


Article

A Comparison of CSR Image Construction between Chinese and American Petroleum Companies in the Context of Ecological Transition

Xiao Wang ¹ , Xiufeng Zhao ^{2,3,*}, Yaxian Wang ⁴ and Suzhen Li ³

¹ School of Marxism, China University of Petroleum (Beijing), Beijing 102249, China

² China Research Institute of Global Energy Public Opinion, China University of Petroleum (Beijing), Beijing 102249, China

³ School of Foreign Languages, China University of Petroleum (Beijing), Beijing 102249, China

⁴ School of Economics of Beijing Wuzi University, Beijing 101126, China

* Correspondence: xiufeng96@cup.edu.cn

Abstract: CSR reports are currently employed by most petroleum corporates as powerful discursive resources to shift their image from “black” to “green”. However, on account of factors such as the corporate ethics and cultures and the social and political situations in which the corporates operate, the CSR reports for image reconstruction may vary in terms of discursive representations as well as the extent and means of achieving “greenness”. With the trend of economic and trade globalization, petroleum companies are bound to trade and open branch offices in countries in which they are not familiar with the ideologies and political atmosphere. Therefore, it is significant to learn about whether political background has an impact on petroleum CSR image construction or not. This paper examines the recent CSR reports by two oil companies, CNPC from China and CHV from America—two corporations diverging in many respects, the socio-political environment, in particular. In line with the constructive view of image, an approach of computer-assisted discourse analysis (CADS) is adopted for the comparison based on two corpora, each consisting of their 2015–2020 CSR reports. The findings have revealed that images constructed by CNPC and CHV have complex and dynamic characteristics as a result of political, social, cultural, and economic backgrounds, and the changes in historical conditions. On the whole, ethics and actions in promoting environmental friendliness constitute the predominant theme of their reports, an indication of their common awareness of the non-sustainable nature of their main and conventional business as environmentally sensitive industries. Nevertheless, CNPC and CHV differ in multiple respects. Firstly, CNPC tends to foreground its green image as an obligatory commitment to “ecological civilization”, a national political strategy. In contrast, CHV constructs its image as a multinational corporate with not much attention to its home-state interests. Secondly, in alignment with different socio-cultural contexts, their basic positioning, as well as primary environmental concerns, targets, implementation paths, and changes with time differ from each other. This study contributes to multidisciplinary research on corporate image construction, promoting the combination of economic management, politics, and discourse analysis with data science. In practice, this study provides a new perspective for analyzing motivations, efforts, and means for the construction of CSR images, as well as some suggestions to corporates on how to adapt their CSR images to the target cultural community.



Citation: Wang, X.; Zhao, X.; Wang, Y.; Li, S. A Comparison of CSR Image Construction between Chinese and American Petroleum Companies in the Context of Ecological Transition. *Sustainability* **2022**, *14*, 14490. <https://doi.org/10.3390/su142114490>

Academic Editors: Wenxuan Hou, Yizhe Dong, Jiandong Chen, Chen Wang, Yun Zhang and Wenlong Zhang

Received: 10 September 2022

Accepted: 27 October 2022

Published: 4 November 2022

Publisher’s Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: CSR image; Chinese and American petroleum companies; corporate discourse; political background; CADS; data mining

1. Introduction

Although it is the pillar of national and world economies, the petroleum industry is an undisputed major contributor to environmental deterioration, e.g., soil, water, and air pollution [1]. Accordingly, it is reckoned as a typical “environmentally sensitive industry” [2].

Thus, the oil industry is, on one hand, well acknowledged as a crucial sector of the economy; on the other hand, it is widely blamed for issues such as environmental damage and climate change, tarnishing its part in the cause of sustainable development. The petroleum sector is therefore especially required to implement CSR initiatives. Petroleum corporates are expected to fulfill higher CSR standards than businesses in other sectors by governments, public institutions, environmental organizations, and citizens. This shows that CSR for oil and gas corporations is not merely a matter of goodwill but rather a necessity and an obligation [1]. Within this landscape, it seems that the only way for oil corporates to survive and maintain their legitimacy is by reconstructing and shifting their images from black to green, i.e., achieving sustainability [3]. A CSR report is deemed as an effective tool for image reconstruction, which accounts for the fact that a CSR report, though optional, is annually issued by more than 75% of the petroleum industry [4]. Petroleum companies are coming under more and more pressure to address a wider range of social obligations [5], particularly their environmental performance. To keep their social license to operate [6], safeguard their reputation, place themselves in ranking indices [7], and remain competitive [8], energy companies must appropriately respond to social expectations, global initiatives, and commitments such as the Sustainable Development Goals (SDGs) [5], as well as local and international regulatory frameworks.

Present-day environmental challenges are enormous for the planet. Animal species have experienced mass extinction in the past decades, 30% of the world's fisheries have collapsed due to overfishing, over 80% of agricultural land is suffering from severe drought and degradation, and 80% of the world's forests are in danger due to deforestation [9]. In the context of the global consensus on ecological transition and reversing the fossil-dominated global energy system, petroleum companies often employ social responsibility reports—a business communication tool—to reshape their images.

CSR image cannot be constructed without considering social, cultural, and political factors [10,11]. Under the trend of economic globalization, there are increasingly closer trade links between petroleum companies in different countries. To better adapt to the local investment environment, it is significant to learn how to build the corporate CSR image in alignment with the social and political environment. For instance, large petroleum companies, such as China National Petroleum Corporation (hereafter referred to as CNPC), Sino Petroleum Corporation (Sinopec), and China National Offshore Oil Corporation (CNOOC) in China, a socialist country, are state-owned, which determines that there must be some special features, different from those reported by Western large oil corporations, in terms of CSR image construction. For example, Chevron (hereafter referred to as CHV), an oil company with America as its home state, is largely positioned as a transnational enterprise, operated primarily in the Western capitalist system. In addition to the difference in political systems, China and America are situated at different stages of development. As to environmental protection, for example, China attaches more importance to pollution control, whereas America started earlier in carbon emission governance. There are also cultural differences. China is a country with high power distance and a collectivist cultural preference, while America holds low power distance and individualism [12]. All these may lead to divergence in public assumptions about a corporate's social responsibility as well as government regulatory models, which affect a corporate's CSR actions and image construction [13,14].

This study examines reports created by oil firms from China and America, the two largest economies in the world. Both of them are home to several Fortune 500 businesses, particularly large-scale oil companies. Within this landscape, they undertake a dual social responsibility for sustainable economic development and environmental protection. As most CSR literature has primarily focused on the practices in North America and Europe [15], comparing Chinese and American corporates helps elucidate CSR image differences between Western and non-Western fossil fuel markets. Furthermore, how CSR image construction is affected by the socio-political and cultural context is shown.

A CSR report is a discourse created by an organization with a view to construct its public image. “Wherever there is meaning there is persuasion [16]” reminds us of the never-neutral state of discourse through which different corporate images are constructed and the ideologies behind them are carried. Businesses are dynamic entities, and when they adapt to new economic, social, and environmental problems in response to pressure from stakeholders, activists, or the media, they may develop different discourses over time [17]. For instance, with recognition that it is imperative to perform actions, to create and reconstruct their ecological images in public, CNPC and CHV, two large fossil fuel companies, take advantage of annually released CSR reports to reconstruct their images.

In view of the preceding background, this study intends to explore the construction of CSR images by adopting corpus-based discourse analysis, from a perspective of comparison. The annual CSR reports by CNPC and CHV, from 2016 to 2020, were collected as the data. This study has two specific objectives: (1) to examine the dynamic images of CNPC and CHV constructed by CSR discourses, and (2) to explore the extent to which political, economic, cultural, and social factors have an impact on petroleum CSR image construction. It is hoped this study will contribute to our understanding that instead of having one singular and consistent image, businesses usually have multiple and dynamic images under different contexts. More importantly, it provides practical implications on how oil companies can improve their CSR images when conducting cross-border trade under different social and political backgrounds.

2. Literature Review

2.1. Corporate Social Responsibility (CSR)

The academic community generally agrees that the emergence of corporate social responsibility (CSR) can date back to *Social Responsibilities of the Businessman* written in 1953 by Howard B. Bowen. CSR was defined by him as managers’ obligatory behavior to follow both the development goals of companies, and social values and expectations. They set corresponding policies, make decisions, and implement them to carry on activities [18]. Since then, more and more scholars have tried to explore further meaning and discussed CSR in a multi-dimensional way. For example, it is believed that CSR-related social behaviors should go beyond common economic interests to a higher level [19]. In addition, CSR four-level pyramid models of economic, legal, ethical, and philanthropic domains have been described by Carroll [20,21].

