

October 31, 2024

Beyond the Ballot: Closing Arguments Energy Issues and People to Watch Ahead of the 2024 Election

With less than a week until the election, the race for the White House remains a toss-up according to polls. Both Vice President Harris and former President Trump are making their closing arguments, trying to win over undecided voters and bolster their "get out to vote" operations. While each candidate will have some scope for unilateral action in foreign, economic, and energy policy, the incoming administration's ability to implement their full agenda will hinge greatly on which party controls Congress. In this edition of Beyond the Ballot, we explore the art of the possible for Trump or Harris in either a split or unified Congress scenario.

- Iran could find itself the principal target of US sanctions if former President Trump prevails next week, and several of his senior advisors have expressed strong support for an Israeli strike on the country's nuclear and energy facilities. We do not envision a major ramping up of Iran sanctions if Harris is elected and would expect her administration to focus on winding down the year-long war (pg 2).
- There are also clear differences on Russia. Senior Trump advisors have called for a swift end to what they term an "unwinnable" war, while Harris looks set to continue Biden's strong support for Ukraine. In addition to the issue of sanctions, changes in policy on the war without buy-in from Kyiv and Europe could have impacts on energy markets (pg 3).
- While both Harris and Trump have campaigned on the continued presence of oil and gas in the energy mix, Harris' plan would see a continued push to regulate emissions, whereas Trump would seek to broadly deregulate the space (pg 5).
- Tariffs have had a prominent role on the campaign trail, and although Trump and Harris have offered different approaches to the fiscal policy, both parties have wielded tariffs in recent years to inflict pain on adversaries and protect domestic manufacturing (pg 6).
- A split Congress could hinder each candidate's ability to usher in major legislative wins, yet the next President can still leverage agencies like DOE and EPA to craft regulation (pg 7).

Figure 1 - Election Outcome Policy Scenarios

	На	rris	Trump			
	Democratic Congress	Split Congress	Split Congress	Republican Congress		
Russia / Ukraine	Continued aid to Ukraine would likely be able to pass in Congress with ease and some bipartisan support.	Further aid packages could be fraught affairs in Congress, with many Republicans vowing no further support following the April 2024 package.	Congress could move to codify oversight of sanctions on Russia to prevent unilateral action by the White House.	The White House would have a freer hand to unilaterally use sanctions as a tool for negotiations with Moscow.		
Iran	A major ramping up of sanctions would be unlikely, and the administration may look to revive JCPOA at a later stage if there is a diplomatic breakthrough in the Middle East.	Status quo of Iran sanction enforcement could be challenged with some bipartisan support. Any effort for JCPOA revival would likely be challenged.				
Tariffs	Harris will have unilateral authority to en- tech focused	act tariffs; will likely continue China/clean tariff strategy.	Trump will have unilateral authority to build on his previous broad-based tariff strategy; will likely extend to more categories and leverage bilateral exemptions.			
All-of-the-Above Energy	Able to appoint less moderate cabinet members for DOE, EPA, Treasury, Interior. Continuity of oil and gas production while maintaining/increasing emissions abatement.		focus on transmission, nuclear and other rrtisan support.	Able to appoint less moderate cabinet members for DOE, EPA, Treasury, Interior. Continuity of oil and gas production, while some clean energy funding could decrease.		
Energy Legislation & Regulation	Democrats would use the 2-year window to push low-carbon agenda, increase regulation on energy sector. Maintain Biden-era emission regulations.	Without the support of Congress, Harris would rely solely on regulation to push low-carbon agenda.	Without support of Congress, Trump would use regulation to roll back Biden- era emissions regulations.	Republicans would use the 2-year window to push pro-fossil fuel legislatio and use agencies to deregulate energy sector.		
IRA	IRA continuity, continued push to finalize rules and distribute funds through DOE and EPA.	IRA continuity yet expected push back/delays on IRA funding and rulemaking.	Without Congress, unable to rescind IRA in full. Trump could freeze unspent funds, pause unfinalized rules, change aspects of tax credit provisions.	While full repeal would be possible, it is unlikely as GOP representatives oppose GOP Congress would make it easier to change aspects of legislation permanently in addition to agency leve actions.		

