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# Urgency vs. Justice: A Discourse Analysis on Nickel Extraction in Indonesia

Bachelor's thesis in Geography

Supervisor: Martin C. Lukas

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**Abstract**

The urgent need for action against climate change has escalated, driven by the inevitable and irreversible consequences that accompany these challenges. An energy transition towards low-carbon sources is necessary to mitigate climate change. The technologies required for this transition demand significant amounts of minerals and metals, leading to more energy- and carbon-intensive extraction of natural resources. Due to the social and environmental consequences which are often unequally distributed, justice concerns related to the energy transition are growing. This creates a dilemma between balancing the need to urgently enact climate action and the ambition to simultaneously meet calls for justice for people and nature affected by the extraction of natural resources. This thesis explores the interplay of urgency vs. justice through a discourse analysis of news articles surrounding nickel extraction in Indonesia from March 2023 to March 2024. Indonesia is a leading global exporter of nickel, a crucial mineral for the energy transition. My discourse analysis identified 4 leading discourses: (1) energy transition and electric vehicles, (2) opportunity for economic development, (3) future political and geopolitical considerations, and (4) environmental and social impacts. The thesis discusses these discourses in light of urgency (national vs. global), justice (tenets-based framework), and urgency vs. justice (jeopardizing vs. enabling dynamic). Overall, a tension between the urgency of the global energy transition to combat climate change and the pursuit of justice for people and nature affected is identified in the news articles, albeit not as an overall dominant discourse.

## Sammendrag

Det presserende behovet for handling mot klimaendringer har eskalert, drevet av de uunngåelige og irreversible konsekvensene som følger med disse utfordringene. En energiomstilling til lavkarbonkilder er nødvendig for å dempe klimaendringene. Teknologiene som kreves for denne omstillingen, krever betydelige mengder mineraler og metaller, noe som fører til mer energi- og karbonintensiv utvinning av naturressurser. På grunn av de sosiale og miljømessige konsekvensene som ofte blir urettferdig fordelt, øker bekymringene for rettferdighet i forbindelse med energiomstillingen. Dette skaper et dilemma mellom å balansere det presserende behovet for å iverksette klimatiltak umiddelbart og ambisjonen om å imøtekomme kravene til rettferdighet for mennesker og natur som blir påvirket av utvinning av naturressurser. Denne oppgaven utforsker samspillet mellom en akselerering av innsatsen og rettferdighet gjennom en diskursanalyse av nyhetsartikler om nikkeltutvinning i Indonesia fra mars 2023 til mars 2024. Indonesia er en ledende global eksportør av nikkelt, et avgjørende mineral for energiomstillingen. Min diskursanalyse identifiserte fire ledende diskurser: (1) energiomstilling og elektriske kjøretøy, (2) mulighet for økonomisk utvikling, (3) fremtidige politiske og geopolitiske hensyn, og (4) miljømessige og sosiale konsekvenser. Oppgaven diskuterer disse diskursene i lys av akselerering av innsatsen (nasjonalt vs. globalt), rettferdighet («tenets-based framework») og akselerering av innsatsen vs. rettferdighet («jeopardizing vs. enabling dynamic»). Totalt sett identifiseres det en spenning mellom hastverk for den globale energiomstillingen for å bekjempe klimaendringene og streben etter rettferdighet for mennesker og natur som blir påvirket i nyhetsartiklene, selv om dette ikke er en overordnet dominerende diskurs.

## **Preface**

As a result of 18 years living abroad, including 14 years in Asia, I have developed a strong interest in global questions and dilemmas, something I wished to explore in my BA thesis. My Geography studies at NTNU revealed my passion for sustainable development, energy transitions, and topics of justice. Following a lecture held by Nanang Indra Kurniawan titled “The (In)Justice Impacts of Sustainable Energy Transition: The Case of Tin and Nickel Extractions in Indonesia” in the course GEOG2017 – Energy Transition and Sustainable Development, I was inspired to learn more about nickel extraction in Indonesia. These factors inspired me to write this thesis.

In light of the escalating urgency of climate change and rising mineral demands for emerging technologies, it is important to reflect on the consequences that result. Therefore, this thesis aims to highlight the complex interplay between the urgency of addressing climate change through a global energy transition and the necessity of justice, particularly concerning environmental and social impacts. By shedding light on this tension, I aspire to catalyze further research in this important field. I hope that this thesis does justice in representing the global discourses of nickel extraction in Indonesia.

Throughout this process, I was fortunate to work with several individuals whom I would like to acknowledge. I express my sincere gratitude to my supervisor, Martin C. Lukas, for his extensive feedback, guidance, and encouragement. I am also grateful to Nanang Indra Kurniawan for their valuable expertise surrounding Indonesian nickel extraction, which has strengthened my thesis through his comments, lectures, and advice. I extend my appreciation to Ståle Angen Rye for providing important direction in the brainstorming phases of this BA thesis, as well as for being an engaging lecturer in the course I had parallel to my thesis writing. Lastly, I’m thankful to my friends and family for their support.

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## 1. INTRODUCTION

According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change written by Calvin et al. (2023, p. 4), “human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming,” resulting in far-reaching and rapid changes to the Earth’s systems (Calvin et al., 2023). Global temperature changes of the magnitude seen since the 1970s have not been experienced in any other period over the last 2000 years (Calvin et al., 2023). This highlights the profound impact of the human species on planet Earth.

Among scientists, there is a widely held concept that humanity’s impacts have propelled the earth out of the *Holocene*, the last ten to twelve thousand years, into a new geological epoch: the *Anthropocene*, the age of humans (Crutzen, 2006; Kumar et al., 2021). The impact of past and present actions by humans, particularly those in the Global North, is expected to have long-lasting effects. This has altered the future of the planet, resulting in the climate departing significantly from its natural behavior (Crutzen, 2006). Hence, it is said that humans are entering *terra incognita*, or unknown territory (Castree, 2015).

This concept has sparked the idea of an ‘Earth in crisis’ (Castree, 2015). Climate change is frequently referred to as the climate crisis, requiring urgent action to avoid irrevocable change to the earth (Haarstad et al., 2023; Kumar et al., 2021). Urgency is defined by Orlove et al. (2020, p. 272) as the “subjective or objective time pressure, in which delays for action will lead to increased risk or harm.” Thus, climate change is considered an urgent issue, frequently mentioned in contexts of pressure for time (Haarstad et al., 2023; Kumar et al., 2021; Van Bommel & Höffken, 2023).

