



# Risk management in utilities – the changing business environment (part 1)

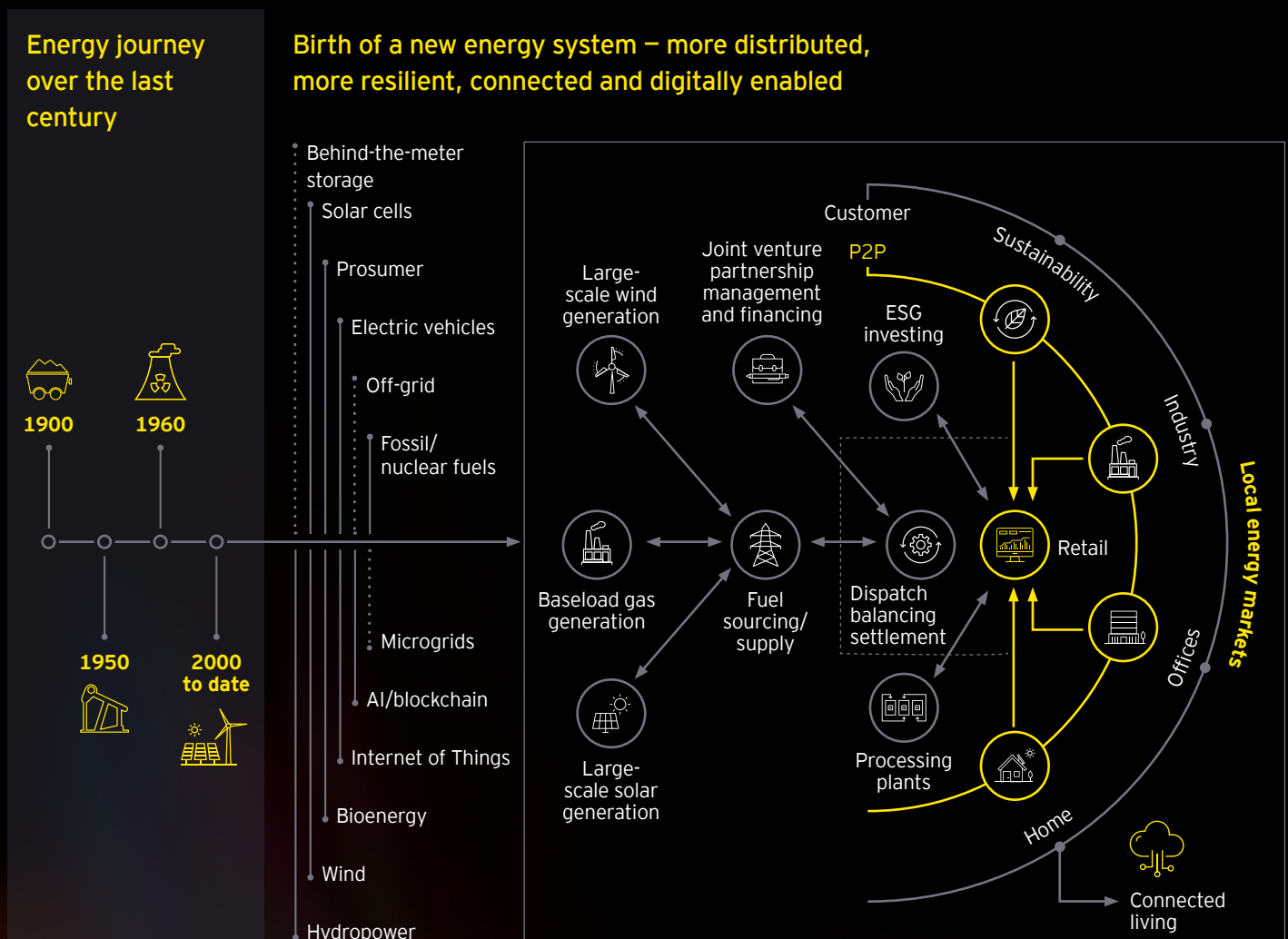


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We are living in a new energy system, augmented and interconnected by digital technologies, where power and information flow in both directions. Unprecedented energy demand has spurred a new wave of capital investments by utilities. This comes against an existing backdrop of expansion of new energy sources, distributed energy models and reoccurring infrastructure resilience challenges due to climate/ extreme weather-related incidents. Today's utilities are experiencing a true revolution in how they are managed, measured and operated. This paradigm shift will continue to drive companies away from the familiar framework of short-term profits toward success that is defined not only by profitability but also by "mega service performance," high resilience and visibility across assets and the enterprise.



