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Media representations of corporate sustainability communication: German news coverage of lithium mining in Chile

Greta Valdés Stünz
Institute of Communication and Media Studies, Leipzig University, Germany.
qi52iqop@studserv.uni-leipzig.de

Nadine Strauß
Department of Communication and Media Research, University of Zürich, Switzerland.
n.strauss@ikmz.uzh.ch

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ABSTRACT

Introduction: The global shift toward e-mobility has intensified scrutiny of raw material procurement, particularly lithium mining in Chile–essential for the automotive industry. However, less is known about how German news media portray and evaluate the sustainability of lithium mining and how corporate messages by the automotive sector are represented in this debate. **Methodology:** This study analyzes how German news media frame the sustainability of lithium extraction in Chile, focusing on ideological differences across outlets, representations of automotive companies in news coverage, and their implications for industrial and environmental priorities surrounding the debate. A qualitative content analysis of 192 articles from five major outlets (2009-2024) reveals distinct narratives. **Results:** The left-leaning news outlet Zeit Online and the tabloid Bild emphasize socio-ecological consequences, while the financial newspaper Handelsblatt and liberal outlet FAZ foreground economic risks; the conservative newspaper Welt combines environmental and geopolitical concerns. Findings highlight temporal shifts whereby articles after 2020 reflect global awareness of geopolitical issues. **Discussion:** The findings suggest that German news coverage increasingly frames lithium mining through interconnected environmental, industrial, and geopolitical concerns, while automotive companies occupy uneven positions of visibility within these mediated sustainability debates. **Conclusions:** By identifying how automotive companies are represented in news coverage, the study highlights patterns that are

consistent with agenda-building dynamics in the interaction between automotive companies and news media.

Keywords: News media framing; Agenda-building; German news media; Sustainability communication; Automotive industry; E-mobility; Lithium mining; Chile.

1. INTRODUCTION

1.1. Setting the Scene: Electromobility as A Path towards Climate Neutrality vs. Raw Material Exploitation

The global shift toward sustainable technologies is reshaping industries, with electromobility playing a central role, particularly in Germany (Bundesministerium für Wirtschaft und Energie [BMWi], 2018). In the aftermath of the 2007–2008 oil price crisis, the EU introduced the 20-20-20 Climate and Energy Package to advance toward renewable energy and low-emission mobility (European Commission, 2009). Germany reinforced this shift through its National Development Plan for Electromobility (Nationale Plattform Elektromobilität, 2010), and the 2019 European Green Deal institutionalized e-mobility as central to the EU's decarbonization strategy (European Commission, 2019). As the adoption of electric vehicles (EVs) increased, so too did the demand for lithium—an essential yet insufficiently available raw material within the EU—intensifying concerns regarding socio-environmental impacts, geopolitical exposure, and supply-chain dependencies (Dietz, 2024). The structural dependence on imported lithium exposes the sector to significant supply vulnerabilities. China dominates more than 70% of global lithium processing and battery manufacturing (Altiparmak, 2022), challenging Europe to establish diversified and resilient supply chains. In response, automotive manufacturers have expanded procurement strategies in Latin America (Escosteguy et al., 2023). Chile, which forms part of the "Lithium Triangle" alongside Argentina and Bolivia and holds roughly 75% of global reserves, is the world's second-largest producer (Jobet et al., 2024) and therefore strategically linked to Germany's automotive sector (Schlosser, 2020). While the industry generates domestic economic benefits (Gobierno de Chile, 2023), lithium extraction in the Atacama Desert has generated socio-ecological conflicts, including water scarcity and tensions with Indigenous communities (Blair et al., 2022; Amato et al., 2021). These contested conditions shape public debate on sustainable mobility and raise questions about how the complexities of extraction are communicated to broader audiences.

Given these dynamics, news media constitute a central arena through which environmental, economic, and political dimensions of lithium mining are constructed and negotiated. Research has demonstrated the prominent role of the media in shaping public discourse on sustainability issues (Cockerill, 2002) and in influencing perceptions of emerging technologies (Holt & Barkemeyer, 2012). Parallel scholarship on strategic communication highlights how corporations actively attempt to shape sustainability narratives, particularly in sectors under public scrutiny, such as the financial sector (Strauß, 2021). Studies have examined lithium-related supply-chain communication (Chagnes & Forsberg, 2023; Lansink, 2022), public engagement with electromobility (Esmene et al., 2020), and socio-environmental perceptions of lithium mining (Agusdinata et al., 2018). While portrayals of mining more broadly have been analyzed (Lyytimäki et al., 2021), little is known about how German news media frame lithium mining in Chile or how communicative efforts by the automotive industry are reflected within this coverage. Germany constitutes a particularly relevant case in this context because of the central economic importance of its automotive industry and its key role in the transition to e-mobility (Krzywdzinski et al., 2023).

Thus, this study aims to answer the following overarching research question by focusing on the case of Germany: How do German news media cover lithium mining in Chile and represent the automotive sector's sustainability communication around e-mobility?

1.2. The Role of the Media in the E-Mobility Discourse

Following Ball-Rokeach and DeFleur's Media System Dependency Theory (1976), media influence becomes more pronounced during periods of societal uncertainty or change, as individuals and institutions increasingly rely on media for information and guidance. Employing this theory to the context of lithium mining in Chile for e-mobility, media dependency becomes particularly relevant, given a high level of uncertainty regarding the effectiveness of sustainability efforts, such as EVs, to meet carbon neutrality goals. In addition, geopolitical tensions and trade disputes affecting raw material supply chains and the strategic interests of German automakers further heighten the complexity of the issue. Against this backdrop, news media function not merely as passive conveyors of information, but as active arenas where competing narratives are shaped, contested, and legitimized–making them central to the public understanding and political negotiation of sustainability transitions in the automotive sector. (Cockerill, 2002; Esmene et al., 2020).

Framing Theory (Entman, 2007) helps to understand how the media actively shape public perception through the selection and emphasis of specific narratives. It is a crucial framework for understanding how specific aspects of reality are selected by the news media and emphasized to shape public perceptions and discourse. Entman identified four key functions of framing: defining problems, diagnosing causes, making moral judgments, and suggesting remedies. Prior to Entman's foundational work, Goffman (1974) highlights how frames structure social reality by organizing information into culturally recognizable narratives. These narratives serve to align public understanding with broader societal or institutional goals, which is particularly relevant in media portrayals of resource extraction, where complex issues like environmental degradation or economic development are distilled into simplified, emotionally resonant stories (Lyytimäki et al., 2021).

Media framing studies have extensively examined environmental and sustainability issues, identifying frames such as environmental degradation, economic opportunity, and geopolitical strategy (Entman, 2007; Nisbet, 2009). For example, research on media portrayals of mining has highlighted the tension between resource exploitation and sustainability, emphasizing frames that either support economic growth or critique environmental harm (Gibbs & O'Neill, 2015; Velte, 2022). However, while these studies provide critical insights, the framing of lithium mining, particularly in Chile, and its significance for the automotive sector's transition to e-mobility in Germany remains underexplored. Addressing this gap by focusing on the case of Germany, the first research question reads:

(RQ1) How do German news media frame lithium mining in Chile overall?

