

# **2025 ETRM/CTRM TRANSFORMATION + MODERNIZATION REPORT.**

# A WORD FROM MOLECULE.



**Sameer Soleja**

CEO, *Molecule*



**That change also exposes the underlying economics of our industry. Nearly two-thirds of firms report that their systems still fail them, most often because they do not cover all commodities or processes.**

The findings of this year's report make clear that modernization in energy and commodity trading has reached a tipping point. In one year, ETRM/CTRM adoption jumped from one-third of organizations to more than 85%. Our respondent pool more than doubled, yet the pattern was consistent across industries and company sizes. This is not statistical noise — it is structural change across the market.

That change also exposes the underlying economics of our industry. Nearly two-thirds of firms report that their systems still fail them, most often because they do not cover all commodities or processes. The expectation of universal coverage sounds attractive, but in practice it is prohibitively expensive and structurally misaligned: every commodity comes with distinct risk models, data structures, and compliance regimes. Vendors that attempt to “do everything” sacrifice depth and agility. As a result, the market is naturally shifting toward modular, best-of-breed technology stacks — ecosystems where specialized solutions can integrate into resilient, scalable enterprise architectures.

It's fascinating to see how the definition of modernization itself has matured. What began as a response to volatility is now a response to structural complexity: compliance, organizational change, and multi-commodity portfolios. Smaller firms are modernizing at the same pace as global enterprises, erasing traditional scale advantages and reshaping competition.

Finally, expectations for artificial intelligence reflect this same pragmatism. Firms see its value first in practical applications — reporting, forecasting, and fraud detection — where productivity gains are tangible and trust can be established. Over time, those capabilities will expand into more strategic domains. The lesson is clear: the theory of the late aughts — that a one-time big-bang investment might satisfy needs for a generation — simply cannot be. Any organization in our industry (and really, most other industries) must engage in a continual process of aligning technology with market economics. Those who set themselves up for success with resilient architectures will be able to keep pace, and will lead the next era of energy.



**Kari Foster**

*VP of Marketing, Molecule*



**In 2025, modernization is about control, scalability, and clarity — systems that can handle multi-commodity portfolios, support tighter risk oversight, and deliver real-time data that you can trust.**

In this, our second-ever ETRM/CTRM Transformation & Modernization Report, the responses from trading professionals worldwide make it clear that modern technology is no longer a nice-to-have.


In our inaugural 2024 report, just 24% of respondents said modernization was in progress, and only 34% were using an ETRM/CTRM system. This year, those numbers have exploded. Over 70% of respondents now report active modernization efforts, and ETRM/CTRM adoption has jumped to 85%. The message is clear: companies aren't just talking about upgrading infrastructure — they're doing it.

But the drivers have changed. For traders and risk leaders, it's no longer about speed alone. In 2025, modernization is about control, scalability, and clarity — systems that can handle multi-commodity portfolios, support tighter risk oversight, and deliver real-time data that you can trust. It's also about enabling more precise decisions. Nearly every respondent expects AI to impact trading operations in the next five years, with strong demand for predictive analytics, automated reporting, and fraud detection. As portfolios grow more complex, and as compliance and decarbonization demands rise, the trading organizations that modernize fastest — and most strategically — will be the ones best positioned to lead.



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The background is a dark blue gradient featuring a stylized city skyline on the left, a dotted world map on the right, and various data visualizations including bar charts, line graphs, and a radar chart. A large, semi-transparent blue arrow points from the top left towards the bottom right, passing over the world map. The text 'INTRODUCTION + METHODOLOGY' is centered in white, with a red plus sign between the two words.

# INTRODUCTION + METHODOLOGY

# INTRODUCTION.

## 2025: The Year Modernization Gets Real

From intent to execution: What modernization really looks like in 2025

According to our previous ETRM/CTRM Transformation + Modernization Report, which was published in 2024, nearly 90% of survey respondents said that modernization was a priority, with the goals of increasing speed and responsiveness (agility). Companies were reacting to volatility, fragmented systems, and operational bottlenecks, all obstacles to efficient operations. Many of these modernization initiatives were in the planning phase.

In 2025, the focus has shifted from planning to execution, and the core driver of modernization is no longer about increased speed of operations. Today, modernization is about control, scalability, and confidence. Respondents want systems that can grow with them, handle increasing portfolio complexity, and deliver precision in data and decisions.

Digitalization and automation remain essential, but they're no longer the end goal. Respondents made it clear: technology should enable smarter decisions, more flexible operations, and a foundation that can support continued growth in a complex market.

This report is based on the 2025 ETRM/CTRM Transformation + Modernization Survey we conducted in January of 2025. In total, more than 400 individuals across 10+ industries shared their expectations, disappointments, and wish list for ETRM/CTRM systems in this new era.

## METHODOLOGY.

The 2025 ETRM/CTRM Transformation + Modernization Survey was conducted in January 2025, collecting responses from across industries, geographies, company sizes, and job functions. Answers were gathered anonymously to ensure unbiased results.

This year's respondent pool more than doubled from 2024, offering a broader view of how companies are evolving and where ETRM/CTRM systems are performing or falling short. The higher level of responses indicates more interest in technology modernization within the trading organization, perhaps a result of the shift from planning to execution that we uncovered in our data analysis.



A person with glasses is seen from the side, working at a desk. A large monitor in the background displays lines of code. In the foreground, a laptop is open, and the person's hands are visible near it. The scene is dimly lit with a blue tint.

# **SURVEY OVERVIEW.**



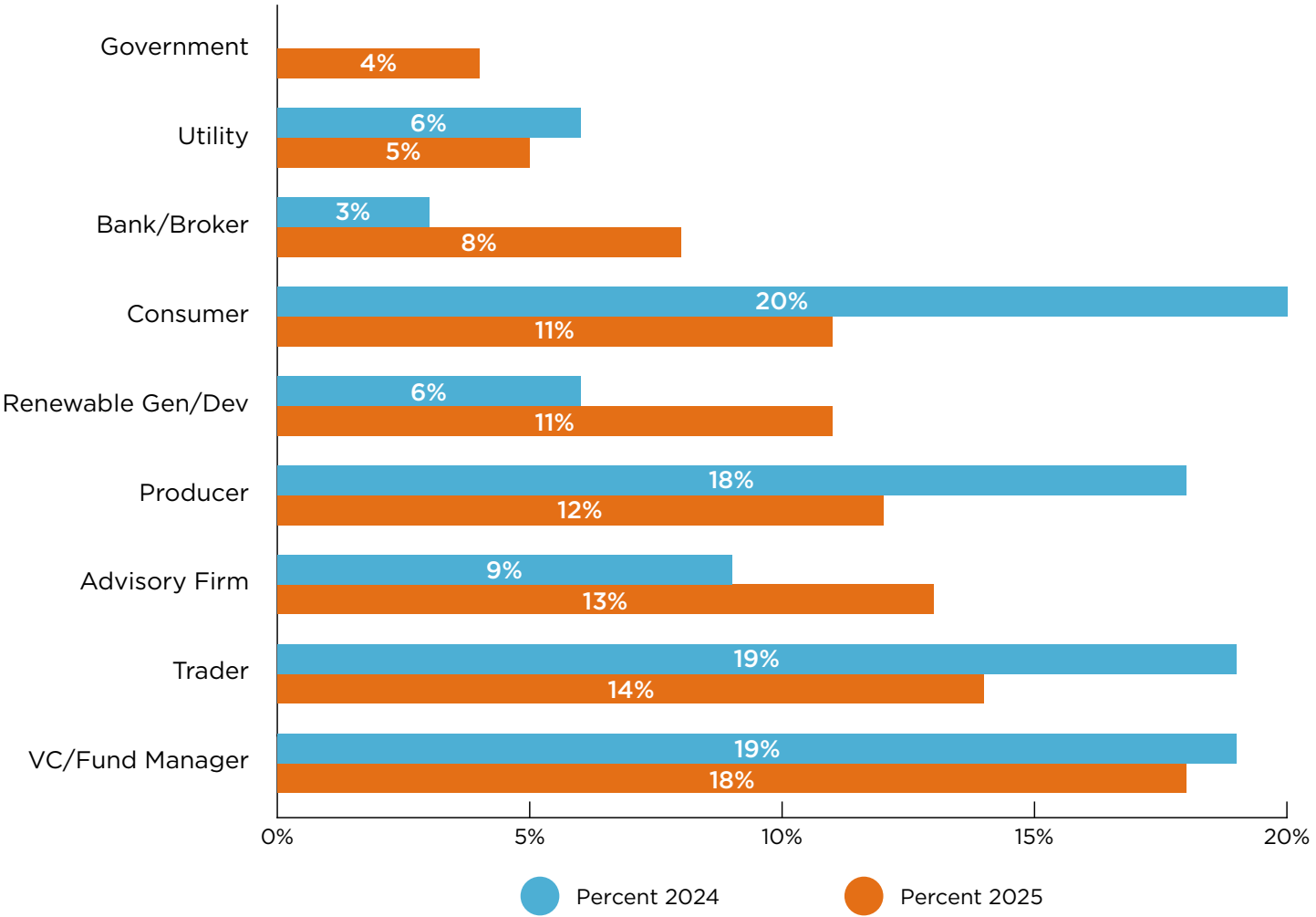
# SURVEY OVERVIEW.

423 respondents participated in our 2025 survey. Over 10 industries are represented, with company sizes ranging from small businesses under \$1 million to enterprises with more than \$500M in revenue.

While Traders and VC/Investor/Funds remain the largest groups responding, responses were more evenly distributed this year, with notable increases from Advisory Firms, Renewable Generators/Developers, and the addition of Government entities for the first time.

This broader mix of responses provides a more nuanced look at how different types of companies are approaching risk, operations, and modernization in 2025.

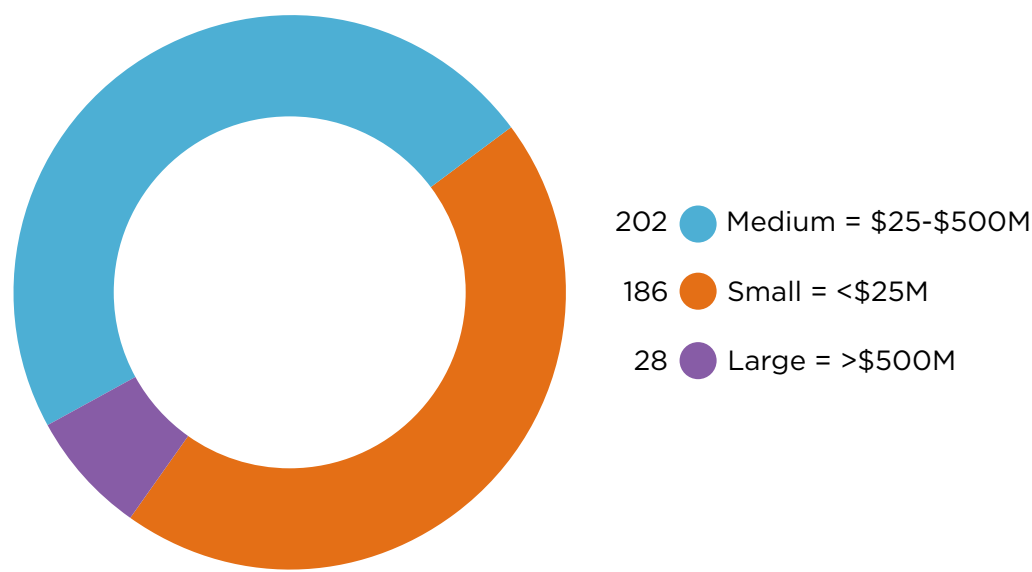
## What best describes the type of company you work for?



In 2024, an overwhelming majority of responses represented four industries – Consumer, Trader, VC/Investor/Fund Manager and Producer. The 2025 survey had a more even distribution of responses by industry, with six industries: VC/Investor/Fund Manager, Trader, Advisory Firm, Producer, Renewable Generator/Developer, and Consumer – each representing over 10% of respondents.

Of particular note is the jump in Renewable Generator/Developer (6% in 2024; 11% in 2025), an industry that is experiencing significant growth and driving new functionality in ETRM systems.

Respondents by Revenue Size



A larger proportion of smaller companies represented in 2025 than in 2024\*

Even spread of company size by category with the only outlier being a higher number of banks / brokers with large revenue (30%) than other company types.

