WHITE PAPER

Energy Transition Transformation

To Build Optionality and Resilience, Align the Why, What and How of Energy Transition Transformation

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Accelerating change, greater uncertainty, and conflicting priorities

Energy companies' new reality is faster changing and more uncertain than ever before. Faced with conflicting priorities, they must strike a winning balance between maximizing returns, decarbonizing at speed, and investing for value. This means transforming how energy companies do business today and how they build resilience for the long term. This paper shows how developing an effective, 'always-on' operating model that integrates purpose, strategy and executional certainty will enable companies to sustain competitive performance in any environment.

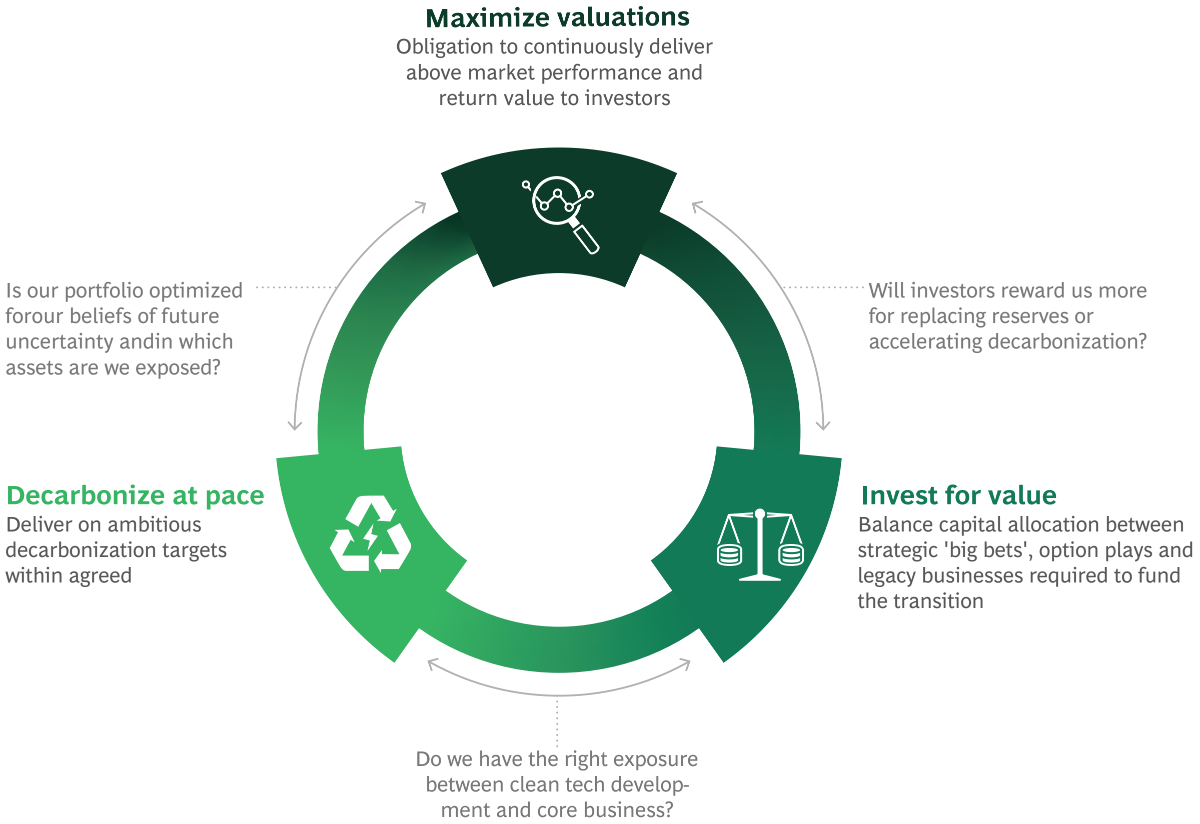
All energy companies must address two core issues

While challenges differ by segment, to succeed in the medium- to long-term, energy companies must address two core issues. The first is finding the right balance between competing demands and priorities. The second is sustaining performance in the face of rising headwinds.

