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forfeitures2Â (9,290)â€”Â 9,329Â 41Â Balance, March 31, 2024\$1,409Â \$1,096,965Â \$(169,635)\$(218,599)\$1,216Â \$711,356Â Net incomeâ€”Â 8,295Â 8,295Â Other comprehensive lossâ€”Â 8,295Â 8,295Â 1,224)Repurchases of common sharesâ€”Â 8,295Â 8,295Â 5,010)Stock compensation expenseâ€”Â 3,827Â 8,295Â 8,295Â Shares issued under equity incentive plan, net of forfeituresâ€”Â 43)Â 82Â 39Â Balance, June 30, 2024\$1,409Â \$1,100,749Â \$(161,340)\$(223,527)\$(8)717,283Â Common stockAdditional paid-in capital(Accumulated deficit)Treasury stock, at costÂ Accumulated other comprehensive incomeTotalÂ Balance, December 31, 2022\$1,396Â \$1,091,475Â \$(242,010)\$(149,624)\$5,992Â \$707,229Â Net lossâ€”Â 8,295Â 8,295Â 1,471)Â 8,295Â 1,471)Other comprehensive lossâ€”Â 8,295Â 8,295Â 5,759)Repurchases of common sharesâ€”Â 8,295Â 8,295Â 29,850)Tax withholdings on equity award vestingâ€”Â 8,295Â 8,295Â 866)Â 866)Stock compensation expense â€”Â 4,756Â 4,756Â Shares issued under equity incentive plan, net of forfeitures10Â 102Â 112Â Balance, March 31, 2023\$1,406Â \$1,096,333Â \$(243,481)\$(180,340)\$233Â \$674,151Â Net incomeâ€”Â 26,122Â 26,122Â Other comprehensive incomeâ€”Â 6,692Â 6,692Â Repurchases of common sharesâ€”Â 43,524)Â 43,524)Excise tax on repurchases of common sharesâ€”Â 630)Â 630)Stock compensation expenseâ€”Â 4,739Â 4,739Â Shares issued under equity incentive plan, net of forfeitures1Â 213Â 214Â Balance, June 30, 2023\$1,407Â \$1,101,285Â \$(217,359)\$(224,494)\$6,925Â \$667,764Â See accompanying notes to condensed consolidated financial statements. 6Table of ContentsECOYST INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands) (unaudited)Six months endedJune 30, 20242023Cash flows from operating activities:Net income\$9,516Â \$24,651Â Adjustments to reconcile net income to net cash provided by operating activities:Depreciation36,523Â 34,147Â Amortization7,034Â 7,019Â Amortization of deferred financing costs and original issue discount1,052Â 1,024Â Debt extinguishment costs90Â 4Â Foreign currency exchange loss (gain)155Â (632)Deferred income tax (benefit) provision(1,690)1,283Â Net loss on asset disposals614Â 2,306Â Stock compensation7,507Â 9,070Â Equity in net income from affiliated companies(3,464)(11,597)Dividends received from affiliated companies33,000Â 10,000Â Other, net2,216Â 6,255Â Working capital changes that used cash:Receivables(4,076)(3,019)Inventories(6,693)(2,987)Prepays and other current assets(4,457)(5,724)Accounts payable(3,289)(1,468)Accrued liabilities(27,578 (29,188)Net cash provided by operating activities46,460Â 41,140Â Cash flows from investing activities:Purchases of property, plant and equipment(36,649)(39,227)Other, net(200)â€”Â Net cash used in investing activities(36,849)(39,227)Cash flows from financing activities:Draw down of revolving credit facilitiesâ€”Â 14,500Â Repayments of revolving credit facilitiesâ€”Â (14,500)Issuance of long-term debt, net of discount870,817Â 817Â 817Â Repayments of long-term debt(877,500)(4,500)Repurchases of common shares(5,010)(73,373)Tax withholdings on equity award vesting(1,218)(866)Repayment of financing obligation(1,478)(1,433)Other, net41Â 294Â Net cash used in financing activities(14,348)(79,878)Effect of exchange rate changes on cash and cash equivalents(310)(3,723)Net change in cash and cash equivalents(5,047)(81,688)Cash and cash equivalents at beginning of period88,365Â 110,920Â Cash and cash equivalents at end of period\$83,318Â \$29,232Â For supplemental cash flow disclosures, see Note 20. See accompanying notes to condensed consolidated financial statements. 7Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) 1. Background and Basis of Presentation:Description of BusinessEcovyst Inc. and subsidiaries (the “Company” or “Ecovyst”) is a leading integrated and innovative global provider of advanced materials, specialty catalysts and services. The Company supports customers globally through its strategically located network of manufacturing facilities. The Company believes that its products and services contribute to improving the sustainability of the environment. The Company has two uniquely positioned specialty businesses: Ecoservices provides sulfuric acid recycling to the North American refining industry for the production of alkylate and provides high quality and high strength virgin sulfuric acid for industrial and mining applications. Ecoservices also provides chemical waste handling and treatment services, as well as ex-situ catalyst activation services for the refining and petrochemical industry. Advanced Materials & Catalysts, through its Advanced Silicas business, provides finished silica catalysts, catalyst supports and functionalized silicas necessary to produce high performing plastics and to enable sustainable chemistry, and through the Zeolyst Joint Venture, innovates and supplies specialty zeolites used for catalysts that support the production of sustainable fuels, remove nitrogen oxides from diesel engine emissions and that are broadly applied in refining and petrochemical processes. The Company’s “regeneration services product group, which is a part of the Company’s “Ecoservices segment, typically experiences seasonal fluctuations as a result of higher demand for gasoline products in the summer months and lower demand in the winter months. These demand fluctuations result in higher sales and working capital requirements in the second and third quarters. Basis of PresentationThe condensed consolidated financial statements included herein are unaudited. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) have been condensed or omitted pursuant to such rules and regulations for interim reporting. In the opinion of management, all adjustments of a normal and recurring nature necessary to state fairly the financial position and results of operations have been included. The results of operations are not necessarily indicative of the expected results for the full year. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes included in the Company’s “Annual Report on Form 10-K for the year ended December 31, 2023. New Accounting Standards:Accounting Standards Not Yet AdoptedIn November 2023, the Financial Accounting Standards Board (“FASB”) issued guidance to improve the disclosures related to public business entities reportable segments. This new guidance requires entities to provide information regarding significant segment expenses, especially those segment expenses that are regularly reported to the Company’s “chief operating decision maker (the Company’s “Chief Executive Officer), or CODM. The guidance also require public entities to disclose the nature, type and amounts of other segment items by reportable segment. Public business entities will also have to report all annual disclosures about segments profits or losses that are required by ASC 280 on an interim basis, including the significant segment expenses and other segment items. The new guidance is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The disclosure will be implemented as required for the fiscal year ended December 31, 2024. The Company is currently evaluating the impact of this guidance. In December 2023, FASB issued guidance to improve disclosures related to incomes taxes. This new guidance requires public business entities to disaggregate information on the effective tax rate reconciliation and income taxes paid to provide greater transparency. Public business entities will be required to provide additional information in specified categories related to effective tax rate reconciliation in tabular form and provide income taxes paid by jurisdictions, with further disaggregation needed if amounts exceed 5% of the total. The new guidance is effective for fiscal years beginning after December 15, 2024. The disclosure will be implemented as required for the fiscal year ended December 31, 2025. The Company is currently evaluating the impact of this guidance. In October 2023, FASB issued guidance to amend either presentation or disclosure requirements related to fourteen subtopics in the FASB Accounting Standards Codification, that are currently in the SEC Regulation S-X or Regulation S-K. The new guidance was issued in response to the SEC’s “ruling on disclosure simplification. For entities subject to existing SEC disclosure requirements, the effective date of each amendment of the topics will be the date that the SEC removes the related disclosure from Regulation S-X or 8Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) Regulation S-K. The guidance must be applied prospectively, with no early adoption permitted for entities subject to those existing SEC disclosures. The Company is currently evaluating the impact of the new guidance as it pertains to the fourteen subtopics that would impact the business and will apply prospectively once in effect. In August 2023, the FASB issued guidance for entities that meet the definition of a joint venture or a corporate joint venture, to adopt a new basis of accounting upon the formation of the joint venture. The new guidance requires the initial measurement of contributed net assets and liabilities at fair value on the formation date, recognition of goodwill for the difference between the fair value of the joint venture’s “equity and net assets, and disclosures about the nature and financial impact of the transaction. The new guidance requires prospective application and is effective for all joint ventures that are formed on or after January 1, 2025, with early adoption permitted. Joint ventures that formed before January 1, 2025 may elect to retrospectively apply the new guidance. The Company will apply the guidance to any new joint ventures formed after the effective date. 3. Revenue from Contracts with Customers: Disaggregated RevenueThe Company’s “primary means of disaggregating revenues is by reportable segments, which can be found in Note 17 to these condensed consolidated financial statements. The Company’s “portfolio of products is integrated into a variety of end uses, which are described in the table below. Key End UsesKey ProductsClean fuels, emission control & otherâ€”Refining hydrocracking catalystsâ€”Emission control catalystsâ€”Catalyst supports used in production of sustainable fuels such as renewable dieselâ€”Catalysts used in production of sustainable aviation fuelsâ€”Catalyst activationâ€”Aluminum sulfate solutionâ€”Ammonium bisulfite solutionPolyethylene, polymers & engineered plasticsâ€”Catalysts for high-density polyethylene and chemicals synthesesâ€”Antiblock for film packagingâ€”Catalyst for advanced recyclingRegeneration and treatment servicesâ€”Sulfuric acid regeneration servicesâ€”Treatment servicesIndustrial, mining & automotiveâ€”Virgin sulfuric acid for miningâ€”Virgin sulfuric derivatives for industrial productionâ€”Virgin sulfuric derivatives for nylon production9Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) The following tables disaggregate the Company’s “sales, by segment and end uses, for the three and six months ended June 30, 2024 and 2023, respectively: Three months ended June 30, 2024EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & other\$8,614Â \$â€”Â \$8,614Â Polyethylene, polymers & engineered plasticsâ€”Â 28,862Â 28,862Â Regeneration and treatment services(1)95,365Â 8,295Â Industrial, mining & automotive49,979Â 49,979Â Total segment sales\$153,958Â \$28,862Â \$182,820Â Three months ended June 30, 2023EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & other\$8,426Â \$â€”Â \$8,426Â Polyethylene, polymers & engineered plasticsâ€”Â 26,045Â 26,045Â Regeneration and treatment services(1)98,494Â 8,295Â Industrial, mining & automotive51,145Â 51,145Â Total segment sales\$158,065Â \$26,045Â \$184,110Â Six months ended June 30, 2024EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & other\$16,003Â \$â€”Â \$16,003Â Polyethylene, polymers & engineered plasticsâ€”Â 47,797Â 47,797Â Regeneration and treatment services(1)178,684Â 178,684Â Industrial, mining & automotive100,873Â 100,873Â Total segment sales\$295,560Â \$47,797Â \$343,357Â Six months ended June 30, 2023EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & other\$13,166Â \$â€”Â \$13,166Â Polyethylene, polymers & engineered plasticsâ€”Â 49,179Â 49,179Â Regeneration and treatment services(1)186,838Â 8,295Â Industrial, mining & automotive95,801Â 95,801Â Total segment sales\$295,805Â \$49,179Â \$344,984Â (1)As described in Note 1 to these condensed consolidated financial statements, the Company experiences seasonal sales fluctuations to customers in the regeneration services product group. (2)Excludes the Company’s “proportionate share of sales from the Zeolyst International and Zeolyst C.V. joint ventures (collectively, the “Zeolyst Joint Venture”) accounted for using the equity method (see Note 9 to these condensed consolidated financial statements for further information). 10Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) 4. Fair Value Measurements: Fair values are based on quoted market prices when available. When market prices are not available, fair values are generally estimated using discounted cash flow analyses, incorporating current market inputs for similar financial instruments with comparable terms and credit quality. In instances where there is little or no market activity for the same or similar instruments, the Company estimates fair values using methods, models and assumptions that management believes a hypothetical market participant would use to determine a current transaction price. These valuation techniques involve some level of management estimation and judgment that becomes significant with increasingly complex instruments or pricing models. Where appropriate, adjustments are included to reflect the risk inherent in a particular methodology, model or input used. The Company’s “financial assets and liabilities carried at fair value have been classified based upon a fair value hierarchy. The hierarchy gives the highest ranking to fair values determined using unadjusted quoted prices in active markets for identical assets and liabilities (Level 1) and the lowest ranking to fair values determined using methodologies and models with unobservable inputs (Level 3). The classification of an asset or a liability is based on the lowest level input that is significant to its measurement. For example, a Level 3 fair value measurement may include inputs that are both observable (Levels 1 and 2) and unobservable (Level 3). The levels of the fair value hierarchy are as follows: â€”Level 1â€”Values are unadjusted quoted prices for identical assets and liabilities in active markets accessible at the measurement date. Active markets provide pricing data for trades occurring at least weekly and include exchanges and dealer markets. â€”Level 2â€”Inputs include quoted prices for similar assets or liabilities in active markets, quoted prices from those willing to trade in markets that are not active, or other inputs that are observable or can be corroborated by market data for the term of the instrument. Such inputs include market interest rates and volatilities, spreads and yield curves. â€”Level 3â€”Certain inputs are unobservable (supported by little or no market activity) and significant to the fair value measurement. Unobservable inputs reflect the Company’s “best estimate of what hypothetical market participants would use to determine a transaction price for the asset or liability at the reporting date. The following tables present information about the Company’s “assets and liabilities that were measured at fair value on a recurring basis as of June 30, 2024 and December 31, 2023, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. June 30, 2024Quoted Prices in Active Markets (Level 1) Significant Other Observable Inputs (Level 2) Significant Unobservable Inputs (Level 3) Derivative assets: Interest rate caps (Note 12) \$19,965Â \$â€”Â \$19,965Â \$â€”Â Derivative liabilities: Interest rate caps (Note 12) \$403Â \$â€”Â \$403Â \$â€”Â December 31, 2023Quoted Prices in Active Markets (Level 1) Significant Other Observable Inputs (Level 2) Significant Unobservable Inputs (Level 3) Derivative assets: Interest rate caps (Note 12) \$19,021Â \$â€”Â \$19,021Â \$â€”Â Derivative liabilities: Interest rate caps (Note 12) \$2,496Â \$â€”Â \$2,496Â \$â€”Â 11Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) Derivative contractsDerivative assets and liabilities can be exchange-traded or traded over-the-counter (“OTC”). The Company generally values exchange-traded derivatives using models that calibrate to market transactions and eliminate timing differences between the closing price of the exchange-traded derivatives and their underlying instruments. OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market transactions, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. When models are used, the selection of a particular model to value an OTC derivative depends on the contractual terms of, and specific risks inherent in, the instrument as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices and rates, forward curves, measures of volatility, and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as forward contracts, swaps and options, model inputs can generally be corroborated by observable market data by correlation or other means, and model selection does not involve significant management judgment. As of June 30, 2024, the Company had interest rate caps that were fair valued using Level 2 inputs. In addition, the Company applies a credit valuation adjustment to reflect credit risk which is calculated based on credit default swaps. To the extent that the Company’s “net exposure under a specific master agreement is an asset, the Company utilizes the counterparty’s “default swap rate. If the net exposure under a specific master agreement is a liability, the Company utilizes a default swap rate comparable to Ecovyst. The credit valuation adjustment is added to the discounted fair value to reflect the exit price that a market participant would be willing to receive to assume the Company’s “liabilities or that a market participant would be willing to pay for the Company’s “assets. 5. Stockholders’ Equity: Accumulated Other Comprehensive Income (Loss) The following tables present the tax effects of each component of other comprehensive income (loss) for the three and six months ended June 30, 2024 and 2023, respectively: Three months ended June 30, 20242023Pre-tax amountTax benefit/(expense)After-tax amountPre-tax amountTax benefit/(expense)After-tax amountDefined benefit and other postretirement plans: Net gains\$714Â \$(178)\$536Â \$651Â \$(162)\$489Â Net prior service cost(7)1Â (6)(31)7Â (24)Benefit plans, net707Â (177)\$530Â 620Â (155)\$465Â Net (loss) gain from hedging activities(1,433)\$581Â (1,075)\$7,059Â (1,660)\$5,399Â Foreign currency translation(679)â€”Â (679)\$828Â 828Â Other comprehensive income (loss)\$1,405Â \$181Â \$(1,224)\$8,507Â \$(1,815)\$6,692Â Six months ended June 30, 20242023Pre-tax amountTax benefit/(expense)After-tax amountPre-tax amountTax benefit/(expense)After-tax amountDefined benefit and other postretirement plans: Net gains\$713Â \$(178)\$535Â \$650Â \$(162)\$488Â Net prior service cost(15)41Â (1)(62)15Â (47)Benefit plans, net698Â (174)\$524Â 588Â (147)\$441Â Net gain (loss) from hedging activities(3,719Â \$(930)\$2,789Â (3,244)\$723Â (2,521)Foreign currency translation(2,363)â€”Â (2,363)\$3,013Â 3,013Â Other comprehensive income\$2,054Â \$(1,104)\$950Â \$357Â \$576Â \$933Â 12Table of ContentsECOYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL

STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) The following tables present the changes in accumulated other comprehensive income (loss), net of tax, by component for the six months ended June 30, 2024 and 2023, respectively:DefinedÂ benefit and other postretirement plansA NetÂ gainÂ (loss) from hedging activitiesForeign currency translationA TotalÂ December 31, 2023\$612Â \$12,546Â \$(14,116)\$(958)Other comprehensive income (loss) before reclassifications540Â 9,778Â \$(2,363)7,955Â Amounts reclassified from accumulated other comprehensive loss(1) (16)(\$,989)Â€Â (7,005)Net current period other comprehensive income (loss)\$524Â 2,789Â \$(2,363)950Â June 30, 2024\$1,136Â \$15,335Â \$(16,479)\$(8)December 31, 2022\$(508)\$24,672Â \$(18,172)\$5,992Â Other comprehensive income before reclassifications412Â 6,392Â \$3,013Â 9,817Â Amounts reclassified from accumulated other comprehensive income (loss)(1) 29Â (8,913)Â€Â (8,884)Net current period other comprehensive income (loss)\$441Â (2,521)3,013Â 933Â June 30, 2023\$(67)\$22,151Â \$(15,159)\$6,925Â (1)See the following table for details about these reclassifications. Amounts in parentheses indicate debits.The following table presents the reclassifications out of accumulated other comprehensive income (loss) for the three and six months ended June 30, 2024 and 2023, respectively:Details about Accumulated Other Comprehensive Income ComponentsAmounts reclassified from Accumulated Other Comprehensive Loss (Income)(1)Affected line item where Income is presentedThree months endedJune 30,Six months endedJune 30,2024202320242023Amortization of defined benefit and other postretirement items:Net loss\$6Â \$29Â \$7Â \$28Â Other (expense) income(2)Net prior service cost (credit)7Â (31)15Â (62)Other (expense) income(2)13Â (2)22Â (34)Total before tax(3)Â€Â (6)5Â Tax (expense) benefits10Â \$ (2)16Â \$(29)Net of taxGains and losses on cash flow hedges:Interest rate caps\$4,662Â \$11,187Â \$9,318Â \$11,885Â Interest income (expense)(1,166)\$(2,800)\$(2,329)\$(2,972)Tax expenses\$3,496Â \$8,387Â \$6,989Â \$8,913Â Net of taxTotal reclassifications for the period\$3,506Â \$8,385Â \$7,005Â \$8,884Â Net of tax(1)Amounts in parentheses indicate debits to profit/loss.13Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) (2)These accumulated other comprehensive income (loss) components are components of net periodic pension and other postretirement cost (see Note 14 to these condensed consolidated financial statements for additional details).Treasury Stock Repurchases2022 Stock Repurchase ProgramOn April 27, 2022, the Board approved a stock repurchase program that authorized the Company to purchase up to \$450,000 of the Companyâ€™s common stock over the four-year period from the date of approval. Under the plan, the Company is permitted to repurchase shares from time to time for cash in open market transactions or in privately negotiated transactions with an equity sponsor in accordance with applicable federal securities laws, with the Company determining the timing and the amount of any repurchases based on its evaluation of market conditions, share price and other factors.During the six months ended June 30, 2024, the Company repurchased 552,081 shares on the open market at an average price of \$9.05 per share, for a total of \$4,998, excluding brokerage commissions and accrued excise tax. As of June 30, 2024, \$229,594 was available for share repurchases under the program. During the six months ended June 30, 2024, the Company did not accrue excise tax related to these repurchases, net of shares issued under the Companyâ€™s equity incentive program (see Note 18 to these condensed consolidated financial statements).During the six months ended June 30, 2023, in connection with secondary offerings of the Companyâ€™s common stock by an equity sponsor in March and May 2023, the Company repurchased 7,000,000 shares of its common stock sold in the offerings from the underwriters at a weighted average price of \$10.48 per share concurrently with the closing of the offerings, for a total of \$73,373, excluding accrued excise tax. During the six months ended June 30, 2023, the Company accrued excise tax of \$630 related to these repurchases, net of shares issued under the Companyâ€™s equity incentive program. This amount was included in accrued liabilities in the condensed consolidated balance sheet and is treated by the Company as a cost of the treasury stock transactions in equity.Tax Withholdings on Equity Award VestingIn connection with the vesting of restricted stock awards (Â€RSAÂ or Â€RSAsÂ), restricted stock units (Â€RSUÂ or Â€RSUsÂ) and performance stock units (Â€PSUÂ or Â€PSUsÂ), shares of common stock may be delivered to the Company by employees to satisfy withholding tax obligations at the instruction of the employee award holders. These transactions, when they occur, are accounted for as stock repurchases by the Company, with the shares returned to treasury stock at a cost representing the payment by the Company of the tax obligations on behalf of the employees in lieu of shares for the vesting unit. There were 128,801 and 95,269 shares delivered to the Company to cover tax payments for the six months ended June 30, 2024 and 2023, respectively and the fair value of those shares withheld were \$1,218 and \$866 for the six months ended June 30, 2024 and 2023, respectively.6. Goodwill:The change in the carrying amount of goodwill for the six months ended June 30, 2024 is summarized as follows:Â EcoservicesAdvanced Materials & CatalystsTotalBalance as of December 31, 2023\$326,589Â \$77,881Â \$404,470Â Foreign exchange impactÂ€Â (195)(195)Balance as of June 30, 2024\$326,589Â \$77,686Â \$404,275Â Â The Company completes its annual goodwill and indefinite-lived intangible assets impairment test during the fourth quarter of each year, or more frequently if triggering events indicate a possible impairment. The Company determines the fair value of its reporting units using both a market approach and an income, or discounted cash flow, approach. As of October 1, 2023, the date of the Companyâ€™s most recent quantitative assessments, the fair values of each of the Companyâ€™s reporting units and the fair values of the Companyâ€™s indefinite-lived trade names and trademarks exceeded their respective carrying values.During the six months ended June 30, 2024, the Company did not identify any events or circumstances that would more likely than not reduce the fair value of the Company's reporting units below their respective carrying values.14Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) Although the estimated fair value of the Advanced Materials & Catalysts reporting unit exceeded its carrying value on October 1, 2023 by over 30%, the Company has experienced unfavorable effects on current operations resulting from certain macroeconomic and industry factors in specific end uses during the six months ended June 30, 2024. Prolonged unfavorable effects could adversely impact the estimated fair value of the Advanced Materials & Catalysts reporting unit in future periods and may result in impairment charges.7. Other Operating Expense, Net:A summary of other operating expense, net is as follows:Three months endedJune 30,Six months endedJune 30,2024202320242023Amortization expense\$2,644Â \$5,289Â \$5,280Â Transaction and other related costs140Â 1,190Â 198Â 2,624Â Restructuring, integration and business optimization costs159Â 1,106Â 385Â 2,129Â Net (gain) loss on asset disposals(341)1,284 614 2,306Â Other, net199Â 195Â 288Â 641Â \$3,108Â \$6,262Â \$6,774Â \$12,980Â 8. Inventories, Net:Inventories, net are classified and valued as follows:June 30,2024December 31,2023Finished products and work in process\$48,536Â \$41,658Â Raw materials\$3,491Â \$3,457Â \$52,027Â \$45,115Â Valued at lower of cost or market:LIFO basis\$30,003Â \$24,815Â Valued at lower of cost and net realizable value:FIFO or average cost basis22,024Â 20,300Â \$52,027Â \$45,115Â 15Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) 9. Investments in Affiliated Companies:The Company accounts for investments in affiliated companies under the equity method. Affiliated companies accounted for on the equity basis as of June 30, 2024 are as follows:CompanyCountryPercentownershipZeolyst InternationalUSA50%Zeolyst C.V.Netherlands50%Following is summarized information of the combined investments(1):Three months endedJune 30,Six months endedJune 30,2024202320242023Sales\$70,644Â \$99,188Â \$127,505Â \$155,085Â Gross profit16,751Â 34,461Â 33,929Â 44,571Â Operating income\$5,739Â 25,103Â 12,583Â 27,502Â Net income\$6,665Â 25,926Â 12,010Â 29,573Â (1)Summarized information of the combined investments is presented at 100%; the Companyâ€™s share of the net assets and net income of affiliates is calculated based on the percent ownership specified in the table above.The Companyâ€™s investments in affiliated companies balance as of June 30, 2024 and December 31, 2023 includes net purchase accounting fair value adjustments of \$222,073 and \$224,614, respectively, related to a prior business combination, consisting primarily of goodwill and intangible assets such as customer relationships, technical know-how and trade names. Consolidated equity in net income from affiliates is net of \$940 and \$2,541 of amortization expense related to purchase accounting fair value adjustments for the three and six months ended June 30, 2024, respectively. Consolidated equity in net income from affiliates is net of \$1,601 and \$3,201 of amortization expense related to purchase accounting fair value adjustments for the three and six months ended June 30, 2023, respectively.The Company had receivables due from affiliates of \$5,018 and \$3,231 as of June 30, 2024 and December 31, 2023, respectively, which were included in prepaid and other current assets in the condensed consolidated balance sheets. The Company had payables from affiliates of \$2,859 and \$1,351 as of June 30, 2024 and December 31, 2023, which were included in accrued liabilities in the condensed consolidated balance sheets. Receivables and payables due from affiliates are generally non-trade.Sales to affiliates were \$2,110 for the three and six months ended June 30, 2024, respectively and \$757 and \$2,457 for the three and six months ended June 30, 2023, respectively. There were no purchases from affiliates for the three and six months ended June 30, 2024 and 2023, respectively.16Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) 10. Property, Plant and Equipment:A summary of property, plant and equipment, at cost, and related accumulated depreciation is as follows: June 30,2024December 31,2023Land \$96,807Â \$96,833Â Buildings and improvements92,085Â 84,860Â Machinery and equipment 851,706Â 820,509Â Construction in progress 35,620Â 42,000Â 1,076,218Â 1,044,202Â Less: accumulated depreciation (502,659)(467,298)\$573,559Â \$576,904Â Depreciation expense was \$18,108 and \$36,523 for the three and six months ended June 30, 2024, respectively. Depreciation expense was \$17,455 and \$34,147 for the three and six months ended June 30, 2023, respectively.11. Long-term Debt:The summary of long-term debt is as follows:June 30,2024December 31,20232024Term Loan Facility\$873,000Â \$877,500Â ABL FacilityÂ€Â 8Â€Â Total debt\$73,000Â \$77,500Â Original issue discount(7,621)(\$6,162)Deferred financing costs(2,974)\$(3,392)Total debt, net of original issue discount and deferred financing costs\$862,405Â \$867,946Â Less: current portion(6,548)(9,000)Total long-term debt, excluding current portion\$855,857Â \$858,946Â Term Loan FacilityIn June 2024, the Company amended its Term Loan Credit Agreement dated as of June 9, 2021 to, among other things, (a) reduce the interest rate applicable to all outstanding Secured Overnight Financing Rate (Â€SOFRÂ) term loans to term SOFR plus 2.25% per annum from a maximum of adjusted term SOFR plus 2.75% per annum, (b) reduce the interest rate applicable to all outstanding base rate term loans to the alternate base rate plus 1.25% per annum from a maximum of the alternate base rate plus 1.75% per annum and (c) extend the maturity date of all outstanding term loans to June 12, 2031 (the amended term loans, the Â€2024 Term Loan FacilityÂ). As a result of the amendment, there is no longer a credit spread adjustment of 10 basis points.The Company evaluated the terms of the amendment in accordance with ASC 470-50 Debt - Modification and Extinguishment and determined that the amendment was primarily a modification of debt. As a result, the Company recorded \$4,471 of third-party financing costs as debt extinguishment costs in the condensed consolidated income statement for the three and six months ended June 30, 2024 and capitalized \$2,183 of original issued discount within long-term debt, excluding current portion on the condensed consolidated balance sheets as of June 30, 2024. In addition, previous unamortized deferred financing costs of \$30 and original issue discount of \$59 associated with the previously outstanding debt were written off as debt extinguishment costs for the three and six months ended June 30, 2024.The interest rate on the 2024 Term Loan Facility was 7.59% as of June 30, 2024.17Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) ABL FacilityThe borrowings under the senior secured asset-based lending revolving credit facility (Â€ABL FacilityÂ) bears interest at a rate equal to an adjusted term SOFR, which includes a credit spread adjustment of 10 basis points or the base rate plus a margin of between 1.25% to 1.75% or 0.25% to 0.75%, respectively. The interest rate on the ABL Facility was 8.75% as of June 30, 2024. Fair Value of DebtThe fair value of a financial instrument is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. As of June 30, 2024 and December 31, 2023, the fair value of the Companyâ€™s term loan facility was \$873,000 and \$876,403, respectively. The fair value is classified as Level 2 based upon the fair value hierarchy (see Note 4 to these condensed consolidated financial statements for further information on fair value measurements).12. Financial Instruments:The Company uses interest rate related derivative instruments to manage its exposure to changes in interest rates on its variable-rate debt instruments. The Company does not speculate using derivative instruments.By using derivative financial instruments to hedge exposures to changes in interest rates, the Company exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is an asset, the counterparty owes the Company, which creates credit risk for the Company. When the fair value of a derivative contract is a liability, the Company owes the counterparty and therefore, the Company is not exposed to the counterpartyâ€™s credit risk in those circumstances. The Company minimizes counterparty credit risk in derivative instruments by entering into transactions with high quality counterparties. The derivative instruments entered into by the Company do not contain credit-risk-related contingent features.Market risk is the adverse effect on the value of a derivative instrument that results from a change in interest rates. The market risk associated with the Companyâ€™s derivative instruments is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.Use of Derivative Financial Instruments to Manage Interest Rate Risk. The Company is exposed to fluctuations in interest rates on its senior secured credit facilities. Changes in interest rates will not affect the market value of such debt but will affect the Companyâ€™s interest payments over the term of the loans. Likewise, an increase in interest rates could have a material impact on the Companyâ€™s condensed consolidated statements of cash flows. The Company hedges the interest rate fluctuations on debt obligations through interest rate cap agreements. The Company records these agreements at fair value as assets or liabilities in its condensed consolidated balance sheets. As the derivatives are designated and qualify as cash flow hedges, the gains or losses on the interest rate cap agreements are recorded in stockholdersâ€™ equity as a component of other comprehensive income, net of tax. Reclassifications of the gains and losses on the interest rate cap agreements into earnings are recorded as part of interest expense in the condensed consolidated statements of income as the Company makes its interest payments on the hedged portion of its senior secured credit facilities. Fair value is determined based on estimated amounts that would be received or paid to terminate the contracts at the reporting date based on quoted market prices.The following table provides a summary of the Companyâ€™s interest rate cap agreements:Financial instrumentNumber of instrumentsIn effect as of June 30, 2024Current notional amount of instruments in effectAnnualized premium of instruments in effectInterest rate cap\$3\$650,000Â \$24,817Â The current notional amounts of the three interest rate cap agreements in effect at June 30, 2024 are \$250,000, \$250,000 and \$150,000. The Company entered into a \$250,000 interest rate cap to mitigate interest rate volatility from August 2022 to October 2024, a \$250,000 interest rate cap agreement to mitigate interest rate volatility from September 2023 to October 2025 and a \$150,000 interest rate cap agreement to mitigate interest rate volatility from August 2023 to July 2024. The \$150,000 interest rate cap agreement will increase to \$175,000 to mitigate interest rate volatility from August 2024 to July 2026. The cap rate in effect at June 30, 2024 for all agreements in effect was 1.00%. The Company also entered into a forward starting interest rate cap agreement to mitigate interest volatility from November 2024 to October 2026.18Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) In February 2023, the Company amended all existing interest rate cap agreements to replace LIBOR with SOFR as the benchmark interest rate, with all other terms of the agreements remaining the same. This amendment changed the previously annualized premiums on the existing interest rate cap agreements.The fair values of derivative instruments held as of June 30, 2024 and December 31, 2023, respectively are shown below:Balance sheet locationJune 30,2024December 31,2023Derivative assetsDerivatives designated as cash flow hedges:Interest rate capsPrepaid and other current assets\$12,270Â \$13,419Â Interest rate capsOther long-term assets\$7,695Â 5,602Â Total derivative assets\$19,965Â \$19,021Â Derivative liabilitiesDerivatives designated as cash flow hedges:Interest rate capsOther long-term liabilities\$403Â \$2,496Â Total derivative liabilities\$403Â \$2,496Â The following table shows the effect of the Companyâ€™s derivative instruments designated as cash flow hedges on AOCI for the three and six months ended June 30, 2024 and 2023, respectively:Three months ended June 30,20242023Location of gain (loss) reclassified from AOCI into incomeAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss)Â recognizedÂ in OCI on derivativesInterest rate capsInterest (expense) income\$3,229Â \$(4,662)\$18,246Â \$11,187Â Six months ended June 30,20242023Location of gain (loss) reclassified from AOCI into incomeAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss)Â recognizedÂ in OCI on derivativesInterest rate capsInterest (expense) income\$13,037Â \$(9,318)\$8,641Â \$11,885Â 19Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) The following table shows the effect of the Companyâ€™s cash flow hedge accounting on the condensed consolidated statements of income for the three and six months ended June 30, 2024 and 2023, respectively:Location and amount of gain (loss) recognized in income on cash flow hedging relationshipsThree months endedJune 30,Six months endedJune 30,2024202320242023Total amounts of income and expense line items presented in the statement of income in which the effects of cash flow hedges are

