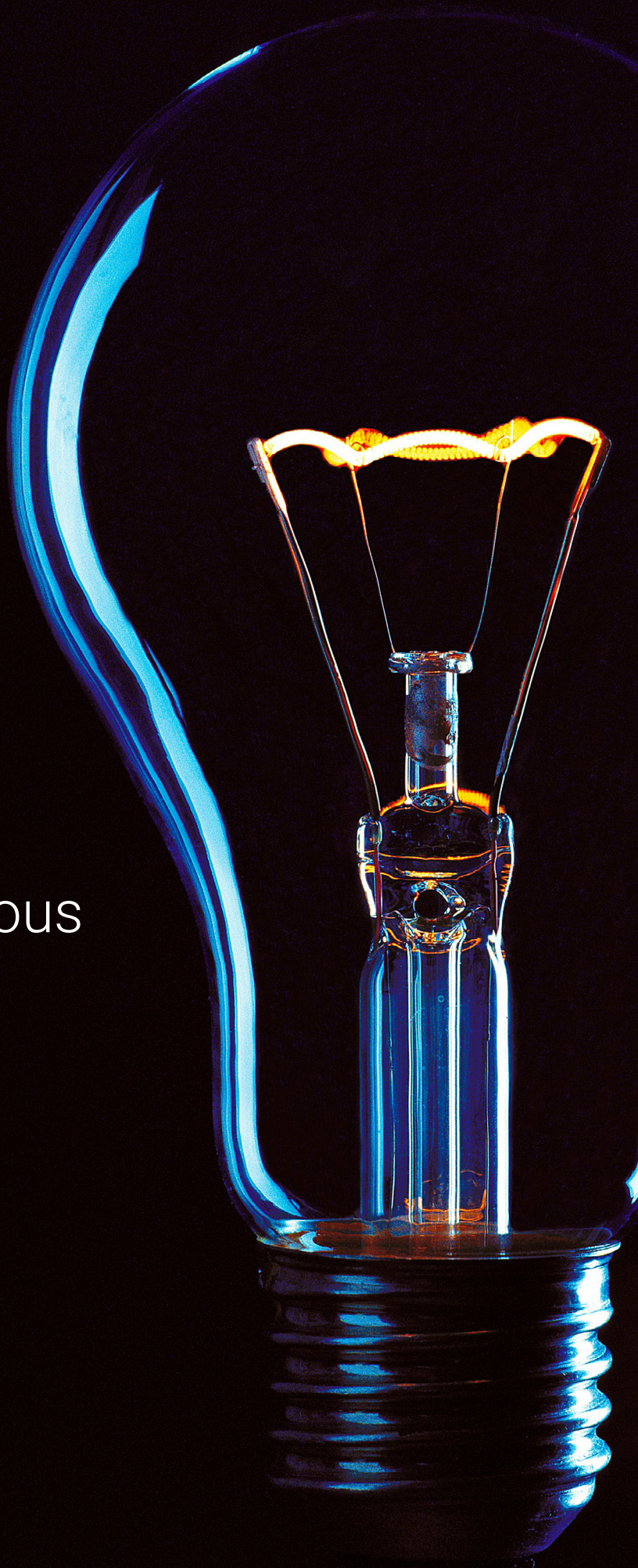
AlixPartners

SOLVING THE ENERGY TRANSITION PARADOX

Net zero optimism is high, but insufficient planning and ambiguous metrics can lead to missed milestones



As part of our inaugural Energy Industries Transition Report, AlixPartners surveyed nearly 400 executives across all regions in the energy value chain on their companies' drive to meeting net zero goals by 2050.

Executives' commitment and confidence is high, with three-quarters of respondents believing their companies will succeed in meeting these goals.

The end-to-end energy value chain is comprised of carbon-heavy businesses which have a disproportionate impact on greenhouse gas emissions. Energy and capital intensive process industries (EPI) play a pivotal role in the globe's sustainability journey. As the broad sense of urgency to decarbonize mounts, so does the pressure to grow volumes, expand margins, innovate, and respond to disruption.

However, they face some challenging roadblocks:

MANY (75%)

have not set the quantitative goals with clear timelines required to achieve success.

MOST (95%+)

believe customers will fund higher costs by paying a decarbonization premium. This goes against typical market norms.

MOST UNDERESTIMATE

the challenge of acquiring and retaining the necessary talent.

Regulatory regimes and governmental support are seen by executives as critical drivers of net zero success or failure; Still, most executives believe they will manage to stay the course through political changes that will occur on the path to 2050.

Net zero optimism and readiness vary significantly by energy subsector, driven by the differing dynamics and challenges faced.