1.3. Building the Media Agenda - The Role of Corporations, Media, and Politics

Prior research has consistently shown that access to the media is asymmetrically distributed, favoring actors with institutional authority, economic resources, and professionalized communication infrastructures (Berkowitz & Adams, 2001). For example, recent empirical work suggests that actors embedded in institutional networks and backed by greater organizational resources tend to receive more media attention and issue authority, while less resourced or marginalized voices often struggle to enter public discourse (Escosteguy et al., 2023; Wonneberger & Jacobs, 2017). These powerful actors strategically deploy tools such as press releases, interviews, position papers, and coordinated lobbying

campaigns to pre-structure journalistic selection and framing processes, aligning public narratives with their organizational objectives (Berger, 2001; Gandy, 1982). Particularly when topics become politically salient or contested, these agenda-building strategies intensify to retain control over public meaning-making processes (Fuchs & Sack, 2022).

Agenda-building theory conceptualizes the media agenda not as an autonomous product of journalistic routines, but as the outcome of dynamic interactions between journalists and organized external actors–most notably corporations, political institutions, and interest groups–who seek to shape issue visibility, salience, and interpretive dominance (Cobb & Elder, 1983; Kiousis et al., 2006). This perspective is particularly relevant in policy domains marked by complexity and contestation, such as sustainability transitions towards EVs, where media coverage plays a pivotal role in defining problems, assigning responsibility, and legitimizing proposed solutions.

At the same time, journalistic actors retain interpretive latitude, as press release information may be selected, reworked, attributed to sources, and reframed in the news writing process rather than being reproduced unchanged (Pander Maat & de Jong, 2013). More specifically, the endeavor by corporations to establish a presence in the media can be comprehended through the framework of corporate agenda-building. According to Berkowitz and Adams (2001) and Gandy (1982), previous studies have demonstrated that organizations strategically employ information subsidies, including press releases, executive interviews, and position papers, to enhance the probability of media coverage. Corporations engage in these efforts not merely to disseminate information, but rather to secure visibility, legitimacy, and interpretive authority in contested policy domains. This phenomenon is particularly evident in the context of sustainability debates, where the level of public scrutiny and the presence of political regulation are pronounced. In such environments, gaining access to media narratives becomes a strategic instrument for shaping the public's understanding of industrial transformation and supply chain practices (Deephouse, 2000; Velte, 2022).

While agenda-building has been extensively studied with regard to climate change and the power of public relations in shaping information flows (see for an overview: Anderson, 2009), its role in transnational sustainability debates–especially those involving critical raw materials–remains underexplored. Building on this theoretical foundation, the study investigates how agenda-building processes manifest in German news reporting on lithium procurement in Chile. Specifically, it seeks to uncover how corporate actors (German automotive manufacturers) are represented in the news coverage, and to what extent communicative efforts are visible in the media portrayals of industrial transformation and resource legitimacy regarding e-mobility and lithium mining in Chile. This leads to the following research question:

(RQ2) How are the five automotive companies (Audi, BMW, Porsche, Mercedes, VW) reflected in the German news reporting about lithium mining in Chile in the context of e-mobility?

1.4. Contextual Factors: Political Ideology and Co-Dependency

Political ideology also plays a key role in shaping how news media select, frame, and interpret issues, reflecting broader ideological structures within national media systems (Hallin & Mancini, 2004). According to Hallin and Mancini's Comparing Media Systems framework, Germany falls within the Democratic Corporatist Model, characterized by strong press freedom, high journalistic professionalism, and a tradition of political parallelism, where private media outlets historically align with distinct political ideologies. While the extent of formal political affiliation has declined, this alignment continues to shape editorial choices and issue framing in many private outlets within the German media landscape.

Building on this, Strömbäck and Esser (2014) emphasize that political parallelism not only influences topic selection, but also how issues are framed, and which sources are considered credible. In pluralistic democracies such as Germany, private media often cater to politically distinct audiences, embedding ideological preferences into sustainability and economic coverage. These ideological orientations shape how sustainability-related issues– such as lithium mining–are presented. Additionally, Benford and Snow (2000) contribute to this discussion by exploring frame resonance: the degree to which frames align with the values and beliefs of their target audience. In this study, resonance may vary between outlets across German news media. To bridge this gap, the study explores the third research question:

(RQ3) How does the framing of lithium mining vary between conservative, neutral, and left-leaning German news media outlets?

2. OBJECTIVES

To provide answers to those questions, this study examines how German news media outlets have portrayed lithium mining in Chile and the German automotive industry. The study explores how media narratives regarding lithium extraction in Chile have evolved between 2009 and 2024, a period marked by significant developments, including the rise of e-mobility as a policy priority in the EU and Germany, increasing global attention to sustainable resource management, economic crises, and wars. Furthermore, the research investigates how narratives vary over time, the shifting prominence of certain issues, and the implications for public discourse. Specifically, it examines how the five German automotive manufacturers (Audi, BMW, Mercedes-Benz, Porsche, VW) are portrayed in connection with lithium mining in Chile within German news media coverage. The findings aim to contribute to a deeper understanding of the complexities of the transition toward more sustainable and geopolitically resilient lithium procurement and processing, as well as the role of corporate sustainability communication in shaping media visibility of automotive companies within this context.

3. METHODOLOGY

3.1. Qualitative Approach and Corpus

A qualitative content analysis, following Mayring and Fenzl (2019), was conducted to explore how German news media frame lithium mining in Chile within the broader context of e-mobility and to systematically identify recurring themes, dominant narratives, and shifts in framing over time. To study the portrayal of lithium mining in Chile, five prominent German news media outlets with high circulation numbers were chosen: *Bild* (conservative-populist tabloid), *Welt* (conservative with economic-liberal profile), *Frankfurter Allgemeine Zeitung* (liberal-technocratic), *Handelsblatt* (financial-economic), and *Zeit Online* (left-liberal). These outlets were selected because of their high national reach (see Table 1; IVW, 2025), their role as reference outlets within the German media landscape, and their coverage of distinct ideological, journalistic, and economic perspectives, allowing for a comparative assessment across diverse segments of German news reporting.

Articles were identified through systematic searches of the five selected news media outlets using the keywords “Chile” and “Lithium”. All publications retrieved for the period Q1 2009 to Q4 2024 containing both keywords were considered for inclusion in the dataset. The starting point of the observation period reflects the emergence of e-mobility as a strategic policy field within the European Union and Germany, as outlined in the Introduction, and corresponds to the earliest occurrences of relevant coverage on lithium mining in Chile within the selected news archives. The endpoint Q4 2024 represents the most recent period accessible before the start of the content analysis and therefore constitutes a natural cut-off point for the analysis.

Because the availability and searchability of articles from this observation period differed across outlets, the searches were conducted through the respective archive or website search function available for each outlet: the website search function of Bild, the website search function of Welt, the FAZ archive for Frankfurter Allgemeine Zeitung, the Handelsblatt archive for Handelsblatt, and the Zeit Online website search function for Zeit Online. Access to all five outlets was obtained through active subscriptions during the data collection phase in Q3 and Q4 2024. Depending on the search interface, the terms were entered as the Boolean search string “Chile” AND/UND “Lithium”; however, some search functions did not apply this keyword combination consistently and also returned items containing only one of the two terms.

Because of these differences across search interfaces, all retrieved items were manually screened. Each item was checked for the occurrence of both “Chile” and “Lithium” in the article text. Only journalistic articles in which both keywords appeared and were thematically connected were retained for the final corpus. Items were excluded if they were duplicates, outside the observation period, videos or other non-article formats, reader comments or letters, agency-style duplicate items, or texts in which only one of the two search terms appeared. The few image galleries identified were included, as they contained accompanying editorial text.