income in interest (expense) income\$(12,895)\$(9,168)\$(26,304)\$(19,000)The effects of cash flow hedging:Gain (loss) on cash flow hedging relationships:Interest contracts:Amount reclassified from AOCI into income4,662A 11,187A 9,318A 11,885A The amount of unrealized losses in AOCI related to the Companyâ€™s cash flow hedges that is expected to be reclassified to the condensed consolidated statement of income over the next twelve months is \$8,700 as of June 30, 2024.13. Income Taxes:The effective income tax rate for the three months ended June 30, 2024 was 27.1%, compared to 25.2% for the three months ended June 30, 2023. The effective income tax rate for the six months ended June 30, 2024 was 30.9%, compared to 28.3% for the six months ended June 30, 2023. The Companyâ€™s effective income tax rates for the three and six months ended June 30, 2024 and 2023, respectively, fluctuated primarily due to the increased discrete tax impact relative to pre-tax book income related to a stock compensation shortfall and tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions. The difference between the U.S. federal statutory income tax rate and the Companyâ€™s effective income tax rate for the six months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions. The difference between the U.S. federal statutory income tax rate and the Companyâ€™s effective income tax rate for the six months ended June 30, 2023 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation, a discrete tax expense associated with the recording of accrued penalties and interest associated with historical uncertain tax positions, and a discrete tax benefit connected to state and local tax law changes.14. Benefit Plans:The following tables present the components of net periodic (benefit) expense for the Company-sponsored defined benefit pension and postretirement plans, which cover certain employees and retirees located in the U.S. Defined Benefit Pension Plans:Three months ended June 30, Six months ended June 30, 2024202320242023Interest cost\$808A \$871A \$1,616A \$1,742A Expected return on plan assets(827)(837)(1,654)(1,674)Settlement (gain) loss(6)29A (6)29A Net periodic (benefit) expense(25)63A (25)63A (44)97A 20Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) Other Postretirement Benefit Plan:Three months ended June 30, Six months ended June 30, 2024202320242023Interest cost\$6A \$6A \$12A \$12A Amortization of prior service credit(7)(31)(15)(62)Amortization of net gain(â€™)A â€™(1)(1)Net periodic benefit(1)(25)\$(4)\$(51)All components of net periodic (benefit) expense other than service cost are presented within other expense (income), net in the Companyâ€™s condensed consolidated statements of income.15. Commitments and Contingent Liabilities:There is a risk of environmental impact in the Companyâ€™s manufacturing operations. The Companyâ€™s environmental policies and practices are designed to comply with existing laws and regulations and to minimize the possibility of significant environmental impact. The Company is also subject to various other lawsuits and claims with respect to matters such as governmental regulations, labor and other actions arising out of the normal course of business. All claims that are probable and reasonably estimable have been accrued for in the Companyâ€™s condensed consolidated financial statements. When these matters are ultimately concluded and determined, the Company believes that there will be no material adverse effect on its consolidated financial position, results of operations or liquidity.16. Related Party Transactions:The Company maintains certain policies and procedures for the review, approval and ratification of related party transactions to ensure that all transactions with selected parties are fair, reasonable and in the Companyâ€™s best interests. All significant relationships and transactions are separately identified by management if they meet the definition of a related party or a related party transaction. Related party transactions include transactions that occurred during the year, or are currently proposed, in which the Company was or will be a participant, and for which any related person had or will have a direct or indirect material interest. All related party transactions are reviewed, approved and documented by the appropriate level of the Companyâ€™s management in accordance with these policies and procedures. Joint Venture Agreement:The Company entered into a joint venture agreement (the â€™Zi Partnership Agreementâ€™) in 1988 with Shell Catalysts & Technologies, an affiliate of Royal Dutch Shell plc, to form Zeolyst International, a 50/50 joint venture partnership (the â€™Zeolyst Partnershipâ€™). Under the terms of the Zi Partnership Agreement, the Partnership leases certain land used in its Kansas City production facilities from Ecovyst. This lease, which has been recorded as an operating lease, provided for rental payments to the Company of \$78 and \$155 for the three and six months ended June 30, 2024 and 2023, respectively. The terms of this lease are evergreen as long as the Zi Partnership Agreement is in place. The Partnership had no sales to the Company for the three and six months ended June 30, 2024 and 2023, respectively. The Partnership purchases certain raw materials from the Company and was charged for various manufacturing costs incurred at the Companyâ€™s Kansas City production facility. The amount of these costs charged to the Partnership were \$6,050 and \$10,084 for the three and six months ended June 30, 2024, respectively and \$5,028 and \$10,869 for the three and six months ended June 30, 2023, respectively. Certain administrative, marketing, engineering, management-related and research and development services are provided to the Partnership by the Company. The Partnership was charged \$4,600 and \$8,900 for the three and six months ended June 30, 2024 and \$3,618 and \$7,252 for the three and six months ended June 30, 2023, respectively, for these services. In addition, the Partnership was charged certain product demonstration costs of \$238 and \$595 for the three and six months ended June 30, 2024, respectively and \$428 and \$928 for the three and six months ended June 30, 2023, respectively. These charges to the Partnership are recorded as reductions in either cost of goods sold or selling, general and administrative expenses in the consolidated statements of income, depending on the nature of the expenditures. The Company had an accounts receivable from the Partnership of \$5,008 and \$3,164 as of June 30, 2024 and December 31, 2023, respectively. There were no accounts payable with the Partnership as of June 30, 2024 and December 31, 2023, respectively. 21Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) 17. Reportable Segments:Summarized financial information for the Companyâ€™s reportable segments is shown in the following table: Three months ended June 30, Six months ended June 30, 2024202320242023Sales:Ecoservices\$153,958A \$158,065A \$295,560A \$295,809A Advanced Materials & Catalysts(1)128,862A 26,045A 47,797A 49,179A Total\$182,820A \$184,110A \$343,357A \$344,984A Adjusted EBITDA:(2)Ecoservices\$49,705A \$60,136A \$91,203A \$96,924A Advanced Materials & Catalysts(3)14,717A 25,371A 25,846A 38,359A Adjusted EBITDA from reportable segments\$64,426A \$85,507A \$117,049A \$135,283A (1)Excludes the Companyâ€™s proportionate share of sales from the Zeolyst Joint Venture accounted for using the equity method (see Note 9 to these condensed consolidated financial statements for further information). The proportionate share of sales excluded is \$29,024 and \$52,505 for the three and six months ended June 30, 2024, respectively. The proportionate share of sales excluded is \$44,689 and \$66,763 for the three and six months ended June 30, 2023, respectively. (2)The Company defines Adjusted EBITDA as EBITDA adjusted for certain items as noted in the reconciliation below. Management evaluates the performance of its segments and allocates resources based on several factors, of which the primary measure is Adjusted EBITDA. Adjusted EBITDA should not be considered as an alternative to net income as an indicator of the Companyâ€™s operating performance. Adjusted EBITDA as defined by the Company may not be comparable with EBITDA or Adjusted EBITDA as defined by other companies. (3)The Adjusted EBITDA for the Companyâ€™s Advanced Materials & Catalysts segment includes the Companyâ€™s 50% portion of the Adjusted EBITDA from the Zeolyst Joint Venture. For the three months ended June 30, 2024, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$5,559, which includes \$1,392 of equity in net income plus \$940 of amortization of investment in affiliate step-up and \$3,227 of joint venture depreciation, amortization and interest. For the six months ended June 30, 2024, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$12,486, which includes \$3,464 of equity in net income plus \$2,541 of amortization of investment in affiliate step-up and \$6,481 of joint venture depreciation, amortization and interest. For the three months ended June 30, 2023, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$16,194, which includes \$11,382 of equity in net income plus \$1,601 of amortization of investment in affiliate step-up and \$3,212 of joint venture depreciation, amortization and interest. For the six months ended June 30, 2023, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$21,630, which includes \$11,608 of equity in net income plus \$3,201 of amortization of investment in affiliate step-up and \$6,821 of joint venture depreciation, amortization and interest. 22Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) A reconciliation of income before income taxes to Adjusted EBITDA is as follows: Three months ended June 30, 2024202320242023Reconciliation of income before income taxes to Adjusted EBITDA from reportable segmentsIncome before income taxes\$11,375A \$34,909A \$13,775A \$34,385A Interest expense, net12,895A 9,168A 26,304A 19,000A Depreciation and amortization21,624A 20,969A 43,557A 41,166A Unallocated corporate expenses5,532A 6,153A 14,613A 13,080A Joint venture depreciation, amortization and interest3,227A 3,212A 6,481A 6,821A Amortization of investment in affiliate step-up940A 1,601A 2,514A 3,201A Debt extinguishment costs4,560A â€™A 4,560A â€™A Net (gain) loss on asset disposals(34)1,128A 614A 2,306A Foreign exchange (gain) loss(99)(398)79A (1,136)LIFO (benefit) expense(1,547)1,111A (2,671)1,510A Transaction and other related costs140A 1,190A 198A 2,624A Equity-based compensation3,827A 5,002A 7,507A 9,070A Restructuring, integration and business optimization expenses159A 1,106A 385A 2,129A Other(173)356A (894)127A Adjusted EBITDA from reportable segments\$64,426A \$85,507A \$117,049A \$135,283A 18. Stock-Based Compensation:The Company has an equity incentive plan under which it grants common stock awards to employees, directors and affiliates of the Company. At June 30, 2024, 8,032,299 shares of common stock were available for issuance under the plan. The Company historically has settled these awards through the issuance of new shares. RSUDuring the six months ended June 30, 2024, the Company granted 1,126,166 RSUs under its equity incentive plan. Each RSU provides the recipient with the right to receive a share of common stock subject to graded vesting terms based on service, which for the awards granted during the six months ended June 30, 2024, generally requires approximately one year of service for members of the Companyâ€™s board of directors and approximately three years of service for employees. The value of the RSUs granted during the six months ended June 30, 2024 was based on the average of the high and low trading prices of the Companyâ€™s common stock on the NYSE on the preceding trading day, in accordance with the Companyâ€™s policy for valuing such awards. Compensation expense related to the RSUs is recognized on a straight-line basis over the respective vesting period. 23Table of ContentsECOVYST INC. AND SUBSIDIARIESNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS(Dollars in thousands, except share and per share amounts)(unaudited) PSU2024 GrantsDuring the six months ended June 30, 2024, the Company granted 535,629 PSUs (at target) under its equity incentive plan. The PSUs granted during the six months ended June 30, 2024 provide the recipients with the right to receive shares of common stock dependent on 50% of a Company-specific financial performance target and 50% on the relative increase in the total shareholder return (â€™TSRâ€™) goal (â€™the Performance Measuresâ€™). The Performance Measures are measured independently of each other, but achievement of both metrics is measured on the same three-year period beginning from January 1, 2024 through December 31, 2026 (â€™Performance Periodâ€™). Depending on the Companyâ€™s performance relative to the Performance Measures, each PSU award recipient is eligible to receive a percentage of the target number of shares granted to the recipient, ranging from 50% to 200%. The PSUs, to the extent earned, will vest on the date the Compensation Committee of the Companyâ€™s Board of Directors (â€™Compensation Committeeâ€™) certifies the achievement of the Performance Measures for the Performance period, which will occur subsequent to the end of the Performance period and after the Company files its annual consolidated financial statements for the year ending December 31, 2026. Achievement of the Company-specific financial performance target is measured based on the actual three-year cumulative results across the Performance period. The TSR goal is based on the Companyâ€™s actual TSR performance against companies in the S&P 1500 Specialty Chemicals Index over the Performance period. The TSR goal, which determines how much of the 50% of the PSUs granted during 2024 may be earned, is considered a market condition as opposed

[illegible]

\$158.1 million for the three months ended June 30, 2023. The decrease in sales was due to lower average selling prices of \$17.0 million, inclusive of the negative impact associated with the pass-through of lower sulfur costs of approximately \$3 million, partially offset by higher sales volume of \$12.8 million. Average selling price was lower primarily due to the pass-through of lower costs, including sulfur, natural gas, freight and other variable costs. The increase in sales volume was primarily related to increased demand for regeneration services and virgin sulfuric acid. Advanced Materials & Catalysts: Sales in Advanced Materials & Catalysts for the three months ended June 30, 2024 were \$28.9 million, an increase of \$2.9 million, or 11.2%, compared to sales of \$26.0 million for the three months ended June 30, 2023. Of the increase in sales, \$2.7 million was associated with higher sales volume and \$0.2 million associated with higher average selling prices. The increase in sales volume was primarily driven by higher end use demand for niche custom catalysts. 32Table of ContentsGross Profit Gross profit for the three months ended June 30, 2024 was \$53.7 million, a decrease of \$7.3 million, or 12.0%, compared to \$61.0 million for the three months ended June 30, 2023. The decrease in gross profit was primarily due to lower average selling prices of \$13.5 million, exclusive of the pass-through of lower sulfur costs, partially offset by favorable variable costs of \$1.6 million along with higher sales volume of \$7.7 million. Average selling prices were lower primarily due to the pass-through of lower costs, including sulfur, natural gas, electricity, and other variable costs. The increase in sales volume was primarily related to higher demand for regeneration services and virgin sulfuric acid. Selling, General and Administrative Expenses Selling, general and administrative expenses for the three months ended June 30, 2024 were \$22.7 million, an increase of \$1.3 million, compared to \$21.4 million for the three months ended June 30, 2023. The increase in selling, general and administrative expenses was primarily due to an increase in other compensation-related expenses of \$4.0 million, offset by a decrease \$1.2 million in stock compensation due to fewer overall awards granted and outstanding for the three months ended June 30, 2024 as compared to the prior year period and decrease of \$1.3 million in other expenses. Other Operating Expense, Net Other operating expense, net for the three months ended June 30, 2024 was \$3.1 million, a decrease of \$3.2 million, compared to \$6.3 million for the three months ended June 30, 2023. The decrease in other operating expense, net was primarily due to a decrease in net loss from asset disposals of \$1.2 million, a decrease of \$0.9 million in restructuring, integration and business optimization costs and a decrease of \$1.1 million in transactions costs. The decrease in restructuring, integration and business optimization costs was primarily driven by lower business optimization costs and the decrease in transactions costs was primarily driven by lower costs associated with share repurchases. Equity in Net Income of Affiliated Companies Equity in net income of affiliated companies for the three months ended June 30, 2024 was \$1.4 million, compared to \$11.4 million for the three months ended June 30, 2023. The decrease was due to \$10.0 million of lower earnings from the Zeolyst Joint Venture during the three months ended June 30, 2024, as compared to the three months ended June 30, 2023. The decrease in earnings from the Zeolyst Joint Venture was due to lower sales volume of catalyst used in the production of sustainable fuels, emission control catalysts and timing of niche custom catalysts. Interest Expense, Net Interest expense, net for the three months ended June 30, 2024 was \$12.9 million, an increase of \$3.7 million, as compared to \$9.2 million for the three months ended June 30, 2023. The increase in interest expense, net was primarily due to the year over year increase in variable rates, which was partially offset by lower outstanding debt during the three months ended June 30, 2024, as compared to the three months ended June 30, 2023 and benefits associated with the interest rate caps. Debt Extinguishment Costs Debt extinguishment costs for the three months ended June 30, 2024 were \$4.6 million. On June 12, 2024, we amended our existing senior secured term loan facility to reduce the applicable interest rates and extend the maturity of the facility to June 2031. The Company evaluated the terms of the amendment in accordance with ASC 470-50 Debt - Modification and Extinguishment and determined that the amendment was primarily a modification of debt. As a result, we recorded \$4.5 million of third-party financing fees as debt extinguishment costs in the condensed consolidated income statement during the three months ended June 30, 2024. In addition, previously unamortized deferred financing costs and original issue discount of \$0.1 million associated with the existing senior secured term loan facility were written off as debt extinguishment costs for the three months ended June 30, 2024. Other Expense, Net Other expense, net for the three months ended June 30, 2024 was \$0.4 million, a decrease of \$0.2 million, as compared to \$0.6 million for the three months ended June 30, 2023. The decrease in other expense, net primarily relates to a decrease of \$0.3 million in other taxes. 33Table of ContentsProvision for Income Taxes The provision for income taxes for the three months ended June 30, 2024 was \$3.1 million, compared to \$8.8 million for the three months ended June 30, 2023. The effective income tax rate for the three months ended June 30, 2024 was 27.1%, compared to 25.2% for the three months ended June 30, 2023. The Company's quarter over quarter effective income tax rate has fluctuated primarily due to an increased discrete tax impact relative to pre-tax book income related to a stock compensation shortfall and a discrete tax benefit associated with state and local tax law changes. The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the three months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest associated with historical uncertain tax positions. Net Income For the foregoing reasons, net income was \$8.3 million for the three months ended June 30, 2024, compared to \$26.1 million for the three months ended June 30, 2023. Adjusted EBITDA Summarized Adjusted EBITDA information is shown below in the following table: Three months ended June 30, 2024 2023 (in millions, except percentages) Adjusted EBITDA: (1) Ecoservices \$49.7A \$60.1A \$(10.4) (17.3)% Advanced Materials & Catalysts (2) 14.7A 25.4A (10.7) (42.1)% Unallocated corporate expenses (7.5) (6.2) (1.3) (21.0)% Total \$56.9A \$79.3A \$(22.4) (28.2)% (1) We define Adjusted EBITDA as EBITDA adjusted for certain items as noted in the reconciliation below. Our management evaluates the performance of our segments and allocates resources based primarily on Adjusted EBITDA. Adjusted EBITDA does not represent cash flow for periods presented and should not be considered as an alternative to net income as an indicator of our operating performance or as an alternative to cash flows as a source of liquidity. Adjusted EBITDA may not be comparable with EBITDA or Adjusted EBITDA as defined by other companies. (2) The Adjusted EBITDA for the Advanced Materials & Catalysts segment includes our 50% portion of the Adjusted EBITDA from the Zeolyst Joint Venture. The Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$5.6 million for the three months ended June 30, 2024, which includes \$1.4 million of equity in net income, excluding \$0.9 million of amortization of investment in affiliate step-up plus \$3.2 million of joint venture depreciation, amortization and interest. Ecoservices: Adjusted EBITDA for the three months ended June 30, 2024 was \$49.7 million, a decrease of \$10.4 million, or 17.3%, compared to \$60.1 million for the three months ended June 30, 2023. The decrease in Adjusted EBITDA was a result of unfavorable net pricing, reflecting the timing and contractual pass-through of certain costs, including energy and other indexed costs and an increase in turnaround and maintenance costs, partially offset by higher sales volume in both regeneration services and virgin sulfuric acid. Advanced Materials & Catalysts: Adjusted EBITDA for the three months ended June 30, 2024 was \$14.7 million, a decrease of \$10.7 million, or 42.1%, compared to \$25.4 million for the three months ended June 30, 2023. The decrease in Adjusted EBITDA was primarily a result of lower sales volume within the Zeolyst Joint Venture associated with catalysts used in the production of sustainable fuels, emission control catalysts and timing of niche custom catalysts, partially offset by higher sales in Advanced Silicas. 34Table of ContentsA reconciliation of net income to Adjusted EBITDA is as follows: Three months ended June 30, 2024 2023 (in millions) Reconciliation of net income to Adjusted EBITDA Net income \$8.3A \$26.1A Provision for income taxes 3.1A 8.8A Interest expense, net 12.9A 9.2A Depreciation and amortization 21.6A 21.0A EBITDA 45.9A 65.1A Joint venture depreciation, amortization and interest (3.2A) 3.2A Amortization of investment in affiliate step-up (0.9A) 1.6A Debt extinguishment costs 4.6A A Net loss on asset disposals (c) A 1.1A Foreign currency exchange gain (d) (0.1) (0.4) LIFO (benefit) expense (e) (1.5) 1.1A Transaction and other related costs (f) 0.1A 1.2A Equity-based compensation 3.8A 5.0A Restructuring, integration and business optimization expenses (g) 0.2A 1.1A Other (h) (0.2) 0.3A Adjusted EBITDA \$56.9A \$79.3A (a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Advanced Materials & Catalysts segment includes our 50% interest in the Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of the Zeolyst Joint Venture. (b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in the Zeolyst Joint Venture as a result of the combination of the businesses of PQ Holdings Inc. and Eco Services Operations LLC in May 2016. We determined the fair value of the equity affiliate investment and the fair value step-up was then attributed to the underlying assets of the Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with intangible assets, including customer relationships and technical know-how. (c) When asset disposals occur, we remove the impact of net gain/loss of the disposed asset because such impact primarily reflects the non-cash write-off of long-lived assets no longer in use. (d) Reflects the exclusion of the foreign currency transaction gains and losses in the statements of income related to the non-permanent intercompany debt denominated in local currency translated to U.S. dollars. (e) Represents non-cash adjustments to the Company's LIFO reserves for certain inventories in the U.S. that are valued using the LIFO method, effectively reflecting the results as if these inventories were valued using the FIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories. (f) Relates to certain transaction costs, including debt financing, due diligence and other costs related to transactions that are completed, pending or abandoned, that we believe are not representative of our ongoing business operations. (g) Includes the impact of restructuring, integration and business optimization expenses, which are incremental costs that are not representative of our ongoing business operations. (h) Other consists of adjustments for items that are not core to our ongoing business operations. These adjustments include environmental remediation and other legal costs, expenses for capital and franchise taxes, and defined benefit pension and postretirement plan (benefits) costs, for which our obligations are under plans that are frozen. Also included in this amount are adjustments to eliminate the benefit realized in cost of goods sold of the allocation of a portion of the contract manufacturing payments under the five-year agreement with the buyer of the Performance Chemicals business to the financing obligation under the failed sale-leaseback. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions). 35Table of ContentsAdjusted Net Income Summarized Adjusted Net Income information is shown below in the following table: Three months ended June 30, 2024 2023 Pre-tax Tax expense (benefit) After-tax Pre-tax Tax expense (benefit) After-tax (in millions) Reconciliation of net income to Adjusted Net Income (1) (2) Net income \$1.4A \$3.1A \$8.3A \$34.9A \$8.8A \$26.1A Amortization of investment in affiliate step-up (b) 0.9A 0.2A 0.7A 1.6A 0.4A 1.2A Debt extinguishment costs 4.6A 1.2A 3.4A A A A Net loss on asset disposals (c) A A A A A A Foreign currency exchange gain (d) (0.1) (0.4) (0.2) (0.2) LIFO (benefit) expense (e) (1.5) (0.3) (1.2) 1.1A 0.3A 0.8A Transaction and other related costs (f) 0.1A A 0.1A 1.2A 0.3A 0.9A Equity-based compensation 3.8A 0.9A 2.9A 5.0A 1.0A 4.0A Restructuring, integration and business optimization expenses (g) 0.2A 0.1A 0.1A 1.1A 0.3A 0.8A Other (h) (0.2) (0.1) (0.2) 0.1A 0.2A Adjusted Net Income \$19.2A \$51.1A \$45.9A \$11.3A \$34.6A (1) We define Adjusted Net income as net income adjusted for non-operating income or expense and the impact of certain non-cash or other items that are included in net income that we do not consider indicative of our ongoing operating performance. Adjusted Net Income is presented as a key performance indicator as we believe it will enhance a prospective investor's understanding of our results of operations and financial condition. Adjusted Net Income may not be comparable with net income or Adjusted Net Income as defined by other companies. (2) Refer to the Adjusted EBITDA notes above for more information with respect to each adjustment. The adjustments to net income are shown net of applicable tax rates as determined by the calculation of our quarterly tax provision under interim financial reporting for the three months ended June 30, 2024 and June 30, 2023, except for equity-based compensation. The tax effect on equity-based compensation is derived by removing the tax effect of any equity-based compensation expense disallowed as a result of its inclusion within IRC Sec. 162(m), and adding the tax effect of equity-based stock compensation shortfall recorded as a discrete item. 36Table of ContentsResults of Operations Six Months Ended June 30, 2024 Compared to the Six Months Ended June 30, 2023 Highlights The following is a summary of our financial performance for the six months ended June 30, 2024 compared to the six months ended June 30, 2023. Sales Sales decreased \$1.6 million to \$343.4 million. The decrease in sales was primarily due to lower average selling price as a result of the pass-through of lower costs, partially offset by higher sales volume. Gross Profit Gross profit decreased \$4.6 million to \$92.9 million. The decrease in gross profit was primarily due to lower average selling price, partially offset by favorable variable costs. Operating Income Operating income decreased by \$0.2 million to \$41.8 million. The decrease in operating income was due to a decrease in gross profit and other operating expenses, net. Equity in Net Income of Affiliated Companies Equity in net income of affiliated companies for the six months ended June 30, 2024 was \$3.5 million, compared to \$11.6 million for the six months ended June 30, 2023. The decrease of \$8.1 million was due to lower earnings from the Zeolyst Joint Venture during the six months ended June 30, 2024, driven by lower sales volume. The following is our unaudited condensed consolidated statements of income and a summary of financial results for the six months ended June 30, 2024 and 2023: Six months ended June 30, 2024 2023 (in millions, except percentages) Sales \$343.4A \$345.0A \$(1.6) (0.5)% Cost of goods sold 250.5A 247.5A 3.0A 1.2A Gross profit 92.9A 97.5A (4.6) (4.7)% Gross profit margin 27.1A % 28.3A % Selling, general and administrative expenses 44.3A 42.5A 1.8A 4.2A Other operating expense, net 6.8A 13.0A (6.2) (47.7)% Operating income 41.8A 42.0A (0.2) (0.5)% Operating income margin 12.2A % 12.2A % Equity in net (income) from affiliated companies (3.5) (11.6) 8.1A (69.8)% Interest expense, net 26.3A 19.0A 7.3A 38.4A Debt extinguishment costs 4.6A A A A 4.6A NMOther expense, net 6.0A 0.2A 0.4A 200.0A Income before income taxes 13.8A 34.4A (20.6) (59.9)% Provision for income taxes 4.3A 9.7A (5.4) (55.7)% Effective tax rate 30.9A % 28.3A % Net income \$9.5A \$24.7A \$(15.2) (61.5)% 37Table of ContentsSales Six months ended June 30, 2024 2023 (in millions, except percentages) Sales: Ecoservices \$295.6A \$295.8A \$(0.2) (0.1)% Advanced Materials & Catalysts 47.8A 49.2A (1.4) (2.8)% Total sales \$343.4A \$345.0A \$(1.6) (0.5)% Ecoservices: Sales in Ecoservices for the six months ended June 30, 2024 were \$295.6 million, a decrease of \$0.2 million, or 0.1%, compared to sales of \$295.8 million for the six months ended June 30, 2023. The change in sales reflects higher sales volume of \$33.1 million, offset by lower average selling pricing of \$33.3 million, before adjusting for the impact of the pass-through of lower sulfur costs of approximately \$8 million. Sales volume was higher primarily due to increased virgin sulfuric acid and regeneration services sales for the six months ended June 30, 2024 as compared to the six months ended June 30, 2023 which had the adverse impact of Winter Storm Elliott and extended maintenance turnaround activity at our facilities in 2023, as well as strong demand for regeneration services in the gulf coast in 2024. Average selling price was lower primarily due to the pass-through of lower costs, including sulfur, natural gas, freight and other variable costs. Advanced Materials & Catalysts: Sales in Advanced Materials & Catalysts for the six months ended June 30, 2024 were \$47.8 million, a decrease of \$1.4 million, or 2.8%, compared to sales of \$49.2 million for the six months ended June 30, 2023. The decrease in sales was primarily due to lower sales volume of advanced silicas used for the production of polyethylene compared to the six months ended June 30, 2023. Gross Profit Gross profit for the six months ended June 30, 2024 was \$92.9 million, a decrease of \$4.6 million, or 4.7%, compared to \$97.5 million for the six months ended June 30, 2023. The decrease in gross profit was primarily driven by lower average selling prices of \$25.3 million, exclusive of the approximately \$8 million of pass-through of sulfur costs, partially offset by favorable variable costs along with higher sales volume of \$11.1 million and unfavorable manufacturing costs of \$9.6 million. Average selling prices were lower primarily due to the pass-through of lower costs, including sulfur, natural gas, electricity and other variable costs. The higher manufacturing costs were primarily driven by planned maintenance turnaround. The increase in sales volume was primarily related to higher demand for regeneration services and virgin sulfuric acid. Selling, General and Administrative Expenses Selling, general and administrative expenses for the six months ended June 30, 2024 were \$44.3 million, an increase of \$1.8 million, as compared to \$42.5 million for the six months ended June 30, 2023. The increase in selling, general and administrative expenses was mainly due to an increase in other compensation-related expenses of \$6.0 million, partially offset by a decrease in stock compensation of \$1.6 million, professional fees of \$0.6 million and other expenses of \$2.0 million. Other Operating Expense, Net Other operating expense, net for the six months ended June 30, 2024 was \$6.8 million, a decrease of \$6.2 million, compared to \$13.0 million for the six months ended June 30, 2023. The decrease in other operating expense, net was mainly driven by a decrease of \$2.4 million in transaction costs, a decrease of \$1.7 million in restructuring, integration and business optimization costs and a decrease in net losses on asset disposals of \$1.7 million. The decrease in restructuring, integration and business optimization costs was primarily driven by lower business optimization costs and the decrease in transactions costs was primarily associated with the sale of the Performance Chemicals business in 2021 and costs associated with share repurchases. 38Table of ContentsEquity in Net Income of Affiliated Companies Equity in net income of affiliated companies for the six months ended June 30, 2024 was \$3.5 million, compared to \$11.6 million for the six months ended June 30, 2023. The decrease in earnings from the Zeolyst Joint Venture was due to lower sales of catalysts used in the production of sustainable fuels, emission control catalysts and timing of niche custom catalysts. Interest Expense, Net Interest expense, net for the six months ended June 30, 2024 was \$26.3 million, an increase of \$7.3 million, as compared to \$19.0 million for the six months ended June 30, 2023. The increase in interest expense, net was primarily due to year over year increase in variable rates, which was partially offset by lower outstanding debt during the six months ended June 30,