For utilities, unprecedented demand, reliability, extreme weather and natural disaster concerns are putting pressure on budgets, performance and perception.

We analyzed the investor presentations, analyst reviews and public reports of 11 public and private utilities players to understand how the risk universe is shifting in this business environment and how it can inform priorities for today's risk function to help an organization outperform and achieve long-term success.

### Typical utilities sector risk universe compared with risk factors and investor releases over the last 24 months

#### Analysis of investor presentations, analyst reviews and public reports of 11 public and private utilities players

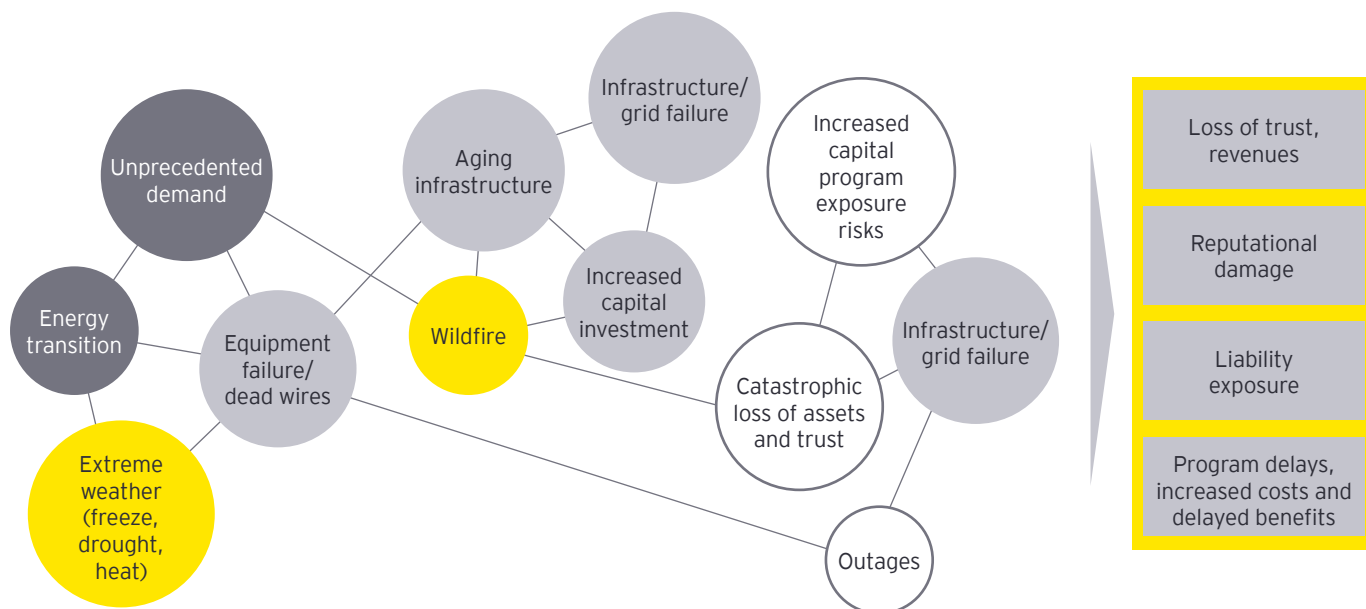


Utilities are laser focused on financial performance, and this was the topic mentioned the most in the last 24 months across the organizations we analyzed. Other highly mentioned risks (infrastructure failures, expansion of energy, litigation, customer service (business and strategy) and capital project execution) are underlying contributors to these concerns on financial performance.

While the typical risk categories within a given utilities sector risk universe have remained relatively stable, the speed and number of risk categories that are occurring and recurring have significantly increased. Additionally, our analysis of the underlying root causes indicates a very interesting relationship.



Multiple risks are occurring and recurring on a larger scale, and often, these risks are interconnected or are leading to new major risks.



