Altus Group

Management's Discussion and Analysis

Q4 and FY 2023

For the twelve months ended December 31, 2023

Contents

The following Management's Discussion and Analysis (the "MD&A") is intended to assist readers in understanding Altus Group Limited's consolidated business, its business environment, strategies, performance, outlook and applicable risks. References to the "Company" or "Altus Group" are to the consolidated group of entities, and this MD&A should be read in conjunction with our consolidated financial statements and accompanying notes (the "financial statements") as at and for the year ended December 31, 2023, which have been prepared on the basis of International Financial Reporting Standards ("IFRS") and reported in Canadian dollars. Unless otherwise indicated herein, references to "$" are to Canadian dollars and percentages are in comparison to the same period in 2022.

Unless the context indicates otherwise, all references to "we", "us", "our" or similar terms refer to Altus Group, and, as appropriate, our consolidated operations.

This document also includes certain non-GAAP and other measures as denoted by a "*". This includes non-GAAP financial measures such as Adjusted Earnings (Loss), and Constant Currency; non-GAAP ratios such as Adjusted EPS; total of segments measures such as Adjusted EBITDA; capital management measures such as Free Cash Flow; and supplementary financial and other measures such as Adjusted EBITDA margin, Net debt to Adjusted EBITDA leverage ratio, New Bookings, Organic New Bookings, Recurring New Bookings, Non-Recurring New Bookings, Organic Revenue, Recurring Revenue, Non-Recurring Revenue, Organic Recurring Revenue, DSO, AE Software Maintenance Retention Rate, and Cloud Adoption Rate. Since the measures, used herein, are not standard measures under IFRS, they may not be comparable to similar measures reported by other entities. Refer to the "Non-GAAP and Other Measures" section for definitions of, and more information on, each measure. For non-GAAP financial measures and total of segments measures, refer to the "Reconciliation of Non-GAAP Measures" section for reconciliations to the most directly comparable IFRS measure. For capital management measures, refer to the "Free Cash Flow" section for a reconciliation to the most directly comparable IFRS measure.

This MD&A is dated as of February 22, 2024.

1. Forward-looking Information

Certain information in this MD&A may constitute "forward-looking information" within the meaning of applicable securities legislation. All information contained in this MD&A, other than statements of current and historical fact, is forward-looking information. Forward-looking information includes, but is not limited to, statements relating to expected financial and other benefits of acquisitions and the closing of acquisitions (including the expected timing of closing), as well as the discussion of our business, strategies and leverage (including the commitment to increase borrowing capacity), expectations of future performance, including any guidance on financial expectations, and our expectations with respect to cash flows and liquidity. Generally, forward-looking information can be identified by use of words such as "may", "will", "expect", "believe", "anticipate", "estimate", "intend", "plan", "would", "could", "should", "continue", "goal", "objective", "remain" and other similar terminology.

Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by us at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may not be known and may cause actual results, performance or achievements, industry results or events to be materially different from those expressed or implied by the forward-looking information. The material factors or assumptions that we identified and applied in drawing conclusions or making forecasts or projections set out in the forward-looking information (including sections entitled "Business Outlook") include, but are not limited to: engagement and product pipeline opportunities in Analytics will result in associated definitive agreements; continued adoption of cloud subscriptions by our customers; retention of material clients and bookings; sustaining our software and subscription renewals; settlement volumes in the Property Tax reportable segment occurring on a timely basis and assessment authorities processing appeals in a manner consistent with expectations; successful execution of our business strategies; consistent and stable economic conditions or conditions in the financial markets including stable interest rates and credit availability for CRE; consistent and stable legislation in the various countries in which we operate; consistent and stable foreign exchange conditions; no disruptive changes in the technology environment; opportunity to acquire accretive businesses and the absence of negative financial and other impacts resulting from strategic investments or acquisitions on short term results; successful integration of acquired businesses; and continued availability of qualified professionals.

Inherent in the forward-looking information are known and unknown risks, uncertainties and other factors that could cause our actual results, performance or achievements, or industry results, to differ materially from any results, performance or achievements expressed or implied by such forward-looking information. Those risks include, but are not limited to: the commercial real estate market; the general state of the economy; our financial performance; our financial targets; our international operations; acquisitions; business interruption events; third party information and data; cybersecurity; industry competition; professional talent; our subscription renewals; our sales pipeline; client concentration and loss of material clients; our cloud transition; product enhancements and new product introductions; technological strategy; intellectual property; property tax appeals and seasonality; compliance with laws and regulations; privacy and data protection; artificial intelligence; our use of technology; our leverage and financial covenants; interest rates; inflation; our brand and reputation; fixed price and contingency engagements; currency fluctuations; credit; tax matters; health and safety hazards; our contractual obligations; legal proceedings; regulatory review; our insurance limits; our ability to meet the solvency requirements necessary to make dividend payments; our share price; our capital investments; the issuance of additional common shares and debt; our internal and disclosure controls; environmental, social and governance (“ESG”) matters; climate risk; and geopolitical risks, as well as those described in our annual publicly filed documents, including the Annual Information Form for the year ended December 31, 2022 (which are available on SEDAR+ at www.sedarplus.ca).

Investors should not place undue reliance on forward-looking information as a prediction of actual results. The forward-looking information reflects management’s current expectations and beliefs regarding future events and operating performance and is based on information currently available to management. Although we have attempted to identify important factors that could cause actual results to differ materially from the forward-looking information contained herein, there are other factors that could cause results not to be as anticipated, estimated or intended. The forward-looking information contained herein is current as of the date of this MD&A and, except as required under applicable law, we do not undertake to update or revise it to reflect new events or circumstances. Additionally, we undertake no obligation to comment on analyses, expectations or statements made by third parties in respect of Altus Group, our financial or operating results, or our securities.

Certain information in this MD&A, including sections entitled “Business Outlook”, may be considered as “financial outlook” within the meaning of applicable securities legislation. The purpose of this financial outlook is to provide readers with disclosure regarding Altus Group’s reasonable expectations as to the anticipated results of its proposed business activities for the periods indicated. Readers are cautioned that the financial outlook may not be appropriate for other purposes.

2. Non-GAAP and Other Measures

We use certain non-GAAP financial measures, non-GAAP ratios, total of segments measures, capital management measures, and supplementary and other financial measures as defined in National Instrument 52-112 - *Non-GAAP and Other Financial Measures Disclosure* ("NI 52-112"). We believe that these measures may assist investors in assessing an investment in our shares as they provide additional insight into our performance. Readers are cautioned that the measures are not defined performance measures, and do not have any standardized meaning under IFRS and may differ from similar computations as reported by other similar entities and, accordingly, may not be comparable to financial measures as reported by those entities. These measures should not be considered in isolation or as a substitute for financial measures prepared in accordance with IFRS.

2.1. Non-GAAP Financial Measures

Adjusted Earnings (Loss)	
How is it useful:	We use Adjusted Earnings (Loss) to facilitate the calculation of Adjusted Earnings (Loss) per Share ("Adjusted EPS").
How we calculate it:	Profit (loss) added or (deducted) by: profit (loss) from discontinued operations; occupancy costs calculated on a similar basis prior to the adoption of IFRS 16; depreciation of right-of-use assets; amortization of intangibles of acquired businesses; acquisition and related transition costs (income); unrealized foreign exchange losses (gains); (gains) losses on disposal of right-of-use assets, property, plant and equipment and intangibles; share of (profit) loss of joint venture; non-cash share-based compensation costs; (gains) losses on equity derivatives net of mark-to-market adjustments on related RSUs and DSUs; (gains) losses on derivatives; interest accretion on contingent consideration payables; restructuring costs (recovery); impairment charges; (gains) losses on investments; (gains) losses on hedging transactions and interest expense (income) on swaps; other costs or income of a non-operating and/or non-recurring nature; finance costs (income), net - leases; and the tax impact of these items. Refer to page 31 for a reconciliation of Adjusted Earnings (Loss) to our financial statements.
Most directly comparable IFRS financial measure:	Profit (loss)

Constant Currency	
How is it useful:	We use Constant Currency to allow current financial and operational performance to be understood against comparative periods without the impact of fluctuations in foreign currency exchange rates against the Canadian dollar.
How we calculate it:	The financial results and non-GAAP and other measures presented at Constant Currency within this document are obtained by translating monthly results denominated in local currency (U.S. dollars, British pound, Euro, Australian dollars, and other foreign currencies) to Canadian dollars at the foreign exchange rates of the comparable month in the previous year. Refer to page 32 for a reconciliation of Constant Currency between foreign exchange rates used.
Most directly comparable IFRS financial measure:	Corresponding IFRS amount, as presented

2.2. Non-GAAP Ratios

Adjusted EPS	
How is it useful:	We use Adjusted EPS to assess the performance of our business, on a per share basis, before the effects of the noted items because they affect the comparability of our financial results and could potentially distort the analysis of trends in business performance.
How we calculate it:	Adjusted Earnings (Loss) divided by basic weighted average number of shares, adjusted for the effects of the weighted average number of restricted shares.

2.3. Total of Segments Measures

Adjusted Earnings before Interest, Taxes, Depreciation and Amortization ("Adjusted EBITDA")	
How is it useful:	We use Adjusted EBITDA to evaluate the performance of our business, as well as when making decisions about the ongoing operations of the business and our ability to generate cash flows.
How we calculate it:	Profit (loss) added or (deducted) by: profit (loss) from discontinued operations; occupancy costs calculated on a similar basis prior to the adoption of IFRS 16; depreciation of right-of-use assets; depreciation of property, plant and equipment and amortization of intangibles; acquisition and related transition costs (income); unrealized foreign exchange (gains) losses; (gains) losses on disposal of right-of-use assets, property, plant and equipment and intangibles; share of (profit) loss of joint venture; non-cash share-based compensation costs; (gains) losses on equity derivatives net of mark-to market adjustments on related restricted share units ("RSUs") and deferred share units ("DSUs"); (gains) losses on derivatives, restructuring costs (recovery); impairment charges; (gains) losses on investments; other costs or income of a non-operating and/or non-recurring nature; finance costs (income), net - leases; finance costs (income), net - other; and income tax expense (recovery). Refer to page 31 for a reconciliation of Adjusted EBITDA to our financial statements. This measure represents Adjusted EBITDA determined on a consolidated basis as a total of our reportable segments. All other Adjusted EBITDA references are disclosed in our consolidated financial statements and are not considered to be non-GAAP financial measures pursuant to NI 52-112.
Most directly comparable IFRS financial measure:	Profit (loss)

2.4. Capital Management Measures

Free Cash Flow	
How is it useful:	We use Free Cash Flow to understand how much of the cash generated from operating activities is available to repay borrowings and to reinvest in the Company.
How we calculate it:	Net cash provided by (used in) operating activities deducted by capital expenditures. Refer to page 30 for a reconciliation of Free Cash Flow to our financial statements.
Most directly comparable IFRS financial measure:	Net cash provided by (used in) operating activities

2.5. Supplementary Financial and Other Measures

Adjusted EBITDA Margin	
How is it useful:	We use Adjusted EBITDA margin to evaluate the performance of our business, as well as when making decisions about the ongoing operations of the business and our ability to generate cash flows.
How we calculate it:	Adjusted EBITDA divided by revenue

Net debt to Adjusted EBITDA leverage ratio	
How is it useful:	We use Net debt to Adjusted EBITDA leverage ratio as a measure of our ability to service our debt and other long-term obligations.
How we calculate it:	Net debt (total borrowings less cash and cash equivalents, net of short-term deposits) divided by Adjusted EBITDA

New Bookings, Organic New Bookings, Recurring New Bookings and Non-Recurring New Bookings	
How is it useful:	For our Analytics reportable segment, we use New Bookings, Organic New Bookings, Recurring New Bookings and Non-Recurring New Bookings as measures to track the performance and success of our sales initiatives, and as an indicator of future revenue growth. New Bookings is inclusive of any new signed contracts as well as any additional solutions and services added by existing customers within our Analytics reportable segment. The contract value of renewals is excluded from this metric with the exception of additional capacity or products purchased at the time of renewal.
How we calculate it:	New Bookings: The total of annual contract values for new sales of our recurring solutions and services (software subscriptions, Valuation Management Solutions, and data subscriptions) plus the total of contract values for one-time engagements (consulting, training, and due diligence). The value of contract renewals is excluded from this metric with the exception of additional capacity or products purchased at the time of renewal. Organic New Bookings: The total of New Bookings deducted by New Bookings from business acquisitions that are not fully integrated (up to the first anniversary of the acquisition). Recurring New Bookings: The total of annual contract values for new sales of our recurring solutions and services. Non-Recurring New Bookings: The total of contract values for one-time engagements.