To mitigate climate change it is necessary to reduce greenhouse gas (GHG) emissions. This requires transitioning to low-carbon energy sources (Van Bommel & Höffken, 2023), a so-called ‘energy transition’. Currently, the five key actions to ramp up the energy transition include adopting solar photovoltaics, electric vehicles and batteries, wind power, nuclear power, and heat pumps (IEA, 2024; Kumar et al., 2021). Without the growing deployment of these technologies, carbon dioxide (CO<sub>2</sub>) emissions growth would have been three times larger between 2019 and 2023 (IEA, 2024). However, many of these technologies create unintended consequences (Kumar et al., 2021).

The consequences of accelerating the energy transition are already becoming apparent, particularly for marginalized communities, including cases of reduced democracy, injustices,

and local environmental destruction (Kumar et al., 2021). Consequently, justice concerns related to the energy transition are growing (Van Bommel & Höffken, 2023). Justice is essential to ensure equality and fairness and resolve existing inequalities in society (Heffron, 2020). The ‘just transition’ is defined by McCauley and Heffron (2018, p. 2) as “a fair and equitable process of moving towards a post-carbon society.” The concept focuses on balancing the socio-economic and ecological factors whilst combating climate change (Bainton et al., 2021).

This creates a dilemma between balancing urgency and justice, between the need to urgently enact climate action and the ambition to simultaneously meet calls for justice (Van Bommel & Höffken, 2023). A literature review conducted by Van Bommel and Höffken highlights this dynamic. As the authors note, “the urgency of climate action can jeopardize justice in energy transitions, but a focus on justice can also obstruct rapid and adequate energy transition policies” (Van Bommel & Höffken, 2023, p. 8). Yet, as of 2023, there is generally a limited amount of literature exploring the urgency vs. justice tension in the context of energy transitions. Though scholars have explored the themes of urgency and justice separately, only a few have explored the interplay between them, and often only in rather vague terms with few details (Van Bommel & Höffken, 2023).

This thesis explores this interplay taking the case of nickel extraction in Indonesia. Indonesia is a leading global exporter of nickel (Camba, 2021; Federal Ministry for Economic Cooperation and Development, 2022), an important metal for the energy transition (Federal Ministry for Economic Cooperation and Development, 2022; Owen et al., 2022; Tritto, 2023). Several concerns regarding the environmental and social impacts of Indonesian nickel mining have been raised recently (Federal Ministry for Economic Cooperation and Development, 2022), creating a concern for justice. Hence, this bachelor thesis asks, “How do discourses surrounding nickel extraction in Indonesia frame the tension between the urgency of the global energy transition to combat climate change and the pursuit of justice?”

To answer the research question, I conducted a discourse analysis of news articles surrounding nickel extraction in Indonesia from March 2023 to March 2024. Hence, the dominant discourses are highlighted by utilizing an inductive approach and discussed in light of the urgency vs. justice dilemma. The following section presents the theoretical framework of urgency vs. justice and gives an overview of energy transition minerals and metals and the case study of Indonesian nickel extraction. The following section illustrates the methodological approach. Section 4 presents the results of the discourse analysis, and section 5 discusses them in light of the

theoretical framework of urgency vs. justice to answer the research question. Finally, a short conclusion summarizes the thesis' main ideas.

## 2. LITERATURE REVIEW

### 2.1. Urgency vs. Justice

The main theoretical framework which will be used in this thesis is the tensions between urgency and justice. The research paper by Van Bommel and Höffken (2023) titled “The Urgency of Climate Action and the Aim for Justice in Energy Transitions – Dynamics and Complexity” is a recently published piece (August 2023) with a systematic overview of the urgency vs. justice literature. The paper also makes an original contribution to the literature by focusing on the tensions between urgency and justice, thus serving as a suitable basis for the theoretical framework applied in this thesis.

#### 2.1.1. *Urgency*

Van Bommel & Höffken (2023), based on Goulder (2020), highlight three main characteristics that make climate action particularly urgent. Firstly, GHGs, which contribute to increasing climate change, have long atmospheric lifetimes and continually contribute to the buildup of atmospheric concentrations. Hence, the impacts of climate change will continue to increase regardless of whether annual emissions remain constant or decline (Goulder, 2020). Secondly, once concentrations reach certain levels, many of the impacts of climate change become irreversible (Goulder, 2020) with many environmental impacts reinforcing each other (Van Bommel & Höffken, 2023). Thirdly, atmospheric CO<sub>2</sub> levels are nearing a threshold where significant climate change impacts are imminent (Van Bommel & Höffken, 2023). The many Earth-system processes contain several associated thresholds “which, if crossed, could generate unacceptable environmental change” with potentially “disastrous consequences for humans” (Rockström et al., 2009, p. 472). Hence, climate scientists have made frequent calls for urgent climate action for decades now (Van Bommel & Höffken, 2023). Already in 1990, the IPCC published the First IPCC Assessment Report (FAR) underlining “the importance of climate change as a challenge with global consequences and requiring international cooperation” (IPCC, n.d.).

#### 2.1.2. *Justice*

There are many different conceptualizations of justice. Most relevant in the context of this thesis, and highlighted by Van Bommel and Höffken (2023), are climate justice, energy justice, and

just transitions. Though these are partially overlapping concepts, they each have specific distinctions. *Climate justice* refers to the justice impacts of climate change. It particularly focuses on the uneven impacts of climate change on different groups of people and in different parts of the world (Van Bommel & Höffken, 2023). *Energy justice* focuses on the justice impacts of energy systems, technologies, and projects. This includes ‘embodied energy injustices’, which “consider hidden and distant injustices (upstream or downstream) arising from the extraction, processing, transportation and disposal of energy resources” (Healy et al., 2019, p. 219). This is particularly relevant in the context of this thesis. *Just transitions* focus on the justice impacts of transitioning away from fossil fuels, with a main focus on “workers and communities dependent on high-carbon industries” (Van Bommel & Höffken, 2023, p. 3).

All three conceptualizations of justice sketched above engage to some degree with the *tenets-based framework* of justice. Though there are variations in the literature, the following four tenets are most common: distributional justice, procedural justice, recognition justice, and restorative justice (Van Bommel & Höffken, 2023). The research paper by Jenkins et al. (2016) titled “Energy Justice: A Conceptual Review” is a key piece of literature in this context. According to the authors, *distributional justice* recognizes the uneven distribution of benefits and burdens and their associated responsibilities. It calls for even distribution of benefits and burdens regardless of social background (Jenkins et al., 2016). *Procedural justice* recognizes access to decision-making processes and calls for “equitable procedures that engage all stakeholders in a non-discriminatory way” (Jenkins et al., 2016, p. 178). *Recognition justice* recognizes which individuals or groups are ignored or misinterpreted. It calls for fair representation of individuals and acknowledgment of divergent perspectives (Jenkins et al., 2016). Restorative justice is a later addition to the framework and has been included since 2017 (Hazrati & Heffron, 2021). Therefore, the term is not included in Jenkins et al.’s review of the framework which was published in 2016. Regardless, *restorative justice* calls for the rectification of injustices caused by the energy sector, as well as preventing injustices from occurring in the future (Hazrati & Heffron, 2021).

