No. 01 / 2017

Minerals and metals from non-EU countries – Europe's role and responsibility for positive change in industry supply chains

February 2017

Andreas Manhart, Martin Gsell, Diana Hay, Doris Schüller
Oeko-Institut e.V.



Funded by the
Horizon 2020 Programme
of the European Union

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 offers critical analysis and recommendations on EU raw materials policy.

This policy brief, the tenth in a series of research articles and reports produced under STRADE, examines the role and responsibility of European institutions to positively influence the environmental and social conditions of raw materials production in non-EU countries.

1. Introduction

Addressing the various environmental and socio-economic challenges in the mining sector requires the engagement of various stakeholders from the public and private sectors of mineral-producing and mineral-consuming countries. Complexity of challenges and potential response strategies is particularly high for minerals and metals being imported into the EU from nations with weak resource governance. To tackle these challenges, the potential roles and responsibilities of the main players – resource-rich countries' governments, mining companies, EU downstream companies and the EU – must be profoundly understood and agreed.

This policy brief aims to identify Europe's roles and responsibilities for reducing adverse social and environmental impacts in global raw material supply chains and for supporting efforts to harness mining-related developing potential. It analyses existing international and European policy commitments, interests and the more general self-concept of the European Union to engage in fields related to a more responsible sourcing of raw materials. Finally, this brief proposes potential roles, responsibilities and interfaces between the public and private sectors and between resource-rich and raw-material-consuming countries. Hereby, the analysis builds up on the previous policy briefs No. 04/2016 [1] and 05/2016 [2], which outlined the various environmental and socio-economic challenges in the ore mining sector, particularly in regions with weak governance.

2. Europe's current commitments for responsibly sourced raw materials

The European Union and its Member States are committed to a broad variety of international conventions that have a certain degree of relevance for raw materials supply chains. In particular, EU and MS are committed to conventions that are partly interlinked with human rights abuses such as conflict financing, hazardous working conditions and child labour. This entails the Universal Declaration of Human Rights and the conventions of the International Labour Organization (including the eight fundamental conventions on freedom of association, right to collective bargaining, forced labour, child labour, equal remuneration and non-discrimination). While these conventions have a binding character only for all government and non-government activities within the jurisdiction of its signatories, they also provide a moral base for the EU's economic activities in other parts of the world.

Recognising the economic importance of extractive industries in many world regions and considering the fact that the EU is largely dependent on the imports of minerals and raw materials, the EU committed itself to actively contributing to a more sustainable sourcing of raw materials from other world regions. This is, amongst others, documented in the following policy documents and initiatives:

- European Raw Materials Initiative (RMI): Although the 2008 RMI is mainly focused on ensuring access to raw materials, setting the right framework conditions to facilitate supply of raw materials from European deposits and reducing the EU's consumption of primary raw materials, it also commits to "continu[ing] to support international initiatives to promote transparency in the extractive sector such as the Kimberly Process Certification Scheme and EITI" [3].
- RMI-related reporting: Issues around transparency and environmentally and socially responsible sourcing from other world regions gained importance in the subsequent implementation process. In its RMI-related reporting in 2013 and 2014, the European Commission stresses that "sustainable mining can and should contribute to sustainable development" and that the EU's development policy should help to create "win-win situations for developing countries and the EU in the area of raw materials." [4]. Furthermore, the European Commission stresses the "crucial role of good governance for the sustainable use of natural resources as an engine of growth for Africa" [4] and gives financial and supply-chain transparency an important role in its policy mix [5].
- EC communication on development policy: In 2011, the EC published "Increasing the impact of EU Development Policy: an Agenda for Change", which recommends that "the EU should scale up its support for oversight processes and bodies and continue to back governance reforms that promote the sustainable and transparent management of natural resources, including raw materials [...] with particular attention to the dependence of the poor on them [...]" [6].
- Initiative *A Resource-Efficient Europe* and *Innovation Partnership on Raw Materials*: Elements of responsible sourcing from other world regions are also embedded in the EU's flagship initiative *A Resource-Efficient Europe* and the EU's *Innovation Partnership on Raw Materials*. Although mostly focusing on measures to be developed and adapted within the EU, enhanced co-operation with international partners is seen as an important means to promote the use of environmentally friendly extraction and processing technologies [7] and to support poverty reduction in resource-reliant developing countries [8].
- "Trade for all" publication: In the 2015 publication, the European Commission committed to "a trade and investment policy based on values", including "a trade agenda to promote sustainable development, human rights and good governance" in partner countries. Raw materials are explicitly mentioned in the context of free trade agreements (FTAs) that shall take sustainable development considerations into account [9]. Generally, this new EU approach to international trade aims at fair and ethical trade relations between the EU and its partner countries.

Furthermore, the EU financially supports the OECD in its work on due diligence frameworks for minerals from conflict-affected and high-risk areas and develops a conflict mineral regulation that widely builds on this due diligence approach [10] but is limited to gold, tin, tantalum and tungsten. These policy approaches focus on human rights issues and aim at providing methodological guidance to mitigate all forms of human rights abuses in mineral supply chains. The methodological core was initially proposed by a UN group of experts to break the link between the minerals sector and conflict in the eastern DR Congo [11] and was subsequently taken up by the UN Security Council in resolution 1952 (2010)¹ with a focus on gold, tin, tantalum and tungsten. Later, The OECD extended the approach to an open scope for geographic coverage and mineral types.