In some respects, these categories are having knock-on impacts on each other. This is putting immense pressure on budgets and raising considerations around long-term performance and service perceptions. This is intuitively evident, but the analysis and data provide the clear, objective case for why a new model for risk management in this environment may be warranted.



## Traditional risk management programs face a broad range of challenges in this changing business environment.

Most enterprise risk management (ERM) programs were built to excel and function in an environment characterized by stability and high reliability. When specialization was needed, the ones that emerged focused on perfecting risk and performance in a number of siloed domains.

# 01

**Bolt-on:**

- ▶ Stand-alone activity not linked to strategy and conducted outside of the “rhythm of the business”; ERM not explicitly linked to strategic planning and annual planning activities

# 02

**Process:**

- ▶ Qualitative: lacks the usage of objective key risk indicators (KRIs) and quantified risk exposure to support risk-informed decision-making, including resource allocation decisions

# 03

**Compliance focused:**

- ▶ Check-the-box/paper exercise designed to meet board reporting requirements and not support the achievement of strategic goals and performance management objectives

# 04

**Engagement and impact:**

- ▶ Stops at enterprise risk assessment (ERA): heavy, manual surveys centered on data collection and risk assessment that can take weeks to months rather than focusing on more value-added risk response planning

# 05

**Unsustainable governance:**

- ▶ Does not drive accountability for mitigation plans or defined risk escalation routines to enable action and support dynamic risk management

# 60%

The percentage of boards that are not satisfied with the management of new and emerging risks. Most boards do not view risk management of atypical or emerging risks as effective.

Up from 55% in 2022.

Source: EY Center for Board Matters – 2023 EY Global Board Risk Survey of 500 board members

However, this approach to enterprise-wide risk management programs is not optimal in a world of knock-on impacts and recurring, higher-magnitude risk events, such as an aging grid infrastructure and the escalating impacts from wildfire and extreme weather events. To that end, boards and leadership teams are beginning to highlight the opportunity for their enterprise risk programs to adopt more atypical risk management capabilities.

## Five key actions for utilities to consider for their risk programs

How should utilities navigate their way forward? In this three-part series, we provide a roadmap for chief risk officers (CROs), ERM leaders and executive management to consider implementing for their risk programs.



### Enhanced ERM program maturity

- Multidimensional risk exposure review
- Risk appetite and concentration risk
- Risk sensing and analytics
- Quantification and scenario analysis

### Special initiatives/ risk mitigation

ERM's role in topical issues, such as:

- Wildfire mitigation
- Regulatory change
- Data centers and impact on load management
- Major capital program control
- Asset integrity and infrastructure reliability

### Dynamic risk assessments and real-time monitoring

- Risk tolerance monitoring framework
- Signposts and emerging risk monitoring
- Aggregation of risk and process data for dynamic risk assessments
- Centralized risk control tower suite for automated monitoring

### Three lines of defense transformation

- Common data and taxonomy
- Aligned three lines of defense accountabilities for risk taxonomy categories
- Simplified governance models

