

Climate Adaptation and Resilience: QUICK START GUIDE

EUISSCA Guidance for
Electric Utility Supply Chain Professionals

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WHY IS THIS IMPORTANT?



01 — New Regulatory Frameworks

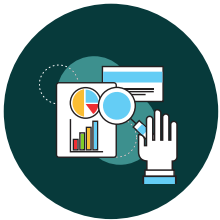


Governments and international organizations are increasingly developing regulatory frameworks to address Climate Adaptation and Resilience.

The Taskforce on Climate-related Financial Disclosures (TCFD) provides recommendations to guide climate disclosures and help evaluate a companies' climate risks and opportunities, which is being used to shape new regulatory frameworks.

The proposed SEC Ruling that would require U.S. listed companies to report detailed disclosures on climate risk and GHG emissions, aligning with TCFD. This is already mandatory internationally with the UK Mandatory TCFD-Aligned Disclosures, the European Climate Law, and others.

02 — Increased Investor Scrutiny



Investors are more closely evaluating supply chains climate-related risks, resilience and adaptation as it becomes increasingly evident that climate change will have a large impact without mitigation and resiliency efforts in place. **Investors want transparent and decision-useful disclosure** on climate risks and opportunities. This is evident in the Coalition for Climate Resilient Investment, Larry Fink's annual Letter to CEOs, and this report by Mercer.

03 — Reputational, Financial, and Operational Risk



An analysis from Trucost shows that utilities face the highest combined physical risk from climate hazards. **In 2020, over 8,000 suppliers disclosing through CDP reported that \$1.26 trillion of revenue is likely to be at risk over the next five years** due to climate change, deforestation and water insecurity. With the added external pressures of climate change and extreme weather events, the threat of supply chain shortages, distribution disruptions, and other supply risks are only going to increase. Taking action to address climate-related risks in your supply chains mitigates reputational risk while supporting long-term business continuity and growth.

WHERE SHOULD YOU START?

If you are going to take 1 step towards addressing climate-related risk, it should be to **assess your related risks and opportunities and identify your organizational and/or supply chain priorities**. This 5-step guide from the U.S. Climate Resilience Toolkit is a good place to start.

CLIMATE RISKS

Physical Risks

 Extreme precipitation & flooding	 Heat & cold stress for outdoor workers
 Sea level rise/ coastal flooding	 Rolling blackouts from grid failure
 Droughts / wildfires	 Power outages: equipment failure/ workforce disruption
 Extreme wind/ storm damage	 Increased heating/cooling demand

Transition Risks

Technology	Reputation	Legal & policy	Market
<ul style="list-style-type: none">• Demand/requirement of carbon credits increase• Energy and fuels costs increase	<ul style="list-style-type: none">• Requirement to report GHG inventory and exposure to climate-related risk• Perception of organization as lagging in climate action	<ul style="list-style-type: none">• Carbon/GHG emissions tax• More mandates and regulations requiring decarbonization & disclosure• Environment-related disputes or violations	<ul style="list-style-type: none">• Reduced availability of materials• Change in access to and/or terms of debt and equity• Customer/consumer increase in demand for net zero products

CASE STUDIES

Climate Resilience Case Study from Alliance Utility Member: Entergy



- After facing damage from Hurricane Laura, Entergy invested in 13K distribution poles, which fared well when Hurricane Delta hit that same region.
- Entergy is strengthening resilience through efforts to increase wind loading of transmission and distribution structures, mitigate floods, enhanced vegetation management, and utilize distributed utility scale generation including black-start resources, solar power, and microgrids.
- Subject to regulatory approval, Entergy plans to invest approximately \$15 billion towards an accelerated resilience plan through 2032.

Climate Resilience Case Study from a Supplier Affiliate Member: Koppers



Koppers completed a survey of American utilities which revealed the following as their main concerns: extreme weather events, supply chain disruptions, rising number of outages and costs to repair them. Here is how Koppers helps utilities navigate these challenges:

- **Forward Planning with a Vendor Focus** – Koppers understands the importance of creating a clear roadmap for communication with utilities ahead of natural disasters. The company suggests including vendors in upfront disaster recovery planning or even in mock drills.
- **Integrated Services** – Navigating communication and directing efforts for multiple vendors is challenging and could impact response time. Koppers eliminates this through providing access to a range of services including wood pole disposal and post-storm pole inspection.
- **Localized Disaster Specific Inventory** – Actively building and managing a year-round disaster-specific inventory can speed recovery efforts. Koppers recommends using past storm metrics to determine inventory/need of materials and storing materials around disaster-prone areas.