The EU and various Member States are also amongst the group of donors funding the Extractive Industries Transparency Initiative (EITI), which aims at increasing transparency and accountability in extractive industries around the world. The EITI process is already implemented in 51 countries, including Norway, UK and Germany². In 2013, the EU also introduced additional obligatory transparency requirements for the extractive industry in chapter 10 of the Accounting Directive 2013/34/EU. This 'transparency initiative' requires Europe's extractive industries to annually report their payments to governments that exceed € 100,000.

These policies and activities of course significantly overlap with general development goals, in particular the Sustainable Development Goals (SDGs). Generally, responsible mining does not only entail reduction of environmental impacts to achieve development goals, such as SDG No. 6 (clean water and sanitation) and No. 15 (life on land), but can also positively contribute to achieving other SDGs, in particular:

¹ The Security Council [...] calls upon all States to take appropriate steps to raise awareness of the due diligence guidelines [...], and to urge importers, processing industries and consumers of Congolese mineral products to exercise due diligence [...]."

² Another European country, France has announced its intention to apply for EITI membership.

- No. 1 – End poverty in all its forms everywhere.
- No. 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- No. 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- No. 12 – Ensure sustainable consumption and production patterns.

3. European supply security and a need for social licenses to operate

Beyond these international conventions, policies and co-operations, the EU as a large-scale net-importer of minerals and metals also has an intrinsic interest in environmentally and socially sound long-term partnerships. Due to the various environmental and social problems described in the policy briefs No. 04/2016 [1] and 05/2016 [2], the mining sector often faces widespread mistrust and rejection from local communities in many parts of the world. Various recent incidents have shown that mining projects can stall because of local opposition and protests:

- In 2013, protests from indigenous people and environmental activists stopped the development of a large-scale bauxite project in Odisha (India). Plans to supply a nearby alumina refinery with bauxite from other local deposits are also likely to be challenged [12].
- Local protests and widespread rejection from the Dominican population have indeterminately delayed a nickel-mining project in the Dominican Republic for several years [13]; [14].
- Severe opposition and protests against the planned extension of a gold and copper mine in Cajamarca (Peru) partly turned into violent clashes between police, security forces and protesters, resulting in injured and fatal casualties [15]. In 2016 a consortium between Newmont Mining, the International Finance Corporation and Buenaventura (a Peruvian mining corporation) announced to drop the Minas Conga project “for the foreseeable future” [16]. According to a recent OECD study, Peru annually faces more than 200 social conflicts, the majority of which are linked to social and environmental impacts from extractive industry projects in the country [17].

A broad range of scholars and commodity market specialists now see that the environmental and social impacts from the extractive industry, especially since these are increasingly challenged by societies and authorities, play a key role in influencing future supply [20]; [18]; [19]. Thus, a social license to operate is not only an important precondition for mining companies and projects, but also an important pillar to ensuring the EU's raw material supply: without being embedded in sound development-orientated strategies, many mining projects might face increasing difficulties in their operations, which might have consequences for the global supply situation.

4. Ongoing value changes as driver for European policy

European consumers' increasing critical perception of the negative impacts of global mining provides another major reason for the growing importance of transparent and environmentally and socially responsible raw materials supply chains. According to Prof. Anthony Hodge, the former president of the International Council on Mining and Metals, “the evolution of societal values and a particular combination of events led to an unprecedented high level of criticism levelled at the mining and metals industry” [21]. For Europe as a large net-importer of minerals and metals, much of the mining-related criticism has been linked to its industry supply chains and its consumption patterns. In the last decade, reports linking conflicts, forced evictions, environmental pollution and degradation with raw material supply chains and the products routinely used for daily life have significantly increased consumer awareness and led to campaigns such as “no blood in my cell phone”. In response, various European companies have developed in-house processes to assess social and environmental risks in raw material supply chains and partly also initiated or joined risk mitigation activities such as the Aluminium Stewardship Initiative (ASI), or the Conflict-Free Tin Initiative (CFTI).

On a global scale, this evolution of societal values also led to the establishment of the UN Guiding Principles for Business and Human Rights and their endorsement by the United Nations Human Rights Council in 2011 [22]. Although not legally binding, the Guiding Principles provide a conceptual framework to define the roles of governments and the private sector in protecting and respecting human rights and to provide access to remedy. With the Guiding Principles, the private sector is – alongside governments – explicitly called upon to “prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts” [22].

This evolution of values is also reflected in a series of new regulatory approaches aiming at a mandatory and effective mitigation of some of the worst types of social and environmental impacts in global supply chains. Although not all of these approaches are targeted at minerals and metals, the following examples illustrate

the general trend to strengthen corporate due diligence requirements for raw materials supply from other world regions and jurisdictions:

- According to the renewable energy directive of 2009 (2009/28/EC) all biofuels and bioliquids that are used for energy purposes in the EU have to comply with a set of environmental criteria, including minimum greenhouse gas emission savings and a ban of biofuel raw materials from land with high biodiversity value or land with high carbon stock (e.g. wetlands, peatlands).
- The 2010 EU timber regulation (Regulation (EU) No 995/2010) prohibits placing illegally harvested timber or timber products on the EU market. Importers of timber and timber products have to exercise due diligence in order to reduce the risks of unintentionally trading timber and timber products from illegal harvest.
- The UK Modern Slavery Act of 2015 includes reporting requirements for businesses with UK activities to ensure that slavery and human trafficking does not take place in any of its supply chains.
- Although not yet passed, the European Parliament and the Commission reached an agreement on a new conflict mineral regulation that requires importers of tin, tungsten, tantalum, gold and their ores from conflict-affected and high-risk areas to exercise due diligence in accordance with the relevant OECD guidelines [23]³.