### Resilience strategy

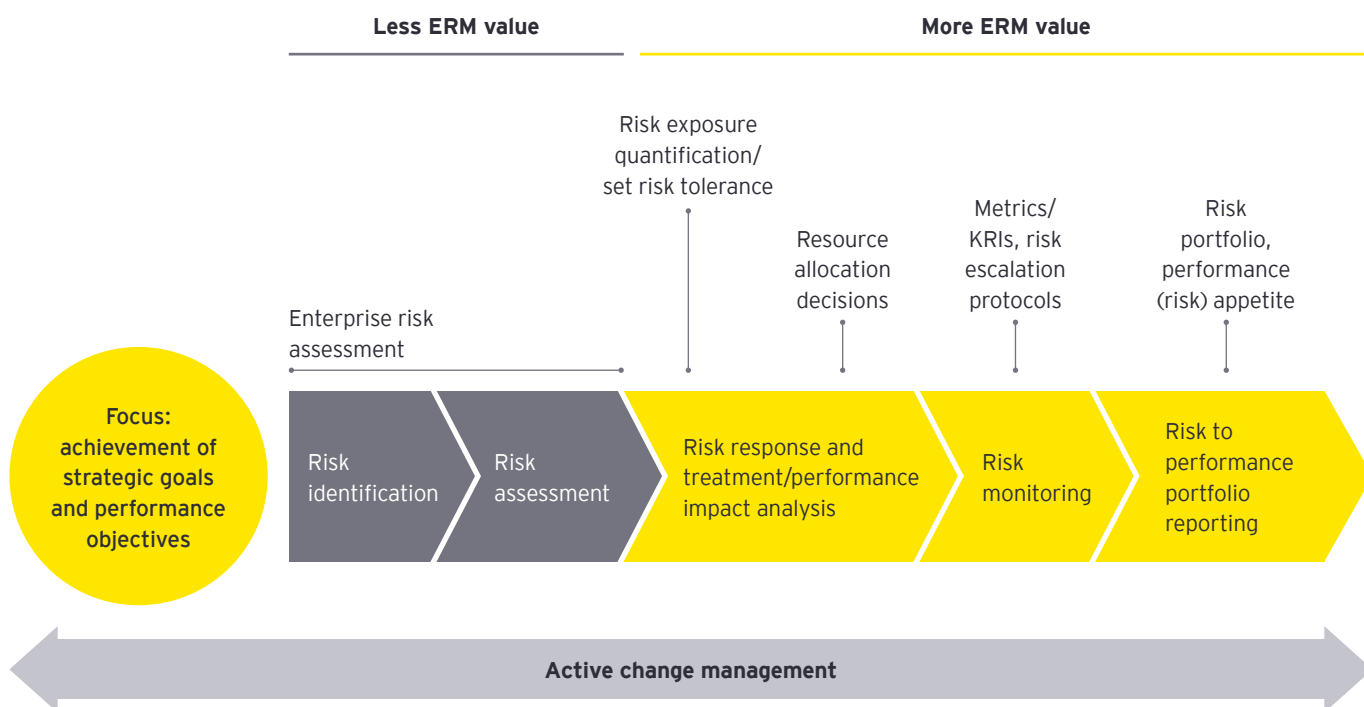
- Anticipate: sense, correlate and forewarn of big shocks
- Plan and prepare: integrate business continuity management and ERM programs – what-if analysis, war games, simulations and multi-scenario tabletop exercises
- Respond, adapt and reshape for long-term agility

Our series will explore two to three capabilities in each of these critical areas. In this paper, we will briefly cover the evolution of ERM programs and the new capabilities that are needed to cope with the changing landscape. Future parts of the series will cover the role ERM plays in risk mitigation, with a specific deep dive into wildfire risks, as well as the use of dynamic assessment to continuously monitor recurring (old faithful) and new emerging mega risks.



## Maturing the ERM function

Your typical ERM lifecycle across sectors can be encapsulated in the key phases shown below. Traditional ERM programs are often trapped in the lower-end value cycle of identifying and ranking risks. The usefulness of these exercises is often limited; however, the full lifecycle of ERM can provide significantly more value.



All too often, the role of ERM has been diminished to focus on surveys and risk updates, which are presented as one-dimensional tables or taxonomies. This approach fails to recognize the interconnectedness and dynamism of today's risk environment.

Additionally, a focus on qualitative ranking that uses standardized rating criteria obscures the true exposure of risk in isolation or aggregated across multiple factors. This tends to put the necessary decisions on escalation, tolerance and appetite at risk.

In this environment, how can today's ERM programs avoid adding to the potential risk of the organizations they are designed to support? What's the best way to provide greater visibility into the true magnitude of the risks, backed by data? And how can they help drive decision-making and deliver a major impact by helping the organization decide which issues need to be escalated, what can be accepted, and what will not be tolerated?

At the end of the day, performance (and, therefore, variance in performance) is at the heart of what executives, boards and utilities stakeholders are most worried about. The goal of today's evolved ERM program is to help support that goal and provide visibility into variation in performance (risk exposure – upside and downside) in a way that is not just one-dimensional but also data driven, so executives can rely with confidence on the program to support decision-making, identify early-warning signals and prioritize risk response actions, including risk acceptance.