To validate the plausibility of the manually constructed corpus, a supplementary Google site-search was conducted for each outlet using the query “Chile Lithium site: [outlet domain]”, with the date range restricted to 2009–2024 and the result type filtered to news items where available. This step was used only as a supplementary plausibility check and not as the basis for corpus construction. Because online archives and search indexes may change over time, minor differences in search result counts may occur if the searches are repeated. The final corpus, however, was manually screened and fixed during the original data collection and analysis phase in Q4 2024. Following this procedure, the final corpus consisted of 192 articles.

Table 1.

Overview of German News Outlets in the Dataset

News outlets	Initial outlet search results	Excluded after manual screening	Google site-search check	Final corpus	Political perspective	Daily circulation (Q4/2024)[1]
Bild	*5*	1	5	4	conservative-populist tabloid	989,933
Welt	*353*	291	71	62	conservative with economic-liberal profile	92,194
Frankfurter Allgemeine Zeitung (FAZ)	*94*	46	50	48	liberal-technocratic	358,193
Handelsblatt	*79*	26	60	53	financial-economic	115,520
Zeit Online	*63*	38	41	25	left-liberal	620,086

Notes: Initial outlet search results refer to the number of items returned by the respective outlet archive or website search before manual screening. Searches were conducted using the Boolean query "Chile" AND/UND "Lithium". The Google site-search check was used only as a supplementary plausibility check using the query "Chile Lithium site: [outlet domain]". The final corpus is based on manual screening of journalistic articles containing both keywords in a thematically relevant context, not on Google search counts alone.

Source: Table 1 presents the results of the author's own analysis. The daily circulation data for the fourth quarter of 2024 (Q4/2024) was extracted from the database of the Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern (IVW, n.d.). For this analysis, the IVW dashboard was filtered to select the following specific titles: Die Welt (Mon–Fri), Die Zeit (weekly), Handelsblatt (Mon–Fri), Frankfurter Allgemeine + Frankfurter Allgemeine Sonntagszeitung (Mon–Sat+Sun), and BILD/B.Z. Deutschland-Gesamt (Mon–Sat). Subsequently, the respective sales figures were retrieved and compiled.

3.2. Data Analysis

The dataset was coded and analyzed using MAXQDA to structure and interpret complex textual data. The analysis followed a systematic coding framework (cf. Mayring & Fenzl, 2019), combining deductive and inductive approaches. Deductive codes structured central analytical dimensions of the study, including sentiment (Siegel & Alexa, 2020) toward lithium mining. Inductive codes emerged during the initial review, identifying context-specific themes such as *Legitimacy of Lithium Mining in Chile* (e.g., Insufficient procurement in Europe) and *Lithium Strategies* (e.g., Strategy Germany, Strategy EU, and Strategy Chile). For example, passages describing lithium as indispensable for electric mobility were coded under the frame *strategic resource for mobility.*

[1]For this analysis, the titles "Die Welt (Mon–Fri)", "Die Zeit (Woe)", "Handelsblatt (Mon–Fri)", "Frankfurter Allgemeine + Frankfurter Allgemeine Sonntagszeitung (Mon–Sat+So)", and "BILD/B.Z. Deutschland-Gesamt (Mon–Sat)" were selected as filters in the IVW dashboard. Subsequently, the sales figures for the first quarter of 2024 were retrieved. Source: IVW Quarterly Circulation Data, available at https://quartalsausweisung.ivw.de/, accessed on April 24, 2026.

Table 2 provides an overview of the main analytical variables and coding categories used in the qualitative content analysis. Throughout the table, (d) indicates deductive codes and (i) indicates inductive codes. The full codebook, including category definitions and illustrative examples, is available in the Appendix.

Table 2.

Overview of deductive and inductive coding categories

Analytical variable	Example categories
Sentiment (d)	Positive (d); Negative (d); Both positive and negative (d); Neutral (d)
Politics (d)	Government officials (i); Political situation in Chile (i); Political situation in other North and South American countries (i); Risk of dependency (i); Underestimation of China (i); Political situation in Russia (i)
Lithium strategies (d)	Government-corporate partnerships (i); Implications for the German Automotive Industry (i); Strategy Germany (i); Strategy EU (i); Strategy Chile (i); China's lithium strategy (i)
Decision-Making (d)	Public Policy Decisions (d); Deliberative Lobbying (d); Regulatory Changes (d)
Lithium occurrence (i)	Chile / Lithium Triangle as One of the World's Largest Lithium Deposits (i); Rising global demand (i); Shortage of raw materials (i); Production surplus (i)
Automotive Companies (d)	Volkswagen (VW) (d); BMW (d); Audi (d); Porsche (d); Mercedes-Benz (d); Automotive company perspectives as portrayed in citations (d); Other automotive companies (d)
Reasons for legitimacy of lithium mining (d)	Strategic resource for mobility (i); Legitimacy through Technical Necessity (i); Legitimacy through Sustainability (i); Legitimacy through insufficient procurement in Europe (i); Legitimacy through economical/financial factors (i); Legitimacy through better conditions in Chile (i); Legitimacy through independence (i); Political instability of other procurement regions (i); Legitimacy through independence from China (i)
ESG thematic framing (d)	Negative social impacts (d): Impacting indigenous (i); Human rights (i); Labor conditions (i); Positive social impacts (i); Environmental concerns (d): Water scarcity (i); Threat to species (i); CO2 emissions (i); Harmful to the climate (i); High energy consumption for lithium mining (i); Long transportation (i); Economic factors (d): Local economic opportunities (i); Concerns over quality fluctuations of lithium (i); White gold – "Weißes Gold" (i)
Stakeholder representation (d)	Local Communities in Chile (d); Mining companies and suppliers (i); Battery recycling companies (i); Activists and NGOs (i); Foundations (i); Other institutions or interest groups (i); Experts (i); Raw material experts (i); Geological experts (i); Energy experts (i); Technology experts (i); Economic experts (i); Astronomy experts (i); Academia (i)
Price of lithium (i)	Stock market (i); Unstable (i); Falling (i); Rising (i); Stable (i)
Other (i)	Battery recycling (i); Lack of knowledge on lithium mining (i); Other prejudices/challenges of lithium mining for the e-mobility sector (i)

Notes: The table summarizes the main analytical variables and coding categories used in the qualitative content analysis. Codes marked with (d) are deductive, whereas codes marked with (i) are inductive.

Source: Author's own compilation.

The individual news article constituted the sampling unit. For the analysis, each article was divided into meaning units, understood as thematically coherent passages containing descriptive statements or evaluative remarks related to lithium mining in Chile. The full article served as the context unit for interpreting coded segments. Each meaning unit could receive multiple codes where relevant to enable a more detailed analysis of how frames and tones were distributed within and across outlets. To avoid overrepresentation of repeated references within individual sampling units, multiple occurrences of the same coded category within one article were counted only once per sampling unit. This document-level counting approach ensured that results reflect the distribution of frames across the corpus rather than their repetition within single texts.

Additional codes captured corporate narratives of car companies, enabling a nuanced analysis of the full range of media frames. For the sentiment analysis, all meaning units that contained an explicit evaluation or a neutral description of lithium mining, and its sustainability implications were included. Each of these meaning units was coded according to its tone as positive, negative, neutral, or mixed. Meaning units were coded as positive when lithium mining was primarily presented as beneficial for the energy transition or industrial development, negative when environmental risks or social conflicts were emphasized, neutral when coverage remained descriptive without evaluative positioning, and mixed when both benefits and risks appeared within the same segment (cf. Siegel & Alexa, 2020).

