

# EQUITY RESEARCH

September 9, 2022

Earnings Update

## ENGHOUSE SYSTEMS

### Race To Migrate On-Premise To Cloud Continues

#### Our Conclusion

Enhouse reported a quarterly revenue miss that highlights a challenging macro environment. Declining demand for on-premise contact centre solutions continues to put pressure on the top line, with Enhouse prioritizing profitability over growth in a tough competitive environment. Euro-related FX headwinds are compounding the top-line weakness. Accelerated M&A could be upside, with \$230MM in cash on Enhouse's balance sheet and an increasingly attractive valuation environment. We maintain our Neutral rating and price target of \$33.50.

#### Key Points

**IMG Mix Shifting To Cloud:** The IMG division had revenue of \$55.1MM, down 16% Y/Y. While the depreciating euro is creating FX headwinds, the decline is also due to a shift in mix, with customers moving to multi-tenant or private clouds. The company has put in place a new 'Cloud Uplift Program' that is seeing some early traction to migrate existing on-premise customers to Enhouse's CCAAS or private cloud, but the majority of the IMG business remains on-premise. The company has also developed a somewhat unique channel partner strategy, providing solutions that allow the channel to sell Enhouse's SaaS or offer their own cloud offering using Enhouse's solutions, in addition to traditional on-premise solutions.

**Capital Allocation:** Enhouse ended the quarter with \$230MM in cash and no debt. The company continues to focus on M&A (spending \$6MM in FQ3), dividends (\$10.3MM) and most recently share buybacks (\$9MM) as uses of cash. While Enhouse has always included buybacks as part of the capital allocation strategy, this quarter was the first time in several years we have seen it execute on the buyback. We expect Enhouse to remain opportunistic around buybacks in the current valuation environment.

**M&A Environment Improving:** Enhouse noted that its actionable M&A pipeline continues to improve as valuations come in line with its financial criteria and rising rates impact both targets and potential acquirers. While historically Enhouse has focused on on-premise targets, we expect the company to shift to more cloud solutions. However, we do not expect the company to acquire targets that do not meet its profitability and payback criteria (healthy margins, 5-6 year payback period). We see Enhouse's focus on funding M&A with cash and cash flow as a differentiator in the current rising rate environment.

Stephanie Price, CFA  
+1 416-594-7047  
Stephanie.Price@cibc.com

Scott Fletcher, CPA, CA  
+1 416-956-3229  
Scott.Fletcher@cibc.com

Natalie Zhang, CFA  
+1 416-581-2120  
Natalie.Zhang@cibc.com

Javeria Gaya, CPA  
+1 416-594-7261  
Javeria.Gaya@cibc.com

Neutral

ENGH-TSX, Sector: Information Technology

Current Price (9/9/22): C\$29.98

Price Target (12-18 mos.): C\$33.50

#### CIBC Estimates and Valuation

(Oct. 31)	2020	2021	2022	2023
EPS diluted	1.78A	1.66A	1.37E	1.33E
Prior			1.41E	1.41E
Adj. EBITDA(mln)	176.8A	168.5A	139.7E	137.5E
Prior			146.1E	147.3E

EPS diluted	Q1	Q2	Q3	Q4
2021	0.37A	0.37A	0.38A	0.54A
2022	0.39A	0.32A	0.33A	0.34E
Prior			0.35E	0.36E

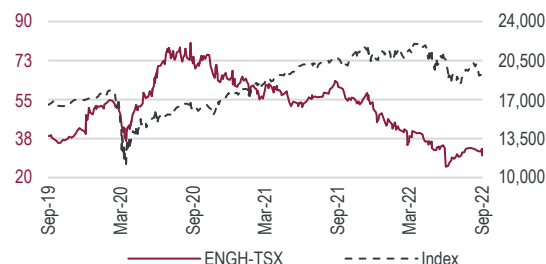
Adj. EBITDA(mln)	Q1	Q2	Q3	Q4
2021	44.5A	40.2A	41.7A	42.1A
2022	38.6A	33.8A	32.5A	34.9E
Prior			36.4E	37.4E

Valuation	2020	2021	2022	2023
P/E	16.9x	18.1x	21.8x	22.5x
EV/EBITDA	14.7x	15.4x	18.6x	18.9x

#### Stock Performance and Key Indicators

Enterprise Value:	C\$2,592M	Shares O/S:	55.4M
Market Cap.:	C\$1,660M	Float:	42.2M
52-wk Range:	C\$24.72 - C\$60.89	Div. / Yield:	C\$0.64/2.13%

#### TSX Composite Index vs. ENGH-TSX



(Source: FactSet)

All figures in Canadian dollars unless otherwise stated.

