



February 1, 2023

## Global Energy Best Ideas

**Our view:** In January, the RBC Global Energy Best Ideas List was up 2.0% compared to the iShares S&P Global Energy Sector ETF (IXC) up 3.2% and a hybrid benchmark (75% IXC, 25% JXI – iShares Global Utilities ETF) up 2.4%. Since its inception in February 2013, the RBC Global Energy Best Ideas List is up 142.5% compared to the S&P Global Energy Sector ETF up 29.5%.

Total Return Comparison	January	YTD	Inception
iShares S&P Global Energy (IXC)	3.2%	3.2%	29.5%
Hybrid Benchmark (75% IXC, 25% JXI)	2.4%	2.4%	43.7%
RBC Global Energy Best Ideas	2.0%	2.0%	142.5%

**January List Changes:**

Additions: HTG-LON

Removals: NA

RBC GLOBAL ENERGY BEST IDEAS LIST								
	Ticker	Rating <sup>1</sup>	Analyst	Mkt Cap (mn)	Date Added	Add Price	Current Price	Price Target
<b>Integrated Energy</b>								
Repsol	REP-ES	OP	Borkhataria	€20,785	12-7-22	€14.52	€15.09	€20.00
Shell	SHEL-LON	OP	Borkhataria	£165,553	7-1-20	1,224p	2,374p	3,200p
<b>Exploration &amp; Production</b>								
Tamarack Valley Energy	TVE-CA	OP	Davis	C\$2,682	7-6-21	C\$2.57	C\$4.82	C\$7.00
Topaz Energy	TPZ-CA	OP	Davis	C\$2,981	11-1-22	C\$23.04	C\$20.69	C\$30.00
California Resources Corporation	CRC-US	OP	Hanold	\$3,139	6-1-21	\$29.01	\$42.73	\$65.00
Diamondback Energy	FANG-US	OP	Hanold	\$25,717	12-7-22	\$138.21	\$146.12	\$182.00
Permian Resources Corporation	PR-US	OP	Hanold	\$6,063	12-7-22	\$8.99	\$10.87	\$13.00
Range Resources	RRC-US	OP	Hanold	\$6,046	7-6-21	\$16.76	\$25.02	\$40.00
ARC Resources	ARX-CA	OP	Harvey	C\$9,614	5-1-21	C\$7.73	C\$15.46	C\$26.00
Tourmaline Oil	TOU-CA	OP	Harvey	C\$20,960	1-1-20	C\$15.08	C\$62.01	C\$89.00
Canadian Natural Resources	CNQ-CA	OP	Pardy	C\$90,411	4-1-22	C\$77.41	C\$81.67	C\$89.00
Enerplus Corporation	ERF-US	OP	Pardy	\$3,968	6-1-22	\$14.84	\$17.75	\$21.00
Santos Limited	STO-AU	OP	Ramsay	A\$23,558	6-1-19	A\$6.74	A\$7.11	A\$10.00
<b>Oilfield Services</b>								
Liberty Energy	LBRT-US	OP	Mackey	\$2,884	8-3-22	\$14.20	\$15.83	\$26.00
SLB	SLB-US	OP	Mackey	\$80,797	1-4-22	\$29.95	\$56.98	\$66.00
Hunting plc	HTG-LON	OP	McCulloch	£575	2-1-23	349p	349p	400p
<b>Midstream</b>								
Pembina Pipeline Corporation	PPL-CA	OP	Kwan	C\$26,039	9-1-22	C\$46.38	C\$47.21	C\$58.00
Targa Resources Corp.	TRGP-US	OP	Schultz	\$16,983	12-1-21	\$51.63	\$75.02	\$104.00
Cheniere Energy Inc	LNG-US	OP	Scotto	\$37,993	5-1-20	\$46.69	\$152.79	\$205.00
Energy Transfer LP	ET-US	OP	Scotto	\$41,015	2-1-22	\$9.57	\$13.28	\$17.00
<b>Utilities, Refiners, Infrastructure &amp; Renewables</b>								
Superior Plus	SPB-CA	OP	Ng	\$2,170	12-7-22	\$9.82	\$10.76	\$15.00
HF Sinclair Corporation	DINO-US	OP	Schultz	\$11,422	6-1-22	\$49.10	\$56.90	\$71.00
Marathon Petroleum Corporation	MPC-US	OP	Schultz	\$60,232	12-7-22	\$109.29	\$128.52	\$141.00
PG&E Corporation	PCG-US	OP	Tucker	\$31,604	9-1-22	\$12.33	\$15.90	\$20.00
Drax Group plc	DRX-LON	OP	Wheeler	£2,591	5-1-21	409p	646p	1,030p

1-OP = Outperform, 2-Indicates Speculative Risk. 3-Opening price given is the closing price of the trading day prior to which the stock was added. 4-Return assumes all dividends and distributions are reinvested.

Note: Performance returns do not take into account relevant costs, including commissions and interest charges or other applicable expenses that may be associated with transactions in this Equity Best Ideas list. Past performance is not, and should not be viewed as, an indicator of future performance.

Source: RBC Capital Markets estimates, FactSet

**RBC Dominion Securities  
Inc.**
**Greg Pardy (Head of Global  
Energy Research)**  
**Robert Kwan (Analyst)**  
**Michael Harvey (Analyst)**  
**Nelson Ng (Analyst)**  
**Luke Davis (Analyst)**  
**Keith Mackey (Analyst)**
**RBC Europe Limited**  
**Biraj Borkhataria (Associate  
Director of European  
Research)**  
**Victoria McCulloch  
(Analyst)**
**RBC Capital Markets, LLC**  
**Scott Hanold (Analyst)**  
**Elvira Scotto (Analyst)**  
**TJ Schultz (Analyst)**  
**Shelby Tucker (Analyst)**
**Royal Bank of Canada,  
Sydney Branch**  
**Gordon Ramsay (Analyst)**



## This Month's Additions and Removals from Energy Best Ideas List

### Exhibit 1 - This Month's Additions

---

#### Hunting Plc (HTG)

Victoria McCulloch, Analyst

+44 207 429 8530

victoria.mcculloch@rbccm.com

- We are adding Hunting, the down-hole equipment manufacturer, to the best ideas list, as it continues to demonstrate its leverage to drilling and production activity with higher revenues and improved utilisation pushing up margins. The company's order book reached a record level of ~\$500m in December, and management has raised EBITDA guidance. We forecast EBITDA of \$85.8m in 2023, an approximately 72% yoy increase, on higher orders and increased pricing power.
  - We expect investors to take a "show me" attitude to results given recent years; however, with the outlook underpinned by the order book, a supportive commodity environment, and energy security concerns, we are confident that 2023 is set up for higher levels of activity and consensus earnings upgrades.
-



## Investment Highlights

Below, we provide a summary of our analysts' views on each *Best Idea*.

