

# Without responsibility and transparency

Human rights risks along the nickel supply chain by Melanie Müller and Michael Reckordt

Being one of the biggest export nations, Germany is strongly dependent on raw material imports. Nearly one hundred percent of the metallic primary raw materials are imported from abroad and processed by the German industry. The German raw material requirement has strongly increased over the past decades and according to the forecasts, it will continue to increase in the next few years. There are always discussions of human rights violations in connection with mining. This applies equally to all raw materials: the raw materials sector is a risk sector

German companies are also regularly involved in human rights violations along the supply chain (directly or indirectly). Therefore, the German government has adopted the National Action Plan "Economy and Human Rights" in 2016. This Action Plan is based on the United Nations Guiding Principles on Business and Human Rights (UNGP) which drafts minimum requirements not only for states but also for companies and their economic activities abroad. The government expects German companies to conduct human rights due diligence not only in their activities abroad, but also in the import businesses. At least fifty percent of all German companies ought to have integrated human rights due diligence in the supply chain until 2020. The human rights due diligence involves the development of methods of assessing human rights risks, the review of the effectiveness of these methods, the publication of the reports of the methods as well as the establishment of easily accessible complaints mechanisms. The National Action Plan and its resulting requirements on companies are based on voluntary participation. Therefore, the companies do not have to fear any legal sanctions.

Latest studies show that there is still too little awareness of human rights responsibility in terms of mining and purchasing raw materials among German companies. This changes relatively slowly. When the Dodd Frank Act has been adopted in the United States, the mining conditions of the so-called conflict materials came into international focus. The mining conditions for stone coal have also been investigated in various studies (Hallowes/Munnik 2017; Müller/Paasch 2016; urgewald 2013). So far, there have been very few studies on the supply chain of other metallic raw materials (Feldt/Kerkow 2013; Müller 2017). More research on supply chains and mining risks of metallic raw materials are necessary because these raw materials cannot usually be completely substituted and it can be assumed that the demand will further increase in the coming years (PowerShift 2017).

The German and the European raw materials policy are very much focused on providing the industry with security of supply. In 2011, for example, the EU for the first time published a list with "critical raw materials". This list primarily contains raw materials which were

possibly endangered the supply of the European industry (by monopolies of individual countries on mining). The listed raw materials, such as the rare earth metals, are repeatedly the subject of public discussions. Although nickel is not a critical raw material in that sense, it is of central importance for the German and the European economy due to its application in various key industries such as the steel production. In addition, Germany is the country with the fifth-largest demand for nickel worldwide (BGR 2015: 42). Yet despite this importance, there have been no studies on the nickel supply chain in recent years.

The Philippines are one of the most important raw material exporters in the world and the world's largest supplier of nickel. A great part of the nickel in the Philip-

pines is transported to China. There are repeated instances of massive human rights violations in connection with mining of nickel. Mid-2016, the Philippine government announced the closure of mines because the mining conditions did not meet the environmental and human rights standards. So far, nickel mining is still taking place in the Philippines.

The latest study describes the nickel supply chain as well as the various mining stations. The first chapter focuses on the mining of this raw material and its context with the Philippines. The second part presents the significance of melting as well as the most important melting producers. The third part focuses on the processing of the raw material and highlights the importance of nickel to the German industry.

# Part I: The Nickel Supply Chain

## by Melanie Müller

Similar to other metallic raw materials, the mining of nickel is associated with various intermediate steps with different actors involved.

The nickel supply chain can be roughly divided into four segments: the mining of nickel (based on the example of the Philippines in this study), the melting process, the processing of nickel – either directly as a metal or in the form of alloys – as well as the recycling. Recycling processes are complex and therefore cannot be discussed in detail within the framework of this study.

#### 1. The first station: the mining of nickel

Nickel can be mined both in open-pit or underground mining. There are a variety of processes of mining and processing (see Heubner/Klöwer et al. 2015; Mudd 2010) which are not presented in this study due to the focus on the supply chain. Both mining processes are applied in the Philippines.

## 1.1 The most significant mining countries and groups in the nickel production

Until 2014, Indonesia played an important role in the nickel production but then the government imposed an

export ban for nickel which was only relaxed in the beginning of 2017. Since then, the Philippines are the most important nickel exporter worldwide. The following chart provides an overview of the most important mining countries:

Rang	Country	Production (thousand tons)	Reserves (thousand tons)
1	Philippines	530	3,100
2	Russia	240	7,900
3	Canada	240	2,900
4	Australia	234	19,000
5	Caledonia	190	8,400
6	Indonesia	170	4,500
7	Brazil	110	10,000
8	China	102	3,000

Chart 1: Chart made in dependence on International Nickel Study Group 2016: 2.