## How are leading organizations approaching ERM, and what lessons should utilities CROs take from this?

The answer for today's CRO is not a complete redo of the ERM program but a step evolution. Specifically, we recommend the following key capabilities be developed:

### Evolved capabilities for mature ERM programs

#### 1 Connected

To elevate ERM and enable its transformation into a more mature function, utilities should consider adopting a control tower approach that clearly defines and identifies areas of risk concentration and integrates data externally and internally across the various lines of defense.

#### 2 Data driven

Utilities should explore quantification or the use of data and metrics to enable risk identification and evaluation. This includes analyzing interdependencies in order to prioritize their potential responses to both ongoing and emerging risks.

#### 3 A dynamic and agile approach

Utilities with mature risk management programs evolve beyond static updates at set intervals on risks to a portfolio-driven view that considers "what-if" scenarios. In addition, their mindset is proactive and follows the what-if question with "what can": What can we leverage to be more prepared? These teams proactively plan for risks in a more dynamic fashion, using scenario analysis and war gaming to see around corners and prepare more effectively for connected risks that could constitute a big shock to the portfolio.

# 01

▶ **Enable clear and consistent prioritization of top risks and resources in line with strategic objectives.**

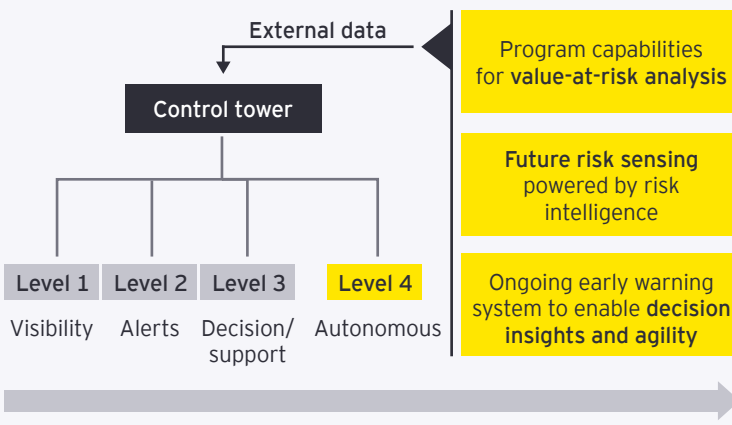
# 02

▶ **Build internal discipline and enterprise resiliency by driving a systematic process for review of "major" risks and the organization's response.**

# 03

▶ **Inform strategic decision-making, including consideration of opportunities, and become a source of competitive advantage.**

A high-functioning ERM program is like a risk control tower that works with other functions to improve **visibility, insights and foresight** to meet objectives.