Please see "Price Target Calculation and Key Risks to Price Target" information on page 5.  
For required regulatory disclosures please refer to "Important Disclosures" beginning on page 6.

**Enghouse Systems (ENGH-TSX) — Neutral**

Price (9/9/22) C\$29.98 12-18 mo. Price Target C\$33.50

Sector: Information Technology

Stephanie Price, CFA +1 416-594-7047 Stephanie.Price@cibc.com

Peer Comparison	2020	2021	2022E	2023E
P/E - Canadian Software Consolidated	27.1x	25.2x	19.6x	18.3x
P/E - Enghouse	31.0x	18.8x	22.7x	21.9x
EV/EBITDA - Canadian Software Consolidated	22.0x	30.1x	26.7x	24.1x
EV/EBITDA - Enghouse	17.2x	8.5x	8.7x	8.1x
P/CF - Canadian Software Consolidated	24.2x	21.4x	-	-
P/CF - Enghouse	12.5x	21.4x	-	-
Key Financial Metrics	2020	2021	2022E	2023E
Sales Growth	30.6%	(7.3%)	(8.8%)	(1.9%)
Per Share Data	2020	2021	2022E	2023E
FCFPS	3.01	2.08	1.86	1.96
Diluted EPS	1.78	1.66	1.37	1.33
Wgt Avg # of Shares	55.0	55.2	55.3	55.4
FD Number of Shares	55.5	56.0	55.7	55.4
Income Statement	2020	2021	2022E	2023E
Revenue	504	467	426	418
Gross Profit	359	338	296	292
Gross Margin	71.2%	72.3%	69.5%	69.9%
Tot Operating Exp	182	169	156	155
OpEx (% of Revenue)	36.08%	36.18%	36.70%	37.00%
Adj. EBITDA	177	169	140	137
Adj EBITDA Margin	35.1%	36.1%	32.8%	32.9%
D&A	(57)	(55)	(46)	(44)
Interest Expense	(1)	(1)	(0)	0
Pretax profit	122	107	95	93
Tax Expense	23	15	19	20
Net Income	99	93	76	74
Net Margin	19.6%	19.9%	17.9%	17.6%
Cash Flow Statement	2020	2021	2022E	2023E
Net CFO	168	118	104	111
Capex	(3)	(3)	(1)	(3)
Free Cash Flow	166	115	103	108
Balance Sheet	2020	2021	2022E	2023E
Total Current Assets	357	304	337	401
Intangible Assets	124	102	76	44
Goodwill	217	223	221	223
Total Assets	764	675	673	700
ST Int-Bearing Debt	0	0	0	0
LT Int-Bearing Debt	0	0	0	0
Total Liabilities	267	220	201	198
Shareholders' Equity	496	454	472	501

Source: FactSet, Company Reports &amp; CIBC World Markets Inc.

**Company Profile**

Enghouse Systems is a provider of enterprise software. Its strategy is to build a diverse software company through strategic acquisitions in the Contact Center, Networks and Transportation verticals.

**Price Target (Base Case): C\$33.50**

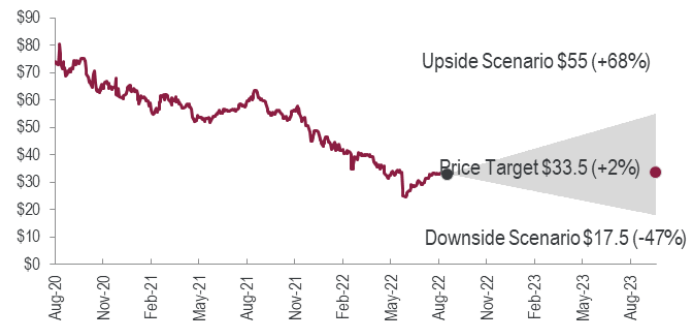
Our price target is calculated using -1% revenue growth, 34.1% EBITDA margins and an 10.5x EV/EBITDA multiple plus the present value of future acquisitions (\$3.50).

