# Twitter Sentiment Analysis on Green Finance

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This research aims to analyze public sentiment regarding the development of green finance worldwide using primary data extracted from Twitter tweets. The research methodology employed is a qualitative approach with the utilization of Python Library software known as VADER (Valence Aware Dictionary and Sentiment Reasoner) to classify sentiments within these tweets. The findings of this study indicate that the majority of the public holds a positive sentiment of 60.2% towards green finance, followed by a neutral sentiment at 26.7%, and a negative sentiment at 13.1%. Some frequently mentioned keywords in the tweets include green finance, finance minister, sustainable finance, green energy, and green bond. The objective of this research is to provide a comprehensive overview of public perceptions of green finance, encompassing its positive aspects, advantages, potentials, and benefits, while also identifying potential weaknesses and threats associated with negative perceptions of green finance. With a better understanding of public sentiment, it is hoped that relevant stakeholders can take appropriate actions to strengthen the green finance ecosystem and raise awareness and support for sustainable finance.

**Keywords: Green Finance, Sentiment, Twitter** 

#### **OPEN ACCESS**

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#### INTRODUCTION

Climate change is a major environmental threat worldwide, although it is not the only threat that exists. If the current global trend of fossil fuel use continues, it is estimated that the Earth's temperature will rise by approximately 4-6 degrees Celsius compared to preindustrial levels. This significant temperature increase has the potential to have serious impacts on food production, human health, and biodiversity. Indeed, in various regions of the world, it could threaten the survival of entire communities (Sachs et al., 2019). Climate change and global warming are primarily caused by greenhouse gas emissions, a fact that cannot be denied today. When it comes to carbon emissions, coal is twice as 'dirty' as natural gas. The shift to coal means that greenhouse gas emissions from fossil fuel combustion (1994-2004) have increased more rapidly than the economy. The increase in greenhouse gas levels necessitates intervention from governments, in line with the Sustainable Development Goals (SDGs) and the Paris Climate Agreement (World Bank, 2021).

One of the most concerning aspects of the global economy today is the low level of investment. This is happening in most countries, especially in developing countries, where the public sector is unable to fill this significant investment gap, and the private sector has not shown sufficient interest. One of the main reasons why the private sector might be less inclined to provide long-term funding for infrastructure projects, including environmentally friendly energy projects, is the low return rates and the associated high risks (Taghizadeh-Hesary & Yoshino, 2019).

Considering the conditions outlined above, there is a need for an increase in environmentally impactful

investment financing achieve sustainable to development goals (SDGs). This can be achieved through the use of new financial instruments and policies, such as green bonds, green banks, carbon market instruments, fiscal policies, and environmentally friendly investments. This includes the roles of central banks, financial technology (fintech), community-based funds focused on the environment, and others, collectively known as "green finance." Currently, there are three main challenges in implementing this strategy: first, identifying the right projects; second, developing complex plans involving both the public and private sectors, often spanning multiple countries; and third, managing financing effectively. То governments must be capable of planning, budgeting, and executing long-term projects effectively (Sachs et al., 2019).

Green finance is a new direction in urban economic development and a crucial aspect of environmental protection within the context of financial development. It reflects an inevitable trend in the extensive transformation of urban economies (Zheng & Ye, 2022). Hence, various regions have been actively involved in establishing green areas within urban financial systems to meet the needs of economic transformation and control the impacts of ecological and environmental pollution. However, it is important to note that economic and environmental conditions may vary in different regions, as well as the level of attention and financial support for environmental Therefore, protection. the promotion implementation of environmentally friendly financial systems will vary depending on the context and challenges faced by each region.