Furthermore, many academics realize that except for the mainstream economic and legal responsibilities, social and environmental responsibilities are of growing importance. The European Commission considers CSR as a concept to show the voluntariness of bearing social and ecological concerns of the company [22]. Five dimensions of CSR, namely economy, society, environment, stakeholder, and voluntariness, have been identified by Dahlsrud [23]. Each corporate is responsible for its influence on both the environment and society. Their commercial operations must be balanced by some non-profit aspects such as society, ecology, consumer interests, ethics, and human rights [24]. As a result, the CSR report (Corporate Social Responsibility report), one of the important representations of CSR, is also named the “sustainability report”, “environmental report”, “corporate citizen report”, and so on.

From the perspective of the management sphere, research on CSR reports often centers around social disclosure [25], consumer-related studies, and business-related research [26]. There are theoretical methods that bridge CSR reports and corporate image, such as institutional/legitimacy theory, impression-management theory, reputation risk-management theory, and agency theory [27,28]. The construction of corporate image and its underlying mechanisms, the connection between behavioral intention and corporate image, and other topics are given increased attention in studies of corporate image [29–31].

2.2. CSR Image Construction

CSR image is associated with both CSR and corporate image [31]. Corporate image usually comes from the process by which the public compares companies' multi-dimensional characteristics [32]. CSR image was explained by Liu [33] as a concept involving the public's perception of a company's behavior and attitude toward stakeholders, or the impression and assessment of a company based on its CSR concept and actions. As a result, it can be claimed that CSR conduct immediately mirrors the CSR image because it is based on the social traits of the business and the social duty it takes on [31].

Over the past several decades, CSR management and marketing communication have rapidly developed from small-scale activities in a few developed countries to global behavior [34,35]. CSR image can be built via special websites on CSR, annual environmental reports, corporate advertisements on CSR, codes of conduct or ethics, social partnerships, etc. [35]. It is a significant means of CSR management and marketing communication.

CSR image construction often emphasizes a particular aspect of social responsibility, e.g., environmental CSR (ECSR). The strategic advantages that come from integrating environmental issues into corporate social responsibility (CSR) initiatives are becoming more and more clear to businesses. Globally, business experts are placing emphasis on attaining a green competitive advantage (GCA), creating a green corporate image (GCI), and environmental CSR (ECSR) [36]. Studies have shown that strengthening a company's green reputation can increase its competitiveness [37,38]. Environmentally friendly products and practices will lead to efficient resource investment, a better market environment, improved corporate branding, higher sales, and lasting competitive edge. Following CSR research, green management is vital for developing a reputation at the core of the organization. One of the key factors that eventually determines environmental image and competitiveness in the green market is considered as green practices [36,39]. Utilizing green business methods has a substantial impact on a company's reputation, image, and client loyalty [40].

Therefore, exploring ways for businesses to improve their green image and competitiveness is a current research imperative [41], especially in the environmentally sensitive petroleum industry. Managers must take action to maintain the company's green image in order to increase ecological legitimacy [42], such as building a green corporate image via CSR reports.

2.3. The Linguistic Turn of CSR Image Studies

The linguistic turn in social and organizational studies has led to widespread acceptance in the academic community [28,43]. Comparative studies, corporate image construction, critical discourse studies, and corpus-assisted analysis [44] have investigated specific lemmas, semantics, and so on in analyzing CSR reports [28,44–46]. We hold that corporate images can be produced and maintained by CSR discursive construction, as image construction can be seen as a discursive process that involves naming, labeling, categorizing, and associating both artifacts and social actors.

In the context of the global consensus on ecological transition and reversing the fossil-dominated global energy system, petroleum companies often employ social responsibility reports—a business communication tool—to reshape their images. CSR images might be influenced by the political system and cultural context of different countries. However, the research on how petroleum companies construct their images via CSR discourses appears inadequate. Furthermore, little research on CSR reports has focused on Chinese enterprises' CSR reporting practices, despite the fact that there have been many studies on CSR reports [28,44,47]. Research on CSR image construction of the emerging state-owned oil corporates in China seems inadequate. It is thus necessary for us to make a comparison of the CSRs released by oil companies from China and those by an established oil company from America, the largest economy and capitalist country. From the comparison, practical implications can be provided for oil industry image building, particularly for those engaged in transnational trade in the globalization process. As to the research procedure, the present study first collected the recent 5-year CSR reports of CNPC and CHV as data. Then, their

CSR images were compared by employing data mining ways. This is an interdisciplinary study that combines political science, management, communications, linguistics, and data science, expanding the methodology of CSR study. It contributes to better realizing the social and political influence on CSR image construction, thus improving business cooperation across the world.

3. Conceptual Framework

An image is dialectical and relational. Rather than enduring, it is better seen as a relatively unstable and fluid concept. Images are relational and constructed and re-constructed in an ongoing negotiation with others, thereby allowing for changes and multiplicity. Corporate images are dynamic and dialectical rather than fixed and receiver-determined. Public perception has constant interaction with the corporates' construction of their images. The notion must be flexible; otherwise, the corporates would become stagnant in the face of an unavoidably changing environment.

Discourses play a significant role in image construction. Discourse plays the role of constructing reality [48–51]. Image construction is a discursive process that involves naming, labeling, categorizing, and associating both artifacts and social actors. In the past two decades, more and more studies have recognized the significance of discourse in the construction of images. Among the discursive studies of image construction, many have focused on national images [52] and religious images [53,54]. Additionally, they often pay attention to the critical role that news media plays. While these studies have helped us to form a better understanding of how images are constructed by media discourse, we also need to extend to corporate discourses to explore how and why a petroleum company constructs its images. It would be of interest to compare what dynamic images petroleum companies shape for themselves, especially ECSR image, and how social and political factors affect the construction, whereby some practical implications can be gained for CSR image construction under different social and political backgrounds.

The current study is part of a corpus-based critical discourse analysis that combines corpus linguistics and critical discourse studies [55–59]. The former is a useful methodology for dealing with quantitative linguistic data, with a focus on semantic domains, frequency lists, keywords, collocations, concordance lines, and so on. The latter is explained as a critical perspective, position, or attitude within the multidisciplinary Discourse Studies discipline [60]. The basic analysis framework is shown in Figure 1.

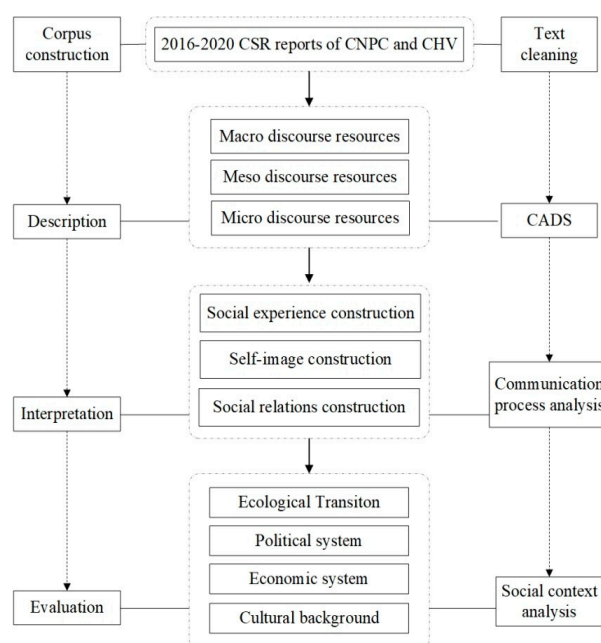


Figure 1. The basic conceptual framework.

4. Data and Methodology

Data for this study consist of CSR reports issued by CNPC and CHV from 2016 to 2020. All the CSR reports used for this study are written in English. The reports were retrieved from corporate websites in June and July 2022. Basic information is shown in Table 1. As to the data collection, first, ten reports were collected from the official websites of the two corporates and followed by cleaning up the corpus, resaving them as two txt files.

Table 1. Overview of CNPC and CHV corpus.