### ARC Resources (ARX)

Michael Harvey, Analyst  
(403) 299-6998  
michael.harvey@rbccm.com

- **FCF generation – ample.** ARC is set to generate ~\$1.6 bn FCF in 2023 on our numbers. With a strong balance sheet and large M&A on hold (for now), the focus remains on Attachie development and RoC initiatives. ARC targets return of capital in the range of 50–100% of FCF via base dividend tied to earnings growth (now at \$0.60/share), and share buyback. Production growth is not a specific target but rather an outcome of the most efficient way to execute projects (Sunrise, Attachie) paired with the Basin's capacity to absorb new product, and is unlikely to exceed 5%. See our recent quarterly note [here](#).
- **Western Canada's largest Montney player.** ARC's production base of ~350,000 boe/d makes it what we view as a Montney Champion with top-decile supply costs and deep project inventory. This benchmarks ARC as the largest Montney producer, third-largest outright gas producer, and sixth-largest E&P by volume amid the WCSB producer landscape, with operated facilities network of ~1.5bcf/d—second only to CNQ and TOU. See our notes [here](#) and [here](#).
- **Facility portfolio adds scale and optionality.** Following the absorption of 7G assets, ARC's owned and operated facility portfolio roughly doubles to about 1.5 bcf/d—now third in the basin behind CNQ and TOU. This larger strategic footprint allows for continued top-quartile operating metrics and optimized marketing, and it establishes critical mass, opening the door for other potential strategic options in the future. See our note [here](#).
- **LNG – The key to long-term value creation.** ARC's existing 2P reserve book contains sufficient resource to sustain an entire 2-train LNG project (1.8 bcf/d) for 10+ years, and when adding future drilling could increase to 40–50 years. Accordingly, we think the company should be viewed as a key supplier, or alternatively as a strategic asset for operators looking for vertical integration. The owners of LNG Canada now collectively hold enough product to support Phase 1 of the development (~1.8 bcf/d), but any expansion (Phase 2, +1.8 bcf/d) would need to be augmented. See our note [here](#).



---

**California Resources Corp. (CRC)**

Scott Hanold, Analyst

(512) 708-6354

scott.hanold@rbccm.com

- **Attractive value proposition.** CRC shares offer an attractive entry valuation point, strong balance sheet, and robust FCF outlook, in our view. The company's low break-even point, which we estimate at \$38–39/bbl (WTI), and 50% reinvestment framework position the company to generate ~\$1 billion of FCF from 2023 through 2025. CRC has an active buyback program and a fixed dividend, which we expect to grow over time. CRC plans to return 50+% of FCF back to shareholders, providing upside to returns longer-term.
  - **ESG exposure in a U.S. E&P.** The company's large surface rights ownership, premium reservoir geology in close proximity to emitting parties, and being located in "green energy" friendly California provide CRC the unique opportunity to economically participate in energy transition opportunities. The State of California has established attractive credit programs to incentivize green energy development in order to meet the state's ambitious climate targets. Accordingly, these credits enhance project economics for CRC as it expands into renewable/carbon management projects being able to take advantage of both in-state and federal credit programs. We think the value of these projects could eclipse the value of the upstream business over time.
  - **Brookfield JV brings third-party validation and enhances CRC's returns.** CRC has entered into a JV with Brookfield Renewables that we think significantly de-risks capital needs for its CCS projects, adds expertise and connections, and importantly provides a third-party valuation of the CCS upside potential for CRC ([deep-dive note](#)). The JV consists of a \$500 initial investment, with the option to invest an additional \$1 billion into future projects. Brookfield will contribute \$10/mt of permitted pore space CRC contributes into the JV, with CRC/Brookfield taking 51%/49% interest stakes in the CCS projects. We think the total value of the initial 200 MMT of CTV projects is worth \$17/share net to CRC if all projects are added into the JV; this assigns no value to the remaining 800 MMT storage capacity that CRC has in its portfolio.
  - **Progressing on the carbon management projects.** In the spring of 2022, we took a field tour of CRC's oil & gas operations, saw the future site of CTV I, and spoke with a local regulator ([note](#)). CRC now has four class VI well permits filed (120 MMT total storage) with the EPA and planned to have permits filed for another 80 MMT of storage by YE22. Targeted FID on CRC's first project Carbon TerraVault I (CTV I) remains mid/late-2023, with first injection planned for late 2025. Near-term catalysts to watch for are approval of the Kern County EIR needed for CTV I to proceed, which we think could come early 2023, and EPA class VI permit approval, which we think could come in mid-2023. CRC targets injecting 5 MMT/annually starting in 2027.
  - **Conventional asset base provides consistency.** The company's conventional asset base has a low capital intensity with base decline rates at ~15%, far lower than shale E&P peers at 35–40%. Its conventional low-risk, low-decline asset development strategy drives more stable production and cash flow generation, which helps underpin our FCF outlook. We estimate that CRC has more than a decade of remaining core drilling opportunities in its core fields, which should position the company for repeatable, robust FCF generation for years to come.
-



---

**Canadian Natural Resources (CNQ)**

Greg Parady, Head of Global Energy  
Research

(416) 842-7848

greg.pardy@rbccm.com

- **Globally distinguished.** Canadian Natural Resources' management committee structure and shareholder alignment are unique factors that distinguish the company globally. CNQ's long-life, low-decline portfolio—anchored by low sustaining capital—affords the company superior free cash flow generation throughout the cycle.
- **Impressive shareholder returns.** CNQ currently allocates 50% of free cash flow (after dividends and base capital) to share repurchases, with the balance (less strategic growth capital/acquisitions) earmarked for debt reduction. Once CNQ's net debt falls to \$8 billion, the company plans to allocate 80–100% of its free cash flow as incremental returns to shareholders. CNQ also raised its common dividend twice in 2022, representing a 45% increase to an annualized rate of \$3.40 per share. We think it is important to point out that CNQ has never cut its common dividend, which has grown at a CAGR of ~21% over the last 23 years.
- **Strong alignment.** CNQ has no CEO. Instead, the company is stewarded by a management committee. This group meets weekly and oversees all matters encompassing marketing, finance, ESG, operations, and technology, among others.
- **ESG – lots of progress.** CNQ has established a GHG emissions reduction target of 40% of total corporate absolute Scope 1 and 2 GHG emissions by 2035 (vs. a 2020 baseline). Not to be overlooked, CNQ also continues to make progress toward its initiatives with respect to the Oil Sands Pathways to Net Zero Alliance. CNQ also continues to target a 50% reduction in North American E&P (including thermal in-situ) methane emissions by 2030 (vs. 2016), and a 40% reduction in both thermal in-situ fresh water usage intensity and mining fresh river water usage intensity by 2026 (from a 2017 baseline).

