WORLD ENERGY COUNCIL

WORLD ENERGY ISSUES MONITOR 2026

PRACTICING THE WORLD ENERGY TRILEMMA: ENERGY TRANSITIONS IN 2026

Image from Kevin Woblick (@kovah), Unsplash

ABOUT

WORLD ENERGY COUNCIL

The World Energy Council is the world's oldest independent and impartial community of energy leaders and practitioners. Through our Humanising Energy vision, we involve more people and communities in accelerating clean and just energy transitions in all world regions. Formed in 1923, the Council has convened diverse interests from across the full energy ecosystem for a century, and today has over 3,000 member organisations and a presence in nearly 100 countries. Our global network draws from governments, private and state corporations, academia and civil society, as well as current and future energy leaders. We effectively collaborate on impact programmes and inform local, regional and global energy agendas in support of our enduring mission: to promote the sustainable use and supply of energy for the benefit of all people.

Further details at www.worldenergy.org and on LinkedIn.
Published by the World Energy Council 2026

World Energy Council
Registered in England and Wales No. 4184478
VAT Reg. No. GB 123 3802 48

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WORLD ENERGY ISSUES MONITOR 2026

The World Energy Issues Monitor is a community-driven effort to refresh global common sense in energy. Each year it brings together the perspectives of energy leaders across regions, sectors, and generations to compare signals, surface blind spots, and guide more grounded action.

In this 16th iteration, more than 2,750 energy leaders across over 110 countries assessed the impact and uncertainty of key transition issues shaping today's operating environment.

The Issues Monitor does not prescribe pathways. It sharpens judgement. By illuminating pressure points and emerging bright spots, it supports leaders in holding security, affordability, and sustainability together as energy systems expand and transform.

World Energy Issues Monitor 2026, published by the World Energy Council.

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FOREWORD

REBALANCING ENERGY SYSTEMS FOR PEACE

As the risk of escalating conflict affects daily lives and energy systems across and beyond the Middle East and Gulf States, peace and stability have emerged as the defining uncertainty shaping world energy leadership in 2026.

Energy systems sit at the centre of modern societies. They underpin national security, economic prosperity and environmental stewardship. Today those systems are expanding even as they transform. Demand for energy continues to grow, infrastructure is under pressure, and geopolitical tensions are reshaping the conditions under which energy decisions are made.

Managing modern energy systems has never been simple. Every country is pursuing its own energy addition and/or energy technology transition pathway, shaped by its resource base, stage of development, institutional capacity and social priorities. While all face the connected challenges of balancing energy security and environmental sustainability, each does so within a distinct set of opportunities and constraints.

In a warmer, more volatile, and less predictable context, the task is to manage whole systems transformations while keeping energy flows reliable, productive, affordable and accessible. This leadership challenge is systemic - social and political, as well as technological and financial.

Energy systems are best managed with disciplined attention to energy security, affordability and sustainability dimensions - balanced together in real time.

Countries are repositioning within the World Energy Trilemma as the balance comes under strain in a more fragmented, many-games world. Trade-offs are deepening and the margins for error are narrowing. Decisions about pace, sequencing and investment now carry clearer political, economic and ecological consequences.

The central question now, however, is less about speed and more about coherence - whether energy flows remain reliable, affordable and productive, as pressures from dignity, digitalisation and decarbonisation multiply?

Around the world basic electricity and clean cooking access gaps are gradually closing, yet the remaining gaps still deny decent lives and economic opportunity to hundreds of millions of people across sub-Saharan Africa and Southeast Asia. And new deficits are growing in all regions as demands for increasingly diverse modern energy services rise faster than systems can expand. These old gaps and new deficits increasingly intersect with broader questions of peace, prosperity and planetary health.

In this context, the Trilemma is more than a framework for reference. It is a leadership discipline to practise. How countries and regions manage emerging systems trade-offs and synergies – or not – shapes economic resilience, social legitimacy, geopolitical stability, and existential risk.

When certainty evaporates, the quality of leadership dialogue - a process, not a panel - becomes part of system stability itself.

For more than a century, the World Energy Council has held the space where ‘all energy interests’ can come together to compare realities, surface blind spots and learn about what is working (bright spots) – or not – in different places. In a more contested and digitally noisy world, this role as an infrastructure of trust becomes even more important.

In 2027 the world energy community will gather in Riyadh for the 27th World Energy Congress under the theme “Inspiring Transformations, Delivering Transitions.” Congress is a pivotal moment to convert insights into shared understanding and new collaborations into momentum. Redesigning and delivering a shared energy future begins with strengthening the health of connections between people and places, systems and regions.

Together we will practise the discipline of rebalancing energy security, and affordability, and sustainability interests across diverse societies and for generations to come.

This is the work of the World Energy Council.

Angela Wilkinson
Secretary General & CEO
World Energy Council

The World Energy Issues Monitor survey this report is based upon was conducted between 24 November 2025 and 12 January 2026. The consultation with our International Advisory Group and Regional Leadership Exchanges that informed this commentary took place during January and February 2026, prior to the currently escalating situation across the Middle East and Gulf States. The 2026 World Energy Issues Monitor should be understood in this context.

EXECUTIVE SUMMARY

ENERGY TRANSITIONS

This World Energy Issues Monitor speaks directly to energy transitions, recognising that every country is pursuing its own transition pathway, shaped by its resource base, level of development, institutional capacity, policy choices, and social priorities. While all face the common challenge of balancing energy security, affordability, and environmental sustainability, each does so within a distinct set of opportunities and constraints.

Energy transitions rarely move in straight or predictable lines. They bend, stall, accelerate, and adapt. The **2026 World Energy Issues Monitor** captures a moment in world energy systems where momentum and strain coexist. The global system is expanding even as it transforms, shaped increasingly by geopolitical and environmental priorities rather than purely economic forces.

A MILESTONE YEAR FOR ENERGY TRANSITIONS

2025 marks a milestone moment – a decade since the Paris Agreement and five years from 2030. Some updated Nationally Determined Contributions (NDC 3.0) have been submitted, but collective ambition and implementation remain insufficient to support a 1.5 °C pathway, and progress towards UN Sustainable Development Goal 7 is significantly off–track.

Expectations around delivery credibility are rising. There is a growing focus on how transitions can be delivered under constraint rather than declared in ambition alone.

SYSTEMS UNDER STRAIN

Across regions, leaders describe energy systems that are changing at a faster pace than their current foundations can support. Energy transitions remain in motion, but are now increasingly shaped by tighter constraints. Geopolitics is weighing heavily on investment and cooperation. Demand pressures are broadening, with new demand centres emerging even as under-estimated energy deficits persist in many places. Visible strain within systems highlights the need for more deliberate pacing and sequencing.

ENERGY DEMAND GROWTH

History suggests that when structural drivers align, demand growth can persist for decades. Over the past century, energy expansion was not driven by a single force, but by the compounding effects of population growth, rising incomes, and successive waves of technology adoption. Efficiency gains did not eliminate growth. Today, industrialisation, electrification of end–use, mobility, urbanisation, digitalisation, and AI form a similarly compounding set of forces – reshaping electricity demand even where total primary energy growth moderates.

ENERGY IS THE OPERATING SYSTEM

In this expanding system context, energy is no longer a bounded sector. It now intersects directly with security, industry, finance, digital infrastructure and cities, expanding system boundaries across geographies and technologies. In this context, a supply-side mindset is no longer enough: demand is swiftly becoming one of the fastest–rising uncertainties and remains widely misunderstood.