These policy responses are mainly based on the increasing public consensus that corporations have a moral responsibility to avoid and mitigate violations of environmental and social standards – even if related problems are located in supply chains and outside the direct control of EU companies. In these cases, raw-material-using companies are asked to analyse and identify related risks and to implement mitigation measures. Thereby, the general aim is for companies to neither directly nor indirectly support human right abuses and environmental damages when they import raw material from sources with related problems; EU companies should play a positive role in improving environmental and social conditions within their spheres of influence. The important role of companies in shaping and transforming societies also stimulated the 2011 EU Strategy for Corporate Social Responsibility, which defines CSR as the responsibility of enterprises for their impact on society. Though it postulates that CSR should be company-led, public authorities can also play a supporting role through a smart mix of voluntary policy measures and, where necessary, complementary regulation [24].

According to Prof. Anthony Hodge, these societal value changes – together with other drivers such as globalization of mining activities and increased worldwide raw material consumption – will most likely gain increasing relevance [25]. This position is supported by the 2016 Strategic Note “Sustainability Now!”, written by the EC's European Political Strategy Center, which points out that “Europe becomes aware of the limits of the Blue Planet and of the need for a fair share for all, notably the rapidly growing developing nations and the younger generation. [...] Calls for sustainability are not new but they start being understood by a much wider audience and a much wider set of economic actors.” [26].

5. Specifying the roles and responsibilities of European stakeholders

As illustrated in chapters 2 to 4, social and environmental aspects in the European raw material supply chain have increasingly gained relevance over the last decade; the EU is widely committed to playing a proactive role in supporting related improvements. Nevertheless, such improvements require concerted action by a variety of players in order to be effective. The following chapter elaborates on a potential distribution of roles and responsibilities, in particular related to government and industry players.

5.1. Differentiation of impact types

To facilitate analysing the potential distribution of roles and responsibilities to improve social and environmental conditions in mining worldwide, this paper differentiates impacts based on their severity. The concept is illustrated in Figure 5-1 and can be described as follows:

- Impacts violating human rights as defined by relevant international conventions such as the UN Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights and the ILO core conventions are classified as *worst type of impacts* in this analysis. For the purpose of this assessment, environmental impacts with the potential to violate human wellbeing (e.g. pollution of drinking

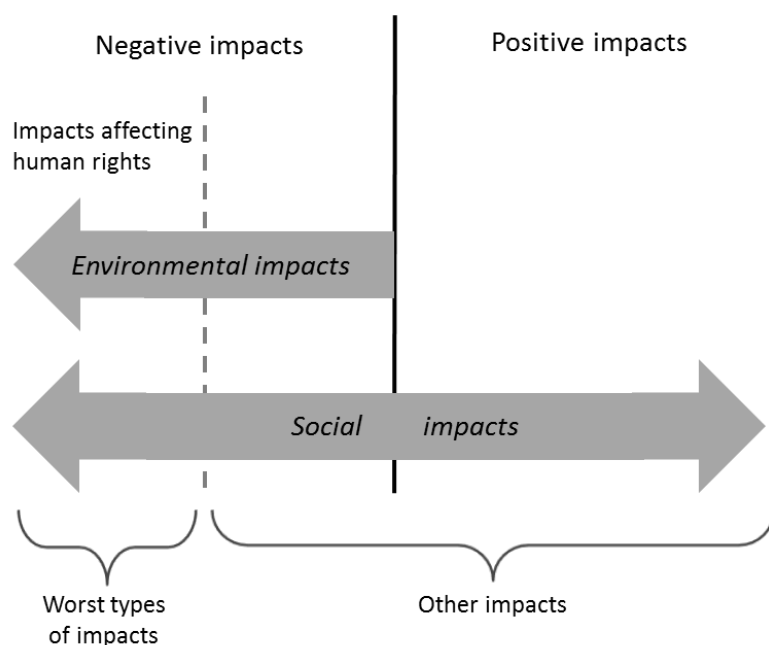
³ The EU approach on conflict minerals partly follows the regulatory approach taken in the USA in 2010 with Section 1502 of the Dodd-Frank Act. While this Act is currently under review of the new US administration, the EU initiative might gain considerable importance for global raw materials policy. This will particularly be the case if Section 1502 of the Dodd-Frank Act will be cancelled in the review process.

water violating people's right to health) are also considered as worst types of impacts. Activities aiming at mitigating all kind of such impacts have been termed “less bad” in policy brief No. 09/2016 [27]. The potential distribution of roles and responsibilities for mitigating such worst types of impact are discussed in chapter 5.2 below.

- All impacts that do not negatively affect human rights are classified as other impacts in this analysis. It is noteworthy that this includes a range of negative environmental impacts such as greenhouse gas emissions and habitat losses, as well as potential negative socio-economic effects such as the loss of alternative economic opportunities. *Other impacts* also encompass positive social impacts such as those described in policy brief No. 05/2016 [2], including the generation of jobs and socio-economic development⁴. This impact group is typically a crucial field for many mining areas and resource-rich nations seeking continuous improvements of the economic benefit and the social and environmental profile of mining operations. It is also closely connected to mining countries’ expectations for mining revenues to contribute to reaching the sustainable development goals.