Company Type	Small	Midsize	Large
VC	36	37	3
Trader	23	36	2
Advisory	32	17	3
Producer	20	27	3
Renewable	20	24	3
Consumer	19	25	0
Bank/Broker	11	12	10
Utility	12	7	1
Government	5	11	2

*\*To note: survey results reflect the profile of those who responded, not a full market sample, so trends should be viewed as directional, not definitive.*

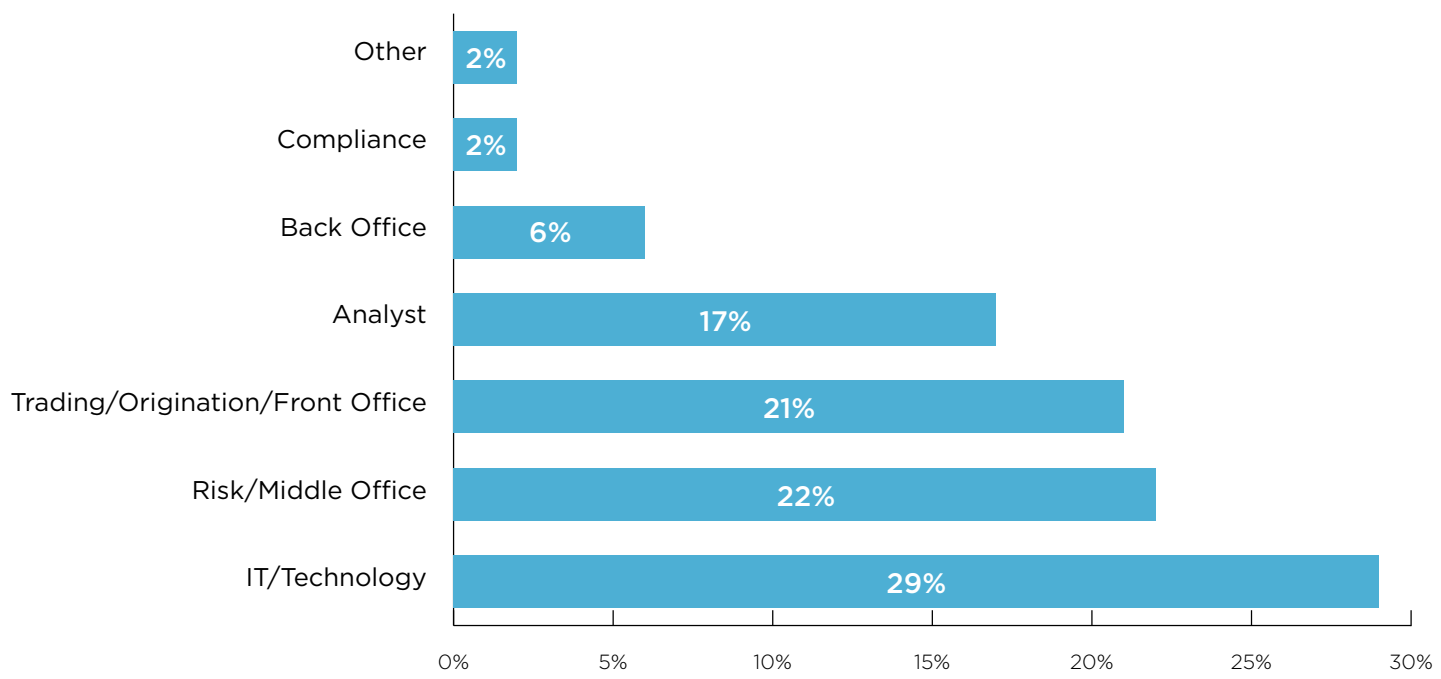
# IT Now Leads ETRM/CTRM Modernization Efforts, Surpassing Risk and Front Office Roles

As modernization moves from strategy to execution, IT/Technology roles now account for 29% of respondents—the largest share. Risk and Front Office functions follow close behind, signaling broad-based engagement across the trade lifecycle.

The largest group of survey respondents work in IT/Technology (29%), followed by Risk/Middle Office (22%) and Front Office roles (21%). Analysts make up 17%, while Back Office and Compliance are much smaller segments.

This spread could reflect the shift from modernization planning to execution, with IT/Technology teams actively involved in implementing modernization initiatives. It also highlights the growing influence of risk functions across energy and commodity organizations — and the increasing focus on modernization as a way to better support front-office operations, especially for small and midsize firms.

## What best describes your role at your company?

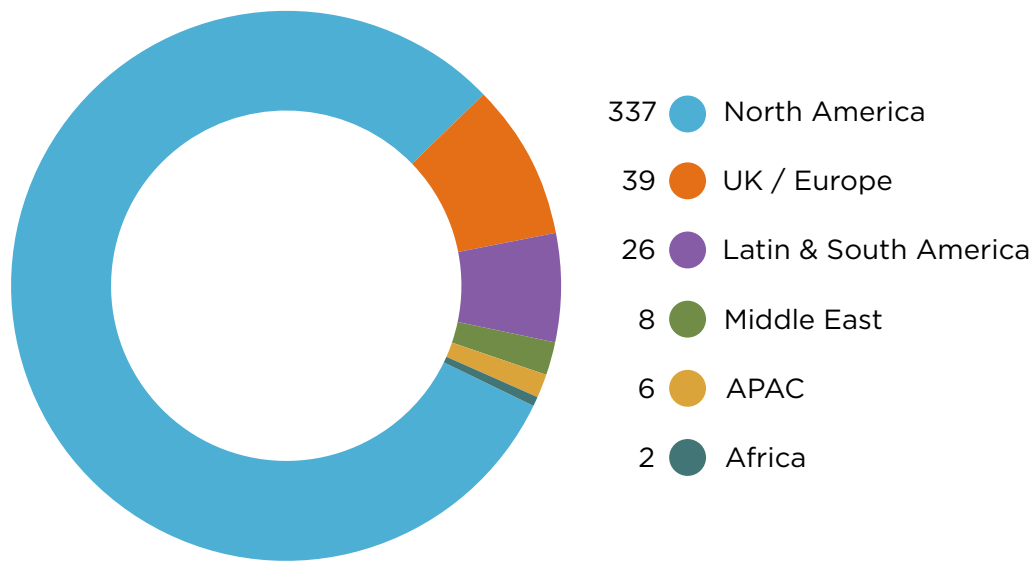




# Where Respondents Are Based

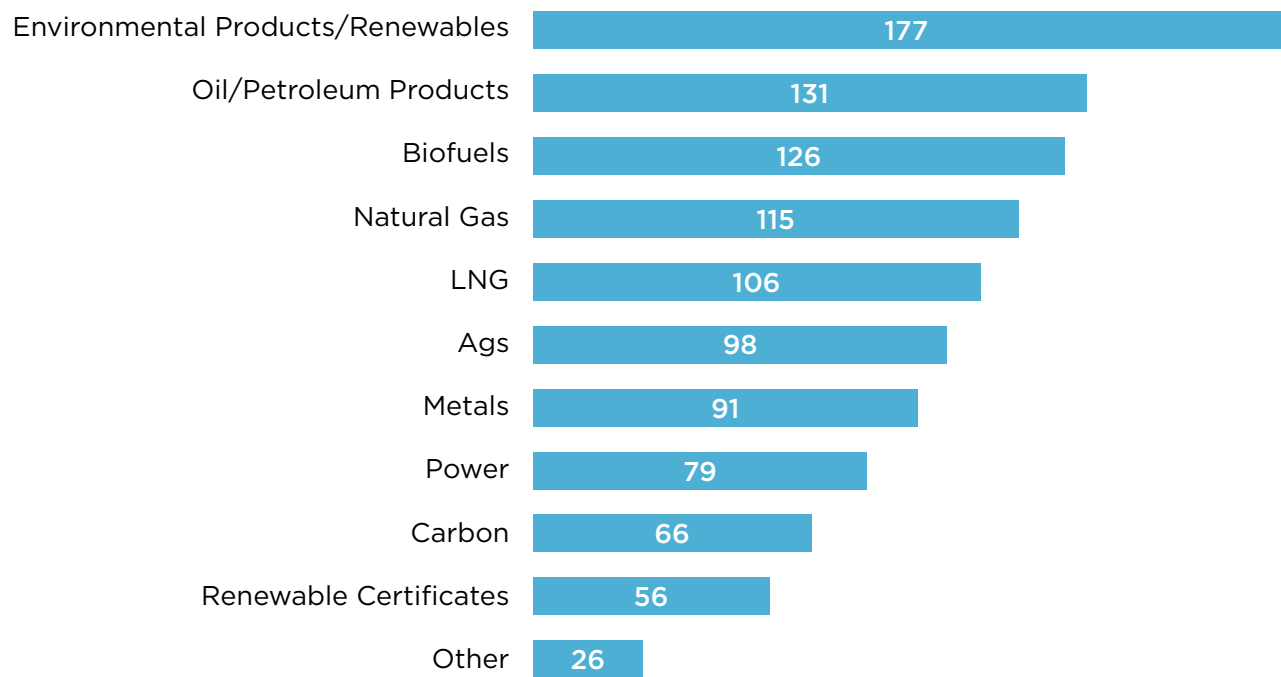
Most respondents were headquartered in North America (80%), with smaller groups representing Europe (9%), Latin/South America (6%), and other global regions.

## Where is your company headquartered?

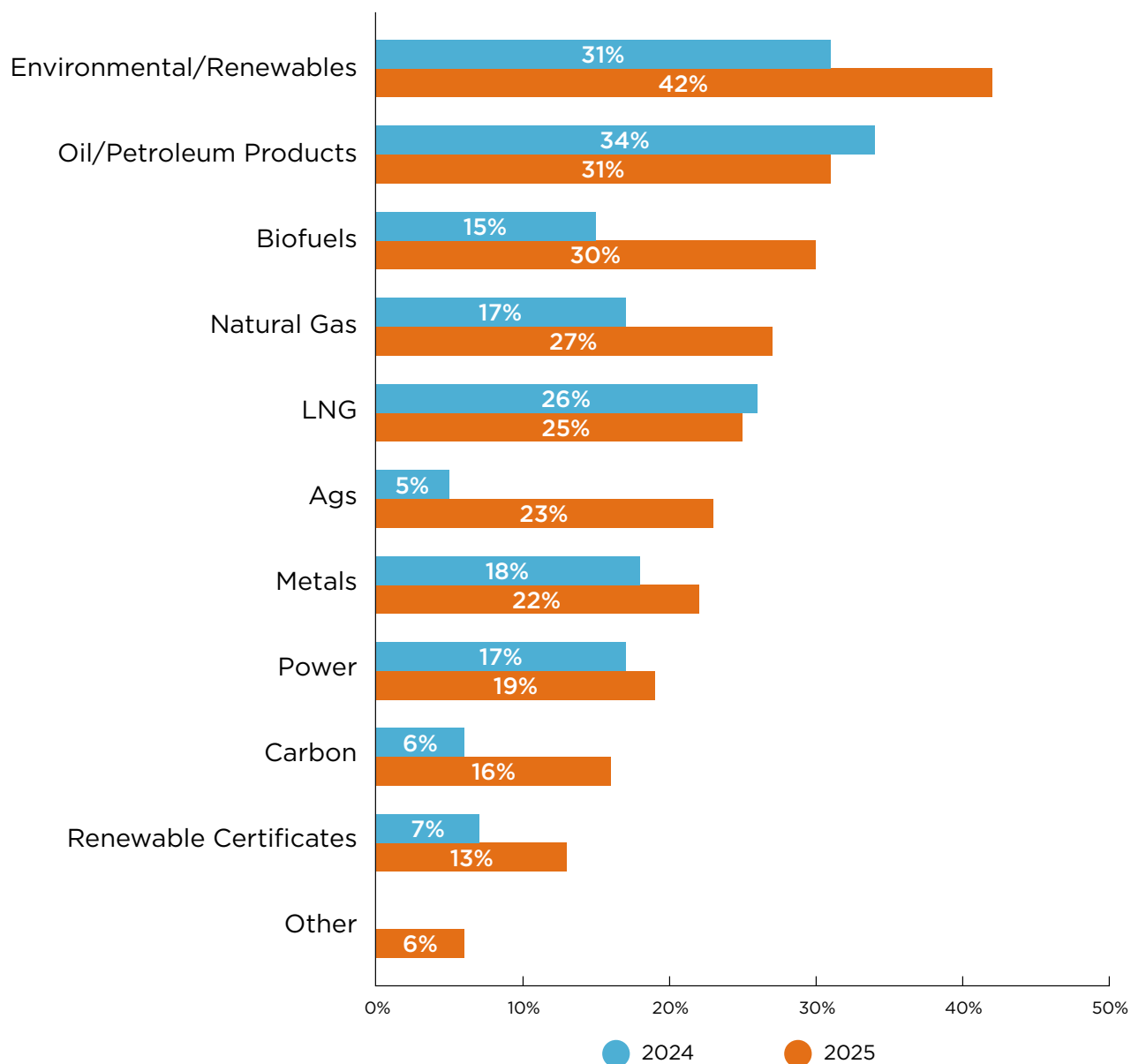


# What Commodities Are Traded

## What commodities do you trade?



## 2025 vs. 2024 Commodities Traded



In 2024, Oil & Petroleum Products was the most commonly traded commodity amongst respondents. Among 2025 survey respondents, Environmental Products/Renewables were the most commonly traded commodities, representing 42% of participants – an increase of 10 percentage points over 2024. Biofuels, Ags, Carbon, and Renewable Certificates also increased in 2025, signaling portfolios that are becoming more complex and more sustainability-linked.

This shift towards renewable energy is supported by [IEA's Electricity 2025 Report](#) which predicts that renewables will meet 95% of electricity demand growth from 2025-2027 and provide more than one-third of total electricity generation globally during that period.

The background is a dark blue gradient with abstract financial data visualizations. In the upper right, there is a line graph with square markers connected by a thin line, showing a fluctuating upward trend. Below this, a grid of small, light blue dots is visible. In the lower half, there are several vertical bars of varying heights, some light blue and some dark blue, resembling a bar chart or candlestick pattern. The overall aesthetic is modern and tech-oriented.

# STATE OF THE MARKET 2025.



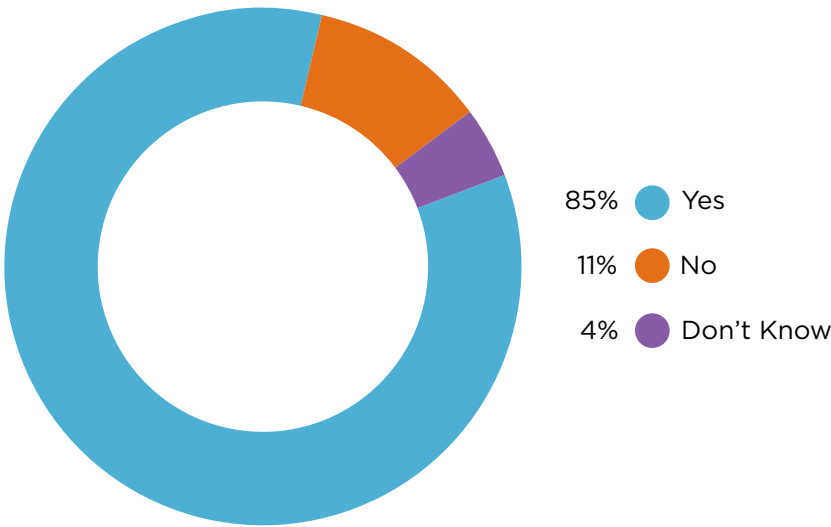
# STATE OF THE MARKET 2025.

## ETRM Usage Has Jumped from 34% to 85% in Just One Year

In 2025, 85% of respondents said they currently use an ETRM/CTRM system, more than double the number of ETRM/CTRM users in 2024 (34%).

This enormous shift in just one year suggests that companies are no longer planning modernization initiatives, they are implementing them.

**Do you currently use a system for managing trade risk (ETRM/CTRM)?**



Other signs point to the same trend: only 4% of respondents didn't know if a current system for managing their trade risk was in place, compared to 32% of respondents last year.

