

Stock Analysis – Energy

Date: 15th of November 2022



2022 has been a rough year for energy markets, due to **Russia-EU gas conflict** and **rising oil prices** since the **Invasion of Ukraine** started at late February.

Recent **Q3 Earnings Season** has proven that major energy companies have exceeded forecasts and generated revenues that compete with that of big tech companies.

As the winter is approaching, market is braced for more volatility in gas and oil prices, since the supply is at a concerning low and the usual increase in demand for energy in both households and industry during the winter season also brings more worries about further rise in the price of the energy commodities.






It's expected that global energy companies will play a pivotal role in the upcoming season and this expectation also brings a positive sentiment towards the companies' stocks.

With the recent **U.S. CPI** data announced at **10 November** as **9-months low**, it's expected for energy stocks to continue to surge upwards with the hopes of FED pivot strengthened.

Here the details for an example portfolio with the selected stocks can be reviewed



Change in price for the stocks on 4 years of data

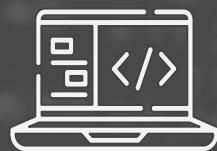
Investment Amount:						\$100,000		Allocation:		50%		
Name Of Stock	Ticker	High	Low	Close	Pivot	Allocation to %	Units	Price	Margin	Take Profit	% Increase	Profit up to
 Iberdrola SA (OTCM:IBDSF)	IBDSF	\$ 10.93	\$ 10.64	\$ 10.50	\$ 10.69	35%	8172	\$10.71	\$17,500	\$11.35	6%	\$5,250
 INTERNATIONAL BUSINESS MACHINES	IBM	\$ 146.08	\$ 142.18	\$ 143.17	\$ 143.81	10%	173	\$144.20	\$5,000	\$152.85	6%	\$1,500
 LOCKHEED MARTIN CORPORATION (XNYS:LMT)	LMT	\$ 471.98	\$ 459.37	\$ 463.86	\$ 465.07	25%	135	\$462.04	\$12,500	\$494.38	7%	\$4,375
 TotalEnergies SE (XNYS:TTE)	TTE	\$ 59.10	\$ 58.05	\$ 58.87	\$ 58.67	15%	646	\$58.05	\$7,500	\$62.11	7%	\$2,625
 EXXON MOBIL CORPORATION (XNYS:XOM)	XOM	\$ 114.64	\$ 112.49	\$ 113.04	\$ 113.39	15%	331	\$113.42	\$7,500	\$121.36	7%	\$2,625
Total						100%		Total Margin	\$50,000	Total Potential Profit		\$16,375

Source: Yahoo Finance

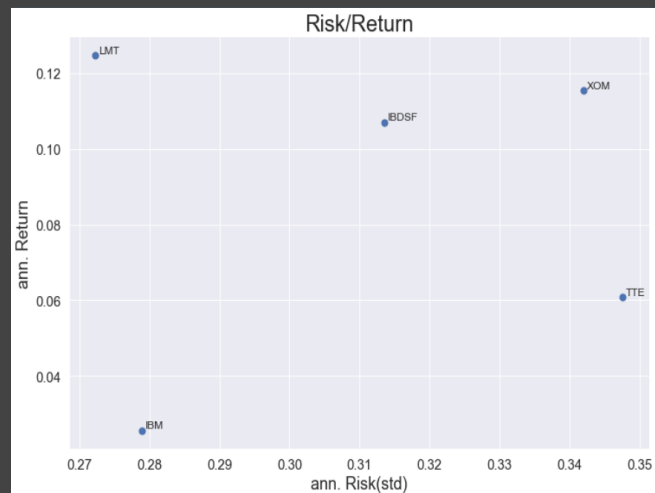
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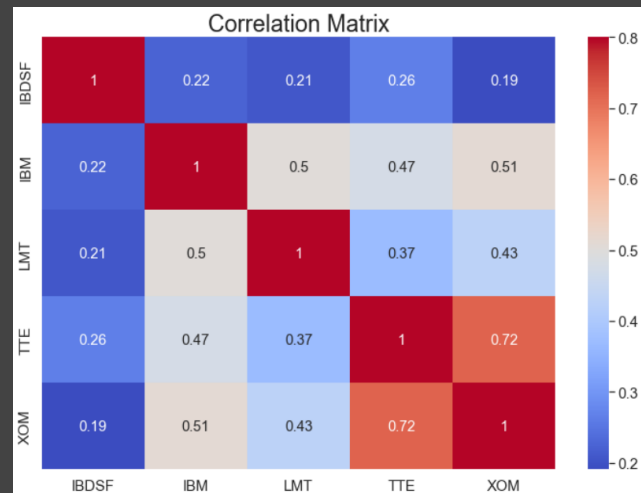
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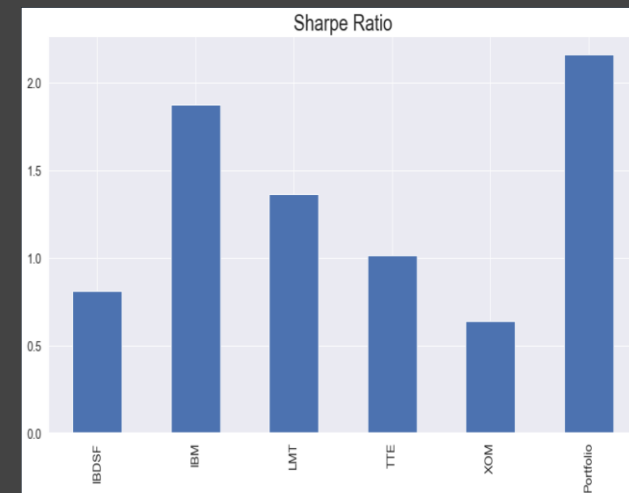
Portfolio Calculations and Chart Outputs