### 2.1.3. Urgency vs. Justice

In the context of energy transitions, Van Bommel and Höffken (2023) highlight two main dynamics between urgency and justice: a jeopardizing dynamic and an enabling dynamic. Within the *jeopardizing dynamic*, there are two competing forces at play: the urgency of climate action as jeopardizing justice and calls for justice as jeopardizing urgently needed climate action (Van Bommel & Höffken, 2023). The urgency to combat climate change can

jeopardize justice in the energy transition as justice requires thoughtful deliberation and participation. Urgency can jeopardize just procedures and exacerbate anti-democratic tendencies (Kumar et al., 2021; Van Bommel & Höffken, 2023). However, fossil fuel-intensive industries tend to delay climate action through the misuse of the just transition discourse (Van Bommel & Höffken, 2023). The *enabling dynamic* shows that treating energy transitions with urgency can enable justice, and at the same time justice can enable urgently needed climate action (Van Bommel & Höffken, 2023). Energy transitions are required to urgently tackle injustices in energy systems. At the same time, justice is important in creating public support for urgently needed energy transitions and climate action (Van Bommel & Höffken, 2023).

## 2.2. Energy Transition

### 2.2.1. Energy Transition Minerals and Metals

The technologies required to facilitate the energy transition require significant amounts of minerals and metals, more than fossil-fuel-based technologies (Church & Crawford, 2018; Hund et al., 2023). These materials are classified using several different terms, including *energy transition minerals and metals* (ETMs) (Bainton et al., 2021) and *critical minerals* (Heffron, 2020). Bainton et al. (2021, p. 628) define ETMs as “specialty metals needed for their unique properties in specific technologies, and bulk commodities required for a broad range of uses in energy generation, transmission and storage infrastructure.” Similarly, the U.S. Department of Energy (2010, p. 6) defines critical minerals, where critical refers to the “importance to the clean energy economy and risk of supply disruption.” The increasing demand for such resources places the mining industry of key strategic importance in the shift towards a low-carbon society (Bainton et al., 2021; Church & Crawford, 2018). Meeting this demand will require forms of resource extraction which are more energy and carbon-intensive, with larger and deeper footprints. Consequently, this generates social and environmental risks and harm (Bainton et al., 2021).

The transport sector is responsible for a large portion of GHG emissions in the energy sector, roughly one-fourth, a consequence of the historic predominance of the fossil fuel-based internal combustion engine (Pandyaswargo et al., 2021). More recently, the internal combustion engine has increasingly been replaced by battery electric vehicles (BEVs or more broadly EVs) (Hoekstra, 2019). Batteries are coined by the World Economic Forum (2019, p. 6) as “a key technology to achieve the Paris Agreement” aimed at limiting global warming to 2 degrees

Celsius. They act as an important near-term driver, possible of enabling a 30% reduction of required emissions in the transport and power sector (World Economic Forum, 2019).

Metals are crucial for batteries, specifically non-ferrous base metals including cobalt, lithium, graphite, manganese, and nickel (Federal Ministry for Economic Cooperation and Development, 2022). There are many different types of batteries with different chemical compositions (LCO, LMO, NCA, LCP, LFP, LTS, NMC, etc.) (Pandyaswargo et al., 2021). A detailed discussion of these types of batteries and compositions is beyond the scope of this thesis; however, I suggest referring to Pandyaswargo et al. (2021) for an introductory overview regarding this. Some of these minerals, and hence the battery compositions, are considered problematic concerning socioeconomic and sustainability issues. For example, allegations of child labor and artisanal operations in the cobalt industry are driving the substitution of cobalt with manganese and nickel (Pandyaswargo et al., 2021). This, coupled with the general rise in demand for batteries, is increasing the presence of nickel-intensive batteries for EV applications (Federal Ministry for Economic Cooperation and Development, 2022). For example, leading to the development of NMC batteries, with increasing nickel content and decreasing cobalt content, which feature higher battery density and lower cost (Pandyaswargo et al., 2021).

### *2.2.2. Nickel Extraction in Indonesia*

Currently, Indonesia, the largest nickel-producing country, accounts for more than one-third of global nickel production (Federal Ministry for Economic Cooperation and Development, 2022). The country contains around one-fourth of the remaining global nickel reserves (Federal Ministry for Economic Cooperation and Development, 2022). With the world battery industry leaders shifting to high-nickel cathodes, nickel for EV batteries will increasingly be sourced from Indonesia (Pandyaswargo et al., 2021). The increasing demand will likely place the nickel industry of “major strategic importance” for Indonesia (Federal Ministry for Economic Cooperation and Development, 2022, p. 9). Consequently, the Indonesian government enforced an export ban on unprocessed minerals to drive the growth of the domestic EV industry (Pandyaswargo et al., 2021). The export ban aims to attract downstream investments, increase jobs, and assure domestic value-added production (Tritto, 2023). The ban has been revised multiple times since it was first formally issued in 2009 and became finally effective in 2020 (Pandyaswargo et al., 2021).

In Indonesia, much of nickel extraction occurs on Sulawesi Island, more specifically in the southeast, central, and southern parts of Sulawesi. Additionally, there are some nickel mining

operations in Maluku and Papua (Federal Ministry for Economic Cooperation and Development, 2022). Indonesia Morowali Industrial Park (IMIP) in Central Sulawesi, Indonesia Weda Bay Industrial Park (IWIP) in North Maluku, and Konawe Industrial Park in Southeast Sulawesi are three of the most significant integrated industrial park projects in Indonesia, operating in both nickel mining and smelting (Federal Ministry for Economic Cooperation and Development, 2022).

There exist two types of nickel: laterite nickel and sulfide nickel, with Indonesia primarily working in laterite nickel resources (Federal Ministry for Economic Cooperation and Development, 2022). Laterite nickel is commonly found in the subsoil's topmost layer and extracted via "open-cutting methods" (Camba, 2021). Though laterite nickel is less polluting than sulfide, it requires a large energy input for the extraction process (Camba, 2021). High energy intensity also results in a higher CO<sub>2</sub> footprint, which is a particular concern for Indonesia due to its dependency on coal as its primary energy source (Federal Ministry for Economic Cooperation and Development, 2022).