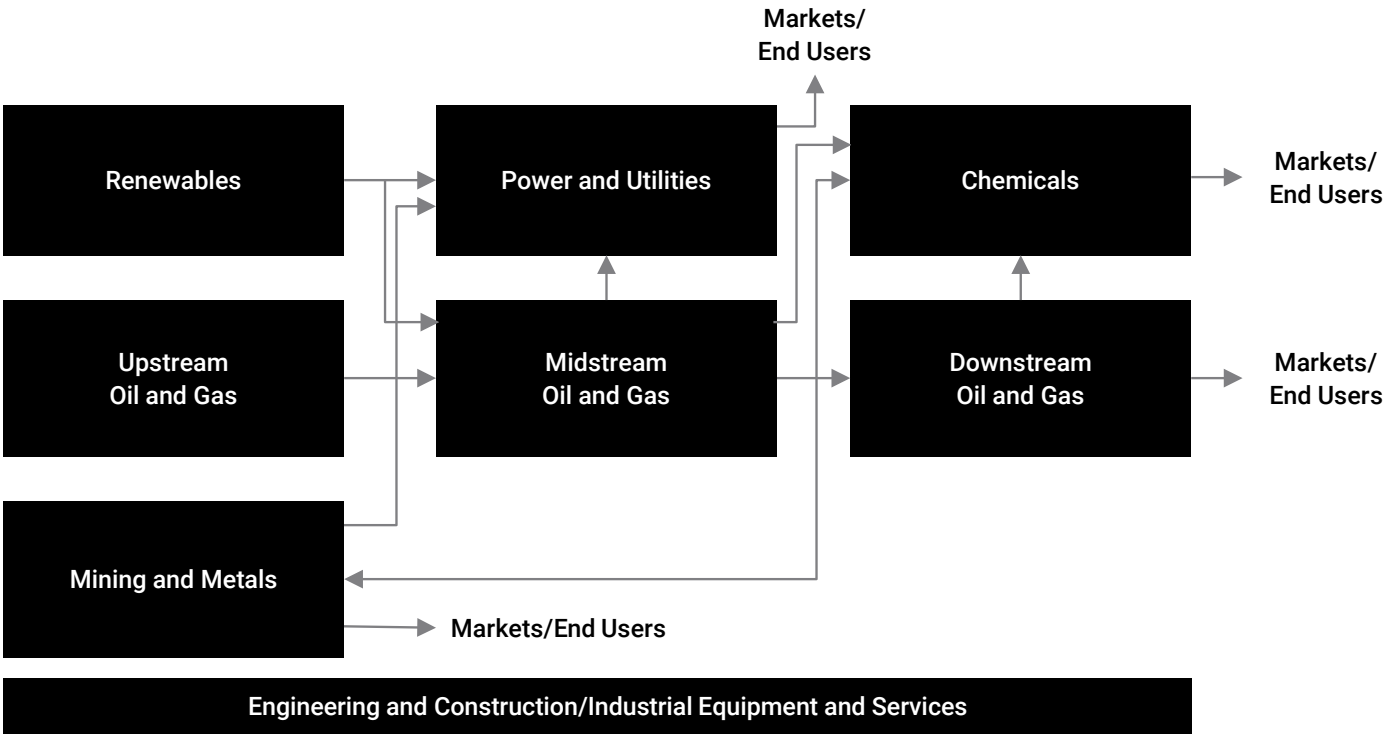
Energy and Capital Intensive Process Industries (EPI) are resolved to deliver even amid an ever-changing political backdrop, with a substantial majority signaling a firm commitment to achieving net zero emissions by 2050. This commitment, however, could be compromised by insufficient levels of planning.

Meeting the challenge requires more than optimism. Success hinges on planning that will be resilient over a quarter-century journey marked by technological transformation, regulatory uncertainty, and unrelenting economic pressures. Detailed roadmaps and stakeholder engagement plans need to be built for the long haul. Revenue models must evolve; cost structures must be nimble; and the drive for growth and profitability must be balanced with demonstrable environmental stewardship.

AlixPartners surveyed 387 executives within various subsectors of energy and related process industries to better understand their approach to the energy transition and to meeting net zero goals. Our inaugural Energy Industries Transition Report investigates critical questions the industry is confronting. What strategies are being employed? How confident are various players in their ability to deliver on their very public goals? Where are the blind spots, and what miscalculations and flawed assumptions are most likely to emerge?

This report highlights the ambitions, risks, and hurdles that accompany the energy transition journey, outlining essential steps companies must take to realize their net zero ambitions, and anticipating the choices that are most likely to separate the winners from the losers.

