

Research Highlights

A weekly summary of stock ideas and developments in the companies we cover.

Morningstar Equity Research

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[Electrifying Growth: Decarbonization Megatrend Offers Generational Growth for Electrical Equipment Suppliers](#)

Disclosure

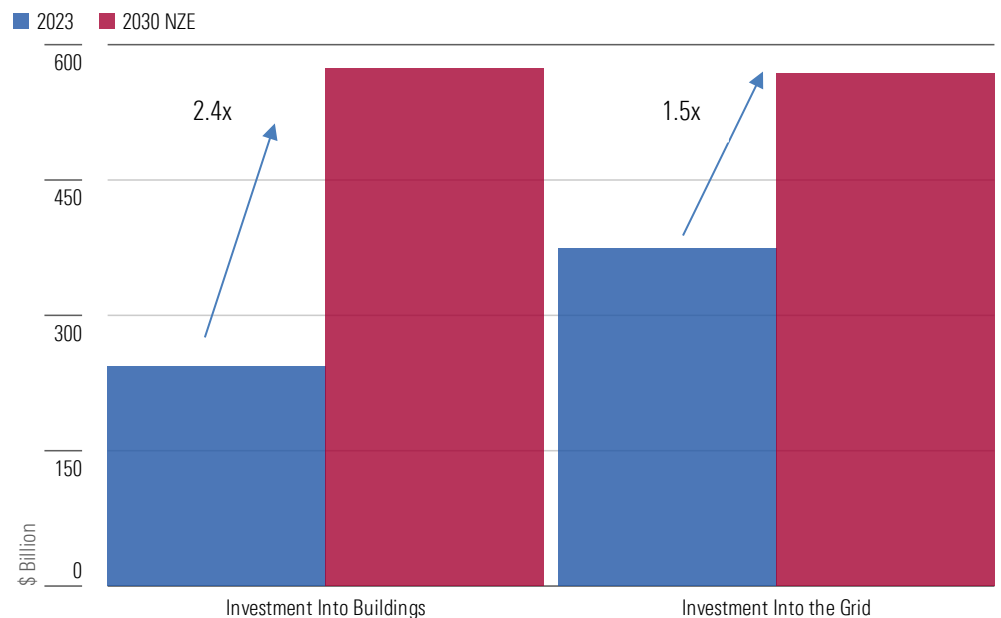
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Decarbonization Megatrend Offers Generational Growth for Europe Electrical Equipment Suppliers

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Electrical equipment suppliers are set for generational growth, underpinned by the energy transition. We're forecasting revenue growth two times higher than expected GDP during the next five years. However, the growth story for electrical equipment suppliers lasts much longer than simply five years if environmental targets are going to be delivered. Modernizing an outdated electrical grid built over 40 years ago and reducing emissions in buildings are two major obstacles to achieving net-zero by 2050. According to the IEA, electrical infrastructure and building efficiency annual investment will need to double by 2030, propelling demand for mission-critical electrical equipment. (Exhibit 1).

Exhibit 1 Achieving Net-Zero Requires Double the Annual Investment Into the Electrical Grid and Building Efficiency



Source: International Energy Agency, 2023.

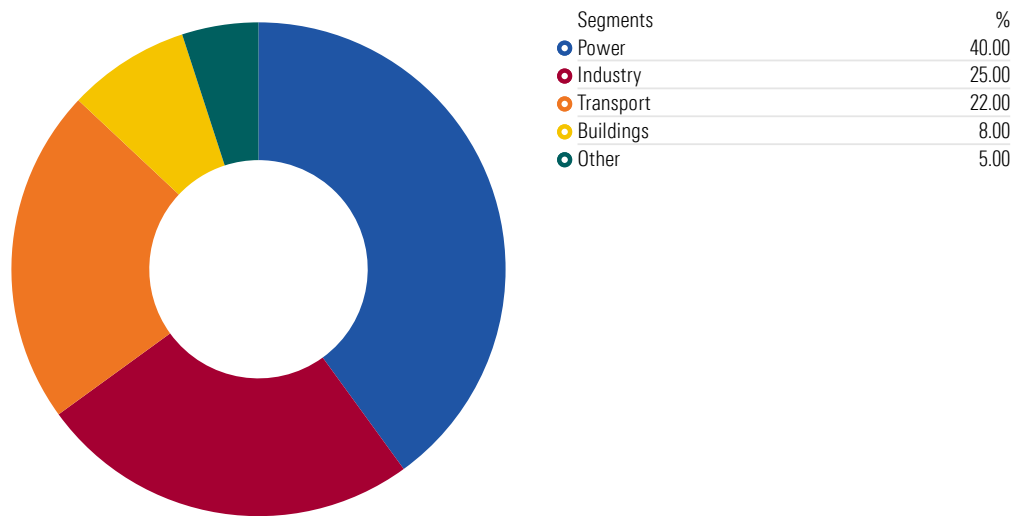
As Mark Twain is believed to have said, "During the gold rush, it's a good time to be in the picks and shovel business." Electrical equipment represents a small but critical cost enabling the reduction of CO2 emissions from the power sector and buildings, which collectively contribute half of global greenhouse gas emissions. We believe Schneider Electric and Eaton are best positioned to benefit from rising

investment by utilities and building owners, reflected by our expected five-year annualized EPS growth of 10% and 15%, respectively. While their peers enjoy similar opportunities, many have more complex businesses with other operating segments, diluting their exposure to the energy transition theme.

Government Stimulus and Strict Regulations Will Incentivize Investment into Decarbonizing Buildings and the Power Sector

When asked about achieving environmental targets, Kadri Simson, the European commissioner of energy, astutely stated, " It is time to shift our attention from targets and rules to what is needed to make things happen." We expect global stimulus packages and strict building regulations to trigger such action. Buildings and the power sector collectively contribute half of global greenhouse gas emissions (Exhibit 3), but are also two industries that we believe are most easily decarbonized.

Exhibit 2 The Power Sector and Buildings Account for Half of Greenhouse Gas Emissions



Source: ABB, IEA.

Decarbonizing electricity generation is the most immediate target for emissions reductions, in part because it is the largest source of energy sector carbon emissions (40% globally) and also because electrification using emissions-free power generation is the fastest scalable path for decarbonizing other sectors. Buildings, which emit most of their emissions through the production of heat and electricity used within the building, offer corporations a relatively easy target to decarbonize without impacting their core operations.

Summary of Electrical Suppliers' Exposure to Decarbonization Themes

Electrical equipment is used by different customers depending on its voltage, and therefore suppliers have varying exposure to decarbonization themes. Utilities typically require a combination of high- and medium-voltage equipment for different parts of the grid, while residential buildings have low-voltage requirements. Therefore, high- and medium-voltage equipment will benefit most from an increase in

investment by utilities, while medium- and low-voltage equipment is best positioned for the electrification of buildings.

We don't differentiate between the exposure for US- and European-listed suppliers, as the below-mentioned businesses each have sizeable businesses across continents. ABB, Legrand, Schneider Electric, Siemens AG, and Siemens Energy each earn between 20% and 35% of their revenue from the US, which is their largest geographical market, despite being listed in Europe. The secular growth themes are also visible on both continents, as evident by stimulus imposed and investment plans from listed-utilities in both regions.