### 3. METHODOLOGY

#### 3.1. Discourse Analysis

The method used in this thesis is a discourse analysis of news articles. Benjaminsen and Svarstad (2021, p. 64) define *discourse* as a "socially shared perspective of a topic...based on assumptions, arguments and claims about major aspects of an issue." Discourses are socially constructed, evolving over time at all geographical scales. A *discourse order* is a compilation of discourses on a specific topic (Benjaminsen & Svarstad, 2021). Among discourses are *leading discourses* which create fundamental structures to analyze specific cases that have influential power over political decisions and practices (Benjaminsen & Svarstad, 2021). The method of *discourse analysis* is used to identify and analyze discourses by examining texts, often in the form of "examinations of central claims of leading discourses on an issue" (Benjaminsen & Svarstad, 2021, p. 64).

The first step in a discourse analysis is identifying the leading discourses on a theme. It is common to start with a literature search on previously conducted discourse analyses to gain insight into the leading discourses on the topic. This will act as a "point of departure for one's own empirical study" (Benjaminsen & Svarstad, 2021, p. 83). Due to the limited previous discourse analyses on the topic of nickel extraction in Indonesia, leading discourses will be identified throughout data collection and analysis. The method of discourse analysis was chosen



due to its representation of societal perspectives on the urgency vs. justice dilemma surrounding nickel extraction in Indonesia.

### 3.2. Data Collection and Analysis

The primary data source in this discourse analysis is news articles. I decided to use news articles as my data as it is readily accessible data that is often representative of public discourse. It is also a form of text that has the power to shape public discourse. News articles were collected through the Google News search function using the search words: “nickel” and “Indonesia”. Using this search word combination allowed for a more open-ended search. Adding more search words was opted against as it would confine the results to a set of pre-selected terms. Thereby, posing the risk of potentially missing out on relevant sources that either focus on other relevant aspects not considered beforehand or that merely utilize different terms on the same topic. As this thesis aims to identify leading discourses in the Indonesian nickel extraction media, it was important to ensure an open-ended search.

News articles were restricted to results from the past year, i.e. 03/2023-03/2024. The results were restricted to the past year for two reasons: (1) to capture the political debate surrounding the 2024 presidential election in Indonesia, where nickel has been one of the central debates due to its significance for the current Indonesian economy. And (2) to limit the amount of media articles to be reviewed to a level feasible within the scope of this BA thesis.

As recommended by Benjaminsen and Svarstad (2021), a coding sheet was utilized for analyzing the collected data. As leading discourses could not be identified through previous discourse analyses before primary data analysis, the coding sheet was elaborated on throughout data analysis as leading discourses were discovered. Hence, an inductive approach was conducted where new elements were increasingly added to the analysis and looked for in other sources. This meant that articles needed to be re-visited as the coding sheet evolved. The coding sheet was created using Microsoft Excel, with a discourse in each column. Articles that highlighted or mentioned specific discourses were coded in red. The coding sheet can be found in the Appendix. In addition to the coding sheet, a Microsoft Word document was kept throughout data analysis to log relevant pieces of text, as well as notes or comments (similarities, differences, surprises, etc.) from each article.

### 3.3. Data Sources

Table 1 below provides a full list of the primary data sources gathered during data collection. All articles are dated from the past year and listed in chronological order. The news articles were gathered from a variety of news sources. Some news sources reoccur as there was a substantial increase of news articles regarding “nickel” and “Indonesia” from that specific source. Therefore, reoccurring news sources differ with (a) and (b) notation.

*Table 1: Primary Data Sources for Discourse Analysis of News Articles.*

Article Source	Article Title	Publication Date
Mongabay	“Red Floods Near Giant Indonesia Nickel Mine Blight Farms and Fishing Grounds” (Salman, 2023)	14.06.2023
BBC	“The Rush for Nickel: ‘They Are Destroying Our Future’” (Baraputri, 2023)	10.07.2023
The Diplomat (a)	“Optimizing Indonesia’s Nickel Industry Potential and Maximizing its Derivatives” (Grace & Cindy, 2023)	21.07.2023
The Japan Times (a)	“Indonesian Nickel Mine Takes Green Steps as Environmental Concerns Mount” (Lee, 2023)	24.07.2023
Rest of World	“As EVs Surge, So Does Nickel Mining’s Death Toll” (Amindoni, 2023)	27.07.2023
China Daily	“PT Vale Indonesia, Chinese Firms Sign Nickel Agreement” (Xin, 2023)	28.08.2023
The Jakarta Post	“Nickel: Overplaying Our Hand?” (The Jakarta Post, 2023)	13.09.2023
Asia News Network	“Indonesia’s Nickel Reserves Could Be Depleted in 15 Years, Minister Warns” (Karyza, 2023)	19.09.2023
AP News (a)	“Facing Increasing Pressure from Customers, Some Miners Are Switching to Renewable Energy” (Milko & Alangkara, 2023)	02.10.2023
Financial Times (a)	“Nickel Miners Linked to Devastation of Indonesian Forests” (Dempsey & Ruehl, 2023)	08.10.2023
The Diplomat (b)	“Indonesia Fast-Tracks Its Electric Vehicle Ambitions” (Rachman, 2023)	26.10.2023
ABC News	“Chinese Companies Are Investing Billions in Indonesia's Nickel Industry — But Working Conditions Can Be Deadly” (Souisa et al., 2023)	07.11.2023
Euronews	“US and Indonesia in Talks Over EV Mineral Alliance” (Lahiri, 2023)	13.11.2023
East Asia Forum	“Rethinking Indonesia’s Nickel Policies to Power Economic Growth” (Hendrix, 2023)	20.11.2023