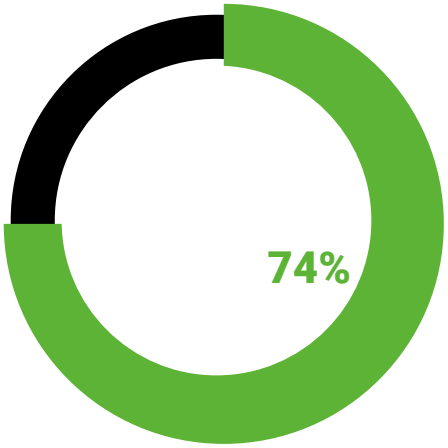
ENERGY AND CAPITAL INTENSIVE PROCESS INDUSTRIES (EPI) VALUE CHAIN



Source: AlixPartners analysis

Lofty goals; lackluster planning

FIGURE 1: PERCENTAGE OF RESPONDENTS WITH HIGH CONFIDENCE IN THEIR COMPANY'S ABILITY TO ACHIEVE NET ZERO BY 2050 OR EARLIER

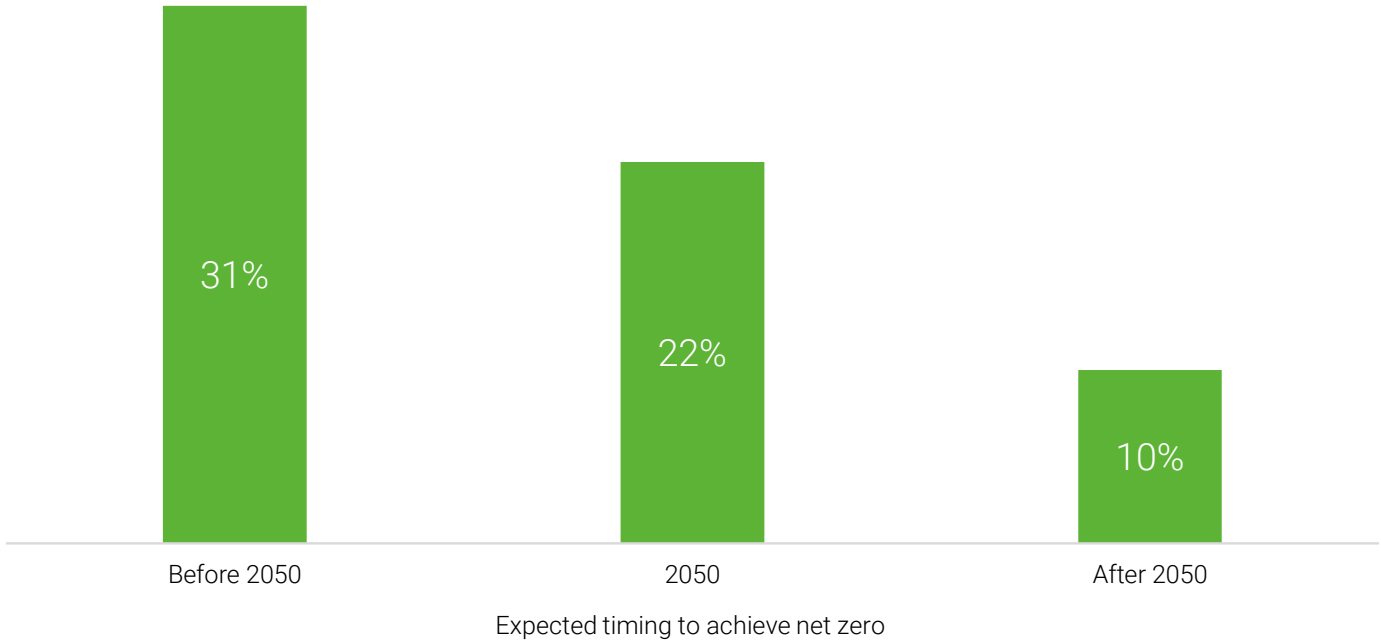


Source: AlixPartners analysis

Having high confidence in achieving net zero by 2050 appears to be table stakes in energy and process industries, and of the roughly 75% of those surveyed who expressed a strong commitment to achieving net zero in this timeframe, most also reported a high level of confidence in succeeding, reflecting a strong correlation between dedication and perceived chances for success.

Yet only about 25% of respondents have set quantitative goals with clear timelines for achieving success. Without concrete timelines, organizations will likely struggle to track progress, identify gaps, and practice accountability. In contrast, those with detailed goals that integrate meaningful milestones and metrics with long-term plans will strengthen their net zero strategies. In fact, timelines, rather than solely quantitative goals, are what drive organizational confidence.