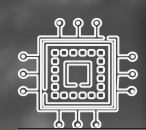
Annual
Risk/Return



Correlation
Matrix
Heatmap



Sharpe Ratio
> 2.2



Selection of Individual Assets

Percentage Movements



Important Note: Stock data usually shows gaps in short timeframes, mostly caused by fundamental events that cause major changes in price when markets are typically closed. Such gaps in data are generally disregarded, bearing in mind that past performance doesn't guarantee future results.

We will utilize the assets below in this example, also explaining the reasons for their selection in 4 years of data:

Iberdrola (IBDSF) : Major utilities company that engages in generation, transmission and distribution of electricity in Spain and internationally. Pandemic had little to no effect on the stock price and value gains had held fast during the global inflation.

International Business Machines (IBM) : Incorporated in 1911, International Business Machines (IBM) is one of the oldest computer and software companies in the world, which is also known for its low volatility. Even with the ongoing global chipset shortage, IBM managed to hold out in its stock value.

Lockheed Martin (LMT) : A key player in aerospace, arms, defense, information security and technology with worldwide interests, which is also a major contractor of U.S. Department of Energy and NASA.

TotalEnergies (TTE) : One of the seven major integrated energy and petroleum companies worldwide, posted record profits on Q3 Earnings Season as EU paid up to avoid higher oil and gas prices.