2026 also marks a shift from pledge led momentum to Trilemma–tested delivery – linking security, affordability and sustainability in real time.

SHOCKS IN 2025

The operating environment was further shaped by the shocks and shifts of 2025 – from the U.S. initiating Paris withdrawal to OPEC+ output increases, from grid failures and rising energy price pressures in Europe

to contested outcomes at COP30 – shaped a year in which geopolitical tension and system constraints increasingly defined the operating environment.

SIGNALS EMERGING ACROSS REGIONS

- **Geopolitics has become the defining disruptor.** Peace and Stability topped the global list of uncertainties even prior to recent developments across the Middle East and Gulf States. Geopolitical pressure is reshaping investment signals and creating an atmosphere of continuous strain rather than occasional shocks.

- **Power System capacity – not ambition – is now setting the pace.** Leaders are increasingly focused on preventing systems overload, with grids, permitting, supply chains, and workforce capacity emerging as decisive constraints.

- **Power Demand is rising – and misread when reduced to the AI story.** Industrialisation, electrification of end–use, mobility, digitalisation, urbanisation and AI are reshaping demand in parallel. As in past eras of population growth, income expansion and technology adoption, multiple structural drivers are compounding rather than substituting for one another.

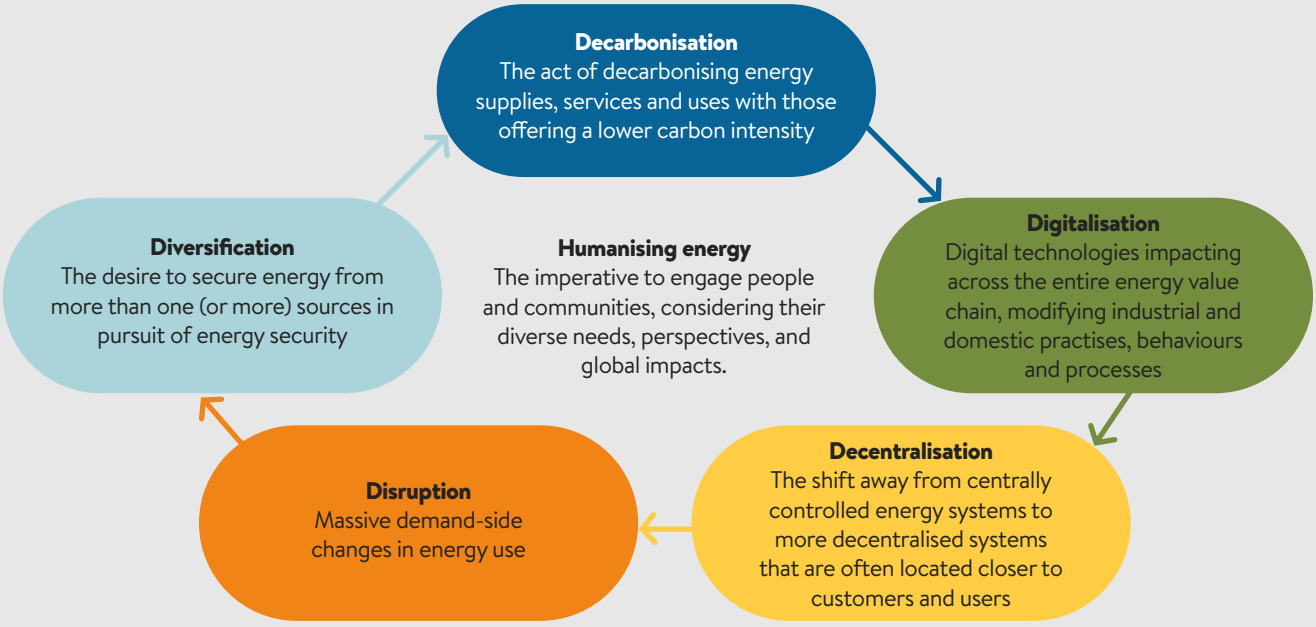
- **Resilience is being tested from within the system.** Congestion, curtailment, negative pricing, and interconnection limits highlight systems working harder to absorb the effects of rapid transformation.

- **Legitimacy is becoming a practical constraint.** Rising costs, unequal benefits, and geopolitical narratives are sharpening debates over who pays, who benefits, and where projects can move forward with confidence.

Together, these signals point to both the risk of transitions stalling and the potential for reversal where constraints and political pressures are at their most acute. Yet investment remains resilient in many markets; showing that even as pressures mount, costs rise, and learning curves advance so too does progress.

A RETURN TO THE 5DS – WITH A DIFFERENT CENTRE OF GRAVITY

The familiar 5Ds remain present, but the balance among them has changed. This year, **Disruption** – on both the supply and the demand side – provides the lens through which the others are interpreted. Geopolitical, climatic, societal, and infrastructural pressures are shaping how **Decarbonisation**, **Digitalisation**, **Decentralisation**, and **Diversification** unfold: accelerating some, slowing others, and creating uneven momentum across regions.



NAVIGATING FORWARD

Leaders are adjusting to a landscape where transitions must be paced with greater care. Sequencing, delivery discipline, and credible signalling are becoming more important, with affordability for households, businesses, and public finances kept firmly in view. Progress increasingly depends on the ability to keep systems coherent as pressures multiply. The task now is ensuring Trilemma-tested delivery – keeping security, affordability, and sustainability advancing together in real time. With many critical infrastructure investments now publicly driven, political influence is rising and public finances are tighter, adding further constraints that can slow delivery if not carefully managed.

A CALL TO ATTENTION, NOT JUST A CALL TO ACTION

The 2026 Issues Monitor does not predict outcomes. It highlights the patterns that matter: where pressure is building, where resilience is forming, and where the operating environment is changing fastest. These patterns invite leaders to focus on the conditions shaping transitions, the limits that must be managed, and the opportunities for connection that remain – even in a more contested world.

This Issues Monitor is designed not to mirror the prevailing debate, but to sharpen judgement for navigating a more constrained operating environment.

INTRODUCTION

The World Energy Issues Monitor survey this report is based upon was conducted between 24 November 2025 and 12 January 2026. The consultation with our International Advisory Group and Regional Leadership Exchanges that informed this commentary took place during January and February 2026, prior to the currently escalating situation across the Middle East and Gulf States. The 2026 World Energy Issues Monitor should be understood in this context.

The Paris Agreement and Nationally Determined Contributions (NDC) framework mobilised a decade of climate ambition. They set direction, established common purpose, and served as the primary framework guiding energy transitions and investment. They remain central to global climate cooperation and long-term direction. Yet the experience of 2015–2025 has revealed the limits of a pledge-centred frame for guiding real-world delivery. Delivery remains uneven, system capacity lags behind clean-energy growth, and energy access and affordability pressures persist. The missing ingredient is increasingly social execution – what systems, institutions, and communities can realistically absorb.