The differentiation between worst types of impacts and other impacts mainly follows international conventions and agreements that allow a quite clear assignment of roles and responsibilities along the boundaries defined by human rights.

Figure 5-1: Concept for differentiating impact types



Source: Oeko-Institut e.V.

5.2. Roles and responsibilities for mitigating worst types of impacts

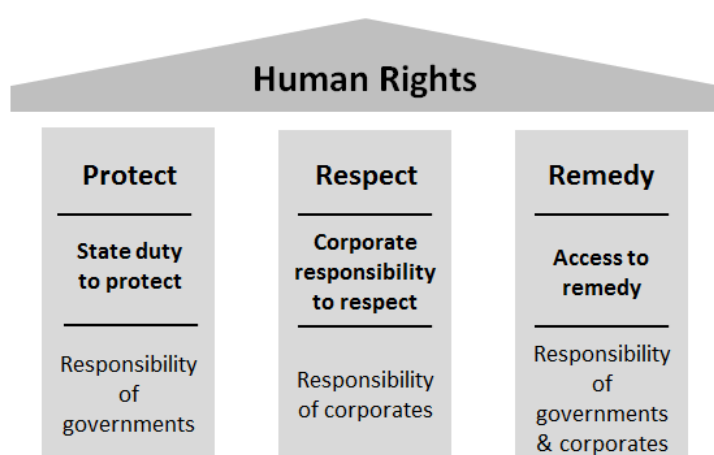
General principles

National governments generally have a core responsibility for insuring that human rights are protected within their jurisdiction and that companies within their jurisdiction operate within legal boundaries and standards. While many governments in the world fulfil this role, 32 out of 58 countries covered by the Resource Governance Index only have weak or failing governance in their extractive sectors [28]. This effectively means that many states are either unable or unwilling to mitigate worst types of impacts linked to mining, including human rights abuses and severe adverse impacts on ecosystems and the livelihoods of populations. This shortcoming is well known and a primary reason why supply-chain related social and

⁴ It is noteworthy that – in contrast to environmental impacts – social impacts can have both a negative and a positive dimension. While violations of human rights are clearly examples of negative social impacts, generation of jobs and income are typically classified as positive social impacts.

environmental issues are relevant for the EU. Partly in response to this governance gap, corporations and in particular internationally operating enterprises are today increasingly regarded as important players being able to positively or negatively influence social and environmental conditions in their spheres of influence. This view – which is also rooted in the consideration that some enterprises and industries directly or indirectly benefit from low environmental and social standards and low associated compliance costs – has promoted various initiatives to integrate corporations into efforts protecting human rights and reducing the worst forms of environmental impacts. The most notable of these attempts are the OECD Guidelines for Multinational Enterprises [29], the Global Reporting Initiative and the UN Global Compact. While these initiatives provide guidance for companies about general expectations and reporting, they still do not clarify the division of roles and responsibilities between enterprises and governments. A specification of roles was first achieved in the field of human rights when the UN endorsed the Guiding Principles for Business and Human Rights in 2011. This 'Ruggie Framework' is built on three pillars (see Figure 5-2).

Figure 5-2: Structure of the UN Guiding Principles for Business and Human Rights



Source: Oeko-Institut e.V. based on [22]

While the first pillar clearly confirms the states' existing responsibility to "protect against human rights abuses within their territory and/or jurisdiction by third parties", the second pillar specifies that "business enterprises should respect human rights" by avoiding causing or contributing to adverse human rights impacts through their own activities, and by "prevent[ing] or mitigat[ing] adverse human rights impacts that are directly linked to their operations, products or services by their business relationships" [22]. The third pillar states that it is the state's responsibility to ensure that victims of business-related human rights abuses have access to remedy. In addition, industry, multi-stakeholder and other collaborative initiatives should ensure that effective non-state grievance mechanisms are available [22].

Although this framework was developed for protecting human rights, it can serve as a blueprint for other types of impacts, in particular those that have the potential to negatively impact human rights (e.g. through massive pollution of soil and water bodies, relocations, destruction of ecosystems).

Roles and responsibilities of EU and Member State governments and European companies

For the EU's raw material supply chains with social and environmental hot spots in non-EU countries, the Ruggie Framework assigns the major responsibilities to non-EU mining countries' governments and the mostly private raw-material extraction and processing sector. While the EU can to a certain extent work on improving governance in resource-rich partner countries (e.g. by development cooperation or accountability and transparency initiatives such as the promotion of EITI), European enterprises must themselves assess whether any of their business activities are directly or indirectly linked to human rights risks or other risks that might lead to the infringement of human rights and to then implement appropriate mitigation strategies.

For European businesses not actively engaged in mining projects outside the EU, this translates into supply chain due diligence, following the implementation framework by the OECD [30]⁵ and the planned EU approach on gold, tin, tungsten and tantalum. This due diligence framework consists of the following steps:

Step 1: Establish strong company management systems.

Step 2: Identify and assess risks in the supply chains.

Step 3: Design and implement a strategy to respond to identified risks.

Step 4: Carry out independent third-party audits of refiner's due diligence practice.

Step 5: Report annually on supply chain due diligence.