## Adoption Varies by Company Type

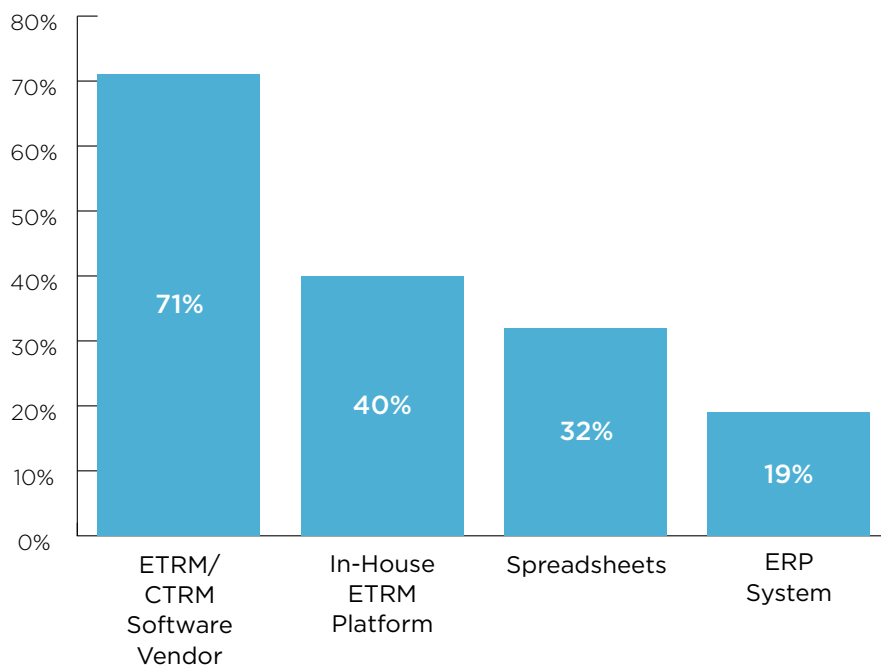
Most company types had ETRM/CTRM adoption rates above 80% — signaling widespread modernization.

The two exceptions are Consumer firms (80%) and Traders ( 59%). Over one-third of Trader respondents do not use an ETRM/CTRM, a surprising gap given their market exposure. This may point to continued reliance on spreadsheets, custom tools, or more manual processes and reflect tighter budgets, more conservative opinions on technology, or fear of interrupting operations long enough to implement new systems.

## The Modern ETRM Stack: 71% Use a Vendor, But That’s Just the Start

The way companies are structuring their ETRM/CTRM stacks reflects the broader shift from planning to execution — and from speed to flexibility. Most companies blend commercial software with internal tools, spreadsheets, or ERPs — favoring integration and specialization over monolithic systems.

### What type of solution(s) do you currently use for managing trade risk?



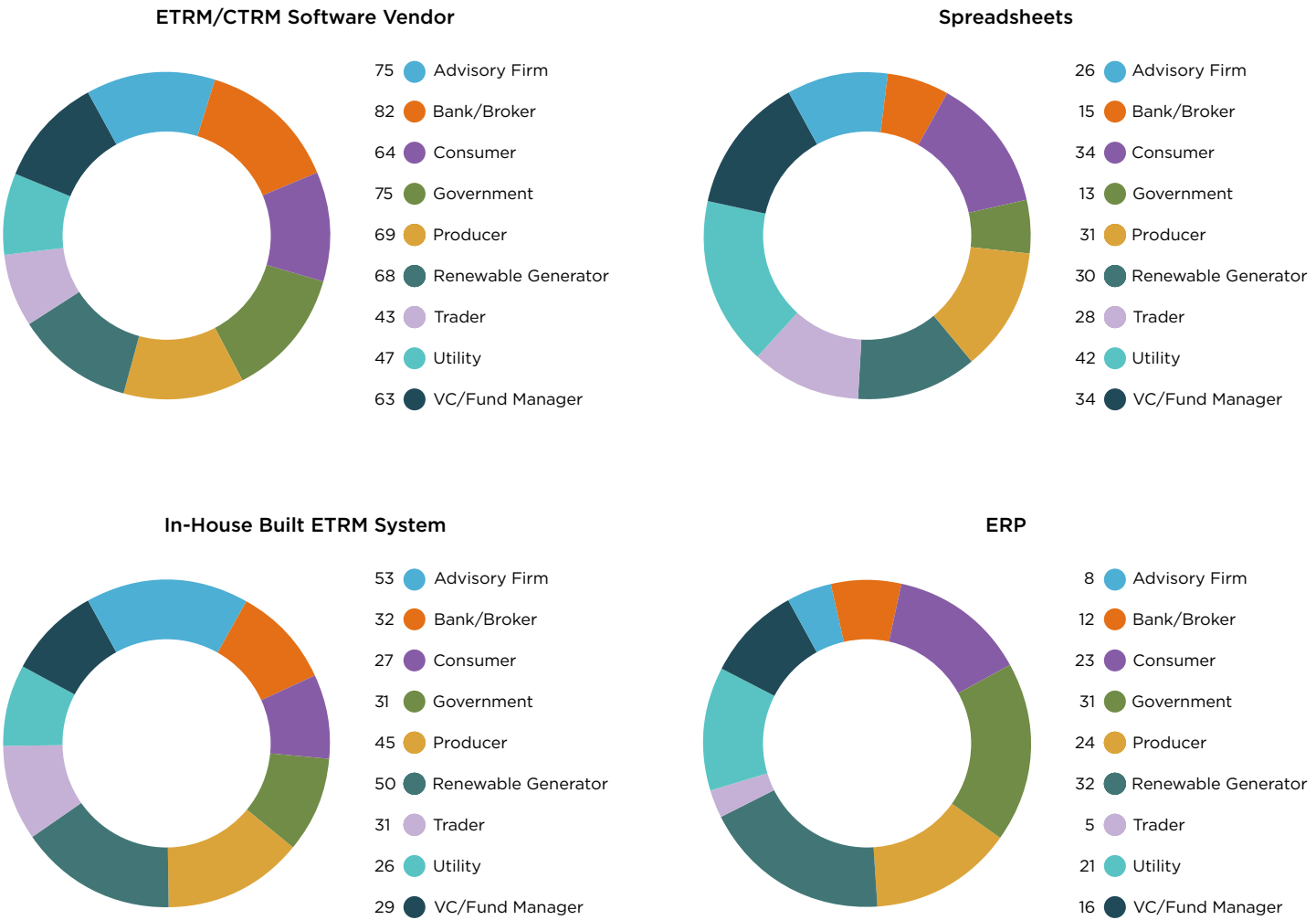
While 71% of respondents report using a commercial ETRM/CTRM, many also layer in in-house tools (40%), spreadsheets (32%), or ERPs (19%). This reflects a shift toward best-of-breed tech stacks — optimizing for functionality and flexibility rather than one-size-fits-all.

Some companies are intentionally moving away from the “Swiss Army knife” approach and opting for best-of-breed systems that work together to meet different needs across the trade lifecycle.

Building this hybrid tech stack requires tighter integration to ensure systems work together cleanly, reliably, and at scale. It is driving the push for better connectivity, broader functional coverage (across trade capture, risk, reporting, and operations), and more flexible architectures.

Vendor Systems Dominate, But Trader Adoption Still Lags

Traders show lower ETRM/CTRM adoption, with just 43% using vendor systems and 31% relying on in-house tools. Their higher spreadsheet use suggests leaner tech stacks or more bespoke setups.



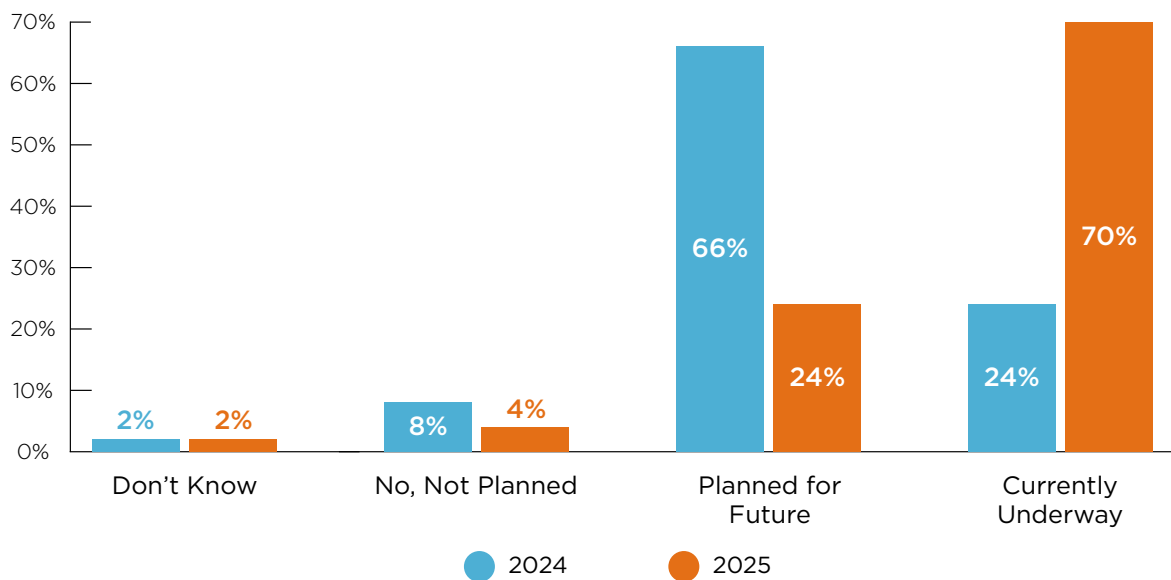
By contrast, Bank/Broker respondents lead in vendor adoption (82%), and Government and Producers stand out for above-average ERP use. Across the board, many firms still juggle multiple systems, especially in segments navigating legacy tech, regulatory pressure, or rapid portfolio changes.

Nearly 94% of respondents have either launched or planned modernization initiatives.

More than 70% of respondents say modernization is already underway at their organization, a steep increase from just 24% last year. In total, nearly 94% have either launched or planned initiatives to modernize their operations.



Is modernizing your trading and risk operations currently an initiative that’s underway at your organization?



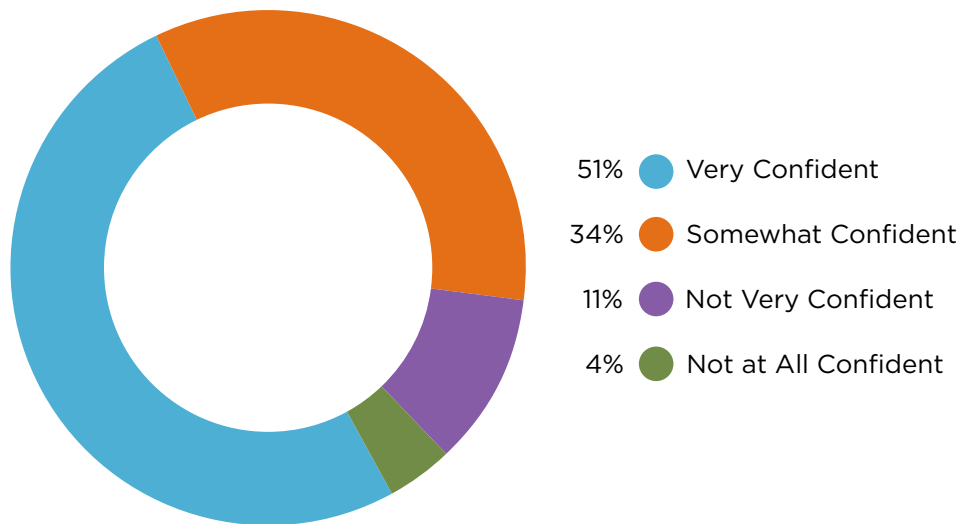
Modernization is now actively reshaping how companies operate, and the expectations are getting sharper. The push for speed and more agile, responsive systems has been joined by demands for control, scalability, and confidence. New ETRM/CTRM systems are not just tools for efficiency, they are infrastructure for more precise decision-making, tighter risk oversight, and strategic, long-term growth.

Confidence Is High, But 14% of Companies Still Aren’t Ready

Most organizations are confident in their ability to modernize, but lingering uncertainty suggests some challenges remain.

51% of respondents are very confident and 34% are somewhat confident in their organization’s ability to launch a modernization initiative. However, 14% are not confident or unsure, a reminder that some companies still face organizational, resource, or clarity barriers even as the need to modernize trading operations rises.

How confident are you in the ability to launch a modernization initiative at your company?

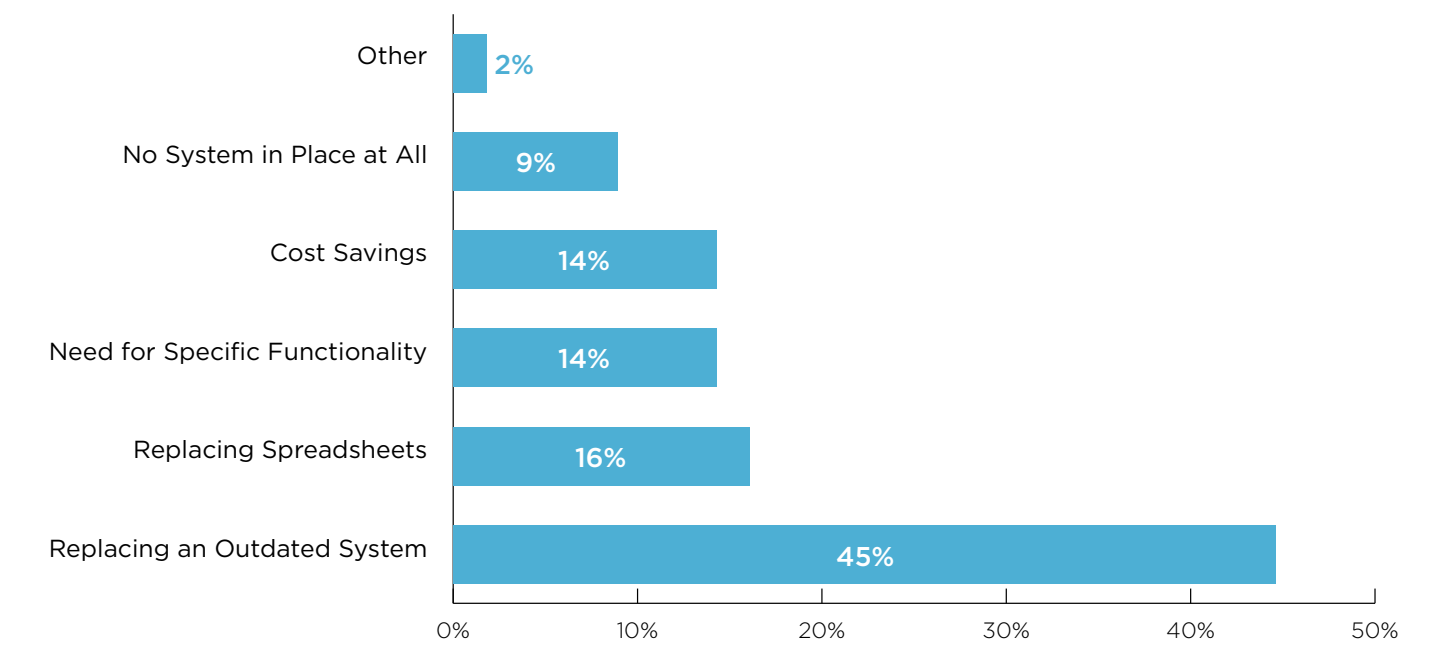


# Replacing Outdated Systems Is the #1 Driver of ETRM/CTRM Investment

Nearly half (45%) of organizations with active or planned ETRM/CTRM initiatives say they’re replacing an outdated system. That’s more than double the number citing spreadsheets (16%) or functionality gaps (14%) as their primary driver.