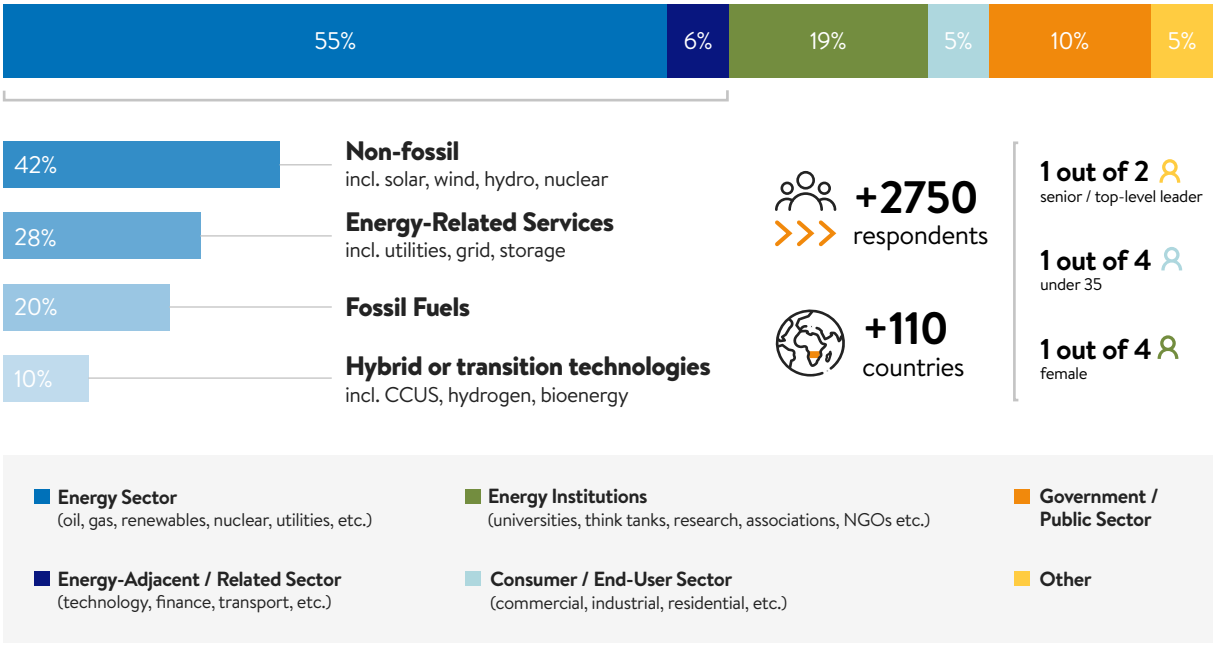
This Issues Monitor now speaks directly to energy transitions, recognising that every nation state member of the United Nations and the World Energy Council is pursuing its own transition pathway, shaped by its particular resource base, level of development, institutional capacity, policy choices, and social priorities. While all countries face the common challenge of balancing energy security, affordability, and environmental sustainability, each does so within a distinct set of opportunities and constraints.

The shocks of 2025 – from shifts in international climate cooperation to disruptions in major energy trade flows – reinforced this shift from pledge to delivery. Energy transitions are unfolding as geopolitical and system constraints. Decisions once viewed as technical or incremental now carry implications for security, legitimacy, and control.

As system boundaries widen across sectors and infrastructures, leaders are confronting more interconnected and less predictable choices. The NDC frame remains essential, but it now needs complementing with Trilemma-tested delivery – a leadership discipline of balancing security, affordability and sustainability in real time. While NDCs helped organise the supply side of transitions, they only partially captured the scale and shape of demand growth now unfolding. Expanding access, affordability pressures, and new uses of energy across digital infrastructure, industry, mobility, and AI are reshaping public expectations and system requirements. Demand uncertainty increasingly shapes system risk: not only how much energy is needed, but where, when, and how concentrated that demand becomes.

Under tighter physical, social, and geopolitical conditions, legitimacy and system coherence determine whether transitions can proceed at pace. Rising concern over concentrated supply chains and strategic technology dependencies is reshaping investment choices, industrial policy and the geography of deployment. With a likely period of 1.5 °C overshoot, resilience, justice and circularity can no longer remain aspirational; they increasingly need to inform core system design. The central question has shifted from how fast technologies can scale to whether systems – technical, financial and social – can be held together as change accelerates.

Figure 1. Capturing Diversity: Geographic, Sectoral & Generational Perspectives

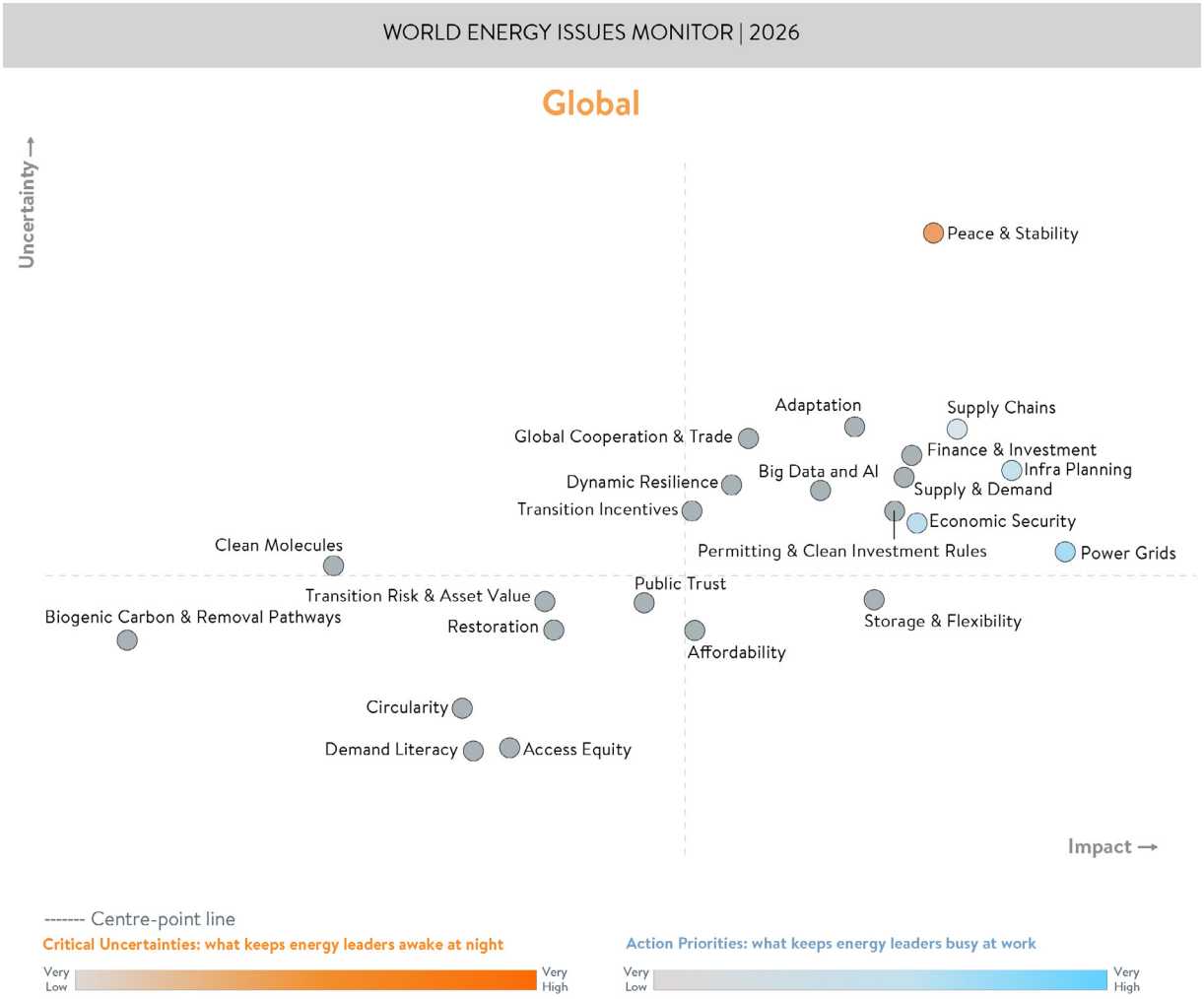


The 2026 World Energy Issues Monitor captures how leaders experience these pressures – where uncertainty is concentrating, how priorities are shifting, and how regional realities are diverging under persistent stress.