Analytical attention focused on codes that appeared most frequently and prominently across outlets and over time in order to identify dominant narratives.

An initial pilot coding phase was conducted to test and refine the coding framework, and category definitions were subsequently reviewed and further specified in consultation with the co-author to ensure conceptual clarity and consistency prior to the systematic application of the coding scheme to the full dataset. Given the single-coder design, intercoder agreement measures were not applicable. Instead, the material was coded in multiple rounds: following the initial pilot coding, the coding framework was revised, and the full dataset was then re-coded and checked again in light of these refinements. This iterative procedure served as an internal validation process, with repeated refinements of category definitions and consultation with the co-author before the final coding framework was applied to the full dataset.

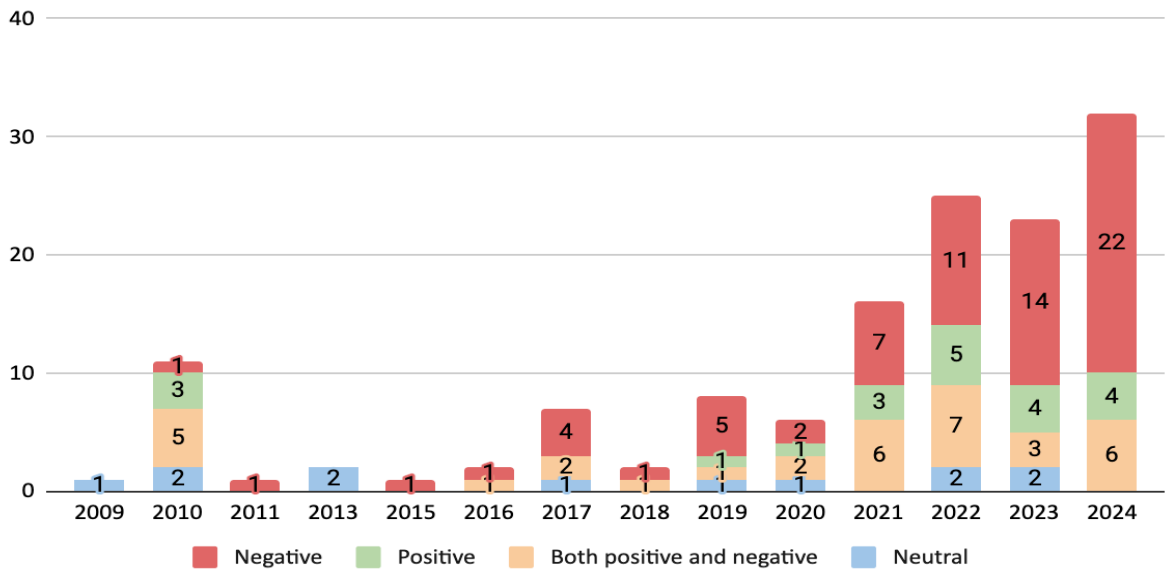
4. RESULTS

4.1. Trends in Coverage and Sentiment: Increasing Negative Sentiment over Time

Overall, German news media coverage of lithium mining in Chile has increased since 2009, with annual article counts ranging from 1 to 11 until 2020. A marked increase in reporting begins in 2021, reaching a peak of 32 articles in 2024. While earlier coverage includes only a limited number of articles coded as negative (see Figure 1), reporting after 2021 shows a higher presence of negative sentiment, with the highest number of negatively coded articles appearing in 2024.

Figure 1.

Trends in Sentiment Across Years



Note: The figure illustrates the yearly distribution of sentiment in German media coverage of lithium mining (2009-2024). The x-axis shows publication years, and the y-axis indicates the number of articles coded per sentiment category (negative, positive, both, or neutral).

Source: Author's own compilation.

Based on the relative frequency of negative sentiment in the articles analyzed, *Bild* has the highest number of negative segments per article, with 2.25 negative segments per article. However, given the comparatively small number of *Bild* articles in the dataset, this observation should be interpreted with caution. *Bild* articles emphasize the environmental consequences of lithium mining, particularly water depletion in Chile's Atacama Desert: "for lithium extraction, mineral-rich groundwater is pumped into *gigantic* basins in areas that are already *extremely* dry."[2] The analyzed *Bild* articles use dramatic wording ("Crime Scene Chile"),[3] and refer to severe consequences of resource extraction for local populations and ecosystems.[4] *Welt* follows with 1.13 negative segments per article and covers a broader thematic range. In *Welt*, negative sentiment is associated with passages that place the environmental aims of the energy transition ("lithium, used to store green electricity")[5] alongside concerns about geopolitical dependencies ("This would definitely make us dependent on China.")[6] and ecological impacts in Chile ("because of the extraction of lithium needed for batteries, lagoons in Chile where the birds live are drying up").[7]

Zeit Online, with 0.96 negative segments per article, includes passages on ethical and social dimensions of lithium mining,[8] focusing on issues like Indigenous rights, environmental degradation, and global inequality. This is reflected, for example, in concerns about whether it is legitimate "to obtain, at the

[2] Bild, 11.12.2023, *Dann schonen E-Autos wirklich das Klima*
[3] Bild, 29.10.2019, *Warum liegt unser Recycling Müll im Dschungel*
[4] Bild, 29.10.2019, *Klimawandel - Warum liegt unser Recycling-Müll im Dschungel von Malaysia*
[5] Welt, 06.08.2024, *Das dunkle Geheimnis der Energiewende*
[6] Welt, 01.11.2022, *Nur noch Elektroautos? Damit liefern wir uns China aus*
[7] Welt, 10.07.2016, *Elon Musk nach Unfällen erstaunlich dünnhäutig*
[8] Zeit Online, 13.03.2024, *Tesla-Werk in Brandenburg - Tesla steht für das System Auto*

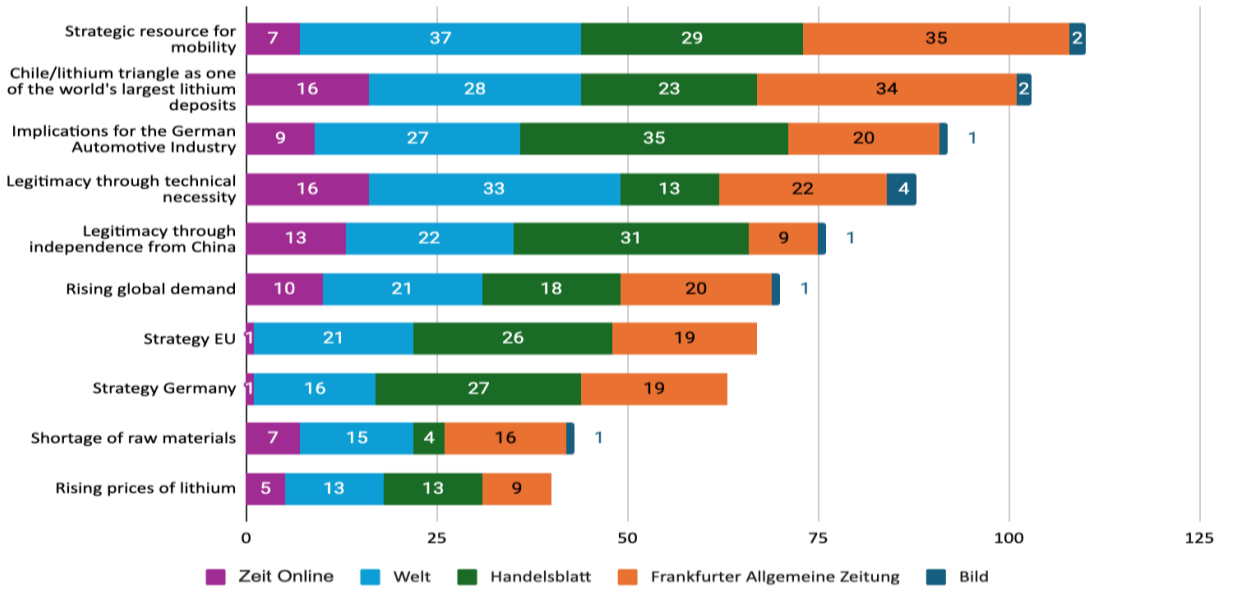
expense of Indigenous peoples in Chile and in a form of neocolonialism, the ingredients for our prosperity and our pursuit of climate neutrality."[9] *Zeit Online's* coverage links lithium mining to tensions and paradoxes within the green energy transition ("dirty raw materials for clean cars";[10] "Must the environment be exploited in order to help the climate?"),[11] addressing questions about the social and environmental costs of technologies like EVs. *Handelsblatt* and *FAZ* show fewer negative segments (0.57 and 0.35), respectively. *Handelsblatt* frequently refers to economic risks, such as supply chain dependencies ("dependencies are enormous")[12] and resource scarcity.[13] *FAZ* presents environmental concerns within broader discussions of sustainability[14] and energy policy: "Chile, where companies extract the light metal from brine through years of evaporation in large basins, […] [is] under criticism because of […] environmental and climate impacts."[15]