---

**Cheniere Inc. (LNG)**

Elvira Scotto, Analyst

(212) 905-5957

elvira.scotto@rbccm.com

- **Highly contracted cash flow with strong counterparties.** Cheniere has a weighted average contract duration of 17 years on its long-term take-or-pay contracts and is 90% contracted on its nine-train portfolio including medium-term and short-term SPA and IPM agreements. All of Cheniere's Sale and Purchase Agreement customers are investment grade rated or have investment grade credit metrics. Importantly, utilities or state-owned utilities/oil and gas companies represent 68% of Cheniere's contracted capacity.
  - **Liquefaction fees represent most of Cheniere's EBITDA.** Cheniere's customers have the contractual right to cancel cargoes but still must pay fixed liquefaction fees. In our 2024 run-rate scenario, on a consolidated basis, liquefaction fees represent ~90% of Cheniere's total EBITDA while lift represents ~5% and marketing ~5%.
  - **Long-term FCF and capital return story.** We believe long-term take-or-pay contracts with high credit quality counterparties provide cash flow visibility. The four pillars of Cheniere's capital allocation strategy are: (1) annual debt pay-down of \$1 billion through 2024 to achieve investment grade ratings; (2) dividend declaration of \$0.33/share (\$1.32/share annualized) with mid-single-digit annual growth; (3) \$1 billion share repurchase program; and (4) invest in accretive growth.
-



---

**Diamondback Energy (FANG)**

Scott Hanold, Analyst

(512) 708-6354

scott.hanold@rbccm.com

- **Defining low-cost operator.** We believe FANG has built a solid Permian Basin position with a deep inventory of liquids-rich development opportunities and is one of few E&Ps that have amassed a combination of quality assets, strong economic growth, minerals ownership, and infrastructure, which collectively help provide an advantage. We believe FANG has one of the lowest cost structures in the basin and a corporate cash flow break-even (including fixed dividend) that is among the best in the industry at below \$45/bbl (WTI). FANG also produces a top-tier cash margin that is among peer best, helping to drive more sustainable FCF generation through commodity cycles.
  - **Robust shareholder return proposition.** The shareholder return commitment is to return at least 75% of FCF to investors through a combination of dividends and buybacks. We think this translates to \$15/share going back to investors in 2023, or a 10% total yield. This notably is a 7–8% YoY increase, which is among the highest for large caps. We think there should be a higher weighting on dividends in the return strategy, though this will somewhat depend on where FANG stock trades. Management's opportunistic strategy is geared toward utilizing buybacks when FANG shares are below its mid-cycle internal valuation (\$60–65/bbl WTI), which we think is \$140–150/share.
  - **Recent acquisitions bolster FCF outlook.** FANG recently announced two bolt-on Midland Basin acquisitions (FireBird and Lario) that together were 7–9% accretive to our 2023/2024 per share estimates while being fairly neutral to our overall Net-Asset Value. The FireBird deal recently closed, while Lario is expected to close in January 2023. Leverage upticks slightly from the deals but remains healthy at sub-1.0x and should improve further as FANG executes on its \$500 million divestiture target.
-

### Drax Group plc (DRX)

Alexander Wheeler, Analyst  
+44 (20) 7653 4481  
alexander.wheeler@rbccm.com

- **Financials remain above consensus post EGL; biomass cost adjustment a big plus.** Clarity on the Electricity Generator Levy (EGL) provides greater visibility for Drax going forward, whilst the government's decision to allow for the changing cost of biomass within the EGL further removes uncertainty from the investment case, in our view. We think overall the EGL was significantly less draconian than the market anticipated and the allowance for changing biomass costs above a £65/MWh threshold is a key positive. We continue to take a conservative view on power prices, assuming a 20% discount to the forward curve, and therefore see further upside on a mark-to-market basis.
- **Three-pronged growth strategy continues to take shape.** Drax retains a number of growth options going forward, which include BECCS, new pumped storage capacity at Cruachan, and continued expansion of upstream pellet facilities. The development of BECCS continues to progress both domestically and internationally. In the UK, successful track 1 BECCS projects will be shortlisted in Q1-23 and we should also gain further clarity on the government's investment framework, which is likely to include a CfD mechanism for both power generation and negative emissions. Internationally, the regulatory framework in the US appears to be increasingly favourable for expansion of BECCS going forward. Additionally, new pumped storage capacity through the 600MW expansion of the Cruachan II pumped storage facility should be completed by the end of the decade. We see the £3bn capex growth plans as fully funded under the current balance sheet, with FCF yields averaging ~25% across the remainder of the decade.
- **Sustainability paramount to Drax's strategy.** Biomass continues to be a key part of the UK government's strategy to achieve net zero, whilst Drax is leading the way on BECCS, which has growth potential both in the UK and internationally. We think criticism of Drax's sustainability credentials was inaccurate in the BBC Panorama documentary towards the end of last year, and we were reassured by a recent trip to see Drax's pellet operations first hand. Drax retains an active aim of ensuring that any biomass sourced will have positive outcomes for climate, nature, and the communities in which it operates.

### Energy Transfer (ET)

Elvira Scotto, Analyst  
(212) 905-5957  
elvira.scotto@rbccm.com

- **Energy Transfer is a publicly traded partnership that owns and operates a portfolio of assets across the natural gas, natural gas liquids, and crude oil value chain.** We believe ET is well positioned to generate meaningful cash flow growth as large-scale growth projects come online and as we expect growth capex to slow. With a stronger balance sheet, ET should be in position to return more cash to unit-holders via distribution increases and/or unit repurchase.
- **Significant synergy potential from recent Enable Midstream acquisition.** (1) Enable brings additional demand pull transportation and storage assets in the Mid-Con and ArkLaTex regions. (2) Enable's Gathering and Processing assets in the Mid-Con complements ET's Gulf Coast fractionation and export assets. (3) Enables Haynesville Gathering and Processing assets and its Gulf Run pipeline increase exposure to the global liquefied natural gas markets. (4) In the Bakken, Enable provides crude gathering that connects into DAPL. ET expects the Enable acquisition to generate \$100MM of cost and efficiency synergies, which we view as achievable given the complementary asset bases.
- **Strong balance sheet FCF generation potential positions the company for capital return.** ET lowered its outstanding debt by ~\$6BN in 2021 and exited 2021 with leverage of 3.9x (credit facility calculation) while targeting leverage of 4.0–4.5x. We forecast that ET exits 2022/2023 with Net Debt/TTM Adjusted EBITDA of 3.7x/3.6x while paying \$6.6BN in distributions.