Just as in the case of mining of most raw materials, there are only few, normally companies operating on a global scale, that are extracting nickel worldwide. Two of the most important groups are the Brazilian



A nickel mine in Surigao del Norte has immense impact on the surrounding land and waters.
Photo: MIILS Global Witness

group Vale and the Russian group Norilsk Nickel. They both have taken leading positions in varying order for many years. Vale is mining nickel in Canada, Brazil, Indonesia, Taiwan and New Caledonia. Since 2008, Vale has been investing in research and explorations of copper mining in the Philippines. Even though the company is not mining raw materials in the country, it has two Floating Transfer Stations in Subic Bay to supply the Chinese market via the Philippines. Norilsk Nickel is active in Russia, Finland, Botswana, South Africa and Australia.

BHB Bilton, the largest mining group in the world, sold its shares of the nickel mining project in Mati (Davao, Mindanao) at the end of the 2000s and withdrew from Philippine mining projects.<sup>2</sup> Others, like the Chinese Jinchuan group, invested in two nickel mines of MacroAsia in Palawan in 2011.<sup>3</sup> Both mines are on a provisional list to be concluded by the Philippine Ministry of Environment.<sup>4</sup> Glencore operates a molten copper in the country but is not itself involved in nickel mining in the Phil-

ippines. Chart 2 shows the five largest mining groups in the field of nickel (status as of 2014).

#### 1.2 The mining of nickel in the Philippines

In connection with nickel mining, human rights violations have been repeatedly reported around the world in the last few years. This refers to nearly all states in which nickel is mined. The risks of nickel mining involve the pollution and contamination of drinking water, health risks for workers as well as for communes that are affected by the nickel mining. Furthermore, an extraction of raw materials is always leading to the expulsion of communes in areas where raw materials are mined. These risks can be illustrated in the example of the nickel mining in the Philippines.

The mining of raw materials does not play an important role for the Philippine's economy, its share of exports is currently only around two percent (PSA 2017; see Breininger/Reckordt 2011). Nevertheless, the country gen-

Rang	Company	Headquarter	Production (thousnsd tons)	Mining Countries
1	Vale	Brasil	275	Canada, Brazil, Indonesia, Taiwan, Caledona (only nickel)
2	Norilsk Nickel	Russia	274	Russia, Finland, Botswana, South Africa, Australia
3	BHB Billiton	Australia/Great Britain	143	Australia
4	Jinchuan Group	China	128	worldwide
5	Glencore	Switzerland	101	Australia, Canada, Caledona, Norway, Dominican Republic

Chart 2: Chart made in dependence on Bell 2016, additional evaluation of the respective companies' websites.

erated 109.4 billion Philippine pesos from the industrial mining of metallic raw materials in 2015. This corresponds to approximately 2.05 billion euros.<sup>5</sup> In order to promote mining, the Philippine government adopted the Mining Act in 1995 which allowed the mining of raw materials in nature reserves and comprehensive special arrangements for foreign investors (Reckordt 2012). This had some serious impacts on the local population.

Since the inauguration of President Rodrigo Duterte and the Minister of the Environment Regina Lopez in 2016, many of the largest Philippine mines have been criticized, including 27 mines producing nickel. There have always been major risks arising from the nickel mining for the population of the Philippines over the past years.

The island of Palawan is an example for the destructive effects of mining. The nickel mining has a massive impact on the biodiversity in this region because the so-called acid mine drainage is released as a by-product of nickel mining which builds up in the groundwater as well as in the soil. They impede plant growth, and thus the agricultural production as well. This has a direct effect on the communes. In Palawan, the acid mine drainage has entered the waters and has led to fish mortality in this area.<sup>6</sup>

The commune of Santa Cruz of the province of Zambales in the northwest of the country is also feeling the negative effects of mining in the region. According to its own estimates, the commune with its 54,000 inhabitants loses half a billion Philippine pesos a year because the harvest of rice, mango and other agricultural products, as well as fishing, is only possible to a limited degree. Furthermore, the vast land areas which are dug up for open-pit mining become infertile for centuries (Reckordt 2015).