Exhibit 3 Schneider Electric Is the Best-Positioned Electrical Business to Decarbonize Buildings and Enable the Energy Transition

	Buildings					Utilities			End Market Exposure to Utilities	End Market Exposure to Buildings	End Market Exposure to Data Centers
	Low-Voltage Electrical Products	Building Management Systems	Building Information Modelling	HVAC	Critical Power/Data Center	Medium-Voltage Products	High-Voltage Products	Smart Grid Software			
ABB	Market Leading Offering	Limited Offering	No Offering	No Offering	Limited Offering	Market Leading Offering	No Offering	No Offering	10-25%	10-25%	0-10%
Eaton	Market Leading Offering	No Offering	No Offering	No Offering	Market Leading Offering	Market Leading Offering	Limited Offering	No Offering	10-25%	25-50%	10-25%
GE Vernova	No Offering	No Offering	No Offering	No Offering	No Offering	Meaningful Offering	Market Leading Offering	Meaningful Offering	>50%	N/A	0-10%
Honeywell	No Offering	Market Leading Offering	No Offering	Market Leading Offering	No Offering	No Offering	No Offering	No Offering	N/A	10-25%	N/A
Legrand	Meaningful Offering	No Offering	No Offering	No Offering	Limited Offering	No Offering	No Offering	No Offering	N/A	>50%	10-25%
Schneider Electric	Market Leading Offering	Market Leading Offering	Limited Offering	Meaningful Offering	Market Leading Offering	Market Leading Offering	No Offering	Market Leading Offering	10-25%	25-50%	25-50%
Siemens AG	Meaningful Offering	Market Leading Offering	Limited Offering	Market Leading Offering	Limited Offering	Market Leading Offering	No Offering	Meaningful Offering	0-10%	10-25%	0-10%
Siemens Energy	No Offering	No Offering	No Offering	No Offering	No Offering	No Offering	Market Leading Offering	No Offering	>50%	N/A	N/A

Source: Morningstar, company reports.

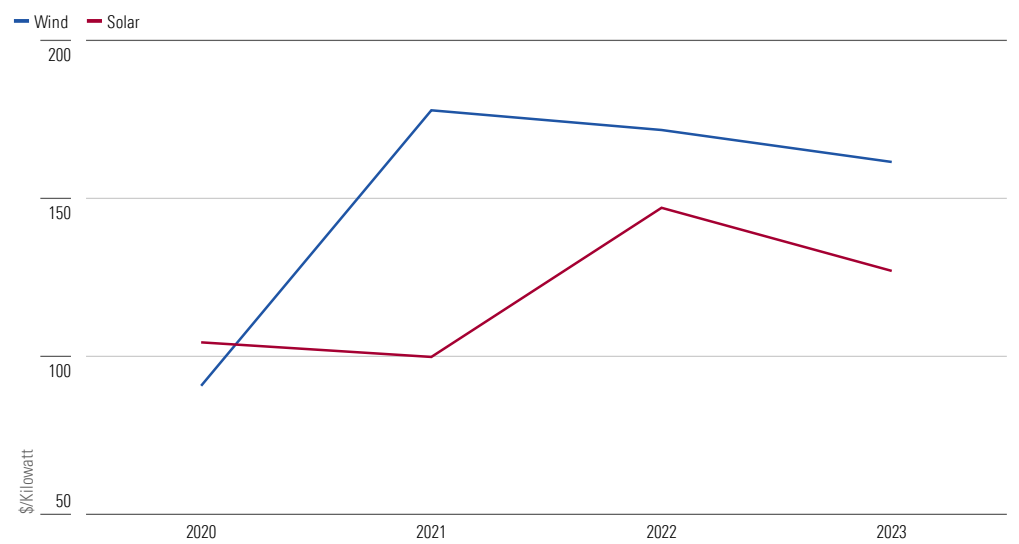
While suppliers of high-voltage electrical equipment, such as GE Vernova and Siemens Energy's Electrification segments will benefit most from higher spending to upgrade grid infrastructure, we deem their investment thesis to be more uncertain. Both GE Vernova and Siemens Energy earn a large contribution of revenue from gas and wind turbines, which we think offers a more complicated investment thesis than Schneider Electric and Eaton. Conversely, Legrand has the largest end-market exposure to buildings, but its portfolio is weighted toward low-voltage electrical equipment which benefits least from grid modernization needed for the energy transition.

Achieving Renewable Energy Targets Will Require Grid Modernization, Propelling Demand for Electrical Equipment

A major aspect of the electrification megatrend is the additional investment required to modernize outdated infrastructure to support the energy transition and improve its resilience to extreme weather events. Much of the focus of the energy transition has been on increasing renewable energy generation, but an outdated power grid is proving to be the biggest obstacle in achieving renewable energy targets. Costs and lead times associated with connecting renewable energy to the grid have nearly doubled

since 2020 (Exhibit 5), mostly driven by the necessary upgrades needed to accommodate new generating capacity. For wind projects, the costs are mostly connected to the investment required into transmission lines, while solar plants are more often connected to the distribution grid. According to Lawrence Berkeley National Laboratory, it cost twice as much to connect a US wind plant to the grid than a thermal plant in 2023. For solar, it was 50% more expensive. We expect the data to be similar in Europe.

Exhibit 4 Costs To Add Renewables to the Grid Have Almost Doubled and Threaten Climate Change Ambitions



Source: ThunderSaid Energy, 2023.

The required grid investment will drive demand for electrical suppliers in the following ways:

- ▶ Replacement Demand
 - ▶ Grid Expansion.
 - ▶ Adoption of Digital Solutions to Ensure the Reliability of the Grid.

Grid Modernization Creates Replacement Demand for Outdated Electrical Equipment

While investment into renewable power has grown by 9% annualized since 2015 due to proven reliability and declining costs, investment into the grid has remained largely stable at around \$300 billion per year (Exhibit 6). Spending remains comfortably below the \$600 billion estimated by the IEA to achieve net-zero emissions, supporting evidence of the significant upside potential possible for suppliers of equipment. The CEO of Nexans, a leading supplier of long-distance cables connecting electricity grids to renewable energy projects, explains the magnitude of the task by comparing the necessary upgrades needed to the grid to meet renewable energy targets to the telecommunications sector moving from 2G to 5G in 10 years. ■■

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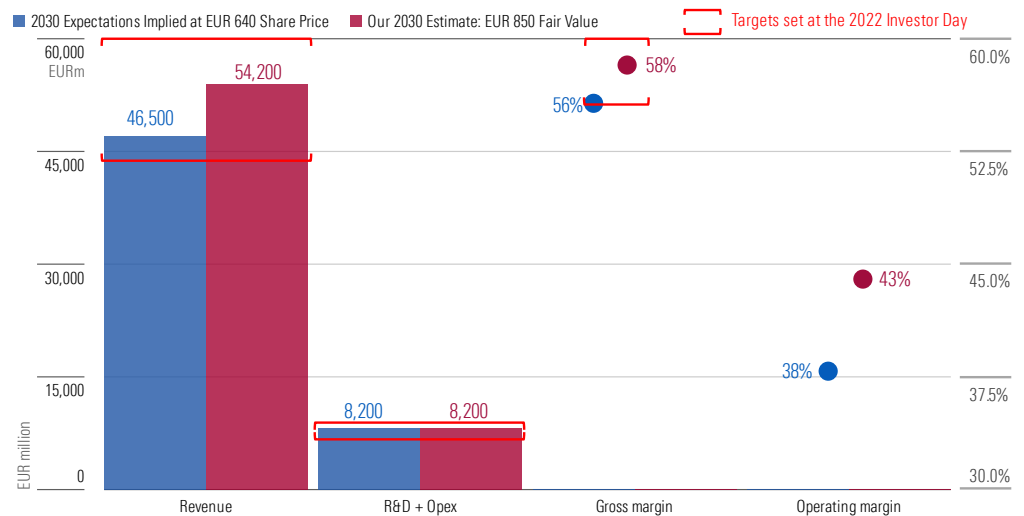
[ASML: Short-Term Pain, Long-Term Gain](#)

ASML: Short-Term Pain, Long-Term Gain

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ASML's shares have fallen 20% since Oct. 15, when management reduced its 2025 revenue outlook to EUR 30 billion-EUR 35 billion from EUR 30 billion-EUR 40 billion. Intel and Samsung have delayed equipment orders as they struggle to ramp up leading-edge semiconductor nodes. As TSMC's lead over Intel and Samsung expands, the Taiwanese firm should become an even larger customer for ASML, and investors fear it might gain bargaining power and demand lower prices. We think this concern is overdone, as ASML is investing significantly in the productivity of its machines, a main ingredient to maintain a healthy relationship with TSMC and the rest of the foundries. Overall, we see the selloff as an overreaction and believe the shares look attractive compared with our EUR 850 fair value estimate. We expect new details on ASML's 2030 guidance and updates on its technological and productivity roadmap at the Nov. 14 investor day, which we will attend in person. While we see possible upside and downside to our fair value estimate based on what's reported during the investor day, we think the market is already pricing in rather pessimistic scenarios.