**Upside Scenario: C\$55.00**

Our upside scenario is calculated using 5% revenue growth, 36% EBITDA margins and a 16x EV/EBITDA multiple plus present value of future acquisitions.

**Downside Scenario: C\$17.50**

Our downside scenario is calculated using -5% revenue growth, 27.5% EBITDA margins and a 5x EV/Sales multiple plus the present value of future acquisitions.



## Financial Summary

**Revenue Growth:** Enghouse reported revenue of \$102MM, below consensus and our estimate (\$107MM/ \$109MM). Adjusted EBITDA of \$32.5MM was down 22% Y/Y and below consensus and CIBCe (\$35.3MM/ \$36.4MM). FX was also a headwind in the quarter, with the depreciating euro impacting revenue by \$3.6MM.

**Divisional Revenue:** Consolidated license revenue of \$19.8MM was down 26% Y/Y and below our estimate (\$22.8MM), hosted and maintenance revenue of \$63.5MM was roughly in line with our estimate and down 7% Y/Y. Professional services revenue of \$16.8MM was down 11% Y/Y and hardware revenue of \$2MM was down versus \$3.6MM in FQ3/21.

**Profitability:** Adjusted EBITDA margin of 31.8% was below consensus (32.9%) and our estimate (33.4%), and down 360 bps Y/Y. The IMG group had adjusted operating profit margins of 36%, below our estimate of 40%. The AMG group had an operating profit margin of 40%, beating our 32% estimate.

### Exhibit 1: ENGH – Financial Summary, FQ3/21 To FQ3/22

	Q3-F2022			Q3-F2021	Y/Y%	Q2-F2022	Q/Q%
	Actual	CIBCe	Cons				
Consolidated							
Revenue (\$MM)	102	109	107	117.6	-13.2%	106	-4.0%
License	20	23	-	26.8	-26.1%	21	-7.5%
Hosted and maintenance services	64	63	-	68.4	-7.1%	64	-0.3%
Professional services	17	20	-	18.8	-10.8%	18	-6.3%
Hardware	2	4	-	3.6	-44.7%	3	-38.4%
EBITDA (\$MM)	32	36	35	41.7	-22.0%	34	-3.8%
EBITDA Margin	31.8%	33.4%	32.9%	35.4%	-10.2%	31.8%	0.1%
Adjusted EPS	0.33	0.35	0.33	0.38	-13.9%	0.32	2.2%
Operating Cash Flow (\$MM)	29	15	29	34	-13.1%	31	-6.4%

Source: Company reports, FactSet and CIBC World Markets Inc.

**Changes To Our Model:** We have updated our model to reflect the weaker-than-expected Q3 results and have recalibrated our top-line assumptions for faster transition to the cloud and the current FX environment. We have also reduced our adjusted EBITDA margin by 70 bps in F23 given the expectation of increased spending related to the cloud transition.

### Exhibit 2: ENGH – Changes To Our Model, F2021A To F2023E

	Revenues (\$MM)	EBITDA (\$MM)	Adjusted EPS	CFO (\$MM)
<b>2021A</b>	467	169	1.66	118
<b>2022E</b>				
CIBC est. – new	426	140	1.37	104
CIBC est. – prior	436	146	1.41	102
Consensus	432	143	1.43	105
<b>2023E</b>				
CIBC est. – new	418	137	1.33	111
CIBC est. – prior	432	147	1.41	114
Consensus	457	151	1.50	129

Source: Company reports, FactSet and CIBC World Markets Inc.