2024, as compared to the six months ended June 30, 2023. This was offset by the benefits associated with our interest rate caps. Debt Extinguishment Costs Debt extinguishment costs for the six months ended June 30, 2024 were \$4.6 million. On June 12, 2024, we amended our existing senior secured term loan facility to reduce the applicable interest rates and extend the maturity of the facility to June 2031. The Company evaluated the terms of the amendment in accordance with ASC 470-50 Debt - Modification and Extinguishment and determined that the amendment was primarily a modification of debt. As a result, we recorded \$4.5 million of third-party financing fees as debt extinguishment costs in the condensed consolidated income statement during the six months ended June 30, 2024. In addition, previously unamortized deferred financing costs and original issue discount of \$0.1 million associated with the existing senior secured term loan facility were written off as debt extinguishment costs for the six months ended June 30, 2024. Other Expense, Net Other expense, net for the six months ended June 30, 2024 was \$0.6 million, an increase of \$0.4 million, as compared to \$0.2 million for the six months ended June 30, 2023. The increase in other expense, net primarily consisted of an increase in foreign currency exchange of \$0.8 million mainly related to the non-permanent intercompany debt denominated in local currency and translated to the U.S. dollar, offset by a decrease in pension costs of \$0.1 million. Provision for Income Taxes The provision for income taxes for the six months ended June 30, 2024 was \$4.3 million, compared to \$9.7 million for the six months ended June 30, 2023. The effective income tax rate for the six months ended June 30, 2024 was 30.9%, compared to 28.3% for the six months ended June 30, 2023. The Company's effective income tax rate for the six months ended June 30, 2024 was different from the effective tax rate for the six months ended June 30, 2023 primarily due to an increased discrete tax impact relative to pre-tax book income related to stock compensation shortfall recognized discretely in the respective quarters and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions. The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the six months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions. Net Income For the foregoing reasons, net income was \$9.5 million for the six months ended June 30, 2024, compared to \$24.7 million for the six months ended June 30, 2023. 39 Table of Contents Adjusted EBITDA Summarized Adjusted EBITDA information is shown below in the following table: Six months ended June 30, 2024 Change 2024/2023 \$ (in millions, except percentages) Adjusted EBITDA (1) Ecoservices \$91.2A \$96.9A \$(5.7) (5.9)% Advanced Materials & Catalysts (2) 25.8A 38.4A (12.6) (32.8)% Unallocated corporate expenses (14.6) (13.1) (1.5) (11.5)% Total \$102.4A \$122.2A \$(19.8) (16.2)% (1) We define Adjusted EBITDA as EBITDA adjusted for certain items as noted in the reconciliation below. Our management evaluates the performance of our segments and allocates resources based primarily on Adjusted EBITDA. Adjusted EBITDA does not represent cash flow for periods presented and should not be considered as an alternative to net income as an indicator of our operating performance or as an alternative to cash flows as a source of liquidity. Adjusted EBITDA may not be comparable with EBITDA or Adjusted EBITDA as defined by other companies. (2) The Adjusted EBITDA for the Advanced Materials & Catalysts segment includes our 50% portion of the Adjusted EBITDA from the Zeolyst Joint Venture. The Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$12.5 million for the six months ended June 30, 2024, which includes \$3.5 million of equity in net income, excluding \$2.5 million of amortization of investment in affiliate step-up plus \$6.5 million of joint venture depreciation, amortization and interest. The Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$21.6 million for the six months ended June 30, 2023, which includes \$11.6 million of equity in net income, excluding \$3.2 million of amortization of investment in affiliate step-up plus \$6.8 million of joint venture depreciation, amortization and interest. Ecoservices: Adjusted EBITDA for the six months ended June 30, 2024 was \$91.2 million, a decrease of \$5.7 million, or 5.9%, compared to \$96.9 million for the six months ended June 30, 2023. The decrease in Adjusted EBITDA was primarily a result of higher turnaround and maintenance costs and unfavorable net pricing, reflecting the timing and contractual pass-through of certain costs including energy and other indexed costs. This was partially offset by higher sales volume for both virgin sulfuric acid and regeneration services. Advanced Materials & Catalysts: Adjusted EBITDA for the six months ended June 30, 2024 was \$25.8 million, a decrease of \$12.6 million or 32.8%, compared to \$38.4 million for the six months ended June 30, 2023. The decrease in Adjusted EBITDA was primarily a result of lower pricing on sales volume within the Zeolyst Joint Venture associated with catalysts used in the production of sustainable fuels, emission control catalysts and timing of niche custom catalysts. 40 Table of Contents A reconciliation of net income to Adjusted EBITDA is as follows: Six months ended June 30, 2024 2023 (in millions) Reconciliation of net income to Adjusted EBITDA Net income \$9.5A \$24.7A Provision for income taxes \$4.3A 9.7A Interest expense, net \$26.3A 19.0A Depreciation and amortization \$43.6A 41.2A EBITDA \$83.7A 94.6A Joint venture depreciation, amortization and interest (a) \$6.5A 6.8A Amortization of investment in affiliate step-up (b) \$2.5A 3.2A Debt extinguishment costs \$4.6A \$4.6A Net loss on asset disposals (c) \$0.6A 0.1A Foreign currency exchange loss (gain) (d) \$0.1A (1.1) LIFO (benefit) expense (e) (2.7) 2.5A Transaction and other related costs (f) \$0.2A 2.6A Equity-based compensation \$7.5A 9.1A Restructuring, integration and business optimization expenses (g) \$0.4A 2.1A Other (h) (1.0) 0.1A Adjusted EBITDA \$102.4A \$122.2A (a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Advanced Materials & Catalysts segment includes our 50% interest in the Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of the Zeolyst Joint Venture. (b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in the Zeolyst Joint Venture as a result of the combination of the businesses of PQ Holdings Inc. and Eco Services Operations LLC in May 2016. We determined the fair value of the equity affiliate investment and the fair value step-up was then attributed to the underlying assets of the Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with intangible assets, including customer relationships and technical know-how. (c) When asset disposals occur, we remove the impact of net gain/loss of the disposed asset because such impact primarily reflects the non-cash write-off of long-lived assets no longer in use. (d) Reflects the exclusion of the foreign currency transaction gains and losses in the statements of income related to the non-permanent intercompany debt denominated in local currency translated to U.S. dollars. (e) Represents non-cash adjustments to the Company's LIFO reserves for certain inventories in the U.S. that are valued using the LIFO method, effectively reflecting the results as if these inventories were valued using the FIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories. (f) Relates to certain transaction costs, including debt financing, due diligence and other costs related to transactions that are completed, pending or abandoned, that we believe are not representative of our ongoing business operations. (g) Includes the impact of restructuring, integration and business optimization expenses, which are incremental costs that are not representative of our ongoing business operations. (h) Other consists of adjustments for items that are not core to our ongoing business operations. These adjustments include environmental remediation and other legal costs, expenses for capital and franchise taxes, and defined benefit pension and postretirement plan (benefits) costs, for which our obligations are under plans that are frozen. Also included in this amount are adjustments to eliminate the benefit realized in cost of goods sold of the allocation of a portion of the contract manufacturing payments under the five-year agreement with the buyer of the Performance Chemicals business to the financing obligation under the failed sale-leaseback. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions). 41 Table of Contents Adjusted Net Income Summarized Adjusted Net Income information is shown below in the following table: Six months ended June 30, 2024 2023 Pre-tax amount Tax expense (benefit) After-tax amount Pre-tax amount Tax expense (benefit) After-tax amount (in millions) Reconciliation of net income to Adjusted Net Income (1) (2) Net income \$13.8A \$4.3A \$9.5A \$34.4A \$3.7A \$24.7A Amortization of investment in affiliate step-up (b) \$2.5A 0.6A 1.9A 3.2A 0.8A 2.4A Debt extinguishment costs \$4.6A 1.2A 3.4A \$4.6A \$4.6A Net loss on asset disposals (c) \$0.6A 0.1A 0.5A 2.3A 0.6A 1.7A Foreign currency exchange loss (gain) (d) \$0.1A \$0.1A (1.1) (0.2) (0.9) LIFO (benefit) expense (e) (2.7) (0.7) (2.0) 0.5A 0.7A 1.8A Transaction and other related costs (f) \$0.2A 0.1A 0.1A 0.1A 2.6A 0.7A 1.9A Equity-based compensation \$7.5A 1.4A 6.1A 9.1A 0.8A 8.3A Restructuring, integration and business optimization expenses (g) \$0.4A 0.1A 0.3A 2.1A 0.6A 1.5A Other (h) (1.0) (0.3) (0.7) 0.1A \$4.6A 0.1A Adjusted Net Income \$26.0A \$6.8A \$19.2A \$55.2A \$13.7A \$41.5A (1) We define Adjusted Net Income as net income adjusted for non-operating income or expense and the impact of certain non-cash or other items that are included in net income that we do not consider indicative of our ongoing operating performance. Adjusted Net Income is presented as a key performance indicator as we believe it will enhance a prospective investor's understanding of our results of operations and financial condition. Adjusted Net Income may not be comparable with net income or Adjusted Net Income as defined by other companies. (2) Refer to the Adjusted EBITDA notes above for more information with respect to each adjustment. The adjustments to net income are shown net of applicable tax rates of 25.1% and 26.2% for the six months ended June 30, 2024 and 2023, respectively, except equity-based compensation. The tax effect on equity-based compensation is derived by removing the tax effect of any equity-based compensation expense disallowed as a result of its inclusion within IRC Sec. 162(m), and adding the tax effect of equity-based stock compensation shortfall recorded as a discrete item. 42 Table of Contents A Financial Condition, Liquidity and Capital Resources Our primary sources of liquidity consist of cash flows from operations, existing cash balances as well as funds available under our asset based lending revolving credit facility (ABL Facility). We expect that ongoing requirements for debt service and capital expenditures will be funded from these sources of funds. Our primary liquidity requirements include funding working capital requirements (primarily inventory and accounts receivable, net of accounts payable and other accrued liabilities), debt service requirements and capital expenditures. Our capital expenditures include both maintenance of business, which include spending on maintenance and health, safety and environmental initiatives as well as growth, which includes spending to drive organic sales growth and cost savings initiatives. We believe that our existing cash and cash equivalents and cash flows from operations, combined with availability under our ABL Facility, will be sufficient to meet our presently anticipated future cash needs for at least the next twelve months. We may also pursue strategic acquisition or divestiture opportunities, which may impact our future cash requirements. We may, from time to time, increase borrowings under our ABL Facility to meet our future cash needs. As of June 30, 2024, we had cash and cash equivalents of \$83.3 million and availability of \$72.3 million under our ABL Facility, after giving effect to \$3.3 million of outstanding letters of credit, for a total available liquidity of \$155.6 million. We did not have any revolving credit facility borrowings as of June 30, 2024. As of June 30, 2024, we were in compliance with all covenants under our debt agreements. Our ABL Facility has one financial covenant with two ratios to maintain. The first ratio compares the total ABL availability against a threshold: the greater of 10% of the line cap (which is defined as the lesser of our revolving loan commitments and the value of our assets) or \$20.0 million. The greater of this threshold cannot be greater than the total availability of the ABL Facility. The second ratio compares the ABL Facility availability of the U.S. revolving credit facility against a \$15.0 million threshold. As of June 30, 2024, we were in compliance with the financial covenant under the ABL Facility. The 2024 Term Loan Facility and the ABL Facility contain various restrictive covenants. Each limits the ability of the Company and its restricted subsidiaries to incur certain indebtedness or liens, merge, consolidate or liquidate, dispose of certain property, make investments or declare or pay dividends, make optional payments, modify certain debt instruments, enter into certain transactions with affiliates, enter into certain sales and leasebacks and certain other non-financial restrictive covenants. During such time, the Company is required to maintain a fixed-charge coverage ratio of at least 1.0 to 1.0. The Company was in compliance with all debt covenants under the 2024 Term Loan Facility and the ABL Facility as of June 30, 2024. Included in our cash and cash equivalents balance as of June 30, 2024 was \$14.0 million of cash and cash equivalents in foreign jurisdictions. Depending on foreign cash balances, we have certain flexibility to repatriate funds should the need arise. Should the need arise, we would repatriate the funds in the most tax efficient manner from those subsidiaries. Repatriation of foreign cash is generally not subject to U.S. federal income taxes at the time of cash distribution. However, foreign earnings may still be taxed for state income tax purposes, as well as subject to certain foreign withholding tax obligations, when cash amounts are distributed back to the U.S. Our liquidity requirements include interest payments related to our debt structure. As reported, our cash interest paid for the six months ended June 30, 2024 and 2023 was approximately \$33.2A million and \$19.4A million, respectively. Before any impact of hedges, a one percent change in assumed interest rates for our variable interest credit facilities would have an annual impact of approximately \$8.7 million on interest expense. We hedge the interest rate fluctuations on debt obligations through interest rate cap agreements. For more information about our interest rate cap agreements, refer to Note 12. Financial Instruments of our condensed consolidated financial statements included in Part 1, Item 1. Financial Statements (Unaudited). Off-Balance Sheet Arrangements The Company's off-balance sheet arrangements include \$3.3 million of outstanding letters of credit on our ABL Facility as of June 30, 2024. 43 Table of Contents Cash Flow Six months ended June 30, 2024 2023 (in millions) Net cash provided by (used in): Operating activities \$46.4A \$41.1A Investing activities (36.8) (39.2) Financing activities (14.4) (79.9) Effect of exchange rate changes on cash and cash equivalents (0.3) (3.7) Net change in cash and cash equivalents (5.1) (81.7) Cash and cash equivalents at beginning of period \$88.4A 110.9A Cash and cash equivalents at end of period \$83.3A \$29.2A Net cash provided by operating activities was \$46.4 million for the six months ended June 30, 2024, compared to \$41.1 million for the six months ended June 30, 2023. Cash generated by operating activities, other than changes in working capital, was higher by \$9.1 million during the six months ended June 30, 2024, as compared to the same period in the prior year primarily due to dividends received from the Zeolyst Joint Venture offset by debt extinguishment costs. The decrease in cash from working capital during the six months ended June 30, 2024 of \$3.8 million was unfavorable compared to the six months ended June 30, 2023 primarily due to unfavorable changes in receivables, inventories and accounts payable, offset by favorable changes in prepaids and other current assets and accrued liabilities. The unfavorable change in receivables was driven by the timing of collection of sales. The unfavorable change in inventory was primarily due to the timing of sales orders and inventory build. The unfavorable change in accounts payable was due to the timing of vendor payments. The favorable change in prepaid and other current assets primarily relates to the timing of miscellaneous and interest receivables and non-trade receivables from related parties. The favorable change in accrued liabilities mainly relates to lower payments for variable employee compensation liabilities partially offset by higher payments for taxes in the current period. Net cash used in investing activities was \$36.8 million for the six months ended June 30, 2024, compared to \$39.2 million during the same period in 2023. Net cash used in investing activities consisted of \$36.6 million and \$39.2 million to fund capital expenditures during the six months ended June 30, 2024 and 2023, respectively. Net cash used in financing activities was \$14.4 million for the six months ended June 30, 2024, compared to \$79.9 million during the same period in 2023. Net cash used in financing activities was primarily driven by the lower repurchases of the Company's common stock of \$68.4 million during the six months ended June 30, 2023. Debt June 30, 2024 December 31, 2023 (in millions) 2024 Term Loan Facility \$873.0A \$877.5A ABL Facility \$4.6A \$4.6A Total debt \$873.0A \$877.5A Original issue discount (7.6) (6.2) Deferred financing costs (3.0) (3.4) Total debt, net of original issue discount and deferred financing costs \$862.4A \$867.9A Less: current portion (6.5) (9.0) Total long-term debt, excluding current portion \$855.9A \$858.9A As of June 30, 2024, our total debt was \$873.0 million, excluding the original issue discount of \$7.6 million and deferred financing costs of \$3.0 million for our senior secured credit facilities. Our net debt as of June 30, 2024 was \$789.7 million, including cash and cash equivalents of \$83.3 million. We may seek, subject to market conditions and other factors, opportunities to repurchase, refinance or otherwise reprice our debt. 44 Table of Contents Capital Expenditures Maintenance capital expenditures include spending on maintenance of business, health, safety and environmental initiatives. Growth capital expenditures include spending to drive organic sales growth and cost savings initiatives. These capital expenditures represent our book capital expenditures for which the company has recorded, but not necessarily paid for the capital expenditures. Six months ended June 30, 2024 2023 (in millions) Maintenance capital expenditures \$28.3A \$30.4A Growth capital expenditures \$5.2A 3.3A Total capital expenditures \$33.5A \$33.7A Capital expenditures remained at a level sufficient for required maintenance and certain expansion growth initiatives during these periods. Critical Accounting Policies and Estimates We prepare our condensed consolidated financial statements in conformity with GAAP and our significant accounting policies are described in Note 2 to our audited consolidated financial statements included in our Annual Report on Form 10-K. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect reported amounts and related disclosures. We base our estimates and judgments on historical experience and other relevant factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. While there has been no material change in our critical accounting policies and use of estimates from those described in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, included in our Annual Report on Form 10-K, we continually evaluate our critical accounting estimates, assumptions and judgments on an ongoing basis. The Company completes its annual goodwill and indefinite-lived intangible assets impairment test during the fourth quarter of each year, or more frequently if triggering events indicate a possible impairment. The Company determines the fair value of its reporting units using both a market approach and an income, or discounted cash flow, approach. As of October 1, 2023, the date of the Company's most recent quantitative assessments, the fair values of each of the Company's reporting units and the fair values of the Company's indefinite-lived trade names and trademarks exceeded their respective carrying values. During the six months ended June 30, 2024, the Company did not identify any events or circumstances

we would be more likely than not reduce the fair value of the Company's reporting units or intangible assets below their respective carrying values. Although the estimated fair value of the Advanced Materials & Catalysts reporting unit exceeded its carrying value on October 1, 2023 by over 30%, the Company has experienced unfavorable effects on current operations resulting from certain macroeconomic and industry factors in specific end uses during the six months ended June 30, 2024. Prolonged unfavorable effects could adversely impact the estimated fair value of the Advanced Materials & Catalysts reporting unit in future periods and may result in impairment charges. Accounting Standards Not Yet Adopted See Note 2 to our unaudited condensed consolidated financial statements for a discussion of recently issued accounting standards and their effect on us. ITEM 3.A. A. A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK. Our major market risk exposure is potential losses arising from changing rates and prices regarding foreign currency exchange rate risk, interest rate risk and credit risk. The audit committee of our board of directors regularly reviews foreign exchange and interest rate activity, and monitors compliance with our hedging policy. We do not use financial instruments for speculative purposes, and we limit our hedging activity to the underlying economic exposure. There have been no material changes in the foreign currency exchange rate risk, interest rate risk or credit risk discussed in Item 7A. Quantitative and Qualitative Disclosures about Market Risk, included in our Annual Report on Form 10-K. Table of Contents ITEM 4. A. A. A. CONTROLS AND PROCEDURES. Evaluation of Disclosure Controls and Procedures Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2024, the end of the period covered by this Quarterly Report on Form 10-Q. The term "disclosure controls and procedures" as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level. Changes in Internal Control Over Financial Reporting No changes in our internal control over financial reporting occurred during the quarter ended June 30, 2024 that materially affected, or which are reasonably likely to materially affect, our internal control over financial reporting. PART II. OTHER INFORMATION ITEM 1. A. A. A. LEGAL PROCEEDINGS. From time to time, we may be subject to various legal claims and proceedings incidental to the normal conduct of business, relating to such matters as personal injury, product liability and warranty claims, waste disposal practices, release of chemicals into the environment and other matters that may arise in the ordinary course of our business. We currently believe that there is no litigation pending that is likely to have a material adverse effect on our business. Regardless of the outcome, legal proceedings can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. ITEM 1A. A. A. RISK FACTORS. Item 1A, Risk Factors in our Annual Report on Form 10-K includes a discussion of our risk factors. There have been no material changes from the risk factors described in our Annual Report on Form 10-K. ITEM 2. A. A. A. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS. The following table contains information about purchases of our common stock, excluding exercise tax, during the second quarter of 2024: Total number of shares of common stock purchased (1) Average price paid per share of common stock (2) Total number of shares of common stock purchased as part of publicly announced plan or programs Maximum number (or dollar value) of shares of common stock that may yet be purchased under the plans or programs (in thousands) (1) April 1, 2024 \$4,552,081 \$9.054 \$52,081 \$229,594 \$252,081 (1) In April 2022, our Board of Directors approved and announced a new stock repurchase program authorizing the repurchase of up to \$450 million of the Company's outstanding common stock over the next four years. This program is expected to be funded using cash on hand and cash generated from operations. We primarily expect to conduct the repurchase program through negotiated transactions with an equity sponsor, as well as through open market repurchases or other means, including through Rule 10b-18 trading plans or through the use of other techniques such as accelerated share repurchases. The actual timing, number and nature of shares repurchased will depend on a variety of factors, including stock price, trading volume, and general business and market conditions. The repurchase program does not obligate us to acquire any number of shares in any specific period or at all and may be amended, suspended or discontinued at any time at our discretion. During the three months ended June 30, 2024, the Company repurchased 552,081 of its common stock on the open market pursuant to the stock repurchase program, for a total cost of \$5.0 million. As of June 30, 2024, \$229.6 million was available for share repurchases under the program. (2) Excludes brokerage commissions and other costs of execution. ITEM 5. A. A. A. OTHER INFORMATION. Trading Arrangements During the three months ended June 30, 2024, none of the Company's directors or executive officers adopted, modified or terminated a Rule 10b5-1 trading arrangement or an non-Rule 10b5-1 trading arrangement, each as defined in Item 408(a) of Regulation S-K. ITEM 6. A. A. A. EXHIBITS. The following exhibits are being filed or furnished as part of this Quarterly Report on Form 10-Q: Exhibit No. Description 3.1 Second Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q, filed on November 14, 2017) 3.2 Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on August 3, 2021) 3.3 Certificate of Correction of Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on November 9, 2021) 3.4 Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on May 9, 2024) 10.1 Second Amendment Agreement, dated as of June 12, 2024, by and among the Borrowers, Ecovyst Midco II Inc., UBS AG Cayman Islands Branch, as administrative agent, and the lenders party thereto. 31.1 Certification of Chief Executive Officer of Ecovyst Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. 31.2 Certification of Chief Financial Officer of Ecovyst Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. 32.1 Certification of Chief Executive Officer of Ecovyst Inc. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. 32.2 Certification of Chief Financial Officer of Ecovyst Inc. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. 101 The following materials from the Quarterly Report on Form 10-Q of Ecovyst Inc. for the quarter ended June 30, 2024, formatted in Inline XBRL: (i) Condensed Consolidated Statements of Income, (ii) Condensed Consolidated Statements of Comprehensive Income, (iii) Condensed Consolidated Balance Sheets, (iv) Condensed Consolidated Statements of Stockholders' Equity, (v) Condensed Consolidated Statements of Cash Flows, (vi) Notes to Condensed Consolidated Financial Statements and (vii) document and entity information, tagged as blocks of text and including detailed tags. 104 The cover page from the Quarterly Report on Form 10-Q of Ecovyst Inc. for the quarter ended June 30, 2024, formatted in Inline XBRL and included as Exhibit 101. 4 The SIGNATURES Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized. Ecovyst Inc. Date: August 2, 2024 By: /s/ MICHAEL FEEHAN Michael Feehan Vice President and Chief Financial Officer (Duly Authorized Officer and Principal Financial and Accounting Officer) EX-31.1 2 ex311-sec302cfoecrtx063020.htm EX-31.1 Document Exhibit 31.1 CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002, Kurt J. Bitting, certify that: 1. I have reviewed this quarterly report on Form 10-Q of Ecovyst Inc.; 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have: (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions): (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting. A Date: August 2, 2024/s/ KURT J. BITTING Kurt J. Bitting Chief Executive Officer (Principal Executive Officer) EX-31.2 2 ex312-sec302cfoecrtx063020.htm EX-31.2 Document Exhibit 31.2 CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002, Michael Feehan, certify that: 1. I have reviewed this quarterly report on Form 10-Q of Ecovyst Inc.; 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have: (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions): (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting. Date: August 2, 2024/s/ MICHAEL FEEHAN Michael Feehan Vice President and Chief Financial Officer (Principal Financial Officer) EX-32.1 4 ex321-sec906cfoecrtx063020.htm EX-32.1 Document Exhibit 32.1 CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 in connection with the quarterly report of Ecovyst Inc. (the "Company") on Form 10-Q for the quarterly period ended June 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kurt J. Bitting, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge: 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. Date: August 2, 2024/s/ KURT J. BITTING Kurt J. Bitting Chief Executive Officer (Principal Executive Officer) EX-32.2 5 ex322-sec906cfoecrtx063020.htm EX-32.2 Document Exhibit 32.2 CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 in connection with the quarterly report of Ecovyst Inc. (the "Company") on Form 10-Q for the quarterly period ended June 30, 2024 as filed with