Organic Revenue	
How is it useful:	We use Organic Revenue to evaluate and assess revenue trends in our business on a comparable basis versus the prior year, and as an indicator of future revenue growth.
How we calculate it:	Revenue deducted by revenues from business acquisitions that are not fully integrated (up to the first anniversary of the acquisition).

Recurring Revenue, Non-Recurring Revenue, Organic Recurring Revenue	
How is it useful:	For our Analytics reportable segment, we use Recurring Revenue, Non-Recurring Revenue, and Organic Recurring Revenue as measures to assess revenue trends in our business, and as an indicator of future revenue growth.
How we calculate it:	Recurring Revenue: Revenue from software subscriptions recognized on an over time basis in accordance with IFRS 15, software maintenance revenue associated with our legacy licenses sold on perpetual terms, Valuation Management Solutions, and data subscriptions. Non-Recurring Revenue: Revenue deducted by Recurring Revenue. Organic Recurring Revenue: Recurring Revenue deducted by Recurring Revenue from business acquisitions that are not fully integrated (up to the first anniversary of the acquisition).

Days Sales Outstanding (“DSO”)	
How is it useful:	We use DSO as a measure of our ability to convert our revenue into cash.
How we calculate it:	Five-quarter average balance of net trade receivables and unbilled revenue on customer contracts net of deferred revenue, divided by the trailing 12-month revenues plus any pre acquisition revenues (as applicable), and multiplied by 365 days.

ARGUS Enterprise (“AE”) Software Maintenance Retention Rate	
How is it useful:	For our Analytics reportable segment, we use AE Software Maintenance Retention Rate as a measure to evaluate our success in retaining our AE software customers. With the majority of our AE customer base having now converted from legacy maintenance contracts to subscription contracts this metric is now less relevant and will be updated in the future.
How we calculate it:	Percentage of the available AE software maintenance renewal opportunity in a fiscal period that renews, calculated on a dollar basis, excluding any growth in user count or product expansion.

Cloud Adoption Rate	
How is it useful:	For our Analytics reportable segment, we use Cloud Adoption Rate as a measure of our progress in transitioning the AE user base to our cloud-based platform, a key component of our overall product strategy.
How we calculate it:	Percentage of the total AE user base contracted on the ARGUS Cloud platform.

3. Business Overview

3.1. About Altus Group

Altus Group is a leading provider of asset and fund intelligence for commercial real estate ("CRE"). We deliver Intelligence as a Service to our global client base through a connected platform of industry-leading technology, advanced analytics and advisory services.

Trusted by the largest CRE leaders, our capabilities help commercial real estate investors, developers, proprietors, lenders, and advisors manage risk and improve performance throughout the asset and fund lifecycle.

Altus Group is a global company headquartered in Toronto with approximately 3,000 employees across North America, EMEA and Asia Pacific.

3.2. Understanding our Business

Valuations are at the core of everything we do

The value of a commercial property is one of the most important factors for CRE investment, ownership and development. It drives decision making across the CRE value chain – from discovery to acquisition/disposition, development, leasing and planning, property tax and debt management, and portfolio strategy. Our business reaches across the entire value chain through our three business segments: Analytics, Property Tax and Appraisals and Development Advisory.

We apply our expertise in valuations toward various use cases across our business units. The primary use cases include: tax appeals, fund mark-to-market reporting, equity and debt portfolio appraisals, software and data, transactions and development investments. Our businesses generate highly differentiated, high quality data. As we connect this data, we are building out new advanced analytics capabilities that also expand our use cases to performance management. By leveraging our asset and fund intelligence at scale, we can correlate valuations with asset performance attributes to help our clients maximize performance and better manage risk.

Our valuation capabilities, data and expertise are relied on by many CRE professionals in the industry to reduce their risks and maximize returns. Our CRE valuation methodologies have been deployed for over 30 years through our software for property cash flow and valuation modelling throughout North America and the U.K., currently offered through our AE software, and is taught in over 200 academic institutions worldwide. Additionally, we are active thought leaders on CRE valuations, as demonstrated through our long-standing relationship with the National Council of Real Estate Investment Fiduciaries ("NCREIF") and other industry associations where our expertise on valuation is relied on by the industry.

Serving a global and diverse client base

Our customers include many market participants across the CRE industry. Key customer segments include CRE investors, developers, proprietors, lenders, service providers and their advisors. We have the privilege of having long-standing relationships with many of the world's largest CRE leaders and enjoy a strong network effect by leveraging our industry leading AE software.

Our customers vary in size, focus and complexity. Our go-to-market plans segment customers under two categories to optimize how we serve them: high touch (large, strategic customers who require more hands-on support); and scale (customers who are more self-reliant). Our approach also segments customers by geography, by offers that can best solve their unique challenges, and by specific client personas. The majority of our revenues come from medium-to-large firms.

Enhancing client value through our Intelligence as a Service offer portfolio

With the mounting challenges of increased competition, globalization, regulatory pressures and ever-changing market dynamics and macroeconomic factors, CRE professionals are looking for objective expert advice and actionable insights to make faster and data-informed decisions. Our end-to-end technology, analytics and advisory services help our clients manage and react to key asset, fund and market events, helping them to improve performance and manage risk.

One of our key competitive differentiators is our unique combination of deep CRE industry expertise and proprietary technology tailored for the CRE industry. Altus Group professionals are not only experts in their practice areas but also in the CRE industry, earning us the reputation as trusted advisors to many of our clients. Our technology and data analytics solutions are trusted by the industry and embedded in key client workflows, with our AE software regarded as a vital application for the valuation of commercial assets. This combination of industry and technology expertise enables us to help our clients navigate complex business challenges and gives us a significant advantage compared to single-focus traditional consulting or technology firms.

Our offer portfolio includes both point and integrated solutions that support different asset and fund-level challenges. We deliver Intelligence as a Service through our offers comprising of our technology, analytics and/or advisory capabilities that broaden our engagement with our clients. Recognizing that customer requirements differ by client type, we sell our offers under three editions: essentials, advanced and premium:

Essentials "Do it myself"	• Provides clients with base editions that are self-service and technology led.
Advanced "Show me"	• Combines the essentials edition with added capabilities. • Includes technology with added data, analytics or services.
Premium "Do it for me"	• Combines the advanced edition with added capabilities. • Includes technology-enabled, expert-led, outcome-based delivery services.

Note: All products and services can still be purchased on a stand-alone basis.

Our four offer categories are:

Offer category	Offer description
Altus Valuation	An offer for cash flow modelling, valuations and reporting. We help clients produce reliable valuations of assets, investments and loans that are trusted by partners, investors and regulators.
Altus Portfolio Performance	An offer to connect asset data, modelling and analytics to optimize asset and portfolio management. We help clients maximize financial performance across real estate investments by identifying risks, understanding portfolio impacts and finding opportunities to add value throughout their lifecycle.
Altus Market Insights	An offer to provide instant access to asset, market and fund-level intelligence. We help clients make faster, informed decisions in key CRE workflows and activities by leveraging market data and predictive analytics.
Altus Property Tax	An offer to minimize property tax liability. We help clients optimize and effectively manage a CRE portfolio's largest operating expense, property taxes.

Our Intelligence as a Service offer portfolio is increasingly being powered by our internal Altus Performance Platform ("APP"). The APP delivers a scalable, diverse, and extensible data model designed to support advanced analytics applications. The APP is where we house the most relevant industry asset data, apply that data for performance and risk management use cases, and derive insight and intelligence through advanced analytics. We are transitioning our entire technology stack onto this platform.

Our reportable segments

We report the results of our operations through the following reportable segments: (1) Analytics; (2) Property Tax and (3) Appraisals and Development Advisory. Our reportable segments are also supported by a corporate centre that primarily includes our finance, information technology, human resources, marketing, legal, corporate development and communications functions.

Analytics	
Principal activities	• Our Analytics portfolio includes software, data analytics, market data, Valuation Management Solutions and technology consulting services. We help clients gain data-based transparency and digitize their CRE asset and fund management valuation processes to empower better decision-making to maximize valuations, reduce risk and enhance the value of their CRE investments.
Key revenue streams	• Our key revenue streams comprise the following solutions: ○ Our software suite includes ARGUS-branded solutions (including the flagship AE product) and Finance Active-branded debt management solutions. Our software solutions are deployed globally and primarily used to value, manage and increase the transparency of equity and debt CRE portfolios. ○ Our market data and related data analytics capabilities cover key North American markets and are used to support acquisition, investment and development decisions. ○ Our Valuation Management Solutions, primarily offered in the U.S., include valuation management and advisory services for CRE portfolios and funds with workflow and analytics tools for managing the valuation process and performing portfolio attribution analysis and benchmarking.

<table>
<tr><th colspan="2">Analytics</th></tr>
<tr><td></td><td>o Our technology consulting services include strategic advisory for front-to-back-office strategies, processes and technology. It also captures traditional software services related to education, training and implementation.
• Approximately 90% of fiscal year 2023 Analytics revenues was Recurring Revenue. Our Recurring Revenue includes software subscription revenues recognized on an over time basis, market data and data analytics subscription offerings, fees from our Valuation Management Solutions that are supported by multi-year contracts, as well as legacy software maintenance fees (which we continue to upgrade to cloud subscriptions).
• Our Non-Recurring Revenue includes services related to technology consulting as well as software education, training and implementation. Although diminishing in size, for customers who have on-premise software and wish to add more on-premise seats, the software license component of the subscription contract is captured as point-in-time revenue when delivered as required by IFRS, and captured in this revenue.</td></tr>
<tr><td>Revenue model</td><td>• Our Recurring Revenue streams are sold primarily on subscription contracts supported by cloud-based solutions. Recurring Revenue provides us with a stable and predictable revenue base that we expect the high majority to repeat every year. Our Analytics subscription agreements vary in length between one to five years with the fee primarily dependent on the number of users and applications deployed. Many of our “high touch” client contracts, particularly for our Valuation Management Solutions, are priced based on the number of real estate assets on our platform and subject to adjustments based on complexity of asset type and frequency of valuations. An asset-based pricing model allows us to grow with our customers, while also enhancing our opportunity to expand the users on our platform and broaden our reach across workflows.
• Our Non-Recurring Revenue service engagements are charged primarily on a time and materials basis, billed and recognized as delivered.</td></tr>
<tr><td>Key geographies and foreign operations</td><td>• Our Analytics solutions are sold globally, primarily targeting our Tier 1 geographies including the U.S., Canada, the U.K., France, Germany and Australia. We operate in 16 countries across North America, EMEA and Asia Pacific, with growing dependency on our service centres in India and Morocco. (a geographic revenue split is provided in section 6.2. Operations by Reportable Segment).</td></tr>
<tr><td>Key customer segments</td><td>• Our key client segments include high touch and scale clients. The high touch clients include large, global and strategic firms that account for the majority of our revenues. The scale segment clients predominately include small-to-medium sized businesses.
• Our customer base is globally dispersed and diversified by type. Key customers include equity and debt investors, service providers, owner operators and developers.</td></tr>
<tr><td>Primary revenue growth drivers</td><td>• Our existing customer base continues to represent an attractive opportunity to deepen our engagement with them and cross-sell new capabilities. As we continue to make deeper inroads across our clients’ organizations and become more embedded in their workflows, our “land-and-expand” approach allows us to efficiently increase revenue from our existing customer base. Growth within our existing customer base also captures higher-value contracts from multi-solution sales facilitated through offer selling and migration of customers to our cloud-based subscription pricing. Albeit additive, price increases are not a material driver of growth at this stage.
• New customers also represent an attractive opportunity, particularly outside of North America where our market penetration is still modest relative to the opportunity. As we expand our capabilities, we have increased opportunities to capture new customer segments and user types/personas in the industry that we have not historically served.</td></tr>
</table>