## Environmental, Social and Governance (ESG) Metrics for ENGH-TSX

## CIBC ESG Metrics

Governance Metrics	2017	2018	2019	2020	2021
Insider Ownership	29.8%	27.6%	26.9%	27.1%	22.5%
Board Gender Diversity	0.0%	0.0%	14.3%	14.3%	28%
Separation of Chair & CEO	NO	NO	NO	NO	NO
Dual-class Ownership?	NO	NO	NO	NO	NO
Disclose ESG Data?	NO	NO	NO	NO	NO
Social Metrics	2017	2018	2019	2020	2021
CEO Comp./Mkt Cap*	\$3.3	\$3.1	\$2.6	\$3.3	\$2
Diversity Targets	NO	NO	NO	NO	NO
Women Managers	20%	13%	13%	13%	13%
Environmental Metrics	2017	2018	2019	2020	2021
Emissions Intensity**	NA	NA	NA	NA	NA
Net-zero Targets?	NO	NO	NO	NO	NO

\*CEO Compensation is shown as per thousand dollars of market capitalization

\*\*Emissions Intensity calculated as total emitted CO2e divided by million \$ of CAD revenue

## Sustainalytics ESG Risk Rating

24.5 +2.8 Medium Risk

Updated on  
Jun 19, 2022

Momentum



## Sustainalytics ESG Risk Rating Ranking

UNIVERSE	RANK	PERCENTILE
	(1 <sup>st</sup> = lowest risk)	(1 <sup>st</sup> = lowest risk)
Global Universe	6037/14482	42nd
Software & Services INDUSTRY	625/985	64th
Enterprise and Infrastructure Software SUBINDUSTRY	295/413	72nd

## Sustainalytics Material ESG Issues

These are the Material ESG Issues driving the ESG Risk Report

Issue Name	ESG Risk Exposure Score   Category	ESG Risk Management Score   Category	ESG Risk Rating Score   Category	Contribution to ESG Risk Rating
Corporate Governance	9.0 High	44.3 Average	5.0 Medium	20.5%
Human Capital	7.2 Medium	12.6 Weak	6.3 High	25.9%
Product Governance	2.0 Low	7.5 Weak	1.8 Negligible	7.6%
Resource Use	1.8 Low	4.0 Weak	1.7 Negligible	7.1%
Business Ethics	2.7 Low	12.5 Weak	2.4 Low	9.7%
Data Privacy and Security	6.8 Medium	25.0 Average	5.4 Medium	22.2%
Carbon -Own Operations	1.8 Low	4.0 Weak	1.7 Negligible	7.1%
Overall	31.3 Low	23.4 Weak	24.5 Medium	100%

## CIBC Quantitative Scorecard

Within Sector			Within S&P/TSX Comp.		
Style	Rank	Delta	Style	Rank	Delta
Value	8	0	Value	115	+123
Momentum	22	-2	Momentum	207	+198
Quality	4	0	Quality	13	+13
Market	26	-1	Market	202	+197
Low Volatility	12	+2	Low Volatility	119	+146
Growth	22	-1	Growth	198	+191

Note: Ranking out of 28 stocks

Note: Ranking out of 237 stocks

## General Notes Behind the Quantitative Scorecard

Delta refers to the change in the ranking over the past month. Number of stocks "Within Sector" is defined by the number within the GICS. In the "Within S&P/TSX" category, we use all stocks in the S&P/TSX Composite. For detail on the Quant Factors included in each style above, please contact the CIBC Portfolio Strategy Team.

The table above is based upon quantitative, statistical, and mathematical analysis and is not intended to serve as a fundamental recommendation.

## CIBC Technical Scorecard

Factor	TSM Score	Factor	TSM Score
TSM	3	Momentum	C
Beta	0.96	MACD	B
Volatility	↓	Alpha (Sector)	B
Trend	↔	Alpha (Index)	B
RSI	Neutral		

## General Notes Behind the Technical Scorecard

**TSM:** The Trendspotting Matrix uses technical factors to score uptrend durability.

**Momentum and alpha** metrics compare performance over one-month, one-quarter and one-year timeframes, outputting a rating from A to D.

**Trend/Volatility** metrics measure price deviations relative to underlying moving averages.

**RSI** is an oscillator that provides mean-reversion estimations.

**MACD** is a momentum indicator rated from A to D based off the strength of its signal.

The table above is based upon a technical methodology that examines the past trading patterns and trades and is not intended to serve as a fundamental recommendation.

## Price Target Calculation

Using the company's current capital structure we value Enghouse at 10.5x EV/2023E EBITDA. In addition, we add the present value of a future acquisition spend (\$4.40/share). This equates to a \$33.5 price target.

## Key Risks To Price Target

The primary risks to our price target include the following: 1) ability to acquire; 2) retention of key personnel; 3) competition; 4) ability to scale.