Besides these effects on the environment, mining effects on also affects the health of workers. Without sufficient protection, the emissions released during mining can cause numerous health problems when getting deep into the lungs and stay there. Long-term health consequences are asthma and other lung diseases (to the development of cancer) as well as heart diseases (Grimsrud et al. 2002; Coogan et al. 1989).

Therefore, it is not surprising that there is a strong resistance emerging against mining in the Philippines in the past years. The network "No to Mining" that was launched in the region of Palawan, calls for the stop of mining. There is strong support for the resistance: until December 2015, the network managed to collect over ten million signatures against mining and for the preservation of the island (Reckordt 2017). The network receives wide support from the Philippines, not least from the fishermen and the agricultural workers who are affected by the mining (Garganera/Sevilla 2017). Another network, which was founded in the run-up to the 2016 elections in the Philippines, criticizes the mining of raw materials in the region. The intention was to put more pressure on the government, given that the former president Aquino hardly cared about the communes affected by the mining (Reckordt 2017).

Civil society activities against mining are risky: in 2015, 33 environmentalists were murdered in the Philippines, according to the NGO Global Witness. One of the wellknown cases of political murders is the killing of broadcaster Gerry Ortega in 2011. He was a well-known critic of nickel mining on the island of Palawan. Ortega was murdered in Puerto Princesa, the capital city of the Province of Palawan. alawan and was murdered one morning in a marketplace in the provincial capital Puerto Princesa (vgl. Breininger/Reckordt 2011: 101). This underlines that even in nickel mining economic interests are pursued, if necessary by force. However, the mining itself brings - besides environmental and health risks - only few economic advantages for the affected communes. As soon as the raw materials are extracted from the soil, they are no longer processed in the Philippines but in other countries. The raw material is mainly shipped to China; a small part is exported to Japan. The raw material companies have their own piers at the harbors in the Philippines, where the raw materials are shipped. But even the shipping is a risky undertaking: in March 2011, two cranes from the companies Rio Tuba Nickel Mines and the Citinickel Mining Corporation that were supposed to transport nickel to China, felt into the water Rio Tuba Nickel Mines and the Citinickel Mining Corporation to China (Garganera/Sevilla 2017).

With the appointment of the former environmentalist Regina "Gina" Lopez as minister of the environment, the pressure on Philippines' mining companies has increased and the situation has changed dramatically. Under the leadership of Lopez the *Department of Environment and Natural Resources* carried out the verification of active nickel mining licenses and identified significant deficiencies. At the beginning of February 2017, Lopez announced the closure of 21 mines in the Philippines. One reason for this is the negative ecological effect of mining. In addition, the investigation also highlighted the social impact: according to Lopez, 82 percent of the profits from mining go to the companies and only 18 percent to the communes. Since the Philippines have been evolved into the worldwide biggest nickel exporter



in recent years, the announcement of the closure of the mines also had an impact on the nickel price on the stock exchange in terms of substantial price fluctuations; since summer 2016, there has been an increasing tendency towards higher costs.<sup>8</sup>

#### 2. Global melting of nickel

The mining is linked not only to ecological and social risks but also to the melting process that affects the environment, as shown by various studies. There are health risks for workers and environmental risks as well (Bai et al. 2016). According to *International Nickel Study Group*, nickel ore is mined in 23 countries worldwide and smelted or refined in 25 countries. there are melts and refineries in 25 countries worldwide, nickel is mined in 23 countries worldwide. There are hardly any free accessible and latest statistics available. The following chart gives an overview of the world's *largest producers* of refined nickel between 2010 and 2013. It underlines the important role of China as a nickel producer:

Country	2010	2013
China	326,000	734,000
Russia	287,000	251,000
Japan	166,086	182,000
Australia	101,598	141,519
Canada	105,413	137,412

Chart 3: States with relevant processing of nickel. Data measures in ton. Chart made in dependence on International Nickel Study Group 2016

According to *Bloomberg*, China's nickel production amounted to 741,000 tons in 2014. *Jinchuan Group Ltd*, one of the most important companies in China, is active in 24 countries, according to the company. *Jinchuan Group Ltd*, which is to its own reports active in at least 24 countries worldwide and The company is involved with one billion dollar in the nickel process plant in Palawan.<sup>9</sup> Other Chinese companies are *Xinjiang Xinxin Mining Industry Co Ltd* and *Tshingshan Holding Group*.