Strike a winning balance between competing demands

Companies must balance valuations, capital investment decisions, and decarbonization ambitions in a world where there are many paths available and it is not always clear what the market will reward (Figure 1). Investors report a strong preference for low carbon capital investments. But despite European IOCs' seemingly aligned capital allocation strategies, their valuation multiples remain depressed compared to peers (Figure 2).

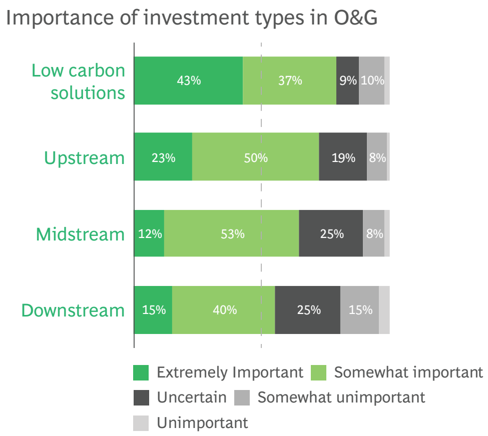
Figure 1 | Energy companies must balance three competing demands



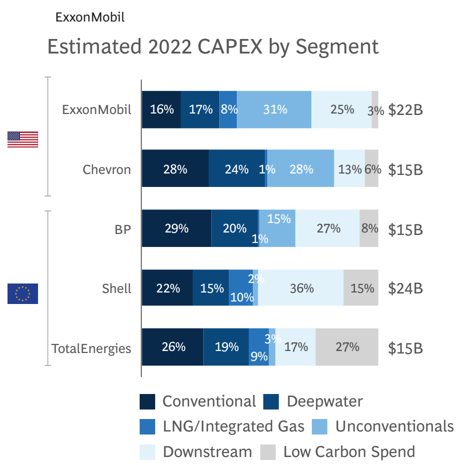
Note: EV/EBITDA calculated based upon calendar year average
Source: S&P Capital IQ; BCG ValueScience® Center

Figure 2 | Mixed signals from the market highlight the need to maintain optionality

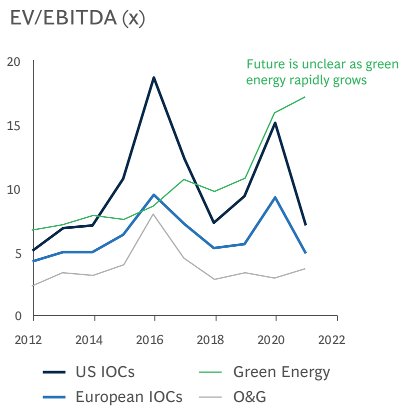
Investors state a preference for low carbon capital investment…



Which aligns to the European IOC capital allocation strategy…



However, European IOCs continue to show depressed multiples vs peers



Note: Low Carbon Spend based on company disclosed capex spend. Low carbon spend not inclusive of customer and mobility focused spend. EV/EBITDA determined based upon calendar year market cap weighted average EV/EBITDA for all 24 Green Energy (e.g., NextEra, Iberdrola, ERG) / 64 O&G (excluding NOC)
Source: Global S&P; Rystad Energy (Nov 2021); company reports/presentations and estimates based on available information; IEA; Capital IQ; BCG CEI

Different challenges faced by different energy segments

The benefits of successful transformation are similar for all energy companies, and include cost efficiency, improved employee satisfaction and productivity, and faster, more effective decision-making processes. But each energy related sector will have specific challenges it needs to address.

International Oil Companies (IOCs)

IOCs face conflicting priorities and must urgently find the right balance between maximizing shareholder returns, decarbonizing at speed, and investing for long term value. When it comes to portfolio management and capital allocation, unprecedented strategic uncertainty creates pressure for IOCs to build optionality. To address these challenges IOCs should consider

- Establishing a lean, efficient operating model for legacy upstream businesses, including streamlining processes to monitor and replace reserves and building capabilities required to reduce costs and execute projects quickly.

- Defining a new operating model to enable optionality in low carbon businesses. This will require embedding agile governance processes that promote rapid decision making, establishing an ‘always on’ dynamic strategy team to assess and act on opportunities and building capabilities to strengthen local customer and partner relationships.