While experience with the implementation of this framework, including the type and effects of potential response strategies, is still quite limited, the EU should consider supporting EU industries in their implementation efforts. This could particularly encompass the following elements:

- Support risk assessment related to regions and raw materials: While the EU has already compiled and published a collection of raw-material-related data on supply risks (see [31]), no comparable information is available on human rights risks and material-specific environmental issues. Although a number of working groups are working to develop assessment methodologies⁶ and compile related information⁷, the results have not yet been published or utilized to systematically support companies in their raw-materials-related risk assessments. Support of risk assessment can also encompass methodologies for prioritization of materials to reduce complexity. After all, most companies directly or indirectly consume a quite broad range of different raw materials.
- Support initiating companies' response strategies: Companies' response strategies (Step 3 of the due diligence framework) will partly require on-the-ground activities (e.g. close cooperation with raw material suppliers and local communities) in countries with insufficient governance outside the EU. Such activities (e.g. support to improve ASM) require very specific know-how and approaches, and are often subject to various uncertainties. Targeted EU support could help to lower the barriers for such types of response strategies and to organize joint activities with various industry partners. As an example for such public private partnership initiatives, the Dutch government helped start the Conflict-Free Tin Initiative that involves the support of artisanal tin-mining activities in the Eastern parts of the DR Congo [32].

In the mid-term, a responsible EU policy also has to promote EU companies' due diligence for all minerals. The upcoming EU conflict-mineral regulation merely focuses on 3TGs, which are only a small portion of the EU's mineral imports; the large amount of adverse social and environmental impacts from mining in countries with poor governance is therefore not covered by this regulatory initiative. This is a big task, and lessons-learned from the upcoming regulation should be considered when looking for efficient and realistic policy approaches (voluntary or legally-binding measures) for the whole minerals spectrum.

Roles and responsibilities for negative side-effects from policy responses

Corporate- and government-driven policy responses to social and environmental risks in supply chains might lead to shifts away from high risk areas and towards sourcing from well-controlled mines in developed countries. The situation in the eastern parts of the DR Congo after a series of UN-documents and the passing of the US Dodd-Frank Act in 2010 exemplify such market shifts. In this case it led to various international buyers questioning any mineral sourcing from Central- and East-African ASM sources. Although the effects of these reactions have not been fully analysed, it is widely assumed that these general evasion strategies not only led to the intended effect of curbing financial sources for armed groups, but also unintentionally to a loss of income in artisanal mining areas not affected by conflict [32].

While such risk evasion strategies might be justified in individual cases, a proliferation of such reactions might lead to situations where European efforts have either no positive global net impact or even lead to detrimental effects [33]. No positive net impacts can occur when supply chain shifts lead to reversal shifts of other market players: While EU supply chains might then be free from social and environmental hotspots, substandard mining would sell its outputs to other global markets without changing its ways of operating.

⁵ The OECD due diligence guidance covers human rights issues and has no particular emphasis on environmental issues. Since environmental impacts can reach levels that negatively affect human rights, they should also be considered in related due diligence processes.

⁶ E.g. Project "Environmental Limits, Environmental Availability and Environmental Criticality of Primary Raw Materials (ÖkoRes) by the German Umweltbundesamt.

⁷ E.g. the OECD voluntary expert group will compile an OECD Material Risk Handbook.

Detrimental effects might occur when certain mining areas completely lose their markets before being given a chance to improve. This is particularly relevant for labour intensive types of mining (in particular artisanal mining) where a large number of people depend on related income and where few economic alternatives are available.

In order to avoid such effects, corporate- and government-driven responses should consider such potential market-shifts and effects and carefully assess the improvement options to be chosen. As a principle, response strategies should aim to achieve additional benefits for global raw material sourcing.

5.3. Roles and responsibilities for increasing net benefits from mining in developing countries and for other impacts

Improving environmental and socio-economic conditions beyond minimum standards is a field where division of roles and responsibilities between public and private actors are less clear and partly subject to varying philosophical and ethical views. However, there is wide consensus that governments of mining countries have a key responsibility for enabling broad socio-economic development. Among other key instruments are transparent and development-orientated fiscal management and combating corruption and tax evasion.

Mining companies' roles and responsibilities

Mining companies' responsibilities, particularly from small mining companies, for increasing net-benefits from mining are not uniformly defined and strongly depend on the national regulatory framework. Nevertheless, mining companies are commonly viewed as needing to support local development, for example using instruments such as local content or local training. The ICM, whose members belong to the biggest global mining companies, shares this view. It promotes large mining companies' contribution to national economic developments and proposes instruments for this approach.

On a cross-sector level, the roles of companies are addressed by ISO 26000, which gives guidance for companies' engagement and defines Social Responsibility (SR) as:

“the responsibility of an organization for the impacts of its decisions and activities on society and the environment through transparent and ethical behavior that:

- Contributes to sustainable development, including the health and welfare of society
- Takes into account the expectations of stakeholders
- Is in compliance with applicable law and consistent with international norms of behavior, and
- Is integrated throughout the organization and practiced in its relationships.” [34]

Thus, corporate social responsibility (CSR) clearly stretches beyond the implementation of minimum standards and also encompasses sustainable development goals and corporate outreach through business relationships. This view is also acknowledged by the European Commission's communication addressing the role of the private sector in developing countries [35].