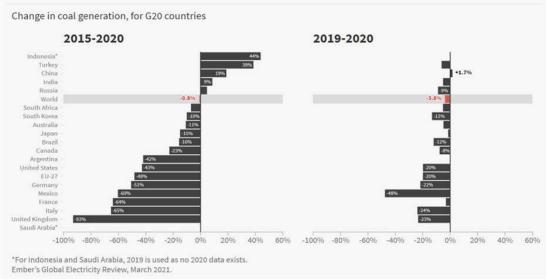


Figure 1: The Transformation of Coal Power Plants in G20 Member Countries

Based on the chart above, some countries such as Indonesia (44%), Turkey (39%), China (19%), India (9%), and Russia (5%) continue to experience an increase in coal-fired electricity generation. Sachs et al. (2019) observed that developing countries, especially in Asia, still heavily rely on coal as an energy source for electricity generation. Although some countries have taken steps to address this issue, significant short to medium-term investments will be needed to make the energy sector more environmentally friendly by reducing emissions and transitioning to renewable energy sources. Governments should consider the implementation of carbon taxes and use the revenue from these taxes to support funding for low-carbon energy systems.

Based on the background mentioned above, the author is interested in examining perceptions of green finance (sustainable finance) using primary data in the form of sentiment from tweets on the social media platform Twitter, collected from January to December 2022. One of the benefits of this research is to gain insight into the trends in public perception regarding the current developments in green finance.

#### LITERATURE REVIEW

In a broad sense, green finance refers to the acquisition and allocation of funds aimed at supporting activities that contribute to environmental protection while providing a fair return to investors or lenders (Lindenberg, 2014). The purpose of green finance is to increase the flow of funds from financial institutions to economic entities involved in projects and activities that support environmental preservation and contribute to achieving sustainable development goals (Ozili, 2022). At the international level, countries have signed the Paris Climate Agreement, which is an international agreement with legal force aimed at addressing climate change. To achieve the goals of the Paris Agreement, significant financial resources need to be mobilized. These financial resources are commonly referred to as green finance.

Green finance is the latest innovation that offers an alternative financing pathway for individuals, companies, and governments willing to fund and invest in environmentally friendly or low-carbon activities (Huang et al., 2019). It is evident that in the field of green finance literature, several recent studies have emerged examining various related issues. These studies encompass a range of aspects, such as the involvement of the private sector in green finance (Taghizadeh-Hesary & Yoshino, 2019); The role of green finance in achieving the sustainable development goals set by the

United Nations (Dörry & Schulz, 2018; Meena, 2013; Sachs et al., 2019); efforts to close the environmental financing gap (Hafner et al., 2020); the role of central banks in environmentally friendly financing (Volz, 2017); the development of the financial sector focused on environmental sustainability (Weber & ElAlfy, 2019); issues related to the definition and concept of green finance (Lindenberg, 2014), and the relationship between green finance and alternative financial instruments such as digital finance and social finance (Ozili, 2021).

This research contributes to the improvement of knowledge and understanding of the development of green finance. It analyzes the extent of sentiment found in Twitter tweets regarding the existence and development of green finance in various countries.

## RESEARCH METHODOLOGY

This research adopts a qualitative approach and utilizes secondary data obtained from the social media platform Twitter. A total of 11,779 tweets from the period of January to December 2022 are used as the data source in this study. Tweets are messages that can be posted by Twitter users and may contain text, numbers, symbols, photos, and videos related to green finance. Twitter distinguishes itself in the social media industry with two main characteristics: its messages are open to the public, and they have a limitation on length, making it a platform with shorter messages compared to other social media platforms. This length limitation allows for quicker analysis. Additionally, Twitter enables research that encompasses the analysis of both individuals and media within a single analytical framework (Vargo et al., 2014). Another reason why Twitter is a suitable choice for social media research is the relatively easy accessibility of Twitter data. Twitter provides an Application Programming Interface (API) for data that allows researchers to collect Twitter data automatically. Additionally, this research also employs web scraping techniques, which involve data extraction from websites, to gather data from Twitter. Therefore, Twitter becomes an effective and efficient data source for social media research related to green finance due to its unique characteristics and the availability of easily accessible data.