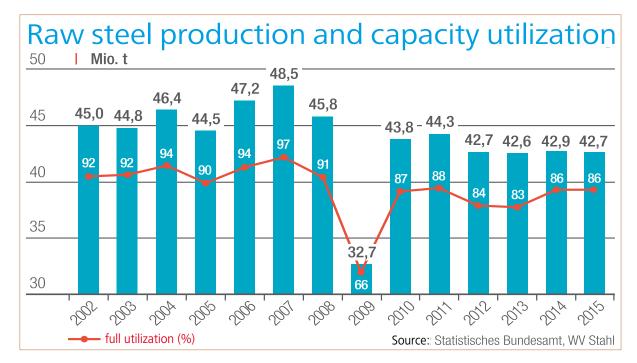
In 2015, eight Chinese nickel producers announced to reduce the nickel production by 20 percent, after the dramatic drop in prices of nickel due to China's high production. The reduction of the production should contribute to price stability. Brazil has also cut its refining production. In March 2016, Norilsk Group called for an increase in the nickel production because of the increase in high prices. 11

#### 3. The processing of nickel

Only after the nickel has passed the melting process, it shows the characteristics which are necessary for the further processing. The possibilities are endless through the use of nickel. This is because the metal has a strong corrosion resistance and hardness but also a high strength at hot and cold temperatures. Furthermore, the *electronic* and *magnetic properties* of nickel have the effect that the metal can be used in a variety of sectors. For example, the nickel metal is used as a catalyst that causes different chemical reactions.

The Chinese company
Shenzou Mining practices open pit mining in Claver, Surigao del Norte.
Photo: Shenzou Mining/Global Witness

Figure 1: Economic Union of Steel 2016, S. 5.



Nickel in the steel industry

By far the most common use of nickel, however, is in the production of alloy steel. According to International Nickel Study Group, 68 percent of the nickel which is processed worldwide is used in the steel industry, especially for the manufacture of stainless steel. Another 16 percent go to the production of alloys, nine percent to the production of coatings, three percent to the casting production, another three percent to the production of batteries and the remaining one percent is not further specified. There is the use of the mixture of nickel, chromium, and molybdenum in the refining process of steel. This makes the steel stainless, more corrosion resistant and more ductile. Therefore it is easier to shape without breaking. In Germany, the steel is used in various sectors; the most important are the construction industry and the automotive industry (International Nickel Study Group 2016). Chart 4 gives an overview of the most important sectors of nickel use.

Area	Indication in Percent
Bau	31
Automobil	26
Maschinenbau	12
Metallwaren	12
Rohre	10
Haushaltswaren	6
Rest	3

Chart 4: Chart made in dependence on WVM 2016

The raw steel production for 2016 was 1,629 million tons worldwide. China is the most important producer on a global scale. In 2016, the country produced 808 million tons of steel and is therefore responsible for half of the global raw steel production. But the German steel industry plays an important role as well. Germany produced 42.1 million tons of steel in 2016. Therefore, the German production has been stable for around four years, after the market collapsed due to the economic crisis in 2009. According to the German steel industry, its production capacities are fully utilized to 85 to 90 percent since 2010. 12 Figure 1 gives an overview of the crude steel production as well as the capacity utilization.

	Import Weight (t)	Import: Value (thsd. EUR)
2008	199.4	3,918
2009	51.0	993
2010	101.9	1,157
2011	565.2	10,449
2012	368.8	6,169
2013	491.4	5,592
2014	1,571.1	18,002
2015	1,263.7	14,091
2016	2,024.5	17,517

Chart 5: Import of nickel alloy from the Republic of China. Chart made in dependence on data of the federal office on statistics on foreign trade. (Table EGW 2002: 3-Steller).

To meet the need for steel, Germany imports the raw steel directly from China but also the nickel alloys which are most likely to be used in the production of crude steel by the Germany steel industry. Chart 5 provides an overview of the imports of nickel alloys from China in the last eight years.