Exhibit 1 Current Share Price Is Discounting a Scenario That Is Too Pessimistic



Source: PitchBook data. Data as of Oct. 21, 2024.

What Is Our Outlook for 2025?

In April, CFO Roger Dassen said that ASML needed "a bit over EUR 4 billion" in orders per quarter in the final three quarters of 2024 to reach the midpoint of its EUR 30 billion-EUR 40 billion revenue guidance for 2025. Given that ASML has already booked EUR 8.2 billion in orders in the second and third quarters, it would need EUR 4 billion in orders in the fourth quarter to reach the EUR 35 billion revenue mark in 2025.

The new EUR 30 billion-EUR 35 billion guidance for 2025 is more conservative. To reach the EUR 32.5 billion revenue midpoint, ASML would only need EUR 2.0 billion in fourth-quarter orders. Despite the weakness in PC and smartphones and uncertainty surrounding Intel and Samsung, EUR 2.0 billion in fourth-quarter orders looks like a low bar. We model ASML sales will reach the midpoint of its new guidance, EUR 32.5 billion, because:

- ▶ TSMC continues to ramp up production in its N2 fab in Hsinchu as it enters volume manufacturing. Although significant EUV orders for this fab were already recorded in the second quarter, additional EUV orders should arrive as TSMC continues to increase production. This could help 2025 revenue. The capacity of the N2 fab is also higher than the N3 fab, meaning it will require more lithography equipment.
- ▶ Management confirmed that ASML could utilize "fast deliveries," and orders received during the first quarter of 2025 could be shipped by year-end 2025.

1.

If we are wrong and ASML comes up short of EUR 32.5 billion in 2025 revenue, we do not expect a meaningful impact on our EUR 850 fair value estimate. Instead of worrying about 2025, we think investors should focus on the long term and not extrapolate quarterly trends into the future, given the lumpy nature of ASML business as the firm sells a low-volume, high-price product.

Management confirmed that some 2025 equipment demand will move to 2026, but the full extent of the pushout is uncertain as it is still early. Sluggish PC and smartphone demand, together with Intel's and Samsung's recent struggles, is the main reason for order delays. We expect low-NA EUV deliveries in the mid- to high 60s in 2026 compared with close to 50 in 2025. EUV is the main contributor our 12% revenue growth forecast for 2026.

What Assumptions Are Baked Into ASML's Current Share Price?

At a share price of EUR 640, the market seems to be assuming ASML's 2030 financial performance will be in line with the weakest scenario given during the 2022 investor day. This means EUR 46.5 billion in 2030 revenue (current 2030 guidance is EUR 44 billion-EUR 60 billion), 56% gross margin (guidance is 56%-60%), and EUR 8.2 billion in research and development plus operating expenses (guidance is EUR 7.6 billion-EUR 8.2 billion). This scenario looks too pessimistic to us, providing a buying opportunity.

Our EUR 850 fair value estimate assumes a scenario that is roughly in line with the midpoint scenario of ASML's 2030 guidance. This assumes EUR 54 billion in revenue in 2030, 58% gross margin, and EUR 8.2 billion in R&D plus operating expenses.

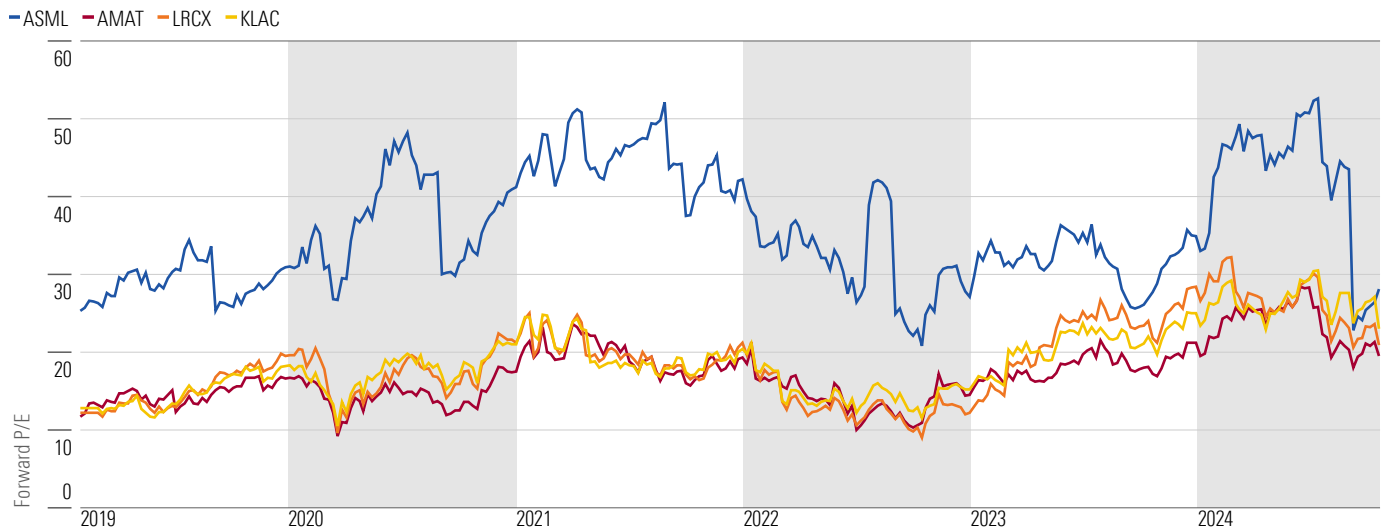
What Is the Right Multiple for ASML?

During the past decade, ASML has enjoyed a hefty valuation premium compared with peers Applied Materials, Lam Research, and KLA. Its shares have traded at an average forward price/earnings of 36 times since February 2019, sometimes reaching 40-50 times, compared with the peer average of 18. In our view, this premium is explained by ASML's monopolistic position and higher earnings growth historically. We believe ASML still deserves to trade at a premium due to its monopoly-type position and virtually unbreakable wide moat. However, this premium valuation might narrow.

We don't see any challenges to ASML's virtual monopoly, given that no other firm is close to manufacturing EUV technology, and ASML's R&D budget is several orders of magnitude larger than those of Nikon and Canon combined. Investors also like product focus, which results in a simpler organization, intragroup cost synergies, and better visibility. Peers like Applied Materials have more conglomerate-type structures with businesses in deposition, etching, and metrology.