In a context where trust is thinner, shared assumptions are fewer, and leaders are navigating transitions with greater scrutiny of intentions and alignment, understanding how pressures interact – and how they are perceived across different contexts – becomes essential to effective, Trilemma–tested leadership.

CRITICAL UNCERTAINTIES AND ACTION PRIORITIES

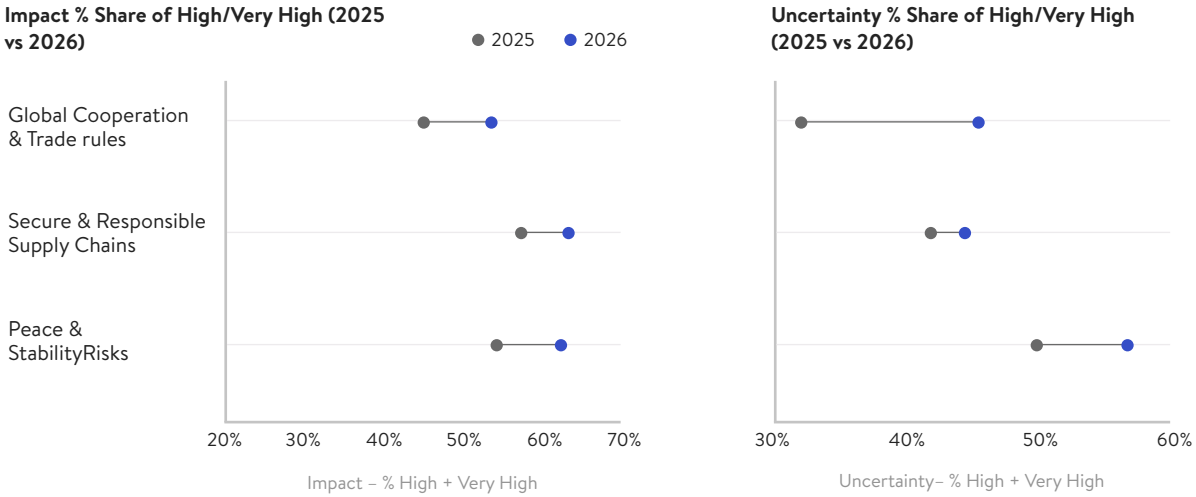
Figure 2. Global Impact and Uncertainty Map 2026



TOP CRITICAL UNCERTAINTY: PEACE & STABILITY

Peace & Stability has become the dominant uncertainty. Geopolitical tension, climate-related disruptions, and institutional strain shape decisions across every region. Signals from 2025 – including OPEC+ output shifts, Brent price volatility and contested COP30 outcomes – underscored how fluid and fragmented the strategic setting has become, tightening the conditions under which leaders balance security, affordability, and sustainability in real time.

Figure 3. Uncertainty and impact increased for the three geopolitical issues surveyed: Peace & Stability Risks, Global Cooperation & Trade Rules, and Secure & Responsible Supply Chains. Across regions more respondents rate these issues as High/Very High Impact in 2026.



- SECURITY AND GEOPOLITICS AS OPERATING CONDITION. A growing sense of insecurity is reshaping priorities. Geopolitics has moved from backdrop to operating condition, with power dynamics playing a larger role in how choices are made. Decisions on investment, supply chains, and market access are increasingly shaped by security considerations, domestic industrial priorities, and concerns about external dependence. Events once considered unthinkable – attacks on shipping lanes, escalating regional conflicts affecting maritime and energy chokepoints, grid sabotage risks, and sanctions affecting fuel and technology flows – are no longer theoretical stress tests but part of operational planning, highlighting how instability can quickly ripple into energy security, trade and pricing dynamics . Stability itself is becoming the lens through which leaders assess risk and opportunity.

- COOPERATION PATHWAYS UNDER STRAIN. Conventional approaches to cooperation are under pressure. Multilateral mechanisms are finding it harder to deliver coordination in an environment marked by mistrust and competing priorities. Regional blocs, middle power diplomacy, and pragmatic coalitions are becoming more prominent, but they also make progress less predictable and alignment harder to sustain.

- CLIMATE IMPACTS EMBEDDED IN SECURITY LANDSCAPE. Climate–related disruptions are now part of the security landscape. Physical shocks – from extreme weather to prolonged heat and water stress – are affecting system reliability and compounding geopolitical and economic pressures. These impacts heighten the need for more adaptive infrastructure and planning, and risk management across regions.

- SPILLOVERS ACROSS SYSTEMS AND AGENDAS. Instability in one domain now spills quickly into others. Energy, climate, competitiveness, and security are more interconnected than ever. While transition momentum remains real, deployment slowdowns, rising emissions in key economies, tighter system constraints signal that progress cannot be taken for granted. Under these conditions, Trilemma–disciplined delivery becomes harder to sustain, as leaders navigate competing pressures on security, affordability, and sustainability simultaneously.

TOP ACTION PRIORITY: PREVENTING SYSTEM OVERLOAD

Energy systems are transforming faster than the infrastructure that supports them. The blackout across Spain and Portugal in 2025 highlighted how quickly operational constraints can appear when systems run close to capacity. Leaders are navigating the tension between ambition and physical limits – marking a shift from pledge–led momentum to delivery discipline – ensuring that progress continues rather than undermines stability.

- GRIDS AND INFRASTRUCTURE CAPACITY ARE THE PACING FACTOR. Grid capacity, connection timelines, spatial planning, and access to critical components determine whether electrification and clean energy deployment can proceed while maintaining system stability. Regional connectivity – interconnectors, cross–border balancing, and shared reserves – is becoming more central as systems seek cost–efficient reliability. Visible signs of strain, including congestion, curtailment, negative pricing, and interconnection limits, show how system growth is outpacing physical capacity.

- ELECTRICITY DEMAND GROWTH WILL EXCEED OVERALL PRIMARY ENERGY GROWTH as transportation, industrial, commercial and home end–uses shift from direct combustion of hydrocarbons to electricity.

- DELIVERY DISCIPLINE MATTERS AS MUCH AS AMBITION. Lengthy approval and permitting processes, sequencing challenges, institutional coordination, workforce constraints, and supply chain capacity – including the concentration of processing and manufacturing at key nodes – are proving decisive. Across most regions, new solar and wind generation can be deployed far more quickly than the transmission needed to connect and integrate it, reinforcing grids and infrastructure as the pacing factor. Delays and misalignment create risks not only for decarbonisation targets, but also for economic security and industrial competitiveness.

