

## Article

# Marketing Communication and Reputation Building of Leading European Oil and Gas Companies on Instagram

Nikola Sagapova \*, Radim Dušek and Petra Pártlová 

Department of Tourism and Marketing, Institute of Technology and Business in České Budějovice (VŠTE), 370 10 České Budějovice, Czech Republic

\* Correspondence: sagapova@mail.vstecb.cz

**Abstract:** The overall transition towards a low-carbon economy is expected to pose a solution for several global problems, including the ongoing climate change while ensuring economic and social development. Large oil and gas companies are aware of the need to transform their business, turn to renewable and clean energy sources to build a positive image and reputation, and have the economic power to do so. This paper aims to evaluate the marketing communication of leading European oil and gas companies on their Instagram accounts in the context of reputation building through using social media and identify to what extent the companies reflect the environmental aspects of corporate social responsibility. Content analysis and the Social Blade tool were used to examine the marketing communication of the five biggest companies by revenue. All the companies are active on Instagram, but it has been found that the Russian companies have remained inactive and have even been losing followers since March 2022, when the war conflict in Ukraine started. Surprisingly, Shell uploaded only a few posts during the reference period but is recognized as the company achieving the highest social media effectiveness. Although all observed oil and gas companies continue their business as usual, they incorporate and communicate efforts to support the development of electromobility, clean and renewable energy projects, as well as ecological projects.

**Keywords:** oil; gas; companies; energy; climate; crisis; reputation; marketing communication; social media



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## 1. Introduction

The transition towards sustainable development through a green and low-carbon economy appears to be crucial when addressing global problems, such as climate change, environmental degradation, biodiversity loss, and other forms of ecological breakdown, poverty, migration, food security, or external vulnerability [1]. Many of these problems are interrelated, complex, and cumulative, adding to the negative impacts and pressures on societies, economies, and ecosystems [2,3]. The pursuit of sustainable development is desirable because human well-being depends directly on environmental quality and preserved nature, and sustainable development improves social, cultural, as well as economic conditions [4]. There are several industries associated with pollution to a larger extent, including the oil and gas industries, which are implementing green innovation while trying to improve organizational and ecological efficiency, stay competitive, and attract investors [5]. Although the transition to a decentralized and decarbonized system of sustainable energy supply poses many challenges and risks, in the long term, it leads to both economic growth and an improvement in environmental quality with generally positive effects on sustainable production and consumption patterns [6,7]. Some large oil and gas companies have realized the need to act and have started various activities related to low-carbon transformation, including setting emission limits, investments in cleaner technologies and renewable energy, etc. [8]. By doing so, these traditional companies not only contribute to a greener future, but their commitments to sustainability and

environmental and social responsibility are crucial from the perspective of improving their reputation [9]. To improve the image, branding, reputation, and position, as well as to appeal to consumers and gain a competitive advantage, companies are turning to green marketing to promote their environmental efforts [10,11]. On the other hand, greenwashing, false solutions, as well as avoiding costly emission reduction are in conflict with the efforts to solve environmental issues, including the climate, since companies try to carry out business greenwashing as usual and make decisions that are in their financial interest, regardless of whether it means continuing the extraction of fossil fuels or destruction of ecosystems, although their products are claimed to be greener, and they carry out activities such as tree planting [12]. Greenwashing increases the costs of promotion that are invested in mimicking CSR investing, as a profit maximizer tries to pretend to be a responsible firm [13]. Greenwashing practices misinform about the eco-friendliness of products and their impacts on the environment, deceive consumers, and increase the consumption of seemingly greener products, which can harm actual green consumption [14].

Moreover, due to the high investment costs necessary for a transition towards providing greener energy, and the core business of oil companies, which is still based on one of the biggest sources of pollution and supported by lobbying and greenwashing, the distrust of consumers and investors in their claims and activities is high [15]. This situation is compounded by the media and public that commonly share the negatives of the sector. Therefore, it is difficult for an oil or gas company to create and maintain a positive image and reputation. Some oil and gas companies focus on extensive media coverage, including social media, for their marketing communication. Social media interaction became even more popular during the COVID-19 pandemic, accelerating the transition from offline to online, as the use of digital marketing tools became a necessity for many entities [16,17]. Social media platforms can be used to communicate and interact with stakeholders, as well as to build and maintain a company's reputation. On the other hand, a single post can make or break a reputation. The Internet has impacted corporate reputation as such by providing globally and publicly shared information, data, and knowledge that used to be local and private. Competent marketing managers must understand the cultural and technical differences between the online and offline worlds in order to build, maintain, protect, and enhance their companies' reputations. Reputation can be positively influenced by positive reviews, awards, philanthropy, CSR, customer care, sponsorship, employee satisfaction, and also by promoting tradition, quality, ecology, and innovative technologies [18,19]. Nevertheless, apart from effective marketing communication, oil and gas companies can manage environmental accounting to both earn a good reputation and control the risks as environmental costs are a part of their production costs and as environmental regulations and penalties for environmental violations increase. Moreover, companies are becoming aware of the need to be involved in environmental events, actions, and initiatives as environmental consciousness begins to be recognized [20].