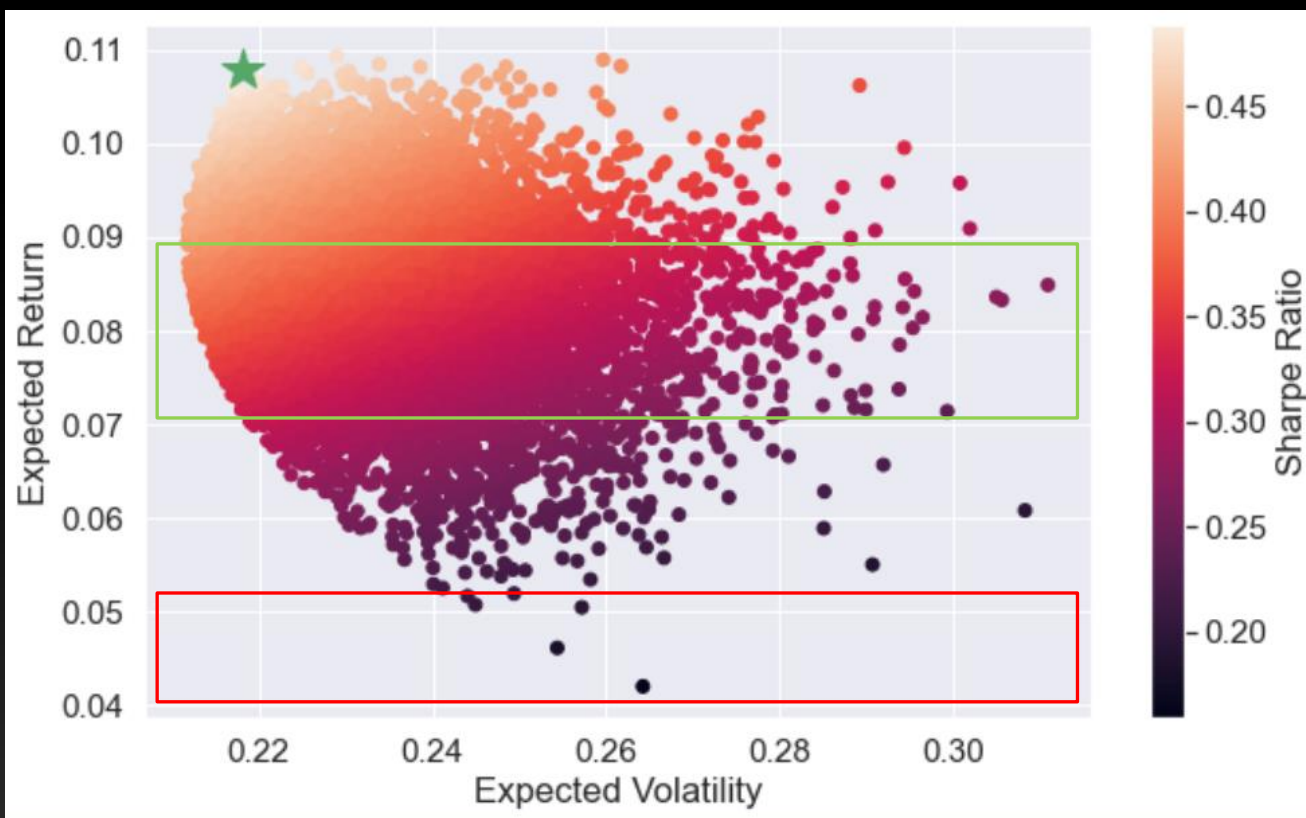
Exxon Mobil (XOM) : Major energy company that explores for and produces crude oil and natural gas in U.S. and internationally. Soaring energy prices drove the companies' profits to a smashing record in Q3 Earnings Season, to the levels matching the profits of tech giants such as Apple.

Portfolio : Utilizing this basket of stocks that is **light on tech** and **strong on energy** industry have shown to generate little to no losses during the current market decline, even adding more than **20%** in its highest overall value as of November 2022.

Overall: Unsystematic risk is hedged to the point of holding **~20% in profits** as of October, also proving successful in limiting the drawdown on XOM and TTE at the start of Covid-19 pandemic. Expected to provide further gains as both energy stocks rise in value.

Any downward movement in the current market conditions can be dynamically hedged with **Brent Oil** and **Natural Gas** to keep the overall drawdown of portfolio to minimum and extend the period that investors would hold their positions.

Efficient Frontier with 4 years of data on 10,000 simulations



Most optimized point on Efficient Frontier
(outlined in green star) shows:

Expected Returns : **~10.8%**

Volatility : **21%**

- In the area that the data is most heavily accumulated (outlined in green rectangle) shows expected returns at **7-9%**
- Volume of data prompting least expected returns due to worst portfolio optimization is less than 1% (outlined in red rectangle), with expected returns at **4-5%.**

Value Analysis approach for energy companies shows the overall financial performance of the company to give investors an idea about the growth potential for the stock.



Summary:

Iberdrola, S.A. engages in the generation, transmission, distribution, and supply of electricity in Spain and internationally. It generates and markets electrical power using renewable sources, such as onshore and offshore wind, hydro, solar photovoltaic, combined cycle gas, nuclear, and biomass, as well as through installation of batteries.

The company is also involved in the purchase and sale of electricity and gas on wholesale markets; development of green hydrogen projects; and distribution and sale of gas. It has a total installed capacity of 58,320 MW, including 38,138 MW of renewable installed capacity; and operates 1.2 million kilometers of electricity transmission and distribution lines, as well as serves 36.11 million consumers.

In addition, the company offers energy storage, heat pumps, self-consumption, and electric vehicles for residential customers; and management of energy facilities, as well as supplies green H2, industrial heat, etc. to industrial customers.

Iberdrola, S.A. was founded in 1840 and is headquartered in Bilbao, Spain.

Iberdrola S.A.'s **ISS Governance Quality Score** as of October 28, 2022 is **4**.