4.2. Key Media Frames

The analysis identifies ten dominant frames in the German media's portrayal of lithium mining in Chile emerged from the analysis. While listed by frequency in Figure 2, they are discussed below in a thematic, not ranked, order for analytical coherence.

Figure 2

Number of Key Frame Articles per Outlet



Note: The figure displays the frequency of key frames identified in the German news outlets analyzed (2009-2024). Values indicate the number of articles per frame and outlet.

Source: Author's own compilation.

[9] Handelsblatt, 17.08.2021, *Automobilbauer aufgewacht!*
[10] Zeit Online, 11.12.2019, *Dreckige Rohstoffe für saubere Autos*
[11] Zeit Online, 06.05.2024, *Lithium im Erzgebirge - Das Gold aus Sachsen*
[12] Handelsblatt, 04.09.2023, *Auf diese 7 Rohstoffe kommt es bei der Transformation an*
[13] Handelsblatt, 16.08.2022, *Nur noch Handel mit Freunden-Warum das „Friendshoring" eine gefährliche Idee ist*
[14] FAZ, 12.04.2021, *Kampf um Lithium in Südamerika -Nachfrage steigt rasant*
[15] FAZ, 02.04.2024, *Wie der Lithium-Crash die ganze Energiewende durcheinander bringt*

Strategic Resource for Mobility (n=110) presents lithium in the analyzed coverage as an essential resource the energy and mobility transition. "The white gold"[16], "the gold of the mobility transition"[17], or even "the white oil of the electric age"[18] are used to associate lithium with economic value and the transition to electric mobility. Statements like "without lithium, there is no e-mobility"[19] appear across all five news outlets. Additionally, the frame *Legitimacy through Technical Necessity* (n=88), captures passages in which lithium is presented as necessary for broader systems of electrification and digitalization. In these passages, lithium is linked to energy storage for solar and wind,[20] supports data infrastructure, and powers everyday electronics.[21] "The world as we know it today, shaped by globalization, industrial agriculture, and planetary electrification, would not exist without lithium."[22] *Welt,* for example, often presents lithium as a transformative resource,[23] in relation to decarbonization and economic opportunities, while also referring to challenges such as environmental degradation and geopolitical dependencies.[24]

The frame *Chile / Lithium Triangle as One of the World's Largest Lithium Deposits* (n=103) captures references to Chile's role as part of the so-called "Lithium Triangle," along with Bolivia and Argentina.[25] Outlets emphasize that this region contains over half of the world's known lithium reserves[26] and is described as relevant for European markets.[27] "Most of the lithium for our electric cars comes from Chile"[28]. The Atacama Desert is often portrayed as a strategically relevant extraction zone,[29] with metaphors like "the Saudi Arabia of e-mobility."[30]

Although *Implications for the German Automotive Industry* ranks third in overall frequency of frames (n=92), it represents the most prominent economic frame linking lithium procurement to the automotive industry and geopolitical issues. This frame captures the industrial and strategic dimensions of lithium procurement. The media frequently reference car manufacturers' dependence on foreign resources,[31] including concerns that without secure access to lithium, Germany may fall behind.[32]

[16] Welt, 28.01.2023, Lateinamerika - *China sichert sich die Macht über das Lithium*
[17] FAZ, 15.09.2023, USA - *Gewaltige Lithium-Vorkommen schlummern im Norden Nevadas*
[18] Welt, 23.05.2023, *Boom bei Elektro-Autos - Merkel ruft Autoindustrie zum Umdenken auf*
[19] FAZ, 02.04.2024, *Wie der Lithium-Crash die ganze Energiewende durcheinander bringt*
[20] Zeit Online, 21.03.2023, *Rohstoffe für die Energiewende - Diese Rohstoffe entscheiden darüber, wie unsere Welt aussehen wir*
[21] FAZ, 02.17.2010, *Energiespeicher - Auf der Suche nach dem Akku der Superlative*
[22] FAZ, 20.10.2024, *Niklas Maaks Kolumne „Kunst der Woche" - Der Rohstoff der Moderne*
[23] Welt, 17.06.2023, *Lithium - So wertvoll ist das leichteste Metall der Erde*
[24] Welt, 23.01.2022, *Rohstoffe für E-Autos - „Lithium-Recycling wird die Top-Aufgabe"*
[25] Welt, 17.06.2010, *Lithium - So wertvoll ist das leichteste Metall der Erde*
[26] FAZ, 09.10.2018, *Abbau von Lithium - Bolivien vertraut deutschen Unternehmen*
[27] Zeit Online, 12.11.2024, *Lithiumabbau - Kann Europa beim Lithium unabhängig werden*
[28] Zeit Online, 06.08.2023, *Lithium - Das neue Rheingold*
[29] Welt, 29.03.2021, *Bolivien - Hier entscheidet sich der globale Kampf ums Lithium*
[30] FAZ, 09.10.2018, *Abbau von Lithium - Bolivien vertraut deutschen Unternehmen*
[31] Zeit Online, 11.12.2024, *Lithiumabbau - Kann Europa beim Lithium unabhängig werden*
[32] Welt, 12.12.2018, *Schlüsselrohstoff Lithium -Deutschland greift nach dem „weißen Gold" in Boliviens Salzsee*

This pattern also appears in the frame *Legitimacy through Independence from China* (n=76), which links resource politics to geopolitical dependencies. Across outlets, China is framed as a dominant actor in global lithium processing, controlling most of the global lithium processing capacities, and appears in relation to concerns about Germany's automotive supply security.[33] A disruption of Chinese supply–due to conflict or export restrictions–is described as potentially affecting German imports and affecting major parts of production. Diversifying these import risks is presented as a political and corporate priority as framed in the German news media.[34]

These concerns are reflected in the frame *Strategy EU* (n=67), which refers to EU-level responses to geopolitical dependencies through policies like the Critical Raw Materials Act[35] or the European Battery Alliance.[36] *Handelsblatt* frequently cites EU Commissioner Thierry Breton's in relation to European mining, refining, and industrial capacity expansion.[37] The EU's strategic goals also appear at the national level.