Chart 6 gives an overview of the steel producers in Germany:

Steel producer in Germany Oxygen steel and Electrical steel (in million tons(2016)		
ThyssenKrupp	12.1	
ArcelorMittal	7.8	
Salzgitter	7.0	
Saarstahl	2.5	
Badische Stahlwerke	2.4	
Dillingen	2.2	
Riva	1.8	
Georgsmarienhütte	1.3	
Lech Stahlwerke	1.2	
ESF Elbestahlwerke Deralpi	1.0	
Deutsche Edelstahlwerke	0.8	
Stahlwerk Thüringen	0.8	
Benteler 0.6		

Chart 6: Economic Union on Steel 2016: The biggest steel producers in Germany. Source: Chart made in dependence on http://www.stahl-online.de/index.php/statistiken/2/#stahlmarkt\_d, last viewed on 7.4.2017.

The three main steel producers – *ThyssenKrupp, ArcelorMittal and Salzgitter* – do not provide any information on the origin of their raw materials on their websites.

The further processing of nickel

In contrast to other European countries, there is no longer an extensive processing of nickel in Germany. 13 There are few companies that are distributing manufactured nickel products abroad<sup>14</sup> but only very few German companies are involved in the production. According to the General Association of the German Non-ferrous Metal Industry, there are three companies which are involved in the processing of semi-finished products<sup>15</sup> of nickel as well as in the production of nickel alloys: Deutsche Nickel GmbH,16 VDM Metals GmbH<sup>17</sup> and Vacuumschmelze GmbH & Co. KG. 18 Although all three companies provide comprehensive information on their products as well as on the composition of their alloys on their websites, there is no information on the origin of the raw material of nickel. However, there are indications as to further locations of the companies on their homepages: Deutsche Nickel GmbH, in addition to its Schwerte headquarters, is also represented in the United States and in China. It even has its own melting in Germany. The VDM Metals has several locations in Europe, Australia and Asia as well as in Northern and Central Europe. The Vacuum Schmelze GmbH is not only active in Germany but also in Slovakia, Malaysia and China. There, the products are produced and sold in Germany. There are no indications that such companies are complying with their duty to protect human rights due diligence. This does not necessarily mean that the companies do not care



Workers on their way through a muddy river which is contaminated with nickel tailings. Photo: Michael Reckordt





about the human rights due diligence. But they do not provide any information on this issue on their websites.

Also the Nickelhütte Aue manufactures products of nickel (nickel chemicals and nickel concentrates) but from secondary intermediates, namely from recycling. One part of the product range is produced from secondary intermediates in Germany. Another part of the intermediates - including nickel metal and ferrous nickel - is imported. The imports come from the Russian Federation, Finland, the Netherlands, Great Britain and Indonesia (BGR 2015: 42). The data situation on the recycling of nickel is insufficient. According to the General Association of the Non-ferrous Metal Industry, it is hardly possible to collect reliable data on the amount of recycled nickel in Germany. This is due to the fact that the raw material is used primarily as an alloy metal and is hardly able to regain its original form. But it is estimated that the product-related recycling rate of nickel stands at about 80 percent.19

#### 4. Aggregation

The brief study shows the supply chain of the raw material nickel, in particular the mining in the Philippines, the melt production which is implemented to a large extent in China, and the exports of Chinese crude steel and nickel alloys to Germany. The details show that the

countries exporting raw material, such as the Philippines, are suffering from the consequences of mining. The extracting of resources has an impact not just on the environment but also on the health of the workers and the quality of life of the affected communes. The profits usually do not remain in the country, as shown by the Philippine example: 82 percent of the profits remain with the mining groups, whereas the affected communes even suffer losses in agriculture or fishing.

A large part of the processing of nickel and the global melt production takes place in China. Russia and Brazil are other important players. Pollutant emissions from the melt production are a risk for the health of workers, as shown by the study. Therefore, there are other emerging risks in the supply chain that have to be considered as well when importing from China. In Germany, nickel alloys are used in large parts of steel refinement. There are only few German companies who are active in the manufacturing of semi-finished products and nickel alloys. These companies do not provide any information on the origin of their raw materials online as well as on the issue of whether and how to take up their human rights responsibilities in the supply chain. These findings concerning companies' use of raw materials can be compared to similar studies of copper and coal that show the lack of transparency of imports.

## **Part II: Political Demands**

### by Michael Reckordt

As demonstrated in the previous study, the raw material sector is associated with high risks on disregarding and violating the human rights. The example of the raw material nickel shows that there are violations of human rights, but the German corporations which are utilizing nickel do not seem to be aware of it yet. These corporations do not transparently report on their efforts and measures to minimize or even avoid human rights risks.