	Corpus	Company	Home Country	Retrieval Links	Time Span	Report Number
1	CNPC Corpus	China National Petroleum Corporation (CNPC)	China	http://www.cnpc.com.cn/en/csr2020/AnnualReport_list.shtml (accessed on 30 May 2022)	2016–2020	5
2	CHV Corpus	Chevron Corporation (CHV)	America	https://www.chevron.com/newsroom/media/publications (accessed on 30 May 2022)	2016–2020	5

The approach of corpus-assisted discourse studies (CADS) was applied in this study [61]. Corpus study is a research method developed in the late 1950s. It has been widely applied in interdisciplinary research in recent years. The combination of corpus linguistics and discourse studies contributes to increasing the representativeness of research samples while decreasing researcher subjectivity [62–64]. Corpus techniques such as high-frequency words, semantic domain, keywords, and their collocation and concordance analysis help researchers work from the bottom up to extract nuanced language patterns [65–67]. However, as the name implies, data and patterns extracted by corpus tools must be supplemented by human interpretations. Therefore, CADS researchers often extract language features (e.g., high-frequency words, keywords) starting from corpus methods, and then contextualized analyses are carried out to obtain more insights [65].

There are some advantages of CADS to combine corpus and discourse analysis techniques: specifically, more expansive, varied, and representative data types; verifiable outcomes; quantitative and empirically based data; and simpler computerized coding, retrieval, and analysis, and data-driven observations and language-related hypotheses [68–70]. Additionally, the corpus approach helps researchers to explain the “incremental effect of discourse” [55].

Firstly, an analysis of high-frequency lemmas and semantic domains is conducted to extract the themes of the discourses. Wmatrix 4 is employed here to identify semantic domains. Secondly, keywords (with the reference of the 2011–2015 CSR reports) are counted out to compare changes in terms of attention to environmental protection. Keyword lists of the two corporates’ CSR reports are extracted by Lancsbox. Thirdly, co-occurrence networks and collocations are shown to extract meso and micro discourse features. On the one hand, the generation of co-occurrence networks is based on the Dirichlet distribution (Linear Discriminant Allocation, LDA) model realized by KH Coder. On the other hand, the collocations of climate and carbon in CNPC and CHV corpus are analyzed by Sketch Engine, and the collocation of pollution in CNPC corpus is shown by the Graphcoll function in Lancsbox.

5. Results

5.1. Statistics of High-Frequency Lemmas

In this study, the CNPC and CHV corpus are first combined to generate a word cloud (see Figure 2) to show their overall focus. It is clear that on the one hand, they focus on their management and development (*development, management, energy, employees, energy, oil, gas, million, production, business, performance . . .*). On the other hand, environment-related issues are also highlighted (*water, safety, environment, natural, system, emissions . . .*).



Figure 2. The word cloud of CNPC and CHV CSR reports.

It is often believed that high-frequency words often present certain images in the minds of listeners or readers, and then affect their perception. Generally speaking, high-frequency nouns refer to issues or topics that the speaker is concerned about, while high-frequency verbs describe behaviors or actions repeated by the speaker. These words not only reflect what the speaker thinks, but also what the speaker does, so it will directly affect people's views and impressions of the speaker. High-frequency content words such as nouns and verbs in the form of lemmas are counted (see Table 2). Different from the word cloud of frequency statistics in Figure 2, Table 2 provides respective frequency of CNPC and CHV CSR reports. An analysis of Table 2 shows that the two corpora share nine pairs of subject terms. Among them, except *we* and *have*, five pairs are about the energy industry, such as *gas*, *energy*, *oil*, *manage*, and *employ*, and the other two pairs are *environment* and *safe*. It shows that, as oil companies, they are aware of the non-sustainability of their main business, the danger of their production process, and the environmental damage. Additionally, CNPC focuses on *nature*, while CHV focuses on *emission*. As a result, efforts were made to repeatedly build their safe and environmental images.

Table 2. The top 30 high-frequency lemmas in the two corpora.

	CNPC Corpus	Frequency	Percentage (‰)	CHV Corpus	Frequency	Percentage (‰)
1	we	1974	13.52	chevron	996	11.75
2	develop	1280	8.77	be	946	11.16
3	gas	1260	8.63	we	897	10.58
4	be	1038	7.11	report	486	5.73
5	energy	1031	7.06	environment	413	4.87
6	manage	912	6.25	water	392	4.62
7	product	887	6.08	have	390	4.6
8	employ	803	5.5	emission	373	4.4
9	cnpc	783	5.36	manage	356	4.2
10	oil	759	5.2	business	321	3.79
11	local	682	4.67	operate	313	3.69
12	project	672	4.6	work	294	3.47
13	environment	639	4.38	risk	273	3.22
14	have	617	4.23	more	262	3.09
15	society	605	4.14	safe	262	3.09
16	technology	533	3.65	process	262	3.09
17	promote	516	3.53	gas	251	2.96
18	million	513	3.51	energy	248	2.93
19	system	483	3.31	million	243	2.87
20	company	477	3.27	data	238	2.81
21	train	454	3.11	right	233	2.75
22	improve	413	2.83	employ	231	2.72
23	control	412	2.82	human	230	2.71
24	nature	390	2.67	perform	219	2.58
25	nation	377	2.58	health	202	2.38
26	safe	375	2.57	oil	196	2.31
27	China	370	2.53	percent	186	2.19
28	responsible	365	2.5	their	173	2.04
29	protect	354	2.43	not	170	2.01
30	tons	328	2.25	workforce	167	1.97

5.2. Semantic Analysis

In this study, the CNPC and CHV corpus are also analyzed to generate the semantic domain to show their themes more targeted. We uploaded the two corpora separately into Wmatrix for semantic annotation and compared them with the embedded British English 2006 (BE06) to generate a key semantic domains list [71]. There are twofold functions of Wmatrix: On the one hand, its embedded USAS (UCREL Semantic Analysis System) automatically generates semantic annotations for words in the text. The semantic annotations set basically comes from the Longman Multifunctional Classification Dictionary [72], which includes 21 superordinate semantic domains (A: general and abstract terms; B: the body and the individual; C: arts and crafts; E: emotion; F: food and farming; G: government and public; H: architecture, housing and the home; I: money and commerce in industry; K: entertainment, sports and games; L: life and living things; M: movement, location, travel and transport; N: numbers and measurement; O: substances, materials, objects and equipment; P: education; Q: language and communication; S: social actions, states and processes; T: time; W: world and environment; X: psychological actions, states and processes; Y: science and technology; Z: names and grammar) and can be subdivided into more than 200 sub-semantic domains [71]. On the other hand, by comparing the frequency of semantic assignment in the observed corpus and the reference corpus (e.g., BE06), keywords and thematic domains will be automatically generated. This tool achieves more than 90% accuracy in both lexical annotation and semantic assignment [73].

In order to present fine-grained analyses, these major semantic fields are further subdivided into 232 category labels. When a text is uploaded, the software can perform automatic semantic tagging on it based on these semantic categories, and assist in the production of detailed information about various semantic categories in this text. The results are shown in Table 3.

Table 3. Top 10 key semantic domains in the two corpora.

CNPC Key Semantic Domain	Example Types	CHV Key Semantic Domain	Example Types
W5 Green Issues	Environment, ecology, pollution, conservation, desertification, ecosystems, energy saving	I2.1 Business: Generally	Business, company, contractors, corporation, inc., business partners, executives, joint venture, enterprise, portfolio, infrastructure, audit
S7.1 + In power	Management, control, supervision, committee, board, power, organized	O1.2 Substances and materials: Liquid	Water, oil, petroleum, crude oil, liquids, freshwater, effluent, ink, diesel, underwater, gasoline, water shortages, drop
O1.3 Substances and materials: Gas	Gas, air, CO2, methane, nitrogen, steam, gas-fired, oxygen	I3.1 Work and employment: Generally	Work, employees, workforce, workers, personnel, employment, role, work-related, workplace, jobs
O1.2 Substances and materials: Liquid	Oil, water, petroleum, liquid, seepage, effluent, ammonia, sewage, freshwater	Z3 Other proper names	Chevron, total, global, principles, API, national, united nations, process, sox, standards, motor, more
A1.1.1 General actions/making	Production, projects, process, operation, carried out, activities, implement, make, refining	A1.1.1 General actions/making	Operations, process, project, activities, actions, production, practices, initiative, committed, made, create, engage, do, spills
I2.1 Business: Generally	Company, business, enterprises, contractors, corporation, executives, office	W5 Green Issues	Environment, conservation, nature, ecosystem, energy resources, energy conservation, environment free, energy policy
A15+ Safe	Safety, safe, safely	S5+ Belonging to a group	Communities, corporate, community, team, partnership, unit, association, organizations, public
A15- Danger	Risk, hazardous, hazards	S8+ Helping	Help, support, services, guidance, promote, protect, enable, compensation, benefit, guidelines, encourage, advisor, assistance
A2.1+ Change	Development, change, reform, restoration, transformation, become, amended	O1.3 Substances and materials: Gas	Gas, methane, steam, air, CO2, gases, nitrogen
X5.2+ Interested/excited/energetic	Energy, actively, interests, diligence, vigorously	A15 Safety/Danger	Health and safety

It is found that CSR reports of CNPC and CHV share six key semantic domains: W5 (Green Issues), O1.3 (Substances and materials: Gas), O1.2 (Substances and mate-

rials: Liquid), A1.1.1 (General actions/ making), I2.1 (Business: Generally), and A15 (Safety/Danger), which generally cover the primary concerns and goals of CSR reports. Most shared semantic domains are helpful to construct images of a business as being professional, economically competitive, and environmentally responsible. Although they both emphasize self-development and environmental friendliness, CHV appears to be more focused on exterior cooperation, while CNPC highlights a well-organized hierarchy and domestic cooperation [28].