## Important Disclosures

**Analyst Certification:** Each CIBC World Markets Inc. research analyst named on the front page of this research report, or at the beginning of any subsection hereof, hereby certifies that (i) the recommendations and opinions expressed herein accurately reflect such research analyst's personal views about the company and securities that are the subject of this report and all other companies and securities mentioned in this report that are covered by such research analyst and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by such research analyst in this report.

**Potential Conflicts of Interest:** Equity research analysts employed by CIBC World Markets Inc. are compensated from revenues generated by various CIBC World Markets Inc. businesses, including the CIBC World Markets Investment Banking Department. Research analysts do not receive compensation based upon revenues from specific investment banking transactions. CIBC World Markets Inc. generally prohibits any research analyst and any member of his or her household from executing trades in the securities of a company that such research analyst covers. Additionally, CIBC World Markets Inc. generally prohibits any research analyst from serving as an officer, director or advisory board member of a company that such analyst covers.

In addition to 1% ownership positions in covered companies that are required to be specifically disclosed in this report, CIBC World Markets Inc. may have a long position of less than 1% or a short position or deal as principal in the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon.

Recipients of this report are advised that any or all of the foregoing arrangements, as well as more specific disclosures set forth below, may at times give rise to potential conflicts of interest.

CIBC World Markets Inc. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that CIBC World Markets Inc. may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Analysts employed outside the U.S. are not registered as research analysts with FINRA. These analysts may not be associated persons of CIBC World Markets Corp. 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.

## CIBC World Markets Inc. Stock Rating System

Stock Ratings	Abbreviation	Description
Outperformer	OP	Stock is expected to outperform similar stocks in the coverage universe during the next 12-18 months.
Neutral	NT	Stock is expected to perform in line with similar stocks in the coverage universe during the next 12-18 months.
Underperformer	UN	Stock is expected to underperform similar stocks in the coverage universe during the next 12-18 months.
Tender	TR	Shareholders are advised to tender shares to a specific offer as we do not believe a superior offer will materialize.
Not Rated	NR	CIBC World Markets does not maintain an investment recommendation on the stock.
Restricted	R	CIBC World Markets is restricted (due to potential conflict of interest) from rating the stock.

Sector Ratings	Abbreviation	Description
Overweight	O	Sector is expected to outperform the broader market averages.
Marketweight	M	Sector is expected to equal the performance of the broader market averages.
Underweight	U	Sector is expected to underperform the broader market averages.
None	NA	Sector rating is not applicable.

Note: Broader market averages refer to S&P 500 in the U.S. and S&P/TSX Composite in Canada.

## CIBC World Markets Inc. Price Chart

For price and performance charts, please visit CIBC on the web at <https://researchcentral.cibccm.com/#/disclaimer-central-new> or write to CIBC World Markets Inc., 161 Bay Street, 4th Floor, Toronto, ON M5H 2S8, Attn: Research Disclosure Chart Request.

## Important Disclosure Footnotes for Enghouse Systems (ENGH.TO)

- 2g CIBC World Markets Inc. expects to receive or intends to seek compensation for investment banking services from these companies in the next 3 months: Enghouse Systems

For important disclosure footnotes for companies mentioned in this report that are covered by CIBC World Markets Inc., click here: [CIBC Disclaimers & Disclosures](#)

### Ratings Distribution\*: CIBC World Markets Inc. Coverage Universe

(as of 09 Sep 2022)	Count	Percent	Inv. Banking Relationships	Count	Percent
Outperformer	166	53%	Outperformer	166	100%
Neutral	134	43%	Neutral	134	100%
Underperformer	8	3%	Underperformer	8	100%
Tender	3	1%	Tender	2	67%
Restricted	2	1%	Restricted	2	100%

Important disclosures for each issuer can be found by visiting the Research Central website at <https://researchcentral.cibccm.com/#/disclaimer-central-new> and then entering the issuer name. Access to our research dissemination policy can be found on the same website at <https://researchcentral.cibccm.com/#/dissemination-policy>. These important disclosures can also be obtained by writing to CIBC World Markets Inc., 161 Bay Street, 4th Floor, Toronto, ON M5H 2S8, Attention: Research Disclosures Request.