Property Tax	
Principal activities	• Property tax is influenced by government-assessed asset valuations and often represents the largest operating expense in CRE property ownership after debt service. Additionally, property tax obligations and processes vary significantly between jurisdictions, requiring regional and asset specific expertise. We help clients proactively manage this expense and their complex appeal processes through our technology-enabled expert services and software to help them minimize the tax burden.
Key revenue streams	• Our core services include conducting property tax assessment reviews for our clients' commercial properties, based on which we selectively pursue appeals with government agencies to minimize our clients' tax liability. • Our key technology solution is itamlink, a property tax management tool that provides clients with a comprehensive overview of their portfolio's tax liabilities, including assessments, appeal status and other taxation information.
Revenue model	• Approximately 70% of our revenues are derived on a contingency basis, where we receive a percentage of the savings we achieve for our clients. As such, we recognize contingency revenues only when settlements are made, which in some cases could span multiple years. Approximately 30% of our Property Tax fees are based on a time and materials basis. Our itamlink software is sold on recurring subscription contracts. • Of note, this business has an element of cyclicality in the U.K., its biggest geographic market. Unlike the North American practice where we bill a client once for the savings we achieve for them for an entire tax assessment period, in the U.K., we bill our clients annually based on savings per year. This annuity billing occurs every second quarter except for the first year of a new cycle (as the first year is not considered an annuity bill). Revenues from the annuity billings generally grow over the cycle as we add more clients and as more cases are settled with the volume of billable clients increasing concurrently with case settlements.
Key geographies and foreign operations	• Our Property Tax services are offered in Canada, the U.S. and the U.K. We also have operations in India where our employees provide onboarding and other supporting roles for our Property Tax services.
Key customer segments	• Our key client segments include proprietors in the high touch segments in North America (where the property tax obligations are with landlords and owners), and largely property tenants under the scale segment in the U.K. (where the property tax obligation rests predominantly with tenants).
Primary revenue growth drivers	• Revenue growth is primarily driven by increasing both the volume and value of our appeal settlement pipeline and our ability to leverage data and automation to scale successful client outcomes. Market share gains drive volume, and value is driven by our expertise and data which allows us to selectively pursue appeals that have a high probability of successful client outcomes. Our ongoing digitization efforts support revenue growth by helping us scale, better identify high-margin opportunities, and increase our sales productivity.

Appraisals and Development Advisory	
Principal activities	• Our Appraisals and Development Advisory portfolio includes expert services in the areas of commercial property valuation appraisals and commercial development advisory.
Key revenue streams	• The Appraisals practice core services include valuation appraisals of real estate portfolios. Additional related services include valuation appraisals of properties for transactional purposes, due diligence, litigation support and economic consulting. The Development Advisory practice provides services in the areas of construction feasibility studies, budgeting, cost and loan monitoring and construction project management.
Revenue model	• Pricing is primarily based on a fixed fee or time and materials basis. Many of our contracts are multi-year.
Key geographies and foreign operations	• Our Appraisals services are primarily offered in Canada, and our Development Advisory services are primarily offered in Canada and Australia.
Key customer segments	• Our key client segments primarily include high touch clients. Our Appraisals customers include institutional CRE clients, whereas our Development Advisory clients include CRE developers, lenders, and government agencies for infrastructure related projects.
Primary revenue growth drivers	• Growth is primarily driven by an expansion of market size and by market share gains.

4. Business Strategy

Market opportunity

Commercial real estate is one of the largest asset classes in the world, yet despite its scale and influence, the CRE industry has historically been slow to digitize. The industry has traditionally been served by single-specialty services and technology, leading to disconnected enterprise data sets and workflows. Consequently, CRE asset and fund level intelligence remains largely fragmented and behind in comparison to other established industries such as financial services.

This is rapidly changing, as the influx of institutional ownership, together with globalization and demographic shifts, demands more sophisticated processes and data-driven transparency. Moreover, the industry is catching up on technological advancements with customers increasingly looking for integration across their platforms and data collaboration across workflows. Jobs, functions and workflows are changing and challenging the status quo of how this industry has historically operated. With the mounting challenges of increased competition, intensifying reporting requirements, and ever-changing market dynamics, the industry is looking for partners to help it innovate, unlock insights, discover new opportunities and better manage risks and costs.

Value creation strategy

We’re on a mission to provide our clients with Intelligence as a Service to enhance their asset performance and risk management capabilities. This mission is the cornerstone of our long-term value creation strategy.

With property valuations at the core of our operations, we have a unique vantage point on CRE asset and fund intelligence. To meet the evolving needs of our clients and strategically position the business for its next phase of our growth, we are on a journey to tap into this intelligence with advanced analytics to bring new, actionable insights to our clients. The unique combination of our high-quality data, innovative technology and deep industry expertise defines our distinct industry-first Intelligence as a Service delivery model.

New advanced analytics represent a significant market opportunity for us, expanding our market reach in performance management. Historically, we have been regarded as our clients' trusted partners for specific purposes, notably in providing valuation insights and assisting them with property tax appeals and their technology requirements. Looking ahead, through the execution of this strategy we expect that our clients will increasingly rely on us to help them address their critical asset and fund challenges to drive performance.

Continued enhancement of our advanced analytics capabilities will pave the way for predictive and prescriptive foresight. This foresight will empower our clients to gain a deeper understanding of the factors influencing asset performance, anticipate opportunities, and proactively adapt their strategies to optimize the performance of their assets and funds.

Over the past couple of years, we have undergone significant business transformation. Through organic investments and strategic acquisitions, we have revamped our operational, technical and platform foundations to scale advanced analytics and optimize our operational efficiency. As a result, we believe we are strongly positioned to deliver on our mission. Profitable growth serves as a fundamental gauge of our success, as measured by the expansion of our Adjusted EBITDA margin, growth in Adjusted EPS, and the maximization of Free Cash Flow.

Strategic Priorities

We are steadfast in our pursuit of becoming the leading Intelligence as a Service provider to the CRE industry. Guided by this vision, we are focused on the following key priorities to drive the growth and long-term success of Altus Group:

1. Deliver Innovative and Differentiated Customer Value	Deliver and leverage advanced analytics across our business to help our clients improve performance and manage risk.
2. Grow Profitably	Maximize operating leverage through efficient processes and investments to drive market growth.
3. Empower Talent	Place the best people in the right roles and enable colleagues for greater performance in an inclusive environment.

5. Financial and Operating Highlights

5.1. Annual Financial Highlights

Selected Financial Information		Year ended December 31,
In thousands of dollars, except for per share amounts	**2023**	2022
Revenues	$ 772,843	$ 735,451
Canada	25%	27%
U.S.	49%	45%
EMEA	22%	24%
Asia Pacific	4%	4%
Adjusted EBITDA*	$ 135,041	$ 135,322
Adjusted EBITDA margin*	17.5%	18.4%
Profit (loss)	$ 10,232	$ (889)
Earnings (loss) per share:		
Basic	$0.23	$(0.02)
Diluted	$0.22	$(0.02)
Adjusted*	$1.64	$1.89
Dividends declared per share	$0.60	$0.60
Free Cash Flow*	$ 58,938	$ 52,605

		As at December 31,
	2023	2022
Funded debt to EBITDA ratio	2.06:1	2.13:1
Net debt to Adjusted EBITDA leverage ratio*	1.98:1	1.96:1

5.2. Annual Operating Highlights

Renewed NCIB

On January 26, 2024, the TSX approved the renewal of our Normal Course Issuer Bid (“NCIB”). Pursuant to the NCIB, we may purchase for cancellation up to 1,376,034 of our outstanding common shares during the period from February 8, 2024 to February 7, 2025, representing approximately 3% of the Company’s issued and outstanding common shares as at January 24, 2024. The total number of common shares that we are permitted to purchase is subject to a daily purchase limit of 20,969 common shares, representing 25% of the average daily trading volume as of the 26-week period ending December 31, 2023, other than block purchase exemptions.

The Company has entered into an automatic share purchase plan (“ASPP”) with a designated broker in relation to the NCIB. The volume of purchases is determined by the broker in its sole discretion based on maximum purchase price and volume parameters established by the Company under the ASPP. All purchases made under the ASPP will be included in computing the number of common shares purchased under the NCIB.

Acquisition of Forbury Property Valuation Solutions Limited

On December 1, 2023, we acquired the business of Forbury Property Valuation Solutions Limited ("Forbury"), a CRE valuation software provider in the Asia Pacific region for NZD30.1 million (approximately CAD25.2 million), net of working capital adjustments, funded by cash on hand and drawing on our credit facilities, of which NZD3.0 million (approximately CAD2.5 million) is held in escrow subject to compliance with certain terms and conditions. Forbury's cloud-based solutions provide valuation tools tailored for the APAC market to help users make informed decisions on when best to refinance, refurbish, reposition or divest their CRE assets. With operations in New Zealand, Australia and the U.K., Forbury's results are reported under our Analytics reportable segment.

Planned Acquisition of the Commercial Real Estate Valuation and Advisory Services Business of Situs Group, LLC (a SitusAMC company)

On November 9, 2023, we announced the signing of a definitive agreement to acquire the Commercial Real Estate Valuation and Advisory Services ("REVS") Business of Situs Group, LLC (a SitusAMC company) for USD225.0 million (approximately CAD310.1 million). The acquisition is expected to close prior to the end of the first half of 2024, subject to customary closing conditions, including receipt of regulatory approvals. REVS offers independent valuation management solutions to some of the largest CRE institutional investors in the U.S. The team of approximately 350 people includes highly credentialed and licensed valuation professionals who leverage real-time data, proprietary research, and innovative technology to help clients monitor and report the value of their commercial real estate portfolios directly contributing to their investment decision process and financial reporting requirements. The transaction will include REVS's key commercial solutions for valuation management (including its Valuation Management System and the Daily Valuation System technology platforms), as well as related appraisal and consulting services. Following closing, REVS will integrate into our Analytics reportable segment.

We expect to fund the acquisition of REVS using a combination of cash on hand and increased capacity under our existing bank credit facilities. In connection with the planned acquisition of REVS, we obtained a commitment from lenders to increase our borrowing capacity from up to an aggregate of $550.0 million to up to an aggregate of $725.0 million, as required to fund the acquisition. The increase to our borrowing capacity is subject to completion of the acquisition of REVS, satisfaction of typical conditions precedent, and definitive documentation.

6. Discussion of Operations

Quarter and Year Ended December 31, 2023

	Quarter ended December 31,		Year ended December 31,	
In thousands of dollars	**2023**	2022	**2023**	2022
Revenues	$ 191,574	$ 183,762	$ 772,843	$ 735,451
Expenses				
Employee compensation	117,877	114,015	481,765	463,949
Occupancy	2,093	1,567	7,848	7,032
Other operating	43,534	37,541	176,484	152,893
Depreciation of right-of-use assets	2,690	2,831	11,121	11,968
Depreciation and amortization	12,031	11,290	46,819	47,557
Acquisition and related transition costs (income)	3,759	207	3,834	4,928
Share of (profit) loss of joint venture	(810)	(786)	(3,146)	(3,013)
Restructuring costs (recovery)	311	17,001	388	38,896
(Gain) loss on investments	659	47	301	164
Finance costs (income), net - leases	265	463	1,222	1,913
Finance costs (income), net - other	8,823	7,918	23,877	5,284
Profit (loss) before income taxes	342	(8,332)	22,330	3,880
Income tax expense (recovery)	482	427	12,098	4,769
Profit (loss) for the period	$ (140)	$ (8,759)	$ 10,232	$ (889)

Revenues

For the quarter ended December 31, 2023, revenues were $191.6 million, up 4.3% (2.8% on a Constant Currency* basis) or $7.8 million ($5.2 million on a Constant Currency basis) from $183.8 million in the same period in 2022. Both Analytics and Property Tax contributed to the growth.