It’s a clear sign of market maturity: companies aren’t trying to fix or extend the life of outdated risk operations anymore — they’re walking away from rigid infrastructure that can’t keep up. They’re seeking platforms that can scale, adapt, and restore confidence in the numbers — not just tools that are faster or “good enough.”

## What is the main reason for investing in an ETRM/CTRM?



The background is a dark blue gradient with glowing binary code (0s and 1s) in white and red. Overlaid on this are faint, glowing circuit board patterns and a large, stylized cloud shape composed of overlapping semi-circular segments, also featuring circuit-like details.

# WHAT'S DRIVING MODERNIZATION.

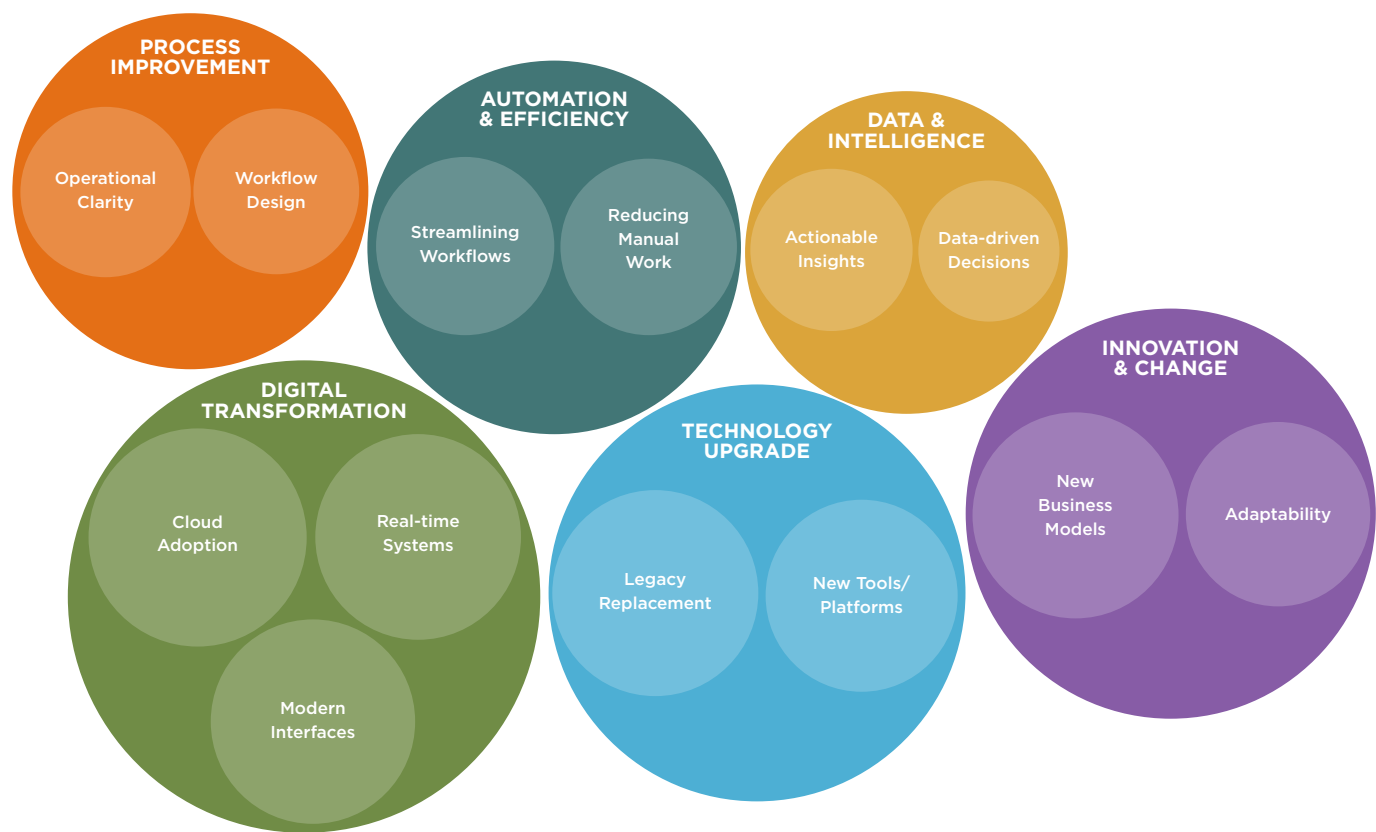


# WHAT'S DRIVING MODERNIZATION?

## Top Modernization Themes: Intelligence, Automation, and Transformation

Open-ended responses reveal that energy and commodity professionals see modernization as an evolution in how work gets done, not just a change in tools.

What word or short phrase best describes how you define “modernization” in the context of your business?



Ask hundreds of energy and commodity professionals what modernization means, and the answers vary, with terms like transformation, digital, automation, and intelligence rising to the top.

Together, their responses point to a shift in mindset. Modernization isn't a one-time overhaul or a single system replacement. It's a long-term strategy — using the right mix of tools to make smarter decisions, streamline operations, and keep pace with change.

# Market Volatility No Longer Dominates Risk Strategy

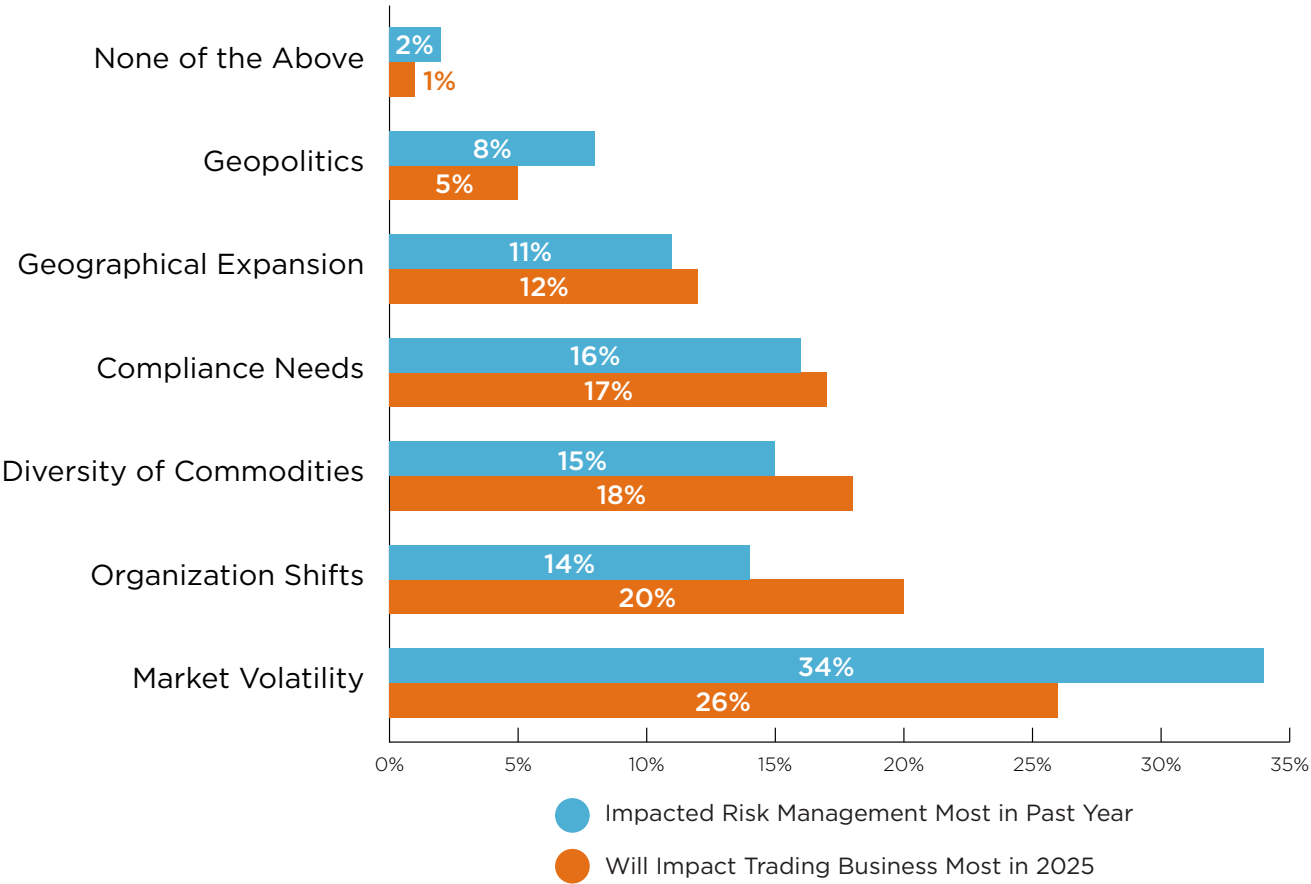
Volatility dropped from 60% in 2024 to just 26% as a top concern for 2025, giving way to structural complexity, compliance, and organizational change.

In 2024, 60% of respondents said market volatility had the greatest impact on their risk management practices. But in 2025, only 26% expect volatility to be the most influential factor shaping their trading business.

Instead, firms are looking ahead to deeper operational challenges. Nearly one in five (19%) anticipate organizational shifts to have the biggest impact on their business this year. Commodity diversity (18%) and compliance requirements (17%) are also climbing in importance.

This shift points to a broader evolution in how firms approach risk: not just managing market events, but building resilient, adaptable operations that can respond to ongoing structural change.

## Past vs future risk drivers



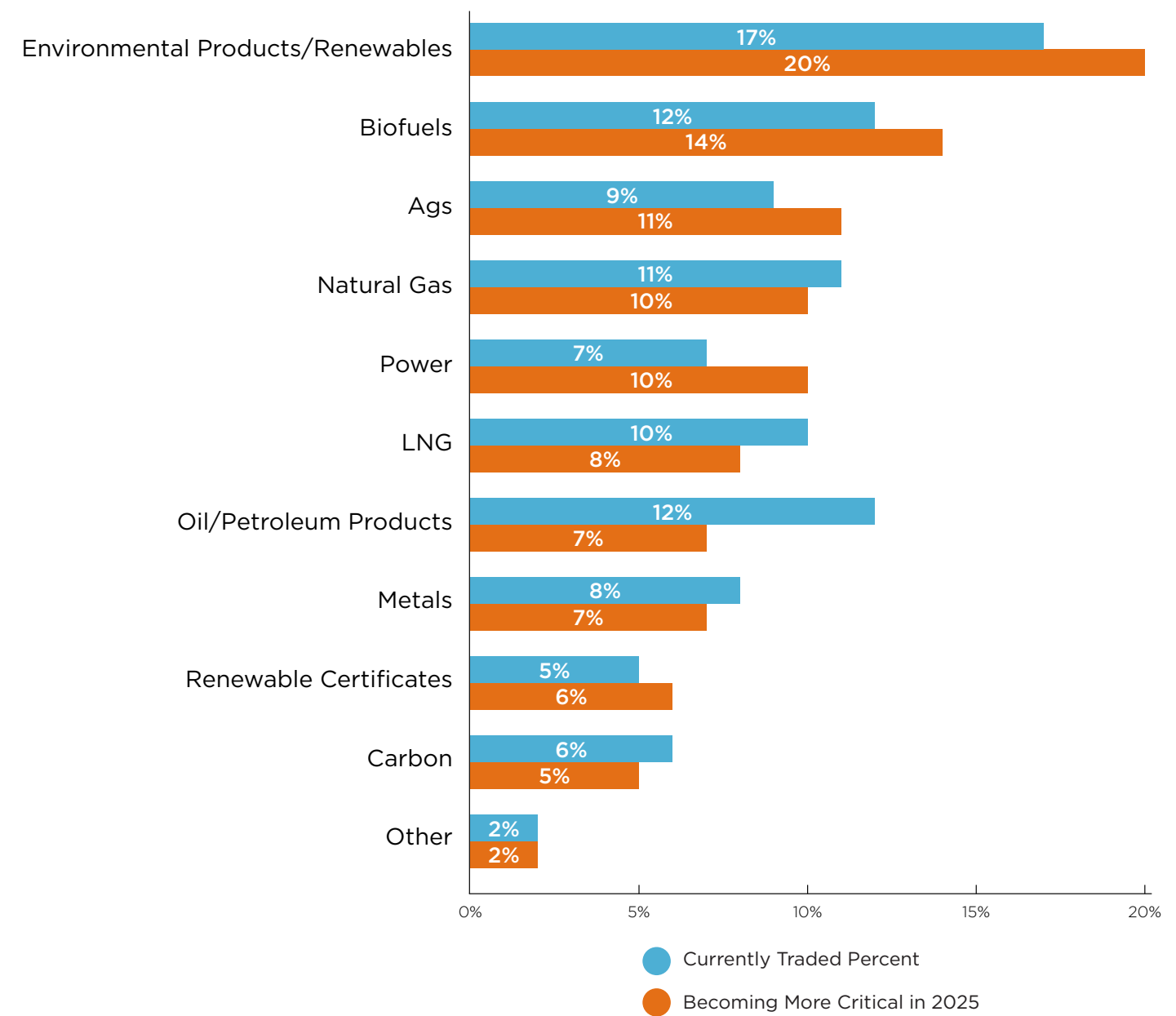
# Biofuels and Environmental Products Top the List of Emerging Priorities

Companies are shifting to cleaner portfolios — translating to new types of risk, greater data complexity, and evolving compliance needs.