## Access to CIBC Equity Research

Clients may access CIBC Equity Research online at Research Central at <https://researchcentral.cibccm.com/>, or at the following research aggregators: Bloomberg, Refinitiv, Capital IQ, and FactSet.



## Legal Disclaimer

This report is issued by CIBC Capital Markets.

CIBC Capital Markets is a trademark brand name under which Canadian Imperial Bank of Commerce ("CIBC"), its subsidiaries and affiliates (including, without limitation, CIBC World Markets Inc., CIBC World Markets Corp. and CIBC Capital Markets (Europe) S.A.) provide different products and services to our customers around the world. Products and/or services offered by CIBC include corporate lending services, foreign exchange, money market instruments, structured notes, interest rate products and OTC derivatives. CIBC's Foreign Exchange Disclosure Statement relating to guidelines contained in the FX Global Code can be found at <https://cibccm.com/en/disclosures/fx-disclosure-statement/>. Other products and services, such as exchange-traded equity and equity options, fixed income securities and futures execution of Canadian securities, are offered through directly or indirectly held subsidiaries of CIBC as indicated below.

CIBC World Markets Inc. is a member of the Canadian Investor Protection Fund and the Investment Industry Regulatory Organization of Canada. In the United States, CIBC World Markets Corp. is a member of the Financial Industry Regulatory Authority and the Securities Investor Protection Fund. In Luxembourg, CIBC Capital Markets (Europe) S.A. (RCS Luxembourg: B236326) is authorised by the European Central Bank (the "ECB") and supervised by the Luxembourg Financial Supervisory Authority (Commission de Surveillance du Secteur Financier) under the oversight of the ECB. CIBC Australia Ltd (AFSL No: 240603) is regulated by the Australian Securities and Investment Commission ("ASIC"). CIBC World Markets (Japan) Inc. is a member of the Japanese Securities Dealer Association. CIBC (TSX/NYSE: CM) is a bank chartered under the Bank Act (Canada) having its registered office in Toronto, Ontario, Canada, and regulated by the Office of the Superintendent of Financial Institutions. CIBC New York Branch is licensed and supervised by the New York State Department of Financial Services. In the United Kingdom, CIBC London Branch is authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Canadian Imperial Bank of Commerce, Sydney Branch (ABN: 33 608 235 847) is an authorised foreign bank branch regulated by the Australian Prudential Regulation Authority (APRA). Canadian Imperial Bank of Commerce, Hong Kong Branch is a registered institution under the Securities and Futures Ordinance, Cap 571, and a limited liability foreign company registered with the Hong Kong Companies Registry. Canadian Imperial Bank of Commerce, Singapore Branch is a wholesale bank licensed and regulated by the Monetary Authority of Singapore.

This report is issued and approved for distribution by (a) in Canada, CIBC World Markets Inc., a member of the Investment Industry Regulatory Organization of Canada ("IIROC"), the Toronto Stock Exchange, the TSX Venture Exchange and a Member of the Canadian Investor Protection Fund and (b) in the United States either by (i) CIBC World Markets Inc. for distribution only to U.S. Major Institutional Investors ("MII") (as such term is defined in SEC Rule 15a-6) or (ii) CIBC World Markets Corp., a member of the Financial Industry Regulatory Authority ("FINRA"). U.S. MIIs receiving this report from CIBC World Markets Inc. (the Canadian broker-dealer) are required to effect transactions (other than negotiating their terms) in securities discussed in the report through CIBC World Markets Corp. (the U.S. broker-dealer). CIBC World Markets Corp. accepts responsibility for the content of this research report.

### Distribution to Institutional Customers Only

#### Canada

This report is provided, for informational purposes only, to institutional investor and retail clients of CIBC World Markets Inc. in Canada, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such offer or solicitation would be prohibited.



## Legal Disclaimer (Continued)

### United States

This report is provided, for informational purposes only, to Major US Institutional Investor clients of CIBC World Markets Corp. in the United States, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such offer or solicitation would be prohibited.

### United Kingdom

The distribution of this report in the United Kingdom is being made only to, or directed only at, persons falling within one or more of the exemptions from the financial promotion regime in section 21 of the UK Financial Services and Markets Act 2000 (as amended) ("FSMA") including, without limitation, to the following:

- authorised firms under FSMA and certain other investment professionals falling within article 19 of the FSMA (Financial Promotion) Order 2005 ("**FPO**") and directors, officers and employees acting for such entities in relation to investment;
- high value entities falling within article 49 FPO and directors, officers and employees acting for such entities in relation to investment; and
- persons who receive this presentation outside the United Kingdom.