The main reason ASML might deserve a narrower valuation premium in the next decade is our expectation for lower earnings growth. From 2015 to 2023, ASML's earnings per share grew at a 25.6% CAGR; we model a 14.9% CAGR in the next decade. Although future generations of EUV equipment like high-NA or hyper-NA will bring incremental growth, we don't expect they will replicate the inflection point that we saw during the transition from deep ultraviolet, or DUV, to EUV. At a forward P/E of 25-30 times—a slight premium to peers—ASML shares also look undervalued and should trade in the EUR 740-EUR 890 range based on our estimate of 2026 earnings, in line with our EUR 850 fair value estimate

Exhibit 2 Even if ASML's Valuation Premium to Peers Narrows, We Still See Upside to the Current Share Price

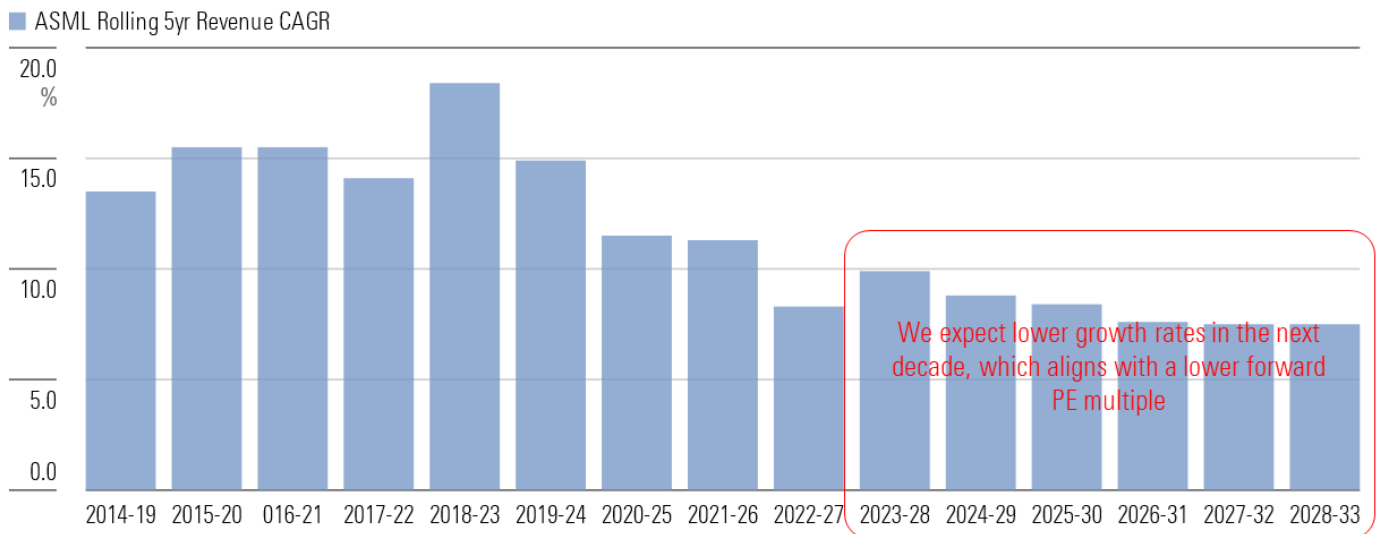


Source: Company reports, Morningstar estimates. Data as of Oct. 21, 2024.

What Is ASML's Long-Term Revenue Growth and Margin Expansion Potential?

Although Moore's Law keeps advancing, thanks to shrinking patterns and new transistor architectures, printing smaller patterns is getting more complicated. As such, investors should not expect the same sales growth from ASML in the next decade compared with the past one (18% CAGR in 2013-23 compared to our 9.7% forecast for 2023-33). New technologies like advanced packaging are changing the way in which Moore's Law evolves, focusing on how to interconnect different chips rather than shrinking dimensions in the same silicon die. Still, ASML machines keep delivering and managing to shrink chip resolutions and increase transistor density; the company recently achieved a critical dimension of 8 nanometers with its high-NA EXE:5000 EUV machine. ASML's growth will come from more systems sold, higher selling price per system, and growth in service revenue.

Exhibit 3 Investors Should Expect High-Single-Digit to Low-Double-Digit Growth in the Next Decade



Source: Company reports, Morningstar estimates. Data as of Oct. 21, 2024.

Another investor concern is that lithography intensity—the share of total semiconductor equipment spending allocated to lithography tools—will decrease. This is a valid argument and another reason ASML won't grow as much in the next decade compared with the previous one. However, it's important to contextualize this. While lithography might represent a smaller percentage of overall equipment capital expenditure in the future, the absolute dollar value spending on lithography tools will keep growing as the overall semiconductor industry expands. We estimate the overall industry will grow at a 7.1%-9.6% CAGR until 2030 (see our [Semiconductor Industry Landscape](#)), in line with our ASML 10-year revenue CAGR of 9.7%.

Higher pricing per lithography tool is another key lever of ASML's growth. As ASML improves not only the technology but the productivity of its machines, it can justify charging higher prices to customers. For instance, ASML's newest low-NA EUV machine, the NXE:3800E, provides a 40% productivity jump to 220 wafers per hour compared with the NXE:3600D at 160. Given that foundries have a huge fixed-cost

base, a jump in productivity is highly accretive for them from a unit economics perspective, and ASML can charge a higher price per machine. ASML reported that the unit EUV price grew from EUR 148 million in the third quarter of 2021 to EUR 188 million last quarter, as it has paired price increases with improved productivity.

Newer machines like the NXE:3800E also come at higher gross margins due to their higher prices and cost efficiencies in design. Now that ASML has many EUV product platforms, machines can share many parts and modules, creating commonality among them and reducing cost, design complexity, and lead times. Once an improvement has been introduced into a machine, it can follow a "cascade effect" and be introduced into older generations of machines.

Additionally, ASML has room to improve the margins of its EUV service business in the long term. Since EUV is a less mature platform than DUV, its service gross margins are still dilutive to the overall group. As it happened with DUV two decades ago, ASML is gradually improving its EUV service margins by developing expertise, improving machine uptime, and upselling services, software, and upgrades. Over its 30-year lifetime, an EUV unit can generate 1.5 times or more of service revenue compared with its equipment revenue, versus DUV's ratio of 1.3 times. As EUV keeps maturing, we expect its service gross margins will surpass those of DUV. ■■

Read the Full Report

European Capital Goods: Scoping the
'Scope 2' Opportunities

An Industrials Sector Energy Efficiency Wave Is Underway

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A combination of recent increases in wholesale energy costs, carbon prices, and tightening energy performance standards is increasing the industrials sector's commitment to and investment in energy-efficient capital equipment, systems, and interventions. The energy-intensive nature of the sector and the high temperatures required in many industrial processes make decarbonization a challenge from both a technological and abatement cost perspective. Here, energy-efficiency gains offer industrial carbon emitters the best of both worlds: improvements in their carbon footprint and profitability in the form of energy savings. Consequently, we expect broad adoption of capital equipment that embraces energy-efficiency advances in motorized and driven systems, HVAC and refrigeration, waste heat recovery, and industrial process optimization.