National Oil Companies (NOCs)

NOCs are moving from a world in which inefficient operators were able to flourish to one where only low-cost and low-carbon operators will survive. To be the ‘last man standing’ they will need to invest capital in inorganic growth opportunities, alliances, and partnerships across the low-carbon value chain and rapidly develop internal capabilities that have traditionally been provided by IOC or service company partners. To transition successfully NOCs should consider:

- Reducing cost and carbon intensity to extend reserve lifespans with fit for purpose technology and support functions.

- Refocusing portfolios on the desired mix of hydrocarbon and new energy assets.

- Accelerating timely and cost-efficient capital delivery programs to take advantage of current high pricing, using innovative digitally enabled capital delivery models.

Upstream independents

Independent upstream players face high degrees of uncertainty and price volatility as the market shifts towards growth in renewable and low-carbon fuels. These companies must seek to cultivate a truly lean and agile organization that drives operational efficiency through digital tools while also maintaining their "social license" by demonstrating commitment to responsible, lower-carbon operations. To address these issues upstream players should consider:

- Future-proofing their hydrocarbon portfolios with fit for purpose support functions and asset-specific decarbonization plans.

- **Transforming their core functions** using digital to reduce costs and improve decision making while implementing standardized delivery models to maintain high asset utilization.

- Building and scaling material lower-carbon businesses leveraging new methods of capital deployment and a supplier ecosystem to secure access to technology.

Downstream independents

Downstream oil and gas companies face shrinking demand and margins, compounded by high projected decarbonization costs. However, as investor interest moves away from traditional refining towards adjacent value pools in retail and mobility, companies are also seeing new opportunities arise. To navigate these challenges and take advantages of opportunities companies should consider:

- Defending their core businesses and improve margins, including maturing trading capabilities to manage volatile market conditions and extract full value from assets beyond intrinsic product margins.

- Growing by attacking in adjacent areas, facilitated by an 'always on' dynamic strategy and capital allocation team, and supported by investment in reskilling / upskilling the workforce.

- Creating optionality and scalability in low carbon businesses, including partnership and M&A opportunities, as well as abatement or divestment plans for existing assets.

Power and Utilities (P&U)

P&U players are being pushed to make capital investments in modernizing, digitizing, and enhancing grid reliability, while decarbonizing and minimizing stranded assets. Consequently, it's crucial to redouble sustainable efficiency efforts (costs and carbon), while investing for the future with integrated planning for new generation and loads. Companies looking to address these issues should consider:

- Building efficiencies through a robust operating model to increase / preserve their regulated rate of return and decrease the cost of capital.

- Investing in integrated planning and a modernized grid, including a delivery model to incorporate asynchronous and distributed generation.

- Growing their asset base and explore diversification opportunities.

IOCs in particular have an obligation to:

- Continuously deliver above market performance and return value to investors
- Balance capital allocation between strategic 'big bets' such as power or mobility, option plays in less mature low carbon businesses, and legacy businesses required to fund the transition
- Deliver on ambitious decarbonization targets within agreed timeframes

Unprecedented strategic uncertainty means it is important for companies to build optionality into their portfolio management and capital allocation practices. In addition to self-funded organic growth, companies are pursuing a range of pathways to build new energy positions while leveraging expertise and minimizing exposure. These include M&A, joint ventures, and strategic alliances.

Sustain performance in the face of increasing headwinds

Irrespective of the pathways a company choses to prioritize, strong headwinds will threaten its ability to deliver sustained results. These are industry-wide trends that all energy companies must find ways to navigate:

- Declining talent pipeline for both traditional and new businesses. Degrees held by workers and unemployment levels in extractive industries are both at their lowest levels since 2006. These industries have also seen a 90% decrease in job seekers between 2019 and 2022.
- Growing organizational complexity. Companies have been addressing external complexity by bolting on new business units. The result is cumbersome organizational structures and decision making processes.
- Rising cost base combined with increased commodity volatility. Annual Brent price swings have widened since 2019, reaching $44/bbl in 2022 and challenging M&A fair value agreements and upstream investment.
- Declining resilience to supply chain, regulatory, and geopolitical shocks. Sustained underinvestment in supply chains since 2014, combined with repeated cost and environmental shocks, have undermined resilience across the board.