---

**Enerplus Corporation (ERF)**

Greg Parady, Head of Global Energy  
Research

(416) 842-7848

greg.pardy@rbccm.com

- **Solid all-around.** Enerplus remains our favourite intermediate producer given its capable leadership team, solid execution, strong balance sheet, and rising shareholder returns.
- **FCF and shareholder returns.** Enerplus has always maintained a strong balance sheet and is now bolstering its shareholder returns offering, with an accent on share repurchases. Commensurate with third-quarter results, the company reaffirmed its commitment to distribute at least 60% of free cash flow in 2023, with an accent on share buybacks. Enerplus also raised its common share dividend 10% to an annualized rate of \$0.22 per share. The company's net debt (debt less cash) stood at \$391 million as of September 30. Execution of a substantial issuer bid (SIB) also remains an option for Enerplus as market conditions dictate. We peg Enerplus's free cash flow (before dividends and including A&D) at approximately \$723 million in 2023.
- **Bakken positioning.** Enerplus's framed 670 drilling locations last April in its core/extended core areas of the Bakken—or about 13 years of drilling inventory at a 50 well per annum (approximately 2.0 rigs) development pace factored into its five-year (2022–26) plan.
- For our most recent update with Enerplus, please see our [Update with Ian Dundas](#).

---

**HF Sinclair Corporation (DINO)**

TJ Schultz, Analyst

(512) 708-6385

tj.schultz@rbccm.com

- **Refining margins.** Refiners across the board have continued to see strong margins from the elevated cracks throughout 2022, and we expect DINO to continue to benefit and generate significant cash as product cracks remain elevated despite moderating rationally through 2023. Management previously stated that the primary risk to operations is a recession, with some natural gas price and RINs headwinds.
  - **Sinclair acquisition.** DINO closed the acquisition of Sinclair in 1Q22, and the integration of the business has gone as management expected. Following close of the acquisition, DINO reinstated the dividend at \$0.40/share (above our \$0.35/share estimate).
  - **Capital allocation.** Given the robust cash flow generation from which the refining group has benefited, DINO has returned more than \$1.1B to shareholders in the form of dividends and share repurchases since the close of the Sinclair acquisition on 3/14/22, which was ahead of the original plan of \$1B to shareholders by the end of 1Q23.
  - **Renewable diesel.** DINO continues to ramp its production of renewable diesel with the completion and startup of its Artesia, New Mexico facility in 2Q22, which followed the commencement of production at the Cheyenne facility in 1Q22.
-





---

#### Hunting Plc (HTG)

Victoria McCulloch, Analyst  
+44 207 429 8530  
victoria.mcculloch@rbccm.com

- **US E&P activity increase.** Tighter oil markets have driven commodity prices materially higher, and while we continue to believe that Energy companies will remain disciplined on spending, we expect US onshore and international activity to increase y/y and tightening in the US OFS market to help drive prices higher in 2023. Hunting continues to demonstrate its leverage to increased activity with higher revenues and improved utilisation pushing up margins.
- **Subsea activity increasing.** Hunting's order book has grown materially due to large subsea orders in the last six months. Worldwide manufacturing constraints and growth in energy security concerns are leading to more offshore awards globally. Hunting's recent subsea acquisitions are seeing the company secure more offshore awards in new geographies. We expect to continue seeing sustained higher offshore spending in FY23 as companies execute projects sanctioned in FY22. Hunting is well positioned to win more awards in this area.
- **Potential M&A.** We expect Hunting to continue targeting small bolt-on strategic deals, building out its non-oil and gas revenues (targeting 25% by 2025) and rapidly growing subsea offering.

---

#### Liberty Energy (LBRT)

Keith Mackey, Analyst  
(403) 299-6958  
keith.mackey@rbccm.com

- **Improving operational execution.** Completion of integration efforts from the company's 2021 acquisitions alongside improved operational execution enabled Liberty Energy to materially outperform Street expectations in 2022. We expect strong results to continue into 2023 given strong demand for the company's pumping, sand, and logistics businesses.
- **Tight frac market drives strong profitability.** Liberty has been able to capitalize on a tight pressure pumping market and expects to generate 40–50% y/y adj. EBITDA growth in 2023. We estimate the US horsepower market to remain relatively tight at approximately 14.5MM demand vs. 15.8MM supply in 2023. Our 2023 assumptions map to overall EBITDA per fleet of approximately \$30MM.
- **Compelling valuation.** Liberty is trading at a discount to its historical range and our frac services coverage peer set. In our view, Liberty should trade at a premium to frac peers given its larger scale, increasing vertical integration, strong balance sheet, and broad exposure to key North American basins.
- See our latest Liberty Energy note [here](#).

---

#### Marathon Petroleum Corp. (MPC)

TJ Schultz, Analyst  
(512) 708-6385  
tj.schultz@rbccm.com

- **Capital returns.** MPC has remained focused on returning capital to shareholders in the form of dividend payments and share repurchases. MPC increased its quarterly dividend by 29% to \$0.75/share (from \$0.58/share) in 3Q22, which is ~\$370mm/quarter. MPC has repurchased a significant number of shares, which has resulted in multiple incremental increases of its share repurchase authorization, and it has ~\$7.6B remaining as of 1/31/23. We continue to expect MPC to be active on the incremental buyback authorization near-term, with a clear preference for buybacks as a means of returning capital.
  - **Renewable fuels.** MPC has continued to progress on the Martinez renewable fuels conversion project, expecting the first phase to reach full capacity of 260mm gal/yr by the end of 1Q23 and capacity to reach 730mm gal/yr by the end of 2023. MPC is well into its pre-fill strategy, pre-filling since mid-summer.
  - **Constructive refining margins.** Along with the rest of the refiner group, MPC has benefited from improved refining margins from higher cracks and wider spreads. We expect these positive margins to continue into 2023 above historical mid-cycle levels.
-



---

**Pembina Pipeline Corporation (PPL)**

Robert Kwan, Analyst  
(604) 257-7611  
robert.kwan@rbccm.com

- **Positioned to benefit from higher WCSB production.** Whether it be uncontracted capacity or within its contract structures that blend minimum take-or-pay levels with fee-for-service upside as volumes grow, we expect Pembina to benefit from growing natural gas and natural gas liquids (NGL) volumes in the Western Canada Sedimentary Basin (WCSB). Further, growing volumes could result in contracted infrastructure opportunities including NGL fractionation expansion and/or pipeline expansion projects.
- **Free cash flow generation after all capex and dividend payments provides a range of capital allocation opportunities.** In 2022, the company prioritized share buybacks (\$350 million target) with the strategy going forward focused on using free cash flow generation to create balance sheet optionality by reducing leverage. Lower debt levels should position the company to pursue a wide range of growth initiatives on an equity self-funded basis.
- **Solid base of business with a commodity kicker.** Pembina's guardrails target more than 80% of EBITDA coming from fee-based revenues, primarily supported by take-or-pay or cost-of-service contracts, which underpin the dividend. As upside optionality, Pembina's Marketing division can benefit from leveraging its asset base to take advantage of various commodity spreads and market dislocations.