For the year ended December 31, 2023, revenues were $772.8 million, up 5.1% (2.2% on a Constant Currency* basis) or $37.3 million ($16.3 million on a Constant Currency basis) from $735.5 million in 2022. Analytics continued to consistently grow throughout the year, while the Property Tax results reflect the cyclicality of the U.K. annuity billings in the second quarter (which on a year-over-year view were compared to a record second quarter in 2022 when the annuity billings peaked). Adjusting for the non-recurring impact of the $33.2 million annuity billings in the prior year, consolidated revenue growth for the year was 10.1% on an as reported basis (7.0% on a Constant Currency basis).

Employee Compensation

Employee compensation represents amounts pertaining to employee salaries, bonuses, benefits, share-based compensation, and gains or losses on equity derivatives related to our RSUs and DSUs. Employee compensation was $117.9 million for the quarter ended December 31, 2023, up 3.4% or $3.9 million from $114.0 million in the same period in 2022. This increase was primarily due to increases in headcount and compensation to support our growth.

For the year ended December 31, 2023, employee compensation was $481.8 million, up 3.8% or $17.9 million from $463.9 million in 2022, driven primarily by investments in Service Delivery, Sales, and Customer Success ($18.0 million), offset by lower costs associated to non-cash incentives. For the quarter and year ended December 31, 2023, employee compensation as a percentage of revenues were 61.5% and 62.3%, as compared to 62.0% and 63.1% in the corresponding periods in 2022, respectively.

Occupancy

Occupancy represents amounts pertaining to short-term leases, low-value assets, and variable lease payments including property taxes, utilities, and common area maintenance costs. Occupancy was $2.1 million for the quarter ended December 31, 2023, up 33.6% or $0.5 million from $1.6 million in the same period in 2022, driven by increases in utilities, common area maintenance costs, and outsourced space ($0.7 million), offset by lower fixed rent ($0.2 million).

For the year ended December 31, 2023, occupancy was $7.8 million, up 11.6% or $0.8 million from $7.0 million in 2022, driven by increases in utilities, common area maintenance costs, and outsourced space ($1.4 million) against lower rent ($0.6 million).

Occupancy costs calculated on a similar basis prior to the adoption of IFRS 16 would have been $5.0 million and $19.8 million for the quarter and year ended December 31, 2023, as compared to $4.5 million and $19.0 million in the corresponding periods in 2022, respectively. For the quarter and year ended December 31, 2023, occupancy as a percentage of revenues was 1.1% and 1.0%, as compared to 0.9% and 1.0% in the corresponding periods in 2022, respectively. Occupancy costs calculated on a similar basis prior to the adoption of IFRS 16 as a percentage of revenues would have been 2.6% and 2.6% for the quarter and year ended December 31, 2023, as compared to 2.4% and 2.6% in the corresponding periods in 2022, respectively.

Other Operating Costs

Other operating costs (previously presented as ‘Office and other operating costs’) represent amounts related to hosting fees, software and data subscriptions, professional fees, travel and entertainment, insurance, office supplies, foreign exchange gains or losses, bad debt expenses, and other service costs. From time to time, it also includes income or costs not classified elsewhere in the statement of comprehensive income (loss). Other operating costs were $43.5 million for the quarter ended December 31, 2023, up 16.0% or $6.0 million from $37.5 million in the same period in 2022, which increase was primarily driven by increased hosting fees and software subscription and maintenance costs ($1.8 million), investments to support the ongoing growth initiatives at Property Tax ($0.8 million), and fluctuations associated with foreign currency exchange ($3.5 million), offset by lower costs at our Appraisals and Development Advisory reportable segment. The remainder of the variance was due to individually immaterial fluctuations in costs to support our operations.

For the year ended December 31, 2023, other operating costs were $176.5 million, up 15.4% or $23.6 million from $152.9 million in 2022, which increase was primarily due to spend relating to investments in our technology infrastructure systems ($6.3 million), increased hosting fees and software subscription and maintenance costs ($5.1 million), increased marketing expenditures ($2.0 million), investments to support the ongoing growth initiatives at Property Tax ($1.3 million), and fluctuations in our foreign currency exchange ($6.3 million). The remainder of the variance was due to individually immaterial fluctuations in costs to support our operations. For the quarter and year ended December 31, 2023, other operating costs as a percentage of revenues were 22.7% and 22.8%, as compared to 20.4% and 20.8% in the corresponding periods in 2022, respectively.

Depreciation of Right-of-Use Assets

Depreciation of right-of-use assets represents the depreciation charge of our office and equipment leases that are capitalized as right-of-use assets and was $2.7 million and $11.1 million for the quarter and year ended December 31, 2023, as compared to $2.8 million and $12.0 million in the corresponding periods in 2022, respectively. The decrease was primarily due to benefits being realized from our efforts to rationalize our leased office space.

Depreciation and Amortization

Depreciation and amortization represent the depreciation charge of our property, plant and equipment and amortization charge of our intangible assets, and were $12.0 million and $46.8 million for the quarter and year ended December 31, 2023, as compared to $11.3 million and $47.6 million in the corresponding periods in 2022, respectively. Depreciation and amortization remained relatively consistent year-over-year mainly due to various acquired intangible assets from previous acquisitions becoming fully amortized in 2023, offset by the amortization of investments in our technology infrastructure systems.

Acquisition and Related Transition Costs (Income)

Acquisition and related transition costs (income) represent amounts related to professional fees for due diligence and facilitating the purchase and integration of our acquisitions, and the subsequent changes in the fair value of our acquisition-related contingent consideration payables. Acquisition and related transition costs (income) were $3.8 million and $3.8 million for the quarter and year ended December 31, 2023, as compared to $0.2 million and $4.9 million in the corresponding periods in 2022, respectively. Acquisition and related transition costs (income) for the quarter ended December 31, 2023 increased due to costs relating to our recently announced acquisitions, while the decrease for the year ended December 31, 2023 was primarily due to prior year costs relating to the acquisition of Rethink Solutions and the integrations of previous acquisitions in 2021.

Share of (Profit) Loss of Joint Venture

Share of (profit) loss of joint venture represents our share of the profits or losses in GeoVerra Inc. ("GeoVerra") and was $(0.8) million and $(3.1) million for the quarter and year ended December 31, 2023, as compared to $(0.8) million and $(3.0) million in the corresponding periods in 2022, respectively.

Restructuring Costs (Recovery)

Restructuring costs (recovery) represent amounts related to employee termination benefits, lease and other contract terminations, and professional fees to facilitate the reorganization of our functions and structure and the closure of offices. Restructuring costs (recovery) were $0.3 million and $0.4 million for the quarter and year ended December 31, 2023, as compared to $17.0 million and $38.9 million in the corresponding periods in 2022, respectively. For the quarter and year ended December 31, 2023, the decrease related entirely to costs being incurred in the prior year associated with the global restructuring program, with costs in 2023 being related to adjustments to existing estimates for employee benefits and leased offices with sub-lease assumptions.

(Gain) Loss on Investments

(Gain) loss on investments represents the changes in the fair value of our investments in partnerships and was $0.7 million and $0.3 million for the quarter and year ended December 31, 2023, as compared to $nil and $0.2 million in the corresponding periods in 2022, respectively.

Finance Costs (Income), Net

Finance costs (income), net represents amounts related to interest incurred on our credit facility borrowings, lease liabilities, or long-term payables. It also includes income received from short-term investments and deposits, and gains or losses from changes in fair value of interest rate swaps. Finance costs (income), net for the quarter ended December 31, 2023 were $9.1 million, up 8.4% or $0.7 million from $8.4 million in the same period in 2022. For the quarter ended December 31, 2023, our finance costs increased primarily from a decrease in the fair value of our interest rate swaps ($0.4 million) and higher interest rates and costs on our bank credit facilities ($0.3 million).

For the year ended December 31, 2023, finance costs (income), net were $25.1 million, up 248.7% or $17.9 million from $7.2 million in 2022 and were driven primarily by the same change in fair value of our interest rate swaps ($9.9 million) and increase in interest rates on our bank credit facilities ($8.3 million).

Income Tax Expense (Recovery)

Income tax expense (recovery) for the quarter and year ended December 31, 2023 was $0.5 million and $12.1 million, as compared to $0.4 million and $4.8 million in the corresponding periods in 2022, respectively. A significant amount of our earnings is derived outside of Canada and as a result a change in the mix of earnings and losses in countries with differing statutory tax rates has impacted our effective tax rates for the quarter and year ended December 31, 2023. Our effective tax rate in 2023 was approximately 54.2%, compared to 122.9% in 2022.

Profit (loss)

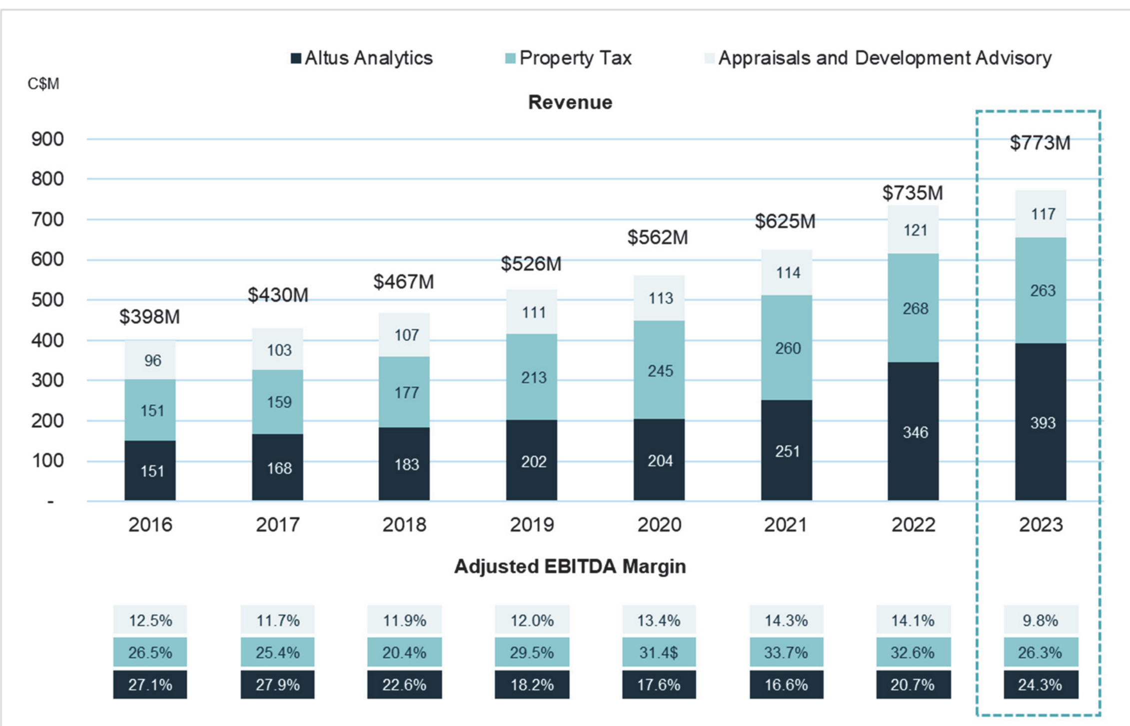
Profit (loss) for the quarter ended December 31, 2023 was $(0.1) million and $(0.00) per share, basic and diluted, as compared to $(8.8) million and $(0.20) per share, basic and diluted, in the same period in 2022. Our profit (loss) for the quarter ended December 31, 2023 benefitted from higher revenues and lower costs following the completion of our 2022 global restructuring program, offset by higher operating costs as well as expenses associated with our recently announced acquisitions.

For the year ended December 31, 2023, profit (loss) was $10.2 million and $0.23 per share, basic and $0.22 per share, diluted, as compared to $(0.9) million and $(0.02) per share, basic and diluted, in 2022. Profit (loss) for the year ended December 31, 2023 was driven by stronger revenues in addition to the completion of our 2022 global restructuring program, partially offset by higher operating costs as well as finance costs due to higher interest rates on our bank credit facilities and the changes in the fair value of our interest rate swaps.