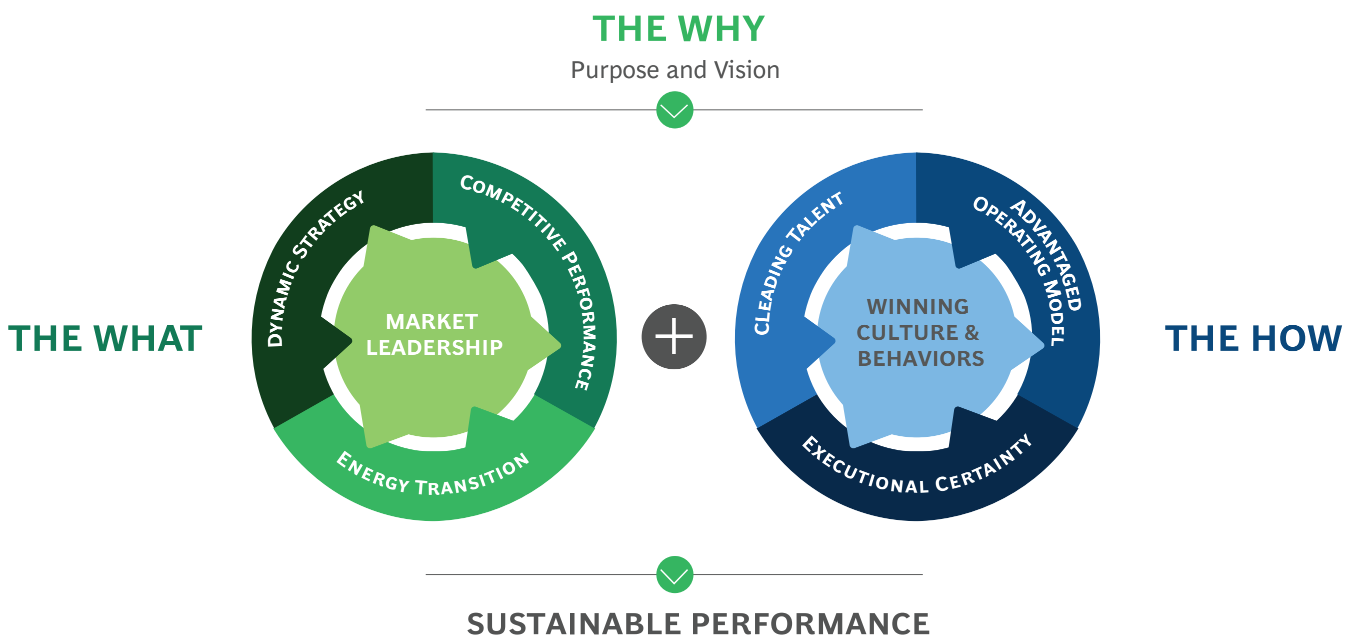
Today's increasingly uncertain reality demands that companies find ways to do business that build resilience. Yet few are equipped with the tools needed to make this transformation.

"Aligning purpose, strategy and executional certainty via an effective operating model is essential to sustain competitive performance

Importance of a holistic approach

To meet these two challenges – simultaneously balancing competing demands while sustaining performance despite rising headwinds – companies must adopt a holistic approach that integrates an inclusive and compelling purpose with a clearly articulated strategy and robust performance agenda. Such an approach helps leaders manage key tradeoffs and create the right organizational context to efficiently execute their strategy. It begins with defining and aligning organizations' 'Why', 'What' and 'How' to deliver sustained results in the face of ongoing uncertainty (Figure 3).

Figure 3 | A holistic approach to integrating purpose, strategy and execution will deliver sustainable performance against a backdrop of uncertainty



Why: purpose and vision

The why establishes the company's purpose for existence and defines the vision for where it is headed. These elements are essential as they provide an authentic foundation for the changes that are needed to thrive in a new, lower carbon reality. The Brighthouse Productivity Index suggests that helping people understand why what they do matters energizes them and results in 2.25x more productivity. Purpose also makes change personal and is the required foundation for a transformation to take root.