---

**Permian Resources Corporation (PR)**

Scott Hanold, Analyst  
(512) 708-6354  
scott.hanold@rbccm.com

- **Largest Delaware Basin pure play.** PR is the rebranded combination following the merger of Centennial Resource Development (CDEV) and Colgate Energy (private) that closed in September 2022. The company is the largest pure-play producer in the Delaware Basin with large, continuous acreage positions in the core of the southern and northern basin trends with 2,500 identified locations. This provides a deep, quality inventory that can support peer-leading FCF yields and returns in our view.
  - **Shareholder returns framework to rival large-cap peers.** The 50+% excess FCF payout framework for shareholder returns will take effect in 2Q23 and was designed to provide a competitive return vs. larger-cap peers/the broader market while still retaining flexibility to be nimble with FCF allocation. We expect PR to deliver shareholder returns of just under \$1/share or an 8% yield in 2023, which we assume is mostly through dividends.
  - **Healthy balance sheet provides optionality.** Leverage modestly increased following the closing of the CDEV-Colgate merger and currently sits slightly above 1x. Near-term FCF priority is reducing outstanding debt and we expect leverage to quickly improve back toward 0.5x by YE23. A healthy balance sheet provides increased financial flexibility for future FCF that could go toward enhancing the shareholder-return strategy. The company targets maintaining leverage of 0.5–1.0x longer-term.
-



---

**PG&E Corporation (PCG)**

Shelby G. Tucker, Analyst  
(212) 428-6462  
shelby.tucker@rbccm.com

- **Continued reduction of wildfire risk.** The company continues to execute on its wildfire mitigation plan. Mitigation actions include system hardening, undergrounding, vegetation management, enhanced powerline safety settings, and public safety power shutoffs.
- **Steep discount not warranted given that CA wildfire protections limit financial risk.** We believe the Wildfire Fund provides meaningful protections against financial liabilities associated with wildfires. While the market seems to remain apprehensive around the mechanics of the fund, we believe the multi-turn discount is overly punitive when considering the financial risks associated with a catastrophic fire.
- **PG&E slowly rebuilding trust.** While the name remains overly sensitive to headlines, we have also seen a meaningful shift in tone from media and stakeholders. We believe that is a result of PG&E's continued efforts to engage stakeholders and communities and we are encouraged by positive signals from the CA legislature and regulator.
- **Robust capex plan drives earnings growth.** PG&E expects above-average rate base growth at a 9% CAGR. Growth opportunities come from system hardening, undergrounding, electrification opportunities, and other wildfire-mitigation investments. Management targets 2% O&M reductions, which should act to help offset customer bill increases.

---

**Range Resources (RRC)**

Scott Hanold, Analyst  
(512) 708-6354  
scott.hanold@rbccm.com

- **Strong upside to historically tight NGL/natural gas markets.** RRC is our preferred equity to express bullishness in NGL and natural gas prices with NGLs representing ~30% of total production volumes. The company exports a large portion of its NGL production, which translates to premium realizations above peers and allows RRC take advantage of both strong international and domestic demand trends.
  - **Rapid organic deleveraging.** The near-term focus remains on running the business for FCF to use for debt reduction although heightened current commodity prices provide a path toward reaching leverage/debt targets in conjunction with shareholder returns. Leverage currently sits at 1x, and we expect RRC to reach its \$1.0–1.5 billion aggregate debt target in early 2023.
  - **Shareholder returns focused on buybacks.** RRC remains active with its share buyback program, repurchasing an additional \$170 million worth of stock during 3Q22. The buyback authorization was increased by \$1 billion at 3Q22 earnings (\$1.2 billion now remaining). Buybacks should remain core to the shareholder-return strategy; along with its \$0.32/share annualized fixed dividend, we think RRC can generate an average total return of 10% now through 2025.
  - **Defining low-cost operator.** RRC has one of the largest tier-1 inventories remaining in the Appalachian Basin, which coupled with its strong technical expertise and low base decline supports a highly efficient maintenance capital program that can be sustained for years to come. This provides a durable and resilient FCF outlook over the next several years; we estimate RRC generating \$3.4 billion of cumulative FCF from 2023 through 2025 (using RBC \$4.87–3.75/Mcf HH price forecast).
-



---

**Repsol SA (REP)**

Biraj Borkhataria, Analyst

(+44) 20-7029-7556

biraj.borkhataria@rbccm.com

- **Refining exposure.** Middle distillate margins remain particularly strong, and with EU oil product sanctions coming, we expect the market to remain tight. Repsol is the most geared to refining among the integrators and we expect this tightness to be supportive for the company's earnings. Repsol's complex refining system should also allow some flexibility to source a variety of crudes, which should help ahead of potentially significant crude volatility. All of this could drive higher refining margins and potentially a larger margin premium. All things considered, it is possible that 2023 refining earnings could be materially ahead of 2022, which was already a strong year.
  - **Commitment to shareholder returns.** Repsol's CEO struck a bullish tone on the 3Q call with intentions to reduce share count closer to 1,200m shares (vs. 1,452m at the end of 3Q22). This firm commitment suggests to us the possibility of material share buybacks as we look into 2023–24, which we expect to be well supported by strong organic free cash flow generation. As such, our forecast buybacks for Repsol of €2bn in 2023 map to total shareholder returns of ~15%—well ahead of the pack—and we see the buyback activity providing an additional layer of support to the stock throughout the year.
  - **Recent track record on inorganic activity.** Our sum-of-the-parts valuation for Repsol, which includes some punitive discount rates on the upstream division, is closer to €22/sh. Along with this, the company's recent partial divestments of its low-carbon portfolio and upstream divisions provide markers that suggest an undervalued share price and scope for a run-up from here.
-