Accordingly, the frame *Strategy Germany* (n=63) focuses on bilateral partnerships and Germany's limited domestic extraction projects. German politicians like Angela Merkel[38], Peter Altmaier, Ursula von der Leyen and Olaf Scholz all supported ties with Chile. Former chancellor Scholz is mentioned in connection with a renewed partnership declaration signed by Chilean President Gabriel Boric.[39] However, coverage often includes references to criticism of delays in domestic permitting procedures.[40] *Zeit Online* refers to the potential for fairer practices[41] and localized value chains,[42] such as lithium extraction within Europe, in the context of environmental and social impacts.

Across all media outlets, the *Rising Global Demand* (n=70) for lithium is a dominant theme, often linked to green transition. Media describe a "new gold rush"[43] amid increasing EV sales and climate targets: "The demand for lithium is expected to increase ninefold if net-zero targets are met."[44] Meanwhile, *Shortage of Raw Materials* (n=43) and *Rising Price of Lithium* (n=40) are discussed as concerns. Although "lithium is not truly rare,"[45] global production is described as lagging far behind demand.[46] As prices increased sharply–having more than doubled by 2017[47] and multiplied sevenfold since 2021[48]–some articles warn of overheating and instability in the market.[49]

[33] Welt, 19.11.2024, *Rohstoffe aus China - Deutschland droht gewaltiger Schaden bei einem Ausfall*
[34] FAZ, 30.10.2024, *Akkus - Bei Lithium zeigt sich Deutschlands Abhängigkeit von China*
[35] Handelsblatt, 18.08.2024, *Energie Briefing - Serbien soll beim Lithium unabhängiger von China machen*
[36] Handelsblatt, 25.03.2022, *So wollen Russland und China die Welt von Rohstoffen abhängig machen*
[37] Handelsblatt, 05.07.2022, *EU-Kommissar fordert längere AKW-Laufzeiten in Deutschland*
[38] Welt, 26.01.2023, *Bergbau - Kooperation von Deutschland und Chile bei Rohstoffen*
[39] Handelsblatt, 18.07.2023, *Gabriel Boric - Chiles junger Präsident unterschreibt Rohstoffdeal mit EU*
[40] Handelsblatt, 10.04.2024, *Lithium, Silizium - Darum wächst Deutschlands Abhängigkeit bei Rohstoffen*
[41] Zeit Online, 20.03.2021, *Elektromobilität - Der Weg zu fairen Batterien*
[42] Zeit Online, 19.06.2023, *Rohstoffe - Chinas globaler Lithium-Feldzug - Risiken für Deutschland*
[43] Zeit Online, 17.06.2022, *Lithium - Denen das Land gehört*
[44] Handelsblatt, 19.06.2024, *Rohstoffe - Neue Hoffnung für Europas wertvollste Lithium-Mine*
[45] Zeit Online, 21.03.2023, *Rohstoffe für die Energiewende - Diese Rohstoffe entscheiden darüber, wie unsere Welt aussehen wird*
[46] Welt, 27.10.2017, *Manischer Wettlauf um Lithium läuft von Kongo bis Cornwall*
[47] FAZ, 01.03.2017, *Lithium-Nachfrage steigt weltweit - Preise verdoppelt*
[48] Handelsblatt, 27.08.2023, *Argentinien erlebt den Lithium-Boom – doch Deutschland ist nicht dabei*
[49] FAZ, 01.03.2017, *Lithium-Nachfrage steigt weltweit - Preise verdoppelt*

Taken together, these framing patterns show that the analyzed coverage frequently connects lithium mining to ecological, economic, industrial, and geopolitical dimensions. By portraying lithium as both a scarce strategic resource and a driver of industrial transformation, the coverage establishes the context in which corporate actors, particularly from the automotive sector, emerge as central agents in navigating and communicating these complexities.

4.3. Media Portrayals of the German Automotive Companies

The following analysis examines how the five German automotive companies are portrayed in the analyzed news coverage, with particular attention to differences in visibility, tonal patterns, and the presence of direct company statements across outlets.

VW receives the most extensive media coverage, and appears regularly from 2017 onward in *Welt, Zeit Online, Handelsblatt*, and *FAZ*. In the context of VW's e-mobility and battery-related activities, *FAZ* notes, "VW does not want to answer the question of where the raw materials come from."[50] Coverage in outlets like *Welt* and *Zeit Online* similarly addresses criticism of the company's reactive sourcing strategy and supply chain management.[51] While VW's large-scale initiatives are acknowledged, the frequent reliance on external experts and analysts rather than direct quotes from company representatives points to a limited presence of direct company statements in the analyzed coverage. This differs from the coverage of competitors like BMW, as shown in the following.

BMW is mentioned regularly each year by *Handelsblatt* and *FAZ* since 2021 through the end of the research period, and three times by *Welt* in 2022 and 2023. References to mining regions or extraction practices were coded with a positive tone across all three outlets. In the *FAZ*, BMW's lithium mining is portrayed as "relatively environmentally friendly, e.g. because the American supplier uses a gentle extraction method."[52] BMW is associated with a comparatively more positive tone in the coverage, particularly in *FAZ* and *Welt*, where the company is linked to transparency in supply chain practices and its sourcing of lithium from Argentina and Australia.[53]Articles frequently include direct quotes from BMW executives, e.g. from Chief Purchasing Officer Andreas Wendt (as of 2021), on sustainability and resource governance.[54] BMW is portrayed as "having the best understanding of its own supply chain," sourcing raw materials directly to maintain transparency over origin, methods, and prices.[55]

Mercedes-Benz receives a relatively balanced portrayal. Mercedes-Benz is mentioned in *Welt, Handelsblatt, FAZ*, and *Zeit Online*. The earliest coverage dates back to 2010, when *FAZ* reported (at that time still referring to the company as Daimler) on its efforts, together with a chemical supplier, to secure raw materials and participate in research projects with the Ministry of the Environment.[56] Subsequent reports appear in 2017, and from 2020 onwards the company is covered at regular intervals, multiple times per year, until the end of the study period. Coverage beyond collaborations with mining companies also refers to Mercedes-Benz' relation to policy frameworks such as the Critical Raw Materials Act.[57] *Welt* and *Handelsblatt* note the company's focus on sustainability and local sourcing,[58] but also refer to its

[50] FAZ, 31.05.2021, *Nachhaltigkeit der E-Autos - Das Problem der Batterien*
[51] Handelsblatt, 24.08.2022, *Batterie-Rohstoffe aus Kanada, VW will ins Minengeschäft einsteigen*
[52] Zeit Online, 30.02.2021*, BMW findet einen zweiten Lithium-Lieferanten*
[53] Handelsblatt, 27.08.2023*, Argentinien erlebt den Lithium-Boom – doch Deutschland ist nicht dabei*
[54] FAZ, 12.04.2021, *Kampf um Lithium in Südamerika - Nachfrage steigt rasant*
[55] Handelsblatt, 24.08.2022, *Batterie-Rohstoffe aus Kanada - VW will ins Minengeschäft einsteigen*
[56] FAZ, 08.03.2010, *Kobalt aus Afrika für deutsche Elektroautos*
[57] Welt, 20.07.2023, *VW, Mercedes und Co. zaudern - Deutschlands falsche Lithium-Scheu*
[58] FAZ, 20.10.2022, *Elektroautos - Mercedes sichert sich Lithium aus Brandenburg*

slower transition to securing raw materials directly, framing this as a strategic vulnerability.[59] Mercedes executives, e.g. Chief Production Officer Markus Schäfer (as of 2021), are occasionally quoted,[60] in relation to the company's statements on the topic within the analyzed news coverage.