Sources: RBC Capital Markets

All values in USD unless otherwise noted. Priced as of prior trading day's market close, ET (unless otherwise stated).

Disseminated: Oct 31, 2024 16:31EDT; Produced: Oct 31, 2024 16:31EDT

RBC Capital Markets, LLC Helima Croft Head of Global Commodity Strategy and MENA Research (212) 618-7798 helima.croft@rbccm.com

Christopher Louney

Natural Gas and Gold Strategist (212) 437-1925 christopher.louney@rbccm.com

Brian Leisen

Global Oil Strategist (212) 437-9956 brian.leisen@rbccm.com

John Soughan Senior Associate (212) 428-5491

john.soughan@rbccm.com

Allison Enck Senior Associate (646) 618-6547 allison.enck@rbccm.com

Victoria Silva Associate (212) 905-5841 victoria.silva@rbccm.com

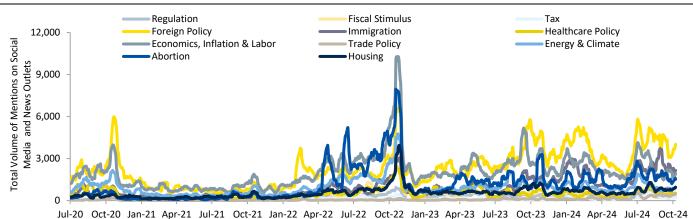
RBC Elements[™] Driving insights through data

See RBC Elements page

at the end of this note.



Figure 2 - US Election Mentions by Policy (15-day Moving Average)



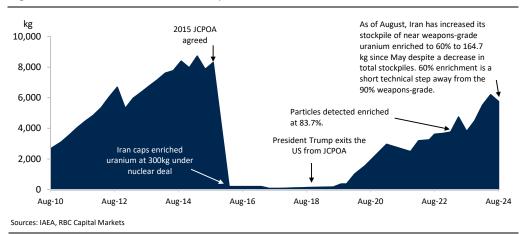
In collaboration with our US Equity Strategy team (Lori Calvasina) and RBC ElementsTM (our in-house data science team), we have assessed the social media chatter on US elections to identify the key policies & platforms that are receiving the most attention. The data analysis is performed using our Al-powered platform, that incorporates over 20 million data points over a 4-year period across social media, online newspapers, forums, and blogs. We leverage a mix of supervised & unsupervised approaches to determine keywords pertaining to each policy topic and quantify the associated conversation volume and sentiment. Sources: RBC Elements, RBC US Equity Strategy, RBC Capital Markets

Energy and Foreign Policy Issues in Focus

Iran – In the Crosshairs

Iran could find itself the principal target of US sanctions if former President Trump prevails next week. The former Trump administration officials we have spoken with were adamant that the maximum pressure policies will be making a return, and reducing Iranian oil revenue will be a top agenda for President Trump. Unlike the case of Russia, where there are some splits within the party, we do not envision any GOP resistance to curtailing Iranian oil exports. We also do not believe a Trump White House will need any new measures, as it would really come down to a more determined enforcement of the existing sanctions that have remained on the books— specifically, the secondary sanctions that mandate significant reductions in Iranian oil imports in order to have continued access to US capital markets. These officials also suggested that tightening these sanctions would give a boost to opponents of the Iranian regime.

As opposed to Russia, where the Europeans are a major player in the sanction regime, we do think there is more scope for unilateral US action on Iran to be materially impactful in the nearterm for balances. We believe the bigger challenge for the Trump White House will come in securing additional barrels to backfill a sanctions-driven supply disruption. We do not think OPEC members are especially eager to repeat the ill-fated summer of 2018 supply surge and will seek clear evidence of an outage before they open the taps to help Washington.