9952177 - Disclosure - Subsequent Events link:presentationLink link:calculationLink link:definitionLink 9954471 - Disclosure - Background and Basis of Presentation (Policies) link:presentationLink link:calculationLink link:definitionLink 9954472 - Disclosure - Revenue from Contracts with Customers (Tables) link:presentationLink link:calculationLink link:definitionLink 9954473 - Disclosure - Fair Value Measurements (Tables) link:presentationLink link:calculationLink link:definitionLink 9954474 - Disclosure - Stockholders' Equity (Tables) link:presentationLink link:calculationLink link:definitionLink 9954475 - Disclosure - Goodwill (Tables) link:presentationLink link:calculationLink link:definitionLink 9954476 - Disclosure - Other Operating Expense, Net (Tables) link:presentationLink link:calculationLink link:definitionLink 9954477 - Disclosure - Inventories, Net (Tables) link:presentationLink link:calculationLink link:definitionLink 9954478 - Disclosure - Investments in Affiliated Companies (Tables) link:presentationLink link:calculationLink link:definitionLink 9954479 - Disclosure - Property, Plant and Equipment (Tables) link:presentationLink link:calculationLink link:definitionLink 9954480 - Disclosure - Long-term Debt (Tables) link:presentationLink link:calculationLink link:definitionLink 9954481 - Disclosure - Financial Instruments (Tables) link:presentationLink link:calculationLink link:definitionLink 9954482 - Disclosure - Benefit Plans (Tables) link:presentationLink link:calculationLink link:definitionLink 9954483 - Disclosure - Reportable Segments (Tables) link:presentationLink link:calculationLink link:definitionLink 9954484 - Disclosure - Stock-Based Compensation (Tables) link:presentationLink link:calculationLink link:definitionLink 9954485 - Disclosure - Earnings per Share (Tables) link:presentationLink link:calculationLink link:definitionLink 9954486 - Disclosure - Supplemental Cash Flow Information (Tables) link:presentationLink link:calculationLink link:definitionLink 9954487 - Disclosure - Background and Basis of Presentation (Details) link:presentationLink link:calculationLink link:definitionLink 9954488 - Disclosure - Revenue from Contracts with Customers (Details) link:presentationLink link:calculationLink link:definitionLink 9954489 - Disclosure - Fair Value Measurements (Details) link:presentationLink link:calculationLink link:definitionLink 9954490 - Disclosure - Stockholders' Equity - Pre-tax and After-tax Components of Other Comprehensive Income (Loss) (Details) link:presentationLink link:calculationLink link:definitionLink 9954491 - Disclosure - Stockholders' Equity - Change by Component (Details) link:presentationLink link:calculationLink link:definitionLink 9954492 - Disclosure - Stockholders' Equity - Reclassifications out of Accumulated Other Comprehensive Income (Details) link:presentationLink link:calculationLink link:definitionLink 9954493 - Disclosure - Stockholders' Equity - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954494 - Disclosure - Goodwill - Schedule of Goodwill (Details) link:presentationLink link:calculationLink link:definitionLink 9954495 - Disclosure - Goodwill - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954496 - Disclosure - Other Operating Expense, Net (Details) link:presentationLink link:calculationLink link:definitionLink 9954497 - Disclosure - Inventories, Net (Details) link:presentationLink link:calculationLink link:definitionLink 9954498 - Disclosure - Investments in Affiliated Companies - Ownership Percentage (Details) link:presentationLink link:calculationLink link:definitionLink 9954499 - Disclosure - Investments in Affiliated Companies - Summarized Income Statement (Details) link:presentationLink link:calculationLink link:definitionLink 9954500 - Disclosure - Investments in Affiliated Companies - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954501 - Disclosure - Property, Plant and Equipment - Summary of Property, Plant and Equipment (Details) link:presentationLink link:calculationLink link:definitionLink 9954502 - Disclosure - Property, Plant and Equipment - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954503 - Disclosure - Long-term Debt - Summary of Long-Term Debt (Details) link:presentationLink link:calculationLink link:definitionLink 9954504 - Disclosure - Long-term Debt - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954505 - Disclosure - Financial Instruments - Interest Rate Cap Agreements (Details) link:presentationLink link:calculationLink link:definitionLink 9954506 - Disclosure - Financial Instruments - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954507 - Disclosure - Financial Instruments - Fair Values of Derivative Instruments Held (Details) link:presentationLink link:calculationLink link:definitionLink 9954508 - Disclosure - Financial Instruments - Effect of Derivative Instruments Designated as Hedges on Other Comprehensive Income (Details) link:presentationLink link:calculationLink link:definitionLink 9954509 - Disclosure - Financial Instruments - Cash Flow Hedge Impact on Income Statement (Details) link:presentationLink link:calculationLink link:definitionLink 9954510 - Disclosure - Income Taxes (Details) link:presentationLink link:calculationLink link:definitionLink 9954511 - Disclosure - Benefit Plans (Details) link:presentationLink link:calculationLink link:definitionLink 9954512 - Disclosure - Related Party Transactions (Details) link:presentationLink link:calculationLink link:definitionLink 9954513 - Disclosure - Reportable Segments - Summary Financial Information by Reportable Segment (Details) link:presentationLink link:calculationLink link:definitionLink 9954514 - Disclosure - Reportable Segments - Reconciliation of Net Income to Segment Adjusted EBITDA (Details) link:presentationLink link:calculationLink link:definitionLink 9954515 - Disclosure - Stock-Based Compensation - Narrative (Details) link:presentationLink link:calculationLink link:definitionLink 9954516 - Disclosure - Stock-Based Compensation - Restricted Stock Units and Performance Stock Units (Details) link:presentationLink link:calculationLink link:definitionLink 9954517 - Disclosure - Stock-Based Compensation - Schedule of RSU and PSU Activity (Details) link:presentationLink link:calculationLink link:definitionLink 9954518 - Disclosure - Stock-Based Compensation - Stock-Based Compensation Expense (Details) link:presentationLink link:calculationLink link:definitionLink 9954519 - Disclosure - Earnings per Share - Reconciliation from Basic to Diluted Weighted Average Shares Outstanding (Details) link:presentationLink link:calculationLink link:definitionLink 9954520 - Disclosure - Earnings per Share - Calculation of Basic and Diluted Earnings per Share (Details) link:presentationLink link:calculationLink link:definitionLink 9954521 - Disclosure - Earnings per Share - Anti-dilutive Shares (Details) link:presentationLink link:calculationLink link:definitionLink 9954522 - Disclosure - Supplemental Cash Flow Information (Details) link:presentationLink link:calculationLink link:definitionLink 9954523 - Disclosure - Subsequent Events (Details) link:presentationLink link:calculationLink link:definitionLink EX-101.CAL 7 ecvt-20240630_cal.xml XBRL TAXONOMY EXTENSION CALCULATION LINKBASE DOCUMENT EX-101.DEF 8 ecvt-20240630_def.xml XBRL TAXONOMY EXTENSION DEFINITION LINKBASE DOCUMENT EX-101.LAB 9 ecvt-20240630_lab.xml XBRL TAXONOMY EXTENSION LABEL LINKBASE DOCUMENT Derivative asset, noncurrent Derivative Asset, Noncurrent Draw down of revolving credit facilities Proceeds from Long-Term Lines of Credit Adjustments to reconcile net income to net cash provided by operating activities: Adjustments to Reconcile Net Income (Loss) to Cash Provided by (Used in) Operating Activities [Abstract] Statistical Measurement [Domain] Statistical Measurement [Domain] Related Party Transactions Related Party Transactions Disclosure [Text Block] Remaining authorized repurchase amount Share Repurchase Program, Remaining Authorized, Amount Derivatives, Fair Value [Line Items] Derivatives, Fair Value [Line Items] Cover page. Cover [Abstract] Net change in cash and cash equivalents Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Period Increase (Decrease), Including Exchange Rate Effect Board of Directors Director [Member] Trading Symbol Trading Symbol Percent ownership Equity Method Investment, Ownership Percentage All Trading Arrangements All Trading Arrangements [Member] Compensation Actually Paid vs. Net Income Compensation Actually Paid vs. Net Income [Text Block] Non-NEOs Non-NEOs [Member] Calculation of Basic and Diluted Earnings per Share Schedule of Earnings Per Share, Basic and Diluted [Table Text Block] Stock-based compensation expense, tax benefit Share-Based Payment Arrangement, Expense, Tax Benefit Rule 10b5-1 Arrangement Adopted Rule 10b5-1 Arrangement Adopted [Flag] Awards Close in Time to MNPI Disclosures Awards Close in Time to MNPI Disclosures [Table] Derivative Derivative [Line Items] Income taxes, net of refunds Income Taxes Paid, Net Investments in affiliated companies Equity Method Investments Pay vs Performance Disclosure [Line Items] Peer Group Total Shareholder Return Amount Peer Group Total Shareholder Return Amount Derivative [Table] Derivative [Table] Background and Basis of Presentation Organization, Consolidation and Presentation of Financial Statements Disclosure [Text Block] Non-Rule 10b5-1 Arrangement Adopted Non-Rule 10b5-1 Arrangement Adopted [Flag] Hedging Relationship [Domain] Hedging Relationship [Domain] Fair Values of Derivative Instruments Held Schedule of Derivative Instruments in Statement of Financial Position, Fair Value [Table Text Block] Fair Value Measurements Fair Value Disclosures [Text Block] Land Land [Member] Award Timing Disclosures [Line Items] Investment, Name [Domain] Investment, Name [Domain] Other Performance Measure, Amount Other Performance Measure, Amount Activity of Restricted Stock Units Schedule of Nonvested Restricted Stock Units Activity [Table Text Block] Goodwill [Line Items] Goodwill [Line Items] Common stock, outstanding shares (in shares) Common Stock, Shares, Outstanding Number of shares available for grant (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Number of Shares Available for Grant Operating lease liabilitiesâ€œnoncurrent Operating Lease, Liability, Noncurrent Cash flow hedging Cash Flow Hedging [Member] Revenue from Contract with Customer [Abstract] Revenue from Contract with Customer [Abstract] Other long-term assets Other Assets, Noncurrent Entity Tax Identification Number Entity Tax Identification Number Summary of Long-Term Debt Schedule of Long-Term Debt Instruments [Table Text Block] Accounting Standards Update and Change in Accounting Principle [Abstract] Shares acquired (in shares) Treasury Stock, Shares, Acquired Antidilutive Securities, Name [Domain] Antidilutive Securities, Name [Domain] Retirement Plan Type [Axis] Retirement Plan Type [Axis] 2024 Grants Grants, 2024 [Member] Grants, 2024 Net cash provided by operating activities Net Cash Provided by (Used in) Operating Activities Cash flows from operating activities: Net Cash Provided by (Used in) Operating Activities [Abstract] Treasury stock, at costâ€ Treasury Stock, Common [Member] Interest Rate Cap Agreements Schedule of Derivative Instruments [Table Text Block] Numerator: Earnings Per Share Reconciliation [Abstract] Pre-tax and After-tax Components of Other Comprehensive Income (Loss) Schedule of Accumulated Other Comprehensive Income (Loss) [Table Text Block] Equity Components [Axis] Equity Components [Axis] Award Timing Method Award Timing Method [Text Block] Net periodic (benefit) expense Defined Benefit Plan, Net Periodic Benefit Cost (Credit) Trading Arrangements, by Individual Trading Arrangements, by Individual [Table] Measurement Frequency [Axis] Measurement Frequency [Axis] Entity Common Stock, Shares Outstanding Entity Common Stock, Shares Outstanding Insider Trading Policies and Procedures [Line Items] Business Acquisition, Acquiree [Domain] Business Acquisition, Acquiree [Domain] Regeneration and treatment services Regeneration and Treatment Services [Member] Regeneration and Treatment Services [Member] Adjustment to Compensation, Amount Adjustment to Compensation Amount Compensation Amount Outstanding Recovery Compensation Amount Aggregate Change in Present Value of Accumulated Benefit for All Pension Plans Reported in Summary Compensation Table Aggregate Change in Present Value of Accumulated Benefit for All Pension Plans Reported in Summary Compensation Table [Member] Entity Small Business Entity Small Business Company Selected Measure Amount Company Selected Measure Amount Tabular List, Table Tabular List [Table Text Block] Significant Unobservable Inputs (Level 3) Fair Value, Inputs, Level 3 [Member] Share-based Compensation Arrangement by Share-based Payment Award Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Award Date [Axis] Award Date [Axis] Aggregate Grant Date Fair Value of Equity Award Amounts Reported in Summary Compensation Table Aggregate Grant Date Fair Value of Equity Award Amounts Reported in Summary Compensation Table [Member] Accrued liabilities Accrued Liabilities, Current Anti-dilutive stock options (in shares) Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Non-cash financing activity: Non-Cash Financing Activity [Abstract] Non-Cash Financing Activity LIFO basis LIFO Inventory Amount Derivative Asset, Noncurrent, Statement of Financial Position [Extensible Enumeration] Derivative Asset, Noncurrent, Statement of Financial Position [Extensible Enumeration] Other Operating Expense, Net Other Operating Income and Expense [Text Block] Cash and cash equivalents at beginning of period Cash and cash equivalents at end of period Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents Goodwill Beginning balance Ending balance Goodwill Tax withholdings on equity award vesting Payment, Tax Withholding, Share-Based Payment Arrangement Stock repurchase program, authorized amount Share Repurchase Program, Authorized, Amount Inventories, Net Inventory Disclosure [Text Block] Treasury stock (in shares) Treasury Stock, Common, Shares Repayments of long-term debt Repayments of Medium-Term Note Forgone Recovery due to Disqualification of Tax Benefits, Amount Forgone Recovery due to Disqualification of Tax Benefits, Amount Product and Service [Domain] Product and Service [Domain] Anti-dilutive stock options Share-Based Payment Arrangement, Option [Member] Zeolyst Joint Venture Zeolyst Joint Venture [Member] Zeolyst Joint Venture [Member] Reconciliation of Revenue from Segments to Consolidated [Table] Reconciliation of Revenue from Segments to Consolidated [Table] Variable Rate Component One Variable Rate Component One [Member] Variable Rate Component One Vested (in dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period, Weighted Average Grant Date Fair Value Goodwill [Roll Forward] Goodwill [Roll Forward] Fair Value Disclosures [Abstract] Fair Value Disclosures [Abstract] Depreciation Depreciation Other, net Proceeds from (Payments for) Other Financing Activities Schedule of Antidilutive Securities Excluded from Computation of Earnings Per Share [Table] Antidilutive Security, Excluded EPS calculation [Table] Comprehensive income Comprehensive Income (Loss), Net of Tax, Attributable to Parent Defined Benefit Pension Plans Pension Plan [Member] Interest Rate Cap Two Interest Rate Cap Two [Member] Interest Rate Cap Two Industrial, mining & automotive Industrial, Mining & Automotive [Member] Industrial, Mining & Automotive [Member] Preferred stock, shares outstanding (in shares) Preferred Stock, Shares Outstanding Ecoservices Ecoservices [Member] Former Refining Services [Member] Security Exchange Name Security Exchange Name Variable rate on spread Debt Instrument, Basis Spread on Variable Rate Award Type [Axis] Award Type [Axis] Related Party Transaction [Domain] Related Party Transaction [Domain] Net income per share: Earnings Per Share, Basic [Abstract] Foreign exchange impact Goodwill, Foreign Currency Translation Gain (Loss) Amounts Reclassified from Accumulated Other Comprehensive Income Amount reclassified from AOCI into income Reclassification out of Accumulated Other Comprehensive Income [Member] Risk-free interest rate Performance Stock Unit, Fair Value Assumptions, Risk Free Interest Rate Performance Stock Unit, Fair Value Assumptions, Risk Free Interest Rate Unamortized deferred financing costs Deferred Debt Issuance Cost, Writoff Number of units Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Number of Shares [Roll Forward] Property, plant and equipment, net Property, plant and equipment, net Property, Plant and Equipment, Net FIFO or average cost basis FIFO or Weighted Average Inventory Amount FIFO or Weighted Average Inventory Amount Total liabilities Liabilities Net purchase accounting fair value adjustments Equity Method Investment, Difference Between Carrying Amount and Underlying Equity Number of reporting units Number of Reporting Units Common stock, par (in dollars per share) Common Stock, Par or Stated Value Per Share Forgone Recovery, Explanation of Impracticability Forgone Recovery, Explanation of Impracticability [Text Block] Schedule of Share-based Compensation Arrangements by Share-based Payment Award [Table] Schedule of Share-Based Compensation Arrangements by Share-Based Payment Award [Table] Expiration Date Trading Arrangement Expiration Date Cash flows from investing activities: Net Cash Provided by (Used in) Investing Activities [Abstract] Reclassification out of Accumulated Other Comprehensive Income [Table] Reclassification out of Accumulated Other Comprehensive Income [Table] Goodwill and Intangible Assets Disclosure [Abstract] Goodwill and Intangible Assets Disclosure [Abstract] Tax benefit/ (expense) Other Comprehensive Income (Loss), Tax, Portion Attributable to Parent Operating lease liabilitiesâ€œcurrent Operating Lease, Liability, Current Total Shareholder Return Amount Total Shareholder Return Amount Common stock, issued shares (in shares) Common Stock, Shares, Issued Equity Awards Adjustments, Footnote Equity Awards Adjustments, Footnote [Text Block] Derivative Liability Derivative liability Derivative Liability Insider Trading Policies and Procedures Adopted Insider Trading Policies and Procedures Adopted [Flag] Less: accumulated depreciation Accumulated Depreciation, Depletion and Amortization, Property, Plant, and Equipment Subsequent Event [Line Items] Subsequent Event [Line Items] Property, plant and equipment, gross Property, Plant and Equipment, Gross Accounts receivable, after allowance for credit loss Accounts Receivable, after Allowance for Credit Loss Amount of gain (loss)â€ recognizedâ€ in OCI on derivatives Other Comprehensive Income (Loss), Cash Flow Hedge, Gain (Loss), before Reclassification and Tax Debt Instrument Debt Instrument [Line Items] Named Executive Officers, Footnote Named Executive Officers, Footnote [Text Block] Derivative liabilities: Financial Liabilities Fair Value Disclosure [Abstract] Common stock, authorized shares (in shares) Common Stock, Shares Authorized Business Combination PQ Holdings, Eco Services [Member] PQ Holdings, Eco Services [Member] Basis of Presentation Basis of Accounting, Policy [Policy Text Block] Diluted (in shares) Weighted average shares outstanding â€œ Diluted (in shares) Weighted average shares outstanding â€œ Diluted (in shares) Weighted Average Number of Shares Outstanding, Diluted Interest Rate Cap Three Period Two Interest Rate Cap Three Period Two [Member] Interest Rate Cap Three Period Two Other comprehensive income (loss), net of tax: Other Comprehensive Income (Loss), Net of Tax, Portion Attributable to Parent [Abstract] Derivative liabilities Derivative Liability, Subject to Master Netting Arrangement, before Offset of Collateral [Abstract] Interest Rate Cap Three Interest Rate Cap Three [Member] Interest Rate Cap Three MNPI Disclosure Timed for Compensation Value MNPI Disclosure Timed for Compensation Value [Flag] AOCI Attributable to Parent, Net of Tax [Roll Forward] AOCI Attributable to Parent, Net of Tax [Roll Forward] Long-term Debt, Type [Axis] Long-Term Debt, Type [Axis] Total equity Beginning balance Ending balance Equity, Attributable to Parent Schedule of Cash Flow, Supplemental Disclosures Schedule of Cash Flow, Supplemental Disclosures [Table Text Block] Related Party Related Party [Member] Services Services [Member] Services [Member] Amortization of net gain Defined Benefit Plan, Amortization of Gain (Loss) Expected volatility Performance Stock Unit, Fair Value Assumptions, Expected Volatility Rate Performance Stock Unit, Fair Value Assumptions, Expected Volatility Rate Hedging Designation [Domain] Hedging Designation [Domain] Interest expense, net Interest expense, net Interest expense, net Interest Expense, Nonoperating Deferred income tax (benefit) provision Deferred Income Tax Expense (Benefit) Amount of gain