Audi receives comparatively little coverage. Audi is mentioned exclusively in 2018 and only in three articles in *Handelsblatt* and *Welt*. In *Handelsblatt*, the coverage primarily focuses on investment decisions in e-mobility. Audi's €14 billion investment in e-mobility is noted,[61] described as ambitious in the coverage but with no direct input from company representatives. *Porsche* appears mainly in niche contexts not directly related to lithium, such as its synthetic fuels project in Chile.[62]

4.4. Variation of Framing Across Outlets

The analysis shows variation in the occurrence and combination of frames across the five German news media outlets between 2009 and 2024.

Although *Bild* is classified in this study as a conservative-populist tabloid, which relies on emotive and dramatized storytelling, the outlet foregrounds *Technical Necessity* as its most prominent frame. In the *Bild* articles analyzed, the automobile industry is mainly portrayed through the lens of electric mobility, with lithium presented as a necessary resource for technological progress and climate goals. Yet *Bild* simultaneously emphasizes ecological consequences through a second dominant frame on *water scarcity*. It describes lithium mining's consequences, noting that it "leads to dramatic water shortages in affected regions. Rivers dry up, agriculture suffers, and water for the population is rationed."[63] This framing includes references to ecological costs and uses emotive language, such as "eco-terrorists"[64] or "crime scenes of the earth"[65]. Given the comparatively small number of *Bild* articles in the dataset, this pattern should be interpreted with caution.

Zeit Online, classified in this study as left-liberal, portrays the automobile industry mainly through the lens of electromobility: as a key sector for climate protection and technological progress. At the same time, it is linked to concerns about raw material supply chains and geopolitical dependencies. *Zeit Online* shares the *Technical Necessity* frame, with emphasis on *Chile's role as one of the world's largest lithium suppliers*. "Germany depends on lithium imports; its main suppliers are Chile, Australia, and China."[66] This places Chile within discussions of lithium imports, supply dependency, and the international dimension of lithium politics within the analyzed coverage. Its second frame–*Independence from China*– appears in connection with supply chain vulnerabilities and diversification. *Zeit Online* links China to geopolitical concerns, asking: "Is Scholz already too late in light of Russian propaganda and Chinese influence?"[67] The question connects lithium procurement with national politics and pressure to act swiftly amid rising global tensions.

Handelsblatt, Germany's leading financial newspaper with a distinctly economic-liberal orientation, shows a focus on business and market-related aspects. *Handelsblatt* frames the lithium debate predominantly through its economic *implications for the German automotive industry*, including references to industrial competitiveness. In *Handelsblatt*, the automobile industry is portrayed as central to the German

[59] FAZ, 31.05.2021 - *Nachhaltigkeit der E-Autos - Das Problem der Batterien*
[60] Handelsblatt, 17.08.2021, *Automobilbauer aufgewacht!*
[61] Welt, 12.12.2018, *Schlüsselrohstoff Lithium -Deutschland greift nach dem „weißen Gold" in Boliviens Salzsee*
[62] FAZ, 21.11.2021, *Wie Deutschland und Chile beim Kampf gegen den Klimawandel zusammenarbeiten*
[63] Bild, 11.12.2023, *E-Autos und Klima - Erst dann sind Elektroautos umweltfreundlich*
[64] Bild, 07.03.2024, *Warum greifen Öko-Terroristen ausgerechnet Tesla an?*
[65] Bild, 06.11.2020*, Warum liegt unser Recycling-Müll im Dschungel?*
[66] Zeit Online, 20.10.2024, *E-Mobilität - Rock Tech zu Raffinerie-Plan - Sind gekommen, um zu bleiben*
[67] Zeit Online, 29.01.2023, *Olaf Scholz in Lateinamerika - Der Versuch einer Zeitenwende*

economy, with its future linked to sustainable transformation. Supporting frames include *Rising Global Demand* and *Strategic Mobility,* which are linked to urgency around supply and industrial planning. As one article notes, "The global climate goals are fueling lithium demand, which could become a major problem for Germany's most important industry,"[68] while raw material shortages and price volatility are further presented as risks to EV production and industrial planning.

Welt, with its conservative stance and economically liberal orientation, frequently describes the automobile industry as a central future sector: without electric cars there is no climate protection, without batteries no competitiveness. At the same time, the articles emphasize the dependence on lithium, cobalt, nickel, and rare earths, often with a focus on South America. Repeatedly, the articles describe Germany and Europe act too late, too hesitantly, or too dependently. *Welt* uses the *Strategic Resource for Mobility* with references to geopolitics, often linking resource issues through the lens of global competition, strategic dependencies, and Germany's position in the international context. "If Germany wants to keep up in e-mobility, it needs lithium,"[69] and "South America has what EVs urgently need: the raw material for their batteries."[70] The importance of large-scale supply is illustrated by early projections from 2009: "To replace even a small part of the global fleet of around one billion vehicles with EVs, millions of batteries are needed."[71]

FAZ, with its liberal-technocratic orientation, also links lithium to strategic mobility and places stronger emphasis on industrial planning than *Welt*. *FAZ* portrays the automobile industry as a key sector undergoing transformation, relevant for climate policy and competitiveness but heavily dependent on lithium as the central resource. It places particular focus on lithium as a *Strategic Resource for Mobility*, with technical and industrial aspects prominent in the analyzed reporting. It highlights that "almost no electric vehicle can function without lithium-ion batteries,"[72] and refers to technical frontiers: "The lithium-ion battery offers range and agility, but the 'battery of the future' still faces limitations."[73] Echoing this, the outlet describes Chile's Atacama in relation to climate action: "Every form of mobility transition depends on turquoise pools like those in the Atacama."[74] This illustrates how the reporting places Chilean extraction sites as connected to the mobility transition and its decarbonization goals.

While *Welt* and *FAZ* use the *Strategic Resource for Mobility* frame earlier and more consistently, other outlets such as *Handelsblatt*, *Bild*, and *Zeit Online* show this frame at different points, often coinciding with global or political events, such as the EU's Green Deal and battery regulations (2021–2022), Chancellor Scholz's resource-focused trip to Latin America in 2023, and Germany's efforts to reduce raw-material dependence on China through new domestic lithium projects (2024). The asynchronous yet similar rise across outlets shows that similar frames appear across outlets at different points in the observation period.

5. DISCUSSION AND CONCLUSION

5.1. Interpretation of Findings

The framing and temporal analysis of German news reporting on lithium mining in Chile reveals several

[68] Handelsblatt, 05.07.2022, *Lithium für Elektroauto-Batterien wird zur Mangelware*
[69] Welt, 31.07.2017, *Lithium, Kobalt - Ein See in Bolivien entscheidet über Deutschlands Zukunft*
[70] Welt, 29.08.2021, *Rohstoff-Schatz - Südamerikas Linke träumen von einer Lithium-Opec*
[71] Welt, 13.11.2009, *Geldanlagen - Run auf das weiße Gold der Zukunft hat begonnen*
[72] FAZ, 10.01.2023, *Wie Evonik Lithium aus Akkus billiger recyceln will*
[73] FAZ, 02.07.2010, *Energiespeicher - Auf der Suche nach dem Akku der Superlative*
[74] FAZ, 02.01.2019, *Die Wunden der Erde, geschlagen vom Hunger der Energie*

broader patterns regarding critical reporting, geopolitical reframing, and corporate visibility. A central observation is the increase in critical reporting after 2021, especially in *Zeit Online* and *Welt*. This aligns with Atanasova (2019), who finds that traditional sustainability journalism often emphasizes negative consequences over solution-oriented narratives and frequently privileges institutional sources. She further argues that conventional outlets tend to frame environmental challenges through dominant techno-economic perspectives while rarely offering space for alternative or systemic approaches. This trend is reflected in the German coverage analyzed here and supports the notion that rising negativity does not automatically equal deeper deliberation but often reflects shifting emphasis toward risk and responsibility attribution, particularly to political actors.