FairPlanet	“The Dark Side of Green Energy: Indonesian Island Battles Nickel Pollution” (Galuh, 2023)	23.11.2023
Nikkei Asia	“Chinese Nickel Miners in Indonesia Face Threat from Falling Prices” (Guoping & Jia, 2023)	05.12.2023
CNN	“‘They Destroyed Our Trees’: Women Say Their Farms Were Seized to Support Indonesia’s Electric Vehicle Boom” (Stambaugh & Jamaluddin, 2023)	09.12.2023
Fortune	“Indonesia's Decision to Ban Nickel Ore Exports Was a Surprising Success for President Jokowi. Will It Work for His Successors?” (Lim, 2023)	15.12.2023
Al Jazeera	“Indonesia Nickel Plant Hit by Deadly Explosion” (Al Jazeera, 2023)	24.12.2023
DW	“Indonesia: 13 Killed in Nickel Plant Explosion” (DW, 2023)	24.12.2023
France 24	“More Than a Dozen Dead in Indonesia After Blast at China-Funded Nickel Plant” (France 24, 2023)	24.12.2023
The Guardian	“Explosion at Nickel Plant in Indonesia Leaves at Least 13 Dead and 46 Injured” (Agence France-Presse, 2023a)	24.12.2023
Voice of America	“Indonesian Workers Protest After Deadly Blast at China-Funded Nickel Plant” (Agence France-Presse, 2023b)	27.12.2023
The Japan Times (b)	“Indonesia Blast Puts Battery Ambitions in Spotlight Ahead of Vote” (Listiyorini et al., 2024)	07.01.2024
Jakarta Globe	“Indonesian Nickel Miners Face Plummeting Prices and Oversupply Concerns” (Vinnilya, 2024)	23.01.2024
Reuters	“Indonesia’s Nickel Policy Appears Fragile” (Daga, 2024)	26.01.2024
Financial Times (b)	“Indonesia’s Flood of Nickel Sparks ‘Darwinian’ Battle for Survival Among Miners” (Dempsey et al., 2024)	30.01.2024
AP News (b)	“Indonesian Presidential Vote Highlights Tradeoffs Between Fast Growth and a Healthy Environment” (Milko, 2024)	09.02.2024
Foreign Policy	“Indonesia Has Grand Ambitions for Its Nickel Industry” (Lu, 2024)	13.02.2024
Bloomberg	“Nickel Prices May Soon Recover from Indonesia-Induced Slump” (Spence, 2024)	07.03.2024
Mining.com	“Amid Nickel Glut, Indonesia’s Next President Vows to Keep ‘Downstreaming’ Policy” (Nangoy, 2024)	13.03.2024

### 3.4. Limitations and Challenges

Using this methodology naturally creates limitations and challenges. Firstly, the bias toward English-speaking sources which will likely not showcase all the discourses regarding Indonesian nickel extraction. However, this is unavoidable as it is empirically not feasible to conduct this media search in all languages, and adding languages that I am familiar with would

be an arbitrary selection. I decided against looking at media sources written in Bahasa Indonesia combined with the use of a translation tool due to the time and word limitations of a BA thesis.

Secondly, the chosen time frame of one year is a long period in the context of news. This results in a large number of results with wide news coverage, where it is only feasible for me to read and analyze a handful of news articles from the search word combination results. I reviewed the articles in order based on the results from Google News, only excluding articles if they were largely irrelevant to the topic and avoiding using the same source multiple times to ensure a wider selection. I continued my selection until I believed that the selection of news articles I had gave me a sufficient overview to highlight the leading discourses. However, reviewing a larger number of articles would have confined the depth of the analysis. If I were to conduct this analysis again, I would have increased my article selection to a minimum of 50 articles.

Third, utilizing the Google News search engine brings forth challenges. Google News ranks its stories based on “the popularity, quality, and relevance of the content” and “your prior interactions and purchases with Google News and other Google services” (Google, n.d.-a). This means that search results differ from person to person and that the results are based on my previous activity on Google. This creates a large concern for bias and how representative the discourses I have highlighted are. On Google News, there is an option to rank by date. However, I decided against this, as I would not be able to go through all the articles from the past year. This would be a good function to use if I was looking at a shorter time period.

I decided against using other search engines, such as duckduckgo.com, which provide more privacy, as the results were more limited. I feared that this would be too selective. Additionally, fewer filter options for limiting time periods were making it more difficult to limit my search using duckduckgo.com. If I were to conduct this analysis again, I would explore if using Incognito mode is a better option. This might reduce bias as it does not save your “browsing history, cookies and site data, or information entered in forms” (Google, n.d.-b).

#### 4. RESULTS

Based on the analysis of the news articles listed above, I identified 4 leading discourses, with several underlying discourses. First, *energy transition and electric vehicles*. Second, *opportunity for economic development*. Third, *future political and geopolitical considerations*. Fourth, *environmental and social impacts*. The following sub-sections discuss these four leading discourses and underlying discourses in detail.

#### 4.1. Energy Transition and Electric Vehicles

Naturally, due to the choice of search words, all media articles refer to nickel. There is a clear consensus among the articles about Indonesia's dominant role in the nickel sector. The Southeast Asian country is referred to by BBC as "the world's largest nickel producer" (Baraputri, 2023) and by Foreign Policy as "home to some of the world's biggest nickel reserves" (Lu, 2024), with other articles using similar descriptions of Indonesia.

Among the articles, there is a strong association between nickel and the EV industry. Only three of the articles from the selection do not mention EVs and batteries in some form (see coding sheet in Appendix). Articles mainly refer to EVs in terms of nickels' important role in the battery composition, hence Indonesia's important role in global EV production. For example, The Guardian says, "The island of Sulawesi is a hub for the mineral-rich country's production of nickel, a base metal used for electric vehicle batteries and stainless steel" (Agence France-Presse, 2023a). Similarly, as noted in Foreign Policy, "Nickel is a key component in electric vehicle batteries, yet few countries can claim as big of a stake over the global nickel sector as Indonesia" (Lu, 2024).

Articles mention Indonesia's transition from focusing on nickel for stainless steel to EVs, assumingly in response to the recent and expected future surge in EV demand following the energy transition. Examples of such references include: "Indonesia's nickel industry has been mainly processing the metal for stainless steel, but many companies are shifting to refine nickel ore for electric vehicle batteries" (Souisa et al., 2023) by ABC News, and "The company wants to sell the production lines so it can transition from producing stainless steel nickel to battery nickel to take advantage of the rise of the electric vehicle market" (Guoping & Jia, 2023) by Nikkei Asia.

Surprisingly, the mention of the energy transition or climate change in the media selection is sparse. The article by China Daily mentions terms such as decarbonization, low-carbon, and sustainable (Xin, 2023), but does not refer to the energy transition or climate change explicitly. Similarly, the article by Financial Times (a) briefly says "long-term the EV sector would help decarbonize the Indonesian economy" (Dempsey & Ruehl, 2023). The article by FairPlant has a stronger acknowledgment of the energy transition by saying, "Indonesia is crucial in accelerating the global transition to clean energy by supplying raw nickel to power electric vehicles" (Galuh, 2023). In CNN's article, there are explicit references to "the climate crisis" and "energy transitions" (Stambaugh & Jamaluddin, 2023), albeit briefly. AP News (b)'s article

has a subheading in the article titled “Indonesia’s Energy Transition” (Milko, 2024) however, the focus extends beyond Indonesia's nickel extraction. At the same time, another article by AP News (a) mentions topics such as the transition to renewable energy, emissions reductions, climate change, and sustainable supply chains (Milko & Alangkara, 2023). Finally, Foreign Policy and The Diplomat (b) make references to “the energy transition” (Lu, 2024) and “EV transition” (Rachman, 2023) respectively. Beyond these instances, there is little direct mention of the energy transition or climate change in the media selection.