European downstream companies' roles and responsibilities

Further down the raw materials supply chain, validity of the principles surrounding EU companies' roles and responsibilities becomes less clear due to complex raw material supply chains where EU companies do not have direct business relations with (sub-)suppliers operating in other regions of the world. Although such business relationships are in the scope of due diligence approaches on the worst types of impacts (see section 5.2), activities of EU businesses to support improvements beyond minimum standards strongly depend on the general context, and in particular the sphere of influence of an organization. As ISO 26000 indicates, the “sphere of influence refers to the range of relationships through which the organization has the ability to affect the decision or activities of others” [34]. This differentiation based on the sphere of influence can be illustrated by the following example: A specific raw material is known to be associated with considerable environmental pollution in (non-EU) sourcing regions. European businesses do not have any direct relations to the extraction companies, but rely on the material for their productions. Although consuming companies are called to integrate this material stream into their due diligence process addressing the worst types of impacts (human rights), support measures to improve raw material extraction in non-EU countries are only feasible for EU companies and sectors that can effectively influence the conditions in mining. Most likely, these are companies and sectors that either have direct relationships with mining companies or that have a large share of the global consumption of the material and therefore a significant level of influence over the supply-chain. Yet also for such situations, CSR activities to improve conditions in mining are voluntary.

EU and EU Member States' roles and responsibilities

EC communications and EU engagement principally acknowledge the EU's responsibility to improve environmental and socio-economic conditions in global raw-material supply chains beyond minimum standards, as described in chapter 2 of this policy brief. Achieving this responsibility can involve measures such as developing cooperation in the fields of resource governance, safe and environmentally sound extraction and processing technologies; promoting job and income-generating extractive industries, and developing businesses and communities. In addition, aspects of environmentally and socially responsible raw-material production can be integrated into trade agreements, academic exchange programmes and civil society dialogues.

The current challenge is to intensify efforts while recognising the global aim to achieve the Sustainable Development Goals and to shift to an integrated new EU raw-material strategy that considers the perspectives of resource-rich countries as well as the EU's attempts to increase supply security.

As successful efforts to increase net benefits from mining strongly depend on the commitment and policies of governments in mining countries, EU efforts should be primarily focused on raw-materials producing countries that explicitly seek cooperation and that are committed to taking lasting ownership in related efforts.

6. Conclusion

The European Union is widely committed to source raw materials from non-EU countries in a manner that is compatible to its values regarding human rights and sustainable development. While these commitments are rooted in various policy documents and an ongoing value change amongst large parts of the European population, the issue of supply security is also recognized as deeply interwoven with the way minerals are produced in other world regions.

The distribution of roles and responsibilities to achieve more responsible sourcing of raw materials from non-EU sources requires differentiating between:

1. activities aimed at mitigating the worst types of impacts, such as human rights abuses and extreme forms of environmental impacts, and
2. activities seeking to address other types of impacts, including the continuous improvement of mining-related processes and the increase of net benefits from mining.

The first type of activities requires strong corporate involvement – including non-mining companies from the EU. Although governments of mining countries carry crucial responsibilities to protect human rights within their jurisdiction, company engagement is particularly important in areas where national governments fail to protect people from human rights abuses or extreme forms of environmental impacts.

Responsibility for the second type of activities largely falls on governments of resource-rich countries and the locally operating mining companies. Support for related efforts mainly comes from the cooperation between mining countries and the EU including its Member States. EU industry support in these fields is particularly relevant from companies and sectors that have the possibility to positively influence social and environmental conditions in mining beyond minimum standards. This is mostly the case for companies that either have direct relationships with mining companies or that have a large share of the global consumption of the material and therefore a significant level of influence over the supply chain.

The STRADE dialogue will strongly focus on the EU's roles and responsibilities. Table 1 summarizes the basic distribution of roles and responsibilities derived in the analysis. For mitigating the worst types of mining impacts, the EU should support European companies' successful implementation of due diligence as a core task along with supporting related international efforts. To increase the net benefit for resource-rich countries and continuously reduce negative social and environmental impacts from mining operations, a renewed EU strategy should aim for fair and ethical trade relationships and strong support for good resource governance. This includes encouraging efforts to combat tax avoidance and profit shifting and supporting resource-rich countries' development strategies.

Table 1: Basic distribution of roles and responsibilities for major raw materials stakeholder groups

Roles and responsibilities	Mitigate worst types of impacts	Continuous improvements & increase of net benefit from mining
Aim:	<i>Protect human rights and mitigate worst types of environmental impacts</i>	<i>Optimise mining processes and increase net benefit from mining in resource-rich countries</i>
Responsibilities of:	Responsible for:	
Governments of mining countries [mostly non-EU]	<ul style="list-style-type: none"> • Good regulatory framework • Good control and execution of legislation • Combating corruption and weak law enforcement 	<ul style="list-style-type: none"> • Enabling broad sustainable development by: <ul style="list-style-type: none"> – Responsible accounting and revenue management – Combating corruption and tax-avoidance – Appropriate policy instruments • Further development of regulatory framework and instruments to support continuous improvements at mining sites
Mining companies [mostly non-EU]	<ul style="list-style-type: none"> • Respect human rights (incl. ILO standards and other international conventions such as indigenous rights) • Sound environmental management and risk mitigation • Compliance with national laws • Payment of all taxes and royalties 	<ul style="list-style-type: none"> • Supporting local development (e.g. local content, local training) • Management system and activities for continuous improvement of social and environmental performance.
Downstream companies (import companies) [EU companies]	<ul style="list-style-type: none"> • Due diligence for their own supply chain, focusing on most pressing issues (e.g. human rights, worst types of environmental impacts) 	<ul style="list-style-type: none"> • Companies and sectors with influence on upstream processes: CSR engagement for socio-economic development and greener mineral production processes
Governments of import countries [EU and member states]	<ul style="list-style-type: none"> • Supporting companies' due diligence activities • Establishing a regulatory framework for supply chain management (if this proves to be an efficient approach) [currently regulation only for gold, tin, tantalum and tungsten; all other minerals are not covered by any regulation] • Supporting international efforts such as OECD due diligence and EITI • Combating negative side effects on developing countries from European regulations 	<ul style="list-style-type: none"> • Fair and ethical trade agreements and fair prices, aiming at higher revenues and added value in developing countries • Supporting good resource governance • Supporting combating tax avoidance and profit shifting • Supporting resource-rich developing countries' industrialization strategies • Supporting R&D for improved mining and processing technologies • Development cooperation & support of mining countries in the fields of policy development & implementation, as well as technical and fiscal aspects.