FIGURE 2: PERCENTAGE OF COMPANIES THAT HAVE QUANTITATIVE GOALS AND TIMELINES IN PLACE BY EXPECTED NET ZERO ACHIEVEMENT TIMING



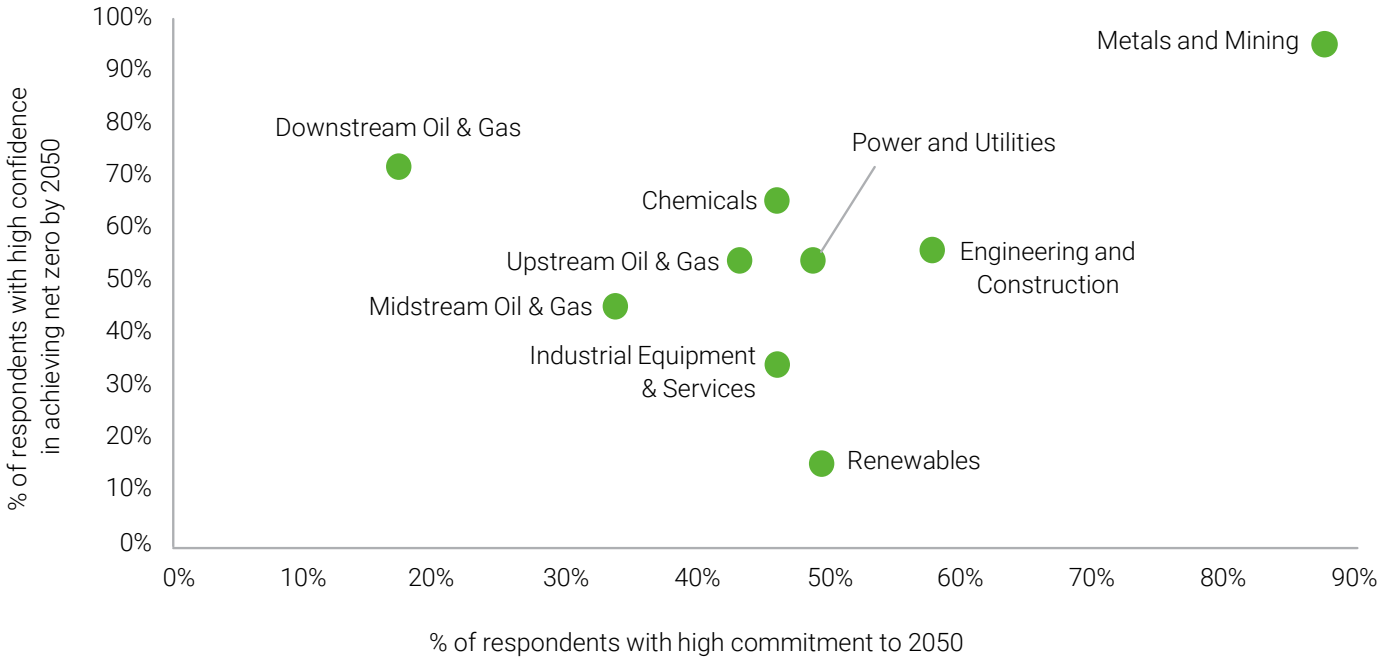
Source: AlixPartners analysis

INDUSTRY-SPECIFIC DEEP DIVE: CONFIDENCE VARIES BY SECTOR

Metals and mining

High scrutiny leads to high confidence

FIGURE 3: PERCENTAGE OF RESPONDENTS WITH CONFIDENCE OF ACHIEVING NET ZERO BY 2050 OR EARLIER



Source: AlixPartners analysis

The search for where net zero confidence is highest begins with an understanding of where the pressure is strongest to decarbonize. Mining is traditionally energy-intensive, eliciting higher investor and public scrutiny of emissions reduction, thus driving organizational alignment towards net zero ambitions. Over 60% of metals and mining participants responded with a "10" for commitment to net zero by 2050; the highest among all sectors.

To meet net zero targets, mining companies will need to develop and implement robust metrics and timelines for both internal progress tracking and external stakeholder communications. Close to 50% of metals and mining companies report having highly mature carbon reduction metrics—including qualitative and quantitative objectives with timelines, which also leads the industry.

In fact, 19 of the top 30 mining companies globally have already publicly announced net zero commitments by 2050. For example, BHP, among the world's most valuable mining companies, has committed to achieving net zero operational emissions (scope 1 and 2) by 2050 and has set interim targets to reduce operational greenhouse gas emissions by at least 30% by 2030 (from 2020 levels).

Downstream oil & gas

Optimism clouded by investment costs

More than 71% of downstream oil and gas (O&G) respondents suggested that net zero before 2050 is achievable, the second-highest rating behind mining executives. This comes as downstream O&G companies roll out continuous advancements in renewable energy, energy efficiency, and carbon capture, driving optimism that the necessary tools to achieve net zero will become more accessible and cost-effective over time.

However, only 6% of downstream O&G respondents answered a "10" for commitment to achievement of net zero by 2050, the lowest percentage out of all sectors. Success hinges on significant capital investments, often involving technologies which are still not fully mature at a commercial scale. Companies like BP, for instance, are investing in areas directly adjacent to their core downstream markets (e.g., biogas, biofuels, and EV charging), while adopting a capital-light approach in other low carbon technologies such as hydrogen/CCS technologies.