5.3. Statistics of Keywords

Keywords refer to words that occur far more frequently in a text or corpus compared with an appropriate reference corpus. Different from high-frequency words, keywords are of abnormal frequency compared to the reference corpus. By highlighting the uncommon focus of the text, the unique points of the images that CNPC and CHV shape themselves will be reflected. In terms of macro analysis, we compare the CSR reports of the past 5 years in order to find the chronological changes. Here, Wmatrix was also employed to calculate the keywords list of CNPC and CHV corpus. The CSR reports from 2011 to 2015 were employed as the reference corpus, and the statistical methods of Log-Likelihood (LL) and LogRatio were applied in Wmatrix.

Table 4 shows that there are five environment-related keywords of CNPC: environmental, ecological, low-carbon, ogci (Oil and Gas Climate Initiative), greenhouse, and climate. By comparison, only two keywords concerning climate change of CHV are presented: carbon and climate. Clearly, CNPC tends to pay more attention to environmental protection compared to the past five years. Additionally, there are more multi-dimensional meanings of environments in CNPC CSR reports: (1) the environment management policy—ecological civilization—initiated by the Chinese government; (2) emission reduction goals: low-carbon and mitigation of greenhouse effect; (3) specific measures: participate in the work of the Oil and Gas Climate Initiative (OGCI).

Table 4. Top 10 keywords of CNPC and CHV corpus (with the reference of the 2011–2015 CSR reports).

Keywords of CNPC Corpus	LL	LogRatio	Keywords of CHV Corpus	LL	LogRatio
compliance	54.95	2.69	carbon	27.23	3.51
control	42.96	1.78	future	24.59	2.34
environmental	42.25	1.41	basis	24.12	2.96
ecological	41.13	2.51	inclusion	21.14	4.01
management	36.46	0.94	intensity	20.83	3.23
low-carbon	33.87	5.38	new	17.03	1.93
land	33.23	2.19	COVID-19	16.44	2.02
ogci	29.67	2.16	pandemic	16.41	4.22
greenhouse	27.61	6.06	employee	15.38	4.13
climate	26.92	2.32	climate	15.38	1.55

5.4. Statistics of Co-Occurrence Network

Moreover, we tried to ascertain the statistics of the co-occurrence network by KH Coder. KH Coder is a text analysis tool developed by Koichi Higuchi, a Japanese scholar, and the kernel of KH Coder is an implicit Dirichlet distribution (Linear Discriminant Allocation, LDA) model. The LDA model is commonly used in NLP to infer the topic distribution of documents. With the core of Linear Discriminant Allocation (LDA), KH Coder is helpful to analyze word co-occurrence and collocations [74,75]. Here, we emphasize the co-occurrence of “we” and “CNPC/CHV” to find out how CNPC and CHV shape themselves, especially ecological images from the first-person perspective, as shown in Figures 3 and 4.

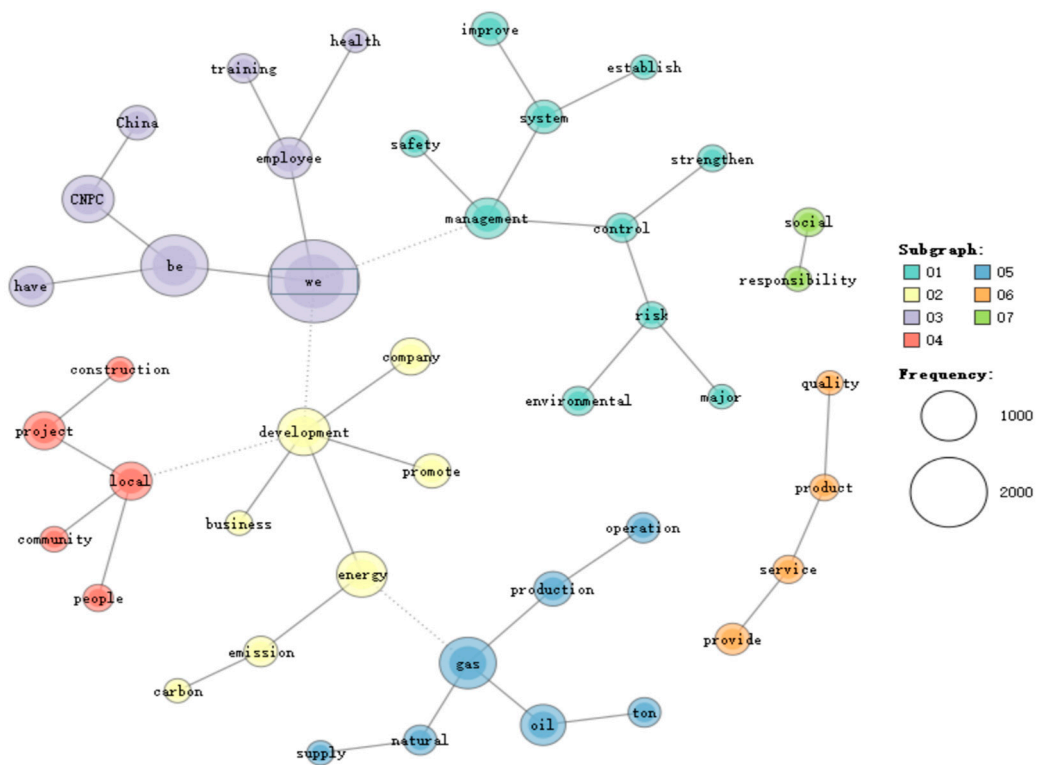


Figure 3. Co-occurrence network of “we” and “CNPC”.

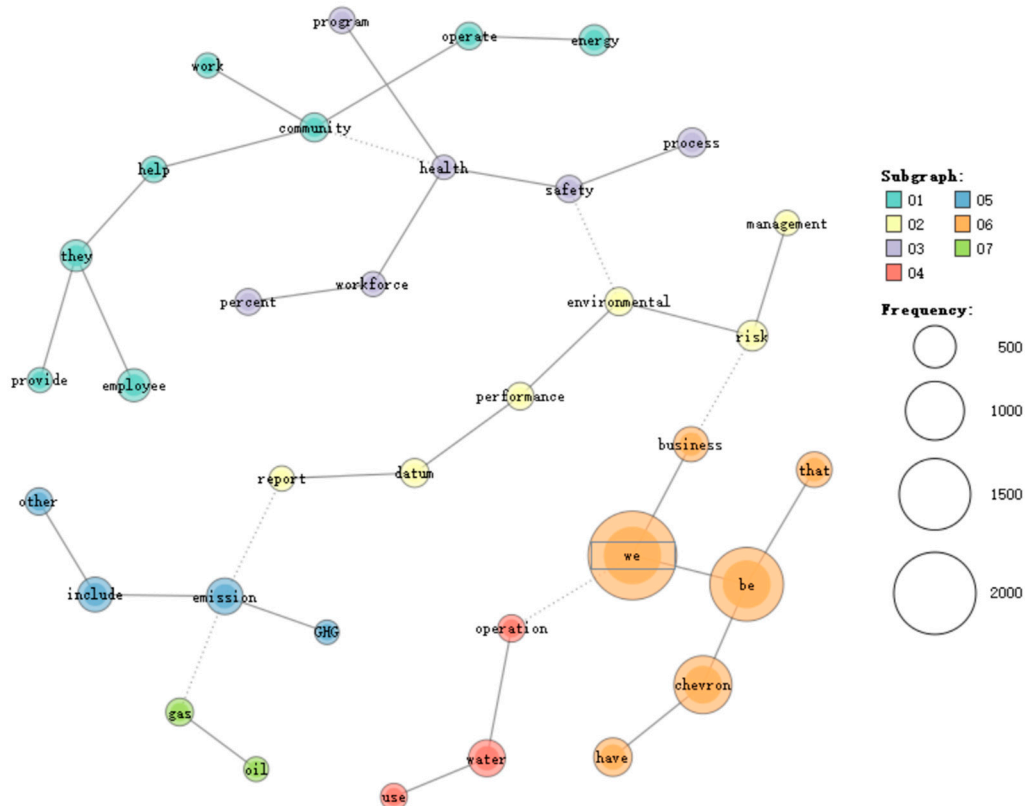


Figure 4. Co-occurrence network of “we” and “CHV”.