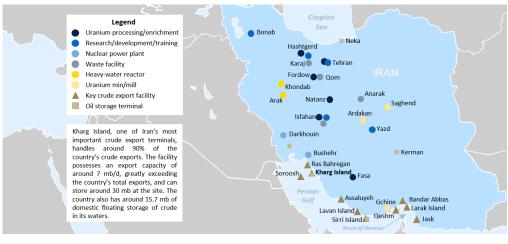




We were also struck by the expressions of enthusiasm from some of Trump's most senior advisors for an Israeli strike on Iranian nuclear facilities. Some of the well-placed former officials we spoke with stated that Prime Minister Netanyahu is facing a historic opportunity to erode the Iranian nuclear threat and reset the Middle East chessboard, given the elimination of the top ranks of Hezbollah and Hamas. They suggested that if the Israelis take a pass at this stage as part of a deal with the Biden administration, Israel could pursue such a goal early in 2025 if Trump returns to office. President Trump certainly showed no enthusiasm for foreign military entanglements during his previous time in power. However, we do take seriously the potential for him to support more aggressive Israeli action, including targeting nuclear facilities, given the views of some of his closest advisors as well as where the broader GOP stands on this issue.

While Vice President Harris has recently called Iran "the most serious American adversary," we still do not envision a major ramping up of sanctions if she prevails next week. We do anticipate that there will be a concerted push to wind down the year-long war, and advisors like Phil Gordon will likely look to prevent any further escalation and stave off an Israeli strike on nuclear and energy facilities. In the event that there is a diplomatic breakthrough in the Middle East, we could envision that a Harris administration may look to revive the JCPOA at a later stage as a pathway to dealing with the proliferation threat posed by Iran.

Figure 4 - Map of Iran's Oil and Nuclear Facilities



Sources: Petro-Logistics, S&P Platts, Council on Foreign Relations, RBC Capital Markets

Ukraine – Winning Strategy

Though a number of Senate Republicans, including Sen. Lindsey Graham (R-SC), continue to call for supporting Ukraine, there is a clear opposing view within Trump's inner foreign policy circle on the efficacy of pouring so many resources into a war that they view as unwinnable. Hence, these advisors insist that a key priority of Trump 2.0 would be to push for a peace settlement as soon as possible, even if it entails allowing Russia to consolidate its territorial gains.

If such a position does indeed become official policy, we can envision that the Russian leadership might be offered sanctions relief as an inducement to shelve further territorial claims. Of course, a real question will be how much a US shift will alter overall Russian sanctions architecture, given that many of the most punitive energy measures were imposed by Europe. Nonetheless, there are sanctions that have been imposed unilaterally by the US and we see them as candidates for easement if Trump prevails—including those that impose restrictions on energy industry investment and related technology exports, as well as punitive measures on entities engaged in the Russian energy trade. We also think it will be important to watch whether cracks emerge in the collective European resolve to support Ukraine if there is a clear US policy pivot on the war.



Feb. 2022 Russia begins invasion of Ukraine 2 0 8 6 6 4	Mar. 2022 Russian banks removed from SWIFT, excluding energy payments	Jun. 2022 EU adopts 6th package of sanctions, including ban on seaborne crude imports	\$60/bbl price	Feb. 2023 G7 agrees on products price on cap targets, EU imposes ban on product imports	May 2023 G7 enhances measures on price cap enforcement, US sanctions oil services entities	Dec. 2023 EU and US tighten price cap scrutiny on sale of tankers to third party countries	May 2024 US imposes sanctions on hundreds of entities, including those engaged in the energy sector
2 -							
0 Jan-22	May-22	Sep-22	Jan-23 ■ Total Su	May-23	Sep-23 Exports (mb/d)		ay-24 Sep-

Figure 5 - Russia Sanctions and Production

Sources: Petro-Logistics, S&P Global, RBC Capital Markets

Both candidates may find issues pushing forward with their desired policy paths for Ukraine without strong support in Congress. Most sanctions related to Russia's invasion of Ukraine, including the 2014 invasion of Crimea, are based on national emergency authorities provided to the President and were therefore moved forward by executive orders under the Obama, Trump, and Biden administrations. However, Congress has moved to enact laws that restrict trade with Russia, including the Ending Importation of Russian Oil Act of April 2022, which codified the ban on Russian energy imports.

Despite support from JD Vance and some of Trump's senior foreign policy advisors for winding down the war, a number of Senate Republicans and a majority of Senate Democrats have called for continued support for Ukraine. Congress could possibly look to limit the White House's playbook for negotiations with Moscow through legislation — a move with precedent, as Congress passed the Iran Nuclear Agreement Review Act of 2015 that codified congressional oversight on the President's ability to use waivers to suspend sanctions as part of a nuclear agreement with Iran.