6.1. Revenues and Adjusted EBITDA by Reportable Segment

Revenues	Quarter ended December 31,				Year ended December 31,			
In thousands of dollars	**2023**	2022	% Change	Constant Currency % Change	**2023**	2022	% Change	Constant Currency % Change
Analytics	$ 103,190	$ 96,061	7.4%	6.1%	$ 392,913	$ 346,103	13.5%	9.4%
Property Tax	60,524	55,830	8.4%	5.9%	263,111	268,583	(2.0%)	(4.6%)
Appraisals and Development Advisory	28,046	32,049	(12.5%)	(12.4%)	117,577	121,469	(3.2%)	(3.1%)
Intercompany eliminations	(186)	(178)	(4.5%)	(0.6%)	(758)	(704)	(7.7%)	7.3%
Total	$ 191,574	$ 183,762	4.3%	2.8%	$ 772,843	$ 735,451	5.1%	2.2%

Adjusted EBITDA	Quarter ended December 31,				Year ended December 31,			
In thousands of dollars	**2023**	2022	% Change	Constant Currency % Change	**2023**	2022	% Change	Constant Currency % Change
Analytics	$ 28,145	$ 25,824	9.0%	7.9%	$ 95,470	$ 71,730	33.1%	26.1%
Property Tax	13,310	14,412	(7.6%)	(10.5%)	69,277	87,533	(20.9%)	(23.1%)
Appraisals and Development Advisory	2,254	5,578	(59.6%)	(59.6%)	11,540	17,099	(32.5%)	(32.3%)
Corporate	(9,541)	(10,886)	12.4%	15.1%	(41,246)	(41,040)	(0.5%)	(3.1%)
Total	$ 34,168	$ 34,928	(2.2%)	(3.4%)	$ 135,041	$ 135,322	(0.2%)	(4.2%)



6.2. Operations by Reportable Segment

Analytics								
	Quarter ended December 31,				Year ended December 31,			
In thousands of dollars	**2023**	2022	% Change	Constant Currency % Change	**2023**	2022	% Change	Constant Currency % Change
Revenues	$ 103,190	$ 96,061	7.4%	6.1%	$ 392,913	$ 346,103	13.5%	9.4%
Adjusted EBITDA	$ 28,145	$ 25,824	9.0%	7.9%	$ 95,470	$ 71,730	33.1%	26.1%
Adjusted EBITDA margin	27.3%	26.9%			24.3%	20.7%		
Other Measures								
Recurring Revenue*	$ 93,010	$ 85,834	8.4%	7.0%	$ 354,563	$ 301,709	17.5%	13.2%
New Bookings*	$ 26,253	$ 34,173	(23.2%)	(23.4%)	$ 94,493	$ 112,540	(16.0%)	(19.1%)
Recurring New Bookings*	$ 18,236	$ 20,849	(12.5%)	(12.6%)	$ 64,507	$ 74,434	(13.3%)	(16.3%)
Non-Recurring New Bookings*	$ 8,017	$ 13,324	(39.8%)	(40.2%)	$ 29,986	$ 38,106	(21.3%)	(24.4%)
AE Software Maintenance Retention Rate*	93%	97%			96%	97%		
Geographical revenue split								
North America	77%	79%			77%	77%		
International	23%	21%			23%	23%		
Cloud Adoption Rate* (as at end of period)	74%	64%			74%	64%		

Revenues

Fourth quarter revenues were $103.2 million, up 7.4% (6.1% on a Constant Currency basis) or $7.1 million ($5.9 million on a Constant Currency basis) from $96.1 million in the same period in 2022. Organic Revenue growth was 6.9% (5.6% on a Constant Currency basis) for the quarter ended December 31, 2023.

Full year revenues were $392.9 million, up 13.5% (9.4% on a Constant Currency basis) or $46.8 million ($32.5 million on a Constant Currency basis) from $346.1 million in 2022. Organic Revenue growth was 13.4% (9.3% on a Constant Currency basis) for the year ended December 31, 2023.

Revenue growth in the fourth quarter and year was driven by robust Recurring Revenue performance benefitting from our ongoing transition to cloud subscriptions, new sales, and a higher number of assets on our Valuation Management Solutions ("VMS") platform. Non-Recurring Revenue* was lower in the fourth quarter and the full year compared to the prior year.

Recurring Revenue

Fourth quarter Recurring Revenue was $93.0 million, up 8.4% (7.0% on a Constant Currency basis) or $7.2 million ($6.0 million on a Constant Currency basis) from $85.8 million in the same period in 2022. Sequentially, Recurring Revenue increased by 6.4% from $87.4 million in the third quarter of 2023, driven primarily by seasonality in new sales and the frequency of valuations at VMS.

Full year Recurring Revenue was $354.6 million, up 17.5% (13.2% on a Constant Currency basis) or $52.9 million ($39.9 million on a Constant Currency basis) from $301.7 million in 2022.

New Bookings

Fourth quarter New Bookings were $26.3 million, down 23.2% (23.4% on a Constant Currency basis) or $7.9 million ($8.0 million on a Constant Currency basis) from $34.2 million in the same period in 2022. Recurring New Bookings were down 12.5% (12.6% on a Constant Currency basis) year-over-year, and Non-Recurring New Bookings were down 39.8% (40.2% on a Constant Currency basis) year-over-year.

Full year New Bookings were $94.5 million, down 16.0% (19.1% on a Constant Currency basis) or $18.0 million ($21.4 million on a Constant Currency basis) from $112.5 million in 2022. Recurring New Bookings were down 13.3% (16.3% on a Constant Currency basis), and Non-Recurring New Bookings were down 21.3% (24.4% on a Constant Currency basis).

New Bookings performance and growth was primarily impacted by the current economic environment.

Adjusted EBITDA

Fourth quarter Adjusted EBITDA was $28.1 million, up 9.0% (7.9% on a Constant Currency basis) or $2.3 million ($2.0 million on a Constant Currency basis) from $25.8 million in the same period in 2022. Adjusted EBITDA margin was 27.3%, up 40 basis points (40 basis points on a Constant Currency basis). Adjusted EBITDA growth and margin expansion benefitted from higher revenues, operating efficiencies, ongoing cost optimization efforts, and foreign exchange fluctuations.

Full year Adjusted EBITDA was $95.5 million, up 33.1% (26.1% on a Constant Currency basis) or $23.7 million ($18.7 million on a Constant Currency basis) from $71.7 million in 2022. Adjusted EBITDA margin was 24.3%, up 360 basis points (320 basis points on a Constant Currency basis).

Property Tax

	Quarter ended December 31,				Year ended December 31,			
In thousands of dollars	**2023**	2022	% Change	Constant Currency % Change	**2023**	2022	% Change	Constant Currency % Change
Revenues	$ 60,524	$ 55,830	8.4%	5.9%	$ 263,111	$ 268,583	(2.0%)	(4.6%)
Adjusted EBITDA	$ 13,310	$ 14,412	(7.6%)	(10.5%)	$ 69,277	$ 87,533	(20.9%)	(23.1%)
Adjusted EBITDA margin	22.0%	25.8%			26.3%	32.6%		

Revenues

Fourth quarter revenues were $60.5 million, up 8.4% (5.9% on a Constant Currency basis) or $4.7 million ($3.3 million on a Constant Currency basis) from $55.8 million in the same period in 2022. Growth in the U.S. and the U.K. was partially offset by a decline in Canada where the Ontario cycle extension is impacting growth.

Full year revenues were $263.1 million, down 2.0% (4.6% on a Constant Currency basis) or $5.5 million ($12.4 million on a Constant Currency basis) from $268.6 million in 2022. Growth in the U.S. was partially offset by the decline in Canada from the Ontario cycle extension as well as in the U.K. reflecting the cyclicality of the U.K. annuity billings in the second quarter of 2022. On a comparative view, the second quarter of 2022 was a historic record for the Company, driven by a $33.2 million contribution from the U.K. annuity billings that reset in 2023. Adjusting for the impact of the U.K. annuity billings in 2022, revenues for the year ended December 31, 2023 would have grown 11.8% (8.9% on a Constant Currency basis).

Adjusted EBITDA

Fourth quarter Adjusted EBITDA was $13.3 million, down 7.6% (10.5% on a Constant Currency basis) or $1.1 million ($1.5 million on a Constant Currency basis) from $14.4 million in the same period in 2022. The slight decline in Adjusted EBITDA reflects higher compensation expenditures, ongoing investments in our cybersecurity and other technology infrastructure, as well as geographic variances of our revenue base on a year-over-year view. The margin contribution varies by geography with the U.K. operations having the highest margin profile.

Full year Adjusted EBITDA was $69.3 million, down 20.9% (23.1% on a Constant Currency basis) or $18.3 million ($20.2 million on a Constant Currency basis) from $87.5 million in 2022. The decline primarily reflects the absence of the U.K. annuity billings as well as higher compensation expenditures, ongoing investments in our cybersecurity and other technology infrastructure, and geographic variances of our revenue base.

Appraisals and Development Advisory

	Quarter ended December 31,				Year ended December 31,			
In thousands of dollars	**2023**	2022	% Change	Constant Currency % Change	**2023**	2022	% Change	Constant Currency % Change
Revenues	$ 28,046	$ 32,049	(12.5%)	(12.4%)	$ 117,577	$ 121,469	(3.2%)	(3.1%)
Adjusted EBITDA	$ 2,254	$ 5,578	(59.6%)	(59.6%)	$ 11,540	$ 17,099	(32.5%)	(32.3%)
Adjusted EBITDA margin	8.0%	17.4%			9.8%	14.1%		

Revenues

Fourth quarter revenues were $28.0 million, down 12.5% (12.4% on a Constant Currency basis) or $4.0 million ($4.0 million on a Constant Currency basis) from $32.0 million in the same period in 2022.

Full year revenues were $117.6 million, down 3.2% (3.1% on a Constant Currency basis) or $3.9 million ($3.8 million on a Constant Currency basis) from $121.5 million in 2022.

The performance reflects muted market activity in the current economic environment.

Adjusted EBITDA

Fourth quarter Adjusted EBITDA was $2.3 million, down 59.6% (59.6% on a Constant Currency basis) or $3.3 million ($3.3 million on a Constant Currency basis) from $5.6 million in the same period in 2022. Adjusted EBITDA declined primarily from reduction in revenues.

Full year Adjusted EBITDA was $11.5 million, down 32.5% (32.3% on a Constant Currency basis) or $5.6 million ($5.5 million on a Constant Currency basis) from $17.1 million in 2022 due to lower revenues and higher spend in our overall technology and back-office infrastructure.

6.3. Corporate Costs

Corporate costs

Corporate costs were $9.5 million for the quarter ended December 31, 2023, as compared to $10.9 million in the same period in 2022. For the year ended December 31, 2023, corporate costs were $41.2 million, as compared to $41.0 million in 2022. Our corporate costs remained relatively consistent and remain elevated while we upgrade our back-office infrastructure.

7. Business Outlook

Forecasting future results or trends is inherently difficult for any business and actual results or trends may vary significantly. The discussion of our expectations relating to the business outlook in this section is forward-looking information that is based upon the assumptions and subject to the material risks discussed under the heading "Forward-Looking Information" beginning on page 1 of this MD&A.

In fiscal 2024, we expect to grow consolidated revenue in the single-digits, grow Adjusted EBITDA in the double digits, and improve Adjusted EBITDA margin over 2023. The business outlook for fiscal 2024 by reportable segment is as follows:

2024 outlook by reportable segment	
Analytics	• 8 – 12% Recurring Revenue growth (excluding REVS) • 400 – 500 bps of Adjusted EBITDA margin expansion
Property Tax	• Low-to-mid single digit revenue growth • 50 – 200 bps of Adjusted EBITDA margin expansion
Appraisals and Development Advisory	• Low single digit revenue growth • Double digit improvement in Adjusted EBITDA

**The business outlook is presented on an Constant Currency basis over fiscal 2023.*

Key assumptions for the business outlook by segment: Analytics: consistency and growth in number of assets on the Valuation Management Solutions platform, continued ARGUS cloud conversions, new sales (including New Bookings converting to revenue within Management's expected timeline), client and software retention consistent with 2023 levels, pricing action, the successful integration of Forbury, improved operating leverage, as well as consistent and increasingly stable economic conditions in financial and CRE markets. Property Tax: continued market share gains, new sales, optimized client outcomes that result in improved contingency payments, and improved operating leverage with technology. Appraisal & Development Advisory: improved client profitability and improved operating leverage.