The methodology used is sentiment analysis, which is a text mining technique aimed at automatically evaluating opinions, feelings, judgments, and attitudes towards a target, such as products and services (Cambria et al., 2013; Liu & Zhang, 2013; Ravi & Ravi, 2015; Vinodhini & Chandrasekaran, 2012). In classifying

tweets, this research utilizes a Python library known as VADER (Valence Aware Dictionary and Sentiment Reasoner). VADER is a lexicon-based sentiment analysis tool that has been adapted for sentiments commonly found in social media. This tool operates on text from various domains and simplifies sentiment analysis by calculating a composite score, which is used to classify tweets into three categories: positive, negative, and neutral (Liu, 2012).

The composite score is calculated by summing the valence (sentiment) ratings of each word in the VADER lexicon, adjusting it according to specific rules, and then normalizing it into a score range from -1 (most negative) to +1 (most positive). Tweets with a composite score greater than 0.05 are classified as positive, while tweets with a composite score less than -0.05 are classified as negative. Tweets with a composite score between -0.05 and 0.05 are considered neutral tweets (Liu, 2012). This method allows the research to categorize the tweets in this study based on the sentiment contained within their text, enabling an analysis of public views and attitudes toward green finance in the context of social media. Other studies using sentiment analysis can be found at Mu'adzah (2022), Maulida et al., (2022), Rusydiana (2022), Rahayu (2022), Maulida & Rusydiana (2023), Zaidan et al., (2022), and Nuraini (2022).

### **RESULT AND DISCUSSIONS**

This research aims to measure the sentiment of Twitter tweets related to green finance during the study period from January to December 2022. As is common, sentiment analysis is used to depict public views on a topic. The data used in this research consists of Twitter tweets related to green finance, which are considered as secondary data. Users and readers of tweets about green finance on Twitter vary, ranging from regular users to practitioners, politicians, and organizations. Therefore, opinions about green finance can be gathered from users from various demographics and interests. Users from many countries are also represented in this data. Below is a list of locations with the highest number of tweets.

**Table 1:** The number of Green Finance Tweets by Location

No	Location	Total
1	London, England	6283
2	Italy	1546
3	Washington, DC	1287
4	Global	829
5	United Kingdom	653
6	New York, NY	599
7	India	582

From the table above, it can be concluded that London, United Kingdom, is the location with the highest number of tweets related to green finance, totaling 6,283 tweets. In the second position, there is Italy with a total of 1,546 tweets. Meanwhile, the third position is occupied by Washington, DC, with a total of 1,287 tweets.

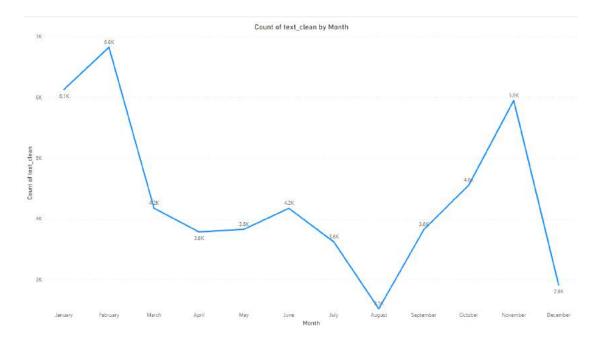


Figure 2: Number of Green Finance Tweets Per Month

In addition to examining the development of Twitter tweets based on user locations, this research also looks at the trend of tweets on the topic of green finance based on months during the study period. Based on the chart above, it is evident that the number of green finance tweets fluctuated each month over the course of one year. We can see that the highest number of green finance tweets occurred in February, totaling 6,800 tweets. Then, in August, there was a significant decrease with only 2,500 tweets. However, it gradually increased from September to November.

In this study, the tool used is a Python programming language library called Vader. Vader is used to process tweet data and classify them into three categories: positive, negative, and neutral. This classification is based on the scores assigned to each tweet. After the assessment, the tweets are grouped into one of the three categories based on their scores. The results of sentiment analysis on the green finance topic can be seen in the form of a diagram that will be presented.