In contrast, despite stronger party consensus on maintaining support for Ukraine, a Harris administration could face challenges moving future aid packages through Congress without a solid majority. When the last aid package to Ukraine was passed by the Senate in April after delays in both chambers, many Republican critics vowed no further aid. Moreover, with many of the most punitive sanctions on Russia in the past 10 years done in partnership with allies in Europe, including the G7 price cap plan and SWIFT ban, the efficacy of unilateral moves by Washington, at least in the near-term, could be limited without fulsome support, not just from Brussels, but across the capitals of the continent.

Regardless of who controls the White House and Congress come January, changes in policy on the war without buy-in from Kyiv could have impacts on energy markets. We have maintained that Ukraine has the ability to target the majority of export facilities in western Russia, and as we have noted, Ukrainian officials had previously insisted that Russian energy operations were fair targets given they help finance the Kremlin's war machine. We would also highlight the fact that Ukraine's key regional backers could also support strikes on Russian energy facilities. The Biden administration has sought to avert a Russian supply disruption throughout this war, and the energy bargain with Kyiv could potentially be at risk again if the Ukrainian leadership finds itself opposed to Washington's desired policy path.



Energy Mix - Defining "All" in "All of the Above" Energy

When the Obama administration popularized the "all of the above" energy approach over a decade ago, it was meant to create space for wind and solar in an energy sector dominated by fossil fuels. Now, Vice President Harris is using this mantra to ensure space is reserved for fossil fuels in her administration. During the presidential debate, she brought up the Inflation Reduction Act not to speak at length about its clean energy wins, but to remark on how it increased federal leasing for oil and gas. When she discussed climate change, she did so in terms of its impact on everyday costs for Americans, not as an existential threat to the country as Biden has.

This moderate shift from her previous policy platforms has been shaped by the reality of the American energy landscape and the ever-growing demand for energy, both clean and traditional. The decision in January to pause approving new LNG export facilities to non-free trade agreement countries has been seen as a catalyst for this push towards "all of the above" for the Harris administration. During our meetings in Washington, it was conveyed that the move was part of an attempt to appeal to the younger and more progressive voters who had grown more discontented with the administration, in part because of the war in Gaza. However, the move proved divisive amongst voters in must-win states like Pennsylvania, as well as with the US oil and gas industry, and we could envision both potential administrations moving to officially end the pause next year. Harris' shift has not received the expected pushback from the climate community, and instead, it seems they have made the decision to be less doctrinaire, leading some Obama-era administration officials to wonder if this is a tactical move to ensure the base turns out on election day.

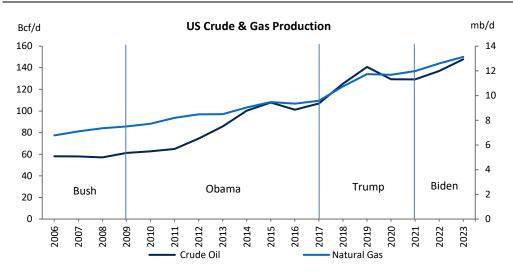


Figure 6 - Oil and Gas Investment Under Recent Administrations

Sources: BNEF, RBC Capital Markets

Although Trump has not shown the same inclusivity for all energy types on the campaign trail, there is reason to believe his administration would also see continued growth for both traditional and clean energy. Trump has vowed to repeal the Inflation Reduction Act, yet the recent surge in GOP support in the House would make a full repeal difficult, and continuity of the bill, even in a limited form, could result in greater investment in clean energy during a second Trump term than in his first. As we have noted, Trump could use his executive power to reorient IRA provisions to focus more heavily on manufacturing and economic growth rather than components like EV consumer tax credits that he vocally opposes. Thus, while Trump may not be campaigning for a surge in clean energy development, we think that his Presidency would see some momentum continue for the energy transition as many investments and projects are already in motion.



With each of the respective camps doubling down on their individual definitions of "all of the above" on the campaign trail, we will be watching closely who will fill key roles of influence in the White House come January. For the Harris administration, there is a view among strategists in Washington that many in the climate community have been sitting on the sidelines in the run-up to the election. At the beginning of the Biden administration, alongside the early move to pause new permits for drilling on federal land, it seemed that the administration would indeed look to shrink the footprint of American oil and gas drilling. Individuals with backgrounds in fossil fuels were initially absent from the administration, with the staff of progressive senators, such as Sen. Elizabeth Warren (D-MA), playing a leading role in vetting key appointments.