One North American oil and gas player applied this principle to an enterprise-level transformation. The company faced issues in connecting prior business unit transformations to an overall change agenda and operationalizing this broader agenda to improve performance. Leaders decided to ground the company's transformation in its vision of being the producer and supplier of choice. They equipped leaders throughout the organization with the right communications and tools to align employees and drive changes across upstream, downstream, midstream and corporate functions. This shared consistency of purpose helped to deliver $4bn in additional value across more than 5,000 separate initiatives.

What: strategy, performance expectations, and energy transition plan

The 'what' defines the path forward to achieve the company's stated purpose and vision. Mapping this path requires companies to understand and balance trade-offs across the enterprise and to develop a clear strategy and performance agenda. The what should encompass:

- A **dynamic strategy** that reflects the company's purpose and vision and is 'always on' to allow agile response to high levels of uncertainty and change (e.g., dynamic portfolio management / capital allocation processes).

- Mechanisms to ensure **competitive performance**, including challenging and specific targets informed by external benchmarks and allowing leaders to make trade-offs between parts of the value chain.

- A substantive plan for **energy transition** including placing strategic bets, setting up option plays, and balancing investment between new business models and the core operations needed to fund the transition.

Companies that do this well are able to deliver market-leading shareholder returns, resilient business models and sustainable results. One example is a North American power and utility company that was seeking to reduce costs and optimize its operational design in response to activist pressure to improve efficiency. They developed a strategy considering trade-offs and identifying a winning combination of growth activities, policy changes and cost reduction opportunities supported by clear targets for operational, cost and capital performance improvements. The company was able to deliver close to $500M in efficiencies and improve its competitive performance.

How: talent, organizational context, and execution

Having a winning strategy is not enough. Companies also need to design the right organization and operating model to deliver it. This ‘how’ is often the most difficult element to get right. Many companies struggle to tailor the traditional businesses operating model required to fund the transition while also capturing new, low-carbon opportunities. These opportunities have very different risk and return profiles and require different skills and capabilities to execute. An effective how hinges on the company’s ability to secure or develop:

- **Leading talent** with the right capabilities. Such a talent pool requires a combination of upskilling, reskilling, and market sourcing, as well as leaders that are aligned on the company’s purpose and role model desired behaviors.

- An **advantageous operating model**, reflecting fit-for-purpose organization design, clear performance management (with goals and incentives aligned at the highest level and cascaded through the organization), efficient processes executed by cross-functional teams, and streamlined, agile decision making to monetize low carbon opportunities in a fast-paced market.

- **Culture and behaviors** that are clearly articulated and tied to company purpose. These are activated by the leaders and teams driving performance and must be embedded sustainably throughout the organization.

- **Executional certainty** delivered through a high-powered transformation team equipped with the right processes and tools to ensure rigor in the transformation while also providing human-centered change management (i.e., focusing not just on the business but on the people who support it).

A UK-based upstream independent applied many of these elements in their operating model transformation. The company is an efficient North Sea operator looking to sustain a steady cash flow from its asset base and expand its portfolio. To deliver on this strategy the company revisited its organizational design based on a campaign approach[1] and defined a transformation plan including change management and upskilling requirements. A dedicated and empowered Transformation Management Office increased executional certainty. As a result, the company is expected to deliver ~$30M in annual savings from contract labour reductions with 15-20% of roles optimized through multi-skilling.

1. A campaign approach refers to moving from a scheduled inspection and maintenance regime delivered by offshore personnel to a targeted campaign of maintenance delivered by a dedicated crew who move between facilities to complete a pre-agreed scope of work. It can be applied to both traditional oil and gas and renewables assets / operations.

Benefits will depend in part on transformation context

Companies that move quickly towards a holistic, always-on approach to integrating purpose, strategy and execution will deliver sustained performance that defends against existential threats while positioning themselves to take advantage of future opportunities (Figure 4).