#### 4.2. Opportunities for Economic Development

The nickel and BEV industries are framed as significant opportunities for economic development in Indonesia. As highlighted in the media, this is something the Indonesian government is working to capitalize on. The Diplomat (b) says “Blessed with enormous reserves of nickel that is vital for the production of EV batteries, the Indonesian government is determined to leverage these supplies to build a domestic EV supply chain” (Rachman, 2023). Downstreaming, a process to “build out higher-value manufacturing capacity” (Lu, 2024), is one of the dominant discourses in the Indonesian nickel extraction media. Ten articles in the selection refer explicitly to downstreaming, whilst an additional four refer to the concept in some form (see coding sheet in Appendix). This is mainly via referring to a domestic supply chain. The Diplomat (a) writes “the Indonesian government wants to develop more domestic smelting facilities in order to derive a greater benefit from the resource” (Grace & Cindy, 2023). The goal of this is to ensure Indonesia reeks of the benefits of its nickel resources.

There is a lot of speculation in the media regarding Indonesia’s economic future and the future of nickel in the EV industry. Among these, is the question regarding EV composition in the future. East Asia Forum writes “Indonesia’s nickel reserves and industrial ambitions are at risk of being rendered less valuable by changes in battery chemistry, or the combination of materials and technologies used in the batteries themselves” (Hendrix, 2023). The Jakarta Post mentions lithium as “an alternative to nickel for the EV battery industry” (The Jakarta Post, 2023). If battery composition changes in the future away from nickel, then Indonesia’s reserves will be deemed of less strategic importance in the energy transition.

Other future concerns include nickel prices and supply, which is a topic that has increased in media focus since the start of 2024. Ten articles in the selection explore the price and/or supply of nickel (see coding sheet in Appendix). Asia News Network article titled “Indonesia’s nickel reserves could be depleted in 15 years, minister warns” (Karyza, 2023) speaks explicitly about

this concern. Whilst Asia News Network worries about future supply concerns, Jakarta Globe, Mining.com, and Reuters are concerned with current oversupply which is said to be the source of the recent price drop of nickel.

#### 4.3. Political and Geopolitical Considerations

The global significance of Indonesia's nickel extraction, the role of foreign investment in Indonesia, and related geopolitical aspects are recurring discourses throughout the article selection. China's dominance in the country, as well as in the EV market in general, is frequently brought to light in the articles. Nikkei Asia writes "China-based companies have built more than 90% of the country's nickel smelters" (Guoping & Jia, 2023). However, Indonesia's strong relationship with China is also raised as a concern across several articles, specifically regarding potential foreign investment from other prominent countries, such as the United States (U.S.) and the European Union (EU). As said by Foreign Policy; "Jakarta's approach has risked alienating it from other prospective partners and international markets, including in the United States" (Lu, 2024). This is a form of geopolitical concern due to the considerable tensions between China and the U.S.

Another dominant discourse and heavily discussed topic is Indonesia's Export Ban. The Export Ban is mentioned in a total of 16 articles (see coding sheet in Appendix). It is seen as one of the main reasons for the increased Chinese dominance in the country's nickel industry. For example, in the article by Foreign Policy: "Jokowi banned raw nickel exports in 2020. That move pushed interested investors, mostly Chinese firms, to instead develop Indonesian smelters and process the minerals in the country" (Lu, 2024). Articles from The Diplomat (a), East Asia Forum, and Reuters also mention how the EU has challenged this policy at the World Trade Organization.

In the last 3 months, there has been a significant increase in the mention of the 2024 Indonesian Presidential Election in the media surrounding nickel. From the selection, eight articles mention the election, where six are from the start of 2024 (see coding sheet in Appendix). The main dilemma brought forth by the articles is how the successor of Joko Widodo will continue the nickel strategy, with Fortune saying, "The next administration will likely continue the Jokowi administration's policy of export restrictions on raw materials" (Lim, 2023). Reuters highlights how this presidential change leaves foreign investors wondering about the future nickel industry in Indonesia; "Global companies face an anxious wait to find out if his successor will fine-tune the plan" (Daga, 2024).

#### 4.4. Environmental and Social Impacts

Another discourse covered in the selection of articles is that nickel extraction comes with associated risks and negative consequences, mainly in the form of environmental and social impacts. For environmental impacts in Indonesia, 5 main concerns are brought up in the media: pollution, waste, emissions, deforestation and soil erosion, and biodiversity loss. Particularly articles by the BBC, The Financial Times (a), CNN, FairPlant, and Mongabay have a strong focus on the environmental impacts.

The articles mentioned above also have a strong link to social impacts as local communities and farmers are heavily reliant on their surrounding environment for survival. For example, Mongabay writes “Local farmers blame flooding from the mine for longer harvest cycles and reduced productivity” (Salman, 2023). Additionally, environmental impacts such as pollution, waste, and emissions can have negative health consequences. CNN writes “residents in Loeha...fear that environmental pollution from nickel mines will also leave them more vulnerable to sickness with limited to no access to medical centers” (Stambaugh & Jamaluddin, 2023). In addition to consequences for local communities, other prominent concerns raised in the media include safety and working conditions, and displacement of villages.

On December 24<sup>th</sup>, 2023, there was a large explosion at IMIP, resulting in over a dozen dead and many injured. This event was featured prominently in the news on the day of the incident, as well as the following days after. This raised concerns about safety and working conditions in the Indonesian nickel industry, where the articles seem to specifically be critiquing Chinese companies. For example, France 24 writes “another incident that has stoked concern over safety at facilities funded and operated by Chinese companies” (France 24, 2023). Similarly, DW says “The incident highlights safety concerns in Indonesian industrial facilities, particularly those operated by Chinese companies” (DW, 2023). Finally, Aljazeera and The Guardian both say “Chinese-funded” (Agence France-Presse, 2023a; Al Jazeera, 2023) when describing the location of the explosion.