The distribution of this report to any other person in the United Kingdom is unauthorised and may contravene FSMA. No person falling outside such categories should treat this report as constituting a promotion to them or rely or act on it for any purposes whatsoever.

This report is distributed solely to eligible counterparties or professional clients and not retail clients as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018.

### All other jurisdictions

This report is distributed solely to institutional clients and not retail clients as defined by the applicable securities legislation and regulation to which CIBC Capital Markets may be subject in any jurisdiction, and only in compliance with all applicable laws and regulations.

The securities mentioned in this report may not be suitable for all types of investors. This report does not take into account the investment objectives, financial situation or specific needs of any particular client of CIBC World Markets. Recipients should consider this report as only a single factor in making an investment decision and should not rely solely on investment recommendations contained herein, if any, as a substitution for the exercise of independent judgment of the merits and risks of investments. The analyst writing the report is not a person or company with actual, implied or apparent authority to act on behalf of any issuer mentioned in the report. Before making an investment decision with respect to any security recommended in this report, the recipient should consider whether such recommendation is appropriate given the recipient's particular investment needs, objectives and financial circumstances. CIBC World Markets suggests that, prior to acting on any of the recommendations herein, Canadian retail clients of CIBC World Markets contact one of our client advisers in your jurisdiction to discuss your particular circumstances. Non-client recipients of this report who are not institutional investor clients of CIBC World Markets should consult with an independent financial advisor prior to making any investment decision based on this report or for any necessary explanation of its contents. CIBC World Markets will not treat non-client recipients as its clients solely by virtue of their receiving this report.

## Legal Disclaimer (Continued)

Past performance is not a guarantee of future results, and no representation or warranty, express or implied, is made regarding future performance of any security mentioned in this report. The price of the securities mentioned in this report and the income they produce may fluctuate and/or be adversely affected by exchange rates, and investors may realize losses on investments in such securities, including the loss of investment principal. CIBC World Markets accepts no liability for any loss arising from the use of information contained in this report, except to the extent that liability may arise under specific statutes or regulations applicable to CIBC World Markets.

Information, opinions and statistical data contained in this report were obtained or derived from sources believed to be reliable, but CIBC World Markets does not represent that any such information, opinion or statistical data is accurate or complete (with the exception of information contained in the Important Disclosures section of this report provided by CIBC World Markets or individual research analysts), and they should not be relied upon as such. All estimates, opinions and recommendations expressed herein constitute judgments as of the date of this report and are subject to change without notice.

Nothing in this report constitutes legal, accounting or tax advice. Since the levels and bases of taxation can change, any reference in this report to the impact of taxation should not be construed as offering tax advice on the tax consequences of investments. As with any investment having potential tax implications, clients should consult with their own independent tax adviser.

This report may provide addresses of, or contain hyperlinks to, Internet web sites. CIBC World Markets has not reviewed the linked Internet web site of any third party and takes no responsibility for the contents thereof. Each such address or hyperlink is provided solely for the recipient's convenience and information, and the content of linked third party web sites is not in any way incorporated into this document. Recipients who choose to access such third-party web sites or follow such hyperlinks do so at their own risk.

Although each company issuing this report is a wholly owned subsidiary of CIBC, each is solely responsible for its contractual obligations and commitments, and any securities products offered or recommended to or purchased or sold in any client accounts (i) will not be insured by the Federal Deposit Insurance Corporation ("FDIC"), the Canada Deposit Insurance Corporation or other similar deposit insurance, (ii) will not be deposits or other obligations of CIBC, (iii) will not be endorsed or guaranteed by CIBC, and (iv) will be subject to investment risks, including possible loss of the principal invested. CIBC Capital Markets and the CIBC Logo Design are trademarks of CIBC, used under license.

© 2022 CIBC World Markets Inc., CIBC World Markets Corp. and CIBC Capital Markets (Europe) S.A. All rights reserved. Unauthorised use, distribution, duplication or disclosure without the prior written permission of CIBC World Markets is prohibited by law and may result in prosecution.