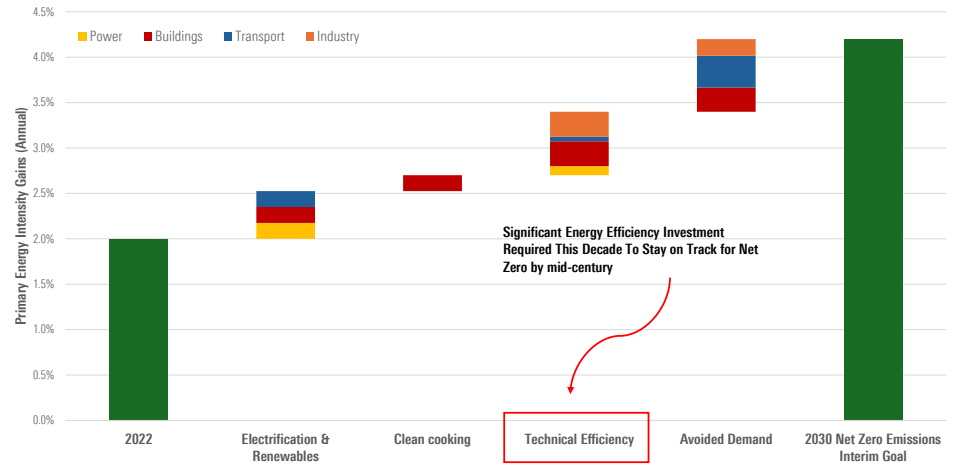
The Industrials Sector Is Primed for an Energy-Efficiency Capital Investment Wave

We think the industrials sector is poised to increasingly incorporate energy-efficient equipment, systems, and solutions in its operations over the coming decade. Rising energy costs—including recent higher wholesale energy prices and the introduction of and/or rises in carbon prices in certain economies—represent the primary driver of the coming energy-efficiency investment wave. Notwithstanding, industrials firms also want to bolster their sustainability credentials—see Exhibit 2. Here, energy-efficiency investments stand among the simplest and lowest-cost options to lower an industrial emitter's carbon footprint.

Doing More With Less

At its core, energy efficiency is about producing the same quantity of goods and/or services with less energy. This makes energy efficiency a sweet spot, which tends to offer both improvements in industrial carbon emitters' carbon footprint and profitability. Accordingly, energy-efficiency gains are key to various net zero emissions road maps, such as the IEA's Net Zero Emissions by 2050 Scenario. Realizing this goal by midcentury involves the achievement of several interim goals, one being a marked step-up in the rate of improvement in the energy intensity of the global economy in the current decade. Indeed, the IEA recently pointed out that the rate of improvement in the global economy's primary energy intensity needs to immediately double to about 4% (up from 2% in 2022) to hit the 2030 interim goal described in its net zero road map. Energy efficiency—described by the IEA in Exhibit 1 as "technical efficiency"—is a key contributor to the decrease in energy consumption needed to keep the global economy on track. Moreover, and as is evident in Exhibit 1, the industrials sector must be a key contributor to the requisite gains in energy efficiency to achieve this goal.

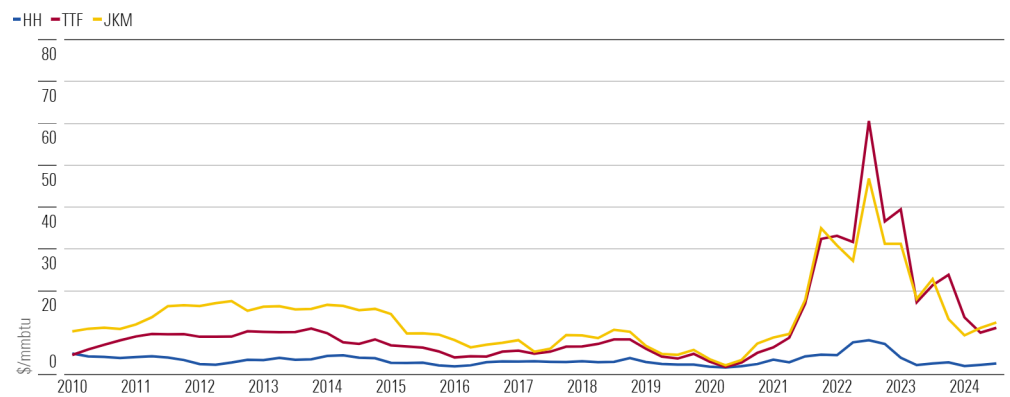
Exhibit 1 The Global Rate of Energy Intensity Improvement Needs to Double to Hit the IEA's 2030 Interim Goal Required Annual Primary Energy Improvement Rate to Reach Interim 2030 Goal Under IEA's 2050 Net Zero Emissions Scenario



Source: International Energy Agency (2023).

Historically, the industrials sector's uptake of energy-efficient equipment and technologies was stymied by a range of barriers. These include higher upfront capital costs versus less energy-efficient alternatives, a particular hindrance to greater uptake in developing economies. Capital rationing has also traditionally held such investment back, as managers prioritized competing growth-oriented capital projects over investments to improve energy efficiency. A range of principal-agent dilemmas—between, for example, the original equipment manufacturer suppliers of electrical motor-enabled capital equipment and its end users, which foot the bill for electricity consumption—have also held back greater adoption.

Exhibit 2 The Rise in Natural Gas Prices Since 2022 Has Lifted the Appeal of Industrials Sector Energy Efficiency

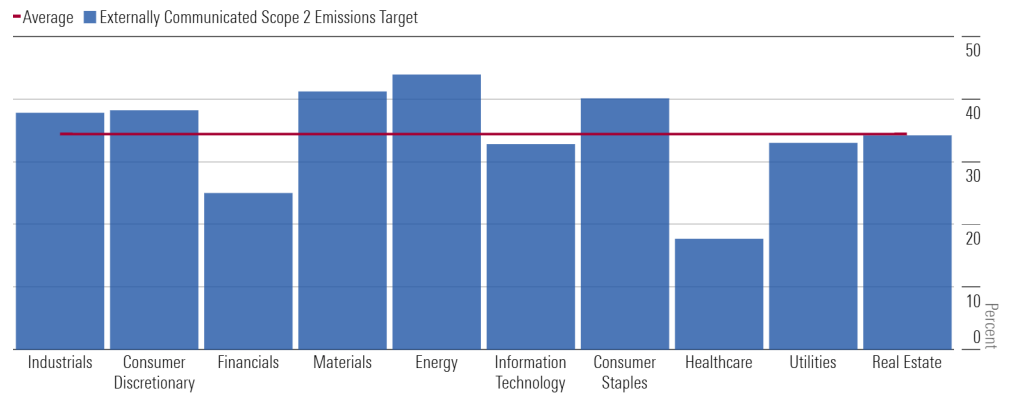


Source: Morningstar commodity. Data as of Oct 28, 2024.

However, the spike in energy prices, particularly in Europe and Asia following Russia's invasion of Ukraine in 2022, highlighted the need and created an economic incentive to improve the energy

efficiency of the industrials sector, lifting its priority among the reinvestment options of industrials firms (Exhibit 2). Indeed, the number of industrials firms with explicitly stated scope 2 carbon emission reduction ambitions is rising, with industrials ranking among the most ambitious sectors regarding energy efficiency (Exhibit 3). Commitments to reducing scope 2 emissions — those being an entity's indirect carbon emissions associated with the purchase of electricity, steam, heat, or cooling — are a proxy for improved energy-efficiency goals.