When asked which commodities are becoming more critical to their organizations, respondents pointed to biofuels (33%) and environmental products (30%), with renewable certificates and carbon also ranking high. This signals a meaningful pivot toward low-carbon markets: one driven not just by policy, but by business strategy.

While traditional commodities like oil and natural gas remain essential, the emergence of sustainability-linked markets is reshaping modernization priorities. Teams require systems that can support both operational complexity and carbon accountability — planning for a world where decarbonization is not just a goal, but a competitive requirement.

## What New Commodities Do You Envision Becoming More Critical to Your Organization?

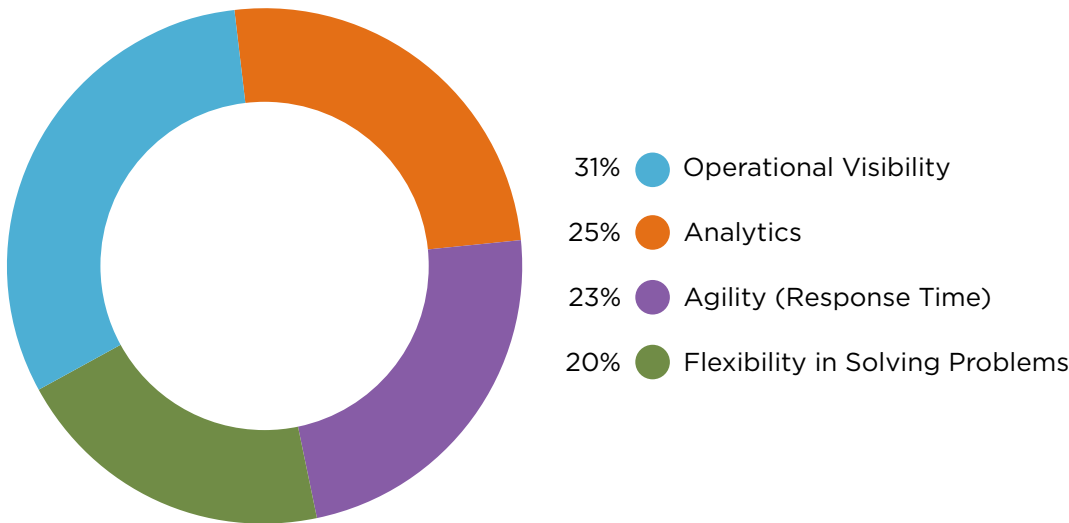


# Operational Visibility (31%) Surpasses Agility (23%) as the Top Risk Management Priority

In 2024, agility and analytics were the top risk management priorities by a wide margin. This year, operational visibility takes the top spot — but the field is tighter, with Agility (23%) and Analytics (25%) close behind.

This shift points to a growing emphasis on seeing and understanding risk across the entire trade lifecycle, instead of just faster, more responsive systems.

**What is your top risk management priority that you do not see changing in the next 5 years?**



As portfolios grow more complex, companies are prioritizing infrastructure that helps them see what is happening, analyze information, and understand it, ensuring decisions are made based on a complete, accurate picture. Visibility into positions and exposures has become a core requirement for managing risk at scale.

**Molecule asks:**

How are recent market shifts (like volatility, regulatory change, or tech adoption) reshaping risk priorities, and what signals do you see in terms of companies repositioning portfolios (especially around renewables)? How are organizations interpreting “modernization” in practice?



**Geoffrey Cann**

*International author, ‘Carbon, Capital, and the Cloud’*



For today’s energy business, modernization is to ready their business for a landscape characterized by tomorrow’s localized energy security concerns. Systems geared to cope successfully with volatility in single commodity markets will struggle against heightened competition for all energy sources, in more geographies, with fewer skilled staff, in opposition with far larger and more automated energy businesses.

When competing locally with the hyper scalers in a race for power, with their enormous resources and market presence, smaller market players are finding themselves suddenly and dramatically outgunned.

Beefing up the main trading and risk platform is an urgent and rational response.



**Joanne Hollington**

*Senior Project Manager, Molecule*



In the EU, Traditional Oil and Gas companies are preparing for ETS2, affecting road and heating fuel suppliers. ICE recently launched the new EUA2 product in May. Reporting is required, even if the System officially starts in 2027.

This, coupled with the Corporate Sustainability Reporting Directive (CSRD), puts an additional burden on these companies. For those with ETRMs with smooth reporting capabilities, this will be easy; for those without, they will need to hire an entire team to manage this.



A person is seen from behind, sitting at a desk in a dimly lit office. They are wearing a grey hoodie and glasses, looking at two large computer monitors. The monitors display various data visualizations, including charts and graphs. A desk lamp is positioned above the desk, casting a soft glow. The background is dark with some blurred lights, suggesting a modern, tech-oriented environment.

# WHY COMPANIES MODERNIZE.

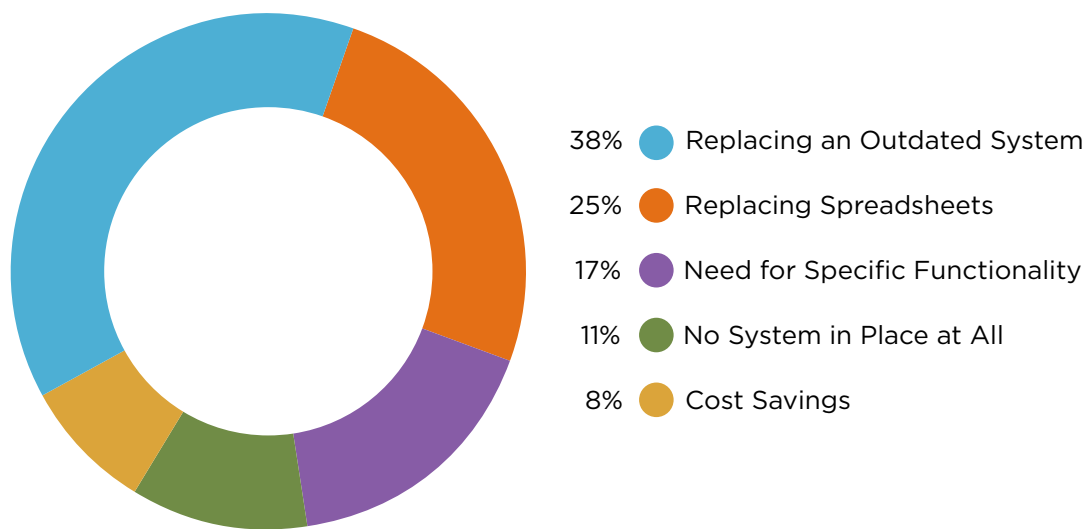
# WHY COMPANIES MODERNIZE.

## Replacing Legacy Systems Now Outpaces Spreadsheet Abandonment

In 2025, 38% of respondents adopted or upgraded an ETRM/CTRM system to replace an outdated system, making it the top driver of modernization this year.

That marks a notable shift from 2024, when the most common driver was replacing spreadsheets (44%), while just 25% cited legacy system replacement. In contrast, spreadsheet replacement fell to 16% in 2025, and need for specific functionality rose modestly from 10% to 14%.

### What was the main need that drove the decision to use an ETRM/CTRM system?



The shift reflects a more mature market: companies are seeking scalable, flexible systems that fit their business models long-term

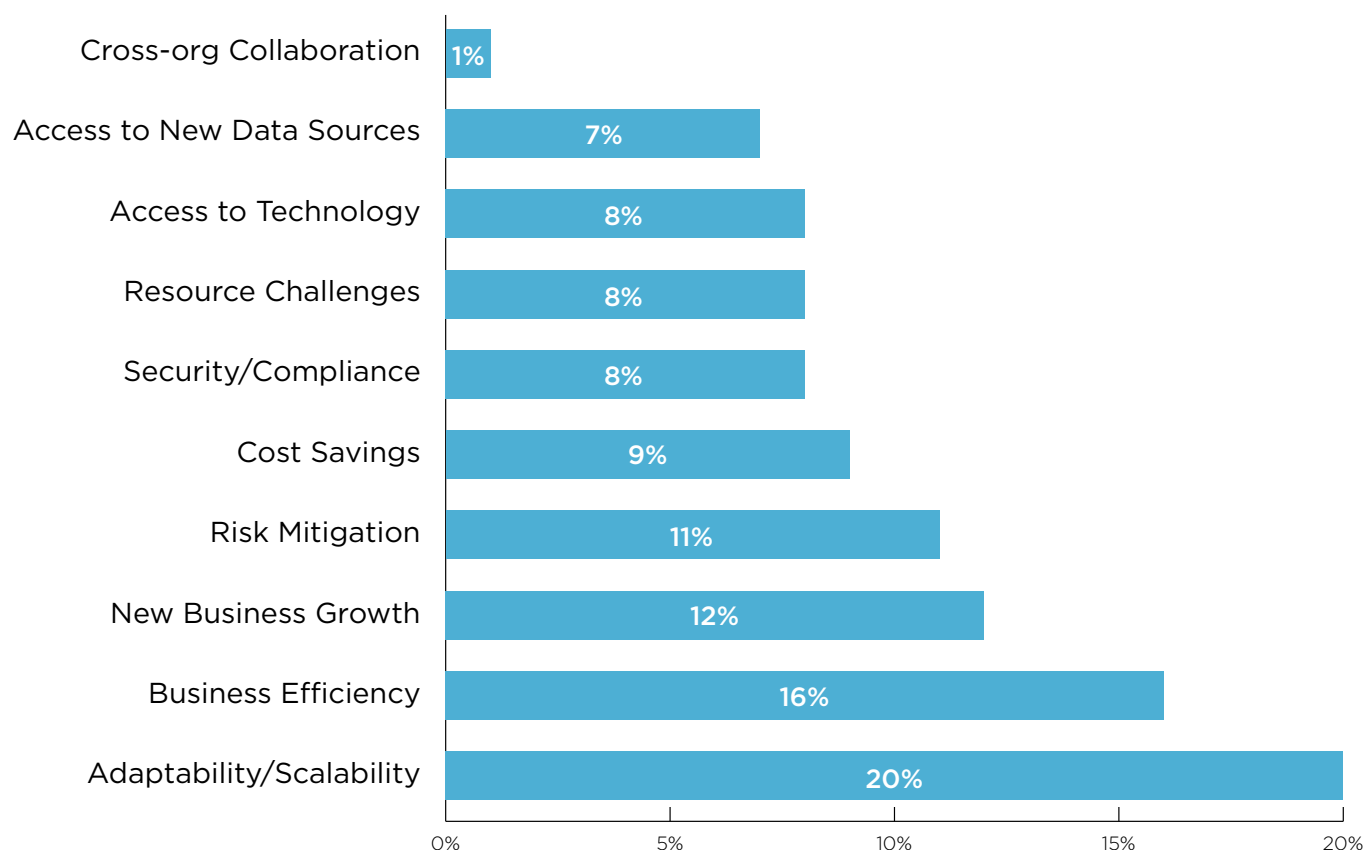
## Scalability is the top driver of modernization — especially for companies at the center of the energy transition.

Nearly 1 in 5 respondents (19.6%) cited scalability and adaptability as the top driver of their modernization efforts. That number climbs sharply in energy-forward sectors:

- 43% of Traders say scalability is their #1 priority, followed by 29% of Producers, 25% of Utilities, and 24% of Renewable Developers

These segments are facing the realities of complex, fast-moving portfolios... and need systems that can keep pace.

## What is the biggest driver for the modernization of trading and risk operations at your organization?



Overall, this underscores that companies modernize to build scalable infrastructure that supports real growth.

## Modernization may be a universal trend — but the reasons behind it aren't.

What pushes a company to modernize depends on what's at stake.

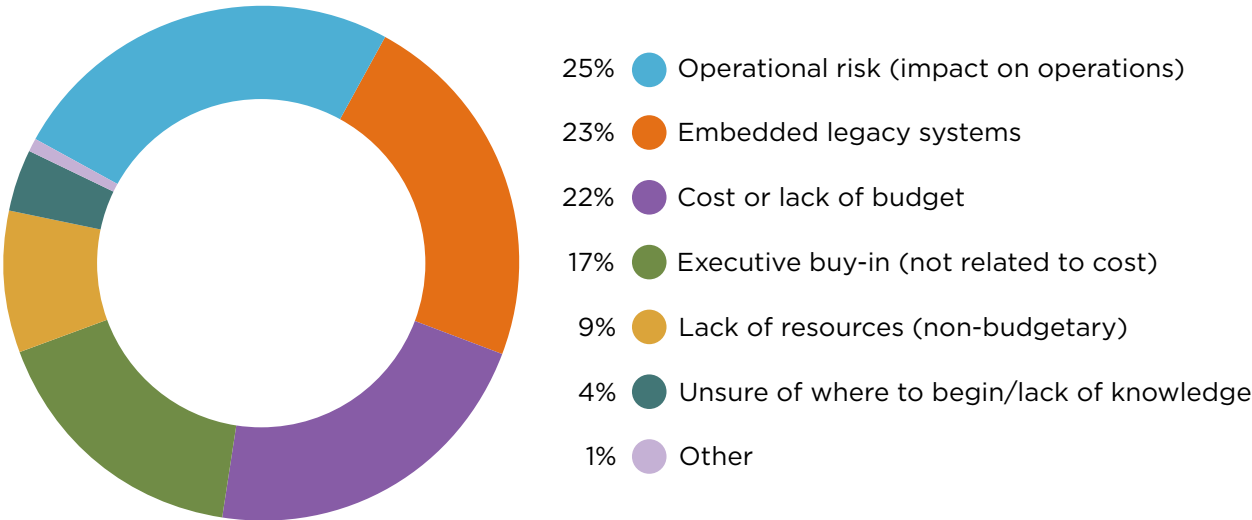
While scalability and adaptability lead overall, each segment has its own trigger — from operational strain to regulatory complexity to growth pressure. Understanding these differences offers a clearer view of how modernization priorities take shape across the market.