President Biden essentially pivoted from telling US producers to keep the oil in the ground to imploring them to produce more when faced with rising energy prices due to a war involving one of the world's largest commodity producers. This shift was enabled in part by the arrival of Amos Hochstein, who had extensive energy experience, to the administration. With tensions in two of the most prolific energy producing regions of the world persisting, we will be watching if oil and gas credentials will be a must-have or a non-starter when resumes are reviewed for key energy positions in the cabinet.

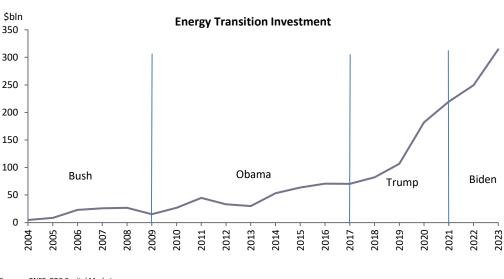


Figure 7 - Clean Energy Investment Under Recent Administrations

Sources: BNEF, RBC Capital Markets

Tariffs – The Most Beautiful Word

Tariffs have had a prominent role on the campaign trail, and although Trump and Harris have offered different approaches to the fiscal policy, both Democrats and Republicans have wielded tariffs in recent years to inflict pain on adversaries and protect domestic manufacturing. Technically, the Constitution grants Congress the power to regulate trade with foreign nations, but the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (TPA-2015) authorized the President to enter into trade agreements with foreign countries to reduce "duties or other import restrictions" that the President deems "unduly burdening and restricting" for US foreign trade and to proclaim limited changes to tariff rates without further congressional action. As such, in any election outcome scenario, we expect both Trump and Harris will continue to leverage tariffs in their foreign and economic policy.

During his Presidency, Trump implemented broad-based tariffs on a variety of goods, placing the US in trade wars with multiple nations during his time in office. In our conversations with former Trump officials, they maintained that this approach was a success as it allowed the administration to deal bilaterally with trade partners to craft quotas or exemptions in



exchange for more favorable trade agreements. Based on campaign rhetoric, it seems Trump will amplify this strategy in a second term, as he calls for 10-20% broad-based tariffs on all foreign goods and a 60% tariff on imports from Chinese goods. We would expect to see trade provisions for climate and labor as well as concepts like "friendshoring", which provides IRA tax credit eligibility to allies and low-carbon trade partners, end if Trump returns to office. We also consider how a Trump administration would approach carbon-based trade regimes like EU's Carbon Border Adjustment Mechanism (CBAM) as it goes into effect in 2026.

While Harris has been highly critical of Trump's broad-based tariff strategy, we don't necessarily believe her distain towards tariffs is as broad. Harris has not specified a detailed tariff policy, yet we would expect to see a continuation of Biden's tariff strategy aimed at protecting domestic clean tech manufacturing. It is important to note that the Biden administration largely maintained the Trump-era tariffs on various Chinese imports, including solar cells, semiconductors, advanced batteries, aluminum, and steel. While some tariffs remained, Biden rolled back some and replaced EU aluminum and steel tariffs with a tariff-rate quota, allowing for historically based volumes to enter the US at a lower rate. Biden also implemented trade provisions, such as "friendshoring" and Critical Mineral Agreements, to provide economic preference to allies and low-carbon manufacturers.

Even in the current and proposed tariff scenarios, some energy imports could still be cheaper than American-made products, dulling the desired effect of protecting domestic manufacturers and keeping adversaries out of the energy system. In September, Biden raised 301 tariffs on clean technologies from China, including a 25% tariff on lithium-ion batteries, both for EVs and energy storage systems. Even with Trump's proposed 60% tariff on all Chinese goods, US batteries may remain more expensive. A 25% tariff on battery energy storage systems would increase the cost to \$116/kWh, and a 60% tariff would increase the cost to \$143/kWh—both still cheaper than the estimated \$192/kWh for a domestically manufactured battery.