Given the current global energy crisis, it seems logical to prioritize renewable energy resources, especially solar, wind, hydro, and biomass energy, as a solution to environmental issues while satisfying human needs. Yet, many countries depend on traditional energy resources, including fossil ones [21]. From the perspective of Europe, which has been experiencing several crises recently, including the COVID-19 pandemic, energy crisis, and war conflict in Ukraine, the need for providing affordable energy becomes even more urgent as the EU stays highly dependent on fossil fuels imports from Russia, and as the energy poverty is increasing [22,23]. An impetus to act was provided by Gazprom when it stopped its supplies to some European countries and as the public became frustrated by supporting the Russian invasion through fossil fuels payments. Therefore, some countries started turning to renewable energy sources [24], while many others turned to coal, which meant reopening, considering reopening closed coal plants and coal mines, postponing their closure, or even considering opening new coal mines to overcome problems with high prices and energy security concerns regardless of promises at the COP26 climate summit to phase out coal-fired power generation [25]. To ensure energy security for Europe, the imports of

energy sources from other regions of the world, including Central Asia, Algeria, the United States of America, and Qatar, are also considered [26]. The corporate environment and the management, regardless of the company's size or sector, are critical when dealing with new phenomena, events, or even chaos [27]. The potential ability to overcome the hardships caused by internal and external factors, including the changes in environmental policies, prices of raw materials, as well as the above-mentioned international conflicts, depends on the company's management and its organization [28]. The current specific situation poses another chance for traditional companies in the energy sector to play a key role depending on their economic power, management, and willingness to invest in alternative energy resources and other socially acceptable initiatives while continuing their regular business in energy supplies, yet improving their reputation, and "saving the day". With the increasing importance of reputation building through social media, the number of studies on this topic is also increasing, but the topic of effective communication on Instagram and the analysis of the communicated content from the perspective of CSR in the oil and gas sector has not yet received much attention in academia. For this reason, we focus our research on this area at a time when energy is an important issue, including the positive reputation of companies operating in this field.

The main objective of the paper is to evaluate the marketing communication of leading European oil and gas companies on their Instagram accounts in the context of image and reputation building through using social media and to identify whether and to what extent the companies include the environmental aspects of corporate social responsibility (CSR) in their Instagram marketing communication.

To meet the objective, the following research questions are formulated:

- (1) What is the activity of individual examined European oil and gas companies on their official Instagram accounts?
- (2) Which of the analyzed oil and gas companies achieved the highest annual average number of interactions of social network users per post published on the official Instagram account?
- (3) What efforts and activities related to the environmental dimension of corporate social responsibility are the oil and gas companies communicating on Instagram between 1 September 2021 and 31 August 2022?

## 2. Materials and Methods

In order to select leading oil and gas companies in Europe for the purposes of the research, leading oil and gas companies for 2022 were chosen according to their revenue in billions of USD. The list of companies released on the Statista portal [29] includes a total of 15 largest world oil and gas companies. The ranking was compiled in June 2022 on the basis of the latest available data on revenue by the portal. In relation to the goal of the paper, 5 of the largest European oil and gas companies by revenue were selected. The selected companies, which are further analyzed within this research, are presented in Table 1.

**Table 1.** Leading oil and gas companies in Europe based on revenue as of 2022.

Company Name	Country	Revenue (in Billions USD)
Shell, PLC	United Kingdom	290
Total Energies	France	210
Gazprom	Russia	176
BP	United Kingdom	172
Lukoil	Russia	169

In the next step, the official Instagram accounts of all oil and gas companies were searched and analyzed. The names of the individual analyzed companies' official Instagram accounts are presented in the Results chapter. Although there are other social media platforms that seem relevant to this study (Twitter or Facebook), Instagram was chosen because it is the platform where all selected companies have their official accounts, unlike

the other networks. In the case of the Russian companies, it was also the most relevant social network in terms of the number of followers. Next, the following data were collected for individual Instagram accounts using the online tool Social Blade [30]:

- 1) Number of uploaded media (number of posts);
- 2) Number of likes;
- 3) Number of comments;
- 4) Number of followers;
- 5) Number of gained new followers per month (only 2019–2022 period).