# 25% say operational risk is the biggest blocker to modernization... more than cost or legacy systems

Operational risk — the challenge of modernizing without breaking critical processes — was the most cited barrier to modernization (25%), followed closely by embedded legacy systems (23%) and cost or lack of budget (22%). These numbers highlight the difficulties in updating systems that are too entrenched, changing workflows that can't absorb disruption, and interrupting businesses that can't afford to pause.

**In 2024, 21% of respondents said they weren't sure where to begin when it came to modernization. This year, just 4% said the same. The shift is clear: companies know what needs to change... but executing on it is still the hardest part.**

What is the biggest challenge preventing the modernization of risk operations at your organization?



**Molecule asks:**

What industry dynamics are putting the most pressure on trading orgs to modernize their risk and operations infrastructure?



**Geoffrey Cann**

*International author, 'Carbon, Capital, and the Cloud'*



In energy trading, modernization is normally driven by business pressures, not typically by technology advancement. The unpredictable and uncoordinated tariffs that create market discontinuities, the surging demand from hyper scalers, and the increasing complexity of commodity deals, such as bundled gas and carbon capture, have forced the hand of energy-sensitive organizations.

Critical inputs into energy supply (copper, aluminum, rare earths) now subject to tariffs will impact the economics of energy infrastructure everywhere, and alter trading economics.

New data center energy deals (nuclear power investments, dedicated solar facilities) underscore the scale of the opportunity for the nimble, and plant the seeds for tomorrow's supply risks.





# WHAT RESPONDENTS VALUE MOST.

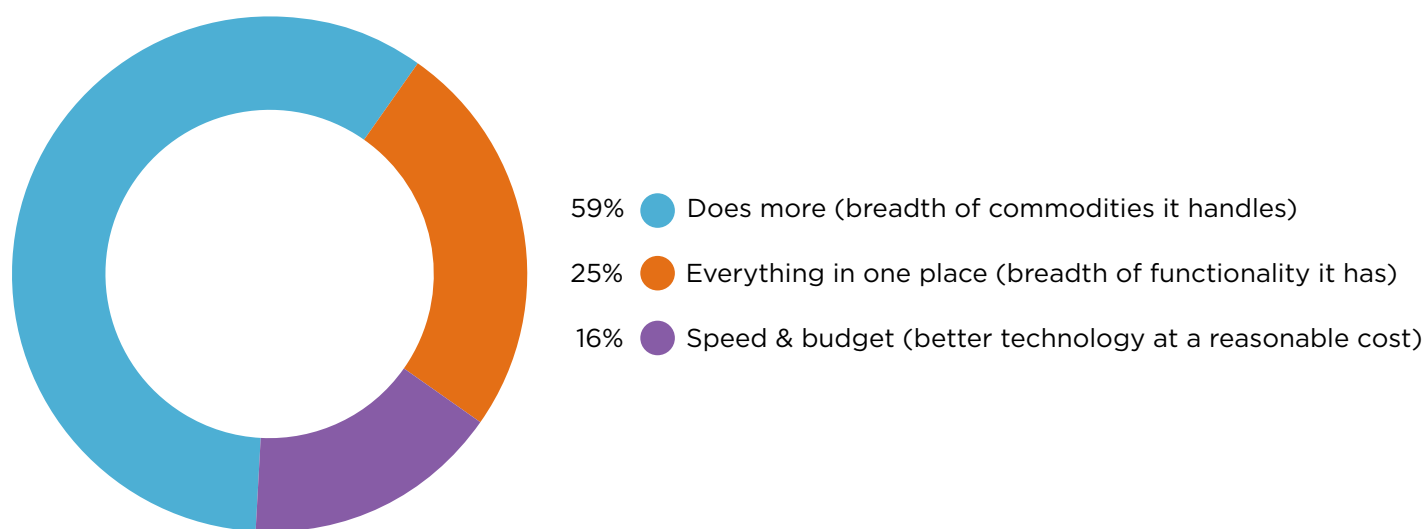
# WHAT RESPONDENTS VALUE MOST.

## 59% Value Speed and Cost — but Complexity Shifts Priorities Toward Control and Scale

Most companies start with speed and budget in mind. But as portfolios scale, the focus shifts to consolidation and multi-commodity support.

When asked what they value most in an ETRM/CTRM system, nearly 60% of respondents chose “speed and budget.” The desire to access faster technology at a reasonable cost was the top response across company types and sizes, especially among smaller firms and those with simpler trading needs.

### What Do You Value Most in an ETRM / CTRM?



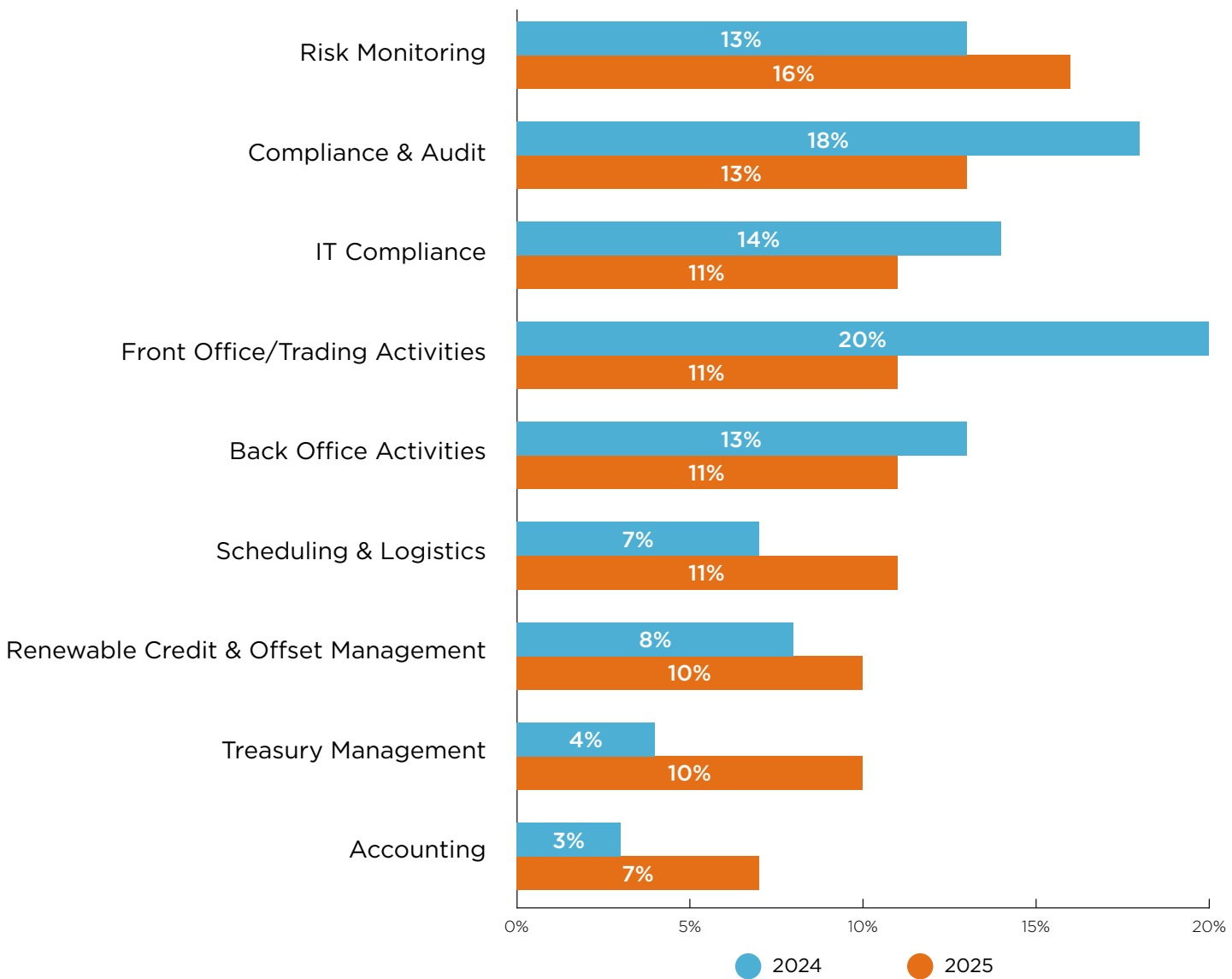
However, as portfolios get more complex, priorities shift.

- Traders, banks/brokers, and VC firms were more likely to value systems with “everything in one place,” favoring broader functionality coverage over integrating multiple systems.
- VC firms and utilities, meanwhile, prioritize systems that can handle a wider range of commodities, highlighting their need for systems that can support them as their portfolios expand.

# 24% of System Goals Are Compliance-Driven — Auditability Is a Core Priority

Modernization in 2025 is about more than speed. Nearly one in four system goals now center on auditability, governance, and reliability — proof that companies are building ETRM/CTRM stacks for control, scalability, and long-term confidence, not just faster execution.

What goals does your ETRM/CTRM system help you achieve at your company?





The most cited goal for ETRM/CTRM systems in 2025 was risk monitoring (16%), followed closely by regulatory compliance and audit (13%) and front-office trading activities (11%). When combined with IT compliance (11%), nearly a quarter of responses prioritized auditability, governance, and system reliability, clear indicators that companies are prioritizing platforms they can trust to protect the business and withstand scrutiny.

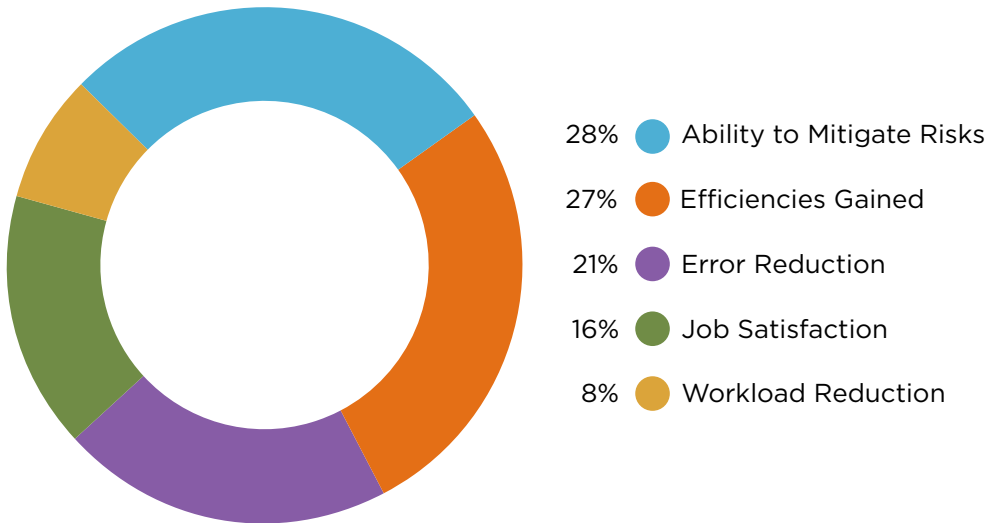
Operational goals like back-office activities (11%), scheduling (11%), the ability to handle renewables (10%), treasury (10%), and accounting (7%) were more evenly spread, reinforcing that modern ETRM/CTRM are expected to support workflows across the entire trade lifecycle, not just front-office execution.

Notably, both scheduling and renewables grew in importance compared to last year, reflecting the rise in companies trading power and gas in 2025.

## Risk Mitigation (28%) and Efficiency Gains (27%) Lead ROI Measures

Companies are focusing their ROI lens on outcomes that matter most: reduced exposure, better data, and the confidence to act on it.

How do you measure return on investment for your ETRM/CTRM system?



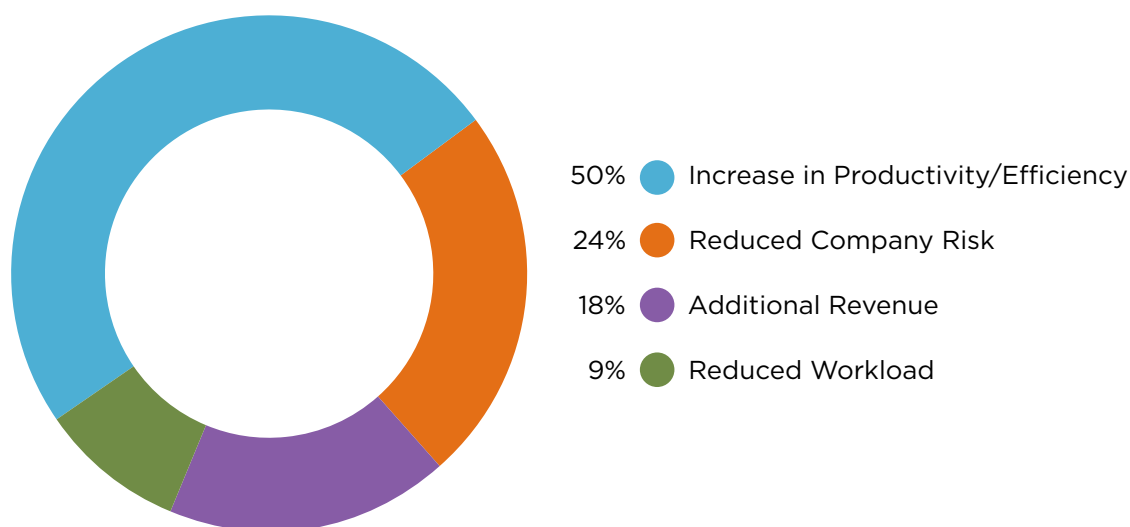
Companies are measuring ETRM/CTRM value by how well it supports high-impact work. Risk mitigation (28%), efficiency gains (27%), and data-driven error reduction (21%) topped the list, highlighting a shift toward systems that are accurate, efficient, and enable decision-making with confidence. Job satisfaction (16%) and workload reduction (8%) were cited less often.