Koppers is actively working on climate resilience. [To learn more, read their whitepaper, "Protecting the Grid", or listen to their podcast here.](#)

CLIMATE ADAPTATION SOLUTIONS

Investing in resilient products and solutions to withstand extreme climate and weather events

- In order to be resilient utilities and supply chain organizations must understand the vulnerabilities of their infrastructures, processes, and supply chain, in order to best invest in resilient solutions.
- Examples of resilient strategies include investing in reinforcing/hardening infrastructure (e.g. technologies to harden power lines, creating stronger/weather resistant utility poles, weather resilient buildings, etc.), understanding the vulnerabilities within supply chains and foreseeing where bottlenecks may occur to invest in products or technologies that fill the gaps.^{2,3}

Identify supply chain vulnerabilities and diversify supply chain sources

- Work to find additional procurement opportunities to ensure supply chain diversification and alternative distribution routes.
- Encourage suppliers to assess the vulnerabilities of their own supply chains and distribution practices.

Have a climate resilience plan for your operations and ensure your suppliers are also assessing their risks and creating a climate resilience plan.

- Having less resilient suppliers can undermine the credibility of the organization and pose risks to the utility
- Example questions for assessing and engaging suppliers on resiliency can be found in the section below.

References

1. [Climate Risk Management and the Electricity Sector](#)
2. [McKinsey- Could Climate become the weak link in your supply chain?](#)
3. [Shortage changed: how utilities are adapting to supply chain issues](#)
4. [U.S. Department of Energy- 2021 Climate Adaptation and Resilience Plan](#)
5. [Climate-Resilient Supply Chain: Proceedings of a Workshop-in Brief](#)

Sample RFX Questions

1. How are climate change issues being considered in your suppliers corporate strategy and/or business plan?
2. Does the supplier assess and disclose climate risks and opportunities in line with TCFD recommendations?
3. Does the supplier have a sustainability/green policy? If so, what is the suppliers sustainability policy and do they have any key performance indicators set to measure success against policy?
4. How does the Supplier embed achievement of its climate and/or sustainability targets into any or all of its subcontracts and relationships with other relevant parties?
5. What are the details of any known or reasonably foreseeable climate change risks to its business or possible legal, financial and commercial impacts of climate change on its business?
6. What are the details of any current or proposed climate change laws or regulations in the jurisdictions that the supplier operates that could have an impact on the suppliers business and its delivery of goods and services to the customer?
7. How does the supplier integrate climate change and transition risks/factors into decision making?

These sample RFX questions can be used however you see fit, including conversationally in engagements with suppliers.

Questions Sources:

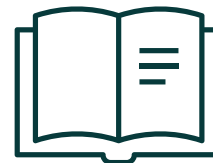
1. [Climate Change Due Diligence Questionnaire for Suppliers from The Chancery Lane Project](#)
2. [Supplier Questionnaire on Energy and GHG Emissions from the EPA](#)



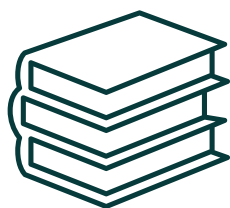
TOOLS AND RESOURCES

Frameworks

[Taskforce on Climate-Related Financial Disclosures \(TCFD\) Reporting Framework](#)
[Proposed SEC Ruling on Climate-Related Financial Disclosures](#)
[IPCC AR6 Climate Change Report](#)



01



02

Guidance

[Resilience Management Practices for Electric Utilities and Extreme Weather](#)

This journal article provides a description of best practices for utility companies to consider when creating climate-risk plans and can serve as a framework for this process

[TCFD Electric Utilities Preparer Forum](#)

This paper guides utilities through climate-related disclosure practices that are aligned with TCFD

[EPA- How to Engage Suppliers](#)

This guide from the EPA gives a template of questions used to engage your supply chains and understand their climate risks and resilience

[Climate Change Due Diligence Questionnaire for Suppliers](#)

This is a questionnaire you can use to engage your suppliers and understand their climate risks and resilience

[U.S. Climate Resilience Toolkit](#)

Provides a 5-step action plan for assessing climate risks and resilience

Further Information

[S&P Global: Utilities face greatest threat as climate risks intensify](#)
[TCFD Hub: Climate Change and Power Utilities](#)
[ICF- Resilient power: How utilities can prepare for increasing climate risks](#)
[Climate Risk Management and the Electricity Sector](#)
[Mckinsey- Could Climate become the weak link in your supply chain?](#)
[Shortage changed: how utilities are adapting to supply chain issues](#)
[U.S. Department of Energy- 2021 Climate Adaption and Resilience Plan](#)
[Climate-Resilient Supply Chain: Proceedings of a Workshop-in Brief](#)



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