The above data were collected as of 7 September 2022. The data obtained were then tabulated. The presented values concerning the activity on Instagram are as of the aforementioned date (7 September). The official profiles chosen for the purposes of the study presented include @shell, @totalenergies, @gazprom\_neft.ru, @bp\_plc, and @lukoil.

To determine the effectiveness of the published Instagram posts for individual examined oil and gas companies, the index of Social Media Effectiveness (SME) was created. This index was used in the authors' previous study concerning the evaluation of the social media effectiveness of top European tourism destinations [31]. In addition to the number of published posts, the index also considers the period for which the individual accounts were active on Instagram (i.e., from the account creation to 2022). The results of the index thus indicate the average level of effectiveness of individual profiles of the analyzed companies for one year according to the substituted variable. After substituting relevant values (number of likes, comments, and followers), the result of the index shows the average annual increase in a given variable per published post, e.g., the number of new followers, likes, or comments (see Table 3).

$$\text{Social Media Effectiveness } variable_{company} = \text{variable} / \text{total posts (current year—year of account creation)} \quad (1)$$

where social media, in this case, is Instagram, and the variables are the sum of likes, the sum of comments, and the sum of followers. The above process is shown for the example of Shell company and its Instagram account:

$$\text{Instagram Effectiveness } likes_{shell} = \text{sum of likes} / \text{total Instagram posts (2022—year of account creation)} \quad (2)$$

For the assessment of uploads related to the environmental dimension of CSR, content analysis was used, including both qualitative and quantitative approaches. This method is relevant as it can be applied to different data sources, including textual, visual, and audio files [32]. As for oil and gas companies, content analysis has also been used in several studies concerning CSR and sustainability [33–35]. The data for the study submitted were obtained directly from the companies' official Instagram profiles. The performed content analysis focused on the feeds and their textual description, while the so-called stories were neglected, although some of them could be saved by the companies. The study was conducted within one year, specifically from 1 September 2021 to 31 August 2022, and included the total number of posts in the given period, the total number of posts related to the environmental dimension of CSR, as well as the published content concerning environmental aspects of CSR. The qualitative approach enables determining how and which topics the companies communicated in the period under review. The relevant environmental content was transcribed and coded so that further interpretation was possible.

### 3. Results

#### 3.1. Instagram Activity of Analyzed Oil and Gas Companies

The growing popularity of graphic content on Instagram (launched in 2010) was an incentive for some of the analyzed oil and gas companies to create their official Instagram accounts in the years 2013–2014. The first posts to attract potential Instagram followers were published by Shell, Total Energies, and Lukoil. BP followed in 2015, but Gazprom started to use Instagram relatively late compared to the other companies (see Table 2).

**Table 2.** Official Instagram profiles of analyzed oil and gas companies and their activity.

Company	Account Created	Posts	Likes	Avg. Likes	Comments	Avg. Comments	Followers
Shell, PLC	2013	623	3,204,556	5144	1,028,573	1651	397,353
Total Energies	2014	230	35,880	156	10,766	47	110,193
Gazprom	2016	1639	719,619	439	12,293	8	119,583
BP	2015	1628	563,793	346	32,153	20	104,624
Lukoil	2014	961	453,775	472	19,941	21	64,438

From its launching until the beginning of September 2022, most posts were published by the Gazprom and BP official Instagram accounts. Although these accounts are the ones with the highest number of posts, their values of average likes, average comments, and the number of followers are not among the highest. As shown in Table 2, the first position in terms of the highest number of “average likes”, “average comments”, and “followers” is occupied by the official Shell Instagram account.

### 3.2. Effectiveness of Marketing Communication of Companies on Instagram

Table 3 shows the evaluation of the effectiveness of individual analyzed oil and gas companies’ Instagram accounts in the form of average values for a specific selected variable for one year on the basis of the calculated SME index.