The pillar scores are;
Audit: **6**
Board: **4**
Shareholder Rights: **8**
Compensation: **3**

Major Holders Breakdown	
0.24%	% of Shares Held by All Insider
44.31%	% of Shares Held by Institutions
44.41%	% of Float Held by Institutions
723	Number of Institutions Holding Shares

Top Institutional Holders				
Holder	Shares	Date Reported	% Out	Value
Sierra Capital LLC	246	Jun 29, 2022	0.00%	2,504
Paradigm Asset Management Company, LLC	5,549	Jun 29, 2022	0.00%	56,488
Captrust Financial Advisors	4	Jun 29, 2022	0.00%	40
Accel Wealth Management	267	Sep 29, 2022	0.00%	2,718

Environment, Social and Governance (ESG) Risk Ratings

Total ESG Risk score
20
27th percentile
Medium

Environment Risk Score
7.1

Social Risk Score
7.0

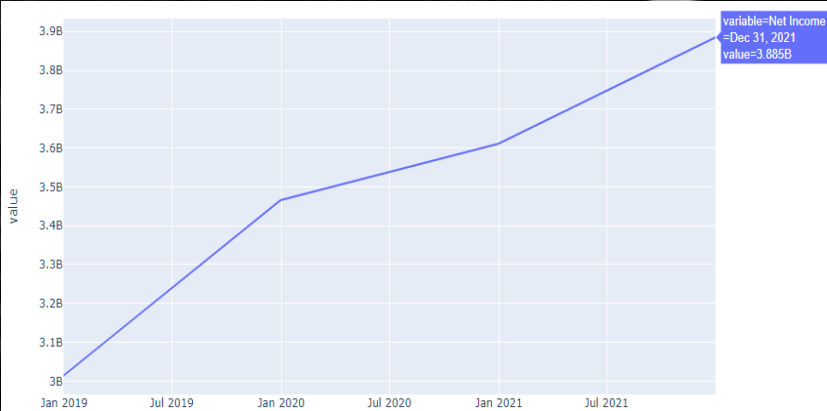
Governance Risk Score
6.4

Controversy Level

3 Significant Controversy level

ESG data provided by Sustainalytics, Inc. Last updated on 8/2022

Percentage of shares held by institutions and the details for the top-5 holders can be reviewed above, along with the details of ESG score for **Medium Risk**.



IBDSF has shown an increasing trend in **Net Income in billions** and moderate **stock percentage returns** compared to S&P500, USD Index and 10-Year Treasury Bonds, between 2018 and 2022.

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Summary:

TotalEnergies SE operates as an integrated oil and gas company worldwide. The company operates through four segments: Integrated Gas, Renewables & Power; Exploration & Production; Refining & Chemicals; and Marketing & Services.

The Integrated Gas, Renewables & Power segment engages in the liquefied natural gas production, shipping, trading, and regasification activities; trading of liquefied petroleum gas (LPG), petcoke and sulfur, natural gas, and electricity; transportation of natural gas; electricity production from natural gas, wind, solar, hydroelectric, and biogas sources; energy storage activities; and development and operation of biomethane production units, as well as provides energy efficiency services. The Exploration & Production segment is involved in the oil and natural gas exploration and production activities.

The Refining & Chemicals segment engages in refining petrochemicals, including olefins and aromatics. This segment is also involved in trading and shipping crude oil and petroleum products. The Marketing & Services segment produces and sells lubricants; supplies and markets petroleum products, including bulk fuel, aviation and marine fuel, special fluids, compressed natural gas, LPG, and bitumen; and provides fuel payment solutions. It operates approximately 16,000 service stations and 25,000 EV charge points.

The company was formerly known as TOTAL SE and changed its name to TotalEnergies SE in June 2021. TotalEnergies SE was incorporated in 1924 and is headquartered in Courbevoie, France.

Iberdrola S.A.'s ISS Governance Quality Score as of October 28, 2022 is **1**.