But it is not just individual companies that have to be taken into account. According to the UN Guiding Principles on Business and Human Rights, the German government is also committed to meet human rights standards. It is, therefore, the government's responsibility to ensure that companies of mine, trade or raw material production meet human rights standards. Voluntary regulations — as seen in the non-reporting of German companies in the nickel sector — are not enough. This is why the editors, who are also active in the nationwide network AK Rohstoffe, call on the German government to the following:<sup>20</sup>

#### Increase recycling rates

Germany is the biggest European and the fifth-largest nickel consumer in the world.<sup>21</sup> In 2015, 57,200 tons have been produced in Germany.<sup>22</sup> They imported further quantities of steel and processed nickel and thus increased their amount of tons. The government was expected to implement specific goals for the sustainable use of raw materials, including nickel. The Federal Environment Agency, for example, criticizes that only 78.5 percent of the nickel cadmium batteries are recycled whereby the legal requirements can be narrowly achieved.<sup>23</sup> In this context, the German government has to – with view to the serious risks of mining and processing of raw materials – react and develop a general recycling strategy, not only concerning nickel but also all metallic raw materials.

#### Strengthen the recycling economy

The government should encourage efforts to prevent food waste throughout the supply chain. The reuse, reparability



A new nickel slurry tank after the old one was destroyed by a landslide. Photo: Michael Reckordt

#### **Notes**

- 1 Floating Transfer Stations are floating transfer stations. View on Website of VALE: http://www.vale.com/en/aboutvale/across-world/ pages/default.aspx (27.3.2017).
- 2 http://www.gmanetwork.com/news/story/179956/money/companies/ bhp-billiton-ends-feud-with-local-partner-to-exit-davao-mine (10.04.2017).
- 3 http://www.reuters.com/article/jinchuan-nickel-philippines-idAFL-3E7K519S20110905 (10.4.2017).
- 4 http://www.philstar.com/business/2017/02/14/1672212/denr-cancels-75-mpsas-watersheds (10.4.2017).
- 5 See Republic of the Philippines. Department of Environment and Natural Resources. Mines & Geosciences Bureau. Mining Industry Statistics. Release Date: 15 December 2016.
- 6 Regis, Emelina 2011: Mining in Palawan and its impact on biodiversity and local communities. Online: http://alyansatigilmina.net/2011/07/12/ mining-in-palawan-and-its-impacts-to-biodiversity-and-localcommunities/ (9.3.2017).
- 7 Morallo: Audrey 2017: DENR to close 21 mining firms. In: PhilStar Global. Online: http://www.philstar.com/business/2017/02/02/1668370/denr-close-21-mining-firms (9.4.2017).
- 8 See Financial Times 2017: Nickel Prices surge after Philippines shuts down mines. Online: https://www.ft.com/content/9fefd91e-e96a-11e6-967b-c88452263daf (27.3.2017).
- 9 See: Mines and Communities (2012): Another natural desaster reignites the mining debate. Online: http://www.minesand communities.org/article.php?a=11405 (7.4.2017).
- 10 See: Bloomberg (2015): China's top smelters agree nickel production cut. Online: https://www.bloomberg.com/news/articles/2015-11-27/ china-s-top-nickel-smelters-agree-20-production-cut-for-2016 (27.3.2017).
- 11 See: Norilsk calls for nickel production to be reduced. Online: https://www.ft.com/content/9a54360c-e6ec-11e5-a09b-1f8b0d268c39 (27.3.2017).
- 12 See: Stahl-online (2016): http://www.stahl-online.de/index.php/ rwi-deutsche-rohstahlproduktion-2016-21/
- 13 See: GDB 2017: http://www.gdb-info.de/welcome.asp?page\_id=248&sessionid= (27.3.2017).
- 14 For an overview see: https://www.wlw.de/de/firmen/nickel (27.3.2017).
- 15 Semi-finished products are products that are produced for other products.
- 16 Website Deutsche Nickel: http://www.deutsche-nickel.de/home.html (27.3.2017).
- 17 Website VDM Metals: http://www.vdm-metals.com/unserunternehmen/ (27.3.2017).
- Website Vacuumschmelze: http://www.vacuumschmelze.de/ (27.3.2017).
- 19 See: GDB 2017: http://www.gdb-info.de/welcome.asp?page\_id=248&sessionid= (27.3.2017).
- 20 Most of the claims are based on the demands of the AK Raw Materials, which was adopted in 2016 by the "For a democratic and globally sound commodity policy" position paper. Online: https:// power-shift.de/wordpress/wp-content/uploads/2016/08/AK\_ Rohstoffe\_demokratische\_und\_global\_gerechte\_rohstoffpolitik.pdf
- 21 Source: Statista-Daten (Distribution of global nickel consumption in 2014, by country), online: https://www.statista.com/statistics/545049/ distribution-of-nickel-consumption-worldwide-by-country/
- 22 Source: BGR Deutschland Rohstoffsituation 2015; online: https://www.bgr.bund.de/DE/Themen/Min\_rohstoffe/Downloads/Rohsit-2015.pdf?\_\_blob=publicationFile&v=3; S. 43
- 23 Source: Umweltbundesamt: Altbatterien; online: https://www. umweltbundesamt.de/print/daten/abfall-kreislaufwirtschaft/ entsorgung-verwertung-ausgewaehlter-abfallarten/altbatterien