Lower confidence is, in part, driven by insufficient planning. Slightly more than 10% of downstream O&G companies report having highly mature carbon reduction metrics. Keep in mind, downstream operations have complex sources of emissions. This makes it challenging and costly for them to measure all emissions and develop standardized metrics that accurately capture all aspects of their carbon footprint.

Renewables

The road to net zero is anything but smooth

Renewables companies are relatively pessimistic about achieving net zero by 2050. Only 30% of renewables respondents believe net zero will be achieved by 2050, the lowest among all sectors.

This may be surprising until factoring in the headwinds this sector faces. Integrating renewable energy sources into existing power grids can be complex and costly, which may delay progress towards net zero.

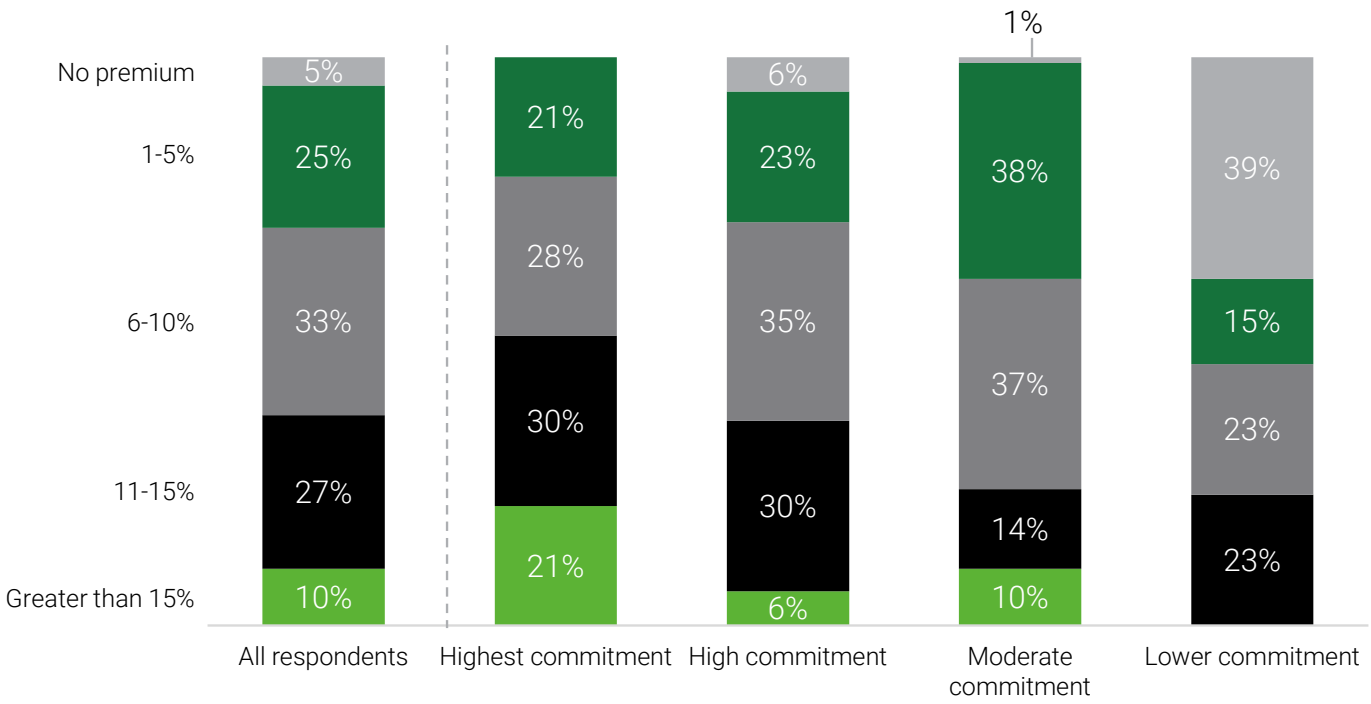
Additionally, renewables companies often face changing regulatory environments, making long-term planning difficult. For instance, National Grid very recently proposed a £35 billion upgrade to the UK's transmission infrastructure to support integration of renewable energy sources. This may result in increased household energy bills and meet public resistance.

Renewable energy companies are further challenged by having a lower carbon footprint relative to other energy sectors. Today, only 4% of renewables companies report having highly mature carbon reduction metrics (qualitative and quantitative objectives with timelines)—the lowest percentage among all sectors. This is partly due to a disproportionate focus on growth, which may lead to de-prioritization of internal net -zero goals.

Consider the case of Evergy, which established a clear target of 80% carbon emissions by retiring coal-based power sources and increasing wind and nuclear power. The company, however, delayed their transition from coal-based power sources to renewable sources due to high energy demand from local data centers.

If you build it, will they pay?