Exhibit 3 The Industrials Sector Is Among the Most Committed to Moving the Dial on Energy Efficiency
 Scope 2 Emissions Reduction Targets by Sustainalytics Industry Classification

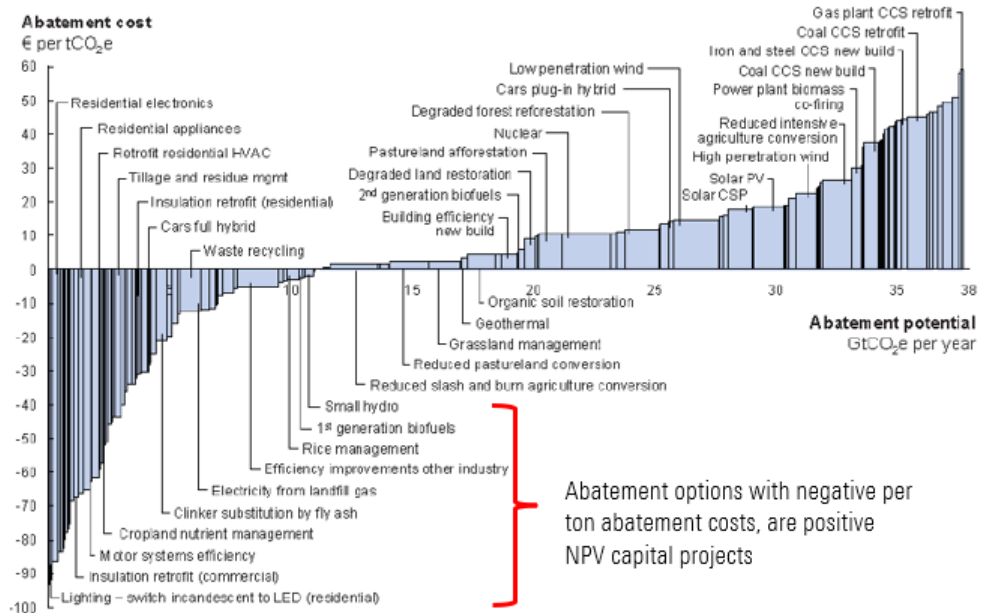


Source: Morningstar Sustainalytics, International Energy Agency. * Sample is drawn from Morningstar Sustainalytics' Low Carbon Transition Rating Research universe, covering an approximate 9,500 publicly listed entities globally.

Low Cost Is Always Best

In seeking the most economically beneficial path toward net zero emissions, firms use marginal abatement cost curves to select between the often-wide range of decarbonization alternatives optimally. Each firm has its own MAC curve, which effectively lays out all the options that are implementable in a company's operations to reduce carbon emissions, ranking them in order of least to most expensive on a per ton of carbon emissions avoided basis. An example of a MAC curve is illustrated in Exhibit 4, with the least expensive abatement options for the industrials firm located on the left-hand side of the chart. Abatement options become progressively more expensive per ton of carbon emissions avoided as one moves further toward the right-hand side of the chart.

Exhibit 4 Abatement Options Often Expensive for Industrials, but Energy-Efficiency Options Typically Compelling
Global Marginal Abatement Curve for Year 2030 (McKinsey & Co, 2009)



Source: Naucner & Enkvist (2009).

In the case of energy-intensive industrial firms, such as chemicals, paper, plastics, cement, glass, and refining industries, MAC curves can present a sobering array of emission reduction alternatives, which skew quickly to the expensive, right-hand side of the curve. Nonetheless, there are emission-reducing technologies available to industrial emitters that represent positive net present value investment opportunities. In effect, these technologies “pay for themselves” by offering an investment return that clears the cost of capital benchmarks while delivering reduced carbon emissions. Such abatement options reside on the very left-hand side of a firm's MAC curve, as they have negative abatement costs, given they are value-accretive. These positive net present value options are almost exclusively energy efficiency initiatives and account for some 10% to 30% of the total abatement potential for an industrial firm, according to McKinsey & Co.

Moreover, the opportunity posed by energy-efficiency initiatives isn't limited to the industrial sector. Rather, energy-efficiency investments and interventions promise reduced carbon emissions at low cost to the broader global economy. To this point, energy-efficiency technologies feature the lowest average abatement costs among the wide array of carbon abatement technologies that have the potential to decarbonize the global economy. Indeed, energy-efficiency abatement technologies and interventions are estimated to cost an average of USD 32 per ton of CO₂ abated, according to recent research by energy transition research consultancy Thunder Said Energy, and therefore are a superior bang for the buck relative to all other abatement categories, which include renewable energy sources, carbon offsets, coal-to-gas switching, and energy demand reduction interventions. ■■■

Stocks on Sale Wide-Moat Stocks Trading at 4 and 5 Stars

Company Name/Ticker	Sector	Star Rating	Fair Value Estimate	Price/Fair Value	Uncertainty Rating	Moat Rating	Market Cap (B)
The Estée Lauder Companies EL	Consumer Defensive	★★★★★	USD 162	0.41	Medium	Wide	23.8
Fineos FCL	Technology	★★★★★	AUD 3.1	0.44	Very High	Wide	0.3
Elekta EKTA B	Healthcare	★★★★★	SEK 127	0.52	Medium	Wide	2.3
Etsy ETSY	Consumer Cyclical	★★★★	USD 100	0.53	Very High	Wide	6.0
Harmonic Drive Systems 6324	Industrials	★★★★★	JPY 5100	0.54	High	Wide	1.7
Edenred EDEN	Financial Services	★★★★★	EUR 55	0.55	Medium	Wide	7.9
Baidu 09888	Communication Services	★★★★★	HKD 154	0.58	High	Wide	32.4
Tencent Holdings 00700	Communication Services	★★★★	HKD 704	0.60	High	Wide	506.0
Huntington Ingalls Industries HII	Industrials	★★★★★	USD 326	0.61	Medium	Wide	7.7
Pernod Ricard RI	Consumer Defensive	★★★★★	EUR 185	0.61	Low	Wide	30.4
GSK GSK	Healthcare	★★★★★	GBX 2200	0.63	Medium	Wide	72.5
Polaris Industries PII	Consumer Cyclical	★★★★★	USD 110	0.63	Medium	Wide	3.9
Anheuser-Busch InBev ABI	Consumer Defensive	★★★★★	EUR 83	0.65	Medium	Wide	113.7
Nike NKE	Consumer Cyclical	★★★★★	USD 117	0.65	Medium	Wide	113.0
Pfizer (Pharmaceuticals) PFE	Healthcare	★★★★★	USD 42	0.65	Medium	Wide	155.6
Rentokil Initial RTO	Industrials	★★★★★	GBX 620	0.66	Medium	Wide	13.1
Luzhou Laojiao Company 000568	Consumer Defensive	★★★★	CNY 228	0.66	High	Wide	31.6
Bombardier Recreational Products DOO	Consumer Cyclical	★★★★	CAD 101	0.67	High	Wide	3.6
Murata Manufacturing Company 6981	Technology	★★★★★	JPY 4000	0.68	Medium	Wide	33.7
Yum China YUMC	Consumer Cyclical	★★★★★	USD 76	0.68	Medium	Wide	19.5
Spirax Group SPX	Industrials	★★★★★	GBX 9650	0.68	Medium	Wide	6.2
Melrose Industries MRO	Industrials	★★★★★	GBX 740	0.69	Medium	Wide	8.5
AmBev ABEV3	Consumer Defensive	★★★★	BRL 18.09	0.69	Medium	Wide	34.8
Roche Holding ROG	Healthcare	★★★★★	CHF 379	0.69	Low	Wide	244.4
Kubota 6326	Industrials	★★★★	JPY 2900	0.70	Medium	Wide	15.3
International Flavors & Fragrances IFF	Basic Materials	★★★★	USD 130	0.70	High	Wide	23.3
Nabtesco 6268	Industrials	★★★★	JPY 3500	0.70	High	Wide	1.9
British American Tobacco BATS	Consumer Defensive	★★★★	GBX 3900	0.70	Medium	Wide	77.6
Jiangsu Yanghe Brewery Joint-Stock Company 002304	Consumer Defensive	★★★★	CNY 128	0.72	High	Wide	19.7
Zimmer Biomet ZBH	Healthcare	★★★★	USD 150	0.72	Medium	Wide	21.6
Campbell Soup CPB	Consumer Defensive	★★★★	USD 62	0.73	Medium	Wide	13.4
Philips PHIA	Healthcare	★★★★	EUR 35	0.73	High	Wide	25.5
ASML Holding ASML	Technology	★★★★	EUR 850	0.73	High	Wide	263.6
Reckitt Benckiser Group RKT	Consumer Defensive	★★★★	GBX 6500	0.74	Medium	Wide	42.5
Rheinmetall RHM	Industrials	★★★★	EUR 730	0.74	Medium	Wide	25.2
Universal Music Group UMG	Communication Services	★★★★	EUR 31	0.75	Medium	Wide	45.6
Diageo DGE	Consumer Defensive	★★★★★	GBX 3100	0.76	Low	Wide	67.0
Brown-Forman BF.B	Consumer Defensive	★★★★	USD 55	0.76	Medium	Wide	19.6
Omron 6645	Technology	★★★★	JPY 7400	0.77	Medium	Wide	7.4
Compagnie Financiere Richemont CFR	Consumer Cyclical	★★★★	CHF 154	0.77	High	Wide	85.4
Endeavour Group EDV	Consumer Defensive	★★★★★	AUD 6.1	0.78	Low	Wide	5.6
Allegro (Poland) ALE	Consumer Cyclical	★★★★	PLN 44.5	0.78	High	Wide	9.1
Sony 6758	Technology	★★★★	JPY 3600	0.78	Medium	Wide	108.5