The pillar scores are;
Audit: **2**
Board: **2**
Shareholder Rights: **1**
Compensation: **2**

Major Holders Breakdown

6.46%	% of Shares Held by All Insider
44.41%	% of Shares Held by Institutions
47.48%	% of Float Held by Institutions
916	Number of Institutions Holding Shares

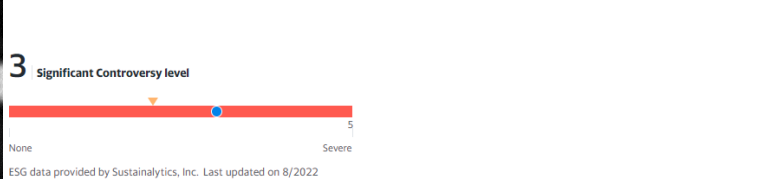
Top Institutional Holders

Holder	Shares	Date Reported	% Out	Value
Aristotle Capital Management, LLC	1,171,375	Jun 30, 2022	0.04%	66,721,518
Stuart Chaussee & Associates, Inc.	83	Sep 30, 2022	0.00%	4,727
Vigilant Capital Management, Llc	332	Sep 30, 2022	0.00%	18,910

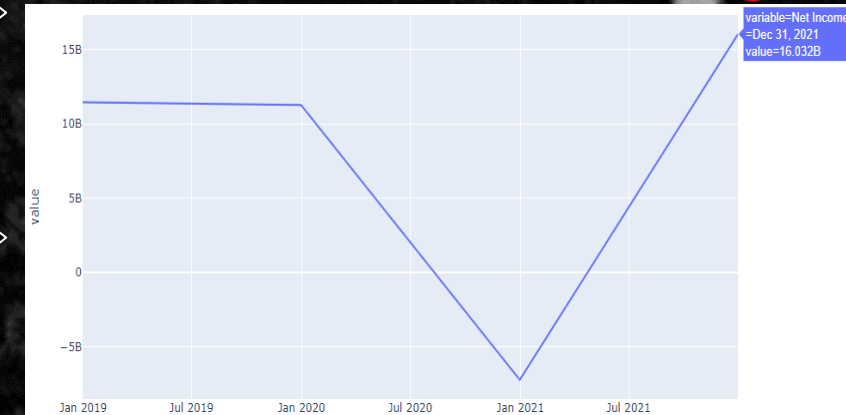
Environment, Social and Governance (ESG) Risk Ratings

Total ESG Risk score	Environment Risk Score	Social Risk Score	Governance Risk Score
30 62nd percentile Medium	13.2	8.7	7.8

Controversy Level



Percentage of shares held by institutions and the details for the top holders can be reviewed above, along with the details of ESG score for **Medium Risk**.



TTE has shown an increasing trend in **Net Income in billions** and moderate **stock percentage returns** compared to S&P500, USD Index and 10-Year Treasury Bonds, between 2018 and 2022.

Summary:

Exxon Mobil Corporation explores for and produces crude oil and natural gas in the United States and internationally.

It operates through Upstream, Downstream, and Chemical segments. The company is also involved in the manufacture, trade, transport, and sale of crude oil, natural gas, petroleum products, petrochemicals, and other specialty products; manufactures and sells petrochemicals, including olefins, polyolefins, aromatics, and various other petrochemicals; and captures and stores carbon, hydrogen, and biofuels.

As of December 31, 2021, it had approximately 20,528 net operated wells with proved reserves.

The company was founded in 1870 and is headquartered in Irving, Texas.

Exxon Mobil Corporation's **ISS Governance Quality Score** as of October 28, 2022 is **4**.

The pillar scores are;

Audit: **7**

Board: **4**

Shareholder Rights: **1**

Compensation: **9**

Major Holders Breakdown

0.07%	% of Shares Held by All Insider
59.54%	% of Shares Held by Institutions
59.58%	% of Float Held by Institutions
3,795	Number of Institutions Holding Shares

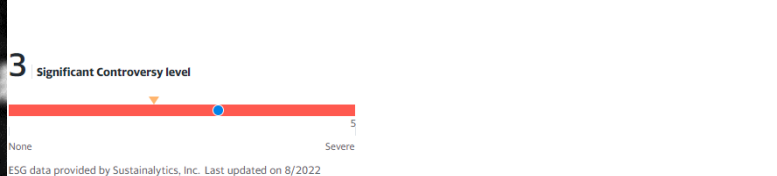
Top Institutional Holders

Holder	Shares	Date Reported	% Out	Value
Vanguard Group, Inc. (The)	368,328,315	Jun 29, 2022	8.84%	41,219,623,080
Blackrock Inc.	287,427,472	Jun 29, 2022	6.90%	32,166,009,444
State Street Corporation	234,554,069	Jun 29, 2022	5.63%	26,248,946,720
FMR, LLC	135,144,175	Jun 29, 2022	3.24%	15,123,985,119
Geode Capital Management, LLC	74,046,323	Jun 29, 2022	1.78%	8,286,524,278