(loss) reclassified from AOCI into income Other Comprehensive Income (Loss), Cash Flow Hedge, Gain (Loss), Reclassification, before Tax Change in Carrying Amount of Goodwill Schedule of Goodwill [Table Text Block] Property, Plant and Equipment Property, Plant and Equipment Disclosure [Text Block] Derivative assets Derivative asset, current Derivative Asset, Current Settlement (gain) loss Defined Benefit Plan, Net Periodic Benefit Cost (Credit), Gain (Loss) Due to Settlement Selling, general and administrative expenses Selling, General and Administrative Expense Operating Lease Rental Payments Operating Lease Rental Payments [Member] Operating Lease Rental Payments [Member] Total other comprehensive (loss) income Other comprehensive (loss) income Other Comprehensive Income (Loss), Net of Tax, Portion Attributable to Parent Interest rate caps Interest rate caps Interest Rate Cap [Member] Recurring Fair Value, Recurring [Member] Accounts receivable, net Accounts Receivable, after Allowance for Credit Loss, Current Antidilutive Securities Excluded from Computation of Earnings Per Share Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items] Total debt, net of original issue discount and deferred financing costs Long-Term Debt Pension Adjustments Prior Service Cost Pension Adjustments Prior Service Cost [Member] Document Fiscal Period Focus Document Fiscal Period Focus Issuance of long-term debt, net of discount Proceeds from Issuance of Medium-Term Note All Executive Categories All Executive Categories [Member] Dilutive effect of unvested common shares and restricted stock units with service conditions, performance stock units considered probable of vesting and assumed stock option exercises and conversions (in shares) Incremental Common Shares Attributable to Dilutive Effect of Share-Based Payment Arrangements Changed Peer Group, Footnote Changed Peer Group, Footnote [Text Block] ASSETS Assets [Abstract] Retirement Plan Type [Domain] Retirement Plan Type [Domain] Document Type Document Type Derivative Contract [Domain] Derivative Contract [Domain] Effective interest rate Debt Instrument, Interest Rate, Effective Percentage Performance Measure [Axis] Performance Measure [Axis] Performance Measure Pension Benefits Adjustments, Footnote Pension Benefits Adjustments, Footnote [Text Block] Total Shareholder Return Vs Peer Group Total Shareholder Return Vs Peer Group [Text Block] Average cost per share (in dollars per share) Shares Acquired, Average Cost Per Share Other Income and Expenses [Abstract] Other Income and Expenses [Abstract] Schedule of Defined Benefit Plans Disclosures [Table] Defined Benefit Plan [Table] Vested (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period Subsequent Event [Table] Subsequent Event [Table] Maximum Maximum [Member] Amortization expense Amortization of Intangible Assets Equity Valuation Assumption Difference, Footnote Equity Valuation Assumption Difference, Footnote [Text Block] Antidilutive Securities [Axis] Antidilutive Securities [Axis] Accounts payable Accounts payable, related parties Accounts Payable, Current LIABILITIES Liabilities [Abstract] Original issue discount Debt Instrument, Unamortized Discount Valuation Assumptions Schedule of Share-Based Payment Award, Stock Options, Valuation Assumptions [Table Text Block] Derivative contracts Fair Value Measurement, Policy [Policy Text Block] Current Fiscal Year End Date Current Fiscal Year End Date Annualized premium of instruments in effect Derivative, Cost of Hedge Statistical Measurement [Axis] Statistical Measurement [Axis] PEO Name PEO Name Non-Rule 10b5-1 Arrangement Terminated Non-Rule 10b5-1 Arrangement Terminated [Flag] Income before income taxes Total before tax income before income taxes Income (Loss) from Continuing Operations before Income Taxes, Noncontrolling Interest Non-PEO NEO Average Total Compensation Amount Non-PEO NEO Average Total Compensation Amount Award Type [Domain] Award Type [Domain] Name Outstanding Recovery, Individual Name Disaggregated Revenue Disaggregation of Revenue [Line Items] Anti-dilutive Shares Schedule of Antidilutive Securities Excluded from Computation of Earnings Per Share [Table Text Block] Compensation Actually Paid vs. Company Selected Measure Compensation Actually Paid vs. Company Selected Measure [Text Block] Non-PEO NEO Non-PEO NEO [Member] Title of Individual [Axis] Title and Position [Axis] Other comprehensive income (loss) before reclassifications OCI, before Reclassifications, Net of Tax, Attributable to Parent Additional paid-in capital Additional Paid-in Capital [Member] Hedging Relationship [Axis] Hedging Relationship [Axis] Award Timing Predetermined Award Timing Predetermined [Flag] Goodwill Goodwill Disclosure [Text Block] Subsequent Event Type [Domain] Subsequent Event Type [Domain] Equity method investment, aggregate cost Equity Method Investment, Aggregate Cost Benefit Plans Retirement Benefits [Text Block] Investment, Name [Axis] Investment, Name [Axis] Performance Measure [Domain] Performance Measure [Domain] Performance Measure Accounting Standards Not Yet Adopted New Accounting Pronouncements, Policy [Policy Text Block] Amortization of prior service credit Defined Benefit Plan, Amortization of Prior Service Cost (Credit) Long-term Debt Long-Term Debt [Text Block] Diluted income per share (in dollars per share) Earnings Per Share, Diluted Title of Individual [Domain] Title and Position [Domain] Counterparty Name [Domain] Counterparty Name [Domain] Reconciliation from Basic to Diluted Weighted Average Shares Outstanding Schedule of Weighted Average Number of Shares [Table Text Block] Name Measure Name Entity Interactive Data Current Entity Interactive Data Current Activity of Performance Stock Units Schedule of Nonvested Performance-Based Units Activity [Table Text Block] Restatement does not require Recovery Restatement Does Not Require Recovery [Text Block] Advanced Materials & Catalysts Advanced Materials and Catalysts [Member] Former Catalysts [Member] Award vesting percentage Share-Based Compensation Arrangement by Share-Based Payment Award, Award Vesting Rights, Percentage Retirement Benefits [Abstract] Retirement Benefits [Abstract] Foreign exchange (gain) loss Gain (Loss), Foreign Currency Transaction, before Tax Preferred stock, shares issued (in shares) Preferred Stock, Shares Issued Fair Value Measured on Recurring Basis Schedule of Fair Value, Assets and Liabilities Measured on Recurring Basis [Table Text Block] Disaggregated Revenue [Table] Disaggregation of Revenue [Table] Statement of Financial Position [Abstract] Statement of Financial Position [Abstract] Interest Rate Cap One Interest Rate Cap One [Member] Interest Rate Cap One Receivables Increase (Decrease) in Receivables Stock compensation Share-Based Payment Arrangement, Noncash Expense DefinedA benefit and other postretirement plansA Accumulated Defined Benefit Plans Adjustment Attributable to Parent [Member] Joint venture depreciation, amortization and interest Equity Method Investment Amortization Expense Equity Method Investment Amortization Expense Provision for income taxes Tax expense Income Tax Expense (Benefit) Interest cost Defined Benefit Plan, Interest Cost Current notional amount of instruments in effect Notional amount Derivative, Notional Amount Defined Benefit Plan, Net Periodic Expense (Benefit) Defined Benefit Plan, Net Periodic Benefit Cost (Credit) [Abstract] Interest rate caps Interest rate caps Derivative Asset Cash paid during the period for: Supplemental Cash Flow Information [Abstract] Unrecognized stock-based compensation expense, period for recognition Share-Based Payment Arrangement, Nonvested Award, Cost Not yet Recognized, Period for Recognition Sales Revenue from Contract with Customer, Excluding Assessed Tax Revenue from Contract with Customer, Excluding Assessed Tax Effect of Derivative Instruments Designated as Hedges on Other Comprehensive Income Derivative Instruments, Gain (Loss) [Table Text Block] Other expense, net Other (expense) income Nonoperating Income (Expense) Reclassification out of Accumulated Other Comprehensive Income [Domain] Reclassification out of Accumulated Other Comprehensive Income [Domain] Statement of Comprehensive Income [Abstract] Statement of Comprehensive Income [Abstract] Number of instruments Derivative, Number of Instruments Held Effective income tax rate Effective Income Tax Rate Reconciliation, Percent Net cash used in investing activities Net Cash Provided by (Used in) Investing Activities Operating income Operating income Operating Income (Loss) Interest expense, net Interest Expense, Operating and Nonoperating Variable Rate [Domain] Variable Rate [Domain] Business Combination Business Acquisition [Line Items] Total liabilities and equity Liabilities and Equity Other, net Other Operating Activities, Cash Flow Statement Subsequent Events Subsequent Events [Text Block] Rule 10b5-1 Arrangement Terminated Rule 10b5-1 Arrangement Terminated [Flag] All Adjustments to Compensation All Adjustments to Compensation [Member] Fair Value Hierarchy and NAV [Axis] Fair Value Hierarchy and NAV [Axis] Ownership Percentage and Summarized Income Statement Equity Method Investments [Table Text Block] Prepays and other current assets Increase (Decrease) in Prepaid Expense and Other Assets Additional paid-in capital Additional Paid in Capital Hedging Designation [Axis] Hedging Designation [Axis] Financial Instruments Derivative Instruments and Hedging Activities Disclosure [Text Block] Derivative Instruments, Gain (Loss) [Table] Derivative Instruments, Gain (Loss) [Table] Reclassification Adjustment out of Accumulated Other Comprehensive Income [Line Items] Reclassification Adjustment out of Accumulated Other Comprehensive Income [Line Items] Other Comprehensive Income (Loss) [Line Items] Accumulated Other Comprehensive Income (Loss) [Line Items] Accumulated Other Comprehensive Income (Loss) [Line Items] Commitments and Contingencies Disclosure [Abstract] Commitments and Contingencies Disclosure [Abstract] Operating leases Right-of-Use Asset Obtained in Exchange for Operating Lease Liability Underlying Security Market Price Change Underlying Security Market Price Change, Percent Expected return on plan assets Defined Benefit Plan, Expected Return (Loss) on Plan Assets Individual: Individual [Axis] Related Party Transaction [Axis] Related Party Transaction [Axis] Buildings and improvements Building and Building Improvements [Member] Tax withholdings on equity award vesting Fair value of shares withheld for tax payments Share-Based Payment Arrangement, Decrease for Tax Withholding Obligation Accumulated other comprehensive income TotalA AOCI Attributable to Parent [Member] Number of instruments in effect Derivative, Number of Instruments in Effect Derivative, Number of Instruments in Effect Net (loss) gain from hedging activities Gain (Loss) on cash flow hedging relationships: Accumulated Gain (Loss), Net, Cash Flow Hedge, Parent [Member] Inventories, net Inventories, net Inventory, Net Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions and Methodology [Abstract] Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions and Methodology [Abstract] Long-term Debt, Type [Domain] Long-Term Debt, Type [Domain] Product and Service [Axis] Product and Service [Axis] Entity Address, State or Province Entity Address, State or Province Property, Plant and Equipment Property, Plant and Equipment [Line Items] Statement [Line Items] Statement [Line Items] Derivative Instruments and Hedging Activities Disclosure [Abstract] Derivative Instruments and Hedging Activities Disclosure [Abstract] Schedule of Equity Method Investments [Line Items] Schedule of Equity Method Investments [Line Items] Erroneous Compensation Analysis Erroneous Compensation Analysis [Text Block] Reconciliation of Net Income to Segment Adjusted EBITDA Reconciliation of Operating Profit (Loss) from Segments to Consolidated [Table Text Block] Defined Benefit Plan Disclosure Defined Benefit Plan Disclosure [Line Items] Equity, Class of Treasury Stock [Line Items] Equity, Class of Treasury Stock [Line Items] Summary of Property, Plant and Equipment Property, Plant and Equipment [Table Text Block] Compensation Actually Paid vs. Total Shareholder Return Compensation Actually Paid vs. Total Shareholder Return [Text Block] Nonvested, beginning balance (in dollars per share) Nonvested, ending balance (in dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value Derivative, cap interest rate Derivative, Cap Interest Rate Anti-dilutive RSUs and PSUs Restricted Stock, Restricted Stock Units (RSUs) and Performance Stock Units (PSUs) [Member] Includes the following: (1) Restricted Stock - stock including a provision that prohibits sale or substantive sale of an equity instrument for a specified period of time or until specified performance conditions are met; and (2) Restricted Stock Units (RSUs) and Performance Stock Units (PSUs) - share instrument which is convertible to stock or an equivalent amount of cash, after a specified period of time or when specified performance conditions are met. Components of Net Periodic Expense (Benefit) Schedule of Net Benefit Costs [Table Text Block] Minimum Minimum [Member] Restatement Determination Date Restatement Determination Date Adoption Date Trading Arrangement Adoption Date Pay vs Performance Disclosure Pay vs Performance Disclosure [Table] Related Party Transactions [Abstract] Property, Plant and Equipment [Table] Property, Plant and Equipment [Table] 2021 Term Loan Facility 2021 Term Loan Facility [Member] 2021 Term Loan Facility Right-of-use lease assets Operating Lease, Right-of-Use Asset Erroneously Awarded Compensation Recovery Erroneously Awarded Compensation Recovery [Table] Derivative Instruments, Gain (Loss) [Line Items] Derivative Instruments, Gain (Loss) [Line Items] Amortization of investment in affiliate step-up Amortization of investment in affiliate step-up Equity Method Investments Charges Related to Purchase Accounting Equity Method Investments Charges Related to Purchase Accounting Segments [Axis] Segments [Axis] Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year [Member] Derivative Instrument [Axis] Derivative Instrument [Axis] Stock Repurchase Program 2022 Stock Repurchase Program 2022 [Member] Stock Repurchase Program 2022 Property, Plant and Equipment [Abstract] Property, Plant and Equipment [Abstract] Total debt Long-Term Debt, Gross Exercise Price Award Exercise Price Net prior service cost Accumulated Defined Benefit Plans Adjustment, Net Prior Service Attributable to Parent [Member] Earnings per Share Earnings Per Share [Text Block] Arrangement Duration Trading Arrangement Duration Cash Flow Hedge Impact on Income Statement Schedule of Cash Flow Hedges Included in Accumulated Other Comprehensive Income (Loss) [Table Text Block] Subsequent Event Subsequent Event [Member] Granted, weighted average grant date fair value (in dollars per share) Granted (in dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Weighted Average Grant Date Fair Value Peer Group Issuers, Footnote Peer Group Issuers, Footnote [Text Block] Segments [Domain] Segments [Domain] Material Terms of Trading Arrangement Material Terms of Trading Arrangement [Text Block] Excise tax Share Repurchase Program, Excise Tax Debt extinguishment costs Debt Extinguishment Costs Debt extinguishment and prepayment costs on debt extinguished prior to maturity, including the write-off of associated debt issuance costs and discounts. All Individuals All Individuals [Member] Polyethylene, polymers & engineered plastics Polymers & Engineered Plastics [Member] Polymers & Engineered Plastics [Member] PEO PEO [Member] Variable Rate [Axis] Variable Rate [Axis] Income Tax Disclosure [Abstract] Income Tax Disclosure [Abstract] Name Trading Arrangement, Individual Name Other Other Nonoperating Income (Expense) Other Postretirement Benefits Plan Other Postretirement Benefits Plan [Member] Statement of Stockholders' Equity [Abstract] Statement of Stockholders' Equity [Abstract] Other intangible assets, net Intangible Assets, Net (Excluding Goodwill) Fair Values Derivatives, Balance Sheet Location, by Derivative Contract Type [Table] Fair Values Derivatives, Balance Sheet Location, by Derivative Contract Type [Table] Property, Plant and Equipment, Type [Axis] Long-Lived Tangible Asset [Axis] Unrecognized stock-based compensation expense Share-Based Payment Arrangement, Nonvested Award, Excluding Option, Cost Not yet Recognized, Amount Treasury stock, at cost; shares 24,406,614 and 24,627,150 on June 30, 2024 and December 31, 2023, respectively Treasury Stock, Common, Value Equity in net (income) from affiliated companies Equity in net income from affiliated companies Equity in net income from affiliated companies Income (Loss) from Equity Method Investments 2021 Grants 2021 Grants [Member] 2021 Grants Variable Rate Component [Domain] Variable Rate Component [Domain] Variable Rate Component [Domain] Other operating expense, net Total other operating expense, net Operating Costs and Expenses Awards Close in Time to MNPI Disclosures, Table Awards Close in Time to MNPI Disclosures [Table Text Block] Derivative assets: Assets, Fair Value Disclosure [Abstract] Prior Year End Fair Value of Equity Awards Granted in Any Prior Year that Fail to Meet Applicable Vesting Conditions During Covered Year Prior Year End Fair Value of Equity Awards Granted in Any Prior Year that Fail to Meet Applicable Vesting Conditions During Covered Year [Member] Related Party, Type [Domain] Related and Nonrelated Parties [Domain] Percentage of fair value in excess of carrying amount Reporting Unit, Percentage of Fair Value in Excess of Carrying Amount Aggregate Erroneous Compensation Amount Aggregate Erroneous Compensation Amount Other, net Other (Income) Expense, Net Other (Income) Expense, Net Local Phone Number Local Phone Number Aggregate Erroneous Compensation Not Yet Determined Aggregate Erroneous Compensation Not Yet Determined [Text Block] Summary Financial Information by Reportable Segment Reconciliation of Revenue from Segments to Consolidated [Table Text Block] Deferred income taxes Deferred Income Tax Liabilities, Net Schedule of Equity Method Investments [Table] Equity Method Investment [Table] Interest (expense) income Interest Expense [Member] Award requisite service period (in years) Share-Based Compensation Arrangement by Share-Based Payment Award, Award Requisite Service Period Working capital changes that used cash: Increase (Decrease) in Operating Capital [Abstract] Secured Overnight Financing Rate (SOFR) Secured Overnight Financing Rate (SOFR) [Member] PEO Total Compensation Amount PEO Total Compensation Amount Right-of-use assets obtained in exchange for new lease liabilities (non-cash): Other Noncash Investing and Financing Items [Abstract] Non-cash investing activity: Non cash Investing Items [Abstract] Non cash Investing Items Property, Plant and Equipment, Type [Domain] Long-Lived Tangible Asset [Domain] Income Statement Location [Axis] Statement of Income Location, Balance [Axis] Pre-tax amount Other Comprehensive Income (Loss), before Tax, Portion Attributable to Parent Unamortized discount, write off Debt Instrument, Unamortized Discount, Write Off Debt Instrument, Unamortized Discount, Write Off Share Repurchase Program [Domain] Share Repurchase Program [Domain] Commitments and Contingent Liabilities Commitments and Contingencies Disclosure [Text Block] Sales from Partnership to Company Sales from Partnership to Company [Member] Sales from Partnership to Company [Member] Debt Disclosure [Abstract] Debt Disclosure [Abstract] Common stock Common Stock [Member] Measure: Measure [Axis] Shares issued under equity incentive plan, net of forfeitures Shares Issued, Value, Share-Based Payment Arrangement, after Forfeiture Preferred stock, authorized shares (in shares) Preferred Stock, Shares Authorized Forgone Recovery due to Expense of Enforcement, Amount Forgone Recovery due to Expense of Enforcement, Amount Schedule of Business Acquisitions, by Acquisition [Table] Schedule of Business Acquisitions, by Acquisition [Table] ABL Facility Line of Credit [Member] Entity Emerging Growth Company Entity Emerging Growth Company Segment Reporting [Abstract] Segment Reporting [Abstract] Shares withheld for tax withholding obligation (in shares) Share-Based Payment Arrangement, Shares Withheld for Tax Withholding Obligation Entity Central Index Key Entity Central Index Key Inventories, Net Schedule of Inventory, Current [Table Text Block] Equity Method Investments and Joint Ventures [Abstract] Equity Method Investments and Joint Ventures [Abstract] Non-GAAP Measure Description Non-GAAP Measure Description [Text Block] Foreign currency translation Foreign currency translationA Accumulated Foreign Currency Adjustment Attributable to Parent [Member] Zeolyst C.V. Zeolyst C.V. [Member] Zeolyst C.V. [Member] Non-PEO NEO Average Compensation Actually Paid Amount Non-PEO NEO Average Compensation Actually Paid Amount

Stockholders' Equity [Text Block] Award Timing, How MNPI Considered Award Timing, How MNPI Considered [Text Block] Equity Component [Domain] Equity Component [Domain] Preferred stock, par (in dollars per share) Preferred Stock, Par or Stated Value Per Share Reportable Segments Segment Reporting Disclosure [Text Block] Current maturities of long-term debt Less: current portion Long-Term Debt, Current Maturities Class of Treasury Stock [Table] Class of Treasury Stock [Table] Net gain Accumulated Defined Benefit Plans Adjustment, Net Gain (Loss) Attributable to Parent [Member] Additional 402(v) Disclosure Additional 402(v) Disclosure [Text Block] New Accounting Standards Accounting Standards Update and Change in Accounting Principle [Text Block] Stock compensation expense APIC, Share-Based Payment Arrangement, Increase for Cost Recognition RSAs with performance only targets not achieved Restricted Stock [Member] Entity Shell Company Entity Shell Company Employee [Member] Employee [Member] Entity Incorporation, State or Country Code Entity Incorporation, State or Country Code Title Trading Arrangement, Individual Title Statement [Table] Statement [Table] Counterparty Name [Axis] Counterparty Name [Axis] Measurement Frequency [Domain] Measurement Frequency [Domain] Valued at lower of cost and net realizable value: Valued at Lower of Cost and Net Realizable Value [Abstract] Valued at Lower of Cost and Net Realizable Value [Abstract] City Area Code City Area Code Stock repurchase program, period (in years) Share Repurchase Program, Period in Force Interest Interest Paid, Excluding Capitalized Interest, Operating Activities Derivative Asset, Current, Statement of Financial Position [Extensible Enumeration] Derivative Asset, Current, Statement of Financial Position [Extensible Enumeration] Insider Trading Policies and Procedures Not Adopted Insider Trading Policies and Procedures Not Adopted [Text Block] Quoted Prices in Active Markets (Level 1) Fair Value, Inputs, Level 1 [Member] Net loss on asset disposals Net (gain) loss on asset disposals Gain (Loss) on Disposition of Assets Total current assets Assets, Current Statement of Cash Flows [Abstract] Statement of Cash Flows [Abstract] Derivative assets Derivative Asset, Subject to Master Netting Arrangement, before Offset of Collateral [Abstract] Accrued liabilities Increase (Decrease) in Accrued Liabilities Repurchases of common shares Payments for Repurchase of Common Stock Schedule of Long-term Debt Instruments [Table] Schedule of Long-Term Debt Instruments [Table] Long-term debt, excluding current portion Total long-term debt, excluding current portion Long-Term Debt, Excluding Current Maturities Accrued excise tax on share repurchases (Note 5) Excise Taxes Payable Excise Taxes Payable Weighted average grant date fair value (per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value [Abstract] Accumulated Other Comprehensive Income (Loss) [Table] Accumulated Other Comprehensive Income (Loss) [Table] Subsequent Event Type [Axis] Subsequent Event Type [Axis] Income Taxes Income Tax Disclosure [Text Block] Net income per share: Earnings Per Share [Abstract] Equity [Abstract] Equity [Abstract] Raw materials Inventory, Raw Materials, Net of Reserves Accumulated deficit Retained Earnings (Accumulated Deficit) Reclassifications out of Accumulated Other Comprehensive Income Reclassification out of Accumulated Other Comprehensive Income [Table Text Block] Award requisite performance period Share-Based Compensation Arrangement By Share-Based Payment Award, Award Requisite Performance Period Share-Based Compensation Arrangement By Share-Based Payment Award, Award Requisite Performance Period Amount of derivative loss expected to be transferred from OCI Cash Flow Hedge Gain (Loss) to be Reclassified within 12 Months Related Party Transaction [Line Items] Related Party Transaction [Line Items] Inventories Increase (Decrease) in Inventories Repayments of revolving credit facilities Repayments of Long-Term Lines of Credit Supplemental Cash Flow Elements [Abstract] Supplemental Cash Flow Elements [Abstract] Organization, Consolidation and Presentation of Financial Statements [Abstract] Organization, Consolidation and Presentation of Financial Statements [Abstract] Aggregate Available Trading Arrangement, Securities Aggregate Available Amount Equity Awards Adjustments Equity Awards Adjustments [Member] Expected dividend yield Performance Stock Unit, Fair Value Assumptions, Expected Dividend Rate Performance Stock Unit, Fair Value Assumptions, Expected Dividend Rate Net cash used in financing activities Net Cash Provided by (Used in) Financing Activities Underlying Securities Award Underlying Securities Amount Performance Stock Units (PSUs) Stock options with performance only targets not achieved Performance Shares [Member] Amendment Flag Amendment Flag Adjusted EBITDA from reportable segments Adjusted Earnings Before Interest Taxes Depreciation And Amortization Adjusted Earnings Before Interest Taxes Depreciation And Amortization Long-term debt, fair value Long-Term Debt, Fair Value Entity Registrant Name Entity Registrant Name Adjustment to Non-PEO NEO Compensation Footnote Adjustment to Non-PEO NEO Compensation Footnote [Text Block] Stock Appreciation Rights (SARs) Stock Appreciation Rights (SARs) [Member] Depreciation and amortization Depreciation, Depletion and Amortization Gross profit Gross profit Gross Profit Reclassification out of Accumulated Other Comprehensive Income [Axis] Reclassification out of Accumulated Other Comprehensive Income [Axis] Equity Method Investment, Nonconsolidated Investee Equity Method Investment, Nonconsolidated Investee or Group of Investees [Member] Foreign currency translation Other Comprehensive Income (Loss), Foreign Currency Transaction and Translation Adjustment, Net of Tax, Portion Attributable to Parent Machinery and equipment Machinery and Equipment [Member] Fair Value as of Grant Date Award Grant Date Fair Value Subsequent Events [Abstract] Subsequent Events [Abstract] Supplemental Cash Flow Information Cash Flow, Supplemental Disclosures [Text Block] Deferred financing costs Debt Issuance Costs, Net Significant Other Observable Inputs (Level 2) Fair Value, Inputs, Level 2 [Member] Fair Value Hierarchy and NAV [Domain] Fair Value Hierarchy and NAV [Domain] EQUITY Equity, Including Portion Attributable to Noncontrolling Interest [Abstract] Amortization Adjustment For Amortization Expense The aggregate amount of recurring noncash expense charged against earnings in the period to allocate the cost of assets over their estimated remaining economic lives, excluding the amount of amortization expense attributable to debt discount (premium) and debt issuance costs. Recovery of Erroneously Awarded Compensation Disclosure [Line Items] Disaggregation of Revenue Disaggregation of Revenue [Table Text Block] Derivative liability, noncurrent Derivative Liability, Noncurrent Entity Address, Postal Zip Code Entity Address, Postal Zip Code Restatement Determination Date: Restatement Determination Date [Axis] Title of 12(b) Security Title of 12(b) Security Common stock (\$0.01 par); authorized shares 450,000,000; issued shares 140,872,846 and 140,744,045 on June 30, 2024 and December 31, 2023, respectively, outstanding shares 116,466,232 and 116,116,895 on June 30, 2024 and December 31, 2023, respectively Common Stock, Value, Issued Share-based Compensation Arrangement by Share-based Payment Award Share-Based Payment Arrangement [Abstract] Zeolyst International Zeolyst International [Member] Zeolyst International [Member] Cash and cash equivalents Cash and Cash Equivalents, at Carrying Value Other, net Payments for (Proceeds from) Other Investing Activities Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested [Member] Corporate Joint Venture Corporate Joint Venture [Member] Forfeited (in dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Forfeitures, Weighted Average Grant Date Fair Value Debt extinguishment costs Debt extinguishment costs Gain (Loss) on Extinguishment of Debt Cash flows from financing activities: Net Cash Provided by (Used in) Financing Activities [Abstract] Year-end Fair Value of Equity Awards Granted in Covered Year that are Outstanding and Unvested Year-end Fair Value of Equity Awards Granted in Covered Year that are Outstanding and Unvested [Member] Summary of Other Operating Expense, Net Schedule of Other Operating Cost and Expense, by Component [Table Text Block] Preferred stock (\$0.01 par); authorized shares 50,000,000; no shares issued or outstanding on June 30, 2024 and December 31, 2023 Preferred Stock, Value, Issued Basic income per share (in dollars per share) Earnings Per Share, Basic Expected term (in years) Performance Stock Unit, Fair Value Assumptions, Expected Term Performance Stock Unit, Fair Value Assumptions, Expected Term Equity Method Investment, Nonconsolidated Investee [Axis] Equity Method Investment, Nonconsolidated Investee [Axis] Accounts payable Increase (Decrease) in Accounts Payable Adjustment to PEO Compensation, Footnote Adjustment to PEO Compensation, Footnote [Text Block] Award Timing MNPI Disclosure Award Timing MNPI Disclosure [Text Block] Total Shareholder Return (TSR) Total Shareholder Return (TSR) [Member] Total Shareholder Return (TSR) Foreign currency exchange loss (gain) Realized Gain (Loss), Foreign Currency Transaction, before Tax Repayment of financing obligation Finance Lease, Principal Payments Capital expenditures acquired on account but unpaid as of the period end Capital Expenditures Incurred but Not yet Paid Aggregate Pension Adjustments Service Cost Aggregate Pension Adjustments Service Cost [Member] Schedule of Goodwill [Table] Goodwill [Table] Derivatives designated as hedging instrument Designated as Hedging Instrument [Member] 2024 Term Loan Facility 2024 Term Loan Facility [Member] 2024 Term Loan Facility Excise tax on repurchases of common shares Excise Tax on Treasury Stock Repurchased Excise Tax on Treasury Stock Repurchased Compensation Actually Paid vs. Other Measure Compensation Actually Paid vs. Other Measure [Text Block] Total current liabilities Liabilities, Current Vesting Date Fair Value of Equity Awards Granted and Vested in Covered Year Vesting Date Fair Value of Equity Awards Granted and Vested in Covered Year [Member] Denominator: Weighted Average Number of Shares Outstanding, Diluted [Abstract] Unamortized discount, noncurrent Debt Instrument, Unamortized Discount, Noncurrent Share Repurchase Program [Axis] Share Repurchase Program [Axis] Total assets Assets Dividends received from affiliated companies Proceeds from Equity Method Investment, Distribution Finished products and work in process Inventory, Finished Goods and Work in Process, Net of Reserves LIFO (benefit) expense Inventory, LIFO Reserve, Effect on Income, Net Cost of goods sold Cost of Goods and Services Sold Equity Method Investment, Nonconsolidated Investee [Domain] Equity Method Investment, Nonconsolidated Investee [Domain] Granted (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period Unallocated corporate expenses Unallocated Corporate Expenses Unallocated Corporate Expenses Purchases of property, plant and equipment Payments to Acquire Property, Plant, and Equipment Other long-term liabilities Other Liabilities, Noncurrent Forgone Recovery due to Violation of Home Country Law, Amount Forgone Recovery due to Violation of Home Country Law, Amount Performance Stock Units Performance Stock Units [Member] Share instrument which is convertible to stock or an equivalent amount of cash when specified performance conditions are met. Commitments and contingencies (Note 15) Commitments and Contingencies Investments in Affiliated Companies Equity Method Investments and Joint Ventures Disclosure [Text Block] Termination Date Trading Arrangement Termination Date Schedule of Related Party Transactions, by Related Party [Table] Related Party Transaction [Table] Amount of gain (loss) AOCI into income Derivative Instruments, Gain (Loss) Reclassified from Accumulated OCI into Income, Effective Portion, Net [Abstract] Sales Revenues Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items] Stock-Based Compensation Share-Based Payment Arrangement [Text Block] Derivative Liability, Noncurrent, Statement of Financial Position [Extensible Enumeration] Derivative Liability, Noncurrent, Statement of Financial Position [Extensible Enumeration] Variable Rate Component [Axis] Variable Rate Component [Axis] Variable Rate Component Entity Address, City or Town Entity Address, City or Town Variable Rate Component Two Variable Rate Component Two [Member] Variable Rate Component Two Equity-based compensation Stock compensation expense Share-Based Payment Arrangement, Expense Net income Net income Net Income (loss) Net Income (Loss) Attributable to Parent Trading Arrangement: Trading Arrangement [Axis] Segment Reporting Segment Reporting, Revenue Reconciling Item [Line Items] Credit spread adjustment Debt Instrument, Basis Spread On Variable Rate, Spread Adjustment Debt Instrument, Basis Spread On Variable Rate, Spread Adjustment Pay vs Performance Disclosure, Table Pay vs Performance [Table Text Block] Forfeited (in shares) Forfeited, performance-based restricted shares (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Forfeited in Period Business Acquisition [Axis] Business Acquisition [Axis] Equity Awards Adjustments, Excluding Value Reported in Compensation Table Equity Awards Adjustments, Excluding Value Reported in the Compensation Table [Member] Dividends or Other Earnings Paid on Equity Awards not Otherwise Reflected in Total Compensation for Covered Year Dividends or Other Earnings Paid on Equity Awards not Otherwise Reflected in Total Compensation for Covered Year [Member] Entity File Number Entity File Number Company Performance Measure Company Performance Measure [Member] Company Performance Measure Revenue from Contracts with Customers Revenue from Contract with Customer [Text Block] Document Fiscal Year Focus Document Fiscal Year Focus Income Statement [Abstract] Income Statement [Abstract] Entity Address, Address Line One Entity Address, Address Line One Repurchases of common shares Repurchases of common shares Treasury Stock, Value, Acquired, Cost Method Weighted average shares outstanding: Weighted Average Number of Shares Outstanding Reconciliation [Abstract] Effect of exchange rate changes on cash and cash equivalents Effect of Exchange Rate on Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Continuing Operations Name Forgone Recovery, Individual Name Award Date [Domain] Award Date [Domain] Document Period End Date Document Period End Date Award Timing MNPI Considered Award Timing MNPI Considered [Flag] Base Rate Base Rate [Member] Nonvested, beginning balance (in shares) Nonvested, ending balance (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Number Granted, percentage of target Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Percentage Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Percentage Insider Trading Arrangements [Line Items] Inventory Disclosure [Abstract] Inventory Disclosure [Abstract] Outstanding Aggregate Erroneous Compensation Amount Outstanding Aggregate Erroneous Compensation Amount PEO Actually Paid Compensation Amount PEO Actually Paid Compensation Amount Purchases from related party Related Party Transaction, Purchases from Related Party Valued at lower of cost or market: LIFO Method Related Items [Abstract] Clean fuels, emission control & other Clean Fuels, Emission Control & Other [Member] Clean Fuels, Emission Control & Other [Member] Adjustment to Compensation: Adjustment to Compensation [Axis] Prepaid and other current assets Prepaid Expense and Other Assets, Current Document Transition Report Document Transition Report Manufacturing Costs Manufacturing Costs [Member] Manufacturing Costs [Member] Document Quarterly Report Document Quarterly Report Restructuring, integration and business optimization costs Restructuring, integration and business optimization expenses Business Optimization, Integration, Restructuring and Other Related Costs Business Optimization, Integration, Restructuring and Other Related Costs Product Demonstration Costs Product Demonstration Costs [Member] Product Demonstration Costs [Member] Pension and postretirement benefits Other Comprehensive (Income) Loss, Defined Benefit Plan, after Tax and Reclassification Adjustment, Attributable to Parent Fair Value, Recurring and Nonrecurring [Table] Fair Value, Recurring and Nonrecurring [Table] Accumulated other comprehensive loss Accumulated Other Comprehensive Income (Loss), Net of Tax Entity Current Reporting Status Entity Current Reporting Status (Accumulated deficit) Retained Earnings [Member] Pension Adjustments Service Cost Pension Adjustments Service Cost [Member] Related Party, Type [Axis] Related and Nonrelated Parties [Axis] Basic (in shares) Weighted average shares outstanding â€” Basic (in shares) Weighted Average Number of Shares Outstanding, Basic Stock Price or TSR Estimation Method Stock Price or TSR Estimation Method [Text Block] Restricted Stock Units Restricted Stock Units (RSUs) [Member] Amortization of deferred financing costs and original issue discount Amortization of Debt Issuance Costs and Discounts Increase (Decrease) in Stockholders' Equity [Roll Forward] Increase (Decrease) in Stockholders' Equity [Roll Forward] Executive Category: Executive Category [Axis] Transaction and other related costs Transaction and other related costs Transaction and Other Related Costs Transaction and Other Related Costs Name Awards Close in Time to MNPI Disclosures, Individual Name Construction in progress Construction in Progress [Member] Entity Filer Category Entity Filer Category Amounts reclassified from accumulated other comprehensive income Reclassification from AOCI, Current Period, Net of Tax, Attributable to Parent Income Statement Location [Domain] Statement of Income Location, Balance [Domain] Net (loss) gain from hedging activities Other Comprehensive Income (Loss), Cash Flow Hedge, Gain (Loss), after Reclassification and Tax, Parent Company Selected Measure Name Company Selected Measure Name EX-101.PRE 10 ecvt-20240630_pre.xml XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE DOCUMENT XML 12 R1.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Cover Page - shares 6 Months Ended Jun. 30, 2024 Jul. 26, 2024 Cover [Abstract] A Document Type 10-Q A Document Quarterly Report true A Document Period End Date Jun. 30, 2024 A Document Transition Report false A Entity File Number 001-38221 A Entity Registrant Name Ecovyst Inc. A Entity Incorporation, State or Country Code DE A Entity Tax Identification Number 81-3406833 A Entity Address, Address Line One 300 Lindenwood Drive A Entity Address, City or Town Malvern A Entity Address, State or Province PA A Entity Address, Postal Zip Code 19355 A City Area Code (484) A Local Phone Number 617-1200 A Title of 12(b) Security Common stock, par value \$0.01 per share A Trading Symbol ECVT A Security Exchange Name NYSE A Entity Current Reporting Status Yes A Entity Interactive Data Current Yes A Entity Filer Category Large Accelerated Filer A Entity Small Business false A Entity Emerging Growth Company false A Entity Shell Company false A Entity Common Stock, Shares Outstanding A 116,466,232 Entity Central Index Key 0001708035 A Current Fiscal Year End Date -12-31 A Document Fiscal Year Focus 2024 A Document Fiscal Period Focus Q2 A Amendment Flag false A X - Definition Boolean flag that is true when the XBRL content amends previously-filed or accepted submission. + References No definition available. + Details Name: dei AmendmentFlag Namespace Prefix: dei Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - Definition Area code of city + References No definition available. + Details Name: dei CityAreaCode Namespace Prefix: dei Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - Definition Cover page. + References No definition available. + Details Name: dei CoverAbstract Namespace Prefix: dei Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Definition End date of current fiscal year in the format --MM-DD. + References No definition available. + Details Name: dei CurrentFiscalYearEndDate Namespace Prefix: dei Data Type: xbrli:MonthDayItemType Balance Type: na Period Type: duration X - Definition Fiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT

Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI

50 -Paragraph 18 -Subparagraph (b) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481112/505-10-50-18>Reference 19: [http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24](http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18 + Details Name: us-gaap StockholdersEquityNoteDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 24 R13.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Goodwill 6 Months Ended Jun. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] A Goodwill 6. Goodwill:The change in the carrying amount of goodwill for the six months ended June 30, 2024 is summarized as follows:Â EcoservicesAdvanced Materials & CatalystsTotalBalance as of December 31, 2023$326,589Â $77,881Â $404,470Â Foreign exchange impactâ€¢Â (195)195Balance as of June 30, 2024$326,589Â $77,686Â $404,275Â A Â The Company completes its annual goodwill and indefinite-lived intangible assets impairment test during the fourth quarter of each year, or more frequently if triggering events indicate a possible impairment. The Company determines the fair value of its reporting units using both a market approach and an income, or discounted cash flow, approach. As of October 1, 2023, the date of the Companyâ€¢™s most recent quantitative assessments, the fair values of each of the Companyâ€¢™s reporting units and the fair values of the Companyâ€¢™s indefinite-lived trade names and trademarks exceeded their respective carrying values.During the six months ended June 30, 2024, the Company did not identify any events or circumstances that would more likely than not reduce the fair value of the Company's reporting units below their respective carrying values.Although the estimated fair value of the Advanced Materials & Catalysts reporting unit exceeded its carrying value on October 1, 2023 by over 30%, the Company has experienced unfavorable effects on current operations resulting from certain macroeconomic and industry factors in specific end uses during the six months ended June 30, 2024. Prolonged unfavorable effects could adversely impact the estimated fair value of the Advanced Materials & Catalysts reporting unit in future periods and may result in impairment charges. X - ReferencesNo definition available. + Details Name: us-gaap GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for goodwill. + ReferencesReference 1: <a href=)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-2>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478156/740-323-50-2](http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/330/tableOfContent + Details Name: us-gaap InventoryDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 27 R16.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Investments in Affiliated Companies 9. Investments in Affiliated Companies:The Company accounts for investments in affiliated companies under the equity method. Affiliated companies accounted for on the equity basis as of June 30, 2024 are as follows:CompanyCountryPercentownershipZeolyst International USA50%Zeolyst C.V.Netherlands50%Following is summarized information of the combined investments(1):Three months endedJune 30,Six months endedJune 30,2024202320242023Sales$70,644Â $99,188Â $127,505Â $155,085Â Gross profit16,751Â 34,461Â 33,929Â 44,571Â Operating income$5,739Â 25,103Â 12,583Â 27,502Â Net income$4,665Â 25,926Â 12,010Â 29,573Â (1)Summarized information of the combined investments is presented at 100%; the Companyâ€¢™s share of the net assets and net income of affiliates is calculated based on the percent ownership specified in the table above.The Companyâ€¢™s investments in affiliated companies balance as of June 30, 2024 and December 31, 2023 includes net purchase accounting fair value adjustments of $222,073 and $224,614, respectively, related to a prior business combination, consisting primarily of goodwill and intangible assets such as customer relationships, technical know-how and trade names. Consolidated equity in net income from affiliates is net of $940 and $2,541 of amortization expense related to purchase accounting fair value adjustments for the three and six months ended June 30, 2024, respectively. Consolidated equity in net income from affiliates is net of $1,601 and $3,201 of amortization expense related to purchase accounting fair value adjustments for the three and six months ended June 30, 2023, respectively.The Company had receivables due from affiliates of $5,018 and $3,231 as of June 30, 2024 and December 31, 2023, respectively, which were included in prepaid and other current assets in the condensed consolidated balance sheets. The Company had payables from affiliates of $2,859 and $1,351 as of June 30, 2024 and December 31, 2023, which were included in accrued liabilities in the condensed consolidated balance sheets. Receivables and payables due from affiliates are generally non-trade.Sales to affiliates were $2,110 for the three and six months ended June 30, 2024, respectively and $757 and $2,457 for the three and six months ended June 30, 2023, respectively. There were no purchases from affiliates for the three and six months ended June 30, 2024 and 2023, respectively. X - ReferencesNo definition available. + Details Name: us-gaap EquityMethodInvestmentsAndJointVenturesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for equity method investments and joint ventures. Equity method investments are investments that give the investor the ability to exercise significant influence over the operating and financial policies of an investee. Joint ventures are entities owned and operated by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group. + ReferencesReference 1: <a href=)Reference 2: [http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph \(a\)\(3\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3](http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3)Reference 3: [http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Topic 323 -Publisher FASB -URI https://asc.fasb.org/323/tableOfContent + Details Name: us-gaap EquityMethodInvestmentsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 28 R17.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Property, Plant and Equipment 6 Months Ended Jun. 30, 2024 Property, Plant and Equipment \[Abstract\] A Property, Plant and Equipment 10. Property, Plant and Equipment:Â Summary of property, plant and equipment, at cost, and related accumulated depreciation is as follows: June 30,2024December 31,2023Land \\$96,807Â \\$96,833Â Buildings and improvements92,085Â 84,860Â Machinery and equipment 851,706Â 820,509Â Construction in progress 35,620Â 42,000Â 1,076,218Â 1,044,202Â Less: accumulated depreciation \(502,659\) \(467,298\)\\$573,559Â \\$576,904Â Depreciation expense was \\$18,108 and \\$36,523 for the three and six months ended June 30, 2024, respectively. Depreciation expense was \\$17,455 and \\$34,147 for the three and six months ended June 30, 2023, respectively. X - ReferencesNo definition available. + Details Name: us-gaap PropertyPlantAndEquipmentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for long-lived, physical asset used in normal conduct of business and not intended for resale. Includes, but is not limited to, work of art, historical treasure, and similar asset classified as collections. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/360/tableOfContent>Reference 2: <http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 6 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-6>Reference 3: \[http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \\(d\\) -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-1\]\(http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \(d\) -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-1\)Reference 4:](http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3)

the Companyâ€™s derivative instruments designated as cash flow hedges on AOCI for the three and six months ended June 30, 2024 and 2023, respectively:Three months ended June 30,20242023Location of gain (loss) reclassified from AOCI into incomeAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss)Â reclassified from AOCI into income\$3,229Â \$(4,662)\$18,246\$ 11,187Â Six months ended June 30,20242023Location of gain (loss) reclassified from AOCI into incomeAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss) reclassified from AOCI into incomeAmount of gain (loss)Â recognizedÂ in OCI on derivativesAmount of gain (loss) reclassified from AOCI into incomeInterest rate capsInterest (expense) income\$13,037Â \$(9,318)\$8,641Â \$11,885Â The following table shows the effect of the Companyâ€™s cash flow hedge accounting on the condensed consolidated statements of income for the three and six months ended June 30, 2024 and 2023, respectively:Location and amount of gain (loss) recognized in income on cash flow hedging relationshipsThree months endedJune 30, Six months endedJune 30,2024202320242023Total amounts of income and expense line items presented in the statement of income in which the effects of cash flow hedges are recorded in interest (expense) income\$(12,895)\$(9,168)\$(26,304)\$(19,000)The effects of cash flow hedging:Gain (loss) on cash flow hedging relationships:Interest contracts:Amount reclassified from AOCI into income4,662Â 11,187Â 9,318Â 11,885Â The amount of unrealized losses in AOCI related to the Companyâ€™s cash flow hedges that is expected to be reclassified to the condensed consolidated statement of income over the next twelve months is \$8,700 as of June 30, 2024. X - ReferencesNo definition available. + Details Name: us-gaap_DerivativeInstrumentsAndHedgingActivitiesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for derivative instruments and hedging activities including, but not limited to, risk management strategies, non-hedging derivative instruments, assets, liabilities, revenue and expenses, and methodologies and assumptions used in determining the amounts. + ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 50-Paragraph 5-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480237/815-40-50-5](http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 50-Paragraph 5-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480237/815-40-50-5)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 5C-Publisher FASB-URI https://asc.fasb.org/1943274/2147482663/740-10-50-5C>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-12](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 815-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/815/tableOfContent+Details Name: us-gaap_DerivativeInstrumentsAndHedgingActivitiesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 31 R20.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Income Taxes 6 Months Ended Jun. 30, 2024 Income Tax Disclosure [Abstract] Â Income Taxes 13. Income Taxes:The effective income tax rate for the three months ended June 30, 2024 was 27.1%, compared to 25.2% for the three months ended June 30, 2023. The effective income tax rate for the six months ended June 30, 2024 was 30.9%, compared to 28.3% for the six months ended June 30, 2023. The Companyâ€™s effective income tax rates for the three and six months ended June 30, 2024 and 2023, respectively, fluctuated primarily due to the increased discrete tax impact relative to pre-tax book income related to a stock compensation shortfall and tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.The difference between the U.S. federal statutory income tax rate and the Companyâ€™s effective income tax rate for the six months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.The difference between the U.S. federal statutory income tax rate and the Companyâ€™s effective income tax rate for the six months ended June 30, 2023 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation, a discrete tax expense associated with the recording of accrued penalties and interest associated with historical uncertain tax positions, and a discrete tax benefit connected to state and local tax law changes. X - ReferencesNo definition available. + Details Name: us-gaap_IncomeTaxDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for income tax. + ReferencesReference 1: <a href=)Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 231-Publisher FASB-URI https://asc.fasb.org/1943274/2147482663/740-10-55-231>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12C-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-12C>Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12B-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-12B>Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 270-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147477891/740-270-50-1>Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6.1.5.Q1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6.1.5.Q1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1)Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 13-Publisher FASB-URI https://asc.fasb.org/1943274/2147480990/946-20-50-13>Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.4-08\(h\)\(2\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.4-08(h)(2))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1)Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-14](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/740/tableOfContentReference 10: http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-14)Reference 11: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 21-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-21>Reference 12: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 17-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-17](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 17-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-17)Reference 13: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph \(SAB Topic 11.C\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479360/740-10-S99-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SAB Topic 11.C)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479360/740-10-S99-2)Reference 14: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 70-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147480794/715-70-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482603/740-50-2+Details Name: us-gaap_IncomeTaxDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 32 R21.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Benefit Plans 6 Months Ended Jun. 30, 2024 Retirement Benefits [Abstract] Â Benefit Plans 14. Benefit Plans:The following tables present the components of net periodic (benefit) expense for the Company-sponsored defined benefit pension and postretirement plans, which cover certain employees and retirees located in the U.S.Defined Benefit Pension PlansThree months endedJune 30, Six months endedJune 30,2024202320242023Interest cost$808Â $871Â $1,616Â $1,742Â Expected return on plan assets(827) (837) (1,654) (1,674) Settlement (gain) loss(6)29Â (6)29Â Net periodic (benefit) expense$(25) $63Â $(44) $97Â Other Postretirement Benefit PlanThree months endedJune 30, Six months endedJune 30,2024202320242023Interest cost$6Â $6Â $12Â $12Â Amortization of prior service credit(7) (31) (15) (62) Amortization of net gainÂ Â Â Â $1 (1) (1) Net periodic benefits(1) $(25) $(4) $(51) All components of net periodic (benefit) expense other than service cost are presented within other expense (income), net in the Companyâ€™s condensed consolidated statements of income. X - ReferencesNo definition available. + Details Name: us-gaap_CompensationAndRetirementDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for retirement benefits. + ReferencesReference 1: <a href=)Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 55-Paragraph 17-Publisher FASB-URI https://asc.fasb.org/1943274/2147480482/715-20-55-17>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(d\)\(iv\)\(03\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (d)(iv)(03)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(d\)\(i\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (d)(i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(d\)\(ii\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (d)(ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(l\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (l)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(d\)\(iii\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/715/tableOfContentReference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (d)(iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(o\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (o)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(p\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (p)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(r\)\(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (r)(1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 12: [http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(r\)\(2\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (r)(2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480506/715-20-50-1)Reference 13: <http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 20-Name Accounting Standards Codification-Section S99-Paragraph 2-Publisher FASB-URI https://asc.fasb.org/1943274/2147480126/715-20-S99-2>Reference 14: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 405-SubTopic 30-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/405-30/tableOfContentReference 2: \[http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \\(a\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482648/440-10-50-4\]\(http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482648/440-10-50-4\)Reference 3: \[http://www.xbrl.org/2009/role/commonPracticeRef-Topic 450-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/450/tableOfContentReference 4: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 954-SubTopic 440-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \\\(a\\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478522/954-440-50-1\\]\\(http://www.xbrl.org/2003/role/disclosureRef-Topic 954-SubTopic 440-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \\(a\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478522/954-440-50-1\\)Reference 5: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \\\(c\\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482648/440-10-50-4\\]\\(http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \\(c\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482648/440-10-50-4\\)Reference 6: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org/1943274/2147480990/946-20-50-2\\]\\(http://fasb.org/us-gaap/role/ref/legacyRef-Topic 440-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/440/tableOfContent+Details Name: us-gaap_CommitmentsAndContingenciesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 34 R23.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Related Party Transactions 6 Months Ended Jun. 30, 2024 Related Party Transactions \\[Abstract\\] Â Related Party Transactions 16. Related Party Transactions:The Company maintains certain policies and procedures for the review, approval and ratification of related party transactions to ensure that all transactions with selected parties are fair, reasonable and in the Companyâ€™s best interests. All significant relationships and transactions are separately identified by management if they meet the definition of a related party or a related party transaction. Related party transactions include transactions that occurred during the year, or are currently proposed, in which the Company was or will be a participant, and for which any related person had or will have a direct or indirect material interest. All related party transactions are reviewed, approved and documented by the appropriate level of the Companyâ€™s management in accordance with these policies and procedures.Joint Venture AgreementThe Company entered into a joint venture agreement \\(the â€œZI Partnership Agreementâ€\\) in 1988 with Shell Catalysts & Technologies, an affiliate of Royal Dutch Shell plc, to form Zeolyst International, a 50/50 joint venture partnership \\(the â€œPartnershipâ€\\). Under the terms of the ZI Partnership Agreement, the Partnership leases certain land used in its Kansas City production facilities from Ecovyst. This lease, which has been recorded as an operating lease, provided for rental payments to the Company of \\$78 and \\$155 for the three and six months ended June 30, 2024 and 2023, respectively. The terms of this lease are evergreen as long as the ZI Partnership Agreement is in place. The Partnership had no sales to the Company for the three and six months ended June 30, 2024 and 2023, respectively. The Partnership purchases certain raw materials from the Company and was charged for various manufacturing costs incurred at the Companyâ€™s Kansas City production facility. The amount of these costs charged to the Partnership were \\$6,050 and \\$10,084 for the three and six months ended June 30, 2024, respectively and \\$5,028 and \\$10,869 for the three and six months ended June 30, 2023, respectively.Certain administrative, marketing, engineering, management-related and research and development services are provided to the Partnership by the Company. The Partnership was charged \\$4,600 and \\$8,900 for the three and six months ended June 30, 2024 and \\$3,618 and \\$7,252 for the three and six months ended June 30, 2023, respectively, for these services.In addition, the Partnership was charged certain product demonstration costs of \\$238 and \\$595 for the three and six months ended June 30, 2024, respectively and \\$428 and \\$928 for the three and six months ended June 30, 2023, respectively. These charges to the Partnership are recorded as reductions in either cost of goods sold or selling, general and administrative expenses in the consolidated statements of income, depending on the nature of the expenditures.The Company had an accounts receivable from the Partnership of \\$5,008 and \\$3,164 as of June 30, 2024 and December 31, 2023, respectively. There were no accounts payable with the Partnership as of June 30, 2024 and December 31, 2023, respectively. X - ReferencesNo definition available. + Details Name: us-gaap_RelatedPartyTransactionsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for related party transactions. Examples of related party transactions include transactions between \\(a\\) a parent company and its subsidiary; \\(b\\) subsidiaries of a common parent; \\(c\\) and entity and its principal owners; and \\(d\\) affiliates. + ReferencesReference 1: <a href=\\)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org/1943274/2147480990/946-20-50-5>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org/1943274/2147480990/946-20-50-6>Reference 4: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \\\(c\\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147477968/946-235-50-2\\]\\(http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \\(c\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147477968/946-235-50-2\\)Reference 5: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \\\(e\\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147477968/946-235-50-2\\]\\(http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \\(e\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147477968/946-235-50-2\\)Reference 6: \\[http://www.xbrl.org/2003/role/disclosureRef-Topic 850-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \\\(d\\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483326/850-10-50-1\\]\\(http://www.xbrl.org/2003/role/disclosureRef-Topic 850-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \\(d\\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483326/850-10-50-1\\)Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220>\]\(http://www.xbrl.org/2009/role/commonPracticeRef-Topic 450-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/450/tableOfContentReference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 954-SubTopic 440-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478522/954-440-50-1\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 715-SubTopic 60-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480266/715-60-50-3+Details Name: us-gaap_PensionAndOtherPostretirementBenefitsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 33 R22.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Commitments and Contingent Liabilities 6 Months Ended Jun. 30, 2024 Commitments and Contingencies Disclosure [Abstract] Â Commitments and Contingent Liabilities 15. Commitments and Contingent Liabilities:There is a risk of environmental impact in the Companyâ€™s manufacturing operations. The Companyâ€™s environmental policies and practices are designed to comply with existing laws and regulations and to minimize the possibility of significant environmental impact. The Company is also subject to various other lawsuits and claims with respect to matters such as governmental regulations, labor and other actions arising out of the normal course of business. All claims that are probable and reasonably estimable have been accrued for in the Companyâ€™s condensed consolidated financial statements. When these matters are ultimately concluded and determined, the Company believes that there will be no material adverse effect on its consolidated financial position, results of operations or liquidity. X - ReferencesNo definition available. + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for commitments and contingencies. + ReferencesReference 1: <a href=)

-Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(2)(g)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 8:

included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States (â€œGAAPâ€) have been condensed or omitted pursuant to such rules and regulations for interim reporting. In the opinion of management, all adjustments of a normal and recurring nature necessary to state fairly the financial position and results of operations have been included. The results of operations are not necessarily indicative of the expected results for the full year. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes included in the Companyâ€™s Annual Report on Form 10-K for the year ended December 31, 2023. Accounting Standards Not Yet Adopted Accounting Standards Not Yet AdoptedIn November 2023, the Financial Accounting Standards Board (â€œFASBâ€) issued guidance to improve the disclosures related to public business entities reportable segments. This new guidance requires entities to provide information regarding significant segment expenses, especially those segment expenses that are regularly reported to the Companyâ€™s chief operating decision maker (the Companyâ€™s Chief Executive Officer), or CODM. The guidance also require public entities to disclose the nature, type and amounts of other segment items by reportable segment. Public business entities will also have to report all annual disclosures about segments profits or losses that are required by ASC 280 on an interim basis, including the significant segment expenses and other segment items. The new guidance is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The disclosure will be implemented as required for the fiscal year ended December 31, 2024. The Company is currently evaluating the impact of this guidance.In December 2023, FASB issued guidance to improve disclosures related to incomes taxes. This new guidance requires public business entities to disaggregate information on the effective tax rate reconciliation and income taxes paid to provide greater transparency. Public business entities will be required to provide additional information in specified categories related to effective tax rate reconciliation in tabular form and provide income taxes paid by jurisdictions, with further disaggregation needed if amounts exceed 5% of the total. The new guidance is effective for fiscal years beginning after December 15, 2024. The disclosure will be implemented as required for the fiscal year ended December 31, 2025. The Company is currently evaluating the impact of this guidance.In October 2023, FASB issued guidance to amend either presentation or disclosure requirements related to fourteen subtopics in the FASB Accounting Standards Codification, that are currently in the SEC Regulation S-X or Regulation S-K. The new guidance was issued in response to the SECâ€™s ruling on disclosure simplification. For entities subject to existing SEC disclosure requirements, the effective date of each amendment of the topics will be the date that the SEC removes the related disclosure from Regulation S-X or Regulation S-K. The guidance must be applied prospectively, with no early adoption permitted for entities subject to those existing SEC disclosures. The Company is currently evaluating the impact of the new guidance as it pertains to the fourteen subtopics that would impact the business and will apply prospectively once in effect.In August 2023, the FASB issued guidance for entities that meet the definition of a joint venture or a corporate joint venture, to adopt a new basis of accounting upon the formation of the joint venture. The new guidance requires the initial measurement of contributed net assets and liabilities at fair value on the formation date, recognition of goodwill for the difference between the fair value of the joint ventureâ€™s equity and net assets, and disclosures about the nature and financial impact of the transaction. The new guidance requires prospective application and is effective for all joint ventures that are formed on or after January 1, 2025, with early adoption permitted. Joint ventures that formed before January 1, 2025 may elect to retrospectively apply the new guidance. The Company will apply the guidance to any new joint ventures formed after the effective date. Derivative contracts Derivative contractsDerivative assets and liabilities can be exchange-traded or traded over-the-counter (â€œOTCâ€). The Company generally values exchange-traded derivatives using models that calibrate to market transactions and eliminate timing differences between the closing price of the exchange-traded derivatives and their underlying instruments. OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market transactions, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. When models are used, the selection of a particular model to value an OTC derivative depends on the contractual terms of, and specific risks inherent in, the instrument as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices and rates, forward curves, measures of volatility, and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as forward contracts, swaps and options, model inputs can generally be corroborated by observable market data by correlation or other means, and model selection does not involve significant management judgment.As of June 30, 2024, the Company had interest rate caps that were fair valued using LevelÂ 2 inputs. In addition, the Company applies a credit valuation adjustment to reflect credit risk which is calculated based on credit default swaps. To the extent that the Companyâ€™s net exposure under a specific master agreement is an asset, the Company utilizes the counterpartâ€™s default swap rate. If the net exposure under a specific master agreement is a liability, the Company utilizes a default swap rate comparable to Ecovyst. The credit valuation adjustment is added to the discounted fair value to reflect the exit price that a market participant would be willing to receive to assume the Companyâ€™s liabilities or that a market participant would be willing to pay for the Companyâ€™s assets. X - DefinitionDisclosure of accounting policy for basis of accounting, or basis of presentation, used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS). + ReferencesNo definition available. + Details Name: us-gaap BasisOfAccountingPolicyPolicyTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for fair value measurements of financial and non-financial assets, liabilities and instruments classified in shareholders' equity. Disclosures include, but are not limited to, how an entity that manages a group of financial assets and liabilities on the basis of its net exposure measures the fair value of those assets and liabilities. + ReferencesNo definition available. + Details Name: us-gaap FairValueMeasurementPolicyPolicyTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy pertaining to new accounting pronouncements that may impact the entity's financial reporting. Includes, but is not limited to, quantification of the expected or actual impact. + ReferencesNo definition available. + Details Name: us-gaap NewAccountingPronouncementsPolicyPolicyTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 43 R32.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Revenue from Contracts with Customers (Tables) 6 Months Ended Jun. 30, 2024 Revenue from Contract with Customer [Abstract] Â Disaggregation of Revenue The Companyâ€™s portfolio of products is integrated into a variety of end uses, which are described in the table below.Key End Use sKey ProductsClean fuels, emission control & otherâ€ Refining hydrocracking catalystsâ€ Emission control catalystsâ€ Catalyst supports used in production of sustainable fuels such as renewable dieselâ€ Catalysts used in production of sustainable aviation fuelsâ€ Catalyst activationâ€ Aluminum sulfate solutionâ€ Ammonium bisulfite solutionPolyethylene, polymers & engineered plasticsâ€ Catalysts for high-density polyethylene and chemicals synthesisâ€ Antiblock for film packagingâ€ Catalyst for advanced recyclingRegeneration and treatment servicesâ€ Sulfuric acid regeneration servicesâ€ Treatment servicesIndustrial, mining & automotiveâ€ Virgin sulfuric acid for miningâ€ Virgin sulfuric derivatives for industrial productionâ€ Virgin sulfuric derivatives for nylon productionThe following tables disaggregate the Companyâ€™s sales, by segment and end uses, for the three and six months ended June 30, 2024 and 2023, respectively:Three months ended June 30, 2024EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & others\$8,614Â \$â€Â \$8,614Â Polyethylene, polymers & engineered plasticsâ€Â \$28,862Â \$28,862Â Regeneration and treatment services(1)95,365Â \$â€Â \$95,365Â Industrial, mining & automotive49,979Â \$â€Â \$49,979Â Total segment sales153,958Â \$28,862Â \$182,820Â Three months ended June 30, 2023EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & others\$8,426Â \$â€Â \$8,426Â Polyethylene, polymers & engineered plasticsâ€Â \$26,045Â \$26,045Â Regeneration and treatment services(1)98,494Â \$â€Â \$98,494Â Industrial, mining & automotive51,145Â \$â€Â \$51,145Â Total segment sales158,065Â \$26,045Â \$184,110Â Six months ended June 30, 2024EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & others16,003Â \$â€Â \$16,003Â Polyethylene, polymers & engineered plasticsâ€Â \$47,797Â \$47,797Â Regeneration and treatment services(1)178,684Â \$â€Â \$178,684Â Industrial, mining & automotive100,873Â \$â€Â \$100,873Â Total segment sales295,560Â \$47,797Â \$343,357Â Six months ended June 30, 2023EcoservicesAdvanced Materials & Catalysts(2)TotalClean fuels, emission control & others13,166Â \$â€Â \$13,166Â Polyethylene, polymers & engineered plasticsâ€Â \$49,179Â \$49,179Â Regeneration and treatment services(1)186,838Â \$â€Â \$186,838Â Industrial, mining & automotive95,801Â \$â€Â \$95,801Â Total segment sales295,805Â \$49,179Â \$344,984Â (1)As described in Note 1 to these condensed consolidated financial statements, the Company experiences seasonal sales fluctuations to customers in the regeneration services product group. (2)Excludes the Companyâ€™s proportionate share of sales from the Zeolyst International and Zeolyst C.V. joint ventures (collectively, the â€œZeolyst Joint Ventureâ€) accounted for using the equity method (see Note 9 to these condensed consolidated financial statements for further information). X - DefinitionTabular disclosure of disaggregation of revenue into categories depicting how nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factor. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5 + Details Name: us-gaap DisaggregationOfRevenueTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 44 R33.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Fair Value Measurements (Tables) 6 Months Ended Jun. 30, 2024 Fair Value Disclosures [Abstract] Â Fair Value Measured on Recurring Basis The following tables present information about the Companyâ€™s assets and liabilities that were measured at fair value on a recurring basis as of June 30, 2024 and December 31, 2023, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.June 30, 2024Quoted Prices in Active Markets (Level 1)Â Significant Other Observable Inputs (Level 2)Â Significant Unobservable Inputs (Level 3)Derivative assets:Interest rate caps (Note 12)\$19,965Â \$â€Â \$19,965Â \$â€Â Â Derivative liabilities:Interest rate caps (Note 12)\$403Â \$â€Â \$403Â \$â€Â Â December 31, 2023Quoted Prices in Active Markets (Level 1)Â Significant Other Observable Inputs (Level 2)Â Significant Unobservable Inputs (Level 3)Derivative assets:Interest rate caps (Note 12)\$19,021Â \$â€Â \$19,021Â \$â€Â Â Derivative liabilities:Interest rate caps (Note 12)\$2,496Â \$â€Â \$2,496Â \$â€Â Â X - ReferencesNo definition available. + Details Name: us-gaap FairValueDisclosuresAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of assets and liabilities, including [financial] instruments measured at fair value that are classified in stockholders' equity, if any, that are measured at fair value on a recurring basis. The disclosures contemplated herein include the fair value measurements at the reporting date by the level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3). + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2 + Details Name: us-gaap ScheduleOfFairValueAssetsAndLiabilitiesMeasuredOnRecurringBasisTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 45 R34.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stockholders' Equity (Tables) 6 Months Ended Jun. 30, 2024 Equity [Abstract] Â Pre-tax and After-tax Components of Other Comprehensive Income (Loss) The following tables present the tax effects of each component of other comprehensive income (loss) for the three and six months ended June 30, 2024 and 2023, respectively:Three months ended June 30, 20242023Pre-tax amountTax benefit/(expense)After-tax amountPre-tax amountTax benefit/(expense)After-tax amountDefined benefit and other postretirement plans:Net gain\$714Â \$(178)\$536Â \$651Â \$(162)\$489Â Net prior service cost(71)Â (6)(31)7Â (24)Benefit plans, net(70)Â (177)\$530Â \$620Â (155)\$465Â Net (loss) gain from hedging activities(1,433)\$358Â (1,075)\$7,059Â (1,660)\$5,399Â Foreign currency translation(679)â€Â (679)828Â \$â€Â \$828Â Other comprehensive income (loss)\$1,405\$181Â \$(1,224)\$8,507Â \$(1,815)\$6,692Â Six months ended June 30, 20242023Pre-tax amountTax benefit/(expense)After-tax amountPre-tax amountTax benefit/(expense)After-tax amountDefined benefit and other postretirement plans:Net gain\$713Â \$(178)\$535Â \$650Â \$(162)\$488Â Net prior service cost(15)Â (1)(62)15Â (47)Benefit plans, net(69)Â (174)\$524Â \$588Â (147)\$441Â Net gain (loss) from hedging activities3,719Â (930)\$2,789Â (3,244)\$723Â (2,521)Foreign currency translation(2,363)â€Â (2,363)3,013Â \$â€Â \$3,013Â Other comprehensive income\$2,054Â \$(1,104)\$950Â \$357Â \$576Â \$933Â The following tables present the changes in accumulated other comprehensive income (loss), net of tax, by component for the six months ended June 30, 2024 and 2023, respectively:DefinedÂ benefit and other postretirement plansÂ NetÂ gainÂ (loss) from hedging activitiesForeign currency translationÂ TotalÂ December 31, 2023\$612Â \$12,546Â \$(14,116)\$(958)Other comprehensive income (loss) before reclassifications540Â \$9,778Â (2,363)\$7,955Â Amounts reclassified from accumulated other comprehensive loss(1) (16)(6,989)â€Â (7,005)Net current period other comprehensive income (loss)\$524Â \$2,789Â (2,363)\$950Â June 30, 2024\$1,136Â \$15,335Â \$(16,479)\$(8)December 31, 2022\$(508)\$24,672Â \$(18,172)\$5,992Â Other comprehensive income before reclassifications412Â \$6,392Â \$3,013Â \$9,817Â Amounts reclassified from accumulated other comprehensive income (loss)(1) 29Â (8,913)â€Â (8,884)Net current period other comprehensive income (loss)\$441Â (2,521)\$3,013Â \$933Â June 30, 2023\$(67)\$22,151Â \$(15,159)\$6,925Â (1)See the following table for details about these reclassifications. Amounts in parentheses indicate debits. Reclassifications out of Accumulated Other Comprehensive Income The following table presents the reclassifications out of accumulated other comprehensive income (loss) for the three and six months ended June 30, 2024 and 2023, respectively:Details about Accumulated Other Comprehensive Income ComponentsAmounts reclassified from Accumulated Other Comprehensive Loss (Income)(1)Affected line item where Income is presentedThree months endedJune 30,Six months endedJune 30,2024202320242023Amortization of defined benefit and other postretirement items:Net loss\$6Â \$29Â \$7Â \$28Â Other (expense) income(2)Net prior service cost (credit)7Â (31)15Â (62)Other (expense) income(2)13Â (212)Â (34)Total before tax(3)â€Â (6)5Â Tax (expense) benefit\$10Â \$(2)\$16Â \$(29)Net of taxGains and losses on cash flow hedges:Interest rate caps\$4,662Â \$11,187Â \$9,318Â \$11,885Â Interest income (expense)(1,166)(2,800)(2,329)(2,972)Tax expense\$3,496Â \$6,387Â \$6,989Â \$8,913Â Net of taxTotal reclassifications for the period\$3,506Â \$8,385Â \$7,005Â \$8,884Â Net of tax(1)Amounts in parentheses indicate debits to profit/loss. (2)These accumulated other comprehensive income (loss) components are components of net periodic pension and other postretirement cost (see Note 14 to these condensed consolidated financial statements for additional details). X - ReferencesNo definition available. + Details Name: us-gaap EquityAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of information about items reclassified out of accumulated other comprehensive income (loss). + ReferencesNo definition available. + Details Name: us-gaap ReclassificationOutOfAccumulatedOtherComprehensiveIncomeTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the components of accumulated other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20 + Details Name: us-gaap ScheduleOfAccumulatedOtherComprehensiveIncomeLossTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 46 R35.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Goodwill (Tables) 6 Months Ended Jun. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] Â Change in Carrying Amount of Goodwill The change in the carrying amount of goodwill for the six months ended June 30, 2024 is summarized as follows:Â EcoservicesAdvanced Materials & CatalystsTotalBalance as of December 31, 2023\$326,589Â \$77,881Â \$404,470Â Foreign exchange impactâ€Â (195)(195)Balance as of June 30, 2024\$326,589Â \$77,686Â \$404,275Â Â X - ReferencesNo definition available. + Details Name: us-gaap GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of goodwill by reportable segment and in total which includes a rolloffward schedule. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 2:

https://fasb.org/us-gaap/role/ref/legacyRef - Name Accounting Standards Codification - Topic 815 - SubTopic 10 - Section 50 - Paragraph 4C - Publisher FASB - URI https://asc.fasb.org/1943274/2147480434/815-10-50-4C + Details Name: us-gaap ScheduleOfDerivativeInstrumentsTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration XML 53 R42.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Benefit Plans (Tables) 6 Months Ended Jun. 30, 2024 Retirement Benefits [Abstract] A Components of Net Periodic Expense (Benefit) Defined Benefit Pension Plans Three months ended June 30, Six months ended June 30, 2024 2023 2024 2023 2024 Interest cost \$808A \$871A \$1,616A \$1,742A Expected return on plan assets (827)(837)(1,654)(1,674) Settlement (gain) loss (6)29A (6)29A Net periodic (benefit) expense \$(25)\$63A \$(44)\$97A Other Postretirement Benefit Plan Three months ended June 30, Six months ended June 30, 2024 2023 2024 2023 2024 Interest cost \$6A \$6A \$12A \$12A Amortization of prior service credit (7)(31)(15)(62) Amortization of net gain \$A \$A \$A (1)(1) Net periodic benefit \$(1)\$25 \$(4)\$51 X - References No definition available. + Details Name: us-gaap CompensationAndRetirementDisclosureAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - Definition Tabular disclosure of the components of net benefit costs for pension plans and/or other employee benefit plans including service cost, interest cost, expected return on plan assets, gain (loss), prior service cost or credit, transition asset or obligation, and gain (loss) recognized due to settlements or curtailments. + References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef - Topic 715 - SubTopic 20 - Subparagraph (h) - Name Accounting Standards Codification - Paragraph 1 - Section 50 - Publisher FASB - URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap ScheduleOfNetBenefitCostsTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration XML 54 R43.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Reportable Segments (Tables) 6 Months Ended Jun. 30, 2024 Segment Reporting [Abstract] A Summary Financial Information by Reportable Segment Summarized financial information for the Company \$A's reportable segments is shown in the following table: Three months ended June 30, Six months ended June 30, 2024 2023 2024 2023 2024 Sales: Ecoservices \$153,958A \$158,065A \$295,560A \$295,805A Advanced Materials & Catalysts (1)28,862A 26,045A 47,797A 49,179A Total \$182,820A \$184,110A \$343,357A \$344,984A Adjusted EBITDA: (2)Ecoservices \$49,709A \$60,136A \$91,203A \$96,924A Advanced Materials & Catalysts (3)14,717A 25,371A 25,846A 38,359A Adjusted EBITDA from reportable segments \$64,426A \$85,507A \$117,049A \$135,283A (1)Excludes the Company \$A's proportionate share of sales from the Zeolyst Joint Venture accounted for using the equity method (see Note 9 to these condensed consolidated financial statements for further information). The proportionate share of sales excluded is \$29,024 and \$52,505 for the three and six months ended June 30, 2024, respectively. The proportionate share of sales excluded is \$44,689 and \$66,763 for the three and six months ended June 30, 2023, respectively. (2)The Company defines Adjusted EBITDA as EBITDA adjusted for certain items as noted in the reconciliation below. Management evaluates the performance of its segments and allocates resources based on several factors, of which the primary measure is Adjusted EBITDA. Adjusted EBITDA should not be considered as an alternative to net income as an indicator of the Company \$A's operating performance. Adjusted EBITDA as defined by the Company may not be comparable with EBITDA or Adjusted EBITDA as defined by other companies. (3)The Adjusted EBITDA for the Company \$A's Advanced Materials & Catalysts segment includes the Company \$A's 50% portion of the Adjusted EBITDA from the Zeolyst Joint Venture. For the three months ended June 30, 2024, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$5,559, which includes \$1,392 of equity in net income plus \$940 of amortization of investment in affiliate step-up and \$3,227 of joint venture depreciation, amortization and interest. For the six months ended June 30, 2024, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$12,486, which includes \$3,464 of equity in net income plus \$2,541 of amortization of investment in affiliate step-up and \$6,481 of joint venture depreciation, amortization and interest. For the three months ended June 30, 2023, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$16,194, which includes \$11,382 of equity in net income plus \$1,601 of amortization of investment in affiliate step-up and \$3,212 of joint venture depreciation, amortization and interest. For the six months ended June 30, 2023, the Adjusted EBITDA from the Zeolyst Joint Venture included in the Advanced Materials & Catalysts segment was \$21,630, which includes \$11,608 of equity in net income plus \$3,201 of amortization of investment in affiliate step-up and \$6,821 of joint venture depreciation, amortization and interest. Reconciliation of Net Income to Segment Adjusted EBITDA A reconciliation of income before income taxes to Adjusted EBITDA is as follows: Three months ended June 30, Six months ended June 30, 2024 2023 2024 2023 2024 Reconciliation of income before income taxes to Adjusted EBITDA from reportable segments Income before income taxes \$11,375A \$34,909A \$13,775A \$34,385A Interest expense, net \$12,895A 9,168A 26,304A 19,000A Depreciation and amortization \$21,624A 20,969A 43,557A 41,166A Unallocated corporate expenses \$7,532A 6,153A 14,613A 13,080A Joint venture depreciation, amortization and interest \$3,227A 3,212A 6,481A 6,821A Amortization of investment in affiliate step-up \$940A 1,601A 2,541A 3,201A Debt extinguishment costs \$4,560A \$A \$4,560A \$A Net (gain) loss on asset disposals (34)1,128A 614A 2,306A Foreign exchange (gain) loss (99)(398)79A (1,136)LIFO (benefit) expense (1,547)1,111A (2,671)2,510A Transaction and other related costs \$140A 1,190A 198A 2,624A Equity-based compensation \$3,827A 5,002A 7,507A 9,070A Restructuring, integration and business optimization expenses \$159A 1,106A 385A 2,129A Other (173)356A (894)127A Adjusted EBITDA from reportable segments \$64,426A \$85,507A \$117,049A \$135,283A X - Definition Tabular disclosure of the reconciliation of profit (loss) from reportable segments to the consolidated income (loss) before income tax expense (benefit) and discontinued operations. Includes, but is not limited to, reconciliation after income tax if income tax is allocated to the reportable segment. + References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef - Name Accounting Standards Codification - Topic 280 - SubTopic 10 - Section 50 - Paragraph 31 - Publisher FASB - URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef - Name Accounting Standards Codification - Topic 280 - SubTopic 10 - Section 50 - Paragraph 30 - Subparagraph (b) - Publisher FASB - URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap ReconciliationOfOperatingProfitLossFromSegmentsToConsolidatedTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration X - Definition Tabular disclosure of all significant reconciling items in the reconciliation of total revenues from reportable segments to the entity's consolidated revenues. + References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef - Name Accounting Standards Codification - Topic 280 - SubTopic 10 - Section 50 - Paragraph 31 - Publisher FASB - URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef - Name Accounting Standards Codification - Topic 280 - SubTopic 10 - Section 50 - Paragraph 30 - Subparagraph (a) - Publisher FASB - URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap ReconciliationOfRevenueFromSegmentsToConsolidatedTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration X - References No definition available. + Details Name: us-gaap SegmentReportingAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration XML 55 R44.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stock-Based Compensation (Tables) 6 Months Ended Jun. 30, 2024 Share-Based Payment Arrangement [Abstract] A Valuation Assumptions The Company used a Monte Carlo simulation to estimate the \$11.64 weighted average fair value of the awards granted subject to the TSR goal during the six months ended June 30, 2024, with the following weighted average assumptions: Expected dividend yield \$A % Risk-free interest rate 4.09A % Expected volatility 39.45A % Expected term (in years) 2.95 Activity of Restricted Stock Units The following table summarizes the activity for the Company \$A's RSUs and PSUs for the six months ended June 30, 2024: Restricted Stock Units Performance Stock Units Number of units Weighted average grant date fair value (per share) Number of units Weighted average grant date fair value (per share) Nonvested as of December 31, 2023 1,962,828A \$10.55A 959,217A (1)\$11.84A Granted 1,126,166A \$8.84A 535,629A \$10.23A Vested (999,788)\$11.10A \$A \$A Forfeited (21,597)\$10.19A (126,497)\$12.99A Nonvested as of June 30, 2024 2,042,067,609A \$9.36A 1,368,349A (1)\$11.10A (1)Based on target. Activity of Performance Stock Units The following table summarizes the activity for the Company \$A's RSUs and PSUs for the six months ended June 30, 2024: Restricted Stock Units Performance Stock Units Number of units Weighted average grant date fair value (per share) Number of units Weighted average grant date fair value (per share) Nonvested as of December 31, 2023 1,962,828A \$10.55A 959,217A (1)\$11.84A Granted 1,126,166A \$8.84A 535,629A \$10.23A Vested (999,788)\$11.10A \$A \$A Forfeited (21,597)\$10.19A (126,497)\$12.99A Nonvested as of June 30, 2024 2,042,067,609A \$9.36A 1,368,349A (1)\$11.10A (1)Based on target. X - References No definition available. + Details Name: us-gaap DisclosureOfCompensationRelatedCostsShareBasedPaymentsAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - Definition Tabular disclosure of the changes in outstanding nonvested performance-based units. + References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef - Topic 718 - SubTopic 10 - Name Accounting Standards Codification - Section 50 - Paragraph 2 - Subparagraph (c)(2) - Publisher FASB - URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap ScheduleOfNonvestedPerformanceBasedUnitsActivityTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration X - Definition Tabular disclosure of the changes in outstanding nonvested restricted stock units. + References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef - Topic 718 - SubTopic 10 - Name Accounting Standards Codification - Section 50 - Paragraph 2 - Subparagraph (c)(2) - Publisher FASB - URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap ScheduleOfShareBasedPaymentAwardStockOptionsValuationAssumptionsTableTextBlock Namespace Prefix: us-gaap Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: duration XML 56 R45.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Earnings per Share (Tables) 6 Months Ended Jun. 30, 2024 Earnings Per Share [Abstract] A Reconciliation from Basic to Diluted Weighted Average Shares Outstanding The reconciliation from basic to diluted weighted average shares outstanding is as follows: Three months ended June 30, Six months ended June 30, 2024 2023 2024 2023 2024 Weighted average shares

Company, Excluding Assessed Tax 49,979 51,145 100,873 95,801 Advanced Materials & Catalysts A A A A Disaggregated Revenue A A A A Revenue from Contract with Customer, Excluding Assessed Tax 28,862 26,045 47,797 49,179 Advanced Materials & Catalysts | Clean fuels, emission control & other A A A A Disaggregated Revenue A A A A Revenue from Contract with Customer, Excluding Assessed Tax 0 0 0 0 Advanced Materials & Catalysts | Polyethylene, polymers & engineered plastics A A A A Disaggregated Revenue A A A A Revenue from Contract with Customer, Excluding Assessed Tax 28,862 26,045 47,797 49,179 Advanced Materials & Catalysts | Regeneration and treatment services A A A A Disaggregated Revenue A A A A Revenue from Contract with Customer, Excluding Assessed Tax 0 0 0 0 Advanced Materials & Catalysts | Industrial, mining & automotive A A A A Disaggregated Revenue A A A A Revenue from Contract with Customer, Excluding Assessed Tax \$ 0 \$ 0 \$ 0 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5>Reference 2: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 3: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(b\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 4: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(c\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 5: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(d\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 6: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(e\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 7: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(f\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 8: [http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph \(g\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91) + Details Name: us-gaap DisaggregationOfRevenueLineItems Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41](http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41)Reference 2: [http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \(i\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1](http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1)Reference 3: [http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph \(ee\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 4: [http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph \(b\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 5: [http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph \(SAB Topic 11.L\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-599-1](http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-599-1)Reference 7: <http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5>Reference 8: [http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30](http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30)Reference 9: <http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42>Reference 10: [http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-](http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22)

SubTopic 210 - Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478795/946-210-50-6Reference 17:

[illegible]

Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147478524/942-220-S99-1> + Details Name: us-gaap_NetIncomeLoss
Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe aggregate amount of income or expense from ancillary business-related activities (that is to say, excluding major activities considered part of the normal operations of the business). + ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph \(SX 210.5-03\(7\)\)](http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(7))) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147483621/220-10-S99-2> + Details Name: us-gaap_NonoperatingIncomeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: <http://www.xbrli.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6> + Details Name: us-gaap_ReclassificationAdjustmentOutOfAccumulatedOtherComprehensiveIncomeLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - Details Name: us-gaap_ReclassificationOutOfAccumulatedOtherComprehensiveIncomeAxis=us-gaap_ReclassificationOutOfAccumulatedOtherComprehensiveIncomeMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentNetUnamortizedGainLossMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentNetPriorServiceCostCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedGainLossNetCashFlowHedgeParentMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 64 R53.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stockholders' Equity - Narrative (Details) - USD (\$) \$ / shares in Units, \$ in Thousands 3 Months Ended 6 Months Ended Apr. 27, 2022 Jun. 30, 2024 Jun. 30, 2023 Mar. 31, 2023 Jun. 30, 2024 Jun. 30, 2023 Equity, Class of Treasury Stock [Line Items] Á Á Á Á Á Repurchases of common shares Á \$ 5,010 Á \$ 43,524 \$ 29,850 Á Á Shares withheld for tax withholding obligation (in shares) Á Á Á Á Á 128,801 95,269 Fair value of shares withheld for tax payments Á Á \$ 1,218 Á \$ 866 \$ 1,218 \$ 866 Stock Repurchase Program 2022 Á Á Á Á Á Equity, Class of Treasury Stock [Line Items] Á Á Á Á Á Stock repurchase program, authorized amount \$ 450,000 Á Á Á Á Á Stock repurchase program, period (in years) 4 years Á Á Á Á Á Shares acquired (in shares) Á Á Á Á Á 552,081 7,000,000 Average cost per share (in dollars per share) Á Á Á Á Á \$ 9.05 \$ 10.48 Repurchases of common shares Á Á Á Á Á \$ 4,998 \$ 73,737 Remaining authorized repurchase amount Á \$ 229,594 Á \$ 229,594 Á Excise tax Á Á Á Á Á \$ 0 \$ 630 X - DefinitionAmount authorized for purchase of share under share repurchase plan. Includes, but is not limited to, repurchase of stock and unit of ownership. + ReferencesReference 1: <http://www.xbrli.org/2009/role/commonPracticeRef -Topic 505 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481520/505-30-50-4> + Details Name: srt_StockRepurchaseProgramAuthorizedAmount1 Namespace Prefix: srt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of decrease to equity for grantee's tax withholding obligation for award under share-based payment arrangement. + ReferencesNo definition available. + Details Name: us-gaap_AdjustmentsRelatedToTaxWithholdingForShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_EquityClassOfTreasuryStockLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionAmount of excise tax on share purchased under share repurchase plan. Includes, but is not limited to, repurchase of stock and unit of ownership. + ReferencesReference 1: <http://www.xbrli.org/2009/role/commonPracticeRef -Topic 505 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1> + Details Name: us-gaap_ShareRepurchaseProgramExciseTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionNumber of shares used to settle grantee's tax withholding obligation for award under share-based payment arrangement. + ReferencesNo definition available. + Details Name: us-gaap_SharesPaidForTaxWithholdingForShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItem Type Balance Type: na Period Type: duration X - DefinitionPeriod share may be purchased under authorized share repurchase plan, in "PnYnMndTnHnMnS" format, for example, "P1Y15M13d" represents reported fact of one year, five months, and thirteen days. Includes, but is not limited to, repurchase of stock and unit of ownership. + ReferencesNo definition available. + Details Name: us-gaap_StockRepurchaseProgramPeriodInForce1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItem Type Balance Type: na Period Type: duration X - DefinitionAmount remaining authorized for purchase of share under share repurchase plan. Includes, but is not limited to, repurchase of stock and unit of ownership. + ReferencesNo definition available. + Details Name: us-gaap_StockRepurchaseProgramRemainingAuthorizedRepurchaseAmount1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionTotal cost of shares repurchased divided by the total number of shares repurchased. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1> + Details Name: us-gaap_TreasuryStockAcquiredAverageCostPerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItem Type Balance Type: na Period Type: duration X - DefinitionNumber of shares that have been repurchased during the period and are being held in treasury. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2>Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.5-02\(29\)\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1)Reference 3: [http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.3-04\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1) + Details Name: us-gaap_TreasuryStockSharesAcquired Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItem Type Balance Type: na Period Type: duration X - DefinitionEquity impact of the cost of common and preferred stock that were repurchased during the period. Recorded using the cost method. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2>Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.3-04\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1)Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1> + Details Name: us-gaap_TreasuryStockValueAcquiredCostMethod Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - Details Name: srt_ShareRepurchaseProgramAxis=ecvt_StockRepurchaseProgram2022Member Namespace Prefix: Data Type: na Balance Type: Period Type: XML 65 R54.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Goodwill - Schedule of Goodwill (Details) \$ in Thousands 6 Months Ended Jun. 30, 2024 USD (\$) Goodwill [Roll Forward] Á Beginning balance \$ 404,470 Foreign exchange impact (195) Ending balance 404,275 Ecoservices Á Goodwill [Roll Forward] Á Beginning balance 326,589 Foreign exchange impact 0 Ending balance 326,589 Advanced Materials & Catalysts Á Goodwill [Roll Forward] Á Beginning balance 77,881 Foreign exchange impact (195) Ending balance \$ 77,686 X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: <http://www.xbrli.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49>Reference 2: <http://www.xbrli.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24>Reference 3: [http://www.xbrli.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph \(d\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100](http://www.xbrli.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100)Reference 4: <http://www.xbrli.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10>Reference 5: [http://www.xbrli.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.5-02\(15\)\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://www.xbrli.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1)Reference 6: <http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1>Reference 7: [http://www.xbrli.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \(a\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1](http://www.xbrli.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1)Reference 8: [http://www.xbrli.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \(b\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1](http://www.xbrli.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1)Reference 9: [http://www.xbrli.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.9-03\(10\)\(1\)\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1](http://www.xbrli.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1) + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of foreign currency translation gain (loss) which increases (decreases) asset representing future economic benefit from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: [http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph \(f\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1](http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1) + Details Name: us-gaap_GoodwillForeignCurrencyTranslationGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_GoodwillRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - Details Name: us-gaap_StatementBusinessSegmentsAxis=ecvt_EcoservicesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=ecvt_AdvancedMaterialsAndCatalystsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 66 R55.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Goodwill - Narrative (Details) Oct. 01, 2023 Goodwill and Intangible Assets Disclosure [Abstract] Á Percentage of fair value in excess of carrying amount 30.00% X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionPercentage of fair value of reporting unit in excess of carrying amount. + ReferencesNo definition available. + Details Name: us-gaap_ReportingUnitPercentageOfFairValueInExcessOfCarryingAmount Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItem Type Balance Type: na Period Type: instant XML 67 R56.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Other Operating Expense, Net (Details) - USD (\$) \$ in Thousands 3 Months Ended Jun. 30, 2024 Jun. 30, 2023 Jun. 30, 2024 Jun. 30, 2023 Other Income and Expenses [Abstract] Á Á Á Amortization expense \$ 2,644 \$ 2,643 \$ 5,289 \$ 5,280 Transaction and other related costs 140,119 198,262 Restructuring, integration and business optimization costs 159,116 385,212 Net (gain) loss on asset disposals (34) 1,128 614 2,306 Other, net 199,195 288,641 Total other operating expense, net \$ 3,108 \$ 6,262 \$ 6,774 \$ 12,980 X - DefinitionBusiness Optimization, Integration, Restructuring and Other Related Costs + ReferencesNo definition available. + Details Name: ecvt_BusinessOptimizationIntegrationRestructuringAndOtherRelatedCosts Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItem Type Balance Type: debit Period Type: duration X - DefinitionOther (Income) Expense, Net + ReferencesNo definition available. + Details Name: ecvt_OtherIncomeExpenseNet Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionTransaction and Other Related Costs + ReferencesNo definition available. + Details Name: ecvt_TransactionAndOtherRelatedCosts Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe aggregate expense charged against earnings to allocate the cost of intangible assets (nonphysical assets not used in production) in a systematic and rational manner to the periods expected to benefit from such assets. As a noncash expense, this element is added back to net income when calculating cash provided by or used in operations using the indirect method. + ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph \(b\) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28)Reference 2: <http://www.xbrli.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40>Reference 3: [http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(2\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2)Reference 4: <http://www.xbrli.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-2> + Details Name: us-gaap_AmortizationOfIntangibleAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of gain (loss) on sale or disposal of assets, including but not limited to property plant and equipment, intangible assets and equity in securities of subsidiaries or equity method investee. + ReferencesReference 1: [http://www.xbrli.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph \(b\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28](http://www.xbrli.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28) + Details Name: us-gaap_GainLossOnDispositionOfAssets1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionGenerally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Excludes Selling, General and Administrative Expense. + ReferencesNo definition available. + Details Name: us-gaap_OperatingCostsAndExpenses Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OtherIncomeAndExpensesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 68 R57.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Inventories, Net (Details) - USD (\$) \$ in Thousands Jun. 30, 2024 Dec. 31, 2023 Inventory Disclosure [Abstract] Á Á Finished products and work in process \$ 48,536 \$ 41,658 Raw materials 3,491 3,457 Inventories, net 52,027 45,115 Valued at lower of cost or market: Á Á LIFO basis 30,003 24,815 Valued at lower of cost and net realizable value: Á Á FIFO or average cost basis \$ 22,024 \$ 20,300 X - DefinitionFIFO or Weighted Average Inventory Amount + ReferencesNo definition available. + Details Name: ecvt_FIFOOorWeightedAverageInventoryAmount Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionValued at Lower of Cost and Net Realizable Value [Abstract] + ReferencesNo definition available. + Details Name: ecvt_ValuedAtLowerOfCostAndNetRealizableValueAbstract Namespace Prefix: ecvt_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionThe aggregated amount of merchandise or goods held by the entity and readily available for future sale plus items held by the entity which are partially complete or in the process of being readied for future sale. This amount is net of valuation reserves and adjustments. + ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph \(SAB Topic 5.BB\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2](http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.BB) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2)Reference 2: [http://www.xbrli.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.5-02\(6\)\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://www.xbrli.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1) + Details Name: us-gaap_InventoryFinishedGoodsAndWorkInProgressNetOfReserves Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: <http://www.xbrli.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10>Reference 2: [http://www.xbrli.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph \(b\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1](http://www.xbrli.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1)Reference 3: [http://www.xbrli.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph \(SX 210.5-02\(6\)\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1](http://www.xbrli.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1)