**Table 3.** Effectiveness of content published by companies on Instagram in terms of user interaction.

Company Name	Avg. Likes per Post	Avg. New Followers per Post	Avg. Comments per Post
	(SME—PER YEAR)		
Shell, PLC	572	71	183
Total Energies	20	60	6
Gazprom	73	12	1
BP	49	9	3
Lukoil	59	8	3

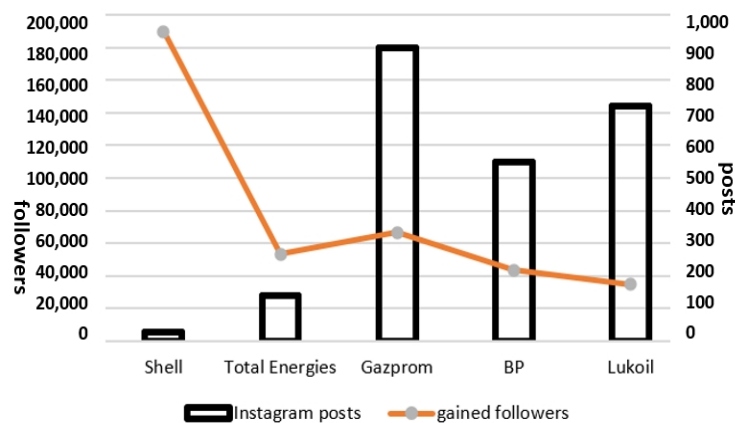
In addition to the number of published posts, likes, comments, and followers, also the period for which the individual company accounts were active (i.e., from their creation until the year 2022) is considered. As shown in the Table 3, the highest level of effectiveness was detected for the official Instagram account of Shell. The annual average numbers per published post are 572 likes, 183 comments, and 71 new followers. High values in terms of the annual average number of likes were also recorded for the accounts of Gazprom and Lukoil, while the lowest recorded value was in the case of the Total Energies account. Although Shell, as the leading oil and gas company in Europe, uploaded an average number of pictures and videos only on its Instagram account compared to the other companies under review, on average, each published post gained more than 70 new subscribers per year. In terms of the average comments per post, the highest value was recorded again in the case of the Shell account. Compared to the other analyzed official accounts, the value is significantly higher (183 avg. comments per post/year).

### 3.3. Detailed Comparison of Oil and Gas Companies’ Instagram Activity (2019–2022)

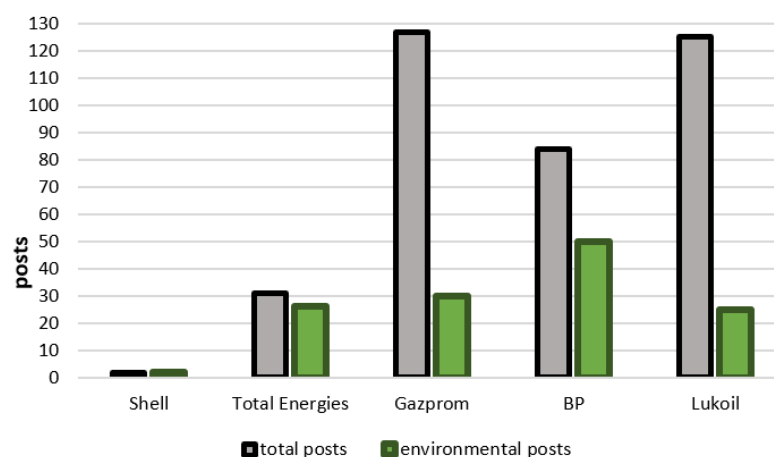
Tables 4–8 show the number of posts on Instagram and also the values of new followers for individual profiles of all analyzed oil and gas companies. The values are presented for individual months in the period 2019–2022. Aggregated values for the whole monitored period (the number of published posts and new followers) for individual oil and gas companies are shown in Figure 1.

Figure 2 shows the total number of posts uploaded within a one-year period between September 2021 and August 2022, as well as the number of posts that reflect the environmental aspects of corporate social responsibility. Although some companies, such as Shell

and Total Energies, were not very active in terms of uploading posts to their feed, the resulting percentage of environment-related posts to the total number of posts is high. In the case of Shell, it is 100%; in the case of Total Energies, it is almost 84%, while the more active companies show a lower percentage. Specifically, it was 60% for BP, 20% for Lukoil, and over 23% for Gazprom.



**Figure 1.** Comparison of analyzed oil and gas companies' Instagram activity in period 2019–2022.



**Figure 2.** The total number of posts and the number of environment-related posts in 1-year period.

### 3.3.1. Shell (United Kingdom)

Table 4 shows interesting results concerning the oil and gas company Shell.

Of all of the analyzed profiles, Shell showed the lowest activity in terms of published content, as only 29 posts were published between January 2019 and August 2022. However, the exact opposite can be seen in the number of new followers per month, as the results of Shell in this respect are significantly better than the results of the other five companies. In less than 4 years, Shell was able to acquire about 190 thousand new followers of its official Instagram profile. As for the Instagram posts reflecting CSR in the context of the environment, Shell focuses on electric vehicles, presents its effort to innovate them and improve their efficiency, but also to widen its charging network globally.