### Santos Limited (STO)

Gordon Ramsay, Analyst  
+61 3 8688 6578  
gordon.ramsay@rbccm.com

- **Santos merger with Oil Search** creates a top 20 global energy company with 2P reserves of 1.378 billion boe and 2021 production of ~116 mmboe. The combined company will have a more diversified production base (47% LNG, 35% gas, and 18% liquids) and a stronger and longer growth profile (Dorado, Papua LNG, Pikka Alaska oil). This will create one of the largest Asian LNG suppliers and aligns partners in PNG LNG and Papua LNG. The larger combined balance sheet provides increased flexibility from >US\$5.5 billion of liquidity and an investment grade credit rating that enables self-funding of development projects. Initial pre-tax synergies of US\$90—115 million pa (excluding integration and other one-off costs) seem conservative with potential to unlock additional value.
- **Barossa final investment decision** achieved in March 2021, with a first production target of 2025. Santos Barossa project rates as the most attractive Australian brownfield LNG development as back fill for Darwin LNG based on a cash cost of production of ~US\$2.00/mmBtu and breakeven cost of LNG supply at ~US\$5.50/mmBtu.
- **Dorado** consists of a relatively simple, shallow-water Western Australian oil field development. Santos forecasts initial production of ~100,000 bopd (gross) and operating costs of <US\$5/bbl. Dorado Phase 1 oil project FEED entry has been achieved, with project FID targeted in 1H 2022 after drilling the nearby Apus and Pavo exploration prospects that offer low-cost and production-extending tie-back potential.
- **Papua LNG** completed all pre FEED activities in 4Q22 with the FEED decision expected in 1Q 2023.
- **Alaska Pikka Oil** achieved FEED entry in 2021 with plans to commence production from Phase 1 at 80,000 bopd (gross) of oil from 2025. Further phases of this Oil Search project have potential to deliver two additional 40,000 bopd (gross) projects. The Alaskan gross 2C oil resource is 936 mmbbls.
- **Moomba CCS Phase 1** is a low-cost 1.7 mmtpa CO<sub>2</sub> storage project in the Cooper Basin with capex estimated at ~US\$165 million gross and a full life cycle cost <A\$30/t CO<sub>2</sub>. This Santos-operated project is expected to start up in 2024, following receipt of an approved methodology for Australian CCS projects to generate Australian Carbon Credit Units.

### Shell PLC (SHEL)

Biraj Borkhataria, Analyst  
(+44) 20-7029-7556  
biraj.borkhataria@rbccm.com

- **Advantaged portfolio.** In our view, Shell has three franchise businesses within the group, all of which are No. 1 in their respective areas. Global deepwater, integrated gas, and marketing form Shell's key competitive advantages, in our view. Shell's marketing business in particular consistently generates >20% ROACEs and is the highest-return business within the group. While we understand that the company values integration highly in its strategy, we believe there are some valuable parts of Shell's business that are not reflected in the share price today—this has not escaped the eye of some in the market (see "[talk to me](#)").
- **Substantial free cash flow.** On our bullish commodity price deck, Shell's advantaged portfolio generates significant amounts of cash, supported by the company's oil leverage and No. 1 LNG presence. This leaves it well positioned to deleverage meaningfully over the coming years with cash to spare for higher shareholder returns.
- **Closing the gap.** On our estimates, Shell generates an FCF yield ahead of the sector on average over 2023–25E but trades at a discount to peers on a DCF multiple basis. We think increasing shareholder returns should help drive a re-rating versus peers, while continued de-leveraging sets up Shell to become a more stable business through the cycle.



---

**Schlumberger N.V. (SLB)**

Keith Mackey, Analyst  
(403) 299-6958  
keith.mackey@rbccm.com

- **Leading size, scale, geographic reach.** SLB's size, scale, geographic diversification, and exposure to new energy sources position it favorably under prevailing industry trends, in our view. We believe SLB is well positioned to benefit from the next leg of growth in International markets. International short- and longer-cycle investment is increasing, led by Latin America, the Middle East, and key offshore basins.
- **Digital evolution to drive financial results.** Growing contribution from the Digital and Integration business line should drive margin accretion over time. Integrated digital platform adoption also improves revenue stability and provides competitive advantage as the E&P industry increasingly embraces efficiencies. Over time, we believe the reduced capital intensity should drive improvement in the company's financial metrics.
- **International upcycle: less nascent.** SLB is well positioned to benefit from the next leg of growth in International markets. In 4Q22 SLB's y/y North American revenue increased 27%, while International grew 26%, led by Middle East and offshore. The company noted that the Middle East is set to lead growth with this cycle characterized by the region's plans to add oil and gas productive capacity.
- **Potential for long-term valuation accretion.** We believe SLB's exposure to a large addressable New Energy market should drive accretion to its valuation multiples over time. Key target markets include carbon capture, hydrogen, geothermal, critical minerals, and energy storage.
- See our latest SLB note [here](#).

---

**Superior Plus (SPB)**

Nelson Ng, Analyst  
(604) 257-7617  
nelson.ng@rbccm.com

- **Adding value through sector consolidation.** Management continues to see attractive propane acquisition opportunities, and we expect the company to continue to execute on acquisitions. In general, management targets deploying \$200–300 million in capital per year and has been able to realize synergies that improve the EBITDA of acquired assets by ~25%+.
  - **Limited downside from a recession.** Weather is a much larger driver of financial results compared to economic activity. The company's U.S. operations (which contribute ~45% of EBITDA, including the pending acquisition of Certarus) mostly serve residential customers, where propane consumption is driven by heating needs. We also note that the company tends to earn higher margins from residential customers, so it could benefit from a declining propane price (lag in pass-through) and a higher U.S. dollar. The company has also completed a number of acquisitions and we expect realized synergies to be a tailwind in 2023.
  - **Strategic acquisition expands business into CNG/RNG/H2.** The pending \$1.05 billion Certarus acquisition ticks many of the boxes with respect to having a strategic and complementary fit (reduces seasonality and provides opportunities to cross-sell propane), is double-digit accretive to distributable cash flow per share, and has a strong organic growth profile, while also reducing the company's leverage. Please [click here](#) for our note covering the transaction.
  - **Potential take-private transaction.** Two investors accumulated a ~30% stake in SPB in 2020/21 on a diluted basis (Brookfield Asset Management and Marquard & Bahls). We believe that the combination of a weak share price, the planned retirement of the CEO (uncertainty as the company searches for new leadership), and a somewhat capital-constrained growth profile (keeping debt to EBITDA within management's 3.5–4.0x target) increases the chances of a take-private transaction.
-