https://asc.fasb.org/1943274/2147480566/210-599-1Reference:2: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference:3: http://fasb.org/us-gaap/roef/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-599-1Reference:4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference:5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference:6: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference:7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-599-1Reference:8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-4 + Details Name: us-gaap LongTermDebt Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as current. Excludes lease obligation. + ReferencesReference:1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-599-1 + Details Name: us-gaap LongTermDebtCurrent Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as noncurrent. Excludes lease obligation. + ReferencesReference:1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-599-1 + Details Name: us-gaap LongTermDebtNoncurrent Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap LongTermDebtTypeAxis=ecvt A2024TermLoanFacilityMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap LongTermDebtTypeAxis=us-gaap LineOfCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 75 R64.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Long-term Debt - Narrative (Details) - USD (\$) in Thousands 1 Months Ended 3 Months Ended 6 Months Ended Jun, 2024 Jun, 2024 Jun, 2023 Dec. 31, 2023 Debt Instrument A A A A Debt extinguishment costs A A A \$ 90 \$ 0 A 2021 Term Loan Facility A A A A Debt Instrument A A A A Unamortized deferred financing costs A A A \$ 30 A 0 A Unamortized discount, write off A 59 59 A 2021 Term Loan Facility | Secured Overnight Financing Rate (SOFR) | Variable Rate Component One A A A A Debt Instrument A A A A Variable rate on spread 2.25% A A A A 2021 Term Loan Facility | Secured Overnight Financing Rate (SOFR) | Minimum | Variable Rate Component Two A A A A Debt Instrument A A A A Variable rate on spread 1.25% A A A A 2021 Term Loan Facility | Secured Overnight Financing Rate (SOFR) | Maximum | Variable Rate Component One A A A A Debt Instrument A A A A Variable rate on spread 2.75% A A A A 2021 Term Loan Facility | Secured Overnight Financing Rate (SOFR) | Maximum | Variable Rate Component Two A A A A Debt Instrument A A A A Variable rate on spread 1.75% A A A A 2024 Term Loan Facility A A A A Debt Instrument A A A A Debt extinguishment costs A 4,471 4,471 A Unamortized discount, noncurrent \$ 2,183 2,183 2,183 A Long-term debt, fair value \$ 873,000 \$ 873,000 \$ 873,000 \$ 876,403 2024 Term Loan Facility | Secured Overnight Financing Rate (SOFR) A A A A Debt Instrument A A A A Credit spread adjustment 0.10% A A A Effective interest rate 7.59% 7.59% 7.59% A ABL Facility | Secured Overnight Financing Rate (SOFR) A A A A Debt Instrument A A A A Credit spread adjustment A 0.10% A A Effective interest rate 8.75% 8.75% 8.75% A ABL Facility | Secured Overnight Financing Rate (SOFR) | Minimum A A A A Debt Instrument A A A A Variable rate on spread A 1.25% A ABL Facility | Secured Overnight Financing Rate (SOFR) | Maximum A A A A Debt Instrument A A A A Variable rate on spread A 1.75% A ABL Facility | Base Rate | Minimum A A A A Debt Instrument A A A A Variable rate on spread A 0.25% A ABL Facility | Base Rate | Maximum A A A A Debt Instrument A A A A Variable rate on spread A 0.75% A A X - DefinitionDebt extinguishment and prepayment costs on debt extinguished prior to maturity, including the write-off of associated debt issuance costs and discounts. + ReferencesNo definition available. + Details Name: ecvt DebtExtinguishmentCosts Namespace Prefix: ecvt Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionDebt Instrument, Basis Spread On Variable Rate, Spread Adjustment + ReferencesNo definition available. + Details Name: ecvt DebtInstrumentBasisSpreadOnVariableRateSpreadAdjustment Namespace Prefix: ecvt Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionDebt Instrument, Unamortized Discount, Write Off + ReferencesNo definition available. + Details Name: ecvt DebtInstrumentUnamortizedDiscountWriteOff Namespace Prefix: ecvt Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionPercentage points added to the reference rate to compute the variable rate on the debt instrument. + ReferencesNo definition available. + Details Name: us-gaap DebtInstrumentBasisSpreadOnVariableRate1 Namespace Prefix: us-gaap Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionEffective interest rate for the funds borrowed under the debt agreement considering interest compounding and original issue discount or premium. + ReferencesReference:1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference:2: http://fasb.org/us-gaap/roef/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-599-1Reference:3: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1Reference:4: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference:5: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-599-3Reference:4: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-6 + Details Name: us-gaap DebtInstrumentInterestRateEffectivePercentage Namespace Prefix: us-gaap Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference:1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference:2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.4-08(f)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-599-1Reference:3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-599-3Reference:4: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference:5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference:6: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference:7: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69E -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69EReference:8: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69F -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69FReference:9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference:10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference:11: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference:12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/214

[illegible]

Balance Type: credit Period Type: duration X - DefinitionEquity Method Investment Amortization Expense + ReferencesNo definition available. + Details Name: ecvt_EquityMethodInvestmentAmortizationExpense Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionEquity Method Investments Charges Related to Purchase Accounting + ReferencesNo definition available. + Details Name: ecvt_EquityMethodInvestmentsChargesRelatedtoPurchaseAccounting Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe percentage of ownership of common stock or equity participation in the investee accounted for under the equity method of accounting. + ReferencesReference 1: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a)(1) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481687/323-10-50-3> + Details Name: us-gaap_EquityMethodInvestmentOwnershipPercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItem Type Balance Type: na Period Type: instant X - DefinitionAmount of income (loss) for proportionate share of equity method investee's income (loss). + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef> -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482740/230-10-45-28>Reference 2: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482964/270-10-50-1>Reference 3: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 4: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.7-04(10)) -Publisher FASB -URI <https://asc.fasb.org/1943274/214777250/944-220-599-1>Reference 5: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481664/323-10-45-1>Reference 6: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (g) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-22>Reference 7: <http://fasb.org/us-gaap/role/ref/legacyRef> -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147483621/220-10-50-32>Reference 8: <http://fasb.org/us-gaap/role/ref/legacyRef> -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.9-04(13)(f)) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147478524/942-220-599-1> + Details Name: us-gaap_IncomeLossFromEquityMethodInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-41>Reference 2: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482964/270-10-50-1>Reference 3: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 4: <http://fasb.org/us-gaap/role/ref/otherTransitionRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 6: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147479941/924-10-599-1>Reference 7: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147479806/606-10-50-5>Reference 8: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-30>Reference 9: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-42>Reference 10: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-22>Reference 11: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-40>Reference 12: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-22>Reference 13: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147479806/606-10-50-4> + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingRevenueReconcilingItemLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_StatementBusinessSegmentsAxis=ecvt_AdvancedMaterialsAndCatalystsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ScheduleOfEquityMethodInvestmentEquityMethodInvesteeNameAxis=ecvt_ZeolystJointVentureMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 85 R74.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Reportable Segments - Reconciliation of Net Income to Segment Adjusted EBITDA (Details) - USD (\$) in Thousands 3 Months Ended 6 Months Ended Jun. 30, 2024 Jun. 30, 2023 Jun. 30, 2024 Jun. 30, 2023 Segment Reporting [Abstract] Å Å Å Income before income taxes \$ 11,375 \$ 34,909 \$ 13,775 \$ 34,385 Interest expense, net 12,895 9,168 26,304 19,000 Depreciation and amortization 21,624 20,969 43,557 41,166 Unallocated corporate expenses 7,532 6,153 14,613 13,080 Joint venture depreciation, amortization and interest 3,227 3,212 6,481 6,821 Amortization of investment in affiliate step-up 940 1,601 2,541 3,201 Debt extinguishment costs 4,560 0 4,560 0 Net (gain) loss on asset disposals (34) 1,128 614 2,306 Foreign exchange (gain) loss (99) (398) 79 (1,136) LIFO (benefit) expense (1,547) 1,111 (2,671) 2,510 Transaction and other related costs 140 1,190 198 2,624 Equity-based compensation 3,827 5,002 7,507 9,070 Restructuring, integration and business optimization expenses 159 1,106 385 2,129 Other (173) 356 (894) 127 Adjusted EBITDA from reportable segments \$ 64,426 \$ 85,507 \$ 117,049 \$ 135,283 X - DefinitionAdjusted Earnings Before Interest Taxes Depreciation And Amortization Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionBusiness Optimization, Integration, Restructuring and Other Related Costs + ReferencesNo definition available. + Details Name: ecvt_BusinessOptimizationIntegrationRestructuringAndOtherRelatedCosts Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionEquity Method Investment Amortization Expense + ReferencesNo definition available. + Details Name: ecvt_EquityMethodInvestmentAmortizationExpense Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionEquity Method Investments Charges Related to Purchase Accounting + ReferencesNo definition available. + Details Name: ecvt_EquityMethodInvestmentsChargesRelatedtoPurchaseAccounting Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionTransaction and Other Related Costs + ReferencesNo definition available. + Details Name: ecvt_TransactionAndOtherRelatedCosts Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionUnallocated Corporate Expenses + ReferencesNo definition available. + Details Name: ecvt_UnallocatedCorporateExpenses Namespace Prefix: ecvt_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of expense for award under share-based payment arrangement. Excludes amount capitalized. + ReferencesReference 1: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SAB Topic 14.F) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147479830/718-10-599-1>Reference 2: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(1)(i) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147480429/718-10-50-2> + Details Name: us-gaap_AllocatedShareBasedCompensationExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe aggregate expense recognized in the current period that allocates the cost of tangible assets, intangible assets, or depleting assets to periods that benefit from use of the assets. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef> -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482740/230-10-45-28>Reference 2: <http://www.xbrli.org/2003/role/exampleRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482785/280-10-55-48>Reference 3: <http://www.xbrli.org/2003/role/exampleRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482785/280-10-55-49>Reference 4: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482964/270-10-50-1>Reference 5: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 6: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (e) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-22> + Details Name: us-gaap_DepreciationDepletionAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount, before tax, of realized and unrealized gain (loss) from foreign currency transaction. + ReferencesReference 1: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.6-07(7)) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147479134/946-220-599-1>Reference 2: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 35 -Paragraph 1 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482014/830-20-35-1>Reference 3: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481956/830-20-45-1>Reference 4: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481926/830-20-50-1>Reference 5: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 830 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481839/830-10-45-17> + Details Name: us-gaap_ForeignCurrencyTransactionGainLossBeforeTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of gain (loss) on sale or disposal of assets, including but not limited to property plant and equipment, intangible assets and equity in securities of subsidiaries or equity method investee. + ReferencesReference 1: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482740/230-10-45-28> + Details Name: us-gaap_GainLossOnDispositionOfAssets1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionDifference between the fair value of payments made and the carrying amount of debt which is extinguished prior to maturity. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef> -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482740/230-10-45-28>Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef> -Name Accounting Standards Codification -Topic 470 -SubTopic 50 -Section 40 -Paragraph 2 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481303/470-50-40-2>Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef> -Name Accounting Standards Codification -Topic 470 -SubTopic 50 -Section 40 -Paragraph 4 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147481303/470-50-40-4> + Details Name: us-gaap_GainsLossesOnExtinguishmentOfDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest. + ReferencesReference 1: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-22>Reference 2: <http://www.xbrli.org/2003/role/exampleRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482785/280-10-55-48>Reference 3: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 4: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-30>Reference 5: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482964/270-10-50-1>Reference 6: <http://www.xbrli.org/2009/role/commonPracticeRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (e) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 7: <http://fasb.org/us-gaap/role/ref/otherTransitionRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-32>Reference 8: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.7-04(11)) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147477250/944-220-599-1>Reference 9: <http://www.xbrli.org/2003/role/exampleRef> -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI <https://asc.fasb.org/1943274/2147482810/280-10-50-31>Reference 10: <http://www.xbrli.org/2003/role/disclosureRef> -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section 599 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147477314/942-235-599-1>Reference 11: <http://fasb.org/us-gaap/role/ref/legacyRef> -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147483621/220-10-599-2> + Details Name: us-gaap_InterestExpenseNonoperating Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe difference between the change in the inventory reserve representing the cumulative difference in cost between the first in, first out and the last in, first out inventory valuation methods and any LIFO decrement which have been reflected in the statement of income during the period. + ReferencesNo definition available. + Details Name: us-gaap_InventoryLIFOReserveEffectOnIncomeNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of

income (expense) related to nonoperating activities, classified as after. + ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 2 -Subparagraph \(SX 210.5-03\(9\)\)](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 599 -Paragraph 2 -Subparagraph (SX 210.5-03(9))) -Publisher FASB -URI <https://asc.fasb.org/1943274/2147483621/220-10-599-2> + Details Name: us-gaap_OtherNonoperatingIncomeExpense Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration XML 86 R75.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stock-Based Compensation - Narrative (Details) Jun. 30, 2024 shares Share-Based Payment Arrangement [Abstract] A Number of shares available for grant (in shares) 8,032,299 X - ReferencesNo definition available. + Details Name: us-gaap_DisclosureOfCompensationRelatedCostsSharebasedPaymentsAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionThe difference between the maximum number of shares (or other type of equity) authorized for issuance under the plan (including the effects of amendments and adjustments), and the sum of: 1) the number of shares (or other type of equity) already issued upon exercise of options or other equity-based awards under the plan; and 2) shares (or other type of equity) reserved for issuance on granting of outstanding awards, net of cancellations and forfeitures, if applicable. + ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification -Topic 718 -SubTopic 10 -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2> + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant Namespace Prefix: us-gaap_Data Type: xbrli:sharesItem Type Balance Type: na Period Type: instant XML 87 R76.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stock-Based Compensation - Restricted Stock Units and Performance Stock Units (Details) 1 Months Ended 6 Months Ended Feb. 29, 2024 Jun. 30, 2024 \$ / shares shares Restricted Stock Units A Share-based Compensation Arrangement by Share-based Payment Award A A Granted (in shares) | shares A 1,126,166 Granted, weighted average grant date fair value (in dollars per share) | \$ / shares A \$ 8.84 Restricted Stock Units | Board of Directors A Share-based Compensation Arrangement by Share-based Payment Award A A Award requisite service period (in years) A 1 year Restricted Stock Units | Employee A Share-based Compensation Arrangement by Share-based Payment Award A A Award requisite service period (in years) A 3 years Performance Stock Units A Share-based Compensation Arrangement by Share-based Payment Award A A Granted (in shares) | shares A 535,629 Granted, weighted average grant date fair value (in dollars per share) | \$ / shares A \$ 10.23 Performance Stock Units | 2024 Grants A Share-based Compensation Arrangement by Share-based Payment Award A A Granted (in shares) | shares A 535,629 Award requisite performance period A 3 years Granted, weighted average grant date fair value (in dollars per share) | \$ / shares A \$ 11.64 Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions and Methodology [Abstract] A A Expected dividend yield A 0.00% Risk-free interest rate A 4.09% Expected volatility A 39.45% Expected term (in years) A 2 years 11 months 12 days Performance Stock Units | 2024 Grants | Company Performance Measure A A Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions and Methodology [Abstract] A A Granted, percentage of target A 0.50 Performance Stock Units | 2024 Grants | Total Shareholder Return (TSR) A A Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions and Methodology [Abstract] A A Granted, percentage of target A 0.50 Performance Stock Units | 2024 Grants | Minimum A A Share-based Compensation Arrangement by Share-based Payment Award A A Award vesting percentage A 50.00% Performance Stock Units | 2024 Grants | Maximum A A Share-based Compensation Arrangement by Share-based Payment Award A A Award vesting percentage A 200.00% Performance Stock Units | 2021 Grants A A Share-based Compensation Arrangement by Share-based Payment Award A A Award requisite service period (in years) 3 years A X - DefinitionPerformance Stock Unit, Fair Value Assumptions, Expected Dividend Rate + ReferencesNo definition available. + Details Name: ecvt_PerformanceStockUnitFairValueAssumptionsExpectedDividendRate Namespace Prefix: ecvt_Data Type: dtr-types1:percentItem Type Balance Type: na Period Type: duration X - DefinitionPerformance Stock Unit, Fair Value Assumptions, Expected Term Namespace Prefix: ecvt_Data Type: xbrli:durationItem Type Balance Type: na Period Type: duration X - DefinitionPerformance Stock Unit, Fair Value Assumptions, Expected Volatility Rate + ReferencesNo definition available. + Details Name: ecvt_PerformanceStockUnitFairValueAssumptionsExpectedVolatilityRate Namespace Prefix: ecvt_Data Type: dtr-types1:percentItem Type Balance Type: na Period Type: duration X - DefinitionPerformance Stock Unit, Fair Value Assumptions, Risk Free Interest Rate + ReferencesNo definition available. + Details Name: ecvt_PerformanceStockUnitFairValueAssumptionsRiskFreeInterestRate Namespace Prefix: ecvt_Data Type: dtr-types1:percentItem Type Balance Type: na Period Type: duration X - DefinitionShare-Based Compensation Arrangement By Share-Based Payment Award, Award Requisite Performance Period + ReferencesNo definition available. + Details Name: ecvt_ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardRequisitePerformancePeriod Namespace Prefix: ecvt_Data Type: xbrli:durationItem Type Balance Type: na Period Type: duration X - DefinitionShare-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Percentage + ReferencesNo definition available. + Details Name: ecvt_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodPercentage Namespace Prefix: ecvt_Data Type: xbrli:pureItem Type Balance Type: na Period Type: duration X - DefinitionEstimated period over which an employee is required to provide service in exchange for the equity-based payment award, in 'PnYnMdTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. + ReferencesReference 1: [http://www.xbrl.org/2003/role/exampleRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(1\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/exampleRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardRequisiteServicePeriod1 Namespace Prefix: us-gaap_Data Type: xbrli:durationItem Type Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(01\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItem Type Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsAndMethodologyAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1D>Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(1\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(2\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(2\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(i\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(ii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iv\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iv\)\(01\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iv\)\(02\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 12: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iv\)\(03\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 13: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(1\)\(iv\)\(04\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 14: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(i\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 15: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(ii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 16: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 17: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(01\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 18: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(02\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 19: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(03\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 20: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(d\)\(1\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 21: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(d\)\(2\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 22: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(e\)\(1\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 23: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(e\)\(2\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 24: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\)\(2\)\(i\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 25: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\)\(2\)\(ii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 26: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\)\(2\)\(iii\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 27: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\)\(2\)\(iv\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2)Reference 28: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(f\)\(2\)\(v\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(v) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X - DefinitionPercentage of vesting of award under share-based payment arrangement. + ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(a\)\(1\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardAwardVestingRightsPercentage Namespace Prefix: us-gaap_Data Type: dtr-types:percentItem Type Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_RestrictedStockUnitsRSUMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=srt_DirectorMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=ecvt_EmployeeMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardDateAxis=ecvt_Grants2024Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: ecvt_PerformanceMeasureAxis=ecvt_CompanyPerformanceMeasureMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: ecvt_PerformanceMeasureAxis=ecvt_TotalShareholderReturnTSRMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardDateAxis=ecvt_A2021GrantsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 88 R77.htm IDEA: XBRL DOCUMENT v3.24.2.u1 Stock-Based Compensation - Schedule of RSU and PSU Activity (Details) 6 Months Ended Jun. 30, 2024 \$ / shares shares Restricted Stock Units A Number of units A Nonvested, beginning balance (in shares) | shares 1,962,828 Granted (in shares) | shares 1,126,166 Vested (in shares) | shares (999,788) Forfeited (in shares) | shares (21,597) Nonvested, ending balance (in shares) | shares 2,067,609 Weighted average grant date fair value (per share) A Nonvested, beginning balance (in dollars per share) | \$ / shares \$ 10.55 Granted (in dollars per share) | \$ / shares 8.84 Vested (in dollars per share) | \$ / shares 11.10 Forfeited (in dollars per share) | \$ / shares 10.19 Nonvested, ending balance (in dollars per share) | \$ / shares 9.36 Performance Stock Units A Number of units A Nonvested, beginning balance (in shares) | shares 959,217 Granted (in shares) | shares 535,629 Vested (in shares) | shares 0 Forfeited (in shares) | shares (126,497) Nonvested, ending balance (in shares) | shares 1,368,349 Weighted average grant date fair value (per share) A Nonvested, beginning balance (in dollars per share) | \$ / shares 11.84 Granted (in dollars per share) | \$ / shares 10.23 Vested (in dollars per share) | \$ / shares 0 Forfeited (in dollars per share) | \$ / shares 12.99 Nonvested, ending balance (in dollars per share) | \$ / shares \$ 11.10 RSAs with performance only targets not achieved A Number of units A Granted (in shares) | shares 4,540 Weighted average grant date fair value (per share) A Granted (in dollars per share) | \$ / shares \$ 8.81 X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that were forfeited during the reporting period. + ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(03\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod Namespace Prefix: us-gaap_Data Type: xbrli:sharesItem Type Balance Type: na Period Type: duration X - DefinitionWeighted average fair value as of the grant date of equity-based award plans other than stock (unit) option plans that were not exercised or put into effect as a result of the occurrence of a terminating event. + ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph \(c\)\(2\)\(iii\)\(03\) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) + Details Name: 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[Stock-Based Compensation - Schedule of RSU and PSW Activity \(Details\) Details 77 false false R78.htm 995419- Disclosure - Stock-Based Compensation Expense \(Details\) Sheet](#)

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[http://www.ecovyst.com/role/EarningsPerShare-ReconciliationFromBasicToDilutedWeightedAverageSharesOutstanding\(Details\)Sheet](#)

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The disclosures contemplated herein include the fair value measurements at the reporting date by the level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3). "}}},"auth_ref":{"r1079","r1080"},"us-gaap_ScheduleOfGoodwillTable":{"xbrlyte":{"stringItemType","nsuri":"http://fasb.org/us-gaap/2024","localname":"ScheduleOfGoodwillTable"},"presentation":{"http://www.ecovyst.com/role/GoodwillScheduleOfGoodwillDetails"},"lang":{"en-us":{"role":{"terseLabel":"Schedule of Goodwill [Table]"},"label":"Goodwill [Table]"},"documentation":"Disclosure of information about goodwill, including, but not limited to, change from acquisition, sale, impairment, and other reason. 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Reportable segments include those that meet any of the following quantitative thresholds a) it's reported revenue, including sales to external customers and intersegment sales or transfers is 10 percent or more of the combined revenue, internal and external, of all operating segments b) the absolute amount of its reported profit or loss is 10 percent or more of the greater, in absolute amount of 1) the combined reported profit of all operating segments that did not report a loss or 2) the combined reported loss of all operating segments that did report a loss c) its assets are 10 percent or more of the combined assets of all operating segments. 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Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for example telephone expenses, Internet, and postal charges. 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Interest contracts

The following table presents the components of net periodic (benefit) expense for the Company sponsored defined benefit pension and postretirement plans, which cover certain employees and retirees located in the U.S.

Component	June 30, 2024	June 30, 2023
Defined Benefit Pension Plans	\$11,883	\$11,883
Postretirement Benefit Plans	\$11,883	\$11,883
Total Net Periodic Expense	\$23,766	\$23,766

The effective income tax rate for the three months ended June 30, 2024 was 27.1%, compared to 25.2% for the three months ended June 30, 2023. The effective income tax rate for the six months ended June 30, 2024 was 30.9%, compared to 28.3% for the six months ended June 30, 2023. The Company's effective income tax rates for the three and six months ended June 30, 2024 and 2023, respectively, fluctuated primarily due to the increased discrete tax impact relative to pre-tax book income related to a stock compensation shortfall and tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.

The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the six months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.

The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the six months ended June 30, 2023 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation, a discrete tax expense associated with the recording of accrued penalties and interest associated with historical uncertain tax positions, and a discrete tax benefit connected to state and local tax law changes.

Benefit Plans

The following tables present the components of net periodic (benefit) expense for the Company sponsored defined benefit pension and postretirement plans, which cover certain employees and retirees located in the U.S.

Component	June 30, 2024	June 30, 2023
Defined Benefit Pension Plans	\$11,883	\$11,883
Postretirement Benefit Plans	\$11,883	\$11,883
Total Net Periodic Expense	\$23,766	\$23,766

The effective income tax rate for the three months ended June 30, 2024 was 27.1%, compared to 25.2% for the three months ended June 30, 2023. The effective income tax rate for the six months ended June 30, 2024 was 30.9%, compared to 28.3% for the six months ended June 30, 2023. The Company's effective income tax rates for the three and six months ended June 30, 2024 and 2023, respectively, fluctuated primarily due to the increased discrete tax impact relative to pre-tax book income related to a stock compensation shortfall and tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.

The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the six months ended June 30, 2024 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation and a discrete tax expense associated with the recording of accrued penalties and interest on historical uncertain tax positions.

The difference between the U.S. federal statutory income tax rate and the Company's effective income tax rate for the six months ended June 30, 2023 was mainly due to state and local taxes, a discrete shortfall tax expense related to stock compensation, a discrete tax expense associated with the recording of accrued penalties and interest associated with historical uncertain tax positions, and a discrete tax benefit connected to state and local tax law changes.

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