Seasonality and Cyclicality

Some of our businesses are subject to cyclical trends and seasonality that may impact overall quarterly results.

As is typical for many technology companies, Analytics tends to have a seasonally stronger fourth quarter, and first quarter revenue and Adjusted EBITDA margins may be sequentially lower than in the fourth quarter of the preceding year (excluding the impact of unusual or nonrecurring items). We believe the strength in the fourth quarter generally reflects customer spending patterns and budget cycles, as well as the impact of incentive compensation plans for our sales personnel. The first quarter typically includes additional expenses, such as payroll taxes, that impact the sequential Adjusted EBITDA margin trend. Also, our Valuation Management Solutions business may experience seasonality around our second and fourth quarters due to clients who conduct bi-annual and annual appraisals.

Property Tax experiences stronger second quarters driven by the annuity billings in the U.K. (as described above and on page 12 of the MD&A), however only starting in the second year of a new U.K. cycle. In the U.S., where market cycles are annual, we also tend to experience higher volumes of settlements in the second and third quarters. Overall, Property Tax tends to experience more quarterly variability due to timing of contingency settlements and other factors, such as the wide-ranging variety of tax cycles across our various jurisdictions (which range from annual to several years). It should also be noted that since a higher portion of our revenues come from contingency contracts, the front-end of a cycle typically requires a ramp-up period in preparation for the appeals. Therefore, it tends to have lower earnings than later in the cycle, when more settlements are made and a high majority of those revenues flow directly to the bottom line.

While these seasonal and cyclical factors have historically been relevant, given the evolution of our businesses through our growth and acquisitions, this pattern should not be considered as a reliable indicator of our future revenue or financial performance. Many other factors, including general economic conditions, may also have an impact on our business and financial results, and are described in our Annual Information Form for the year ended December 31, 2022.

8. Liquidity and Capital Resources

Cash Flow	**Year ended December 31,**	
In thousands of dollars	**2023**	2022
Net cash related to operating activities	$ 71,429	$ 77,085
Net cash related to financing activities	(51,781)	(18,665)
Net cash related to investing activities	(34,923)	(54,057)
Effect of foreign currency translation	1,900	(367)
Change in cash position during the period	$ (13,375)	$ 3,996
Free Cash Flow	$ 58,938	$ 52,605
Dividends paid	$ 26,579	$ 24,699

We expect to fund operations with cash on hand and cash derived from operating activities. Deficiencies arising from short-term working capital requirements and capital expenditures may be financed on a short-term basis with bank indebtedness or on a permanent basis with offerings of securities. Our liquidity may be affected by a reduction to future cash generated from operating activities, or by a limitation of access to short-term financing and tightening credit markets due to factors such as a significant erosion in the general state of the economy. In 2022, we further amended and expanded our bank credit facilities to continue strengthening our liquidity position. For further details regarding the amendments, refer to the “Cash from Financing Activities” discussion below and Note 21 - Borrowings in the notes to the annual financial statements.

We returned $27.5 million to shareholders in 2023 through quarterly dividends of $0.15 per common share, or $0.60 per common share for the year.

8.1. Cash from Operating Activities

Working Capital		
In thousands of dollars	**December 31, 2023**	December 31, 2022
Current assets	$ 302,563	$ 319,878
Current liabilities	(218,276)	(239,860)
Working capital	$ 84,287	$ 80,018

Current assets are composed primarily of cash and cash equivalents and trade receivables and other. It also includes income taxes recoverable and derivative financial instruments for our equity derivatives on RSUs and DSUs. The decrease is primarily due to the utilization of our cash on hand as a result of the repayment of our credit facilities, the funding of the purchase price for the acquisition of Forbury and a decrease in our trade receivables as we improve on our collections.

Current liabilities are composed primarily of trade payables and other, and lease liabilities. It also includes income taxes payable. The decrease is primarily due to a decrease in our restructuring provisions due to the completion of our 2022 global restructuring program, a decrease in our contract liabilities (deferred revenue) due to timing of contract renewals and related billings, and the payments of certain deferred and contingent consideration. This was partially offset by an increase in trade payables.

As at December 31, 2023, trade receivables, net and contract assets (unbilled revenue on customer contracts) net of contract liabilities (deferred revenue) were $145.1 million, up 7.5% or $10.2 million from $134.9 million as at December 31, 2022. As a percentage of the trailing 12-month revenues, trade receivables and unbilled revenue on customer contracts net of deferred revenue was 18.8% as at December 31, 2023, as compared to 18.3% as at December 31, 2022.

Our DSO* was 71 days as at December 31, 2023, as compared to 62 days as at December 31, 2022. We transitioned to a new enterprise resource planning system in the first quarter of 2023, resulting in anticipated billing and collection delays impacting our DSOs. Our billings and collections throughput have increased significantly during the subsequent quarters of 2023 and we continue to expect returning to historical DSO levels in the coming quarters.

Current and long-term liabilities include amounts owing to the vendors of acquired businesses on account of excess working capital, contingent consideration payable, deferred purchase price payments and other closing adjustments. As at December 31, 2023, the amounts owing to the vendors of acquired businesses were $3.1 million, as compared to $7.5 million as at December 31, 2022.

We expect to satisfy the balance of our current liabilities through the realization of our current assets.

Changes in working capital affecting net cash generated by (used in) operations		
In thousands of dollars	**December 31, 2023**	December 31, 2022
Net changes in:		
Operating working capital	$ (24,117)	$ 177
Liabilities for cash-settled share-based compensation	591	(5,303)
Deferred consideration payables	(1,610)	(3,384)
Contingent consideration payables	(2,989)	3,010
Net changes	$ (28,125)	$ (5,500)

Operating working capital is composed primarily of trade receivables and other, trade payables and other excluding the impacts of liabilities for cash-settled share-based compensation and contingent consideration payables, and income taxes recoverable and payable. The change in operating working capital was primarily driven by an increase in our contract assets (unbilled revenue on customer contracts) in combination with a decrease in the balance of our contract liabilities (deferred revenue), accrued expenses, and payments in our restructuring provisions associated with our 2022 global restructuring program. This was offset by a decrease in our trade receivables and an increase in our trade payables.

Liabilities for cash-settled share-based compensation represent awards granted through our Long-Term Incentive Restricted Share Unit Plan, Restricted Share Unit Plan, or Deferred Share Unit Plan, which are to be settled in the future. These liabilities are linked, and therefore exposed, to movements in the price of our common shares. The movement in our liabilities for cash-settled share-based compensation was due to additional awards granted during the year, offset by the decrease in the closing price of our common shares from $54.04 per share on December 31, 2022 to $42.14 per share on December 31, 2023. For further details regarding liabilities for cash-settled share-based compensation, refer to Note 24 - Share-based Compensation in the notes to the financial statements.

From time to time, we become party to deferred or contingent consideration payables which are assumed as part of an acquisition. Deferred consideration payments represent unconditional portions of the purchase consideration of our acquisitions that are payable at a date after the closing date of the related transaction. Contingent consideration payments are generally based on acquired businesses achieving certain future-oriented performance targets from the date of acquisition and may differ from our initial estimates.

8.2. Cash from Financing Activities

Our revolving bank credit facilities are used for general corporate purposes and the funding of our acquisitions. From time to time, we amend our bank credit facilities to further strengthen our liquidity position. Most recently, on June 28, 2022, we further amended our bank credit facilities to increase our borrowing capacity from $400.0 million to $550.0 million, with certain provisions that allow us to further increase the limit to $650.0 million. The bank credit facilities mature on March 24, 2027, with an additional two-year extension available at our option. As previously announced, we have obtained a commitment from certain lenders to increase our borrowing capacity under our existing bank facilities to fund the acquisition of REVS. The increase is subject to completion of the acquisition of REVS, satisfaction of typical conditions precedent and definitive documentation.

As at December 31, 2023, our total borrowings on our bank credit facilities amounted to $308.6 million, a decrease of $11.0 million from December 31, 2022, primarily based on working capital and operational requirements. During the year, we drew a total of $72.2 million on our bank credit facilities, as compared to $84.5 million in 2022. We repaid $83.6 million during the year, as compared to $57.1 million in 2022. We continue to pay down the total outstanding balance with cash flows generated from our operations.

Loans under the bank credit facilities bear interest at a floating rate, based on the Canadian prime rates, Canadian bankers' acceptance rates, U.S. base rates, or SONIA, SOFR, and €STR rates plus, in each case, an applicable margin to those rates. The applicable margin for Canadian bankers' acceptance and SONIA, SOFR and €STR borrowings depends on a trailing four-quarter calculation of the Funded debt to EBITDA ratio. The weighted average effective rate of interest for the year ended December 31, 2023 on our bank credit facilities was 6.09%, as compared to 3.66% in 2022. To mitigate our exposure to interest rate fluctuations, on April 29, 2022, we entered into interest rate swap agreements for a total notional amount of GBP57.0 million to pay the counterparties a fixed interest rate of 2.07% per annum in exchange for an amount equal to the GBP - SONIA.

In addition, the Company and certain of its subsidiaries, collectively the guarantors, must account for at least 80% of consolidated revenues on a trailing 12-month basis. The bank credit facilities require repayment of the principal at such time as we receive proceeds of insurance, equity or debt issuances, or sale of assets in excess of certain thresholds. Letters of credit are also available on customary terms for bank credit facilities of this nature. Furthermore, we have provided a security interest to the lenders over certain of our assets in connection with the bank credit facilities.

We also have outstanding letters of credit under our bank credit facilities in the total amount of $1.0 million (December 31, 2022 - $1.5 million).

As at December 31, 2023, we were in compliance with the financial covenants and other requirements of our amended bank credit facilities. The financial covenants are summarized below:

	December 31, 2023
Funded debt to EBITDA (maximum of 4.50:1)	2.06:1
Interest coverage (minimum of 3.00:1)	6.65:1

Other than long-term debt and letters of credit, we are subject to other contractual obligations, such as leases and amounts owing to the vendors of acquired businesses as discussed above.

Contractual Obligations [1]	Payments Due by Period (undiscounted)				
In thousands of dollars	Total	Less than 1 year	1 to 3 years	4 to 5 years	Over 5 years
Bank credit facilities	$ 308,628	$ -	$ 308,628	$ -	$ -
Lease obligations	50,727	15,386	19,882	10,564	4,895
Deferred consideration payables	1,757	1,757	-	-	-
Contingent consideration payables	200	200	-	-	-
Other liabilities	216,726	150,847	35,914	14,704	15,261
Total contractual obligations	$ 578,038	$ 168,190	$ 364,424	$ 25,268	$ 20,156

(1) Contractual obligations exclude aggregate unfunded capital contributions of $3.4 million to certain partnerships as the amount and timing of such payments are uncertain.

We purchased 53,700 common shares for total cash consideration of $2.1 million and 105,400 common shares for total cash consideration of $4.6 million under our Normal Course Issuer Bid during the quarter and year ended December 31, 2023, respectively.

8.3. Cash from Investing Activities

We invest in property, plant and equipment and intangible assets to support the activities of the business. Capital expenditures for accounting purposes include property, plant and equipment in substance and in form, and intangible assets.

Capital expenditures are reconciled as follows:

Capital Expenditures	**Quarter ended December 31,**		**Year ended December 31,**	
In thousands of dollars	**2023**	2022	**2023**	2022
Property, plant and equipment additions	$ 1,189	$ 1,783	$ 4,827	$ 5,433
Intangibles additions	3,363	6,502	7,664	19,047
Capital expenditures	$ 4,552	$ 8,285	$ 12,491	$ 24,480

We continue to make further investments in 2023 to transform how we operate, collaborate and go-to-market. These incremental investments improve how we engage with our employees and customers and enable us to efficiently and effectively scale as we continue to grow and enhance our productivity metrics. We have upgraded certain of our leased properties to better align with our continued rationalization of office space and have made certain investments to our software applications to better serve our markets.