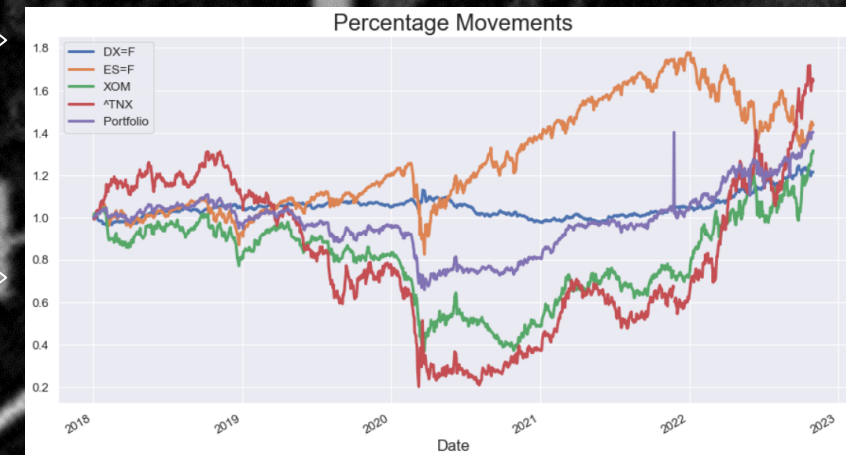
Environment, Social and Governance (ESG) Risk Ratings

Total ESG Risk score	Environment Risk Score	Social Risk Score	Governance Risk Score
36 83rd percentile	18.5	9.8	8.1
High			

Controversy Level



Percentage of shares held by institutions and the details for the top-5 holders can be reviewed above, along with the details of ESG score for **High Risk**.



XOM has shown an increasing trend in **Net Income in billions** and moderate **stock percentage returns** compared to S&P500, USD Index and 10-Year Treasury Bonds, between 2018 and 2022.

Recent Fundamental Events



Lockheed beats estimates on F-35 sales, maintains guidance

Lockheed Martin Corp (NYSE:LMT) reported better-than-expected quarterly revenue on Tuesday, helped by higher sales in its aeronautics unit, which makes the F-35 fighter jet, as the company sees demand for arms increasing after Russia's invasion of Ukraine.

Shares were up as much as 7.5% to \$427.27 during trading in New York after Chief Financial Officer Jay Malave told analysts on a post-earnings conference call that percentage wise the company would grow "low single digit for 2024 as a baseline."



Exxon's record-smashing Q3 profit nearly matches Apple's

Its \$19.66 billion third-quarter net profit far exceeded recently raised Wall Street forecasts as sky-rocketing natural gas and high oil prices put its earnings within reach of Apple's \$20.7 billion net for the same period.

As recently as 2013, Exxon ranked as the largest publicly traded U.S. company by market value - a position now held by Apple.

Oil company profits have soared this year as rising demand and an under-supplied energy market collided with Western sanctions against Russia over its invasion of Ukraine. U.S. exports of gas and oil to Europe have jumped and promise to set all-time profit records for the industry.



TotalEnergies Posts Rise in Q3 Income as Ukraine Conflict Pushes Up Gas Prices

TotalEnergies SE (EPA:TTEF) reported a surge in third quarter core income, as a spike in gas prices caused by the war in Ukraine helped the French group overcome a new multi-billion dollar impairment charge.

Adjusted earnings before interest, taxes, debt and amortization grew by 74% year-on-year during the three-month period to \$19.42 billion. Much of this uptick was driven by TotalEnergies' integrated gas, renewables and power unit, which posted record operating income thanks to a 54% rise in the average selling price of liquefied natural gas compared to the prior quarter.



Wall Street ends sharply higher on sign of cooling inflation

The S&P 500 and Nasdaq jumped on Thursday, racking up their biggest daily percentage gains in over 2-1/2 years as a sign of slowing inflation in October sparked speculation the Federal Reserve might become less aggressive with interest rate hikes.

The Labor Department's data showed the annual CPI number below 8% for the first time in eight months.

The S&P 500 climbed 5.54% to end the session at 3,956.31 points. The Nasdaq gained 7.35% to 11,114.15 points.



Sources for Information



Seeking Alpha α



Libraries Used (Python 3.9)

Yfinance, Numpy, Pandas, Matplotlib, Scipy, Seaborn

Provided by Emir E

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