#### Sentiment Polarity on Tweets Data

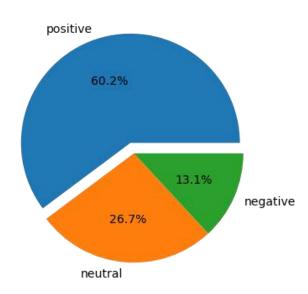


Figure 3: Polarity of Sentiment towards Green Finance

Based on the chart above, it is known that the presence of green finance has a positive sentiment of 60.2%, followed by a neutral sentiment of 26.7%, and a negative sentiment of 13.1%. These sentiment results are derived from tweets published by Twitter users, where the words conveyed in written text are rated on a scale from negative, neutral to positive. This data indicates that the majority of Twitter users have a positive outlook on the existence of green finance. Positive sentiment represents opinions from tweets that

are positive and tend to be optimistic in addressing the presence of green finance and supporting its development. Therefore, the potential acceptance of the public, as indicated by the tendency of positive perceptions, should be continuously cultivated. The development of green finance also needs to be supported by systems and education that are in line with current conditions so that people can easily understand and implement green finance.

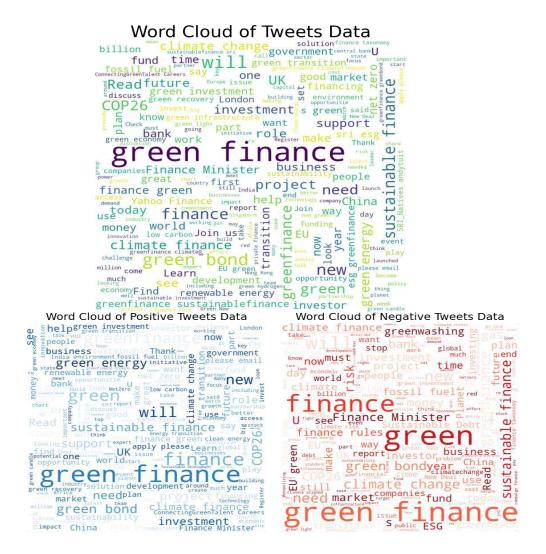


Figure 4: Wordcloud Data Tweets

The chart above displays the frequently occurring words in tweets related to green finance, including tweets categorized as positive, negative, and neutral. "Green finance," "finance minister," "sustainable finance," "green energy," and "green bond" are common words that appear in these tweets. The word cloud showcases words that frequently appear in tweets related to green finance, with larger words indicating higher frequency.

The data obtained from tweets related to green finance from Twitter is considered sufficient to represent public sentiment, given that Twitter is a social media platform used by people from various backgrounds to express their opinions on various topics, including green finance. Tweets about green finance are relatively recent, as this topic has gained prominence only recently.

Neutral tweets often express that the users do not know much or anything at all about green finance. Positive tweets, on the other hand, state that green finance is a positive innovation that needs to be enhanced. The presence of green finance also has a positive impact on the environment, contributing to sustainable financial benefits as a form of environmental appreciation. Meanwhile, negative tweets commonly express that the general public still lacks awareness, and the benefits have not been fully realized. Additionally, its contribution to society is not yet evident. For a more detailed view of the positive, neutral, and negative sentiments related to green finance in tweet texts, please refer to the appendix.

In the table (appendix), there is a sequence of positive sentiment followed by actions such as retweets and the number of positive responses (likes). Many individuals respond positively to the concept of sustainable finance (green finance) because investing funds with the aim of greening is expected to address issues like raw sewage disposal into rivers and promote the use of renewable energy. Some social media posts refer to countries like India, Germany, and China, which are positively embracing the adoption of green finance. This positive acceptance is based on the understanding

that innovations in green finance can provide assistance to countries, especially developing ones, that need affordable financial access for environmentally friendly projects and environmentally supportive technologies. In China, it has even been announced that support for coal-fired power generation will be gradually phased out, with a focus on transitioning to more environmentally friendly and low-carbon emission energy sources.