---

### Tamarack Valley Energy (TVE)

Luke Davis, Analyst

(403) 299-5042

luke.davis@rbccm.com

- **Top Clearwater producer with capacity to grow.** Tamarack's acquisition of [Deltastream Energy](#) has repositioned the company as the leading Clearwater producer with 752 net sections across the fairway. Management's updated 2023 Clearwater guidance points to 37,330 boe/d across the fairway with \$125–140 million in E&D capital budgeted for 69 net wells. Tamarack has also budgeted \$95–100 million of capital toward EOR projects, heavily focused in the Clearwater. Pro-forma Clearwater volumes map to roughly 33,000 bbl/d or roughly 30% of play volumes (note [here](#)). Management highlighted more than 500 locations acquired in the transaction and now estimates more than 200 Tier 1 and 2 Clearwater locations.
  - **Return-of-capital framework well defined.** Tamarack increased its monthly dividend by 20%/25% following its Rolling Hills Energy acquisition and latest Deltastream Energy acquisition. The team remains committed to providing shareholder returns with 25%/50%/75% of excess funds flow to be directed toward its NCIB (note [here](#)) and/or special dividends as management reaches net debt target ranges of \$900–1,100 million, \$500–\$900 million, and \$500 million, respectively. The \$500 million debt floor maps to roughly 1.0x D/CF at US\$45/bbl WTI.
  - **Five-year plan underscores robust FCF profile.** Tamarack now sees \$1.4–1.8B in FFF generation over the next five years at US\$55/bbl WTI and C\$2.50/GJ AECO on annual capital spend of \$350–380 million. Recent M&A activity has shifted the corporate break-even to roughly US\$37/bbl, led by the portfolio's shift toward the Clearwater and Charlie Lake, among the lowest breakeven plays in North America (note [here](#)). Management's preliminary 2023 guidance (note [here](#)) maintains 68,000–72,000 boe/d of production with a \$425–475 million capital program; Tamarack highlights that a 1% reduction in the decline rate maps to a \$10–15 million reduction in maintenance capital.
  - **Strong balance sheet able to support further M&A.** Based on our updated estimates, we forecast Tamarack to carry approximately \$913/\$398 million in net debt at year-end 2023E/24E, representing a 2023E/2024E D/CF ratio of 0.8x/0.3x compared to most oil-weighted peers reaching a net cash position in 2023E. We currently model NCIB utilization resuming in Q4/23 along with a 25% dividend increase in Q3/23. We do not model incremental M&A, though we believe this will be evaluated once net debt falls below \$900 million per the company's updated return-of-capital framework.
-





---

**Targa Resources Corp. (TRGP)**

TJ Schultz, Analyst

(512) 708-6385

tj.schultz@rbccm.com

- **Best way to play Permian and commodity upside.** Among midstream, we think TRGP will correlate best to constructive commodity tape into 2023. We like TRGP's top-tier platform in the Permian, coupled with integration to the docks on the Gulf Coast.
  - **Growth projects.** TRGP has announced numerous organic growth projects that are expected to supplement and grow its cash flow. These projects include multiple processing plants in the Permian, Train 9 fractionator in Mont Belvieu under construction and Train 10 now permitted, and the Daytona NGL pipeline (twinning of the west leg of Grand Prix) that will support NGL volume growth from the Permian G&P assets and new plants under construction.
  - **Financial flexibility.** Maintaining its healthy investment grade balance sheet is a key focus point for TRGP when making decisions. Flexibility has improved, as leverage is trending lower and the structure simplification (DevCo repurchase and redemption of outstanding Series A Preferreds) has allowed for more impactful progress. This flexibility allows TRGP to continue investing in organic growth projects while returning meaningful capital to shareholders.
  - **M&A.** TRGP contributed to some midstream consolidation during 2002 with multiple acquisitions. In July 2022, TRGP completed its acquisition of Lucid Energy's Permian Delaware Basin G&P assets for \$3.55B (TRGP estimates a 2023E EBITDA multiple of 7.5x), which include 1,050 miles of natural gas pipelines and 1.4 Bcf/d of processing capacity in New Mexico. TRGP also acquired South TX assets from Southcross, which have performed as expected and were an ideal acquisition given the stickier volumes provided from gathering to the wellhead. M&A will remain a part of TRGP's strategy, with location and potential for immediate synergies being the key, but it is not needed for the company to experience growth.
  - **FCF and capital allocation.** Outlook for FCF is solid at our price deck, as we expect that TRGP can generate >\$1B of FCF in 2024 even with ~\$50mm of estimated stock buybacks through 2024 and another step-up in the dividend to \$2/share, which should allow for debt leverage (post Lucid) to be back below 3x. In addition to debt reduction, TRGP will have many options for usage of the FCF including: (i) additional dividend growth; (ii) additional common stock buybacks; and (iii) higher capex.
-





---

### Topaz Energy (TPZ)

Luke Davis, Analyst

(403) 299-5042

luke.davis@rbccm.com

- **Diversified royalty model with a natural gas tilt.** Topaz's 2023E/2024E production profile remains 71%/69% gas-weighted. Topaz is supported by top counterparties, namely Tourmaline Oil, which has dedicated an average of \$1.9B/year from 2023 to 2028 to support production growth in NEBC and the mid-decade LNG Canada project. Topaz's latest Deltastream acquisition (note [here](#)) has positioned it as a leader in the Clearwater, now holding 52% of pro-forma OOIP at Marten Hills and Nipisi. The team now anticipates reaching 3,000 bbl/d of total Clearwater production by 2024. The royalty business model remains insulated from E&P cost inflation, providing margin stability.
- **Resilient infrastructure model.** Topaz holds working interests in five facilities backed by long-term take-or-pay commitments, a contracted interest in a portion of Tourmaline's third-party revenues, and a 49.5% interest in a water-handling facility. The company's infrastructure portfolio is currently expected to generate 2022E revenues of \$64.5 million and FCF \$56.0 million. This covers 36% of the 2022E dividend and remains an area of focus as management continues to target a long-term 50-50 split in EBITDA with the royalty segment. As a result, we expect management to evaluate and potentially transact on infrastructure M&A opportunities to expand the portfolio.
- **FCF allocation balanced between RoC and debt reduction.** Topaz increased its annual dividend to \$1.20/sh (~6% dividend yield) with the latest Deltastream acquisition, where we estimate a 47%/41% effective payout ratio in 2023E/2024E. The company is able to balance its RoC program with continued deleveraging efforts, with our model pointing toward roughly \$50 million in quarterly post-dividend FCF, on average, through 2023.

---

### Tourmaline Oil (TOU)

Michael Harvey, Analyst

(403) 299-6998

michael.harvey@rbccm.com

- **Key beneficiary of an improved natural gas outlook.** Strong commodity prices provide the firepower for [Western Canada Sedimentary Basin \(WCSB\) natural gas](#) producers to return meaningful capital to shareholders plus still grow modestly (+6%/year CAGR in the current plan), while being mindful that basin growth much beyond this figure could start to drive egress constraints.
  - **Cheniere export agreement – a well-timed deal.** We estimate a US\$1 increase in JKM pricing to result in roughly C\$50–55 mm of incremental after-tax cash flow in 2023. TOU has hedged approximately 10% of the JKM volumes at an average price of ~US\$23/mmBtu, and we would expect the company to take advantage of the current strength by layering on additional hedges at even more attractive prices. See our note [here](#).
  - **Return of capital accelerates, with a vast majority of FCF to be returned.** TOU announced special dividends for Q1/23, with \$2.00/sh payable on February 1. Our outlook now calls for two base dividend increases in 2023 (to \$1.16/share annualized) on top of \$2/sh specials in each of the quarters in 2023.
  - **High quality asset base, with North Montney driving the growth.** TOU's 5-year plan now includes development of its Northern Montney asset, [Conroy](#), pushing corporate volumes to 700,000 boe/d by 2028. TOU expects Conroy to grow to ~100,000 boe/d in two tranches, with on-stream dates of 2026 and 2028 (set to coincide with the startup of LNG Canada). The plan incorporates capex spend of roughly half of forecast cash flows, leaving meaningful capacity for RoC programs.
-



## Portfolio tracking

The RBC Capital Markets Global Energy Best Ideas List highlights our Research Analysts' highest-conviction names across the global energy sector at the time of their addition into the list. Our objective is to highlight individual stocks that are expected to outperform the iShares Global Energy ETF (IXC) and a hybrid benchmark with a weighting toward the iShares Global Utilities ETF (JXI).