Figure 4 | Examples of major existential threats and future opportunities

Defending against existential threats

- Stranded assets with inaccessible capital
- Non-competitive cost position along the supply curve
- Undervalued by the market where some of the parts greater than enterprise value

Positioning for future opportunities

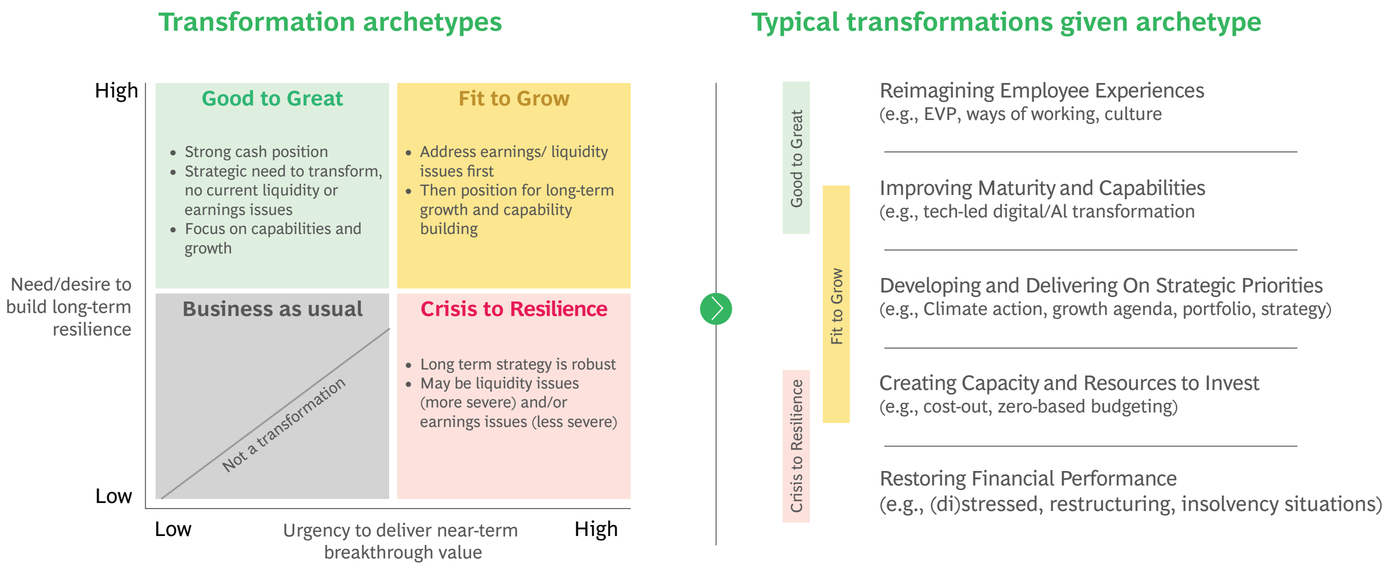
- 25-40% Cost savings from fit-for-purpose operating models and digitization
- +10% Employee satisfaction from new ways of working
- 30-40% Faster decision making from streamlined and clear processes

Source: BCG case experience

However, it is important to acknowledge that every company will start from a different position and must design the right transformation for its unique context. We can think of this performance context and associated priorities in terms of archetypes: 'good to great'; 'fit to grow'; and 'crisis to resilience' (Figure 5).

- Companies that are performing well today with no cash flow or earnings issues but with a strategic need to transform should consider taking a 'good to great' approach. This focuses on enhancing their maturity and capabilities to enable future growth in adjacent sectors like CCUS, hydrogen and biofuels that position them for differentiation and leadership.
- Other companies with less pressing cash or financial issues should take a 'fit to grow' approach to recover and position for long-term growth and capability building. This starts with developing and delivering on strategic priorities (e.g., climate action, growth agenda) to satisfy investors while looking to enhance capabilities for future growth opportunities.
- Some companies are in crisis mode, facing activist challenges, reputational issues or having to quickly address short term liquidity needs. For these companies the primary focus should be on moving from 'crisis to resilience' using restructuring, zero-based budgeting, digital/genAI tools, etc. to restore financial performance and create capacity and resources to invest for the future

Figure 5 | Performance context and timeframe orientation inform transformation priorities



Transformation is daunting but doable

Facing this new, uncertain reality can be daunting for energy companies, as they must strike a delicate balance between delivering on their climate and sustainability commitments and maximizing market returns. However, a tailored approach that addresses the why, what and how of a transition transformation can facilitate the process and build resilience for a fast-paced and uncertain future. With a holistic and dynamic 'always-on' approach, companies can successfully navigate the difficult trade-offs that are inherent in the energy transition and position themselves to win in the future.

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