Frames such as *Strategic Resource for Mobility* and *Legitimacy through Independence from China* show a significant rise from 2020 onward, suggesting a reframing of lithium's role: no longer primarily tied to climate goals but increasingly presented as a response to geopolitical dependence. This shift illustrates how sustainability narratives are recontextualized under changing geopolitical conditions, with ecological arguments increasingly subordinated to economic and strategic rationales. These findings echo insights by Nisbet (2009), who highlights how climate and sustainability topics are often reframed in the public sphere in line with prevailing political-economic ideologies.

Although BMW ranks only third in the overall frequency of mentions across the automotive brands analyzed, it appears comparatively successful in placing quotations in the coverage and is associated with a comparatively positive tone in reporting about the company. This suggests that BMW's media visibility depends less on the quantity of mentions than on the combination of quotation presence and positive tonal treatment. Whether this is the result of deliberate strategic communication or whether journalists independently emphasize BMW's positioning cannot be determined from the media analysis; nevertheless, the patterns correspond to what Hallahan et al. (2007) describe as typical outcomes of proactive agenda-building.

Mercedes-Benz receives similar attention, yet its slower move toward direct lithium sourcing is increasingly framed as a strategic risk. The presence of executive quotations may indicate efforts at visible positioning within sustainability-related supply-chain debates. However, compared with BMW, Mercedes-Benz appears more reactive and less directly positioned in the coverage. VW dominates coverage but is less frequently associated with clearly articulated company positions within the reporting. VW dominates the coverage but is less frequently associated with clearly articulated company positions in the reporting. Its visibility appears to be driven more by journalistic scrutiny and external commentary than by proactive corporate messaging. This points to a more reactive media presence that may limit the company's ability to shape the narrative (Deephouse, 2000). The comparatively low media presence of Audi and Porsche may be related to their integration into the larger Volkswagen Group, where external communication on the topic is largely concentrated at the parent-company level. This supports findings by Strauß and Njagojevic (2025), illustrating how powerful economic actors become visible within media discourse through agenda-building processes.

Thematic convergence around strategic and geopolitical frames suggests that outlets respond in parallel to external triggers, such as the EU's Green Deal, the 2023 Critical Raw Materials Act, Germany's resource-focused diplomacy including Scholz's Latin America trip, and Chile's 2023 National Lithium Strategy. This points to agenda-building dynamics, where external actors and events influence the media's prioritization of issues (Wolfe et al., 2013). *Handelsblatt* and *FAZ* engage early with industrial policy themes, whereas *Zeit Online* emphasizes social justice and ecological concerns. These tendencies are consistent with ideological framing logics described by Hallin and Mancini (2004), although they may also be influenced by differences in journalistic genre, temporal developments in coverage, and the unequal attention paid

towards the topic across outlets. Furthermore, this may reflect frame resonance processes (Benford & Snow, 2000), whereby certain narratives align more closely with the values and expectations of specific outlets and their respective audiences.

5.2. Limitations

This study does not establish causal links to how automotive companies' communication strategies shape media narratives, or viceversa. The absence of the strategic corporate perspective of the five automotive companies under research makes it unclear whether the direct quotes taken up by the press were strategically crafted, whether they originally appeared in corporate press releases, or whether they were emphasized independently by journalists from external corporate events. A further limitation lies in the restricted media sample, which includes only five German news outlets. More specialized media, such as trade magazines, may also play an important role in this debate and were not included in the present analysis. Future research could also take a comparative cross-country perspective to examine how these media debates differ across national contexts.

5.3. Conclusion

This study examined how German news media report on lithium mining in Chile and how automotive companies are represented within these mediated sustainability debates.

In this sense, RQ1 is answered by showing that lithium mining in Chile is framed through a combination of environmental, economic, industrial, and geopolitical concerns, with these dimensions becoming more closely intertwined over time. RQ2 is addressed by showing that the five German automotive companies occupy uneven positions of visibility in the coverage. The analysis identifies differences in the presence of quotations from corporate representatives, tonal associations, and narrative positioning across companies. BMW is more often associated with direct quotations and more positive reporting, whereas Mercedes-Benz and VW appear in more reactive or less clearly articulated ways, and Audi and Porsche remain comparatively marginal. RQ3 is answered by showing that the framing of lithium mining varies across outlets in ways broadly consistent with their editorial profiles: *Zeit Online* and *Bild* place stronger emphasis on socio-ecological consequences, *Handelsblatt* foregrounds economic and industrial risks, *FAZ* emphasizes strategic-industrial and technocratic dimensions, and *Welt* combines environmental concerns with geopolitical framing.

Regarding the overall research question, the analysis shows that German news coverage constructs lithium mining in Chile as a mediated sustainability debate in which resource extraction is increasingly negotiated through questions of industrial transformation, supply security, strategic dependency, and the contradictions of the green transition. In this respect, the study contributes to framing research by showing that coverage of critical raw materials is structured by the growing interrelation of environmental, economic, industrial, and geopolitical dimensions. It also adds nuance to research on agenda-building and contextual media factors by showing that automotive companies occupy uneven positions of visibility across the five news outlets and that these patterns vary in ways broadly consistent with the outlets' editorial and political orientations.

The study therefore meets its broader objective of clarifying how German news media portray lithium mining in Chile and how the automotive sector becomes visible within these debates.

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Contributions of the authors:

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AUTHOR/S:

Greta Valdés Stünz
Institute of Communication and Media Studies, Leipzig University, Leipzig, Germany.
External doctoral researcher in Communication and Media Studies at Leipzig University. Her research focuses on environmental and strategic communication, with particular emphasis on the communication and public perception of critical raw materials and the transition to electric mobility. Her doctoral research examines the communication surrounding lithium mining in Chile, including news media coverage, corporate communication, and public perceptions. Her broader research interests include sustainability communication, corporate communication, media framing, and the geopolitical dimensions of global raw-material supply chains. Her work combines quantitative and qualitative approaches to examine how environmental, economic, and geopolitical dimensions of resource extraction are communicated and interpreted by different actors.
gi52iqop@studserv.uni-leipzig.de
ORCID ID: https://orcid.org/0009-0008-8532-4624

Nadine Strauß
Department of Communication and Media Research (IKMZ), University of Zurich, Zurich, Switzerland.
Assistant Professor of Strategic Communication and Media Management at the Department of Communication and Media Research (IKMZ), University of Zurich. Her research focuses on strategic communication and its management, particularly how organizations and societal actors use communication to engage stakeholders, create value, and contribute to organizational performance and societal sustainability. Her research interests include corporate and sustainability communication, public relations, financial communication and investor relations, crisis communication, financial and business journalism, and digital news use. Before joining the University of Zurich, she was a Marie Skłodowska-Curie Fellow at the University of Oxford and a postdoctoral researcher at the University of Vienna. She received her PhD in Communication Science from the University of Amsterdam.
n.strauss@ikmz.uzh.ch
Index H: 22
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