The table (appendix) illustrates ten neutral sentiments that have been extracted from the text of tweets on Twitter based on the level of retweets and the number of likes received. These neutral sentiments specifically encompass tweets that convey information about developments in the field of green finance without implying a positive or negative opinion. For example, in one tweet, there is information that Spain plans to provide funding for its recovery and resilience, with a focus on projects related to the green and digital transition. Additionally, there are tweets that report news about the launch of the first green bonds in France.

In addition to the tweets containing positive and neutral sentiments, we will now review the tweets on Twitter that describe negative sentiments, which have been sorted based on the highest number of retweets and likes. From the research results, there are tweets expressing disappointment regarding the allocation of funds intended to assist countries in addressing climate change. It turns out that these funds will not be allocated to the UN Green Climate Fund, which has been approved by the international community as a source of funding for climate projects. There are also tweets that highlight the view that the taxonomy of sustainable finance or green finance is seen as a controversial lobbying tool used by the President of France in his campaign for re-election.

Overall, the analysis of tweet disclosures, whether containing positive or negative opinions, tends to depict fundamental viewpoints rather than technical aspects. The differing opinions in these tweets reflect the high level of enthusiasm among the public regarding the concept of green finance, which is still relatively new in the global context.

### DISCUSSION

Based on the results of this research, London, England, has been identified as the location with the largest volume of tweets related to green finance at the global level. This situation is influenced by the fact that the UK holds a prominent position as a global financial center committed to environmentally friendly practices. The UK government has allocated £5.8 billion for

international climate funds with the goal of stimulating private investment that supports environmentally conscious projects and expanding markets for sustainability-focused and low-carbon emission businesses worldwide. With its key role as an investor, the UK has contributed to the establishment of two commercially managed private equity funds. These funds focus on developing sub-funds and carbon emission reduction-oriented development projects in developing countries. Based on this foundation, the UK has significant potential to become one of the leading financial global centers in sustainable environmentally friendly finance. In addition to being a significant economic opportunity, the development of sustainable finance also has the potential for a significant positive impact on the UK's environment (City of London Corporation, 2016). The United Kingdom holds a strategic position that allows it to act as a bridge connecting East and West, North and South, in the context of supply and demand for sustainable finance. combination of environmentally innovation and deep knowledge of financial markets makes the UK an optimal location to further promote developments in the field of sustainable finance (UK Government, 2023). Therefore, it is not surprising that the majority of Twitter tweets related to green finance originate from the United Kingdom.

Even though green finance is still a relatively new concept and may spark differences of opinion in society, the sentiment analysis results indicate a dominant positive trend towards the development of green finance. This positive response opens up opportunities for stakeholders in green finance to continue improving the quality and quantity of their offerings, so that the benefits can be enjoyed inclusively by society. The protection and improvement of the ecological environment are essential conditions and prerequisites for ensuring the survival and development of humanity. The financial industry understands the importance of this and supports efforts to develop and restore the environment within a long-term perspective. Moreover, they are committed to building environmentally friendly cities capable of supporting sustainable development. The transition to a low-carbon and environmentally conscious economy requires changes in financing approaches to meet the growing needs of the green sector. Dikau and Volz (2021) emphasize the importance of these changes in addressing economic and environmental sustainability challenges.

Based on the positive response from the public and the existing literature, there are significant

opportunities for green finance to increase the flow of funds from financial institutions to entities involved in projects and activities aimed at preserving the environment and achieving sustainable development goals. This aligns with the findings of Force (2015) and Lee & Baral (2017). As awareness of the negative impacts of fossil fuel emissions continues to grow, there has been a push to divest from the fossil fuel sector. Instead, the focus has shifted towards investing in lowcarbon projects and activities, which have a positive impact on sustainable environmental protection (Bergman, 2018). Green finance plays a beneficial role in various aspects, including as a source of funding to maintain environmental sustainability, as highlighted by Wang & Zhi (2016). Furthermore, green finance can also become a flow of funds that supports sustainable trade and investment, as emphasized by Eyraud et al. (2013). Its use can also facilitate low-risk financing, as highlighted by the research conducted by Taghizadeh-Hesary & Yoshino (2019). Furthermore, green finance has the potential to develop investment instruments and sources of financing that are oriented towards environmental sustainability, as discussed by Sachs et al. (2019).