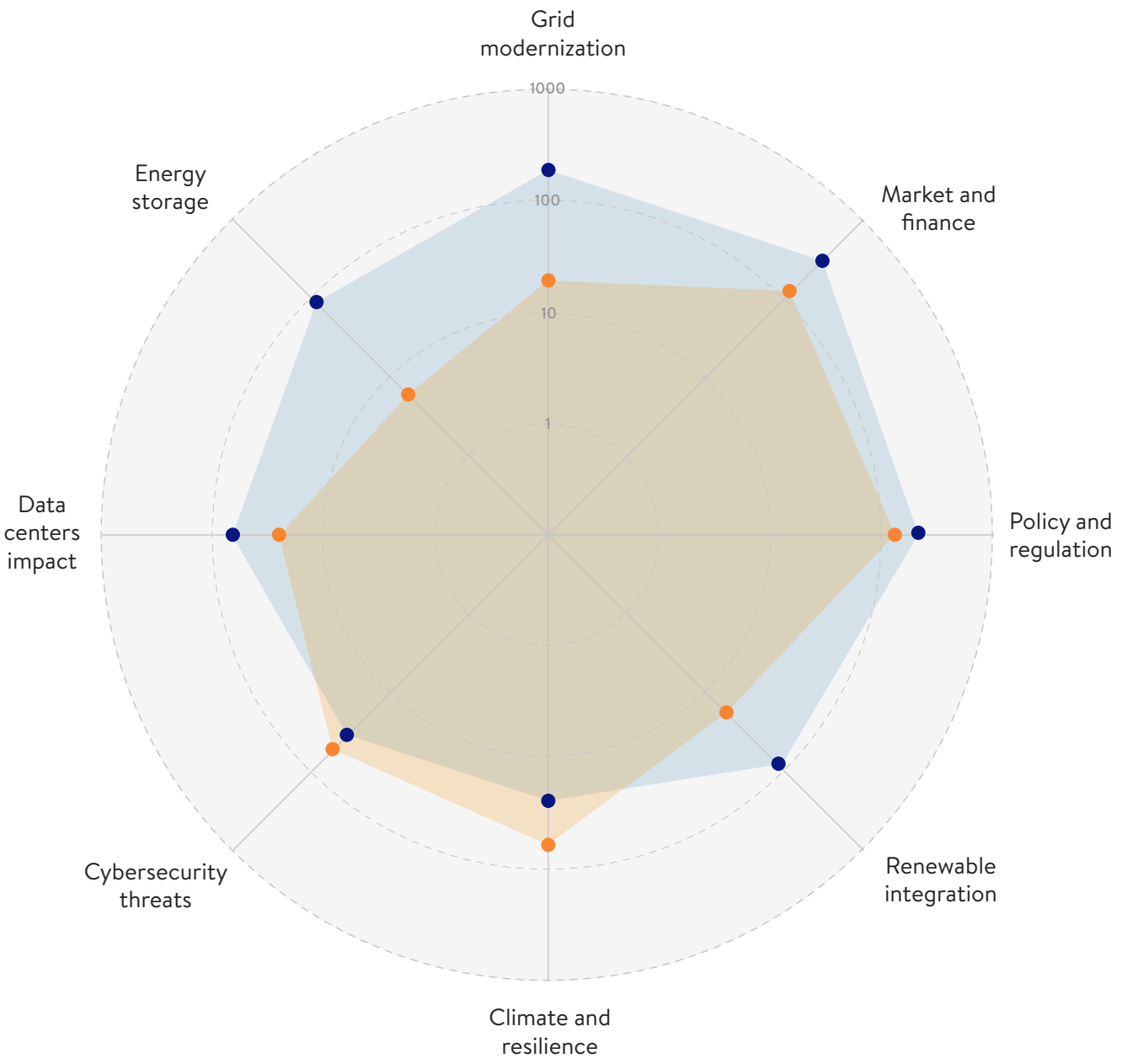
- SYSTEM FLEXIBILITY AND RESILIENCE UNDERPIN SECURITY OUTCOMES. Storage, demand–side response, and adaptive system planning are essential to managing supply variability, extreme weather, and rising demand. They enable systems to absorb shocks rather than amplify them. Yet storage is not scaling fast enough to replace balancing roles once provided by flexible gas and other buffering capacity, exposing how systems are struggling to keep pace with their own transformation.

Figure 4. Respondents who rate grids higher (or are more uncertain about it) tend to rate enablers – planning, permitting, storage/flexibility, system resilience, and digital/AI – in the same direction.

Issue Correlations (Impact): Grids & Enablers / Societal / Nature

Issue Correlations (Uncertainty): Grids & Enablers / Societal / Nature

Figure 5. Media coverage over the last year reflects a similar pattern: strong momentum around grid investment and market development, alongside growing concern about resilience, cybersecurity, and system integration – reinforcing the sense that transitions are advancing, but under increasing operational pressure. (Source: PolecatX, Feb 2025-Feb 2026)



The chart shows the number of events for each theme. The colour indicates whether the sentiment is positive or concerning.

Figure 6. Regional patterns vary, but these system pressures appear across all geographies – with different pacing, intensity, and points of strain. Comparison of Regional Action Priorities and Critical Uncertainties

BLIND SPOTS AND BRIGHT SPOTS

BLIND SPOTS: WHERE SYSTEM PRESSURE IS UNDERESTIMATED

Even as leaders focus on immediate constraints, the Issues Monitor highlights areas where underlying system pressure is rising more quietly. Blind spots are the pressures rarely dominate headlines but shape whether transitions can remain secure, affordable, and sustainable as systems scale.

- POWER DEMAND: BROADER THAN A SINGLE NARRATIVE. Last year's surge in data-center investment – rivaling upstream oil spending in some markets – drew attention to AI-driven demand growth. But population growth, industrialisation, mobility, urbanisation, and electrification remain equally powerful drivers. The risk is misdiagnosing a multi-driver demand wave – amplified by AI electricity needs – while regional energy deficits widen. Global population growth – concentrated in emerging and urbanising regions – continues to add baseline demand for electricity, materials, housing, and mobility, even before transition choices are made.

- PRICES BECOME UNAFFORDABLE WHEN SYSTEMS FALL OUT OF SYNC. Energy and electricity costs rise when renewable wind and solar capacity is built faster than it can be connected, integrated or stored, effectively requiring parallel power systems to operate. Prices also increase when investment in oil, gas and coal declines faster than reliable alternatives are added and integrated. Geopolitical considerations shaping the sourcing of solar panels, batteries and wind turbines can further add to cost pressures.

- RETHINKING RESILIENCE: FROM EVENTS TO ATMOSPHERE. Many systems are no longer experiencing occasional shocks, but persistent turmoil – overlapping geopolitical tensions, climate volatility, market fluctuations, and infrastructure constraints. The blind spot lies in maintaining an event based mindset when instability has become continuous and requires broader-scope, longer-horizon resilience planning.