### 3.3.2. Total Energies (France)

During 2019, the official profile of Total Energies showed very low activity, as only two posts were published. The situation changed in 2020 when several posts were released weekly, especially in the spring months, which meant an increase in the number of new followers. Increased activity on the profile was also recorded in the spring of the next year; however, between April and December, the activity on the profile was again zero in terms

of posting new posts. Within the first 8 months of the year 2022, a total of 28 new posts were published (see Table 5).

**Table 4.** Shell’s Instagram activity in period 2019–2022.

Month	2019		2020		2021		2022	
	Posts	New Follows	Posts	New Follows	Posts	New Follows	Posts	New Follows
January	0	2832	0	3623	1	1936	1	3423
February	0	3669	1	3958	2	2015	0	5461
March	0	3733	0	3910	0	4418	0	9802
April	4	3892	0	2607	0	2729	0	9387
May	3	4335	3	1751	0	3369	0	4403
June	0	4435	2	3294	0	2848	0	8631
July	2	3366	0	3467	1	3820	0	8347
August	0	3516	0	4147	0	4666	0	8407
September	2	3874	0	2772	0	3729	-	-
October	2	4807	0	3837	0	4392	-	-
November	0	5964	0	2519	0	4356	-	-
December	1	6521	0	2519	0	4356	-	-
<b>Total</b>	<b>17</b>	<b>50,944</b>	<b>6</b>	<b>39,079</b>	<b>5</b>	<b>41,732</b>	<b>1</b>	<b>57,861</b>

**Table 5.** Total Energies’ Instagram activity in period 2019–2022.

Month	2019		2020		2021		2022	
	Posts	New Follows	Posts	New Follows	Posts	New Follows	Posts	New Follows
January	1	1924	0	1289	0	1949	2	1557
February	0	349	0	1165	0	824	0	1292
March	0	1032	8	834	3	1085	7	1464
April	0	686	23	1444	12	1060	2	1343
May	0	986	20	1691	0	2073	1	1304
June	0	1153	14	1868	0	2048	2	1002
July	1	970	6	1412	0	2024	9	1042
August	0	1000	4	1376	0	586	5	1425
September	0	863	5	992	0	630	-	-
October	0	-659	7	1216	0	1266	-	-
November	0	1584	1	1221	0	1421	-	-
December	0	1139	0	1169	7	1078	-	-
<b>Total</b>	<b>2</b>	<b>11,027</b>	<b>88</b>	<b>15,677</b>	<b>22</b>	<b>16,044</b>	<b>28</b>	<b>10,429</b>

As for the posts concerning the environmental aspect of CSR, Total Energies presents itself as a multi-energy company that deals with various renewable energy resources within energy transition, especially solar and wind energy, but also considers the role of alternative fuels such as natural gas, biofuels, green hydrogen, which should help the transition and decarbonization of industry and transportation, as well as storage batteries. Moreover, the company also deals with the circular economy, plastic recycling, and the production of bioplastics. Total Energies also points to its own efforts concerning the respect, management, and the protection of biodiversity and wildlife, including many global initiatives, namely, e.g., replanting mangroves.

### 3.3.3. Gazprom (Russia)

Of all of the analyzed profiles of oil and gas companies, the profile of Russian Gazprom is the most active one in terms of the quantity of published content in the years 2019–2022. In the first three years of the monitored period, about 290 posts were published in the profile, which also meant a gradual increase in the number of followers. However, the situation changed in 2022. Most likely, it could be due to the invasion of Russian troops

into Ukraine and the related negative public opinion. This had two fundamental effects on the official profile in terms of the monitored variables; first, it was a significant reduction in the quantity of the published content, and second, from March 2022, a negative increase was recorded in all monthly values in terms of gained followers (see Table 6).