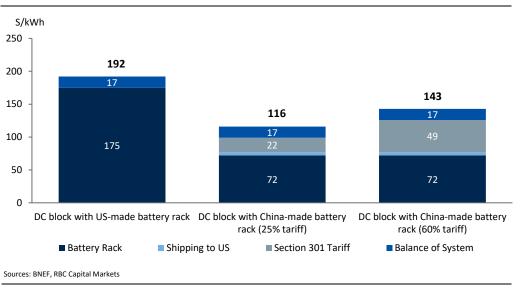


Figure 8 - Tariff Impacts on Battery Energy Storage Systems (2026 estimate)

Energy Regulation – The Administrative State

Executive agencies like the Department of Energy, Environmental Protection Agency, and Treasury craft regulation at the behest of the President, yet in the new post-Chevron doctrine landscape, there is increased judicial scrutiny over what agencies have the power to do. Previously, when regulation was challenged in courts, judges deferred to agencies to interpret laws, but when the Supreme Court overturned Chevron Deference, they made it more difficult for agencies to regulate industries unilaterally. This more tenuous legal landscape will make



rewriting or implementing new regulation more difficult and lengthier, hamstringing what both Harris and Trump could do to regulate emissions, federal lands, and energy infrastructure when they come to office this January.

However, agency rules are much easier to change if they are not final or are being challenged in the courts. This will importantly affect what Trump can do to roll back or shape the Inflation Reduction Act. Although Trump has called for a full repeal of the IRA, it is protected from being repealed solely through executive order as the legislation was passed through Congress. Even in a red wave scenario, the recent stance from 18 House Republicans to uphold the bill challenges the likelihood of a full legislative repeal. Still, the President has authority to contour the framework of the law through executive agencies (Treasury, DOE, EPA) to make tax credits more difficult to access, freeze any unallocated money, or revise unfinalized rules. This would likely be exercised by Trump to target EPA's recent power plant emissions rule that would require carbon capture and storage (CCS) on new natural gas power plants, among other outstanding emissions regulation. Trump could also repurpose energy lending vehicles like DOE's Loan Program Office (LPO) to focus less on clean energy projects and direct more funds to mining, factories, and advanced fossil fuel projects. Of the \$250 billion in lending the LPO has, only \$6.5 billion has been deployed to market, leaving the \$26 billion of conditional commitments primed to be frozen and the \$212 billion that remains unassigned ripe for redirection to Trump's all-of-the-above technologies.

Additionally, the Congressional Review Act could be used in a red wave scenario to overturn any final rules made within the last 60 legislative days of the previous Congress. This was used in the 115th Congress to repeal 16 rules from the Obama administration. It is estimated that final rules submitted by agencies after August 1 could be subject to the CRA, yet since the legislative calendar has not concluded, the number of vulnerable rules could reach beyond that. In figure 9, we highlight both unfinalized IRA provisions and other recent agency decisions that are vulnerable to the CRA should a red wave come this November.

A Harris administration would see the continuation of the IRA and other landmark Biden energy regulations that work to decarbonize power, transport, and industry. Given recent decisions and rhetoric from the Supreme Court, it is likely that if Harris continues a policy of deeper regulation, she will be met with unfavorable judicial scrutiny.

Rule	Final Rule Date	Status
Sustainable aviation fuel and clean fuel credits (40B and 45Z)	No timeline	Vulnerable
Clean commercial vehicle tax credit (45W)	No timeline	Vulnerable
Zero-emission nuclear power production credit (45U)	No timeline	Vulnerable
Alternative fuel infrastructure tax credit (30C)	No timeline	Vulnerable
Clean hydrogen (45V)	End of 2024	Vulnerable
Zero-carbon energy production and investment credits (45Y, 48 and 48E)	End of 2024	Vulnerable
Advanced manufacturing and critical minerals production credit (45X)	End of 2024	Vulnerable
Updated Level of Credit or Deduction for Satisfying Certain Prevailing		Potentially
Wage and Registered Apprenticeship Requirements	June 25, 2024	vulnerable
FERC Order 1920 – Building for the Future Through Electric Regional		Potentially
Transmission Planning and Cost Allocation	June 11, 2024	vulnerable
Applications for Permits to Site Interstate Electric Transmission		Potentially
Facilities	May 29, 2024	vulnerable