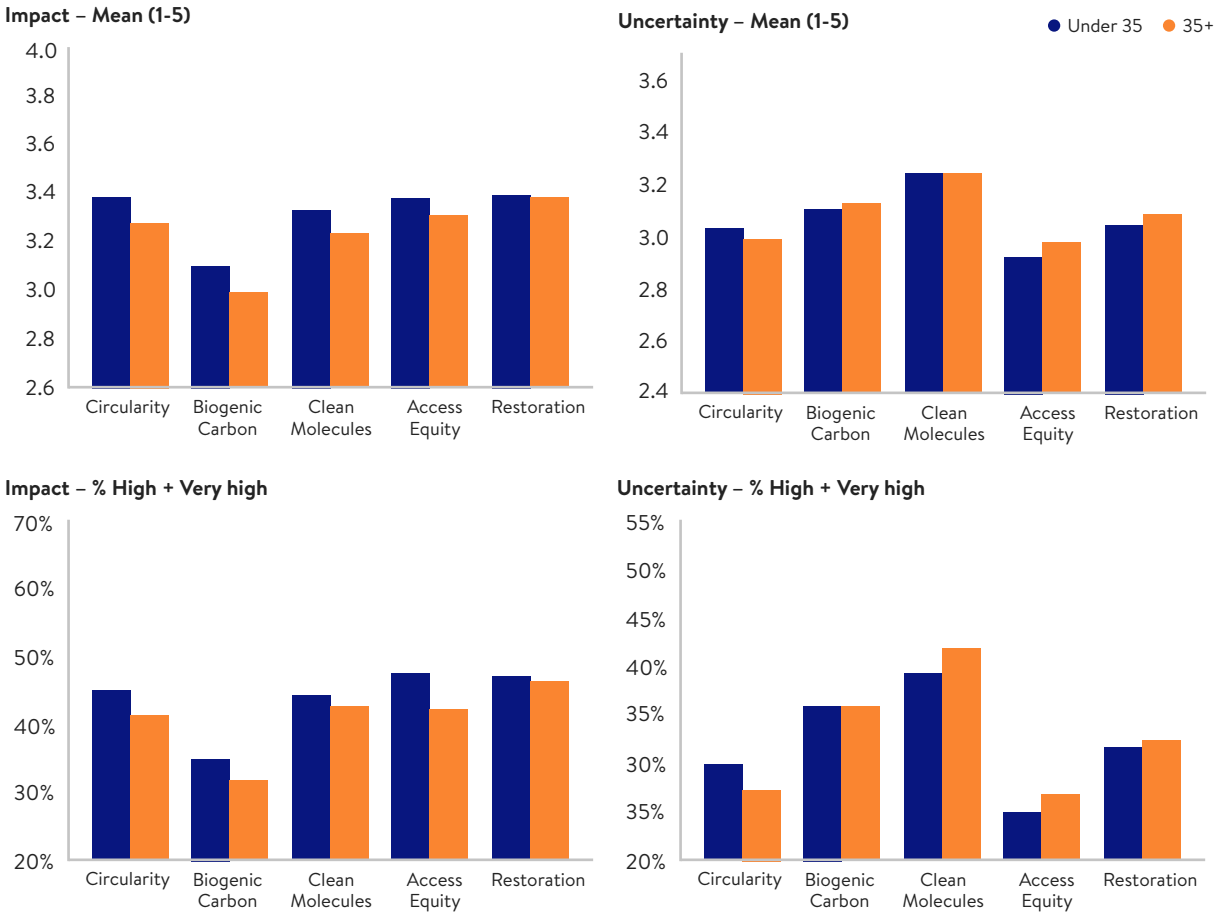
- HIDDEN CONVERSION STEPS SHAPE SYSTEM COSTS AND BOTTLENECKS. Electrification of end uses hides the growing system challenge of moving energy across multiple forms. Fossil fuel systems evolved to be highly interoperable, with well-understood conversion pathways and integrated supply chains. The emerging low-carbon system must create similar interoperability across new interfaces – between electrons and molecules, storage and transport, and different end-use sectors. Each step introduces losses, costs, and infrastructure requirements that are often under-accounted for in transition planning.

- LEGITIMACY AND TRUST: ENERGY TRANSITIONS ARE DEEPLY HUMAN. Declining public trust now shapes what can be built, where, and at what pace – particularly for large, visible infrastructure such as wind turbines and long-distance transmission lines. In a context of rising costs, uneven benefits, and competing geopolitical narratives, legitimacy functions as invisible infrastructure. Social capital underpins the resilience of systems, and social or political backlash is becoming less a question of "whether" but "when".

- SYSTEM DEPTH: MATERIALS, WASTE, AND WATER. Scaling new energy systems requires more attention to lifecycle impacts and material flows. Circularity, waste streams, and critical material dependencies are becoming central constraints, while water constraints are becoming more visible in water-stressed regions and in parts of the value chain such as mining, fuels production and thermal cooling. The blind spot is the assumption that scale can be achieved without addressing these deeper physical limits.

Together, these blind spots point to pressures building beneath the surface that will shape how effectively transitions can be delivered under stress.

Figure 7: People of all ages value Legitimacy & Trust and Affordability & Equal Benefits equally. But values about future transitions, such as circularity and restoration, resonate more with younger people



BRIGHT SPOTS

While the Issues Monitor highlights where pressure is building, signals from across the energy system point to areas where momentum is still emerging – examples of capability, coordinated action, and system adaptation that continue even under tighter constraints.

- MISSION 300 SHOWS THAT TARGETED COALITIONS CAN STILL MOBILISE SCALE. It aims to connect 300 million Africans by 2030 to electricity through coordinated reforms, grid expansion, and distributed renewable solutions. Endorsed by thirty African Heads of State in 2025, it has secured over $50 billion in commitments for affordable, reliable energy access.

- GLOBAL GRID INVESTMENT ACCELERATED SHARPLY – BUT THESE COST HAVE TO BE RECOVERED AND BOTTLENECKS REMAIN. Global grid spending is expected to exceed $470 billion in 2025, the first time it has crossed this threshold and the second straight year of double-digit growth. Yet rising equipment costs, long delivery times, and permitting delays mean that physical grid expansion still lags drastically behind need. The recovery of these costs will decrease power affordability.

- THE MIDDLE EAST IS SCALING RENEWABLES AND GRID TRANSFORMATION AT RECORD PACE. Operational renewable capacity in the MENA region reached 44 GW by end-2025, with a record 13 GW (+44%) added in a single year – driven by giga-scale solar projects across the UAE, Saudi Arabia and neighbouring countries. Major investments in grid transformation and interconnection are supporting integration of variable generation and rapidly rising electricity demand. The

region's clean-energy project pipeline has grown to 202 GW, nearly matching its aggregated 2030 ambitions.

- HIGH-VRES SYSTEMS SHOW BOTH CAPABILITY AND FRAGILITY. Record solar and wind additions pushed several regions toward historically high shares of variable generation. Systems such as South Australia, parts of Brazil, and regional grids in China are operating with very high instantaneous VRES penetration, supported by storage and flexible demand, and increasingly sophisticated dispatch. These examples show that high-VRES grids are possible – but remain operationally delicate.

- NUCLEAR RESTARTS AND SMRS SIGNAL RENEWED INVESTMENT IN FIRM, LOW-CARBON CAPACITY. The Palisades plant in Michigan became the first U.S. facility to move from decommissioned back toward operation, while securing $400 million in federal support to develop two new SMR-300 reactors at the site. Japan approved restarting Kashiwazaki-Kariwa, the world's largest nuclear plant, and France confirmed six new EPR2 reactor builds and fleet extensions. These moves signal renewed emphasis on firm, low-carbon capacity to support system stability.

NAVIGATING FORWARD: RECALIBRATION UNDER MISTRUST AND CONSTRAINT

Energy leaders are not facing a temporary disruption but a shift in operating conditions. Under persistent instability and with trust thinner, leadership is less about choosing the perfect pathway and more about maintaining direction, coherence and alignment under pressure – sequencing decisions, holding coalitions together, and signalling credible intent.

From declarations to Trilemma-tested delivery. The task now is to convert ambition into reliable, inclusive outcomes by pacing and sequencing transitions to what systems can absorb. That means keeping security and affordability and sustainability advancing together so that no single priority captures the system.

Deeper tensions have emerged; they are structural, geopolitical, and social – not technical glitches to be optimised away:

- **Security and openness** – balancing sovereignty with system integration.
- **Equity and speed** – maintaining affordability and fairness while scaling rapidly.
- **Decarbonisation and development** – aligning climate ambition with industrialisation and jobs.
- **National priorities and system stability** – reconciling domestic agendas with cross-border reliability.