## Productivity Tops the List: 1 in 2 Companies Say It's the Biggest ETRM/CTRM Benefit

Increase in productivity and efficiency is the most cited benefit — highlighting that companies increasingly value modern systems not just for their features, but for the measurable outcomes they deliver.

**Thinking of your current ETRM/CTRM system, what is the biggest benefit you've experienced from it?**



When asked about the biggest benefit of their current ETRM/CTRM system, 50% of respondents pointed to increased productivity and efficiency. That was followed by reduced company risk (24%), additional revenue (18%), and reduced workload (9%).

Productivity was the top response across nearly all company types, especially among advisory firms, government entities, and traders. Bank/broker firms prioritized additional revenue, and VC/fund managers prioritized reduced workload.

Interestingly, the most cited benefit — productivity and efficiency — closely echoes one of the top ways companies measure ROI: efficiency gains. This overlap suggests companies are not only aiming for more efficient operations, but actually experiencing them.

Across the board, the benefits most often reflect a system's ability to improve the quality and impact of day-to-day operations, either through improved risk management or increased productivity.

**Molecule asks:**

Are you seeing more firms treat risk and trading systems as a strategic investment rather than just an operational necessity?



**Allen Brooks**

Author of *Energy Musings newsletter*



The dynamics of commodity and energy markets are changing. Consumption of renewable energy, especially solar and wind, is growing rapidly. While there is much talk about an energy transition from fossil fuels to renewable energy, the data shows otherwise.

We are in an energy additive phase and not a replacement phase. Fossil fuel growth continues to exceed the growth of renewable generation. Finding and delivering the least expensive forms of energy are crucial for consumers and businesses. Renewable energy has added supply options, which create opportunities and challenges. More options further complicate the analysis and selection process. Incorrect choices or failure to understand the risks associated with specific choices can easily and quickly destroy business models, making trading systems critical to the process.



# WHERE ETRM/CTRM SYSTEMS FALL SHORT.

# WHERE ETRM/CTRM SYSTEMS FALL SHORT.

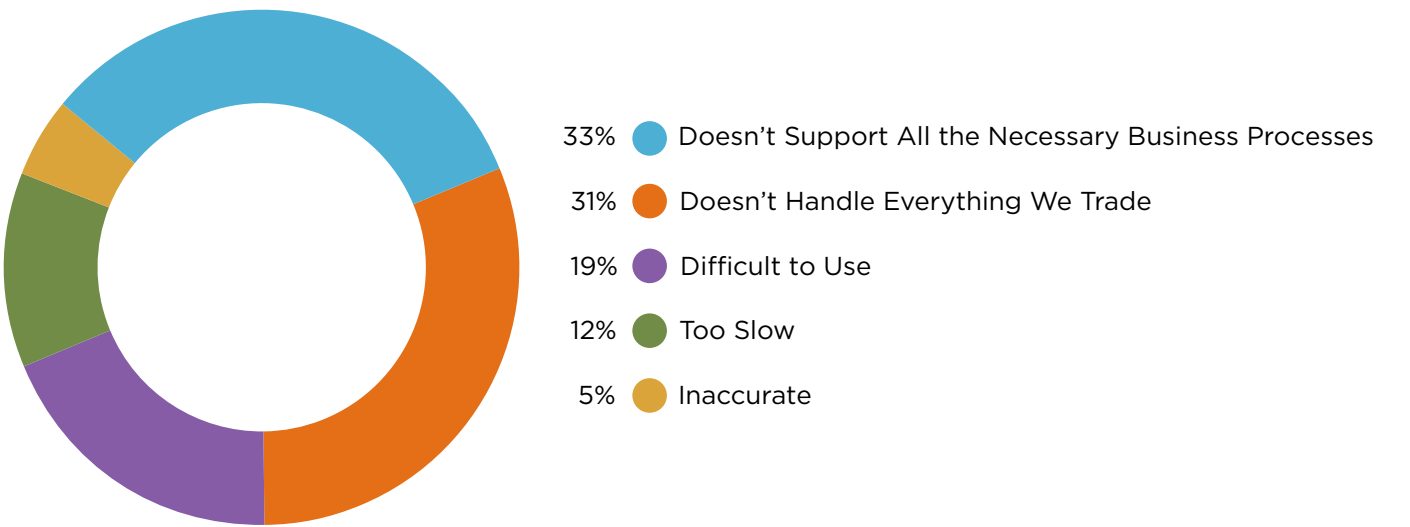
## 64% Say Their System Fails to Support Key Business Processes or Trading Scope

Even as modernization accelerates, many companies are still running into the same wall: their systems don’t support everything they need them to.

Nearly two-thirds (64%) of respondents identified two core limitations with their current ETRM/CTRM: it either doesn’t support all the necessary business processes, or it doesn’t handle everything they trade. As portfolios grow more complex, these gaps create risk — and highlight why companies are prioritizing platforms that can scale with them.

**Nearly 1 in 3 say their current ETRM/CTRM doesn’t handle everything they trade.**

Thinking of your current ETRM/CTRM system, what is the biggest challenge you’ve experienced with it?



This challenge was consistent across company types: many respondents said their systems don’t cover all the commodities they trade. That gap adds complexity and makes risk harder to manage.

Expectations are shifting. Usability alone isn’t enough anymore. As portfolios and markets grow more complex, trading desks need systems that can adapt and scale with them.

**Then vs. Now: What's Changed Since 2024?**

In 2024, 70% of respondents said their system didn't support all necessary business processes.

This year, that number dropped sharply to 33.7%, but another issue has grown: 31.1% now say their system doesn't handle everything they trade, up from 21% last year.

ETRM System Challenge	2024	2025	Δ Change
Doesn't support all necessary processes	70%	33.7%	▼ -36.3 pts
Doesn't handle everything we trade	21%	31.1%	▲ +10.1 pts
Difficult to use	27%	19.4%	▼ -7.6 pts
Too slow	10%	11.1%	▲ +1.1 pts
Inaccurate	13%	4.6%	▼ -8.4 pts

Vendors may be improving usability and reliability—but coverage and scalability remain the bigger bottlenecks. Today's systems need to support larger, more diverse portfolios, cover a broader range of business operations, and deliver accurate, timely data to drive risk and trading decisions.

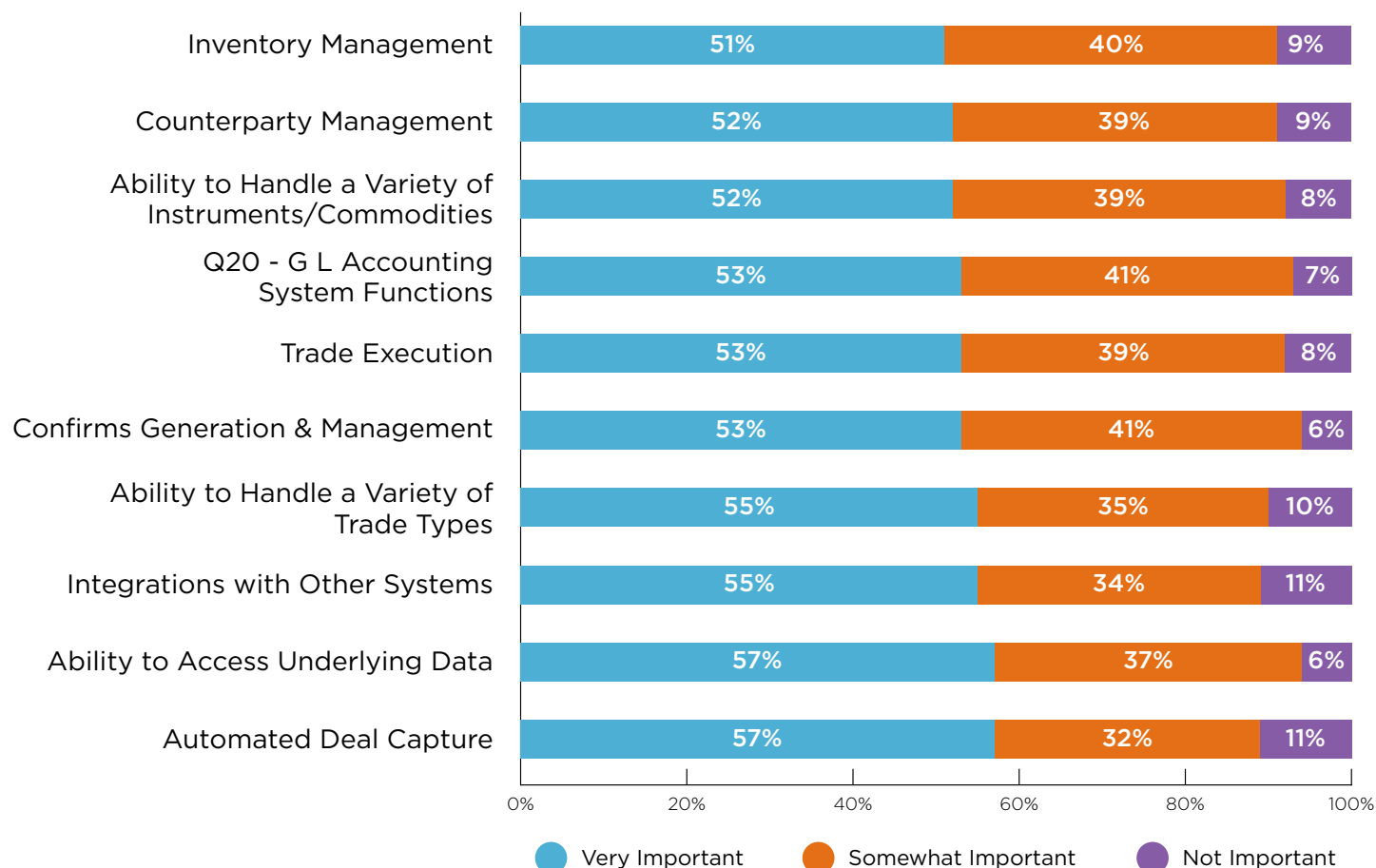
**Functionality Expectations Are Rising...**

Respondents rated nearly every core feature as “very important” — and dismissed almost none.

When asked to rate the importance of specific ETRM/CTRM features, respondents scored nearly every function highly. Automated deal capture, data access, system integrations, and support for diverse trade types all received “very important” ratings from more than 55% of respondents.

Almost no function was dismissed: “not important” responses remained under 10%. These results point to a market that expects systems to be broad, capable, and complete.

**Thinking of what you expect from an ETRM/CTRM system, please rate the importance of the functions for your company.**



## ... But the Most Important Features Still Fall Short

Even top-ranked capabilities like trade type support and execution don't meet expectations — revealing critical cracks in core workflows.

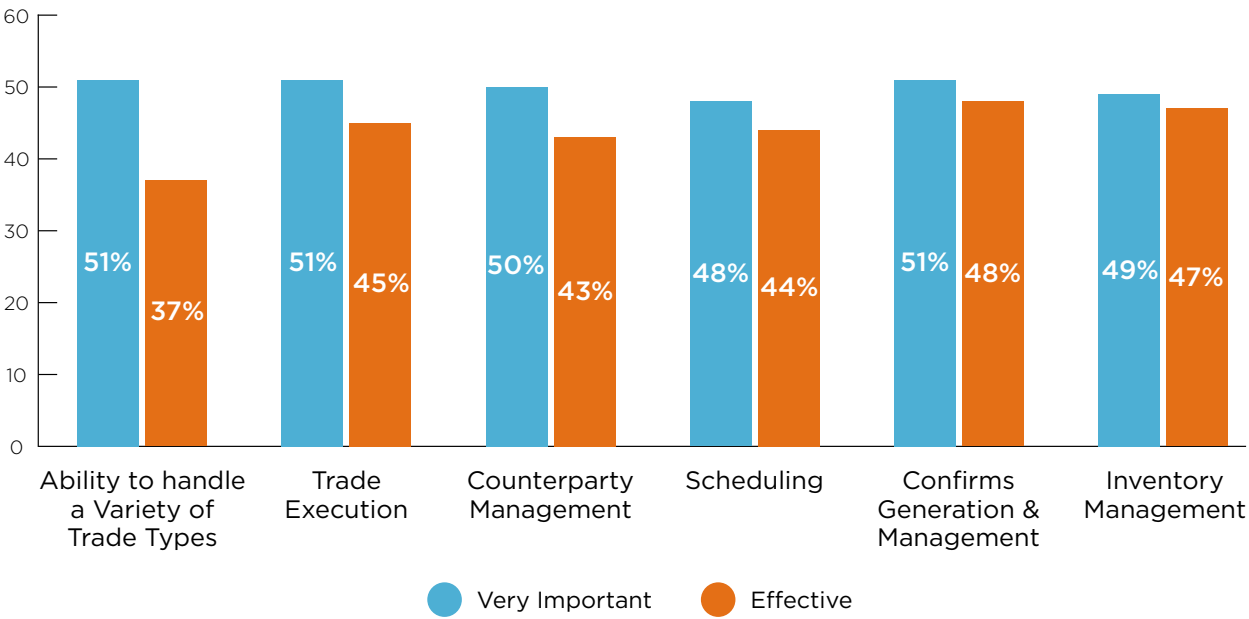
When comparing what functionality respondents rated as “very important” to how effective their system actually is, no functionality was perceived as 100% effective.

Several high-priority features continue to underperform:

- Support for diverse trade types was rated “very important” by over half of respondents, yet only 37% say their system handles it effectively.
- Trade execution: 51% “very important” vs. 45% effective.
- Counterparty management: 50% “very important” vs. 43% effective.
- Scheduling: 48% “very important” vs. 44% effective.



Thinking of your current ETRM/CTRM system, please rate how effective the functions it provides are for your company.



# What Users Want Next: Smart, Integrated, and Scalable Systems

The most requested features reveal where expectations are growing — and where modernization needs to deliver next.