FIGURE 4: EXPECTED RENEWABLES PRICE PREMIUM



Source: AlixPartners analysis

Strong net zero commitments are often accompanied by an anticipation that consumers and businesses will be willing to pay a premium for low carbon products and services. While the potential for higher premiums provides a significant financial incentive for companies to invest and develop greener products and services, there is little evidence to support this expectation.

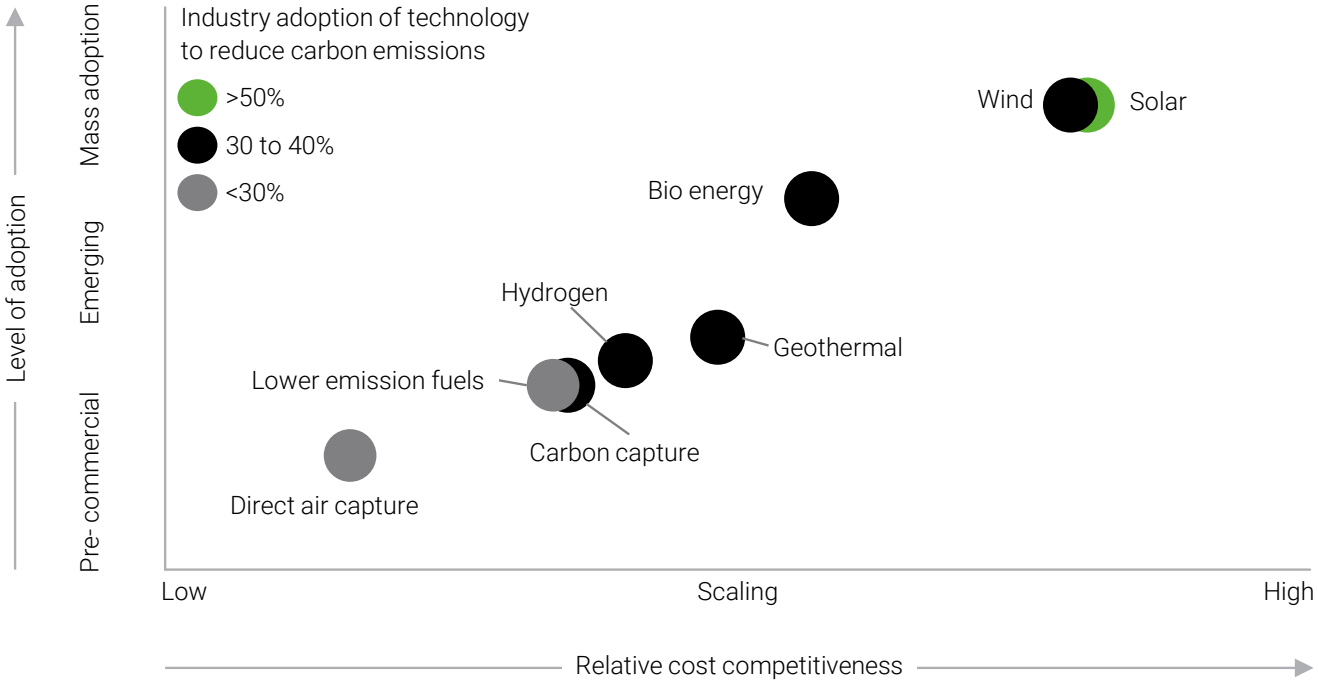
In fact, history tells us that in almost every industry, the opposite is true; consumers and businesses won't pay more voluntarily. Barring a government-driven mandate, EPI companies should plan on market prices when forecasting their expected margins, following the simple rule that customers won't voluntarily pay more.

High expectations for a payoff must be accompanied by an awareness of the minefield of risks and uncertainties that can severely impede an industry's ability to unlock the full potential of their investments.

EPI companies are utilizing a diverse range of solutions to reduce carbon emissions. The wide variance in approaches underscores the still-fledgling nature of decarbonization strategies.

However, technologies with relatively higher maturity and a proven track record—such as solar, wind, and energy efficiency measures—are most widely adopted. This shows a preference for scalability and reliable performance, while minimizing operational and financial risks.