**Table 6.** Gazprom’s Instagram activity in 2019–2022.

Month	2019		2020		2021		2022	
	Posts	New Follows	Posts	New Follows	Posts	New Follows	Posts	New Follows
January	19	2914	15	2151	24	917	6	334
February	31	2759	14	1709	16	947	19	457
March	26	3076	20	2025	23	975	6	−979
April	24	2481	41	2527	21	1326	0	−26
May	25	1827	34	2426	31	885	0	−193
June	47	2688	31	2057	31	1807	0	−275
July	22	2621	18	2251	22	1294	6	54
August	19	3729	20	1747	21	236	0	−61
September	25	3392	25	1624	24	790	-	-
October	22	3304	18	884	19	847	-	-
November	13	2125	17	929	18	634	-	-
December	18	1760	32	1544	37	1857	-	-
<b>Total</b>	<b>291</b>	<b>32,676</b>	<b>285</b>	<b>21,874</b>	<b>287</b>	<b>12,515</b>	<b>37</b>	<b>−689</b>

Based on the content analysis performed, it was found that Gazprom deals with the environmental aspects of CRS mainly through various environmental projects and projects aimed at the development of regions and towns as well as its own companies. Great emphasis is put on the Arctic and the protection of this area and its natural inhabitants. This is evidenced by the activities aimed at cleaning the tundra, preventing the migration of reindeer, as well as by its participation in the biomonitoring the population of marine mammal population, namely Atlantic walruses, narwhals, beluga whales, and bowhead whales. Ecological projects, nature, its protection, vulnerability, and inhabitants, as well as a responsible approach to nature and the environment or the improvement of certain areas, appear relatively often in Gazprom’s posts related to the environmental dimension of CSR. Moreover, the posts also concern energy transformation, reducing carbon intensity, CO<sub>2</sub> or energy consumption, ecological treatment, and water treatment, but marginally also decarbonization and carbon capture and storage (CCS) or green aviation fuel based on raw vegetable material or achieving sustainable development goals (SDGs) and environmental, social, and corporate governance (ESG).

### 3.3.4. BP (United Kingdom)

As shown in Table 7, the analysis of the official profile of BP showed that the greatest activity in terms of published content was recorded in 2019.

However, in the next years, the activity decreased gradually. With the lower number of published posts, there was also a decrease in the monthly numbers of new values in the years 2020–2021. The results of the content analysis show that in terms of its environmental responsibility, BP tries to communicate various efforts that should lead to ensuring safe, affordable, and lower-carbon energy. The company claims to try to achieve the transition towards net zero and has the ambition to be a net zero company by 2050 or sooner. The scope of the company’s activities include electromobility and the expansion of EV charging and fast charging points, developing hydrocarbons and green hydrogen business, onshore and offshore wind projects, solar projects, fuel types, including natural gas, LNG, sustainable aviation fuel, or green biofuels based on vegetable oil or even reused cooking oil to replace diesel. Controversially, there can be seen the efforts of the company to communicate their use of current non-eco-friendly methods and investments in energy production as something that helps the company with funding the energy transition towards a low-carbon



future and boosting renewable energies. This way, the company communicates, e.g., the production of oil from oil fields in the Gulf of Mexico, gas production in Egypt, production in Castellón refinery, investments in Chery Point Refinery, North Sea oil and gas, or offshore gas discovery in Indonesia.

**Table 7.** BP's Instagram activity in period 2019–2022.

Month	2019		2020		2021		2022	
	Posts	New Follows	Posts	New Follows	Posts	New Follows	Posts	New Follows
January	22	2692	4	1185	7	6	6	756
February	25	2616	7	1961	7	145	8	818
March	32	2933	19	826	13	255	8	1049
April	29	2648	23	780	7	114	4	768
May	23	2715	23	708	6	265	6	1181
June	23	2137	19	789	14	−111	11	774
July	23	1778	6	118	24	293	5	964
August	23	2693	10	111	7	171	8	778
September	11	1985	8	220	9	377	-	-
October	10	1144	11	187	9	644	-	-
November	7	1223	5	139	6	795	-	-
December	6	833	10	326	4	687	-	-
<b>Total</b>	<b>234</b>	<b>25,397</b>	<b>145</b>	<b>7350</b>	<b>113</b>	<b>3641</b>	<b>56</b>	<b>7088</b>

### 3.3.5. Lukoil (Russia)

The Russian oil and gas company Lukoil shows a similar trend as Gazprom in terms of the activity on its Instagram account. On its profile, it published an above-average quantity of content, mainly in the years 2020 and 2021. However, the year 2022 shows similar values as Gazprom, i.e., nearly zero activity in the spring and summer months in terms of the content published and negative growth in the number of followers; nevertheless, in this case, the outflow of followers is lower than in the case of Gazprom (see Table 8).