Without any special environmental precautions, the nickel is stored at the port before it is shipped to China. (Michael Reckordt)

and recycling capability of products need to be strengthened through product design (in electronics: hardware and software). This also applies to products which contain raw materials such as nickel.

#### Renounce deep sea mining

In the context of the need to reduce the consumption of raw material, the government ought to renounce deep sea mining. *The impacts on natural resources and human health cannot yet be estimated.* Therefore, it is not known how many unknown species would be eradicated by deep sea mining. The political processes of regimentation are totally insufficient. The larger deposits of nickel under water and the risks onshore should not be an excuse for entering into the deep sea mining venture.

#### Binding due diligence obligations

Companies must be obliged to examine the impacts of their activities and business relationships on human rights and the environment across the entire value chain and to prevent negative consequences. If they cannot assess any negative impacts or potential risks on request of the competent authority, a fine will be imposed. In the case of avoidable damages, the German government shall give the victims the opportunity to sue companies that are partly responsible, for compensation at German civil courts. Companies that do not meet the human rights due diligence, have to be excluded from public contracts and the foreign trade promotion for five years.

## Transparent and obligatory documentation of the reporting by companies

The government ought to oblige companies to a public documentation of the human rights due diligence. The human rights standards of the companies as well as the screening processes should be documented transparently. To make the audits easily accessible to the public, the government should create a central point in order to collect, review and publish the information online. This would make it easier for downstream industries to receive the information on the origin of their products and to take all relevant available information into account when purchasing.

#### Implementation of corporate criminal liability of companies

Germany is the last EU member state without such a law, next to Greece. It should be easily accessible to victims of human rights abuses, considering the importance of implementing it as an integral part of it.

#### Supporting the Philippines in diversifying the economy

The German government ought to help raw material exporting states by diversifying the economy, regardless of the economic interests to a low-priced supply of raw materials. If states, like the Philippines, decide to redefine themselves economically, far away from the exploitation of raw materials, the German government should support the country through collaboration in terms of development, environment – also in the renaturation of former cultivation areas – and economy.

#### **Protecting civil society**

The German government is requested to place the protection of the civil society clearly before economic interests.

It has to demand a commitment to protect the civil society and monitor the implementation when entering international contracts which refer to raw material projects and raw material trade.

Furthermore, it has to commit companies in its efforts to ensure the human rights due diligence to engage against repressions of the civil society. Moreover, we call on the German government to stand up for the protection and the strengthening of the civil society – both politically and financially – and to provide representatives of civil society organizations with free access to law.

#### Protecting and reinforcing the rights of indigenous people

Indigenous communities are disproportionately affected by mining in the Philippines and in many other states. Therefore, we call on the German government to finally ratify the ILO Convention 169 and thereby the only binding document under international law which provides full recognition of the rights of indigenous people worldwide. Furthermore, the government must ensure that German companies respect the rights of indigenous people, such as land rights, the right of participation, consultation and free, prior and informed consent (FPIC) when performing economic activities. an companies in their economic activities respect the rights of indigenous people, like land rights, the right of participation, consultation and free, prior and informed consent (FPIC). These laws must also be protected as part of the German foreign, economic, trade, environmental and development policy.