The interest in green finance has significantly increased in the industry (Ozili, 2022). Examples that reflect the increased interest in sustainable finance include various financial schemes developed by several financial institutions and companies. For instance, Bendigo Bank in Australia offers home loans that support sustainable practices in housing. In Europe, many Dutch banks promote "green" mortgages as part of government efforts to encourage investment in sustainable housing. NRB Bank in the United States provides specialized financing for solar energy projects, while Bank of America in the United States has a home equity program focused on energy and environmentallyoriented home improvements. VanCity in Canada offers loans for clean air vehicles, Rabobank in Europe issues climate-focused credit cards, and Westpac in Australia has Landcare Term Deposits that allocate funds to environmental and sustainable conservation projects. All of these examples reflect the increased interest in developing financial products and services that support sustainable and environmentally-friendly objectives (UNEP Finance Initiative Innovative Financing for Sustainability, 2007).

Regarding the negative responses and literature reviews, green finance also needs to evaluate its relatively slow development. Recent analysis results indicate that there are still various issues that need to be addressed within the green finance system (Wang, 2022). Furthermore, efforts are needed to establish a standardized evaluation system that can be universally applied to measure the level of development and stages in sustainable finance (Wang & Wang, 2021; Zheng & Ye, 2022). This is because differences in economic conditions in each country and practical experiences in sustainable finance in one country have limitations as a reference for the development of sustainable finance in other countries.

Since the concept of sustainable finance was introduced, many economists have conducted in-depth research on the evaluation and implementation of sustainable finance (Wang, 2022). Oh & Kim (2018) and (Ozili, 2021) have highlighted the crucial role played by private companies, including commercial banks and private capital, in promoting sustainable finance. Berensmann & Lindenberg (2019) have proposed several strategies to increase the flow of private capital into sustainable projects and activities. These strategies include: designing a supportive business environment that facilitates green financing; developing disclosure standards and rules that can promote the growth of environmentally friendly financial assets; providing financial incentives and regulations to encourage green financing and investment, fostering greater transparency in green finance; and, lastly, better coordination between existing financial, environmental, and regulatory policies. These strategies aim to create a more conducive environment for the development and growth of green finance.

#### CONCLUSION

Green finance is one of the innovations in the financial sector that promotes sustainable development. This research was conducted to provide an overview of how the public responds to green finance through sentiment analysis of 11,779 tweets from various sources. The results of the study show that London, England, is the location with the most tweets about green finance, reaching 6,283 tweets. The use of the hashtag #greenfinance peaked in February, with the highest number of tweets reaching 6.8 thousand. Sentiment analysis indicates that approximately 60.2% of the public expressed a positive sentiment towards green finance, followed by 26.7% neutral sentiment, and 13.1% negative sentiment. Keywords that frequently appear in these tweets include green finance, finance minister, sustainable finance, green energy, and green bond. It is important to note that this research has limitations, including the one-year time frame and the

analysis of 11,779 tweets. The results of this research are also dynamic and can change over time with the emergence of new trends or changes in variables that affect perceptions of green finance. Nevertheless, the results of this research can provide an initial insight into how the public responds to green finance, and it is expected to help stakeholders take strategic steps to strengthen the green finance ecosystem, enhance regulations, and improve green finance literacy to achieve inclusivity in sustainable finance.