Literature

- [1] Dolega, P.; Degreif, S.; Buchert, M. & Schöler, D. (2016). Outlining Environmental Challenges in the Non-Fuel Mining Sector: STRADE Policy Brief No. 04/2016. Darmstadt. Available at http://stradeproject.eu/fileadmin/user_upload/pdf/PolicyBrief_04-2016_Sep2016_FINAL.pdf, last accessed on 23 Dec 2016.
- [2] Schöler, D.; Brunn, C.; Gsell, M. & Manhart, A. (2016). Outlining Socio-Economic Challenges in the Non-Fuel Mining Sector: STRADE Policy Brief No. 05/2016. Darmstadt. Available at http://stradeproject.eu/fileadmin/user_upload/pdf/PolicyBrief_05-2016_Oct2016_FINAL.pdf, last accessed on 23 Dec 2016.
- [3] European Commission (ed.) (2008). The raw materials initiative - meeting our critical needs for growth and jobs in Europe: Communication from the Commission to the European Parliament and the Council. COM(2008) 699 final. Brussels. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008DC0699&from=EN>, last accessed on 17 Nov 2016.
- [4] European Commission (ed.) (2013). Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Raw Materials Initiative: COM(2013) 442 final. Brussels.
- [5] European Commission (ed.) (2014). Commission staff working document on the implementation of the Raw Materials Initiative accompanying the document Communication of the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative: SWD(2014) 171 final. Brussels.
- [6] European Commission (2011). Increasing the impact of EU Development Policy: an Agenda for Change: Communications from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Brussels. Available at http://eacea.ec.europa.eu/intra_acp_mobility/funding/2012/documents/agenda_for_change_en.pdf, last accessed on 17 Nov 2016.
- [7] European Commission (ed.) (2012). Making raw materials available for Europe's future wellbeing - Proposal for a European innovation partnership on raw materials: SWD(2012) 27 final. Brussels. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0082&from=EN>, last accessed on 19 Dec 2016.
- [8] European Commission (ed.) (2011). Communication from the Commission to the European Parliament, the Council, the European A resource-efficient Europe - Flagship initiative under the Europe 2020 Strategy: COM(2011) 21 final. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0021:FIN:EN:PDF>, last accessed on 19 Dec 2016.
- [9] European Commission (ed.) (2015). Trade for all - Towards a more responsible trade and investment policy. Brussels. Available at http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf, last accessed on 17 Nov 2016.
- [10] European Commission (2016). EU political deal to curb trade in conflict minerals. Brussels. Available at http://europa.eu/rapid/press-release_IP-16-2231_en.htm, last accessed on 17 Nov 2016.
- [11] UN Security Council (ed.) (2010). Final report of the Group of Experts on the Democratic Republic of the Congo: United Nations Security Council Document S/2010/596. New York, last accessed on 18 Nov 2016.
- [12] Dimpal (2016). Bauxite: Vedanta's Lanjigarh refinery to source bauxite from Kodingamali. Available at <https://roskill.com/news/bauxite-vedantas-lanjigarh-refinery-source-bauxite-kodingamali/>, last accessed on 18 Oct 2016.
- [13] Eis, F. (2012). New reports says civil unrest threatens Dominican Republic mining. Available at <http://www.mining.com/new-report-says-civil-unrest-threatens-dominican-republic-mining-61361/>, last accessed on 23 Dec 2016.
- [14] Lewis, R. (2015). Dominican activists call mining projects 'new form of colonialism'. Available at <http://america.aljazeera.com/articles/2015/1/28/dominican-republic-mining.html>, last accessed on 23 Dec 2016.
- [15] The Guardian. Peru anti-mining protests escalate during state of emergency (05 Dec 2012). Available at <https://www.theguardian.com/world/2012/jul/05/peru-anti-mining-protests-escalate>, last accessed on 19 Dec 2016.
- [16] Newmont Mining Corporation (ed.) (2016). Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015. Washington D.C. Available at <https://www.sec.gov/Archives/edgar/data/1164727/0001155837016003258/nem-20151231x10k.htm>, last accessed on 18 Nov 2016.
- [17] OECD (ed.) (2016). Peru - Integrated governance for inclusive growth: OECD Public Governance Reviews. Paris.
- [18] National Research Council of the National Academies (ed.) (2008). Minerals, Critical Minerals, and the U.S. Economy. Washington D.C.
- [19] Prior, T.; Giurco, D.; Mudd, G.; Mason, L. & Behrisch, J. (2012). Resource depletion, peak mineral and the implications for sustainable resource management. *Global Environmental Change*, 22(3), pp. 577–587.
- [20] Angerer, G.; Buchholz, P.; Gutzmer, J.; Hagelüken, C.; Herzig, P.; Littke, R.; Thauer, R. & Wellmer, F.-W. (2016). Rohstoffe für die Energieversorgung der Zukunft: Geologie - Märkte - Umwelteinflüsse (neue Ausgabe). Energiesysteme der Zukunft. München: Deutsche Akademie der Technikwissenschaften.