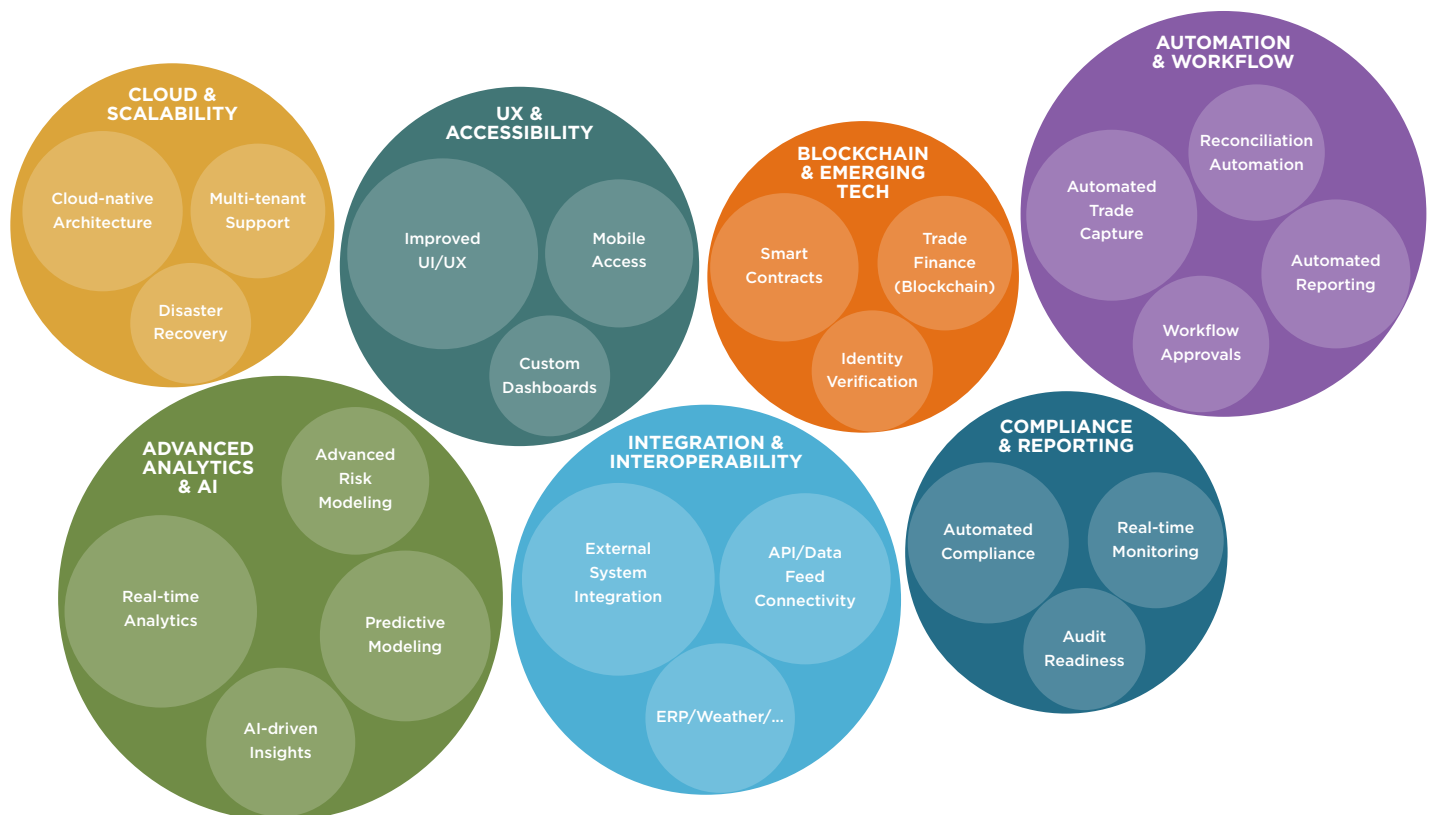
Across hundreds of open-ended responses, a few priorities stood out:

- Advanced analytics and AI were the most frequently cited functionality: better forecasting, real-time analysis, and smarter decision support.
- Integration and interoperability, with clear demand for systems that connect seamlessly across platforms and data sources.
- Automation and workflow enhancements, reflecting the need to reduce manual work and streamline key processes.
- User experience and accessibility, where faster systems, simpler interfaces, and mobile access are increasingly expected.

Other frequently mentioned needs included blockchain-based security, automated compliance reporting, and cloud-native scalability, all signaling readiness for increased complexity and a faster pace of operations.

These requests reflect a more mature market that understands how quickly technology is advancing and wants to harness it to improve business processes. As systems become more central to how trading organizations operate, users are asking for tools that do more.

**Thinking of your current ETRM/CTRM system, what kinds of functionality would you like to see that isn't available to you now?**



**Molecule asks:**

Why do you think organizations are becoming less tolerant of systems that can't flex to support new commodities, instruments, or business models?



**Geoffrey Cann**

*International author, 'Carbon, Capital, and the Cloud'*



The growing intolerance for inflexible ETRM/CTRM stems from a shift in expectations. Business leaders in all areas are now experiencing what modern systems can deliver, from personalized dashboards with drill-down to the sensor, to AI engines that make swift work of laborious analytics.

The notion that trading systems are somehow uniquely complex and therefore exempt from change no longer holds sway.

A new generation of technically savvy managers more deeply understand the art of the possible, and they don't readily accept the status quo. They are more equipped to challenge legacy defenders who insist that adaptability is not possible or practical.

Competitors are already demonstrating what modernized systems can achieve. They are able to react to market changes more swiftly and profit from risk in ways that create greater value.



**Allen Brooks**

*Author of Energy Musings newsletter*



Reflecting on 50-plus years in the financial services industry, I marvel at the range of modern investment choices available today. The use of computers, financial software, and the Internet facilitated that growth. Not only did the range of choices expand, but the ease of using them has revolutionized many sectors within the financial industry, resulting in some businesses prospering while others disappeared. If your company is not prepared or able to adapt quickly to shifting energy and commodity market dynamics or the opening of new markets, profit opportunities will be missed.







# **FUTURE OF ETRM.**

# FUTURE OF ETRM.

## AI Expectations Are Centered on Reporting, Forecasting, and Detection

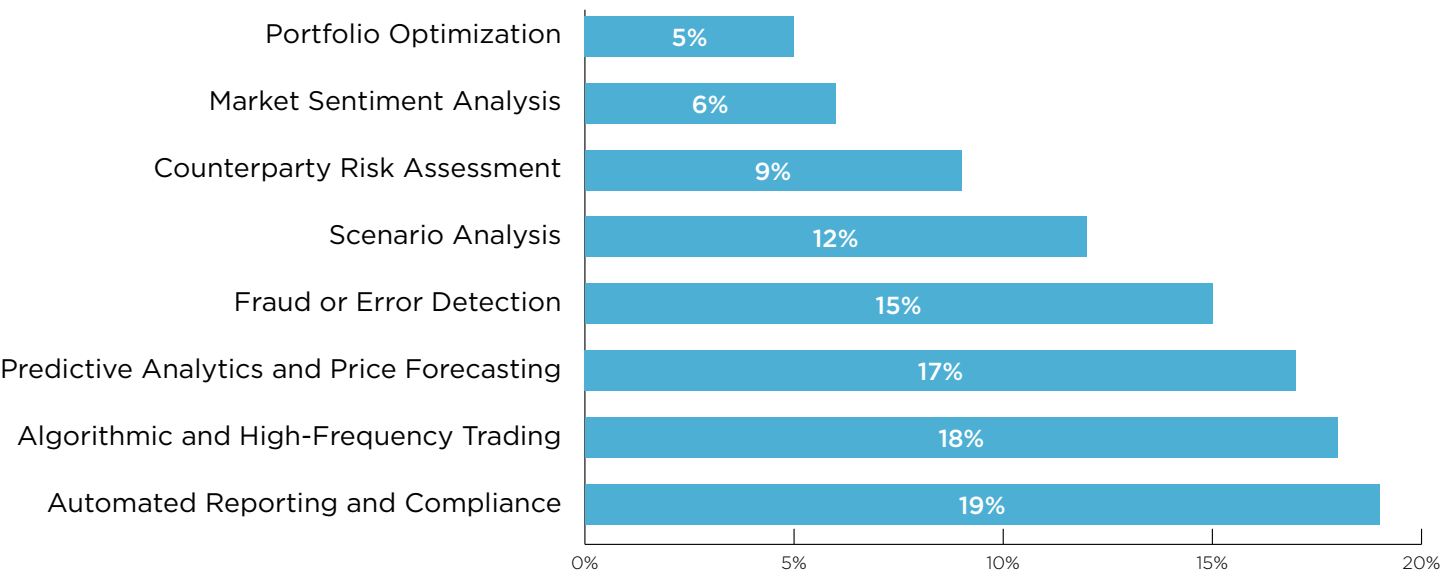
Most respondents believe AI can provide clear, near-term value to ETRM systems. Top cited use cases include:

- Automated reporting (18.7%)
- Algorithmic trading (18.2%)
- Predictive analytics (16.8%)
- Fraud detection (15.1%)

These are areas where AI could reduce manual work, surface insights faster, or tighten control.

Interest drops for more complex or speculative applications like scenario analysis (12.0%), counterparty risk assessment (9.2%), and market sentiment analysis (5.6%). These results indicate that respondents see AI as useful, but primarily as a way to support day-to-day operations — not replace high-stakes decision-making.

### What do you feel is the most useful way AI could be used to improve your ETRM/CTRM usage?





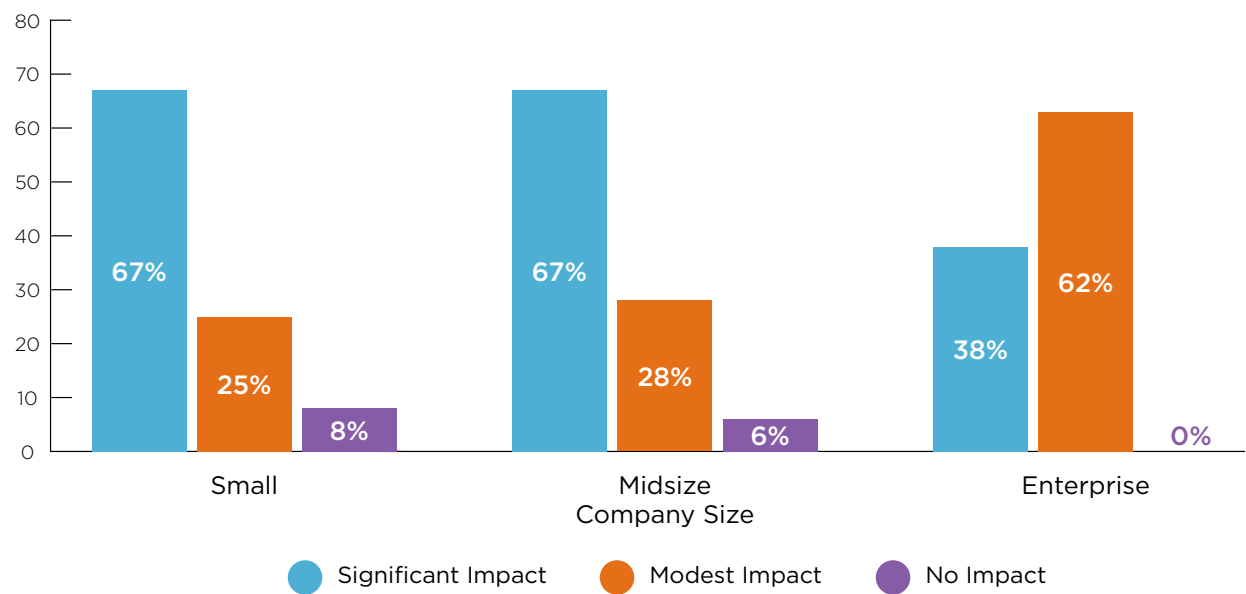
# 91% Expect AI to Reshape Trading Operations

Confidence is high, but readiness may depend on size, speed, and strategy.

61.9% of respondents expect AI to significantly impact their trading operations in the next five years, and another 29.3% anticipate a more modest effect. Just 7.3% said they don't expect AI to have any impact, and 1.4% weren't sure.

While sentiment was consistent across company types, company size revealed a divide. Smaller and midsize firms showed the highest confidence in AI, with over 60% expecting AI to significantly reshape operations. At the enterprise level, only 37.5% shared that view — though overall belief in AI's potential is nearly universal.

## Do you think AI will significantly impact your trading operations in the next 5 years?



**Molecule asks:**

What technologies or capabilities do you think will shape the next phase of modernization in energy and commodities?



**Allen Brooks**

*Author of Energy Musings newsletter*



Artificial Intelligence is hailed as our next revolutionary technology. Its arrival and growth will revolutionize the utility industry along with all other businesses. Energy and commodity markets can take a page from Wall Street, where algorithmic trading often drives stock prices to the wonderment of traders and investors. AI has been touted for its ability to produce solutions and execute strategies rapidly. Exactly how AI will help modernize commodity and energy markets is unclear, but the speed of change will increase. Failing to prepare for its arrival and use would be a severe failure of management.

The background is a dark blue collage of various financial charts and graphs. These include line graphs with multiple colored lines (yellow, green, red), bar charts, and world maps with data points. The charts are arranged in a layered, overlapping fashion, giving a sense of depth and complexity. The overall aesthetic is high-tech and data-driven.

# CONCLUSION

# CONCLUSION.

## The Tipping Point for ETRM/CTRM Modernization

2025 is the year transformation moves from planning to execution.

After years of planning, companies are finally acting on their ETRM/CTRM modernization strategies. In 2025, the shift is clear: expectations are higher, timelines are shorter, and “good enough” no longer cuts it. Efficiency is still the goal — but it’s no longer the only goal. Today’s market demands ETRM/CTRMs that empower better decisions, give users deeper control, and provide more trustworthy data.

In the face of constantly shifting regulations and increasing trade in new commodities like renewable energy, modern ETRM/CTRM systems can help companies stay competitive, manage risk with clarity, and scale with portfolio growth and complexity.

Gaps are widening as older systems sacrifice performance in some areas to meet expectations in others – delivering systems that provide speed but can’t handle all commodities, or supporting a wide range of commodities but falling short on trading scope. The ability to handle a variety of trade types may be the top priority, but current systems still struggle to deliver it effectively.

Continuous innovation will be critical to help trading systems meet the evolving expectations of 2025 commodity market participants, where AI, automation, and advanced analytics deliver better insights across all commodities and help drive long-term market advantages.

The ETRM/CTRM market has shifted, and companies that want to keep pace will need to modernize to be ready for whatever the future brings.