Positive social impacts of nickel extraction have also been mentioned, particularly in the form of job creation and economic development. The Japan Times (b) writes “Seen as a stepping stone toward more sophisticated manufacturing, the policy (Jakarta’s ambitious bet on battery metal processing to accelerate industrial development) has created jobs and export revenue” (Listiyorini et al., 2024).



## 5. DISCUSSION

### 5.1. Urgency

As outlined in section 2.1.1. on Urgency, there is an urgent need for action to combat climate change due to the long lifetime of GHGs, and the irreversible and unstoppable impacts that follow. Overall, there is limited coverage surrounding the urgency for climate action in the selection of news articles. However, two forms of urgency can be reflected in the articles: global urgency and national urgency. **Global urgency** is reflected in the global push for an energy transition to decarbonize the energy sector in response to climate change. In the context of the article selection, through the EV market with an increased demand for nickel. A sense of **national urgency** is observed from Indonesia urgently capitalizing on the current energy transition through the nickel and EV industry for economic development.

#### 5.1.1. Global Urgency

In some of the media articles analyzed, there is an observed discourse highlighting the global urgency for an energy transition to combat climate change. For example, CNN writes “...the global push away from planet-heating fossil fuels toward renewable energy” (Stambaugh & Jamaluddin, 2023). The use of the term “planet-heating” by the author may raise a sense of environmental crisis and the need for urgent action. Additionally, the phrase “global push” implies a worldwide effort, framing the energy transition as a global rather than a local issue. AP News (a) writes “...demand for critical minerals like nickel and cobalt is surging as climate change hastens a transition to renewable energy” (Milko & Alangkara, 2023). The use of the word “critical” in the term critical minerals increases the sense of urgency and deems the minerals of significant importance to the energy transition. This is strengthened by the author’s use of words such as “surging” and “hastens” which further amplifies the sense of pressure for time for action.

With the article selection coming from a wide range of sources across the globe, the strong association between nickel and the EV industry suggests that nickel extraction is of global significance. For example, The Diplomat (b) writes “The U.S. and the European Union are urgently searching both for critical minerals needed to fuel their green revolutions and to diversify their supply chains away from China.” (Rachman, 2023). Overall, the quote has strong geopolitical connotations, particularly in terms of competition and dependency on resources. This is amplified by the fact that the U.S. and EU are strong global powers with significant influence. Furthermore, “urgently searching both for critical minerals” evokes a sense of great

demand for these resources, highlighting the urgency perceived by the U.S. and EU in securing access to these minerals. The term used here, “green revolution”, is interesting to acknowledge as it suggests a radical or great change towards a more sustainable future.

It is important to mention that the generally limited coverage of urgency for climate action observed does not necessarily entail that the authors do not see these issues and developments of nickel linked to the urgency of the climate crises. Rather, perhaps it is for the sake of the limited scope of an article to focus on issues specifically surrounding nickel. Adding search words such as “climate” or “climate change” to the search word combination might have led to a selection of articles with a stronger focus on the urgency of climate action.

### *5.1.2. National Urgency*

There is an observed sense of urgency for Indonesia to capitalize on the energy transition through the EV industry. For instance, Foreign Policy writes “The global shift away from fossil fuels and the growing demand for the critical minerals powering green technology have turbocharged Jakarta’s ambitions” (Lu, 2024). This quote suggests that Jakarta’s eagerness towards critical minerals has been significantly intensified by global energy transition trends. It reflects the city, or country’s, interest in positioning itself as a key player in the green technology supply chain. Accomplishing this through leveraging its access to critical minerals, such as nickel, to pursue its economic goals, provided they adopt the correct strategic approach.

Indonesia has implemented several strategies to increase its revenues from the nickel industry. Among them is their increased focus on downstreaming (i.e. export ban) and foreign investment, whilst simultaneously transitioning from nickel for stainless steel to EVs to capitalize on the growing EV market. All these aspects are heavily discussed in the media surrounding nickel extraction in Indonesia, suggesting an overall strong focus on the economic aspects of nickel extraction in Indonesia in the selection. However, Foreign Policy also highlights concerns attributed to Indonesia’s focus on nickel, saying “As demand for the energy transition drives the development of new kinds of EV batteries, experts say the changing technology landscape could also complicate Jakarta’s future plans” (Lu, 2024). This quote suggests that Jakarta’s ambitions may face complications as a result of these advancements in BEV technology.

Another concern is how Indonesia is balancing the economic prospects against the overall aim of the EV industry, which is to decrease GHG emissions to mitigate climate change. AP News (b) says “but prospects for significant changes seem uncertain since the country, instead of switching off coal-fired power plants, is building new ones to power refineries and metal

smelters in industrial parks across the country” (Milko, 2024). This quote suggests that Indonesia is prioritizing the economic gains of the nickel industry over climate mitigation due to the implementation of new coal-fired power plants, which will largely offset the positive effects of electric vehicles. Hence, making the EV industry less “green” than might be perceived in public discourses.

## 5.2. Justice

There are mainly two overarching justice discourses within the media on nickel extraction in Indonesia: the environmental and social consequences. The degree to which these concerns are lifted varies greatly with some articles only briefly mentioning, whilst others dedicating the entire article to the environmental and/or social consequence(s) of nickel extraction in Indonesia. The discourses will now be discussed in light of the tenets-based framework which was explained in section 2.1.2. on Justice: distributional, procedural, recognition, and restorative justice. It is important to acknowledge that, due to the scope of the thesis, not all injustices that are brought up in the media selection can be discussed, therefore I highlight mainly the leading discourses.

### 5.2.1. *Distributional Justice*

Distributional justice recognizes the uneven distribution of benefits and burdens and calls for an even distribution regardless of social background. In the media selection, there is a discourse that the brunt of the burdens from nickel extraction in Indonesia falls on the local communities in the surrounding areas of the nickel mines. Many of these local communities are heavily reliant on their surrounding environment for survival. Showcasing this, FairPlanet writes “It is unjust that individuals who coexist peacefully with their natural surroundings are forced to bear the brunt of the energy transition” (Galuh, 2023). The author’s use of the phrase “forced to bear the brunt of the energy transition” implies that these individuals, perhaps potentially vulnerable or marginalized groups, are disproportionately burdened by the energy transition. One example brought up in the selection includes, by the BBC, the Bajau people whose traditional lives have been impacted due to nickel waste entering the waters (Baraputri, 2023).