**Table 8.** Lukoil's Instagram activity in period 2019–2022 period.

Month	2019		2020		2021		2022	
	Posts	New Follows	Posts	New Follows	Posts	New Follows	Posts	New Follows
January	7	750	13	1286	11	234	10	647
February	10	810	20	1723	16	310	12	414
March	8	939	9	1229	22	232	7	−273
April	7	937	27	942	19	195	0	8
May	12	468	36	1100	24	298	0	−40
June	9	1342	47	950	32	463	0	−59
July	4	837	23	1781	16	339	0	48
August	10	916	18	1964	18	275	2	88
September	15	2484	35	1440	28	514	-	-
October	21	2003	27	1003	17	357	-	-
November	18	1852	19	882	32	615	-	-
December	15	1615	24	234	19	614	-	-
<b>Total</b>	<b>136</b>	<b>14,953</b>	<b>298</b>	<b>14,534</b>	<b>254</b>	<b>4446</b>	<b>31</b>	<b>833</b>

The content analysis shows that in terms of environmental responsibility, Lukoil is presented by means of awards for an active corporate policy in the field of information disclosure, as well as for its annual reports, sustainability report, efforts in the area of ESG, improving the quality of greenhouse gas emission management systems, risks, and opportunities associated with the transition to a low-carbon economy in the context of climate regulation and the contribution of the company to achieving SDGs. Quite often,

there are posts related to biodiversity conservation and restoration. The company participates in efforts to conserve biodiversity, implement studies, and protect the Caspian seal and the ecological restoration of the specially protected area of the Adranov forest, the recovery of valuable fish populations (e.g., sturgeon) in the area of its activities, reforestation, or the biomonitoring of saigas. Within its transformation, the company aims to reduce the consumption of energy resources and the negative impacts on the environment, increase the effective use of energy, and increase the share of renewable resources, especially solar energy.

#### 4. Discussion

Although all of the analyzed companies use Instagram for their marketing communication, their activity, effectiveness, and the environmental dimension of CSR-related content differ. There have been some surprising findings, for example, in the case of Shell, which shows zero activity concerning uploading posts in the feed, yet it achieves the best results in terms of efficiency. This finding is in contradiction with the commonly accepted opinion that for marketing communication to be efficient, companies need to be sufficiently active in the sense of adding content. However, in terms of the effectiveness of marketing communication on social networks, the timing and quality of posts and the subject's user base are also important factors [36]. The reason for high efficiency in the case of Shell can be the highest number of followers and the fact that Shell is an easily recognizable global brand that operates in many markets. In contrast, some Russian companies that had been active in their marketing communication have ceased to post on Instagram, probably in relation to the aggression in Ukraine, and the number of their followers has significantly decreased. The Russian–Ukrainian conflict is thus likely to have damaged their reputation. In addition, Instagram and Facebook were banned in Russian territory during the first weeks of the conflict, and the Meta corporation was labeled as an extremist group [37,38]. Russia's reputation as such was ruined by the war, and many Western international companies stopped their operations there not only because of the expected economic crisis but also because of the reputational risk [39]. The consequences of the war brought difficulties for both consumers and producers. Due to the conflict, Russia became more isolated and cut off from technology and goods imports, foreign companies stopped or curtailed their operations, and the state experienced a massive brain drain. The ban on Instagram and Facebook platforms affected many entrepreneurs who based their business models on them [40]. If a company or individual wanted to remain active in the social media available in Russia at the time, the only option was the VK network, which is allied with the Russian government and immediately controlled by pro-Putin parties. The social network cooperates with the government, censorship, and intelligence agencies, and abiding to Russian law, refers to the war as a special military operation, deletes and blocks all offensive content, including information about the Russian invasion, and does not ensure the security of user data [41].

All of the analyzed companies are active in marketing communication of their efforts and activities related to clean and renewable energies and energy transition, yet they are not identical when it comes to their environmental pledges and efforts. Shell dedicates its efforts to electromobility, Total Energies to a wide scale of sources of renewable energies and circular economy, Gazprom focuses on ecological projects and nature conservation, Lukoil on the transparency of its corporate documents, management of systems in the context of climate, but is also active in biodiversity conservation, while BP has the ambition to become a net zero company by 2050 or sooner and is investing in its business, but also in renewable energy to support the transition to a lower carbon future. In addition to large oil and gas companies, various marketing efforts can also be observed among small and medium-sized companies operating on a smaller scale. However, some small and medium-sized companies indicate that marketing communication and the application of digital marketing tools is a challenge for them for many reasons, such as generational differences, limited resources, underestimation of the potential of (digital) marketing in