- [21] Hodge, R. A. (forthcoming). Towards contribution analysis: In: Extractive Industries and the Development of Low-Income Economies (draft title).
- [22] United Nations (ed.) (2011). Guiding Principles on Business and Human Rights. Geneva. Available at http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf, last accessed on 09 Dec 2016.
- [23] European Parliament (2016). Conflict minerals: MEPs secure mandatory due diligence for importers. Brussels. Available at <http://www.europarl.europa.eu/news/en/news-room/20161122IPR52536/conflict-minerals-meps-secure-mandatory-due-diligence-for-importers>, last accessed on 12 Dec 2016.
- [24] European Commission (ed.) (2011). A renewed EU strategy 2011-14 for Corporate Social Responsibility: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2011) 681 final. Brussels.
- [25] Hodge, R. (2011). Mining and Sustainability. In Society for Mining, Metallurgy, and Exploration (SME) (Ed.), SME Mining Engineering Handbook. Third Edition (pp. 1665–1688).
- [26] Falkenberg, K. (2016). Sustainability Now! A European Vision for Sustainability (EPS Strategic Notes No. 18). Brussels.
- [27] Schüler, D.; Degreif, S.; Dolega, O. & Manhart, A. (2016). Voluntary initiatives in the mining sector and their principles and criteria on socio-economic sustainability: STRADE Policy Brief No. 06/2016. Darmstadt. Available at http://stradeproject.eu/fileadmin/user_upload/pdf/PolicyBrief_09-2016_Dec2016_FINAL.pdf, last accessed on 25 Jan 2017.
- [28] Revenue Watch Institute (ed.) (2013). The 2013 Resource Governance Index. New York. Available at http://www.resourcegovernance.org/sites/default/files/rgi_2013_Eng.pdf, last accessed on 19 Dec 2016.
- [29] OECD (ed.) (2011). OECD Guidelines for Multinational Enterprises. Paris. Available at <http://www.oecd.org/daf/inv/mne/48004323.pdf>, last accessed on 19 Dec 2016.
- [30] OECD (ed.) (2016). OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Third Edition. Available at <http://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf>, last accessed on 19 Dec 2016.
- [31] European Commission (ed.) (2014). Report on critical raw materials for the EU. Brussels.
- [32] Manhart, A. & Schleicher, T. (2013). Conflict minerals - An evaluation of the Dodd-Frank Act and other resource-related measures. Freiburg. Available at <http://www.oeko.de/oekodoc/1809/2013-483-en.pdf>, last accessed on 26 Feb 2016.
- [33] Manhart, A.; Gandenberger, C.; Bodenheimer, M. & Griestop, L. (2015). Ungewollte Verschiebungseffekte durch Standards und Zertifizierungen - Relevanz und Lösungsansätze für den Bereich der abiotischen Rohstoffe. Available at https://www.umweltbundesamt.de/sites/default/files/medien/378/dokumente/rohpolress_kurzanalyse_5_verschiebungseffekte_07102015_final-ig.pdf, last accessed on 20 Dec 2016.
- [34] ISO 26000 Post Publication Organisation (2016). ISO 26000 Basic training material. Available at http://www.iso.org/iso/iso_26000_basic_training_material_annexslides.pptx, last accessed on 22 Dec 2016.
- [35] European Commission (ed.) (2014). A stronger Role of the Private Sector in Achieving Inclusive and Sustainable Growth in Developing Countries: COM(2014) 263 final. Brussels. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX%3A52014DC0263&qid=1400681732387&from=EN>, last accessed on 22 Dec 2016.

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:

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

Project Identity

Project Name	Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
Coordinator	Oeko-Institut; Doris Schueler, Project Coordinator, d.schueler@oeko.de
Consortium	
	OEKO-INSTITUT E.V. – INSTITUT FUER ANGEWANDTE OEKOLOGIE Merzhauser Strasse 173, Freiburg 79100, Germany
	SNL Financial (AB) Olof Palmes gata 13, Se -111 37, Stockholm, Sweden
	PROJEKT-CONSULT BERATUNG IN ENTWICKLUNGS-LAENDERN GMBH Laechenstrasse 12, Bad Vilbel 61118, Germany
	UNIVERSITY OF DUNDEE Nethergate, DD1 4HN Dundee, United Kingdom
	GEORANGE IDEELLA FORENING Box 43, Mala 93070, Sweden
	UNIVERSITY OF WITWATERSRAND JOHANNESBURG Jan Smuts Avenue 1, Johannesburg 2001, South Africa
	DMT-KAI BATLA (PTY) LTD P.O Box 41955, Craighall, 2024, South Africa
Funding Scheme	This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689364
	 Funded by the Horizon 2020 Programme of the European Union
Duration	1.12.2015 – 30.11.2018
Budget	EU funding: €1 977 508.75
Website	www.STRADEproject.eu

The views expressed in STRADE Policy Briefs are those of the respective author(s) and do not necessarily reflect the views of all the STRADE Consortium members. The European Union is not responsible for any use made of the information in this publication.