Generally, CNPC and CHV both place great emphasis on environmental improvements and environmental risk prevention (see subgraphs 01 and 02 in Figure 3, and subgraphs 02 and 05 in Figure 4). Although both are oil companies, they have different positioning.

In Figure 3, the pronoun “we” is used to refer to CNPC and China. For CNPC, as a state-owned corporate, its destiny is closely connected with the development of China. This image is determined by Chinese political system—socialism. By comparison, in Figure 4, “we” is connected with chevron and business. It indicates that CNPC is more state-bound, whereas CHV is more concerned with its business as a typical multinational company.

5.5. Statistics of Collocates

Collocation in CADS studies specifically refers to “the occurrence of two or more words within a text at short distances from each other” [76]. By collocation analysis, we learn about the similarities and differences of CNPC and CHV image construction from a meso and micro perspective. On the one hand, we targeted the representative environment-related words “climate” and “carbon”. The unique word “pollution” was selected from example types in the semantic domain of Green Issues in the CNPC corpus (see Table 3).

5.5.1. Significant Collocation Words of Climate and Carbon in CNPC and CHV Corpus

As shown in Table 4, climate and carbon simultaneously appear in the top 10 keywords of CNPC and CHV corpus (with the reference of the 2011–2015 CSR reports). We studied the significant collocations of climate and carbon by employing Word Sketches in the online tool Sketch Engine (Sketch Engine is an online system designed by Adam Kilgarriff’s corpus research group in the U.K. It has been widely used in the fields of lexicography, machine translation, language learning, etc. Accessed on 31 July 2022: <http://the.sketchengine.co.uk/>) (see Table 5).

Table 5. Significant collocations of climate and carbon.

Collocation Structures	Nouns Modified by “Climate”		Nouns Modified by “Carbon”	
	CNPC	CHV	CNPC	CHV
Collocation words and significant collocate value	change (13.2)	change (12.8)	dioxide (11.6)	capture (12.1)
	Change (11.7)	risk (11.4)	emission (11.4)	dioxide (11.7)
	Initiative (10.8)	resilience (11.0)	reduction (10.5)	intensity (11.2)
	Exchange (10.2)	report (10.1)	neutrality (10.3)	pricing (10.8)
	Conference (10.1)	lobbying (9.5)	forest (10.2)	cost (10.7)
	Investments (10.0)	fund (9.5)	capture (10.2)	footprint (10.6)
	Products (9.6)	principle (9.4)	sink (10.2)	price (9.9)
	Kunlun (9.5)	Initiative (9.3)	intensity (9.8)	storage (9.6)
	China (9.4)	adaptation (9.0)	footprint (9.5)	target (9.5)
	conference (8.9)	policy (8.7)	market (9.5)	leakage (8.7)

In terms of climate, climate change is always the top issue that CNPC and CHV are concerned about. Both take an active part in climate change cooperation, such as joining the Oil and Gas Climate Initiative (OGCI). Differences lie in the attitude and specific routes to prevent climate change. The actions of CNPC, as a state-owned corporate, to prevent climate change are closely associated with China. Most environmental programs are funded by national finance, and many cooperative partners are also state-owned enterprises. CNPC also took active participation in founding the Tianjin Climate Exchange (TCE), the first comprehensive emissions trading institution in China. Therefore, its climate change prevention activities are closely tied with the country’s initiatives at the national level. By comparison, faced with the climate change issue, CHV, as an independent multinational oil company, places more emphasis on its business management activities, such as climate change lobbying and making principles to mitigate climate change. In addition, CHV not only tries to pursue climate change resilience, but also thinks it is necessary to adapt to climate change. Both GHG mitigation and climate change adaptation are significant.

As to carbon, both CNPC and CHV take some specific measures to reduce carbon dioxide emissions, such as carbon capture and carbon footprint measurement. What sets CNPC apart from CHV is that CNPC’s carbon goal closely follows its country. CNPC

pointed out in its 2020 CSR report: “The energy transition will be greatly accelerated under the guidance of the new energy security strategy and the requirements of the ‘Peak Carbon, Carbon Neutrality’ goal”. At the General Debate of the 75th UN General Assembly, Xi Jinping announced that “China will increase its independent contribution by more effective policies and measures. China will strive to reach the peak of carbon dioxide emissions by 2030, and achieve carbon neutrality by 2060.” This shows that CNPC’s business strategy serves the macro goals of China.

5.5.2. Significant Collocation Words of Pollution in CNPC Corpus

There is a unique word in example types of Green Issues in the CNPC corpus, pollution (see Table 3), which did not appear in the CHV corpus. To examine the semantic field around the word “pollution”, we employed the GraphColl function in LancsBox [77] to find high-frequency collocations of the keyword and generated a collocation graph (see Figure 5). At the National Ecological and Environmental Protection Conference, a significant political discourse has been presented: “In the new era, in order to promote the construction of ecological civilization, it is a major undertaking to fight in pollution prevention and control. It is a big, tough, and bitter battle because of its tight time, heavy tasks, and great difficulties.” Therefore, CNPC has taken pollution prevention as a major target. There are final goals such as zero pollution, as well as concrete measures such as three-tiered pollution prevention and pollution sources online monitoring. Additionally, CNPC often metaphorically refers to the act of anti-pollution as war, such as this example: “Natural gas has made a great contribution to improving the energy structure and combating air pollution in Beijing and North China”.

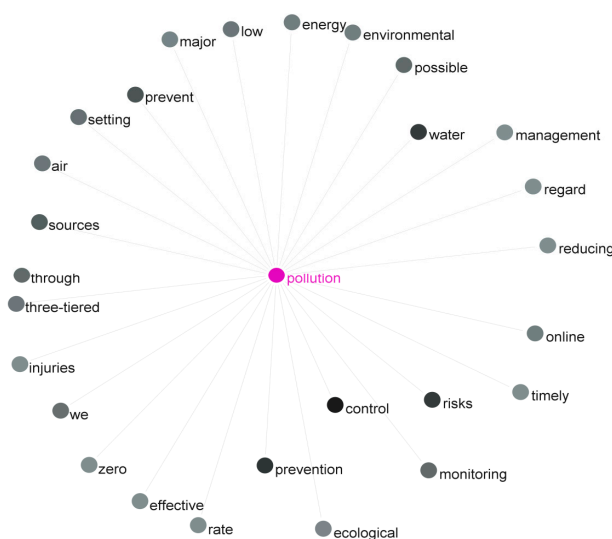


Figure 5. Collocation network map of “pollution” in CNPC corpus.

6. Discussion

6.1. The Similarity and Differences of CSR Image Construction and the Social and Political Contexts Behind

Generally, CNPC and CHV both place great emphasis on environmental improvements and environmental risk prevention in their CSR reports. As fossil fuel companies in environmentally sensitive industries, CNPC and CHV are conscious of the non-sustainable nature of their main business. In order to legitimize their long-term existence, they spend a large segment in their CSR reports constructing sustainable and environmentally friendly images. As seen in the corpus statistics, climate change is on the list of their top concerns. Both of them take an active part in climate change cooperation, such as joining the Oil and Gas Climate Initiative (OGCI). As to carbon issues, CNPC and CHV take some

specific measures to reduce carbon dioxide emissions, such as carbon capture and carbon footprint measurement.