Source: Morningstar. As of Nov. 8, 2024.

Stocks on Sale Wide-Moat Stocks Trading at 4 and 5 Stars

Company Name/Ticker	Sector	Star Rating	Fair Value Estimate	Price/Fair Value	Uncertainty Rating	Moat Rating	Market Cap (B)
SF Express 002352	Industrials	★★★★	CNY 57.6	0.78	High	Wide	30.0
Barry Callebaut BARN	Consumer Defensive	★★★★	CHF 1810	0.78	Low	Wide	9.1
AstraZeneca AZN	Healthcare	★★★★	GBX 12400	0.78	Medium	Wide	194.2
NXP Semiconductors NXPI	Technology	★★★★	USD 300	0.79	Medium	Wide	60.0
Adobe Systems ADBE	Technology	★★★★	USD 635	0.79	High	Wide	220.5
Nestlé NESN	Consumer Defensive	★★★★	CHF 100	0.79	Low	Wide	233.3
Taiwan Semiconductor Manufacturing Company 2330	Technology	★★★★	TWD 1380	0.79	Medium	Wide	873.3
Boeing BA	Industrials	★★★★	USD 191	0.79	High	Wide	112.9
JD.com 09618	Consumer Cyclical	★★★★	HKD 195	0.80	High	Wide	60.5
Pexa Group PXA	Technology	★★★★	AUD 17.25	0.80	Medium	Wide	1.6
Wuliangye Yibin 000858	Consumer Defensive	★★★★	CNY 196	0.80	High	Wide	87.7
Yaskawa Electric 6506	Industrials	★★★★	JPY 5600	0.80	High	Wide	7.7
Constellation Brands STZ	Consumer Defensive	★★★★	USD 291	0.80	Medium	Wide	42.4
Adyen ADYEN	Technology	★★★★	EUR 1660	0.80	High	Wide	45.1
DSM-Firmenich DSFIR	Basic Materials	★★★★	EUR 130	0.81	Medium	Wide	29.8
Sanofi SAN	Healthcare	★★★★	EUR 117	0.82	Medium	Wide	128.8
Veeva Systems VEEV	Healthcare	★★★★	USD 273	0.82	High	Wide	36.2
Alphabet GOOGL	Communication Services	★★★★	USD 220	0.82	Medium	Wide	2,221.0
The Hershey HSY	Consumer Defensive	★★★★	USD 210	0.82	Low	Wide	35.0
Fanuc 6954	Industrials	★★★★	JPY 5200	0.83	High	Wide	26.1
Teradyne TER	Technology	★★★★	USD 135	0.83	High	Wide	18.2
Unicharm 8113	Consumer Defensive	★★★★	JPY 5700	0.83	Medium	Wide	17.9
Corteva CTVA	Basic Materials	★★★★	USD 70	0.84	Medium	Wide	40.3
Julius Baer Group BAER	Financial Services	★★★★	CHF 66	0.84	High	Wide	13.1
Daifuku 6383	Industrials	★★★★	JPY 3500	0.84	Medium	Wide	7.0
Merck & Co. MRK	Healthcare	★★★★	USD 120	0.84	Medium	Wide	255.9
L'Oreal OR	Consumer Defensive	★★★★	EUR 410	0.84	Medium	Wide	198.1
West Pharmaceutical Services WST	Healthcare	★★★★	USD 378	0.86	Medium	Wide	23.4
Airbus Group AIR	Industrials	★★★★	EUR 168	0.86	Medium	Wide	122.3
The Walt Disney Company DIS	Communication Services	★★★★	USD 115	0.86	High	Wide	179.4
Oriental Land 4661	Consumer Cyclical	★★★★	JPY 4450	0.86	Medium	Wide	41.5
Siemens Healthineers SHL	Healthcare	★★★★	EUR 61	0.87	Medium	Wide	63.4
Bio-Rad Laboratories BIO	Healthcare	★★★★	USD 430	0.87	High	Wide	10.2
Microsoft MSFT	Technology	★★★★	USD 490	0.87	Medium	Wide	3,163.0
Bristol-Myers Squibb BMY	Healthcare	★★★★	USD 63	0.87	Medium	Wide	111.0
Brambles BXB	Industrials	★★★★	AUD 22	0.87	Medium	Wide	17.5
ASX ASX	Financial Services	★★★★	AUD 75	0.87	Low	Wide	8.3
Mondelez International MDLZ	Consumer Defensive	★★★★	USD 75	0.88	Low	Wide	87.9
Mondelez International MDLZ	Consumer Defensive	★★★★	USD 75	0.88	Low	Wide	87.9
Dassault Aviation AM	Industrials	★★★★	EUR 227	0.88	Medium	Wide	16.7
Thermo Fisher Scientific TMO	Healthcare	★★★★	USD 630	0.88	Medium	Wide	212.6
Kenvue KVUE	Consumer Defensive	★★★★	USD 26	0.88	Medium	Wide	44.0
Dassault Systemes DSY	Technology	★★★★	EUR 37	0.89	Medium	Wide	46.2
United Parcel Service of America UPS	Industrials	★★★★	USD 150	0.89	Medium	Wide	114.5
TD Bank Group TD	Financial Services	★★★★	CAD 88	0.89	Low	Wide	98.7
Saab SAAB B	Industrials	★★★★	SEK 262.5	0.90	Medium	Wide	11.6
Northrop Grumman NOC	Industrials	★★★★	USD 580	0.90	Medium	Wide	75.8
Singapore Exchange S68	Financial Services	★★★★	SGD 12.7	0.90	Medium	Wide	9.2
Kweichow Moutai Company 600519	Consumer Defensive	★★★★	CNY 1780	0.90	Medium	Wide	288.6
Inner Mongolia Yili Industrial Group 600887	Consumer Defensive	★★★★	CNY 33	0.91	Medium	Wide	26.8
Agilent Technologies A	Healthcare	★★★★	USD 151	0.92	Medium	Wide	40.1
Auckland Airport AIA	Industrials	★★★★	NZD 8	0.93	Low	Wide	7.4
BAE Systems BA.	Industrials	★★★★	GBX 1490	0.93	Medium	Wide	53.6
VeriSign VRSN	Technology	★★★★	USD 195	0.95	Low	Wide	17.9

Source: Morningstar. As of Nov. 8, 2024.