8.4. Free Cash Flow

We proactively manage and optimize our Free Cash Flow available for reinvestment in our business. Free Cash Flow is reconciled as follows:

Free Cash Flow	**Quarter ended December 31,**		**Year ended December 31,**	
In thousands of dollars	**2023**	2022	**2023**	2022
Net cash provided by (used in) operating activities	$ 44,693	$ 27,465	$ 71,429	$ 77,085
Less: Capital Expenditures	4,552	8,285	12,491	24,480
Free Cash Flow	$ 40,141	$ 19,180	$ 58,938	$ 52,605

We use Free Cash Flow to understand how much of the cash generated from operating activities is available to repay borrowings and to reinvest in the Company.

For the year ended December 31, 2023, Free Cash Flow reflected the temporarily higher working capital balances from the first and second quarters as we ramped our new enterprise resource planning system, as well as our returning to historical cash generation levels in the third and fourth quarters.

9. Reconciliation of Non-GAAP Measures

9.1. Reconciliation of Profit (Loss) to Adjusted EBITDA and Adjusted Earnings (Loss)

The following table provides a reconciliation of Profit (Loss) to Adjusted EBITDA and Adjusted Earnings (Loss):

	Quarter ended December 31,		Year ended December 31,	
In thousands of dollars, except for per share amounts	**2023**	2022	**2023**	2022
Profit (loss) for the period	$ (140)	$ (8,759)	$ 10,232	$ (889)
Occupancy costs calculated on a similar basis prior to the adoption of IFRS 16 (1)	(2,859)	(2,905)	(11,902)	(11,993)
Depreciation of right-of-use assets	2,690	2,831	11,121	11,968
Depreciation of property, plant and equipment and amortization of intangibles (7)	12,031	11,290	46,819	47,557
Acquisition and related transition costs (income)	3,759	207	3,834	4,928
Unrealized foreign exchange (gain) loss (2)	904	(1,821)	1,622	(3,854)
(Gain) loss on disposal of right-of-use assets, property, plant and equipment and intangibles (2)	(2)	825	454	825
Share of (profit) loss of joint venture	(810)	(786)	(3,146)	(3,013)
Non-cash share-based compensation costs (3)	4,455	7,123	19,792	24,544
(Gain) loss on equity derivatives net of mark-to-market adjustments on related RSUs and DSUs (3)	942	(1,890)	4,594	2,481
Restructuring costs (recovery)	311	17,001	388	38,896
(Gain) loss on investments (4)	659	47	301	164
Other non-operating and/or non-recurring (income) costs (5)	2,658	2,957	13,735	11,742
Finance costs (income), net - leases	265	463	1,222	1,913
Finance costs (income), net - other (8)	8,823	7,918	23,877	5,284
Income tax expense (recovery) (9)	482	427	12,098	4,769
Adjusted EBITDA	$ 34,168	$ 34,928	$ 135,041	$ 135,322
Depreciation of property, plant and equipment and amortization of intangibles of non-acquired businesses (7)	(3,602)	(2,376)	(13,506)	(8,955)
Finance (costs) income, net - other (8)	(8,823)	(7,918)	(23,877)	(5,284)
(Gain) loss on hedging transactions, including currency forward contracts and interest expense (income) on swaps	3,762	3,396	3,057	(6,856)
Interest accretion on contingent consideration payables	-	-	-	6
Tax effect of adjusted earnings (loss) adjustments (9)	(4,613)	(7,939)	(25,527)	(28,511)
Adjusted earnings (loss)*	$ 20,892	$ 20,091	$ 75,188	$ 85,722
Weighted average number of shares - basic	45,421,165	44,715,291	45,302,194	44,635,448
Weighted average number of restricted shares	433,123	597,408	485,530	633,675
Weighted average number of shares - adjusted	45,854,288	45,312,699	45,787,724	45,269,123
Adjusted earnings (loss) per share (6)	$0.46	$0.44	1.64	$1.89

(1) Management uses the non-GAAP occupancy costs calculated on a similar basis prior to the adoption of IFRS 16 when analyzing financial and operating performance.
(2) Included in other operating expenses in the consolidated statements of comprehensive income (loss).
(3) Included in employee compensation expenses in the consolidated statements of comprehensive income (loss).
(4) Gain (loss) on investments relates to changes in the fair value of investments in partnerships.
(5) Other non-operating and/or non-recurring income (costs) for the quarter and year ended December 31, 2023 relate to legal, advisory, consulting, and other professional fees related to organizational and strategic initiatives. For the quarter and year ended December 31, 2022, other non-operating and/or non-recurring income (costs) relate to legal, advisory, and other consulting costs related to organizational and strategic initiatives, including those related to the transition of certain members of our leadership team. These are included in other operating expenses in the consolidated statements of comprehensive income (loss).
(6) Refer to page 4 of this MD&A for the definition of Adjusted EPS.
(7) For the purposes of reconciling to Adjusted Earnings (Loss), the amortization of intangibles of acquired businesses is adjusted from Profit (loss) for the period. Per the quantitative reconciliation above, we have added back depreciation of property, plant and equipment and amortization of intangibles and then deducted the depreciation of property, plant and equipment and amortization of intangibles of non-acquired businesses to arrive at the amortization of intangibles of acquired businesses.
(8) For the purposes of reconciling to Adjusted Earnings (Loss), the interest accretion on contingent consideration payables and (gains) losses on hedging transactions and interest expense (income) on swaps is adjusted from Profit (loss) for the period. Per the quantitative reconciliation above, we have added back finance costs (income), net – other and then deducted finance costs (income), net – other prior to adjusting for interest accretion on contingent consideration payables and (gains) losses on hedging transactions and interest expense (income) on swaps.
(9) For the purposes of reconciling to Adjusted Earnings (Loss), only the tax impacts for the reconciling items noted in the definition of Adjusted Earnings (Loss) is adjusted from Profit (loss) for the period. Please refer to page 3 of this MD&A for the definition of Adjusted Earnings (Loss).

9.2. Constant Currency

The following tables provide a summarization of the foreign exchange rates used as presented based on the average monthly rates, and the foreign exchange rates used for Constant Currency for currencies in which we primarily transact in:

	Quarter ended December 31, 2023		Year ended December 31, 2023	
	As presented	For Constant Currency	As presented	For Constant Currency
Canadian Dollar	1.000	1.000	1.000	1.000
United States Dollar	1.361	1.357	1.349	1.301
Pound Sterling	1.689	1.593	1.677	1.608
Euro	1.464	1.386	1.459	1.370
Australian Dollar	0.886	0.892	0.896	0.903

	Quarter ended December 31, 2022		Year ended December 31, 2022	
	As presented	For Constant Currency	As presented	For Constant Currency
Canadian Dollar	1.000	1.000	1.000	1.000
United States Dollar	1.357	1.260	1.301	1.254
Pound Sterling	1.593	1.699	1.608	1.724
Euro	1.386	1.441	1.370	1.483
Australian Dollar	0.892	0.918	0.903	0.942

10. Summary of Quarterly Results

In thousands of dollars, except for per share amounts	2023					2022				
	Fiscal 2023	Dec 31	Sep 30	Jun 30	Mar 31	Fiscal 2022	Dec 31	Sep 30	Jun 30	Mar 31
Results of Operations										
Revenues	$ 772,843	$ 191,574	$ 185,232	$ 205,213	$ 190,824	$ 735,451	$ 183,762	$ 177,691	$ 206,414	$ 167,584
Adjusted EBITDA	$ 135,041	$ 34,168	$ 29,650	$ 44,695	$ 26,528	$ 135,322	$ 34,928	$ 32,910	$ 49,743	$ 17,741
Adjusted EBITDA margin	17.5%	17.8%	16.0%	21.8%	13.9%	18.4%	19.0%	18.5%	24.1%	10.6%
Profit (loss) for the period	$ 10,232	$ (140)	$ 929	$ 11,856	$ (2,413)	$ (889)	$ (8,759)	$ 6,827	$ 12,499	$ (11,456)
Basic earnings (loss) per share:	$0.23	$(0.00)	$0.02	$0.26	$(0.05)	$(0.02)	$(0.20)	$0.15	$0.28	$(0.26)
Diluted earnings (loss) per share:	$0.22	$(0.00)	$0.02	$0.26	$(0.05)	$(0.02)	$(0.20)	$0.15	$0.28	$(0.26)
Adjusted earnings (loss) per share	$1.64	$0.46	$0.33	$0.53	$0.33	$1.89	$0.44	$0.42	$0.77	$0.27
Weighted average number shares ('000s):										
Basic	45,302	45,421	45,408	45,361	45,012	44,635	44,715	44,609	44,508	44,171
Diluted	45,908	45,421	45,904	45,816	45,012	44,635	44,715	45,382	45,179	44,171

11. Selected Annual Information

Selected Financial Information	For the year ended December 31,		
In thousands of dollars, except for per share amounts	**2023**	2022	2021
Operations			
Revenues	$ 772,843	$ 735,451	$ 625,387
Revenue growth	5.1%	17.6%	11.4%
Organic Revenue growth	13.4%	12.0%	5.2%
Adjusted EBITDA	$ 135,041	$ 135,322	$ 109,755
Adjusted EBITDA growth	(0.2%)	23.3%	10.9%
Adjusted EBITDA margin	17.5%	18.4%	17.5%
Profit (loss)	$ 10,232	$ (889)	$ 25,573
Earnings (loss) per share:			
Basic	$0.23	$(0.02)	$0.62
Diluted	$0.22	$(0.02)	$0.60
Adjusted	$1.64	$1.89	$1.90
Dividends declared per share	$0.60	$0.60	$0.60

Balance Sheet	At December 31,		
	2023	2022	2021
Total assets	$ 1,214,693	$ 1,263,886	$ 1,199,200
Long-term liabilities (excluding deferred income taxes)	363,736	390,552	372,042

In each of the past three years we have declared and paid quarterly dividends totalling $0.60 annually, per common share to the shareholders.

12. Share Data

As at February 20, 2024, 45,552,750 common shares were outstanding and are net of 408,677 escrowed shares. These escrowed shares are subject to restrictive covenants and may or may not vest. Accordingly, these shares are not included in the total number of common shares outstanding for financial reporting purposes and are not included in basic earnings per share calculations.

As at December 31, 2023, there were 2,216,822 share options outstanding (December 31, 2022 - 2,330,062 share options outstanding) at a weighted average exercise price of $48.61 per share (December 31, 2022 - $45.42 per share) and 835,575 share options were exercisable (December 31, 2022 - 561,324). All share options are exercisable into common shares on a one-for-one basis.

Shareholders who are resident in Canada may elect to automatically reinvest quarterly dividends in additional Altus Group common shares under our Dividend Reinvestment Plan ("DRIP").

Pursuant to the DRIP, and in the case where common shares are issued from treasury, cash dividends will be reinvested in additional Altus Group common shares at the weighted average market price of our common shares for the five trading days immediately preceding the relevant dividend payment date, less a discount, currently set at 4%. In the case where common shares will be purchased on the open market, cash dividends will be reinvested in additional Altus Group common shares at the relevant average market price paid in respect of satisfying this reinvestment plan.

For the year ended December 31, 2023, 17,668 common shares (2022 - 46,638 common shares) were issued under the DRIP.

13. Financial Instruments and Other Instruments

Financial instruments held in the normal course of business included in our consolidated balance sheet as at December 31, 2023 consist of cash and cash equivalents, trade receivables and other (excluding deferred costs to obtain customer contracts and prepayments), trade payables and other (excluding contract liabilities), income taxes recoverable and payable, investments, borrowings and derivative financial instruments. We do not enter into financial instrument arrangements for speculative purposes.

The fair values of the short-term financial instruments approximate their carrying values. The fair values of borrowings are not significantly different than their carrying values, as these instruments bear interest at rates comparable to current market rates. The fair values of other long-term assets and liabilities, and contingent consideration payables are measured using a discounted cash flow analysis of expected cash flows in future periods. The investments in equity instruments are measured based on valuations of the respective entities. Investments in partnerships are measured in relation to the fair value of assets in the respective partnerships.

The fair value of the liabilities for our RSUs and DSUs as at December 31, 2023 was approximately $23.4 million, based on the published trading price on the TSX for our common shares.

We are exposed to interest rate risk in the event of fluctuations in the Canadian prime rates, Canadian bankers' acceptance rates, U.S. base rates, or SONIA, SOFR, and €STR rates, as the interest rates on the bank credit facilities fluctuate with changes in these rates.