What sets CNPC apart from CHV is the different enterprise type and social and political background. The results show that CSR images are influenced by the political system and cultural context of different countries. CNPC, as a socialist state-owned corporate, is closely tied with the national development and goals, in that within the political system of socialism, a state-owned enterprise is required to fulfill commitments in promoting the national interests and social well-being as a whole. By comparison, CHV, a typical multinational company, is more concerned with global issues rather than those of the home state. In different socio-cultural contexts, their basic positioning, as well as environmental concepts and targets, implementation paths, and changes with time often differ from each other.

Firstly, as regards to basic positioning, the Chinese petroleum enterprise CNPC highly emphasizes its patriotism and national sentiments. CNPC takes the interests of the country and the nation and the well-being of the whole society as its primary responsibilities. It is not only in line with the social attributes of a socialist state-owned enterprise, but also reflects the national spirit with patriotism as the core. CHV, as a capitalist multinational oil company, without intentionally showing its national interest orientation, constructs itself as a professional commercial group with a well-established management system. It also tries to build itself as a contributor to global interests and human well-being.

Secondly, as to the environmental concepts and targets, CNPC's ecological goals always follow the major policies and guidelines of the Chinese government, such as the "Two Mountain Theory (Lucid waters and lush mountains are invaluable assets)" and "Peak Carbon, Carbon Neutrality". Additionally, a significant political discourse was presented at the National Ecological and Environmental Protection Conference: "In the new era, in order to promote the construction of ecological civilization, it is a major undertaking to fight in pollution prevention and control. It is a big, tough, and bitter battle because of its tight time, heavy tasks, and great difficulties." Therefore, CNPC has taken pollution prevention as a major target. There are final goals such as zero pollution, as well as concrete measures such as three-tiered pollution prevention and pollution sources online monitoring. By metaphorically referring to the act of anti-pollution as a war, the images of perseverance and not being afraid of difficulties have been constructed. It is more in line with the Chinese social and aesthetic values of the hard work and courage. By comparison, CHV often insists on its own corporate ethics. For example, faced with climate change, CHV not only tries to pursue climate change resilience, but also holds that it is necessary to adapt to climate change. To CHV, both GHG mitigation and climate change adaptation are significant.

Thirdly, in terms of the implementation paths, CHV appears to be more concerned with cooperation with other companies, and CNPC seems to stress internal cooperation and a well-organized hierarchy. Most environmental programs are funded by national finance, and many cooperative partners are also state-owned enterprises. Therefore, climate change prevention activities often rely on the country. By contrast, faced with the climate change issue, CHV, as an independent multinational oil company, places more emphasis on its business management functions, such as climate change lobbying and making climate change principles.

Finally, compared to 2011–2015, CNPC tends to pay more attention to environmental protection. This is due in large part to China's greater emphasis on ecological transition. The environmental management policy, namely ecological civilization, was initiated by the Chinese government in 2017 to realize a beautiful China. At the General Debate of the 75th UN General Assembly, it was proposed that "China will increase its independent contribution by more effective policies and measures. China will strive to reach the peak of carbon dioxide emissions by 2030, and achieve carbon neutrality by 2060." This shows that CNPC's business strategy serves the macro goals and policies of China. The energy transition must be greatly accelerated under the guidance of the new energy security strategy and the requirements of the "Peak Carbon, Carbon Neutrality" goal.

6.2. The Managerial Implications

The above similarities and differences in CNPC and CHV's CSR image construction demonstrate that the political and cultural contexts in which a company is located play a decisive role in the content and form of corporate discourse. Common industry characteristics and prospects, the specific period of human development, and the common perception of global public have led to the construction of similar images for Chinese and American oil companies, such as the emphasis on sustainability, climate change, and environmental protection. It is aimed to overturn the stereotypical impression that fossil energy companies represent pollution and unsustainability in the public mind. The high degree of national and ethnic identity of CNPC reflects its social mission as a state-owned enterprise. CHV, as the world's leading multinational business group, provides an example for transnational enterprises in terms of carbon management, environmental protection technology, and so on.

Managerial implications lie in that under the trend of economic globalization, petroleum companies should attach great importance to different political backgrounds when conducting international trade. Their CSR image construction is required to conform to the target country's social and political situation. For instance, as regards to ECSR image restoration and underpinning, the strategies of mortification, corrective action, and offensiveness elimination could be applied appropriately according to local policies and language expression culture [78]. It is necessary to develop a thorough understanding of the strategic importance of CSR, set up a comprehensive CSR operation pattern, and strengthen the development of CSR culture across various geographical scopes. Specifically, there are practical implications for Chinese and American CSR image construction in the petroleum industry when carrying on international trade.

If Chinese petroleum companies want to invest and build factories in other parts of the world, as to CSR image construction, some points can be paid attention to. (1) In addition to highlighting the national and ethnic identities, it is essential to strengthen the construction of international identity and focus on discourses on human well-being. (2) More emphasis should be given to international cooperation and global welfare. In terms of discursive representation, it will be beneficial for a company to establish itself as a global player. (3) More attention should be paid to corporate norms and modern management. A pioneering enterprise with standardized management and a modern enterprise with multiple participants will receive more recognition from local investors, consumers, communities, and banks. (4) A company should adapt itself to environmental processes in developed countries. Western countries put more emphasis on carbon emissions rather than pollution governance. Chinese petroleum enterprises have taken many positive measures in energy conservation, emission reduction, energy efficiency, and climate change; CSR image discursive construction in this aspect could be further strengthened in the future.

As to American oil companies, they may consider a few factors when building their CSR images in emerging markets. (1) Be acquainted with the local social and political system. For instance, it is essential to construct CSR images in alignment with local policies and guidelines. (2) Identify local and national culture, such as the predominant sentiment of patriotism and collectivism in China. (3) Comply with the local environmental governance. It is important to describe how to mitigate pollution as to ECSR image construction. (4) Be responsive to local language features. Some fixed expressions such as "ecological civilization", "lucid waters and lush mountains are invaluable assets", "wage a determined battle to prevent and control pollution", and "human community with a shared future" could recur in local CSR reports.

7. Conclusions

The findings reveal that images constructed by CNPC and CHV in their CSR reports have complex and dynamic characteristics as a result of political, social, cultural, and economic backgrounds. As fossil fuel companies in environmentally sensitive industries, CNPC and CHV are conscious of the non-sustainable nature of their main business. Simi-

larly, both try to construct their ecological images. CNPC tends to construct its image as a national one, highlighting its role as a state-owned enterprise, while CHV constructs its image as a multinational corporate that is not closely tied to its home state. As a leading global company, CHV does not tend to manifest much national interest orientation. Under different socio-cultural contexts, their basic positioning, as well as environmental concepts and targets, implementation paths, and changes with time often differ from each other.

With the trend of economic and trade globalization, petroleum companies are bound to trade and open branches in foreign countries. This study thus puts forward some suggestions for CSR image construction when oil enterprises conduct transnational trade: the balance of national identities and international images, complying with local political rules, adapting to local environmental stages, weighing collectivism and individualism cultures, the adaptation to local language expressions and image repair discursive strategies, and so forth. These proposals may also be useful for other overseas companies in different regions and industries.

The first contribution of this study is the methodological improvement by integrating insights and methods from political science, management, communications, linguistics, and data science. By combining discourse analysis and corpus linguistics in the study of corporate image, the scope of corporate communication and image management in business is expanded. Second, the study provides a new perspective for analyzing motivations, efforts, and means in the construction of CSR images. Third, it adds to our knowledge of the complexities of corporate images in a long-term social change process. It also demonstrates how underlying dynamics such as political systems, historical reasons, and cultural background contribute to this diversity. It should be acknowledged that this research examines the construction of corporate images from the perspective of the company itself. Further research is needed to explore from other perspectives, such as how stakeholders or consumers depict CSR images of petroleum corporates. Moreover, the comparison of corporate discursive image construction between different countries, the subject and object, as well as the past and the present are also worth further study.

Author Contributions: Conceptualization, X.W., X.Z., Y.W. and S.L.; methodology, X.W., X.Z. and Y.W.; software, X.W.; validation, X.W. and X.Z.; formal analysis, X.W.; investigation, X.W.; resources, X.W.; data curation, X.W.; writing—original draft preparation, X.W.; writing—review and editing, X.Z.; visualization, X.W.; supervision, X.Z.; project administration, X.Z.; funding acquisition, X.Z. All authors have read and agreed to the published version of the manuscript.