In a more fragmented landscape, shared frames help coordinate without forcing uniformity. The conditions now call for greater Trilemma discipline – moving from pledge-led ambition alone toward delivery that holds security, affordability, and sustainability together under pressure and avoids single-issue choices that undermine system stability. The emerging World Energy Compass complements this by introducing shared design principles – resilience, flourishing, and circularity – that clarify direction when pathways differ.

Cross-sector alliances across governments, industry, finance, and digital sectors are shaping progress at speed and scale, even as multilateral pathways strain. They are emerging as pragmatic vehicles for maintaining momentum where alignment is partial and pressures on security, affordability, and sustainability must be managed together. And while COP30 revealed widening divisions over fossil phasedown pathways, initiatives like Mission 300 in Africa show how focused coalitions can mobilise investment and initiate reform, even when broader consensus proves elusive.

In a more contested environment, spaces to strengthen shared understanding and sharpen judgement matter as much as capital and technology. The World Energy Council acts as trust infrastructure in this "many-games" world – enabling leaders to compare realities, test assumptions, and learn from bright spots and blind spots. The 2027 World Energy Congress provides a moment to translate this into practice: an inclusive, intergenerational convening across the full spectrum of energy interests. Its theme, "*Inspiring Transformations, Delivering Transitions*," speaks to the need to turn uncertainty into more disciplined forward momentum.

CONCLUSION

The events of 2025 served as reminders that energy transitions unfold within wider political and physical realities – from contested climate diplomacy to visible system stress and shifting investment signals. The 2026 World Energy Issues Monitor reflects this backdrop: uncertainty is structural, system pressures are higher, and momentum and fragility coexist.

Five signals stand out:

- **Peace & Stability** is the dominant uncertainty influencing decisions across regions.
- **Power delivery constraints** – grids, permitting, supply chains, skills – set the pace of transitions.
- **Power demand drivers** extend well beyond the AI narrative. Multiple structural forces are compounding – electricity expansion will persist even if hydrocarbon demand plateaus.
- **Power system stress** is visible in congestion, curtailment, negative pricing and interconnection limits.
- **Trust** functions as invisible infrastructure – and in many places it is thinning, particularly where affordability pressures and uneven cost burdens intensify.

Across regions, transitions are moving faster than their foundations can comfortably support. Pressures that once appeared episodic are more persistent. Cooperation is harder. The boundaries of what is feasible are tightening. Yet progress continues where delivery is credible, legitimacy is cultivated, and pace is matched to what systems, institutions and communities can sustain.

The agenda now is delivery over declarations. Ambition remains essential, but 2026 is the moment for Trilemma–tested pathways – keeping security and affordability and sustainability advancing together, not allowing any single priority to dominate. The immediate work is practical and shared: strengthen pacing factors such as grids and flexibility, sequence for stability, and invest in social licence as deliberately as in infrastructure.

Looking ahead, three questions frame the path forward:

- **Where are systems signalling pressure – and where is resilience emerging?**
- **Which constraints are structural, and which can be eased through better sequencing, coordination, or design?**
- **How can intent and delivery be aligned so trust holds and progress is maintained, while keeping affordability in view?**

The Issues Monitor is designed not to simply to mirror the debate, but to sharpen judgement in a more contested and larger operating environment. It offers a shared basis for comparing perspectives, understanding pressure points, and identifying where meaningful progress can take hold.

A decade on from Paris – and five years from 2030 – the centre of gravity has shifted: transitions must be Trilemma–tested, not only pledge–aligned. 2026 is the year to manage the AND-AND-AND – security, affordability, sustainability – so that systems absorb pressure rather than amplify it, and progress to more and better energy for people and planet continues.

ABOUT THE WORLD ENERGY ISSUES MONITOR

The World Energy Issues Monitor is a community-driven effort to refresh global common sense in energy. Each year it brings together the perspectives of energy leaders across regions, sectors, and generations to compare signals, surface blind spots, and guide more grounded action.

In 2026, more than 2,750 energy leaders across over 110 countries assessed the impact and uncertainty of key transition issues shaping today's operating environment.

This year's edition continues to deepen the diversity of insight, segmenting responses across regions, sectors, seniority, gender, and generation. The survey underwent a thorough review, refining 23 core transition issues across six categories to capture blind spots, new signals, and shifts in leadership priorities.

The Issues Monitor does not prescribe pathways. It sharpens judgement. By illuminating pressure points and emerging bright spots, it supports leaders in holding security, affordability, and sustainability together as energy systems expand and transform.

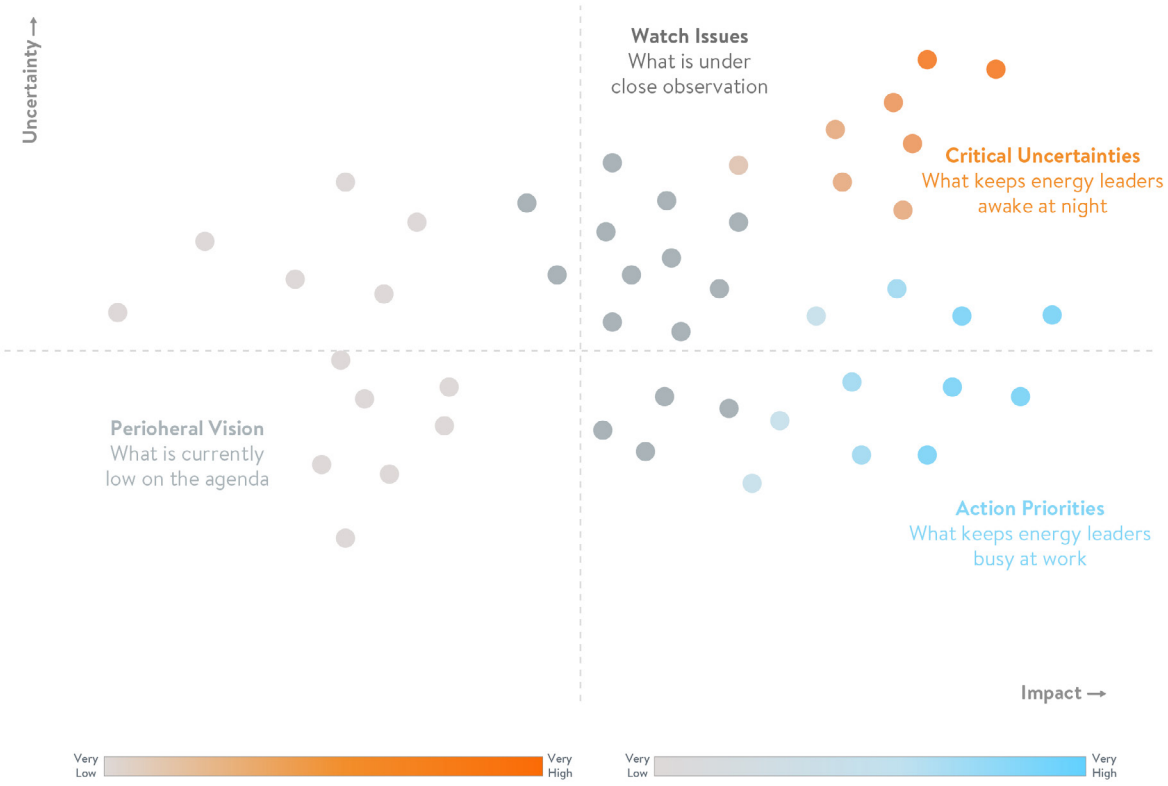
Table 1: Issues' Categories and Prompts

The Issues Monitor map plots energy issues by perceived impact and uncertainty, providing a snapshot of where pressure is building and where priorities are shifting across regions. The axes intersect at the medium perception level, distinguishing high-impact and high-uncertainty issues more effectively.