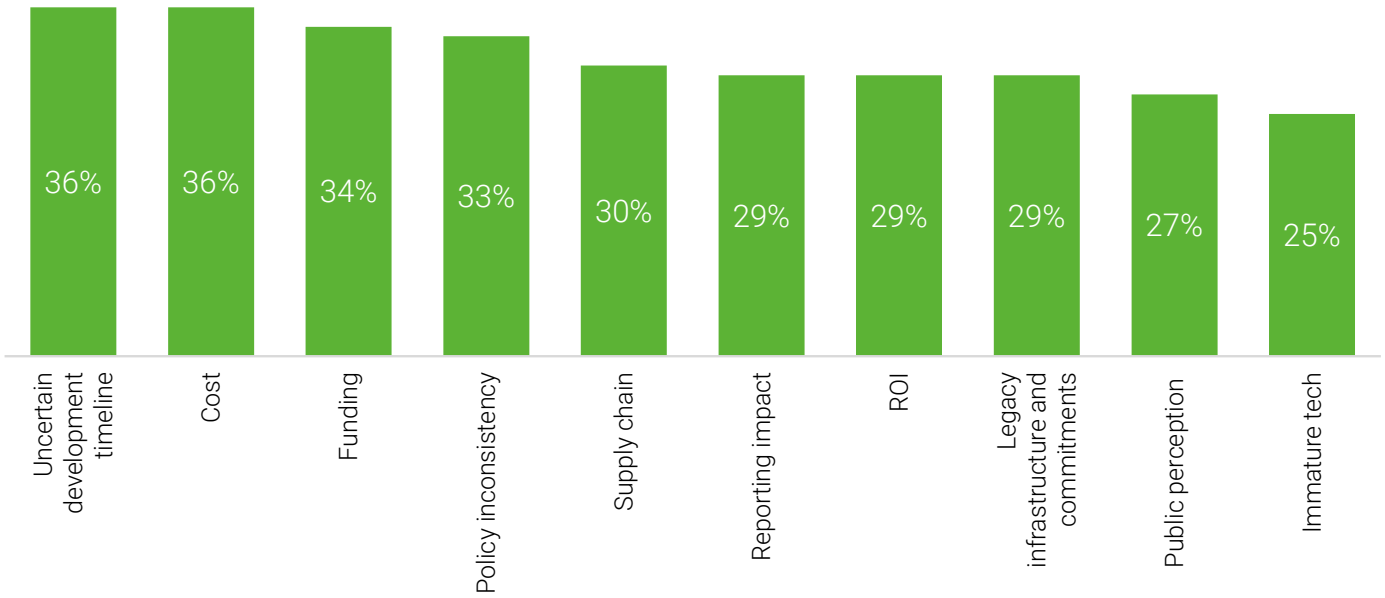
FIGURE 5: COST, MATURITY, AND ADOPTION CURVE BY RENEWABLE TECHNOLOGY



Source: Clean Edge, AlixPartners research and analysis

Challenges are considerable, but also surmountable

FIGURE 6: TOP CHALLENGES COMPANIES FACE



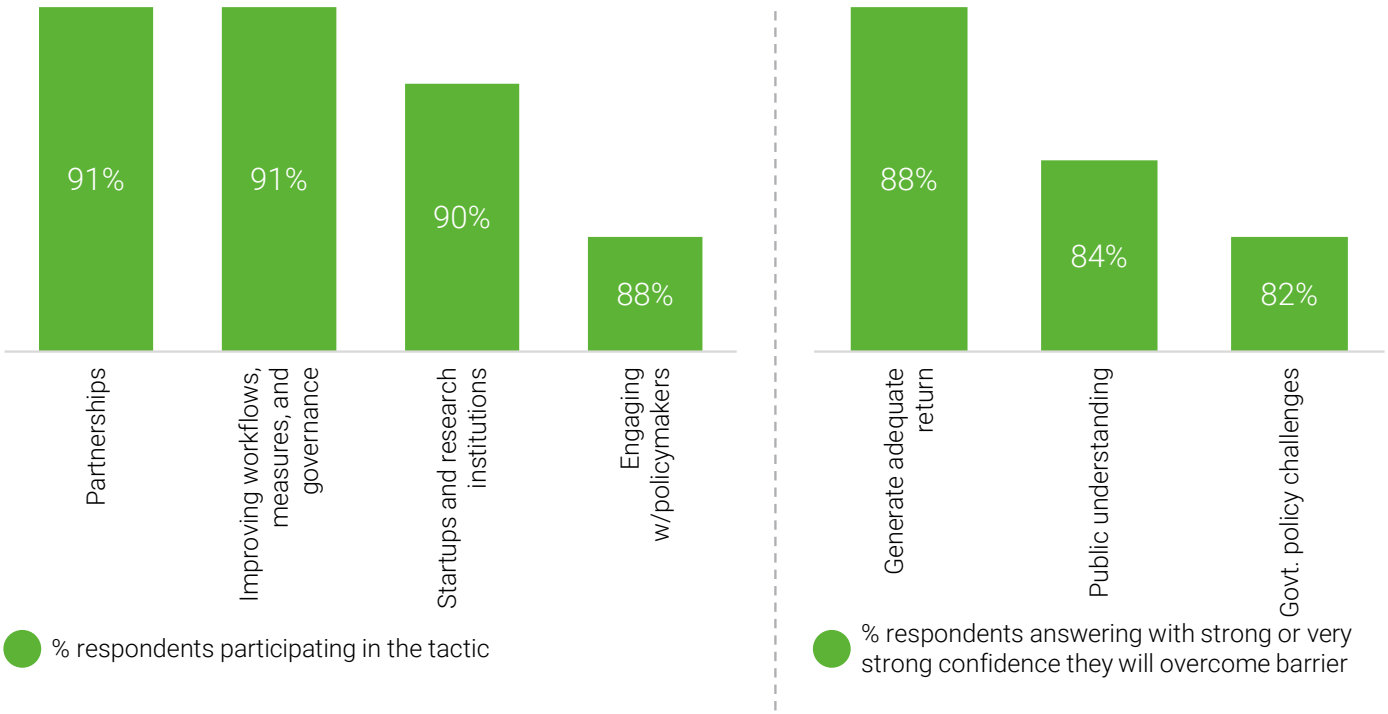
Source: AlixPartners analysis

The wide range of both internal and external hurdles companies face when it comes to meeting their net zero goals demonstrates the magnitude of the task at hand. Topping the list are the challenges associated with the expected costs, and the burden of securing additional funding for the transition. Timelines for large-scale programs and the ever-present uncertainty associated with policy and supply chain readiness also present considerable headaches for the industry.

Geopolitics represent another major concern. Over 80% of respondents indicate that conflict between Russia, China, and the West could have a moderate to substantial impact on their investments. Similarly, over 80% of respondents believe their performance could be impacted by talent and skill constraints.

Nevertheless, many executives see a path forward. Approximately 85% of respondents express confidence that they can eventually manage key business challenges and roadblocks. And around 90% of respondents say they are very strongly or strongly participating in key tactics and avenues that should help to smooth the path to net zero.

FIGURE 7: TACTICS UTILIZED AND BARRIERS TO BE OVERCOME



Source: AlixPartners analysis

THRIVING AMID DISRUPTION

The findings of our inaugural Energy Industries Transition Report are closely aligned with AlixPartners' ongoing analysis of how disruption affects leading global companies. The firm's **2025 AlixPartners Disruption Index (ADI),** published in January, polled 3,000 executives on the topic, including 300 energy executives.

Among energy industry-specific findings:

Energy executives cite zero carbon regulations, increasing consumer demand for sustainable energy, and the rise of energy transition technologies as the three most disruptive forces.

60% of energy executives have faced high levels of disruption over the past year, only slightly higher than the combined 10-industry average of 57%.

86% of energy executives expect 'moderate to significant' change to their business model over the next year due to disruptive forces.

83% of energy executives say that environmental issues and policies have caused them to change their business strategy or take material actions.

Energy is the industry most likely to significantly increase investment in China over the next year.

78% of energy respondents have made scope 1 and 2 reduction commitments, 59% have made scope 3 commitments, and 80% feel that their companies are on track to meet these reduction commitments.