Funding: This research was supported by Humanities and Social Sciences Fund Project of the China Ministry of Education (no. 21YJA740055).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The original CSR report data of CNPC and CHV were obtained from their official websites. Access to Wmatrix 4 was purchased by China University of Petroleum-Beijing, where the authors study or work, as part of the resources for study. Data related to statistics of word frequency and collocations used to support the findings of this study are included within the article. The complete keyword list, wordlist, and semantic domains generated by Lancsbox, Wmatrix 4, and Sketch Engine used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Nawrocki, T.L.; Szwajca, D. A multidimensional comparative analysis of involvement in CSR activities of energy companies in the context of sustainable development challenges: Evidence from Poland. *Energies* **2021**, *14*, 4592. [\[CrossRef\]](#)
2. Jose, A.; Lee, S.-M. Environmental Reporting of Global Corporations: A Content Analysis based on Website Disclosures. *J. Bus. Ethics* **2007**, *72*, 307–321. [\[CrossRef\]](#)
3. Jaworska, S. Change But no Climate Change: Discourses of Climate Change in Corporate Social Responsibility Reporting in the Oil Industry. *Int. J. Bus. Commun.* **2018**, *55*, 194–219. [\[CrossRef\]](#)

4. O'Connor, A.; Gronewold, K.L. Black gold, green earth: An analysis of the petroleum industry's CSR environmental sustainability discourse. *Manag. Commun. Q.* **2013**, *27*, 210–236. [\[CrossRef\]](#)
5. Agudelo, M.A.L.; Johannsdottir, L.; Davidsdottir, B. Drivers that motivate energy companies to be responsible. A systematic literature review of Corporate Social Responsibility in the energy sector. *J. Clean. Prod.* **2020**, *247*, 119094. [\[CrossRef\]](#)
6. Curran, G. Social licence, corporate social responsibility and coal seam gas: Framing the new political dynamics of contestation. *Energy Policy* **2017**, *101*, 427–435. [\[CrossRef\]](#)
7. Bolton, S.C.; Kim, R.C.-H.; O'Gorman, K.D. Corporate Social Responsibility as a Dynamic Internal Organizational Process: A Case Study. *J. Bus. Ethic* **2011**, *101*, 61–74. [\[CrossRef\]](#)
8. Dong, S.; Xu, L. The impact of explicit CSR regulation: Evidence from China's mining firms. *J. Appl. Account. Res.* **2016**, *17*, 237–258. [\[CrossRef\]](#)
9. World Bank. World Development Indicators: Environment. 2014. Available online: <http://data.worldbank.org/topic/environment> (accessed on 28 September 2022).
10. Morsing, M.; Roepstorff, A. CSR as corporate political activity: Observations on IKEA's CSR identity–image dynamics. *J. Bus. Ethics* **2015**, *128*, 395–409. [\[CrossRef\]](#)
11. Iqbal, J.; Hussain, S.; Khan, K. The use of Corporate Social Responsibility (CSR) as a political tool: A case study of tobacco industry in Swabi Pakistan. *Lib. Arts Soc. Sci. Int. J.* **2021**, *5*, 509–597. [\[CrossRef\]](#)
12. Hofstede, G. Cultural constraints in management theories. *Acad. Manag. Perspect.* **1993**, *7*, 81–94. [\[CrossRef\]](#)
13. Shao, H.H. *A Contrastive Study of the Construction of Corporate Environmental Protection Image in Chinese and American Energy Companies' Corporate Social Responsibility Reports from the Perspective of Multimodality*; Guangdong University of Foreign Studies: Guangdong, China, 2021. [\[CrossRef\]](#)
14. Zhang, H. *A Comparison of Corporate Image in Sino-American Corporate Social Responsibility Reports of Telecom Based on Appraisal Theory*; Southwestern University of Finance and Economics: Chengdu, China, 2021. [\[CrossRef\]](#)
15. Lin, Y. Legitimation strategies in corporate discourse: A comparison of UK and Chinese corporate social responsibility reports. *J. Pragmat.* **2021**, *177*, 157–169. [\[CrossRef\]](#)
16. Burke, K. *A Rhetoric of Motives*; University of California Press: Berkeley, CA, USA, 1969.
17. Pollach, I. Issue Cycles in Corporate Sustainability Reporting: A Longitudinal Study. *Environ. Commun.* **2016**, *12*, 247–260. [\[CrossRef\]](#)
18. Bowen, H.R. *Social Responsibilities of the Businessman*; Harper & Row: New York, NY, USA, 1953.
19. Davis, K. Can Business Afford to Ignore Social Responsibilities? *Calif. Manag. Rev.* **1960**, *2*, 70–76. [\[CrossRef\]](#)
20. Carroll, A.B. A Three-Dimensional Conceptual Model of Corporate Performance. *Acad. Manag. Rev.* **1979**, *4*, 497. [\[CrossRef\]](#)
21. Carroll, A.B. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Bus. Horiz.* **1991**, *34*, 39–48. [\[CrossRef\]](#)
22. European Commission. *Corporate Social Responsibility: A Business Contribution to Sustainable Development*; Office for Official Publications of the European Communities: Luxembourg, 2002.
23. Dahlsrud, A. How corporate social responsibility is defined: An analysis of 37 definitions. *Corp. Soc. Responsib. Environ. Manag.* **2008**, *15*, 1–13. [\[CrossRef\]](#)
24. Martinuzzi, A.; Krumay, B.; Pisano, U. Focus CSR: The new communication of the EU commission on CSR and national CSR strategies and action plans. *Eur. Sustain. Develop. Netw.* **2011**, *23*, 6. Available online: https://www.esdn.eu/fileadmin/ESDN_Reports/2011-December-The_New_Communication_of_the_EU_Commission_on_CSR_and_National_CSR_strategies.pdf (accessed on 13 June 2022).
25. Odriozola, M.D.; Baraibar-Diez, E. Is Corporate Reputation Associated with Quality of CSR Reporting? Evidence from Spain. *Corp. Soc. Responsib. Environ. Manag.* **2017**, *24*, 121–132. [\[CrossRef\]](#)
26. Golob, U.; Podnar, K.; Elving, W.J.; Nielsen, A.E.; Thomsen, C.; Schultz, F. CSR communication: Quo vadis? *Corp. Commun. Int. J.* **2013**, *18*, 176–192. [\[CrossRef\]](#)
27. Andrea, P. Corporate reputation and CSR reporting to stakeholders: Gaps in the literature and future lines of research. *Corp. Commun. Int. J.* **2015**, *20*, 11–29.
28. Sun, Y.; Jin, G.; Yang, Y.; Zhao, J. Metaphor Use in Chinese and American CSR Reports. *IEEE Trans. Dependable Secur. Comput.* **2018**, *61*, 295–310. [\[CrossRef\]](#)
29. Kim, J.; Song, H.; Lee, C.-K.; Lee, J.Y. The impact of four CSR dimensions on a gaming company's image and customers' revisit intentions. *Int. J. Hospitality Manag.* **2017**, *61*, 73–81. [\[CrossRef\]](#)
30. Tran, M.A.; Nguyen, B.; Melewar, T.; Bodoh, J. Exploring the corporate image formation process. *Qual. Mark. Res. Int. J.* **2015**, *18*, 86–114. [\[CrossRef\]](#)
31. Zhong, Y.; Zhu, W.; Zhou, Y. CSR Image Construction of Chinese Construction Enterprises in Africa Based on Data Mining and Corpus Analysis. *Math. Probl. Eng.* **2020**, *2020*, 7259724. [\[CrossRef\]](#)
32. Nguyen, N.; Leblanc, G. Corporate image and corporate reputation in customers' retention decisions in services. *J. Retail. Consum. Serv.* **2001**, *8*, 227–236. [\[CrossRef\]](#)
33. Liu, Z.F. *Corporate Social Responsibility and Corporate Image Building*; China Financial & Economic Publishing House: Beijing, China, 2008.
34. Bendell, J. 2010: World Review. The use of CSR communication. *J. Corp. Citizsh.* **2010**, *40*, 6–25.