Geopolitical Issues	
Peace & Stability Risks *(Risk to Peace)*	Geopolitical tensions, maritime chokepoints, sanctions and counter-sanctions, cyber-attacks, and strategic competition around critical infrastructure that can disrupt energy systems, trade flows, and investment decisions.
Secure & Responsible Supply Chains *(Supply Chains)*	Availability and reliability of critical materials, components, and equipment (including transformers), risks from supplier concentration, localisation of manufacturing, and compliance with environmental and ethical standards across value chains.
Global Cooperation & Trade Rules *(Global Cooperation & Trade)*	Shifts from multilateralism toward regional or sub-regional cooperation, evolving trade rules, carbon border measures, and interoperability standards affecting market access and cross-border energy flows.
Economic Issues	
Financing & Investment Confidence *(Finance & Investment)*	Cost of capital, currency volatility, insurance availability, sovereign debt exposure, and access to blended finance shaping investor confidence and the pace of transition investment.
Economic Security & Industrial Competitiveness *(Economic Security)*	Productivity growth, industrial upgrading, domestic manufacturing capacity, quality job creation, localisation of value chains, and exposure to import dependence in a changing global economy.
Affordability & Inclusive Benefits *(Affordability)*	Fair access to affordable energy for households, SMEs, and emerging economies, including energy burden, tariff and subsidy design, and the distribution of transition costs and benefits.
Expanding Supply & Balancing Demand *(Supply & Demand)*	Ability to match energy supply with growing and shifting demand, including electrification pace, system capacity, AI and cooling demand growth, transitional fuels, storage and flexibility gaps, and sovereign energy security.

Transition Risk & Asset Value *(Asset Value)*	Exposure to stranded assets, overcapacity risks, bankability of new business models, performance-based contracting, and investor confidence during the transition.
Societal Issues	
Social License & Access Equity *(Access Equity)*	Distribution of transition benefits and impacts, affordability pressures, community participation, local value creation, and benefit-sharing arrangements that shape social acceptance.
Public Voice & Trust in Transitions *(Public Trust)*	Transparency of plans and data, quality of consultation and co-design, institutional accountability, misinformation and politicisation, and perceived credibility of transition delivery.
Demand Literacy & Design *(Demand Literacy)*	Awareness of energy use, ability to shift when and how energy is consumed, comfort and health outcomes, digital access and usability, and behavioural and cultural norms influencing demand.
Environmental Issues	
Climate Adaptation & Resilience *(Adaptation)*	Exposure to extreme weather, peak stress events, infrastructure vulnerability, adaptation planning, insurance availability, and preparedness for physical climate risks.
Nature-Positive Restoration (*Restoration)*	Impacts on land and water use, biodiversity protection, ecosystem restoration, nature-based solutions, and water security under changing climate conditions.
Circularity & Materials Footprint *(Circularity)*	Materials efficiency, recycling and recovery systems, responsible sourcing, embedded supply chain emissions, and design for repair, reuse, and longer system life.
Regulatory Issues	
Infrastructure Planning & Delivery Speed *(Infra Planning)*	Coordination and sequencing of grids, pipelines, ports, manufacturing, logistics, and storage infrastructure, including interconnection, permitting timelines, and capacity to deliver projects at pace and scale.
Permitting & Clean Investment Rules *(Permitting Rules)*	Predictability and clarity of regulatory processes, stable investment frameworks, disclosure and reporting requirements, and certainty of incentives across the project lifecycle.
Incentives for Net-Positive Transitions *(Transition Incentives)*	Alignment of tax, subsidy, carbon pricing, and market rules to reward clean value creation, while avoiding policy whiplash, tariff shocks, and mixed investment signals.
System Risk Preparedness & Dynamic Resilience *(Dynamic Resilience)*	Readiness for cyber and digital outages, supply disruptions, system interdependencies, and the ability to coordinate emergency response and recovery.
Technology Gamechangers	
Digital & AI System Optimisation *(Big Data and AI)*	Use of data, digital controls, automation, and AI for system forecasting and optimisation, alongside data centre and cooling load growth, cybersecurity, and data-integrity risks.
Storage & Flexibility *(Energy Storage)*	Deployment of short- and long-duration storage, distributed flexibility, and demand response to balance variable supply at system and local levels.
Clean Molecules & Infrastructure *(Clean Molecules)*	Development of hydrogen, ammonia, and sustainable biofuels, including production cost and reliability, transport, storage, handling infrastructure, safety, and affordability considerations.
Biogenic Carbon & Removal Pathways *(Biogenic Carbon)*	Capture, use, and storage of biogenic CO2 streams, sustainable biomass supply, industrial feedstock substitution, and engineered and nature-based carbon removal solutions.
Power Grids *(Transmission Grids)*	Transmission and distribution networks, interconnection, cross-border integration, and distributed grid solutions enabling system reliability and decarbonisation.

Figure 8: How to Read an Issues Map



Alongside Critical Uncertainties and Action Priorities, the map highlights Watch Issues and areas of Peripheral Vision – emerging signals that may become more consequential. The aim is not to rank issues, but to support navigation in a more constrained and complex energy landscape.

- CRITICAL UNCERTAINTIES (orange, top-right): High impact and high uncertainty.
- ACTION PRIORITIES (blue, bottom-right): High impact, low uncertainty.
- WATCH ISSUES (grey, centre): Moderate-impact issues with varying uncertainty.
- PERIPHERAL VISION (grey, left-side): Low-impact issues with varying uncertainty.

ACKNOWLEDGEMENTS

The World Energy Issues Monitor team extends its sincere gratitude to all individuals and organisations who contributed insights, shared information and reviewed drafts. Special thanks to the more than 2,750 energy leaders who participated in the survey, making this work possible.

We also recognise the dedicated efforts of our Future Energy Leaders Issues Monitor Ambassadors, along with China Electricity Council (CEC), China Petroleum and Chemical Industry Federation (CPCIF), China Southern Grid, Consumers International, Eles (Slovenia), Energy Involvement Professional Commission of Investment Association of China (IAC), German Association of Energy and Water Industries (BDEW), International Copper Association, SembCorp, and State Grid Corporation of China (SGCC), for strengthening country and regional representation in the 2026 survey.

A special acknowledgment goes to the three Member Committees contributing the highest number of responses – China, Saudi Arabia and France. When adjusted for population size, Iceland, Lebanon, Uruguay, Armenia and Burkina Faso stood out in their regions for exceptional engagement. Their leadership has been instrumental in shaping a truly global perspective on energy challenges.

These collective contributions reinforce the World Energy Council's mission to foster inclusive dialogue and collaboration across the global energy community.

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We are delighted to recognise the outstanding efforts of our Future Energy Leaders Ambassadors who went above and beyond in championing the survey: Francisco Beltran (Uruguay), Esther Evening (New Zealand), Michelle Howie (Australia), Keith Katyora (South Africa), and Milica Vujacic (Austria). With thanks also to Joanie Brunner (Switzerland), Olamide Efosa-Austin (Nigeria), Ana Gomez (Portugal), Nikita Gorbatko (Latvia), Rares Hurghis (Romania), and Siddharth Jain (UAE).

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