business practice, and focus on relationships [42]. On the other hand, digital communication improves organizational responsiveness, performance, creativity, and also the team spirit of the employees of local oil and gas companies [43]. Regardless of the size of the company in the oil and gas sector, they all face the same challenges in terms of negative brand image and reputation due to the nature of their operations and their impact on the natural environment [44]. However, green marketing, green value creation, and green improvement have a significant positive impact on the company's trustworthiness, credibility, and reputation as perceived by host communities [45]. With respect to crisis management, and the handling of environmental problems, including oil spills, it was noted that companies often do not provide information in their annual reports on the actions taken to cleanup, even though such reporting, including the amount invested, could improve their reputation and investor trust [5]. Nevertheless, upstream oil and gas companies, in particular, recognize the importance of sustainability reporting and are currently implementing it to enhance their credibility and transparency, maintain their reputation, and avoid sanctions [46]. However, the analysis of six listed companies in the oil and gas industry, namely Shell, BP, Total, Lukoil, Eni, and Equinor, found that while companies are trying to report on their environmental performance, risks, and visions for the future, and there is a positive trend as the quality of information increases, greenwashing is still taking place in them [47]. A strong increase in discourse towards climate, low-carbon energy, and transition rhetoric, as well as clean energy and decarbonization, has been observed among major European companies (BP and Shell), but actions and investments do not follow promises, and greenwashing allegations seem relevant [48]. Russian state-owned Gazprom is trying to build and maintain a good image and reputation by addressing sustainability issues, but the media criticize its monopoly position, market manipulation, and the related price of the crisis, as well as oil drilling in the permafrost areas of the Arctic, pipeline construction in seismic areas, and problems related to supply to Ukraine and Europe. All these facts have a negative impact on the company's image and reputation [49,50]. What can be considered rather controversial within the scope of our study is the activity of BP. The company tries to present even its efforts to expand its petrochemical business as something that helps the company in its transformation and transition towards a low-carbon future. The green narrative, rebranding, and discrepancy with the actual environmental performance of BP have been referred to as greenwashing and green lashing even earlier, after the Deepwater Horizon disaster in 2010 [51].

A certain limitation of this study is that the content analysis focused on a one-year period only in terms of the environmental aspects of CSR, where only the posts of the company rather than stories were considered. An interesting extension to this research would thus be to include content analysis that would consider the social aspects of CSR and the content analysis of comments. Further research could deal with the reputation and trust based on the content analysis of comments, reviews, etc., as some of the comments below the posts explain their resentment of the business of oil and gas companies, with some of them accusing the companies of greenwashing when it comes to their claims and environment-related uploads. Accusations of greenwashing result in increased skepticism in consumers. As an example, Shell is promoting greener low-carbon fuels; however, it still makes large investments in fossil fuels and their reserves and even lobbies against climate policies [15]. As a result of the disclosure of greenwashing practices and environmental scandals, the trust in a given company usually decreases, and opinions about it change, thus threatening its reputation and image, which may lead to boycotts or, on the contrary, calls for proper behavior [52]. In relation to the reputation of oil and gas companies, it is necessary to mention the damage to the environment as well as the threat of accidents and pollution, which may lead to the violation of human rights and disruption of the life of communities in mining locations, loss of livelihoods, land, and drinking water [53,54].

## 5. Conclusions

The goal of the paper was to evaluate the marketing communication of leading European oil and gas companies on their official Instagram accounts in the context of reputation building, as well as reflect the environmental aspects of their online communication. The research focused on the five largest European oil and gas companies by revenue as of 2022, specifically Shell, Total Energies, Gazprom, BP, and Lukoil. In terms of Instagram activity, most posts were published by the Gazprom and BP official accounts; however, the highest number of average likes, average comments, and followers was recorded on the official Shell Instagram account. However, both Russian companies remain inactive on Instagram and have even lost followers since March 2022, when the conflict in Ukraine started.

According to the results of the SME index, the quantity of the published content does not automatically indicate the high degree of interactions among Instagram users. Although Shell, as the leading oil and gas company in Europe, uploaded a rather average number of media on its Instagram account compared to the other companies, its annual average interactions per published post are 572 likes, 183 comments, and 71 new followers.

It can be concluded that all of the analyzed oil and gas companies are active in communicating their efforts and activities related to clean and renewable energies and energy transition, but each company has a different approach to these issues. For example, Shell emphasizes electromobility, while Russian companies focus more on ecological projects aimed at nature and biodiversity conservation. Companies BP and Total Energies announce mainly their transition to a low-carbon economy, but while the efforts of Total Energies can be characterized as green marketing, in the case of BP, its posts can be rather perceived as greenwashing in some cases.

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