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#### References

- Bai, Yana et al. 2016: Cohort Profile: The China Metal-Exposed Workers Cohort Study (Jinchang Cohort). In: International Journal of Epidemiology, 2016, 1–7.
- Bell, Terrence2016: The World's Biggest Nickel Producers 2014. Online: https://www.thebalance.com/the-10-biggest-nickel-producers-2014–2339732 (7.04.2017).
- BGR, Bundesanstalt für Geowissenschaften und Rohstoffe 2015: Deutschland – Rohstoffsituation 2015. Hannover.
- Breininger, Lilli und Michael Reckordt 2011: Rohstoffrausch Die Auswirkungen von Bergbau in den Philippinen. Essen: philippinenbüro
- Coogan, Timothy P., Latta, Dorothy M., Snow, Elizabeth T. und Max Costa (1989): Toxinity and Carcinogenicity of Nickel Compouns. In: CRC Critical Reviews of Toxicology 19 (4), 341–384.
- Feldt, Heidi; Kerkow, Uwe 2013: Menschenrechtliche Probleme im peruanischen Rohstoffsektor und die deutsche Mitverantwortung, Aachen: Misereor, Online: https://www.misereor.de/fileadmin/ publikationen/studie-rohstoffe-menschenrechte-in-peru.pdf (7.4.2017).
- Garganera, Jaybee & Sevilla, Farah (Alyansa Tigil Mina, ATM) Interview 3.1.2017.
- Hallowes, David und Victor Munnik 2016: The destruction of the Highveld. Part 1: Digging Coal. Pietermaritzburg: groundwork.
- Heubner, Ulrich; Klöwer, Jutta 2015: Nickelwerkstoffe und hochlegierte Sonderedelstähle. Eigenschaften, Verarbeitung, Anwendungen. Renningen: expert Verlag.
- Grimsrud, Tom K., Berge, Steinar R.; Haldorsen, Tor und Aage Andersen (2002): Exposure to Different Forms of Nickel and Risk of Lung Cancer. In: American Journal of Epidemiology 156 (12), S. 1123–1132.
- International Nickel Study Group 2016: Production, usage and prices. Online: http://www.insg.org/prodnickel.aspx (7.4.2017).
- Mudd, Gavin 2010: Global Trends anLd Environmental Issues in Nickel Mining: Sulfides versus Laterides. In: Ore Geology Reviews 38 (1–2), 9–26
- Müller, Melanie 2017: Deutsche Kupferimporte: Menschenrechtsverletzungen, Unternehmensverantwortung und Transparenz entlang der Lieferkette. GLOCON Policy Paper 1. Berlin: Freie Universität Berlin. Online: http://www.land-conflicts.fu-berlin.de/\_media\_design/glocon\_policy\_paper\_1.pdf (27.3.2017).
- Müller, Melanie und Armin Paasch 2016: Wenn nur die Kohle zählt. Deutsche Mitverantwortung für Menschenrechte im südafrikanischen Kohlesektor. Aachen: Misereor. Online: https://www.misereor.de/fileadmin/publikationen/studie-wenn-nur-die-kohle-zaehlt.pdf (27.3.2017).
- PowerShift 2017: Ressourcenfluch 4.0. Die sozialen und ökologischen Auswirkungen von Industrie 4.0 auf den Rohstoffsektor. Berlin: PowerShift.
- PSA 2017: Merchandise Export Performance: January 2017, Online: http://psa.gov.ph/content/merchandise-export-performance-january-2017
- Reckordt, Michael (2017): Gina Lopez wird es schon richten...Bergbaupolitik und der Nickelabbau unter der Ägide einer Umweltaktivisten. In: Südostasien, Jg. 2016, Nr. 4
- Reckordt, Michael 2015: Rote Flüsse und tote Fischteiche: Nickelabbau in den Philippinen. Online: https://power-shift.de/rote-fluesse-und-tote-fischteiche-nickelabbau-in-den-philippinen-teil-1/ (27.3.2017).
- Reckordt, Michael 2012: Wie Rohstoffe in Südost-/Ostasien zur Entwicklung beitragen könn(t)en. Das alternative Bergbau-Gesetz der Philippinen. Köln: Philippinenbüro.
- urgewald 2013: Bitter Coal. Ein Dossier über Deutschlands Steinkohleimporte. Sassenberg: urgewald and FIAN Deutschland.
- Wirtschaftsvereinigung Stahl 2016: Fakten zur Stahlindustrie in Deutschland. Online: http://www.stahl-online.de/wp-content/uploads/2013/12/Fakten\_Stahlindustrie\_2016\_V2.pdf (27.3.2017).

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