To mitigate our exposure to interest rate fluctuations, we monitor interest rates and consider entering into interest rate swap agreements in connection with our bank credit facilities. On April 29, 2022, we entered into interest rate swap agreements for a total notional amount of GBP57.0 million. The net fair value of this derivative is $4.6 million in our favour.

We are exposed to price risk as the liabilities for cash-settled plans are classified as fair value through profit or loss, and linked to the price of our common shares.

We enter into equity derivatives to manage our exposure to changes in the fair value of RSUs and DSUs, issued under their respective plans, due to changes in the fair value of our common shares. Changes in the fair value of these derivatives are recorded as employee compensation expense and offset the impact of mark-to-market adjustments on the RSUs and DSUs that have been accrued.

As at December 31, 2023, we have equity derivatives relating to RSUs and DSUs outstanding with a notional amount of $23.8 million. The net fair value of these derivatives is $4.2 million in our favour.

We are exposed to credit risk with respect to our cash and cash equivalents, trade receivables and other and derivative financial instruments. Credit risk is not concentrated with any particular customer. In certain parts of our business, it is often common business practice of our customers to pay invoices over an extended period of time and/or at the completion of the project or on receipt of funds. We assess lifetime expected credit losses for all trade receivables and contract assets for unbilled revenue on customer contracts by grouping customers with shared credit risk characteristics, the days past due, and by incorporating forward-looking information as applicable.

Liquidity risk is the risk that we will not be able to meet our financial obligations as they become due. We manage liquidity risk through the management of our capital structure and financial leverage. We also manage liquidity risk by continuously monitoring actual and projected cash flows, taking into account the seasonality of our revenues and receipts and the maturity profile of our financial assets and liabilities. Our Board of Directors reviews and approves our operating and capital budgets, as well as any material transactions outside the ordinary course of business, including proposals on mergers, acquisitions or other major investments.

14. Contingencies

From time to time, we or our subsidiaries are involved in legal proceedings, claims and litigation in the ordinary course of business with customers, former employees and other parties. Although it is not possible to determine the final outcome of such matters, based on all currently available information, we believe that our liabilities, if any, arising from such matters will not have a material adverse effect on our financial position or results of operations and have been adequately provided for in the financial statements.

In the ordinary course of business, we are subject to tax audits from various government agencies relating to income and commodity taxes. As a result, from time to time, the tax authorities may disagree with the positions and conclusions we made in our tax filings, which could lead to assessments and reassessments. These assessments and reassessments may have a material adverse effect on our financial position or results of operations.

15. Accounting Policies, Estimates, and Judgments

15.1. Critical Accounting Estimates and Judgments

The preparation of the financial statements requires management to make estimates and assumptions concerning the future. It also requires management to exercise its judgment in applying our accounting policies and the reported amounts of assets and liabilities, revenue and expenses, and related disclosures. Estimates and judgments are continually evaluated and are based on current facts, historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Accounting estimates will, by definition, seldom equal the actual results.

The following discussion sets forth management's most significant estimates and assumptions in determining the value of assets and liabilities and the most significant judgments in applying accounting policies.

Revenue Recognition and Determination and Allocation of the Transaction Price

We estimate variable consideration for contingency arrangements on a project-by-project basis. Variable consideration is not constrained only to the extent that it is highly probable that the amount will not be subject to significant reversal when the uncertainty is resolved, which is when savings are realized by the customer, unless the contractual terms provide for an enforceable right to payment for performance completed.

The transaction price is allocated on the basis of the relative standalone selling prices for contracts with more than one performance obligation. Estimation of the standalone selling price involves reasonably available data points, market conditions, entity-specific factors and information about the customer or class of customer and to similar customers as evidence of the standalone selling price for each performance obligation; however when one is not available, the standalone selling price is estimated. Where the observable price is not available, based on the specific facts and circumstances, either the adjusted market assessment or the expected cost plus a margin approach is applied. The determination of the standalone selling prices requires significant judgment.

Impairment of Trade Receivables and Contract Assets

The impairment provisions for trade receivables and contract assets determined under IFRS 9, *Financial Instruments*, are based on assumptions about the risk of default and expected loss rates. We use judgment in making these assumptions and selecting the inputs to the impairment calculation based on our past history, existing market conditions, and forward-looking estimates at the end of each reporting period. Such estimates and judgments could impact trade receivables, contract assets for unbilled revenue on customer contracts and other operating expenses.

Estimated Impairment of Goodwill

We test at least annually whether goodwill is subject to any impairment. Goodwill impairment is evaluated between annual tests upon the occurrence of events or changes in circumstances. Goodwill is allocated to cash-generating units ("CGUs") for the purpose of impairment testing. The allocation is made to those CGUs or group of CGUs that are expected to benefit from synergies of the business combination in which the goodwill arose. Goodwill is tested for impairment in the groups of CGUs for which it is monitored by management. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount for any CGU is determined based on the higher of fair value less costs to sell and value in use. Both of the valuation approaches require the use of estimates. Significant erosion in the general state of the economy could result in increased impairment losses. For the year ended December 31, 2023, no goodwill impairment charge was recorded (2022 - $nil).

Determination of Purchase Price Allocations and Contingent Consideration

Estimates are made in determining the fair value of assets and liabilities, including the valuation of separately identifiable intangibles acquired as part of an acquisition. Judgments are also made in determining whether any consideration transferred for an acquisition relates to future compensation arrangements and are therefore to be excluded from the purchase price allocation. Furthermore, estimates are made in determining the value of contingent consideration payments that should be recorded as part of the consideration on the date of acquisition and changes in contingent consideration payable in subsequent reporting periods. Contingent consideration payments are generally based on acquired businesses achieving certain performance targets. The estimates are based on our best assessment of the related inputs used in the valuation models, such as future cash flows and discount rates. Future performance results that differ from our estimates could result in changes to liabilities recorded, which are recorded as they arise through profit or loss.

Income Taxes

We are subject to income taxes in numerous jurisdictions. Significant judgment is required in determining the provision for income taxes. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income taxes in the period in which such determination is made.

15.2. Changes in Material Accounting Policies and Estimates

15.2.1. Adoption of Recent Accounting Pronouncements

Amendments to IAS 8: Definition of Accounting Estimates

In February 2021, the IASB issued amendments to IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, which introduces a new definition of ‘accounting estimates’. The amendments clarify the distinction between changes in accounting estimates, and changes in accounting policies and the correction of errors. The amendments also clarify the measurement techniques and inputs used to develop accounting estimates.

The new guidance is effective for annual periods beginning on or after January 1, 2023, with earlier application permitted, and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of the effective date. These amendments did not have a material impact on our consolidated financial statements.

Amendments to IAS 1 and IFRS Practice Statement 2: Disclosure of Accounting Policies

In February 2021, the IASB issued amendments to IAS 1, *Presentation of Financial Statements*, and IFRS Practice Statement 2, *Making Materiality Judgments*, to provide guidance in the application of materiality judgments to accounting policy disclosures. These amendments also replaced the requirement for disclosures around ‘significant’ accounting policies with a requirement to disclose ‘material’ accounting policies.

The amendments are effective for annual periods beginning on or after January 1, 2023, with earlier application permitted as long as this fact is disclosed. The amendments did not have a material impact on our consolidated financial statements.

Amendments to IAS 12: Deferred Tax related to Assets and Liabilities arising from a Single Transaction

In May 2021, the IASB issued amendments to IAS 12, *Income Taxes*, to provide clarity as to whether certain deductions are attributable for tax purposes to the liability recognized in the consolidated financial statements or to the related asset component. These amendments also narrow the scope for exemption when recognizing deferred taxes under the initial recognition exemption.

These amendments are effective for annual periods beginning on or after January 1, 2023, and should apply these amendments to transactions that occur on or after the beginning of the earliest comparative period presented. These amendments did not have a material impact on our consolidated financial statements.

15.2.2. Future Accounting Pronouncements

We have not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

Amendments to IAS 1: Classification of Liabilities as Current or Non-Current and Deferral of Effective Date

In January 2020, the IASB issued amendments to IAS 1, *Presentation of Financial Statements*, to provide a more general approach to the presentation of liabilities as current or non-current based on contractual arrangements in place at the reporting date. These amendments:

- specify that the rights and conditions existing at the end of the reporting period are relevant in determining whether we have a right to defer settlement of a liability by at least twelve months;
- require disclosures around the relevant information about the covenants to be complied with in order to have the right to defer settlement of a liability by at least twelve months;
- provide that management's expectations are not a relevant consideration as to whether we will exercise our rights to defer settlement of a liability; and
- clarify when a liability is considered settled.

On October 31, 2022, the IASB issued a deferral of the effective date for the new guidance to annual periods beginning on or after January 1, 2024, which is to be applied retrospectively. We do not expect material impacts from these amendments on our consolidated financial statements.

16. Disclosure Controls and Procedures and Internal Controls over Financial Reporting

Management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P") and internal controls over financial reporting ("ICFR"), as those terms are defined in National Instrument 52-109 - Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109").

Management has caused such DC&P to be designed under its supervision to provide reasonable assurance that our material information, including material information of our consolidated subsidiaries, is made known to our Chief Executive Officer and our Chief Financial Officer for the period in which the annual and interim filings are prepared. Further, such DC&P are designed to provide reasonable assurance that information we are required to disclose in our annual filings, interim filings or other reports we have filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in the applicable securities legislation.

Management has caused such ICFR to be designed under its supervision using the framework established in Internal Control - Integrated Framework (2013) published by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with IFRS.

Section 3.3(1)(b) of NI 52-109 allows an issuer to limit its design of DC&P and ICFR to exclude controls, policies and procedures of a business that the issuer acquired not exceeding 365 days from the date of acquisition.

Management has not limited the scope of the design of DC&P and ICFR to exclude controls, policies and procedures of any acquired businesses as at December 31, 2023.

Management has caused to be evaluated under its supervision the effectiveness of its DC&P as of December 31, 2023 and has concluded that the design and effectiveness of these controls and procedures provide reasonable assurance that material information relating to Altus Group, including our consolidated subsidiaries, was made known to management on a timely basis to ensure adequate disclosure.

Management has caused to be evaluated under its supervision the effectiveness of its ICFR as of December 31, 2023, using the COSO framework. Management has concluded that the overall design and effectiveness of these controls provide reasonable assurance of the reliability of financial reporting and the preparation of the consolidated financial statements for external purposes in accordance with IFRS.

In January 2023, we upgraded certain of our technology infrastructure systems, which included the implementation of new enterprise resource planning, customer relationship management, and contract lifecycle management systems across core business processes. Accordingly, we have modified a number of internal controls. Management is taking actions to monitor and maintain appropriate internal controls during the transition period following the implementation. These include performing additional controls, verifications and testing to ensure data integrity.

There have been no significant changes in our internal controls over financial reporting that occurred for the quarter ended December 31, 2023, the most recently completed interim period, that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

The audit committee and our Board of Directors have reviewed and approved this MD&A and the annual financial statements as at and for the year ended December 31, 2023.

17. Additional Information

Additional information relating to Altus Group Limited, including our Annual Information Form, is available on SEDAR+ at www.sedarplus.ca and on our corporate website at www.altusgroup.com under the Investors tab. Our common shares trade on the TSX under the symbol “AIF”.

Altus Group

LISTINGS
Toronto Stock Exchange
Stock trading symbol: AIF

AUDITORS
ERNST & YOUNG LLP

TRANSFER AGENT
TSX Trust Company
301 - 100 Adelaide Street West, Toronto, ON M5H 4H1
Toronto: (416) 682-3860
Toll-free throughout North America: 1 (800) 387-0825
Facsimile: 1-888-249-6189
Website: www.tsxtrust.com
Email: shareholderinquiries@tmx.com

HEADQUARTERS
33 Yonge Street, Suite 500, Toronto, Ontario, Canada M5E 1G4
Telephone: (416) 641-9500
Toll-free Telephone: 1 (877) 953-9948
Facsimile: (416) 641-9501
Website: www.altusgroup.com
Email: info@altusgroup.com