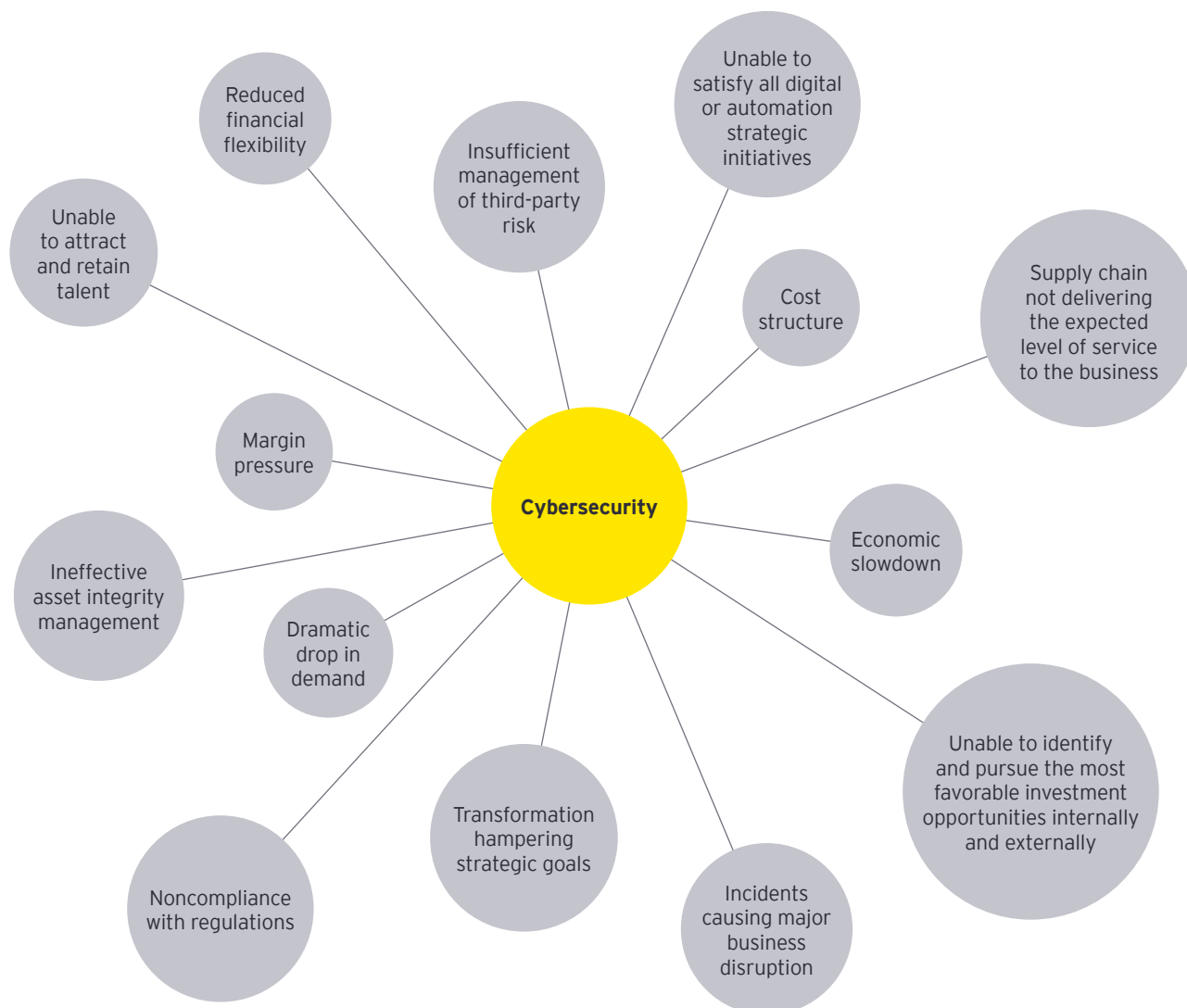




## Case study: Concentration, risk interconnectedness and its role in risk response and resilience

A utility is adopting the connected risk tower approach to increase visibility across the entire risk portfolio (top down and bottom up) by integrating different levels of risks via a taxonomy and analyzing the risks and their drivers. In addition, the organization has adopted a more business-driven approach focused on not only the top areas of risks by exposure but also concentration – a “fix one, address many” approach.

This enables the business to mitigate the most severe risk concentrations with Red/SWOT teams across the line of defense functions. To that end, the organization is not just identifying risks but also targeting mitigation efforts at the point of the most significant risk concentration in a more cohesive way with the business. This approach is most effective with the application of data and emerging technology to drive visibility, efficiency and a deeper understanding of the utility's most pressing risks and their nodes. A longer play is to use the data for monitoring across the connected nodes – so that the risk organization builds a “foresight capability” that highlights new patterns, risk connections and what-ifs as information is fed in from internal and external events. This will allow the organization to better anticipate potential big shocks to the system.



## Conclusion

The utilities sector today faces a turning point as it contends with higher demand that brings growth potential but also expansion and operational and external risk exposure. The role of risk management and the expectations of value for executives and boards have sharpened to a focus that is not only business led and helps the organization plan, prepare and see around the corner but also pragmatic – recognizing that not all risks can be mitigated. To that end, effective prioritization of risks beyond the traditional realm is needed, which requires a holistic view of the portfolio.

Utilities should develop or evolve to a coordinated, adaptive ERM framework (i.e., a “risk control tower”) that will help the business respond more effectively to recurring and emerging threats and harness opportunities that maintain high levels of service for customers and achieve goals.

The world of risk today is exciting and dynamic. As risk managers, the assets accessible to manage these emerging risks are varied and form an intriguing landscape of what is possible for the emboldened, strategic risk organization.

## Contacts

For a conversation about your ERM strategy

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