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## **APPENDIX**

Positive Sentiment Tweet Text

No	text_clean	vader_label_clean	Retweet Count	
1	Nationalising water & energy would see savings of £7.6bl a year- that's how much they pay out on dividend & finance payments. Money that could be invested to end raw sewage being pumped into our rivers & to create green renewable energies.	positive	1636	5605
2	BSCArmy has introduced 5 promising IDOs Green_Beli FlourishingAI knightwarp2e VelasPad Buffer_Finance Their performance is AMAZING!  How much have you gained from these IDOs?  Share in the comment!	positive	1191	865
3	To nationalise water & energy would see savings of £7.6bl a year on dividends & finance payments.  Money for a better, cheaper service & a green future.	positive	1030	3146
4	Nationalising water & energy would see savings of £7.6bl a year on dividend & finance payments. Money that could be invested to end raw sewage being pumped into our rivers & to create green renewable energies. It's a no brainer.	positive	1011	2601
5	Big news from Israel, the "world's lab": "Finance Minister AvigdorLiberman called for an end to the widespread use of the 'Green Pass' certificate () 'There is no medical or epidemiological logic in the Green Pass, many experts agree."	positive	930	2703
6	As a climate-responsible developing country, India welcomes partners to create templates of sustainable development in India. These can also help other developing countries, who need affordable access to green finance and clean technologies: PM	positive	740	3588
7	Scientific evidence is being sacrificed "to win a political compromise", says the head of the group advising the European Union on its green finance taxonomy. "Nine of the EU's advisors have threatened to quit over the Commission's latest proposal"	positive	656	2577
8	Germany's □□□ coalition agreement, some key points: Greens get foreign ministry & new economy-climate mega ministry, FDP get finance	positive	475	1532

]	No	text_clean	vader_label_clean	Retweet Like Count Count
		ministry. Deal includes coal exit "ideally" by 2030, €12 min wage, 400k new homes/year, expanded state-based investments in green, digital etc.		
	9	I welcome POTUS Joe Biden's announcement to increase international public climate finance to \$11.4 billion a year. I also welcome President Xi's announcement that China will end financing of coal fired power plants abroad & redirect support to green & low carbon energy.	positive	450 1895
	10	Lucky Colour Chart: THURSDAY Finance: RED  ✓ Love: GREEN ✓ Work: BLUE YELLOW  ✓ Unlucky ※: PURPLE ✓ Admin will be  wearing my Skechers t-shirt tomorrow!!!  □□□AlwaysherewithMew	positive	407 351

Table. Neutral Sentiment Tweet Text

text_clean	vader_label_clean	Retweet Like Count Count
It's all starting to fall apart. Israel's Finance Minister Calls For The Ending Of The Green Pass - I24NEWS	neutral	998 2619
We have received Spain's recovery & resilience plan. NextGenerationEU will finance the country's recovery, with projects linked to the green and digital transition, cohesion and gender equality.	neutral	379 1373
If the City was a country it would rank as the world's ninth highest CO2 emitter. We need a Green New Deal that tackles the concentrated power of finance over our economy, and redirects it towards tackling climate breakdown. Watch the video	neutral	314 791
NEW: ICE plans to move its 1 billion-euro daily market for European carbon emissions contracts to the Netherlands, a blow to the U.K.'s attempts to build a green finance powerhouse after Brexit	neutral	258 344
Senate Finance chair Ron Wyden says tonight of Senate Parliamentarian green light for additional reconciliation bill: "Democrats now have more options to overcome Republican obstruction and get things done."	neutral	248 994
	It's all starting to fall apart. Israel's Finance Minister Calls For The Ending Of The Green Pass - I24NEWS  We have received Spain's recovery & resilience plan. NextGenerationEU will finance the country's recovery, with projects linked to the green and digital transition, cohesion and gender equality.  If the City was a country it would rank as the world's ninth highest CO2 emitter. We need a Green New Deal that tackles the concentrated power of finance over our economy, and redirects it towards tackling climate breakdown. Watch the video  NEW: ICE plans to move its 1 billion-euro daily market for European carbon emissions contracts to the Netherlands, a blow to the U.K.'s attempts to build a green finance powerhouse after Brexit  Senate Finance chair Ron Wyden says tonight of Senate Parliamentarian green light for additional reconciliation bill: "Democrats now have more options to overcome Republican obstruction and	It's all starting to fall apart. Israel's Finance Minister Calls For The Ending Of The Green Pass - I24NEWS  We have received Spain's recovery & resilience plan. NextGenerationEU will finance the country's recovery, with projects linked to the green and digital transition, cohesion and gender equality.  If the City was a country it would rank as the world's ninth highest CO2 emitter. We need a Green New Deal that tackles the concentrated power of finance over our economy, and redirects it towards tackling climate breakdown. Watch the video  NEW: ICE plans to move its 1 billion-euro daily market for European carbon emissions contracts to the Netherlands, a blow to the U.K.'s attempts to build a green finance powerhouse after Brexit  Senate Finance chair Ron Wyden says tonight of Senate Parliamentarian green light for additional reconciliation bill: "Democrats now have more options to overcome Republican obstruction and