Highlighted Companies

Pinnacle West Capital PNW

★★	
Currency	USD
Fair Value Estimate	80
Current Price	89.22
Price/Fair Value	1.14
Moat Rating	None
Uncertainty	Low
Capital Allocation	Standard
Sector	Utilities
Analyst	Travis Miller

Pinnacle West Earnings: Demand Growth Driving New Investment; Raising Fair Value Estimate

Pinnacle West is on track to top our full-year 2024 earnings outlook after reporting \$3.37 per share of earnings during the third quarter, down slightly from the third quarter of 2023. Management reaffirmed its \$5.00-\$5.20 EPS guidance range.

Why it matters: In the third quarter, core electricity demand growth added \$0.58 EPS and warmer-than-normal weather added \$0.83 EPS. We are raising our 2024 EPS estimate to reflect these large, unexpected benefits. Weather-adjusted electricity sales are up 5.7% year to date, at the high end of management's 4%-6% expectation. Business customers were the largest source of new demand.

Millicom TIGO

★★★★	
Currency	USD
Fair Value Estimate	34
Current Price	26.41
Price/Fair Value	0.78
Moat Rating	Narrow
Uncertainty	High
Capital Allocation	Standard
Sector	Comm Svcs
Analyst	Michael Hodel

The bottom line: We are raising our fair value estimate to \$80 from \$78 after increasing our capital investment outlook and incorporating strong year-to-date performance. We are reaffirming our no moat rating.

Pinnacle West's stock trades at a 14% premium to our new fair value estimate as of Nov. 8. We continue to assume 6% annual earnings growth, in line with management's 5%-7% target.

Big picture: We are raising our 2024-27 capital investment forecast by 20% to \$9.7 billion, in line with management's update and contributing to our fair value estimate increase. The increase in capital investment reflects accelerating demand growth.

Intellia Therapeutics NTLA

★★★★★	
Currency	USD
Fair Value Estimate	85
Current Price	16.00
Price/Fair Value	0.19
Moat Rating	None
Uncertainty	Very High
Capital Allocation	Standard
Sector	Healthcare
Analyst	Rachel Elfman

The board raised the dividend 2% to \$3.58 annualized for 2025, in line with our expectation. We expect the dividend to grow more slowly than earnings as Pinnacle West funds its capital investment plan and brings down its payout ratio.

Coming up: Management plans to issue a request for proposal in November for new generation resources. The result of the RFP could lead to more capital investment for Pinnacle West.

Following the US presidential election on Nov. 5 election, the Arizona Corporation Commission has two new commissioners, and all five commissioners are Republicans. We will be watching if the new commission adopts formula rates before the next election.

Source: Morningstar. Data as of Nov. 8, 2024.

* Indicates new Morningstar coverage.

Millicom Earnings: Cash Flow Was Strong Despite Ongoing Restructuring; Shares Attractive

Revenue growth remained modest during the third quarter, with service revenue up 2% year over year. However, Millicom showed renewed momentum, adding 470,000 net wireless and 50,000 net fixed-line consumer customers, both the best since 2022. Profitability and cash flow improved sharply.

Why it matters: Millicom's turnaround continues. Restructuring efforts produced a 10% increase in EBITDA, despite ongoing one-time costs. Free cash flow has totaled about \$500 million year to date, up from an \$80 million deficit in 2023. In Guatemala, Millicom's most important operation, service revenue grew 4%, the best result in three years despite modest customer losses. Management noted that competition from America Movil has ramped up recently, but we aren't concerned at this point. Cash flow has allowed Millicom to reduce net debt to \$5.4 billion from \$6 billion at the start of the year, significantly improving its financial position. The planned tower sale to SBA Communications would further strengthen the balance sheet.

The bottom line: We maintain our \$34 fair value estimate, and we believe Millicom shares are attractive. Our narrow moat rating is predicated on the attractive competitive structure in several of the firm's markets, including Guatemala, a wireless duopoly with America Movil. Xavier Niel's investment firm Atlas has closed its tender offer for Millicom shares. Atlas purchased 11% of Millicom's shares at the \$25.75 tender price and it now owns 40% of the company. We expect Niel will continue to exert a positive influence on Millicom.

Coming up: Millicom's effort to consolidate the Colombian telecom market continues to progress. The Colombian government is evaluating Millicom's offers, including the proposed buyout of the government's stake in Telefonica's Colombian business. While Colombia remains a challenging market, Millicom's performance there has improved, with big jumps in wireless and broadband customer additions during the quarter.

Intellia Earnings: Early-Stage Pipeline Makes Progress; Shares Attractive for Long-Term Investors

No-moat Intellia Therapeutics' early-stage gene editing pipeline is continuing to make progress. We maintain our positive long-term outlook and fair value estimate of \$85 per share. We view the stock as very undervalued, currently trading in 5-star territory. Intellia provides pure-play exposure to novel gene editing technology for long-term investors with a very high tolerance for risk. Pipeline candidate, NTLA-2002, is designed to inactivate a gene involved in potentially life-threatening inflammatory attacks for people suffering from hereditary angioedema. We like that Intellia is actively screening patients for its phase 3 study evaluating NTLA-2002, and we assign this pipeline candidate a 35% probability of approval in our base case. The clinical data looks positive, and we expect the phase 3 data could be released in 2026. Given time to review the data, submit regulatory filings, and prepare for a launch, we think it could reach the market in 2028, pending approvals.

We appreciate that enrollment is progressing in the phase 3 study of NTLA-2001 for the treatment of ATTR amyloidosis with cardiomyopathy, and it's tracking ahead of the company's target enrollment projections. We assign this pipeline candidate a 40% probability of approval in our base case, and we

think it could reach the market as early as 2026. By the end of our 10-year forecast period, we forecast NTLA-2002 for cardiomyopathy could generate almost \$1 billion in annual sales. We forecast Intellia's research and development costs as a percentage of sales will remain elevated over the next few years as it focuses on developing its pipeline candidates, but we forecast it will decline to the high teens as a percentage of sales in the later years of our 10-year forecast period.

We like that Intellia remains in a healthy financial position with \$944 million in cash and marketable securities at quarter-end, which should provide a cash runway into late 2026 to fund research and development expenses. ■■

Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. We think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (mines, for example), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach.

Morningstar's Equity Research Group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating:

1. our assessment of the firm's economic moat.
2. our estimate of the stock's fair value.
3. our uncertainty around that fair value estimate.
4. the current market price.

This process ultimately culminates in our single-point star rating.

Economic Moat

The Morningstar Economic Moat Rating is a structural feature that Morningstar believes positions a firm to earn durable excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow-moat companies are those that Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those that Morningstar believes will earn excess returns for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction-related risks related to environmental, social, and governance; industry disruption; financial health; or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Fair Value Estimate

Each stock's fair value is estimated by using a proprietary discounted cash flow model, which assumes that the stock's value is equal to the total of the free cash flows of the company is expected to generate in the future, discounted back to the present at the rate commensurate with the riskiness of the cash flows. As with any DCF model, the ending value is highly sensitive to Morningstar's projections of future growth.

Fair Value Uncertainty

The Morningstar Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the fair value estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors. Based on these factors, analysts classify the stock into one of several uncertainty levels: Low, Medium, High, Very High, or Extreme. Our recommended margin of safety—the discount to fair value demanded before we'd recommend buying or selling the stock—widens as our uncertainty of the estimated value of the equity increases.

Market Price

The market prices used in this analysis and noted in the report come from exchanges on which the stock is listed, which we believe is a reliable source.

Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock's current price relative to the analyst's estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst's educated opinion, is cheap, expensive, or fairly priced. To rate a stock, analysts estimate what they think it is worth (its "fair value"), using a detailed, long-term cash flow forecast for the company. A stock's star rating depends on whether its current market price is above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is close to the analyst's fair value estimate.

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Please note that investments in securities are subject to market and other risks, and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not continue in the future and is no indication of future performance. A security investment's return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost.

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