A long-only portfolio, the RBC Capital Markets Global Energy Best Ideas List is set up as follows:

- There is no limit to the number of names included in the RBC Capital Markets Global Energy Best Ideas List.
- Individual holdings are deemed to be weighted equally, with weights reset every month or anytime that there is a change to the list.
- Names added to the list will remain on the list for at least one full month, i.e., there will be no mid-month additions/deletions. If we discontinue research coverage of a company included on the RBC Global Energy Best Ideas List, the stock will be removed from the list as of the next monthly publication.
- The RBC Global Energy Best Ideas has a mandatory stop loss mechanism as follows: a stock will be removed from the list if it is down 20% in the current year or down 20% since being added to the list.
- We will use the most recent closing price prior to the list being published, unless noted otherwise, as the price for performance calculations. Therefore, any additions to or deletions from the list are recorded as have being made at their most recent closing price.
- Dividends will be added to returns from stock price movements on the day that stocks go ex. dividend.
- We will provide a monthly update on the constituent names of the list as well as past performance on or around the start of each month.
- We will include only stocks on which we have research coverage.
- We do not make provisions for taxes and/or trading commissions when adding or removing stocks from the portfolio.

**Note:** Total return data for the list as well as relevant indices are from Bloomberg and FactSet.



## Contributing Authors

### RBC Dominion Securities Inc.

Greg Pardy (Head of Global Energy Research)  
Robert Kwan (Analyst)  
Michael Harvey (Analyst)  
Nelson Ng (Analyst)  
Luke Davis (Analyst)  
Keith Mackey (Analyst)

(416) 842-7848  
(604) 257-7611  
(403) 299-6998  
(604) 257-7617  
(403) 299-5042  
(403) 299-6958

greg.pardy@rbccm.com  
robert.kwan@rbccm.com  
michael.harvey@rbccm.com  
nelson.ng@rbccm.com  
luke.davis@rbccm.com  
keith.mackey@rbccm.com

### RBC Europe Limited

Biraj Borkhataria (Associate Director of European Research)  
Victoria McCulloch (Analyst)

+44 20 7029 7556  
+44 207 429 8530

biraj.borkhataria@rbccm.com  
victoria.mcculloch@rbccm.com

### RBC Capital Markets, LLC

Scott Hanold (Analyst)  
Elvira Scotto (Analyst)  
TJ Schultz (Analyst)  
Shelby Tucker (Analyst)

(512) 708-6354  
(212) 905-5957  
(512) 708-6385  
(212) 428-6462

scott.hanold@rbccm.com  
elvira.scotto@rbccm.com  
tj.schultz@rbccm.com  
shelby.tucker@rbccm.com

### Royal Bank of Canada, Sydney Branch

Gordon Ramsay (Analyst)

+61 3 8688 6578

gordon.ramsay@rbccm.com



## Required disclosures

### Non-U.S. analyst disclosure

One or more research analysts involved in the preparation of this report (i) may not be registered/qualified as research analysts with the NYSE and/or FINRA and (ii) may not be associated persons of the RBC Capital Markets, LLC and therefore may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

### Conflicts disclosures

This product constitutes a compendium report (covers six or more subject companies). As such, RBC Capital Markets chooses to provide specific disclosures for the subject companies by reference. To access conflict of interest and other disclosures for the subject companies, clients should refer to <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?entityId=1>. These disclosures are also available by sending a written 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 or an email to [rbcinsight@rbccm.com](mailto:rbcinsight@rbccm.com).

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.

## Explanation of RBC Capital Markets Equity rating system

An analyst's 'sector' is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

### Ratings

**Outperform (O):** Expected to materially outperform sector average over 12 months.

**Sector Perform (SP):** Returns expected to be in line with sector average over 12 months.

**Underperform (U):** Returns expected to be materially below sector average over 12 months.

**Restricted (R):** RBC policy precludes certain types of communications, including an investment recommendation, when RBC is acting as an advisor in certain merger or other strategic transactions and in certain other circumstances.

**Not Rated (NR):** The rating, price targets and estimates have been removed due to applicable legal, regulatory or policy constraints which may include when RBC Capital Markets is acting in an advisory capacity involving the company.

As of March 31, 2020, RBC Capital Markets discontinued its Top Pick rating. Top Pick rated securities represented an analysts best idea in the sector; expected to provide significant absolute returns over 12 months with a favorable risk-reward ratio. Top Pick rated securities have been reassigned to our Outperform rated securities category, which are securities expected to materially outperform sector average over 12 months.

### Risk Rating

The **Speculative** risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.



## Distribution of ratings

For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets' ratings of Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis.

Distribution of ratings				
RBC Capital Markets, Equity Research				
As of 31-Dec-2022				
Rating	Count	Percent	Investment Banking	
			Serv./Past 12 Mos.	
			Count	Percent
BUY [Outperform]	839	56.05	225	26.82
HOLD [Sector Perform]	603	40.28	151	25.04
SELL [Underperform]	55	3.67	3	5.45

## 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: <https://rbcnw.bluematrix.com/sellside/MAR.action>

The 12 month history of SPARCs can be viewed at [RBC Insight](#).

## 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

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard & Poor's Financial Services LLC ("S&P") and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

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 IIROC). 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 Hong Kong Residents:**

This publication 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 (SFC) in Hong Kong, RBC Investment Services (Asia) Limited and RBC Global Asset Management (Asia) Limited, both entities are regulated by the SFC. This material is not for general distribution in Hong Kong to persons who are not professional investors (as defined in the Securities and Futures Ordinance of Hong Kong (Cap. 571) and any rules made thereunder.

**To Singapore Residents:**

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 material 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. Royal Bank of Canada, Singapore Branch accepts responsibility for this report and its dissemination in Singapore.

**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 2023 - Member SIPC

Copyright © RBC Dominion Securities Inc. 2023 - Member Canadian Investor Protection Fund

Copyright © RBC Europe Limited 2023

Copyright © Royal Bank of Canada 2023

All rights reserved