No	text_clean	vader_label_clean	Retweet Count	
6	The DBSA has announced the launch of its first green bond. The €200m bond was issued through a private placement with the French development finance institution, the Agence Française de Développement (AFD). BuildingAfricasProsperity RethinkingInfrastructureDevelopment	neutral	230	1849
7	Finance minister calls for cancellation of COVID vaccine 'Green Pass' Goh	neutral	184	628
8	This made my dayEpitomises much of the green finance agenda ahead of COP26. H/t Me_or_Us	neutral	158	416
9	UNGA's early stars: K-pop's BTS and a Carney-led green finance push	neutral	154	488
10	Gillian Tett: UNGA's early stars: K-pop's BTS and a Carney-led green finance push	neutral	142	434

Table. Negative Sentiment Tweet Text

No	text_clean	vader_label_clean	Retweet Count	
1	Trump must be prosecuted for inciting a deadly insurrection. Yes, if he's prosecuted for tax or bank fraud or campaign finance violations, that can end this nauseating notion of him as a legit 2024 nominee. But prosecuting 1/6 is necessary to dim the green light to more violence.	negative	1475	5449
2	BREAKING - ISRAEL TO CANCEL GREEN PASS BECAUSE USELESS AND HARMFUL SAYS FINANCE MINISTER (J POST)	negative	410	1023
3	Cameron, Johnson, Sunak, Hancock abusing their positions for private finance deals is becoming a distraction. The Greensill collapse endangers 000s of jobs. UK Steel must be nationalised now, jobs saved, build a green economy with UK steel. Then have your sham investigation.	negative	388	901
4	ISRAELE SI CHIAMA FUORI COVID-19: Israel should cancel Green Pass system – Finance Minister	negative	335	753
5	Glasgow. AU will provide \$2bn over five years to help countries adapt to climate change (SMH). The	negative	263	877

No	text_clean	vader_label_clean	Retweet Count	
	money will not be provided to the UN Green Climate Fund that the world agreed to use for climate finance. AU will control the spending directly to "cut red tape" (The Age). wtf?			
6	The new taxonomy would label ca 1.4 billion tons of CO2 as "green", according to AndreasHoepner who advises the EU on sustainable finance. He calls it "the greatest greenwash of all times". This taxonomy is a lobby scam powered by a French president campaigning to be reelected.	negative	259	1290
7	What a missed opportunity. The EUTaxonomy could have aligned finance with the Paris goals. Labelling gas as a green investment sets a low bar and risks allowing greenwashing in the financial system. 1/5	negative	257	722
8	BREAKING: Scientists locked on sciencemuseum to protest the tradegovuk Global Investment Summit at the museum. "In 2 days the UK government is 'rolling out the green carpet' for some of the biggest names in coal finance" Dr Alexander Penson, cancer researcher StopTheHarm	negative	252	565
9	□Upcoming Projects Chatex_bot Green_Beli ForestKnight_io defi_11 Mobius_Finance knightwarp2e SoccerHub_io PlanetSandbox darenft getFUFU nfraction_com DarkFrontiersGS HeroesEmpires wagglenetwork MechMaster_IO Colizeumio and more  Let's explore together	negative	248	593
10	Bscgem Green Dildo Finance \$GDILDO 100k market cap advisors from a 300 ranked coin everise tokenomics 100x potential LAUNCH IN 1 HOUR! Telegram:	negative	224	140