Figure 9 - Agency Rules Vulnerable to Congressional Review Act



Recent Global Commodity Strategy and MENA Research

Oil Market in 60 Seconds: Revisiting ReversionCommodity Comment: Bracing for ImpactClean Energy Correspondence: Objects in MotionBeyond the Ballot: The Undoing?Natural Gas NavigatorCommodity Comment: "Drag Me Down"Post Card from Washington: Closing TimeCommodity Comment: Awaiting ActionOil Strategy: Expedition Log – Pick Your Battles





Driving insights through data

Description

RBC Elements[™] is a primary research and data science team embedded within RBC's Global Research division. The main focus of RBC Elements[™] is to use scientific methods, algorithms and systems to analyze vast amounts of structured and unstructured data, to obtain insights that are inputs into RBC's Fundamental Global Research teams.

Objective

The team is involved in creating various machine learning and predictive modeling tools and processes, helping RBC Research discover the information hidden in big data, and allowing the Research division to make smarter decisions and deliver differentiated products to our clients. RBC Elements[™] strives to augment the already available industry data with different alternative data sources, and enhance data collection procedures to include information that is relevant.

Methods

The team is implementing different machine learning and data mining algorithms using state-of-the-art methods. Examples include:

- Machine learning techniques and algorithms, such as k-NN, Naive Bayes, SVM, Decision Forests, Clustering, Artificial Neural Networks, and Natural Language Processing to find patterns in the past, and to predict the future.
- Feature selection techniques to find what matters most in the data.
- Statistical modeling and analysis, and statistical tests such as distributions, and regression/GLM.
- Developing hypotheses and making inferences using large amounts of data.



Required disclosures

Conflicts disclosures

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of the member companies of RBC Capital Markets and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets and its affiliates.

With regard to the MAR investment recommendation requirements in relation to relevant securities, a member company of Royal Bank of Canada, together with its affiliates, may have a net long or short financial interest in excess of 0.5% of the total issued share capital of the entities mentioned in the investment recommendation. Information relating to this is available upon request from your RBC investment advisor or institutional salesperson.

Helima Croft is a member of the board of directors of Reservoir Media, Inc. (Nasdaq: RSVR)

Conflicts policy

RBC Capital Markets Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on request. To access our current policy, clients should refer to https://www.rbccm.com/global/file-414164.pdf or send a request to RBC Capital Markets Research Publishing, P.O. Box 50, 200 Bay Street, Royal Bank Plaza, 29th Floor, South Tower, Toronto, Ontario M5J 2W7. We reserve the right to amend or supplement this policy at any time.

Dissemination of research

RBC Capital Markets endeavors to make all reasonable efforts to provide research content simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. RBC Capital Markets provides eligible clients with access to Research Reports on the Firm's proprietary INSIGHT website, via email and via third-party vendors. Please contact your investment advisor or institutional salesperson for more information regarding RBC Capital Markets' research.

For a list of all recommendations on the company that were disseminated during the prior 12-month period, please click on the following link: <u>https://rbcnew.bluematrix.com/sellside/MAR.action</u>

The 12 month history of Quick Takes can be viewed at https://www.rbcinsightresearch.com/.

Analyst certification

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Third-party disclaimers

RBC Capital Markets disclaims all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any statements made to the media or via social media that are in turn quoted in this report, or otherwise reproduced graphically for informational purposes.



Disclaimer

RBC Capital Markets is the business name used by certain branches and subsidiaries of the Royal Bank of Canada, including RBC Dominion Securities Inc., RBC Capital Markets, LLC, RBC Europe Limited, RBC Capital Markets (Europe) GmbH, Royal Bank of Canada, Hong Kong Branch, Royal Bank of Canada, Singapore Branch and Royal Bank of Canada, Sydney Branch. The information contained in this report has been compiled by RBC Capital Markets from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Capital Markets, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Capital Markets" judgement as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. This report is not an offer to sell or a solicitation of an offer to buy any securities. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. RBC Capital Markets research analyst compensation is based in part on the overall profitability of RBC Capital Markets, which includes profits attributable to investment banking revenues. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. RBC Capital Markets may be restricted from publishing research reports, from time to time, due to regulatory restrictions and/ or internal compliance policies. If this is the case, the latest published research reports available to clients may not reflect recent material changes in the applicable industry and/or applicable subject companies. RBC Capital Markets research reports are current only as of the date set forth on the research reports. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. To the full extent permitted by law neither RBC Capital Markets nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct, indirect or consequential loss arising from, or in connection with, any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior written consent of RBC Capital Markets in each instance.