### 5.2.2. *Procedural Justice and Recognition Justice*

Procedural justice necessitates access to decision-making processes for all stakeholders in an equitable and non-discriminatory way. The main procedural injustice issue brought forth in the media selection is the displacement of villages or land-grabbing. CNN tells about “Masita, a

former pepper farmer, (who) now sells meals from a small stall after her land was seized by a nickel mining company” (Stambaugh & Jamaluddin, 2023). CNN says that Masita did not know she would lose her land, with many other Indonesians struggling with land disputes and conflicts over territory as well due to a lack of clear land titles. This shows that local communities are not only uninformed but also unrecognized, displaying both procedural injustice and recognition injustice. Recognition justice recognizes which individuals or groups are ignored or misinterpreted and calls for fair representation of those individuals.

Another leading procedural injustice issue apparent in the media selection is the burdens faced by the workers of nickel extraction operations in Indonesia, with a focus on the treatment of workers, working conditions, and adherence to labor laws and regulations. ABC News writes “issues included deceptive recruitment, retention of identity documents, wages being withheld, and workers working for long stretches without days off” (Souisa et al., 2023). The issues mentioned suggest a lack of fair and just procedures in the employment and treatment of workers in Indonesian nickel extraction.

Moreover, the December explosion at IMIP sparked a heated online debate over safety and working conditions in the Indonesian nickel industry. Rest of World says, “These incidents are rising in Indonesia’s nickel heartland as workers do a dirty, hazardous job, battling the fear of death by industrial accident on the poorly monitored fringes of Indonesian territory” (Amindoni, 2023). The quote suggests an increasing trend of industrial accidents, increasing the sense of urgency to tackle this issue. The characterization of the work as “dirty” and “hazardous” shapes the perceptions of the industries labor conditions as risky, and the mention of “battling the fear of death” stresses the severity of the risks faced by workers. Finally, the phrase “poorly monitored fringes of Indonesian territory” suggests a lack of oversight and regulation in the governance of nickel extraction.

### *5.3.3. Restorative Justice*

Restorative justice calls for the rectification of injustices and preventing them from occurring in the future. The media highlights the environmental impacts of nickel extraction, among them pollution, waste, emissions, deforestation and soil erosion, and biodiversity loss. Though Indonesia has laws aimed at rectifying these environmental injustices, it is unclear how effective they are in practice. BBC says:

“The secretary general, Meidy Katrin, says that in order to get a license companies must agree to carry out reforestation or reclamation of the land when they have finished

mining an area. “The question is, are the companies doing it?” she says, admitting there are patches of bare land that have not been reforested” (Baraputri, 2023).

The quote suggests that laws aimed at the reforestation of mining areas, do not necessarily lead to the implementation of reforestation in practice. Such issues are reflected in the pressures on the government and miners in Indonesia to correct these injustices. Financial Times (a) writes “President Joko Widodo said in March Indonesia would step up scrutiny of the sector and tell companies to reforest depleted mining regions” (Dempsey & Ruehl, 2023). Hence, it is suggested that though Indonesia perhaps has laws and regulations in place, the country requires stronger enforcement.

### 5.3. Urgency vs. Justice

As outlined in section 2.1.3 on Urgency vs. Justice in the literature review, there are two main dynamics between urgency and justice. Within the jeopardizing dynamic, climate urgency can jeopardize justice, whilst at the same time justice concerns can jeopardize urgent climate action. And within the enabling dynamic, urgent climate action can enable justice and vice versa.

#### 5.3.1. *Jeopardizing Dynamic*

In the media articles analyzed, nickel extraction in Indonesia is mainly brought to light as a jeopardizing dynamic where the urgency for climate change, or more specifically the urgency for nickel demand to supply an energy transition, is jeopardizing justice, in the form of social and environmental consequences. In terms of social consequences, Rest of World says “Chinese demand for nickel, an important ingredient in EV batteries, has triggered a mining boom in the remote regions of Indonesia. Deaths and injuries from industrial accidents have been racking up” (Amindoni, 2023). Here, the author might be implying that China is to blame for these consequences by saying Chinese demand has triggered a mining boom which has led to industrial accidents. This quote exemplifies how the energy transition is causing social consequences, in other words jeopardizing justice. Similarly for environmental consequences, Financial Times (a) writes “Rising demand for electric vehicles and the batteries that power them leads to more trees being felled” (Dempsey & Ruehl, 2023). Here the author consciously connects the EV demand to deforestation as cause and consequence, suggesting that the energy transition is compromising local biodiversity.

### 5.3.2. *Enabling Dynamic*

Though not as prevalent, the analyzed media articles surrounding nickel extraction in Indonesia also show an enabling dynamic where the general public understands the importance of justice in energy transitions. AP News (b) writes “Increasingly, voters are demanding that the men vying to succeed him address the tradeoffs between fast growth and a healthy environment in the world’s fourth most populated country” (Milko, 2024). The basis for this claim that the author has put forth is that Indonesian voters believe that “a greener and more inclusive approach to growth” is required (Milko, 2024). Many voters also stress concerns for job creation, alleviation of poverty, and inflation management. The author writes “For many Indonesians, such bread and butter issues take priority” (Milko, 2024). Hence, this weighing of economic development vs. environmental protection is of importance to the Indonesian public.

## 6. CONCLUSION

This thesis has explored the question “How do discourses surrounding nickel extraction in Indonesia frame the tension between the urgency of the global energy transition to combat climate change and the pursuit of justice?” It has done so through discussing notions of urgency and justice both separately and in combination. Two main forms of urgency were identified. First, the global push for an energy transition to combat climate change and the global significance of nickel as a critical resource in this context. Second, the urgency for Indonesia to capitalize on the energy transition to pursue its economic goals by leveraging its access to critical minerals. This was reflected in the strong focus on the economic aspects of nickel extraction in Indonesia in the media selection.

On the other hand, justice concerns were reflected in discussions of environmental and social consequences in the media selection. The main concerns surrounded local communities (distributional justice), displacement of villages and treatment of workers (procedural and recognition justice), and environmental impacts (restorative justice). In the context of the tension between urgency and justice, both the jeopardizing and enabling dynamics were identified in the media selection. First, in the form of the urgency for nickel demand to supply an energy transition jeopardizing justice through social and environmental consequences. Second, in the form of the importance of justice in energy transitions from the general public.

The thesis highlights the tense interplay between the urgency of addressing climate change through a global energy transition and the imperative of justice, particularly concerning environmental and social impacts. This highlights the necessity for an approach to the energy

transition that carefully balances both aspects at once. It is important that such approaches fully consider the extent of the impacts associated with mineral extraction, ensure public engagement and participation, and implement policies and practices that prioritize both urgency and justice. While the thesis provides valuable insights, it also highlights the need for further research to deepen understanding of the complexities involved in aiming to address the tensions between urgency and justice in the context of global energy transition and resource extraction.

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