



Climate Adaptation and Resilience: QUICK START GUIDE

SSCA Guidance for
Electric Utility Supply Chain Professionals

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<https://www.euissca.org/>



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 provides recommendations to guide climate disclosures and help evaluate a companies climate risks and opportunities, which is being used to shape new regulatory frameworks.

- In the United States there is a 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](#), with the number of regulatory frameworks only continuing to grow.

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 on utilities and their supply chains without mitigation and resiliency efforts in place**. Investors want transparent and decision-useful disclosure on climate risks and opportunities. Some examples of this are the [Coalition for Climate Resilient Investment](#), the [Blackrock Letter](#), and this report by [Mercer](#).

03 — Reputational, Financial, and Operational Risk



The risks related to climate change can affect a Utility and Supply Chain's reputation, finances, and operations. 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**. Stakeholder concern and public opinions are reputational risks faced by utilities and supply chains that don't take action while addressing climate-related risks can improve reputation as well as operations and finances.

WHERE SHOULD YOU START?



If you are going to take 1 step towards addressing Climate-related risk through adaptation and resilience, it should be to **assess your climate related risks and identify what the priority risks are for your organization and/or supply chain**. These are risks that you need to address first within your organization. This [5-step guide from the U.S. Climate Resilience Toolkit](#) is a good place to start.

CLIMATE RISKS

Physical Risks



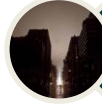
Extreme precipitation & Flooding



Heat & cold stress for outdoor workers



Sea level rise/ coastal flooding



Rolling blackouts from grid failure



Droughts / Wildfire



Power outages: equipment failure/ workforce disruption



Extreme wind/ storm damage



Increased heating/cooling demand

Transition Risks

Technology

- Demand/requirement of carbon credits increase
- Energy and fuels costs increase

Reputation

- Requirement to report emissions
- Your organization is perceived as lagging in their climate action

Legal & policy

- Carbon/GHG emissions tax
- More mandates and regulations
- Lagging decarbonization in line with company climate goals
- Environmental related disputes or violations

Market

- Reduced availability of materials
- Access to and/or terms of debt and equity change
- 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, all of which held when Hurricane Delta hit that same region.
- Other resilience projects by Entergy include efforts for flood mitigation, enhanced vegetation management, and distributed utility scale generation including black-start resources, solar power, and microgrids.
- Entergy's Resiliency projects have the potential for \$5-\$15 Billion of proactive and integrated investment by 2030

Climate Resilience Case Study from a Supplier Affiliate Member: Kopper

Kopper completed a survey of utilities showing their main concerns: extreme weather events, rising number of outages, supply chain disruptions, and rising costs. Here is how they help the Utility navigate these challenges

- **Forward Planning with a Vendor Focus**- Kopper understands the importance of creating a clear roadmap for organizational communication ahead of natural disasters. They have a 100+ page playbook, created to ensure the understanding of mobilization and de-mobilization of resources
 - **Integrated Services**- Navigating communication and directing challenges for multiple vendors is challenging and Kopper eliminates this through providing access to additional services including wood pole disposal and post-storm inspection of poles.
 - **Localized Disaster Specific Inventory**- Kopper recommends using the micro vs. macro approach by using past storm metrics to determine inventory/need of materials, and storing materials around disaster-prone areas
- Kopper is actively working on climate resilience. [To learn more read their whitepaper or listen to their podcast.](#)

CLIMATE ADAPTATION SOLUTIONS

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

- Vulnerability from energy systems comes from exposure to a climate stressor (e.g., drought, wildfires, flooding) and the assets sensitivity to the stressor. ¹
- 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 technology for cooling and water efficiency in power plants, reinforcing/hardening infrastructure (e.g. hardening the grid) to withstand extreme weather², and more specific actions relevant to your region and services³

Identify supply chain vulnerabilities and diversify supply chain sources

- With the threat of climate change, there is a surge in demand for advanced technology, renewable energy sources, electric mobility, etc. with a lot of pressure on Utility Supply Chains. ⁴
- 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.
- Suppliers should assess the vulnerabilities of their supply chains and distribution practices and work to find additional procurement opportunities to ensure supply chain diversification and alternative distribution routes.⁵

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

- Leading organizations engage with their suppliers to ensure that they become more energy efficient and resilient.
- Having less resilient suppliers can undermine the credibility of the organization and pose risks to the utility
- Example questions for how to start engaging your suppliers can be found in the section below. ⁶

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?

Questions Source:

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

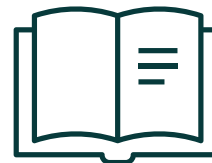
1. [ICF- Resilient power: How utilities can prepare for increasing climate risks](#)
2. [Climate Risk Management and the Electricity Sector](#)
3. [Mckinsey- Could Climate become the weak link in your supply chain?](#)
4. [Shortage changed: how utilities are adapting to supply chain issues](#)
5. [U.S. Department of Energy- 2021 Climate Adaption and Resilience Plan](#)
6. [Supplier Questionnaire on Energy and GHG Emissions from the EPA](#)



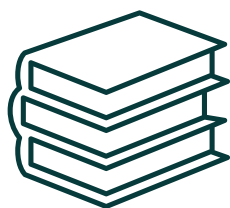
TOOLS AND RESOURCES

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

Assessment 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](#)



03