Additional information is available on request.

To U.S. Residents: This publication has been approved by RBC Capital Markets, LLC (member FINRA, NYSE, SIPC), which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC.

To Canadian Residents: This publication has been approved by RBC Dominion Securities Inc. (member CIRO). Any Canadian recipient of this report that is not a Designated Institution in Ontario, an Accredited Investor in British Columbia or Alberta or a Sophisticated Purchaser in Quebec (or similar permitted purchaser in any other province) and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report should contact and place orders with RBC Dominion Securities Inc., which, without in any way limiting the foregoing, accepts responsibility for this report and its dissemination in Canada.

To U.K. Residents: This publication has been approved by RBC Europe Limited ('RBCEL') which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority ('FCA') and the Prudential Regulation Authority, in connection with its distribution in the United Kingdom. This material is not for general distribution in the United Kingdom to retail clients, as defined under the rules of the FCA. RBCEL accepts responsibility for this report and its dissemination in the United Kingdom.

To EEA Residents: This material is distributed in the EU by either RBCEL on an authorised cross-border basis, or by RBC Capital Markets (Europe) GmbH (RBC EG) which is authorised and regulated in Germany by the Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) (BaFin). **To Persons Receiving This Advice in Australia:** This material has been distributed in Australia by Royal Bank of Canada, Sydney Branch (ABN 86 076 940 880, AFSL No. 246521). This material has been prepared for general circulation and does not take into account the objectives, financial situation or needs of any recipient. Accordingly, any recipient should, before acting on this material, consider the appropriateness of this material having regard to their objectives, financial situation and needs. If this material relates to the acquisition or possible acquisition of a particular financial product, a recipient in Australia should obtain any relevant disclosure document prepared in respect of that product and consider that document before making any decision about whether to acquire the product. This research report is not for retail investors as defined in section 761G of the Corporations Act.

To persons receiving this from Royal Bank of Canada, Hong Kong Branch: This document is distributed in Hong Kong by Royal Bank of Canada, Hong Kong Branch which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission. This document is not for distribution in Hong Kong, to investors who are not "professional investors", as defined in the Securities and Futures Ordinance (Cap. 571 of Hong Kong) and any rules made under that Ordinance. This document has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. Past performance is not indicative of future performance. WARNING: The contents of this document have not been reviewed by any regulatory authority in Hong Kong. Investors are advised to exercise caution in relation to the investment. If you are in doubt about any of the contents of this document, you should obtain independent professional advice.

To persons receiving this from Royal Bank of Canada, Singapore Branch: This publication is distributed in Singapore by the Royal Bank of Canada, Singapore Branch, a registered entity licensed by the Monetary Authority of Singapore. This publication is not for distribution in Singapore, to investors who are not "accredited investors" and "institutional investors", as defined in the Securities and Futures Act 2001 of Singapore. This publication has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance. If you have any questions related to this publication, please contact the Royal Bank of Canada, Singapore Branch.

To Japanese Residents: Unless otherwise exempted by Japanese law, this publication is distributed in Japan by or through RBC Capital Markets (Japan) Ltd. which is a Financial Instruments Firm registered with the Kanto Local Financial Bureau (Registered number 203) and a member of the Japan Securities Dealers Association ("JSDA") and the Financial Futures Association of Japan ("FFAJ").

Registered trademark of Royal Bank of Canada. RBC Capital Markets is a trademark of Royal Bank of Canada. Used under license.

Copyright © RBC Capital Markets, LLC 2024 - Member SIPC

Copyright © RBC Dominion Securities Inc. 2024 - Member Canadian Investor Protection Fund

Copyright © RBC Europe Limited 2024 Copyright © Royal Bank of Canada 2024

All rights reserved