35. Nielsen, A.E.; Thomsen, C. Corporate Social Responsibility (CSR) Management and Marketing Communication: Research Streams and Themes. *Hermes J. Lang. Commun. Bus.* **2012**, *25*, 49–6565. [\[CrossRef\]](#)
36. Alam, S.M.; Islam, K.M. Examining the role of environmental corporate social responsibility in building green corporate image and green competitive advantage. *Int. J. Corp. Soc. Responsib.* **2021**, *6*, 8. [\[CrossRef\]](#)
37. Ambec, S.; Lanoie, P. Does it pay to be green? A systematic overview. *Acad. Manag. Perspect.* **2008**, *22*, 45–62.
38. Porter, M.E.; van der Linde, C. Green and competitive. *Harv. Bus. Rev.* **1995**, *73*, 120–134.
39. Sellitto, M.A.; Hermann, F.F. Influence of Green Practices on Organizational Competitiveness: A Study of the Electrical and Electronics Industry. *Eng. Manag. J.* **2019**, *31*, 98–112. [\[CrossRef\]](#)
40. Dutta, K.; Umashankar, V.; Choi, G.; Parsa, H. A Comparative Study of Consumers' Green Practice Orientation in India and the United States: A Study from the Restaurant Industry. *J. Foodserv. Bus. Res.* **2008**, *11*, 269–285. [\[CrossRef\]](#)
41. Cronin, J.J.; Smith, J.S.; Gleim, M.R.; Ramirez, E.; Martinez, J.D. Green marketing strategies: An examination of stakeholders and the opportunities they present. *J. Acad. Mark. Sci.* **2010**, *39*, 158–174. [\[CrossRef\]](#)
42. Amores-Salvadó, J.; Castro, G.M.-D.; Navas-López, J.E. Green corporate image: Moderating the connection between environmental product innovation and firm performance. *J. Clean. Prod.* **2014**, *83*, 356–365. [\[CrossRef\]](#)
43. Alvesson, M.; Kärreman, D. Taking the linguistic turn in organizational research: Challenges, responses, consequences. *J. Appl. Behav. Sci.* **2000**, *36*, 136–158. [\[CrossRef\]](#)
44. Yu, D.; Bondi, M. The generic structure of CSR reports in Italian, Chinese, and English: A corpus-based analysis. *IEEE Trans. Prof. Commun.* **2017**, *60*, 273–291. [\[CrossRef\]](#)
45. Fuoli, M. Assessing social responsibility: A quantitative analysis of Appraisal in BP's and IKEA's social reports. *Discourse Commun.* **2012**, *6*, 55–81. [\[CrossRef\]](#)
46. Catenaccio, P. *Understanding CSR Discourse: Insights from Linguistics and Discourse Analysis*; Arcipelago Edizioni: Milano, Italy, 2012.
47. Bhatia, A. International genre, local flavor: Analysis of PetroChina's corporate and social responsibility report. *Rev. Signos* **2013**, *46*, 307–331. [\[CrossRef\]](#)
48. Fowler, R.; Hodge, B.; Kress, G.; Trew, T. *Language and Control*; Longman: London, UK, 1979.
49. Fairclough, N. *Critical Discourse Analysis: Papers in the Critical Study of Language*; Longman Group Ltd.: London, UK, 1995.
50. Wodak, R. *The Discourse of Politics in Action: Politics as Usual*; Palgrave: Basingstoke, UK, 2011.
51. Wodak, R.; Forchtner, B. *The Routledge Handbook of Language and Politics*; Routledge: New York, NY, USA, 2018.
52. Wang, H.; Ge, Y. Negotiating national identities in conflict situations: The discursive reproduction of the Sino-US trade war in China's news reports. *Discourse Commun.* **2019**, *14*, 65–83. [\[CrossRef\]](#)
53. Moore, K.; Mason, P.; Lewis, J. *Images of Islam in the UK: The Representation of British Muslims in the National Print News Media 2000–2008*; Cardiff School of Journalism, Media and Cultural Studies: Cardiff, UK, 2008.
54. Baker, P.; Gabrielatos, C.; McNery, T. *Discourse Analysis and Media Attitudes: The Representation of Islam in the British Press*; Cambridge University Press: Cambridge, UK, 2013.
55. Baker, P. *Using Corpora in Discourse Analysis*; Continuum: London, UK, 2006.
56. Flowerdew, J.; Richardson, J.E. (Eds.) *The Routledge Handbook of Critical Discourse Studies*; Routledge: New York, NY, USA, 2018.
57. Van Dijk, T.A. *Discourse and Power*; Palgrave Macmillan: New York, NY, USA, 2008.
58. Van Dijk, T.A. Critical Discourse Studies: A sociocognitive approach. In *Methods of Critical Discourse Studies*; Wodak, R., Meyer, M., Eds.; SAGE: London, UK, 2016; pp. 62–86.
59. Pei, J.; Li, D.; Cheng, L. Media portrayal of hackers in China Daily and The New York Times: A corpus-based critical discourse analysis. *Discourse Commun.* **2022**, *16*, 598–618. [\[CrossRef\]](#)
60. Hart, C.; Cap, P. Introduction. In *Contemporary Critical Discourse Studies*; Hart, C., Cap, P., Eds.; Bloomsbury: London, UK, 2014; pp. 1–15.
61. Chen, F.; Wang, G. A war or merely friction? Examining news reports on the current Sino-U.S. trade dispute in The New York Times and China Daily. *Crit. Discourse Stud.* **2020**, *19*, 1–18. [\[CrossRef\]](#)
62. Partington, A. Corpora and discourse, a most congruous beast. In *Corpora and Discourse*; Partington, A., Morley, J., Haarman, L., Eds.; Peter Lang: Bern, Switzerland, 2004; pp. 11–20.
63. Widdowson, H.G. On the limitations of linguistics applied. *Appl. Linguist.* **2000**, *21*, 3–25. [\[CrossRef\]](#)
64. Widdowson, H.G. *Text, Context, Pretext: Critical Issues in Discourse Analysis*; Blackwell: Oxford, UK, 2004.
65. Baker, P.; Gabrielatos, C.; KhosraviNik, M.; Krzyżanowski, M.; McNery, T.; Wodak, R. A useful methodological synergy? Combining critical discourse analysis and corpus linguistics to examine discourses of refugees and asylum seekers in the UK press. *Discourse Soc.* **2008**, *19*, 273–306. [\[CrossRef\]](#)
66. Hunston, S. *Corpora in Applied Linguistics*; Cambridge University Press: Cambridge, UK, 2002.
67. Love, R.; Baker, P. The hate that dare not speak its name? *J. Lang. Aggress. Confl.* **2015**, *3*, 57–86. [\[CrossRef\]](#)
68. Lee, D.Y.W. Corpora and Discourse Analysis: New Ways of Doing Old Things. In *Advances in Discourse Studies*; Bhatia, V.K., Flowerdew, J., Jones, R.H., Eds.; Routledge: London, UK, 2008; pp. 86–99.
69. McNery, T.; Wilson, A. *Corpus Linguistics: An Introduction*, 2nd ed.; Edinburgh University Press: Edinburgh, UK, 2001.
70. Freake, R.; Gentil, G.; Sheyholislami, J. A bilingual corpus-assisted discourse study of the construction of nationhood and belonging in Quebec. *Discourse Soc.* **2011**, *22*, 21–47. [\[CrossRef\]](#)

-
71. Rayson, P. Wmatrix: A Web-Based Corpus Processing Environment. 2011. Available online: <http://ucrel.lancs.ac.uk/wmatrix/> (accessed on 13 June 2022).
 72. McArthur, T. *Longman Lexicon of Contemporary English*; Longman: London, UK, 1981.
 73. Rayson, P.; Archer, D.; Piao, S.; McEnery, A.M. The UCREL semantic analysis system. In Proceedings of the Workshop on Beyond Named Entity Recognition Semantic Labelling for NLP Tasks in Association with the 4th International Conference on LREC, Lisbon, Portugal, 25 May 2004.
 74. Higuchi, K. KH Coder v. 3.00. 2016. Available online: <http://khcoder.net/en/> (accessed on 20 August 2022).
 75. Higuchi, K. KH Coder 3 Reference Manual. 2016. Available online: http://khcoder.net/en/manual_en_v3.pdf (accessed on 20 August 2022).
 76. Sinclair, J. *Corpus, Concordance, Collocation*; Oxford University Press: Oxford, UK, 1991.
 77. Brezina, V.; Weill-Tessier, P.; McEnery, A. #LancsBox v. 5.x. 2020. Available online: <http://corpora.lancs.ac.uk/lancsbox> (accessed on 3 June 2022).
 78. Benoit, W.L. *Accounts, Excuses, and Apologies: Image Repair Theory and Research*; SUNY Press: Albany, Australia, 2015.