84% of energy respondents indicate that they have access to the technologies needed to meet their reduction targets.

KEEPING FOCUS IN AN EVER CHANGING WORLD

AlixPartners' 2025 Energy Industries Transition Report was launched during a critical moment in the world's approach to natural resources, the climate, and innovation. Political winds inevitably shift, and views on decarbonization and global collaboration evolve. The executives we surveyed are engaged with policymakers, believe that government policies have and will shape their actions, and expect that, despite short-term swings, policies will be relatively stable over the longer term. Given that they will be a critical part of achieving 2050 goals, EPI companies are determined to hold central roles in solving long-term challenges, ensuring financial viability, and accelerating next-generation technology, while continuing to provide products and services that support the global economy.

MAINTAINING COMPETITIVENESS WHILE MEETING TARGETS

Energy companies are strongly committed to achieving net zero emissions by 2050 but have yet to comprehensively address the long list of challenges they face, which include securing funding, and overcoming technological barriers. The time is now to mitigate risks and generate momentum among both internal stakeholders and investors.

The success of the energy transition depends on taking decisive action immediately, beginning with these important steps:

DEVELOP DETAILED ROADMAPS

Create comprehensive net zero roadmaps with specific, measurable goals and timelines to enhance accountability and effectively track progress.

CONDUCT ECONOMIC SCENARIO ANALYSIS

Thorough economic analyses can help identify cost-effective strategies for achieving decarbonization goals while maintaining financial performance.

NAVIGATE REGULATORY LANDSCAPES

Stay informed and compliant with regulatory requirements while leveraging potential incentives to support decarbonization efforts.

INNOVATE BUSINESS MODELS

Explore and adopt new business models that prioritize sustainability, such as circular economy practices, to drive long-term growth and environmental responsibility.

INVEST IN WORKFORCE TRAINING

Develop and implement training programs to equip employees with the necessary skills and knowledge to support the transition to low carbon technologies and sustainable practices.

ENHANCE COLLABORATION

Foster partnerships with other industry players, research institutions, and technology providers to share knowledge, resources, and best practices for achieving decarbonization goals.

AlixPartners

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ABOUT US

For more than forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges—circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line—a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA—so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.